

# FUND EVALUATION REPORT

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## San Jose Federated City Employees' Retirement System

Quarterly Review  
December 31, 2015



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**Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.**

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**Executive Summary**  
**As of December 31, 2015**

The value of the San Jose Federated City Employees' Retirement System assets was \$1.94 billion on December 31, 2015, a decrease of approximately \$32 million from the end of the third quarter. The Retirement System had \$42.0 million of net outflows, slightly offset by positive investment performance.

- The Retirement System's net of fees performance for the quarter, including the overlay, was +0.4%.
- The Retirement System, including the overlay, underperformed both the Policy and Custom Benchmark for the quarter by 40 basis points and 20 basis points, respectively. Fiscal year-to-date, the Retirement System underperformed the Policy Benchmark by 30 basis points, but outperformed the Custom Benchmark by 20 basis points. For the trailing 12 months, the Retirement System outperformed the Policy and Custom Benchmark by 30 basis points and 90 basis points, respectively.
  - Asset class returns, relative to their respective benchmarks, were mixed for the fourth quarter. All active public equity managers outperformed their benchmarks.
  - Private Real Estate was the best absolute performing asset class for the quarter, returning +4.7%. Private Real Estate returned +11.4% fiscal year-to-date, and +20.7% for the trailing 12 months.
  - Global Equity returned +3.9% for the quarter, underperforming the MSCI ACWI IMI benchmark's return of +4.9%. However, Global Equity outperformed the MSCI ACWI IMI over the fiscal year-to-date, 1-, 3- and 5-year periods.
  - Non-Investment Grade Credit had the greatest relative underperformance. For the quarter, Non-Investment Grade Credit returned -3.0% versus +1.6% for the custom benchmark (50% BAML Global HY/50% JPM GBI-EM). The main driver of the underperformance was the Claren Road Credit Fund, Ltd., which has since been terminated.

- The Retirement System underperformed the peer Public Plans > \$1 Billion Universe's median return of +2.4% for the fourth quarter. Underperformance, relative to peers, was primarily due to the Retirement System's conscious decision to underweight equity assets.
- The Retirement System completed several investment manager changes during the fourth quarter. Northern Trust EAFE Small Cap-NL and Amici Offshore were terminated, and Oberweis International Opportunities was funded.

### Vontobel Emerging Markets

- Vontobel returned +1.9% net of fees for the quarter, outperforming the MSCI Emerging Markets return of +0.7%. Vontobel has significantly outperformed the benchmark since it was added to the Retirement System in July 2013. Fiscal year-to-date and for the trailing 12 months, Vontobel outperformed its benchmark by 8.5% and 6.3%, respectively. Vontobel's stock selection vs. the index was additive (+2.2%), while its relative allocations detracted (-0.7%).

### Cove Street

- Cove Street Small Cap Value returned +4.3% net of fees for the quarter vs. the Russell 2000 Value's return of +2.9%. Cove Street's performance for the trailing 12 months (-2.3%) significantly outperformed the benchmark's performance of -7.5% over the same periods. Cove Street's positions in agricultural companies FMC Corp and American Vanguard were additive over the quarter. FMC Corp benefitted from better pricing in lithium, while American Vanguard cut costs and began to pay down debt.

### Sandler Plus

- Sandler Plus Offshore Fund returned +3.9% net of fees for the quarter, outperforming the HFRI Equity Hedge (Long/Short Equity) benchmark's return of +2.3%. For the fiscal year-to-date and trailing 12 months, Sandler has returned +6.8% and +13.0%, respectfully. Over the same time periods, the benchmark returned -4.1%, and -0.4%, respectfully. Sandler's consumer discretionary positions were the biggest contributor for the quarter (+3.8%) and for the trailing 12 months (+8.0%).

### Claren Road

- Claren Road experienced significant underperformance. Claren Road has been terminated.

Investment Manager	Asset Class	Changes/ Announcements	Performance Concerns	Meketa Recommendation <sup>1</sup>	Comments
Artisan Global Value	Global Equity	Yes	---	Hold	Team Additions
Vontobel EM Equity	Emerging Markets Equity	---	---	---	---
Cove Street Small Cap Value	Small Cap Equity	---	---	---	---
Oberweis International Opps.	Int'l Small Cap Equity	---	---	---	---
Aberdeen Frontier Markets Equity	Frontier Markets Equity	Yes	---	Hold	SEC Inquiry/Multiple Acquisitions
Senator Global Opportunity	Long-Short Equity	---	---	---	---
Horizon Portfolio I	Long-Short Equity	---	---	---	---
Sandler Plus	Long-Short Equity	---	---	---	---
Marshall Wace Eureka	Long-Short Equity	Yes	---	Hold	Team Additions
Voya Securitized Credit	Global Credit	---	---	---	---
BlueBay EM Select Debt	Global Credit	---	---	---	---
Davidson Kempner Inst.	Long-Short Credit	Yes	---	Hold	Organizational Structure Changes
Credit Suisse Risk Parity	Commodities	Yes	---	Hold	DOL QPAM Exemption
First Quadrant Balanced Risk	Commodities	Yes	---	Hold	Partner Departure

<sup>1</sup> The Meketa Investment Group recommendations are based on the noted organizational or resource changes at each manager.



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### Artisan

- In November 2015, two analysts were promoted to associate portfolio managers on the Global Value team.
- In December 2015, Benjamin L. Herrick, CFA joined the Global Value team.

### Aberdeen

- On December 16, 2015, Aberdeen Asset Management Inc. (AAMI) received an inquiry from the SEC in connection with a national initiative related to recent events in the Fixed Income markets, and in particular the high yield market. The exam is currently in progress.
- In December 2015, a senior portfolio manager on the U.S. Fixed Income team filed an age discrimination and retaliation claim against AAMI. The claim involves a dispute about an internal promotion and related issues. The dispute is currently in litigation and AAMI does not expect the outcome of the claim to have a materially detrimental impact to AAMI.
- In December 2015, Aberdeen completed the acquisition of Arden Asset Management LLC, a provider of hedge fund solutions with offices in New York and London.
- In December 2015, Advance Emerging Capital became Aberdeen Emerging Capital; a wholly owned subsidiary of Aberdeen PLC based in Aberdeen's London office.

### Marshall Wace

- In 2015, Marshall Wace hired a new manager for the Global Industrials strategy, seeded a second strategy (Global Consumer) within the Overlay book, and hired 8 new analysts.

### Davidson Kempner

- On January 1, 2016, two additional members were added to the Management Committee.
- On January 1, 2016, the firm formed an Investment Committee that is chaired by Tony Yoseloff and includes Conor Bastable, Michael Herzog and Tom Kempner. The Investment Committee's primary goal is to "look at the portfolios holistically across the firm," and "allow the firm to consider improvements to their investment process and further facilitate the transmission of ideas and information across investment areas."

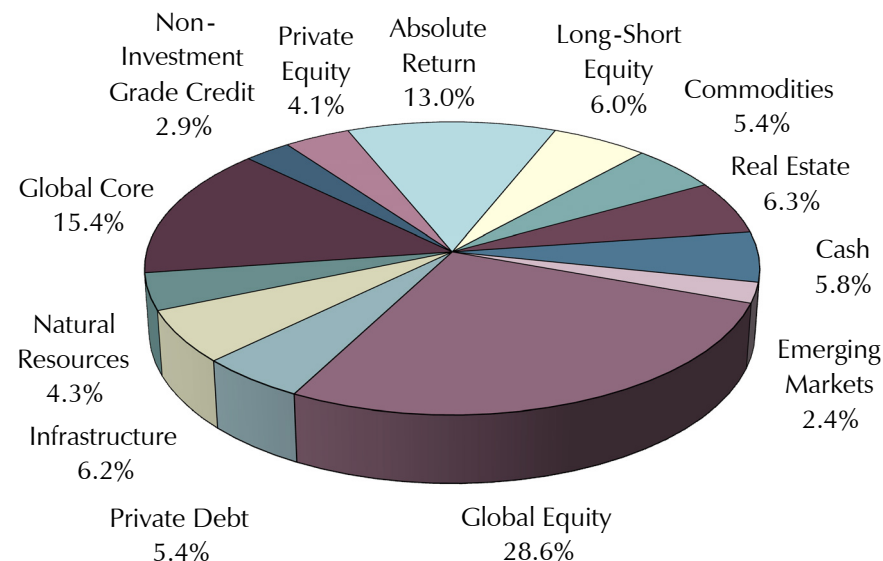
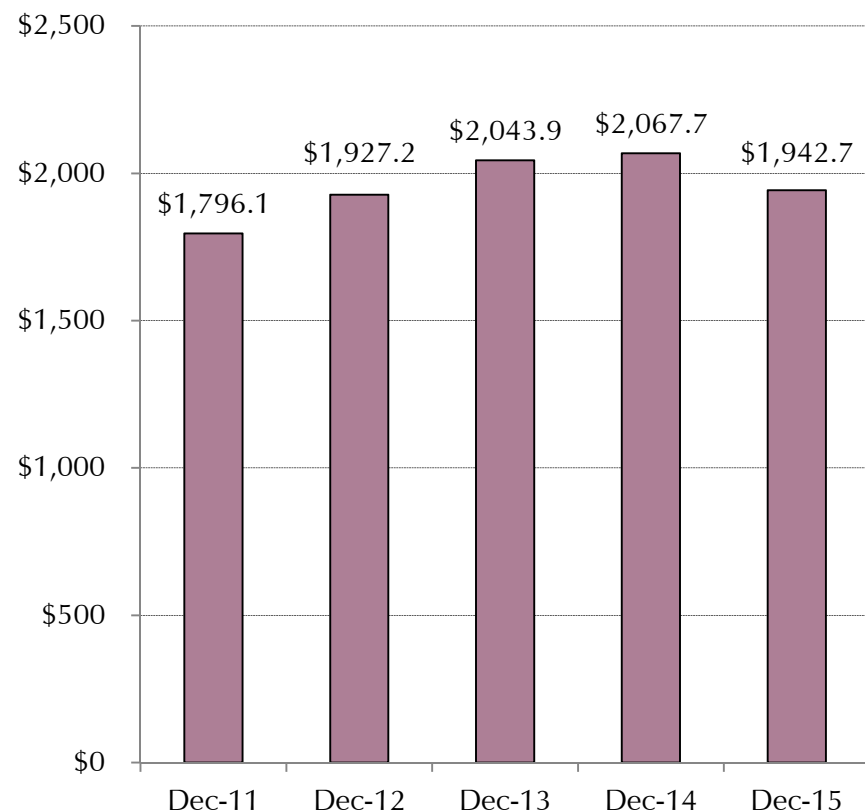
### Credit Suisse

- On October 2, 2015, the U.S. Department of Labor granted Credit Suisse and its affiliates a five-year exemption to enable the firm to continue acting as a Qualified Professional Asset Manager ("QPAM") for its ERISA clients. Under this five-year exemption, Credit Suisse is permitted to reapply to the DOL for an additional five-year exemption to run throughout the remaining period of the QPAM class exemption disqualification (i.e., from November 21, 2014 through November 21, 2024). At that point, Credit Suisse will no longer need an individual QPAM exemption as the QPAM class exemption disqualification period will have lapsed. Credit Suisse continues to believe that it will satisfy the conditions imposed by the DOL through the five-year exemption.

### First Quadrant

- Effective December 2015, Ghene Faulcon, Partner, is no longer with the firm. Mr. Faulcon's departure is not expected to have material impact on the strategy.

**Plan Summary**  
**As of December 31, 2015**



The diversification pie chart does not include the impact of the overlay.

## San Jose Federated City Employees' Retirement System

## Aggregate Assets Asset Summary as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Retirement System	Russell Overlay Net Position <sup>1</sup> (%)	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Total Fund Aggregate</b>	<b>1,942.7</b>	<b>100.0</b>	<b>100.0</b>	<b>NA</b>	<b>NA</b>	<b>1,974.7</b>
<b>Equity Assets</b>	<b>638.8</b>	<b>32.9</b>	<b>34.7</b>	<b>37</b>	<b>30-44</b>	<b>673.3</b>
Global Equity <sup>2</sup>	559.0	28.8	30.6	28	20-36	586.5
<i>Long-Short Equity</i>	116.6	6.0	6.0	6	3-9	114.7
Private Equity <sup>3</sup>	79.8	4.1	4.1	9	4-14	86.8
<b>Fixed Income Assets<sup>4</sup></b>	<b>401.8</b>	<b>20.7</b>	<b>18.6</b>	<b>19</b>	<b>9-29</b>	<b>423.2</b>
Global Core	298.5	15.4	13.3	12	7-17	300.8
Non-Investment Grade Credit	56.7	2.9	2.9	4	0-6	75.9
Emerging Markets	46.6	2.4	2.4	3	0-5	46.5
<b>Private Debt<sup>3</sup></b>	<b>104.3</b>	<b>5.4</b>	<b>5.4</b>	<b>5</b>	<b>0-10</b>	<b>109.8</b>
<b>Real Assets</b>	<b>432.6</b>	<b>22.3</b>	<b>22.3</b>	<b>23</b>	<b>15-30</b>	<b>441.1</b>
Real Estate	121.7	6.3	6.3	7	4-10	118.5
Commodities	105.7	5.4	5.4	6	2-10	112.9
Infrastructure	120.9	6.2	6.2	5	2-8	124.3
Natural Resources	84.3	4.3	4.3	5	2-8	85.5
<b>Absolute Return Assets<sup>5</sup></b>	<b>251.7</b>	<b>13.0</b>	<b>13.0</b>	<b>11</b>	<b>6-16</b>	<b>239.4</b>
<b>GTAA/Opportunistic</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>5</b>	<b>0-7</b>	<b>0.0</b>
<b>Cash<sup>6</sup></b>	<b>113.5</b>	<b>5.8</b>	<b>6.1</b>	<b>0</b>	<b>0-5</b>	<b>87.9</b>

<sup>1</sup> Data in the column titled "Russell Overlay Net Position" is based on physical exposures, adjusted for synthetic positions provided by Russell Investments.

<sup>2</sup> Global Equity includes <\$0.1 million of residuals from terminated managers or previous transitions.

<sup>3</sup> Fair values are based on reported value as of 9/30/15, adjusted for cash flows through 12/31/15.

<sup>4</sup> Fixed Income was reconstructed on 10/1/15 to include Global Core, Non-Investment Grade Credit, Emerging Markets, and exclude Private Debt. 9/30/15 Market Values are reflective of this restructuring.

<sup>5</sup> Final NAV and performance provided by Albourn.

<sup>6</sup> Cash includes the cash account, cash equitized in the Russell Investments Overlay program, cash from private manager distributions, residuals from the Terminated Manager Account, and proceeds from the redemptions of Amici and Hudson Bay that have yet to be distributed to the Retirement System.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Portfolio Roster as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Asset Class	% of Retirement System	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Total Fund Aggregate</b>	<b>1,942.7</b>	<b>NA</b>	<b>100.0</b>	<b>NA</b>	<b>NA</b>	<b>1,974.7</b>
<b>Equity Assets</b>	<b>638.8</b>	<b>100.0</b>	<b>32.9</b>	<b>37</b>	<b>30-44</b>	<b>673.3</b>
<b>Global Equity<sup>1</sup></b>	<b>559.0</b>	<b>100.0</b>	<b>28.8</b>	<b>28</b>	<b>20-36</b>	<b>586.5</b>
Artisan Global Value	131.7	23.6	6.8			159.3
Northern Trust MSCI EAFE Index-NL	122.3	21.9	6.3			126.3
Vontobel Emerging Markets Equity	66.0	11.8	3.4			64.8
Northern Trust Russell 3000 Index	54.6	9.8	2.8			51.4
Cove Street Small Cap Value	24.8	4.4	1.3			28.5
Oberweis International Opportunities	24.5	4.4	1.3			0.0
Aberdeen Frontier Markets Equity	17.6	3.2	0.9			17.8
Russell Currency Hedge <sup>2</sup>	0.9	0.2	< 0.1			0.4
Northern Trust EAFE Small Cap-NL	0.0	0.0	0.0			23.2
<b>Long-Short Equity</b>	<b>116.6</b>	<b>20.8</b>	<b>6.0</b>	<b>6</b>	<b>3-9</b>	<b>114.7</b>
Senator Global Opportunity Offshore Fund	35.4	6.3	1.8			24.0
Horizon Portfolio I	31.6	5.6	1.6			23.8
Sandler Plus Offshore Fund	25.3	4.5	1.3			24.4
Marshall Wace Eureka Fund	24.3	4.4	1.3			23.9
Amici Offshore	0.0	0.0	0.0			18.7

<sup>1</sup> Global Equity includes <\$0.1 million of residuals from terminated managers or previous transactions.

<sup>2</sup> The Plan initiated a partial currency hedge on August 21, 2015 of the following currencies: Australian Dollar, Canadian Dollar, Swiss Franc, Euro, British Pound Sterling, and Japanese Yen. As of the date of this report, the unrealized profit or loss was <\$0.1 mm and the total net exposure of the hedge was \$26.6 mm.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Portfolio Roster as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Asset Class	% of Retirement System	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Equity Assets (continued)</b>						
<b>Private Equity<sup>1</sup></b>	<b>79.8</b>	<b>100.0</b>	<b>4.1</b>	<b>9</b>	<b>4-14</b>	<b>86.8</b>
Pantheon USA Fund VII	29.9	37.3	1.5			32.0
Pathway Private Equity Fund VIII <sup>2</sup>	14.4	18.5	0.8			15.9
Partners Group Secondary 2011	13.3	16.6	0.7			14.6
Pantheon Global Secondary Fund III 'B'	12.1	15.0	0.6			14.0
Partners Group Secondary 2008	6.2	7.7	0.3			6.3
Great Hill Equity Partners IV	4.0	4.9	0.2			4.0
<b>Fixed Income Assets<sup>3</sup></b>	<b>401.8</b>	<b>100.0</b>	<b>20.7</b>	<b>19</b>	<b>9-29</b>	<b>423.2</b>
<b>Global Core</b>	<b>298.5</b>	<b>74.3</b>	<b>15.4</b>	<b>12</b>	<b>7-17</b>	<b>300.8</b>
Northern Trust 1-10 Year Intermediate Gov't Bond Index	135.2	33.6	7.0			136.3
Northern Trust 0-5 Year TIPS	108.3	26.9	5.6			108.6
Voya Securitized Credit	55.0	13.7	2.8			55.8
<b>Non-Investment Grade Credit</b>	<b>56.7</b>	<b>14.1</b>	<b>2.9</b>	<b>4</b>	<b>0-6</b>	<b>75.9</b>
Davidson Kempner Institutional Partners	34.4	8.6	1.8			34.3
Claren Road Credit Fund, Ltd	22.4	5.6	1.2			41.6
<b>Emerging Markets</b>	<b>46.6</b>	<b>11.6</b>	<b>2.4</b>	<b>3</b>	<b>0-5</b>	<b>46.5</b>
BlueBay Emerging Markets Select Debt	46.6	11.6	2.4			46.5

<sup>1</sup> Fair values are based on reported value as of 9/30/15, adjusted for cash flows through 12/31/15.

<sup>2</sup> Preliminary 9/30/15 NAV provided by manager and adjusted for cash flows through 12/31/15.

<sup>3</sup> Fixed Income was reconstructed on 10/1/15 to include Global Core, Non-Investment Grade Credit, Emerging Markets, and exclude Private Debt. 9/30/15 Market Values are reflective of this restructuring.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Portfolio Roster as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Asset Class	% of Retirement System	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Private Debt<sup>1</sup></b>	<b>104.3</b>	<b>100.0</b>	<b>5.4</b>	<b>5</b>	<b>0-10</b>	<b>109.8</b>
Medley Opportunity Fund II, L.P.	53.0	50.8	2.7			55.0
White Oak Direct Lending	31.2	29.9	1.6			34.7
GSO Direct Lending	20.1	19.3	1.0			20.1
<b>Real Assets</b>	<b>432.6</b>	<b>100.0</b>	<b>22.3</b>	<b>23</b>	<b>15-30</b>	<b>441.1</b>
<b>Real Estate</b>	<b>121.7</b>	<b>100.0</b>	<b>6.3</b>	<b>7</b>	<b>4-10</b>	<b>118.5</b>
<b>Core Real Estate</b>	<b>87.3</b>	<b>71.8</b>	<b>4.5</b>			<b>84.9</b>
PRISA I	45.0	37.0	2.3			43.7
American Core Realty Fund, LLC	42.3	34.8	2.2			41.2
<b>Private Real Estate<sup>1</sup></b>	<b>34.4</b>	<b>28.2</b>	<b>1.8</b>			<b>33.6</b>
DRA Growth and Income Fund VII	14.0	11.5	0.7			14.3
DRA Growth and Income Fund VIII	6.2	5.1	0.3			5.4
DRA Growth and Income Fund V	5.9	4.9	0.3			5.9
Fidelity Real Estate Growth Fund III	3.4	2.8	0.2			3.2
DRA Growth and Income Fund VI	3.1	2.6	0.2			3.2
GEAM Value Add Realty Partners	1.7	1.4	< 0.1			1.7

<sup>1</sup> Fair values are based on reported value as of 9/30/15, adjusted for cash flows through 12/31/15.





## San Jose Federated City Employees' Retirement System

## Aggregate Assets Portfolio Roster as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Asset Class	% of Retirement System	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Real Assets (continued)</b>						
<b>Commodities</b>	<b>105.7</b>	<b>100.0</b>	<b>5.4</b>	<b>6</b>	<b>2-10</b>	<b>112.9</b>
First Quadrant Balanced Risk Commodity Fund	54.8	51.8	2.8			57.8
Credit Suisse Risk Parity Commodity Fund	51.0	48.2	2.6			55.1
<b>Infrastructure</b>	<b>120.9</b>	<b>100.0</b>	<b>6.2</b>	<b>5</b>	<b>2-8</b>	<b>124.3</b>
Rhumblin DJ Brookfield Global Infrastructure	120.9	100.0	6.2			124.3
<b>Natural Resources</b>	<b>84.3</b>	<b>100.0</b>	<b>4.3</b>	<b>5</b>	<b>2-8</b>	<b>85.5</b>
Rhumblin S&P Global Large MidCap Commodity & NR	84.2	99.9	4.3			85.3
Northern Trust Global LargeMid NR	0.1	0.1	<0.1			0.1
<b>Absolute Return Assets<sup>1</sup></b>	<b>251.7</b>	<b>100.0</b>	<b>13.0</b>	<b>11</b>	<b>6-16</b>	<b>239.4</b>
<b>Relative Value</b>	<b>135.9</b>	<b>54.0</b>	<b>7.0</b>			<b>141.9</b>
DE Shaw	43.1	17.1	2.2			41.4
Arrowgrass International Fund	36.7	14.6	1.9			35.9
Pine River Fund	33.6	13.4	1.7			34.0
Hudson Bay Fund	22.5	8.9	1.2			30.6

<sup>1</sup> Final NAV and performance provided by Albourne.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Portfolio Roster as of 12/31/15

	Market Value 12/31/15 (\$ mm)	% of Asset Class	% of Retirement System	Target Allocation (%)	Target Range (%)	Market Value 9/30/15 (\$ mm)
<b>Absolute Return Assets<sup>1</sup> (continued)</b>						
<b>Global Macro</b>	<b>115.8</b>	<b>46.0</b>	<b>6.0</b>			<b>97.5</b>
Keynes Leveraged Quantitative Strategies Fund	20.0	7.9	1.0			0.0
Dymon Asia Macro	19.8	7.9	1.0			20.0
BlueTrend	19.6	7.8	1.0			20.1
Kepos Alpha Fund	19.0	7.5	1.0			19.4
Brevan Howard Multi-Strategy Fund <sup>2</sup>	15.4	6.1	0.8			23.3
Brevan Howard Fund, Limited <sup>2</sup>	15.3	6.1	0.8			7.8
MKP Opportunity Offshore, L.P.	6.7	2.7	0.3			6.9
<b>Cash<sup>3</sup></b>	<b>113.5</b>	<b>100.0</b>	<b>5.8</b>	<b>0</b>	<b>0-5</b>	<b>87.9</b>

<sup>1</sup> Final NAV and performance provided by Albourne.

<sup>2</sup> The Plan began transitioning from the Brevan Howard Multi-Strategy Fund to the Brevan Howard Limited Fund in July 2015. The transition will be completed after four calendar quarters.

<sup>3</sup> Cash includes the cash account, cash equitized in the Russell Investments Overlay program, cash from private manager distributions, residuals from the Terminated Manager Account, and proceeds from the redemptions of Amici and Hudson Bay that have yet to be distributed to the Retirement System.



## San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Total Fund Aggregate<sup>2</sup></b>	<b>0.4</b>	<b>-4.2</b>	<b>-3.1</b>	<b>3.2</b>	<b>3.5</b>	<b>4.1</b>	<b>1/1/94</b>	<b>6.9</b>
<b>Net of Fees<sup>3</sup></b>	<b>0.4</b>	<b>-4.2</b>	<b>-3.1</b>	<b>3.1</b>	<b>3.4</b>	<b>3.9</b>		<b>6.7</b>
<b>Total Fund Aggregate ex Overlay</b>	<b>0.3</b>	<b>-4.1</b>	<b>-3.1</b>	<b>3.1</b>	<b>3.5</b>	<b>4.1</b>		<b>6.9</b>
<b>Net of Fees ex Overlay</b>	<b>0.3</b>	<b>-4.2</b>	<b>-3.2</b>	<b>3.0</b>	<b>3.3</b>	<b>3.9</b>		<b>6.7</b>
<i>CPI (inflation)</i>	-0.6	-0.9	0.7	1.0	1.5	1.9		2.2
<i>San Jose FCERS Policy Benchmark<sup>4</sup></i>	0.8	-3.9	-3.4	3.6	3.6	4.4		6.8
<i>San Jose FCERS Custom Benchmark<sup>5</sup></i>	0.6	-4.4	-4.0	2.8	3.1	NA		NA
<i>Public Plans &gt; \$1 Billion Universe (Median)<sup>6</sup></i>	2.4	-2.9	-0.1	6.9	6.8	5.5		NA

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Represents performance which is gross of fees for public market managers and net of fees for private market managers.

<sup>3</sup> Beginning in July 2012, fees are accounted for on a cash basis. Previously, fees were accounted for on an accrual basis.

<sup>4</sup> Please see the Appendix for composition of the San Jose FCERS Policy Benchmark.

<sup>5</sup> San Jose FCERS Custom Benchmark consists of the individual benchmarks that comprise the San Jose FCERS Policy Benchmark weighted accordingly to actual allocations and re-adjusted monthly.

<sup>6</sup> Universe data provide by InvestorForce. Returns are net of fees.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Total Fund Aggregate</b>								
<b>Equity Assets</b>	<b>3.2</b>	<b>-3.4</b>	<b>-0.6</b>	<b>8.8</b>	<b>NA</b>	<b>NA</b>	<b>1/1/12</b>	<b>10.2</b>
Global Equity	3.9	-4.1	-1.7	8.1	6.4	NA	5/1/10	7.6
<i>MSCI ACWI IMI</i>	4.9	-5.2	-2.2	7.9	6.1	5.0		7.1
Long-Short Equity	1.3	-1.6	3.3	NA	NA	NA	10/1/14	6.1
<i>HFRI Equity Hedge (Long/Short Equity)</i>	2.3	-4.1	-0.4	5.0	2.7	3.6		-0.4
Private Equity <sup>2</sup>	-1.5	1.6	7.6	13.5	13.1	6.6	1/1/06	6.6
<i>Cambridge Associates Private Equity Composite<sup>3</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		10.9
<b>Fixed Income</b>	<b>-1.0</b>	<b>-0.8</b>	<b>-0.1</b>	<b>0.9</b>	<b>NA</b>	<b>NA</b>	<b>1/1/12</b>	<b>2.4</b>
<i>Fixed Income Custom Benchmark<sup>4</sup></i>	-0.5	0.3	-2.7	-1.6	1.0	3.8		-0.2
Global Core	-0.8	NA	NA	NA	NA	NA	10/1/15	-0.8
<i>Barclays Global Aggregate</i>	-0.9	-0.1	-3.2	-1.7	0.9	3.7		-0.9
Non-Investment Grade Credit	-3.0	-3.4	-5.4	NA	NA	NA	10/1/14	-9.7
<i>50% BAML Global HY / S&amp;P Global Leveraged Loan</i>	1.6	-4.5	-2.2	5.0	6.2	6.0		-2.0
Emerging Markets	0.2	NA	NA	NA	NA	NA	8/1/15	-5.1
<i>50% JPM EMBI GD / 50% JPM GBI-EM</i>	0.6	-5.6	-7.1	-4.6	0.9	NA		-4.6
<b>Private Debt<sup>2</sup></b>	<b>-2.5</b>	<b>0.7</b>	<b>2.7</b>	<b>6.3</b>	<b>6.5</b>	<b>NA</b>	<b>12/1/10</b>	<b>6.4</b>
<i>3 Month Libor + 5%</i>	1.3	2.8	5.4	5.3	5.4	6.8		5.4

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> All manager returns are time-weighted and presented one quarter lagged. Meketa Investment Group recommends that the Trustees use dollar-weighted (IRR) returns as shown in the quarterly Private Markets report in order to evaluate private markets managers.

<sup>3</sup> Cambridge Associates Private Equity Composite (40% Secondary and 60% Fund of Funds) used since 1Q14. Data for the Venture Economics Private Equity Index was used through 4Q13, but the index was discontinued in early 2014.

<sup>4</sup> Prior to 10/1/2015, Fixed Income Custom Benchmark was 100% Barclays Global Aggregate. After 10/1/2015, Fixed Income Custom Benchmark consists of 80% Barclays Global Aggregate, 5% JPM GBI GD, 5% JPM EMBI GD, 5% S&P Global Leveraged Loan, and 5% BAML Global HY Index.



	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Total Fund Aggregate (continued)</b>								
<b>Real Assets</b>	<b>-1.8</b>	<b>-11.7</b>	<b>-12.8</b>	<b>-6.4</b>	<b>-5.2</b>	<b>NA</b>	<b>5/1/10</b>	<b>-2.2</b>
Real Estate <sup>2</sup>	3.4	8.2	16.2	16.5	14.6	5.8	1/1/94	9.3
Core Real Estate	2.9	6.9	14.4	12.8	12.8	NA	7/1/09	9.8
NCREIF ODCE Equal Weighted (net)	3.2	6.7	14.2	12.7	12.6	5.3		9.7
Private Real Estate	4.7	11.4	20.7	25.3	19.4	NA	7/1/09	8.2
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		10.4
Commodities	-6.3	-19.3	-22.9	-14.4	-10.9	NA	5/1/10	-6.6
Bloomberg Commodity Index	-10.5	-23.5	-24.7	-17.3	-13.5	-6.4		-9.0
Infrastructure	-2.7	-10.8	-13.4	NA	NA	NA	3/1/14	-1.1
DJ Brookfield Global Infrastructure Index	-2.9	-11.2	-14.4	4.9	8.8	8.8		-2.1
Natural Resources	-1.4	-24.1	-26.7	-13.4	NA	NA	11/1/12	-12.5
S&P Global Natural Resources	0.6	-22.1	-24.0	-11.3	-8.7	0.9		-10.2
<b>Absolute Return Assets<sup>3</sup></b>	<b>-0.1</b>	<b>0.4</b>	<b>1.8</b>	<b>3.9</b>	<b>NA</b>	<b>NA</b>	<b>11/1/12</b>	<b>4.2</b>
HFRI Macro Index	-0.2	-0.9	-1.3	1.2	-0.1	3.5		1.5
Relative Value	1.1	-0.3	3.9	NA	NA	NA	10/1/14	3.5
HFRI Relative Value Index	-0.2	-2.8	-0.2	3.6	4.2	5.6		-0.9
Global Macro	-1.7	2.1	-2.3	NA	NA	NA	10/1/14	1.4
HFRI Macro: Discretionary Thematic Index	-0.4	-1.9	0.0	-0.3	-0.8	NA		-1.0
<b>Russell Investments Overlay<sup>4</sup></b>	<b>0.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>NA</b>	<b>NA</b>	<b>11/1/11</b>	<b>0.1</b>

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> All manager returns are presented one quarter lagged with the exception of the American Core Realty Fund and PRISA, which are not lagged.

<sup>3</sup> Final NAV and performance provided by Albourne.

<sup>4</sup> Overlay returns provided by Russell Investments.

# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal' YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Equity Assets</b>	<b>3.2</b>	<b>-3.4</b>	<b>-0.6</b>	<b>8.8</b>	<b>NA</b>	<b>NA</b>	<b>1/1/12</b>	<b>10.3</b>
<b>Global Equity<sup>2</sup></b>	<b>3.9</b>	<b>-4.1</b>	<b>-1.7</b>	<b>8.1</b>	<b>6.4</b>	<b>NA</b>	<b>5/1/10</b>	<b>7.6</b>
Artisan Global Value	4.7	-3.0	-1.7	11.7	NA	NA	3/1/11	11.4
Net of Fees	4.5	-3.3	-2.2	11.1	NA	NA		10.7
<i>MSCI ACWI Value</i>	4.1	-6.7	-6.3	5.7	4.8	3.7		3.7
Northern Trust MSCI EAFE Index-NL	4.7	-6.0	-0.5	5.3	NA	NA	11/1/12	6.9
Net of Fees	4.7	-6.0	-0.5	5.3	NA	NA		6.9
<i>MSCI EAFE</i>	4.7	-6.0	-0.8	5.0	3.6	3.0		6.6
Vontobel Emerging Markets Equity	2.1	-8.5	-7.8	NA	NA	NA	7/1/13	-0.9
Net of Fees	1.9	-8.9	-8.6	NA	NA	NA		-1.7
<i>MSCI Emerging Markets</i>	0.7	-17.4	-14.9	-6.8	-4.8	3.6		-4.3
Northern Trust Russell 3000 Index	6.3	-1.4	0.6	14.8	12.3	7.5	9/1/99	5.4
Net of Fees	6.3	-1.4	0.5	14.8	12.2	7.5		5.3
<i>Russell 3000</i>	6.3	-1.4	0.5	14.7	12.2	7.4		5.2
Cove Street Small Cap Value	4.3	-6.8	-1.7	NA	NA	NA	5/1/14	-0.5
Net of Fees	4.3	-7.0	-2.3	NA	NA	NA		-1.1
<i>Russell 2000 Value</i>	2.9	-8.2	-7.5	9.1	7.7	5.6		-1.7
Oberweis International Opportunities	NA	NA	NA	NA	NA	NA	11/1/15	4.7
Net of Fees	NA	NA	NA	NA	NA	NA		4.7
<i>MSCI EAFE Small Cap</i>	6.8	-0.5	9.6	10.4	6.3	4.6		0.8

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Global Equity includes a partial currency hedge initiated on August 21, 2015 of the following currencies: Australian Dollar, Canadian Dollar, Swiss Franc, Euro, British Pound Sterling, and Japanese Yen. As of the date of this report, the unrealized profit or loss was <\$0.1 mm and the total net exposure of the hedge was \$26.6 mm.



	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Equity Assets (continued)</b>								
Aberdeen Frontier Markets Equity	-1.0	-9.0	-9.8	NA	NA	NA	12/1/13	-5.5
Net of Fees	-1.3	-9.7	-11.2	NA	NA	NA		-7.0
<i>MSCI Frontier Markets</i>	-1.2	-11.7	-14.5	4.8	0.4	-1.8		-3.2
<i>MSCI Frontier Markets ex GCC</i>	0.4	-7.6	-11.8	1.8	-1.9	2.1		-7.2
<b>Long-Short Equity<sup>2</sup></b>	<b>1.3</b>	<b>-1.6</b>	<b>3.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10/1/14</b>	<b>6.1</b>
Senator Global Opportunity Offshore Fund	0.6	-7.4	-2.8	NA	NA	NA	4/1/13	7.1
<i>HFRI Event Driven Index</i>	0.3	-5.2	-2.9	3.3	3.1	4.6		2.3
Horizon Portfolio I, Limited	1.2	2.3	3.9	NA	NA	NA	7/1/13	7.7
<i>HFRI Equity Hedge (Long/Short Equity)</i>	2.3	-4.1	-0.4	5.0	2.7	3.6		4.1
Sandler Plus Offshore Fund	3.9	6.8	13.0	NA	NA	NA	5/1/13	9.2
<i>HFRI Equity Hedge (Long/Short Equity)</i>	2.3	-4.1	-0.4	5.0	2.7	3.6		3.6
Marshall Wace Eureka Fund	1.9	3.4	11.7	NA	NA	NA	4/1/14	11.0
<i>HFRI Equity Hedge (Long/Short Equity)</i>	2.3	-4.1	-0.4	5.0	2.7	3.6		0.1

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Performance is net of fees.

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Equity Assets (continued)</b>								
<b>Private Equity<sup>2,3</sup></b>	<b>-1.5</b>	<b>1.6</b>	<b>7.6</b>	<b>13.5</b>	<b>13.1</b>	<b>6.6</b>	<b>1/1/06</b>	<b>6.6</b>
Pantheon USA Fund VII	-1.4	2.5	9.7	16.0	14.7	NA	1/1/07	NA
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		10.1
Pathway Private Equity Fund VIII <sup>5</sup>	-3.3	-1.2	5.9	15.0	14.5	NA	8/1/04	NA
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		12.5
Partners Group Secondary 2011	1.6	4.8	12.3	18.6	NA	NA	11/1/12	31.5
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		13.9
Pantheon Global Secondary Fund III 'B'	-3.1	-1.2	0.5	3.1	4.3	NA	1/1/07	NA
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		10.1
Partners Group Secondary 2008	-2.4	0.2	-1.2	8.7	11.2	NA	12/1/08	NA
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		9.2
Great Hill Equity Partners IV	-0.7	5.3	25.0	31.3	30.7	NA	10/1/08	NA
<i>Cambridge Associates Private Equity Composite<sup>4</sup></i>	0.6	5.7	8.2	13.3	13.3	10.9		9.0

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> All manager returns are time-weighted and presented one quarter lagged. Meketa Investment Group recommends that the Trustees use dollar-weighted (IRR) returns as shown in the quarterly Private Markets report in order to evaluate private markets managers.

<sup>3</sup> Performance is net of fees.

<sup>4</sup> Cambridge Associates Private Equity Composite (40% Secondary and 60% Fund of Funds) used since 1Q14. Data for the Venture Economics Private Equity Index was used through 4Q13, but the index was discontinued in early 2014.

<sup>5</sup> Preliminary.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Fixed Income Assets</b>	<b>-1.0</b>	<b>-0.8</b>	<b>-0.1</b>	<b>0.9</b>	<b>NA</b>	<b>NA</b>	<b>1/1/12</b>	<b>2.4</b>
<b>Global Core</b>	<b>-0.8</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10/1/15</b>	<b>-0.8</b>
Northern Trust 1-10 Year Intermediate Gov't Bond Index	-0.8	0.3	1.1	0.8	NA	NA	10/1/12	0.7
Net of Fees	-0.8	0.3	1.1	0.8	NA	NA		0.7
<i>Barclays Intermediate Gov't Bond Index</i>	-0.8	0.4	1.2	0.8	2.0	3.7		0.8
Northern Trust 0-5 Year TIPS	-0.3	-1.0	-0.1	NA	NA	NA	7/1/14	-2.0
Net of Fees	-0.3	-1.0	-0.1	NA	NA	NA		-2.0
<i>Barclays U.S. TIPS 0-5 Years</i>	-0.3	-1.0	0.0	-0.9	0.8	2.8		-1.9
Voya Securitized Credit	-1.5	NA	NA	NA	NA	NA	8/1/15	0.1
Net of Fees	-1.5	NA	NA	NA	NA	NA		0.1
<i>Barclays U.S. Securitized</i>	-0.2	1.1	1.5	2.0	3.0	4.6		0.5
<b>Non-Investment Grade Credit<sup>2</sup></b>	<b>-3.0</b>	<b>-3.4</b>	<b>-5.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10/1/14</b>	<b>-9.7</b>
Davidson Kempner Institutional Partners	0.2	-0.1	1.5	NA	NA	NA	2/1/13	4.8
<i>HFRI Event Driven Index</i>	0.3	-5.2	-2.9	3.3	3.1	4.6		2.6
Claren Road Credit Fund, Ltd.	-6.9	-7.4	-11.9	NA	NA	NA	7/1/13	-9.5
<i>HFRI RV Fixed Income-Corporate Index</i>	0.4	-2.7	-0.8	2.0	3.5	3.8		1.8
<b>Emerging Markets</b>	<b>0.2</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>8/1/15</b>	<b>-5.1</b>
BlueBay Emerging Markets Select Debt	0.2	NA	NA	NA	NA	NA	8/1/15	-5.1
Net of Fees	-0.1	NA	NA	NA	NA	NA		-5.5
<i>50% JPM EMBI GD / 50% JPM GBI-EM</i>	0.6	-5.6	-7.1	-4.6	0.9	NA		-4.6

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Performance is net of fees.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Private Debt<sup>2,3</sup></b>	<b>-2.5</b>	<b>0.7</b>	<b>2.7</b>	<b>6.3</b>	<b>6.5</b>	<b>NA</b>	<b>12/1/10</b>	<b>6.4</b>
Medley Opportunity Fund II, L.P.	2.0	3.9	7.7	8.6	NA	NA	6/1/11	7.9
3 Month Libor + 5%	1.3	2.8	5.4	5.3	5.4	6.8		5.4
White Oak Direct Lending	-9.0	-3.4	-3.3	3.6	NA	NA	2/1/11	3.2
3 Month Libor + 5%	1.3	2.8	5.4	5.3	5.4	6.8		5.4
GSO Direct Lending	-3.3	-3.4	-3.2	3.9	NA	NA	3/1/11	10.1
3 Month Libor + 5%	1.3	2.8	5.4	5.3	5.4	6.8		5.4
<b>Real Assets</b>	<b>-1.8</b>	<b>-11.7</b>	<b>-12.8</b>	<b>-6.4</b>	<b>-5.2</b>	<b>NA</b>	<b>5/1/10</b>	<b>-2.2</b>
<b>Real Estate<sup>4</sup></b>	<b>3.4</b>	<b>8.2</b>	<b>16.2</b>	<b>16.5</b>	<b>14.6</b>	<b>5.8</b>	<b>1/1/94</b>	<b>9.3</b>
<b>Core Real Estate</b>	<b>2.9</b>	<b>6.9</b>	<b>14.4</b>	<b>12.8</b>	<b>12.8</b>	<b>NA</b>	<b>7/1/09</b>	<b>9.8</b>
PRISA I	3.2	8.2	15.4	14.5	14.4	6.1	7/1/04	7.8
Net of Fees	3.0	7.8	14.4	13.5	13.4	5.1		6.8
NCREIF ODCE Equal Weighted (net)	3.2	6.7	14.2	12.7	12.6	5.3		6.8
American Core Realty Fund, LLC	3.0	6.5	15.4	13.1	13.1	NA	1/1/07	5.4
Net of Fees	2.8	6.0	14.3	12.0	12.0	NA		4.3
NCREIF ODCE Equal Weighted (net)	3.2	6.7	14.2	12.7	12.6	5.3		4.3

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> All manager returns are time-weighted and presented one quarter lagged. Meketa Investment Group recommends that the Trustees use dollar-weighted (IRR) returns as shown in the quarterly Private Markets report in order to evaluate private markets managers.

<sup>3</sup> Performance is net of fees.

<sup>4</sup> All manager returns are presented one quarter lagged with the exception of the American Core Realty Fund and PRISA, which are not lagged.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Real Assets (continued)</b>								
<b>Private Real Estate<sup>2,3,4</sup></b>	<b>4.7</b>	<b>11.4</b>	<b>20.7</b>	<b>25.3</b>	<b>19.4</b>	<b>NA</b>	<b>7/1/09</b>	<b>8.2</b>
DRA Growth and Income Fund VII	4.3	6.6	14.3	15.5	NA	NA	4/1/12	15.5
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		11.7
DRA Growth and Income Fund VIII	4.5	8.3	13.4	NA	NA	NA	1/1/15	13.4
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		13.3
DRA Growth and Income Fund V	5.5	15.1	18.4	17.0	12.5	5.7	1/1/06	5.7
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		7.8
Fidelity Real Estate Growth Fund III	5.0	16.8	40.7	27.6	21.2	NA	1/1/08	-7.2
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		5.7
DRA Growth and Income Fund VI	4.3	9.3	12.0	22.0	19.5	NA	1/1/08	9.9
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		5.7
GEAM Value Add Realty Partners	0.9	9.4	40.5	33.1	24.6	NA	1/1/07	-2.3
NCREIF Property	2.9	6.1	13.3	12.1	12.2	7.8		6.8

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Performance is net of fees.

<sup>3</sup> All manager returns are time-weighted and presented one quarter lagged. Meketa Investment Group recommends that the Trustees use dollar-weighted (IRR) returns as shown in the quarterly Private Markets report in order to evaluate private markets managers.

<sup>4</sup> Trailing period returns provided by manager.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Real Assets (continued)</b>								
<b>Commodities<sup>2</sup></b>	<b>-6.3</b>	<b>-19.3</b>	<b>-22.9</b>	<b>-14.4</b>	<b>-10.9</b>	<b>NA</b>	<b>5/1/10</b>	<b>-6.6</b>
First Quadrant Balanced Risk Commodity Fund	-5.3	-19.8	-24.9	-15.7	NA	NA	4/1/11	-13.4
Custom Risk Parity Commodity Benchmark <sup>3</sup>	-7.4	-18.5	-20.5	-13.0	NA	NA		-10.6
Bloomberg Commodity Index	-10.5	-23.5	-24.7	-17.3	-13.5	-6.4		-14.9
Credit Suisse Risk Parity Commodity Fund	-7.4	-18.8	-20.7	-13.0	NA	NA	4/1/11	-10.5
Custom Risk Parity Commodity Benchmark <sup>3</sup>	-7.4	-18.5	-20.5	-13.0	NA	NA		-10.6
Bloomberg Commodity Index	-10.5	-23.5	-24.7	-17.3	-13.5	-6.4		-14.9
<b>Infrastructure<sup>2</sup></b>	<b>-2.7</b>	<b>-10.8</b>	<b>-13.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3/1/14</b>	<b>-1.1</b>
Rhumblin DJ Brookfield Global Infrastructure <sup>4</sup>	-2.8	-10.8	NA	NA	NA	NA	6/1/15	-14.3
DJ Brookfield Global Infrastructure Index	-2.9	-11.2	-14.4	4.9	8.8	8.8		-14.8
<b>Natural Resources<sup>2</sup></b>	<b>-1.4</b>	<b>-24.1</b>	<b>-26.7</b>	<b>-13.4</b>	<b>NA</b>	<b>NA</b>	<b>11/1/12</b>	<b>-12.5</b>
Rhumblin S&P Global Large MidCap Commodity & NR <sup>4</sup>	-1.4	-24.1	NA	NA	NA	NA	6/1/15	-28.0
S&P Global Large MidCap Commodity and Resources	-1.5	-24.2	-27.0	-13.7	-9.7	2.4		-28.2
S&P Global Natural Resources	0.6	-22.1	-24.0	-11.3	-8.7	0.9		-25.9

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Performance is net of fees.

<sup>3</sup> Custom Risk Parity Commodity Benchmark returns provided by Credit Suisse.

<sup>4</sup> Tracking error due to a cash position resulting from a delay in the ability to invest in certain markets.



# San Jose Federated City Employees' Retirement System

## Aggregate Assets Performance as of 12/31/15

	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Absolute Return Assets<sup>2,3</sup></b>	<b>-0.1</b>	<b>0.4</b>	<b>1.8</b>	<b>3.9</b>	<b>NA</b>	<b>NA</b>	<b>11/1/12</b>	<b>4.2</b>
<b>Relative Value</b>	<b>1.1</b>	<b>-0.3</b>	<b>3.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10/1/14</b>	<b>3.5</b>
DE Shaw	4.1	5.8	14.6	NA	NA	NA	4/1/13	14.1
<i>HFRI Fund Weighted Composite Index</i>	1.0	-3.3	-0.8	3.7	2.3	4.1		2.7
Arrowgrass International Fund	2.2	1.3	6.5	6.3	NA	NA	11/1/12	6.6
<i>HFRI Relative Value Index</i>	-0.2	-2.8	-0.2	3.6	4.2	5.6		3.9
Pine River Fund	-1.1	-6.6	-2.7	3.9	NA	NA	1/1/13	3.9
<i>HFRI Relative Value Index</i>	-0.2	-2.8	-0.2	3.6	4.2	5.6		3.6
Hudson Bay Fund	-1.9	-2.7	-1.9	NA	NA	NA	8/1/13	0.1
<i>HFRI Relative Value Index</i>	-0.2	-2.8	-0.2	3.6	4.2	5.6		2.9
<b>Global Macro</b>	<b>-1.7</b>	<b>2.1</b>	<b>-2.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10/1/14</b>	<b>1.4</b>
Dymon Asia Macro	-0.7	NA	NA	NA	NA	NA	9/1/15	-0.9
<i>HFRI Macro Index</i>	-0.2	-0.9	-1.3	1.2	-0.1	3.5		-0.2
BlueTrend	-2.4	6.6	3.4	NA	NA	NA	4/1/13	-0.7
<i>Barclay BTOP50 Index</i>	0.0	2.3	-1.0	3.9	1.1	3.3		3.5
Kepos Alpha Fund	-2.1	6.5	-8.4	NA	NA	NA	3/1/13	1.9
<i>HFRI Macro Systematic Diversified</i>	-1.0	-0.7	-2.3	2.3	0.2	5.2		2.3

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Final NAV and performance provided by Albourne.

<sup>3</sup> Performance is net of fees.



	4Q15 (%)	Fiscal <sup>1</sup> YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Performance Inception Date	Since Inception (%)
<b>Absolute Return Assets<sup>2,3</sup> (continued)</b>								
Brevan Howard Multi-Strategy Fund <sup>4</sup>	-1.2	-3.2	-1.9	0.3	NA	NA	12/1/12	0.7
<i>HFRI Macro Index</i>	-0.2	-0.9	-1.3	1.2	-0.1	3.5		1.5
Brevan Howard Fund, Limited <sup>4</sup>	-2.2	-3.5	NA	NA	NA	NA	7/1/15	-3.5
<i>HFRI Macro Index</i>	-0.2	-0.9	-1.3	1.2	-0.1	3.5		-0.9
MKP Opportunity Offshore	-2.3	NA	NA	NA	NA	NA	8/1/15	-4.7
<i>HFRI Macro: Discretionary Thematic Index</i>	-0.4	-1.9	0.0	-0.3	-0.8	NA		-2.7

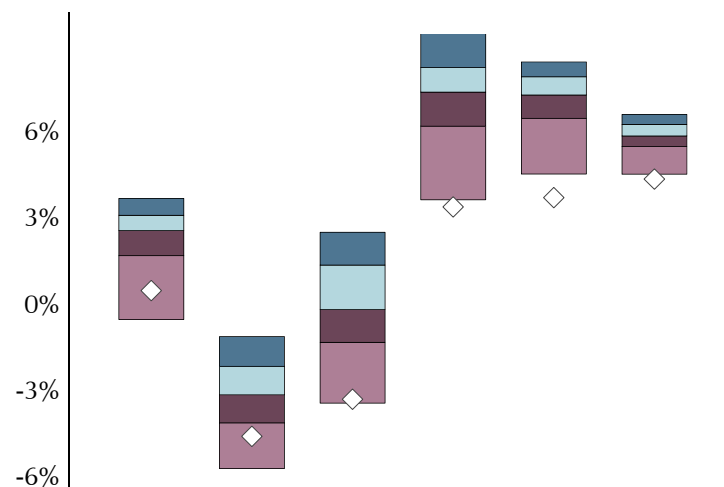
<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Final NAV and performance provided by Albourne.

<sup>3</sup> Performance is net of fees.

<sup>4</sup> The Plan began transitioning from the Brevan Howard Multi-Strategy Fund to the Brevan Howard Limited Fund in July 2015. The transition will be completed after four calendar quarters.

Total Fund Aggregate vs. Public Plans > \$1 Billion Universe<sup>1</sup>



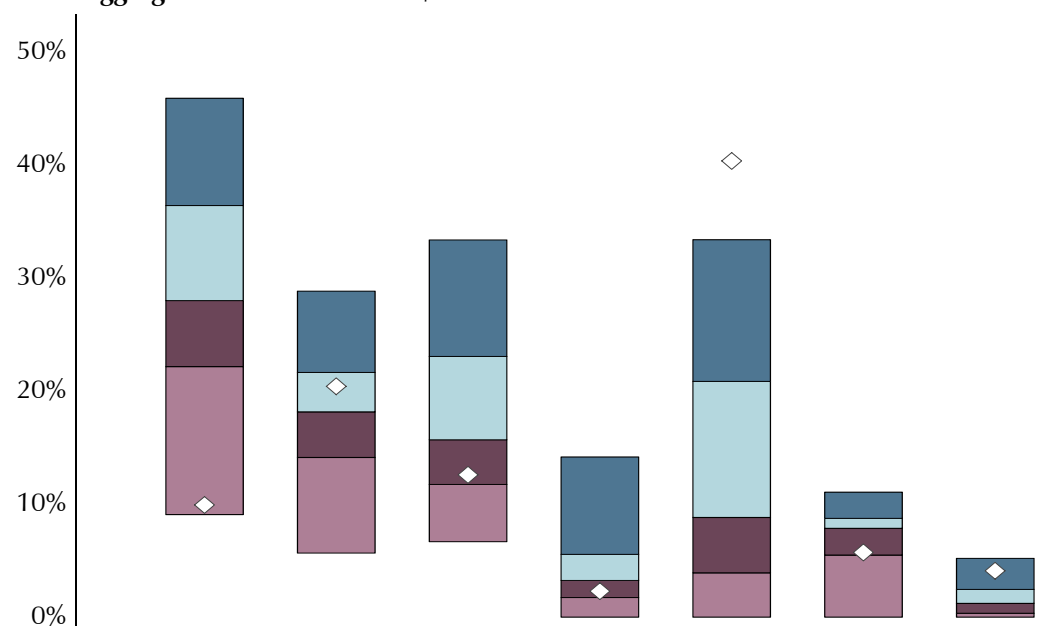
	4Q15 (%)	Fiscal YTD <sup>2</sup> (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Total Fund Aggregate<sup>3</sup></b>	<b>0.4</b>	<b>-4.2</b>	<b>-3.1</b>	<b>3.1</b>	<b>3.4</b>	<b>3.9</b>
25th Percentile	2.9	-1.9	1.3	7.7	7.4	5.9
Median	2.4	-2.9	-0.1	6.9	6.8	5.5
75th Percentile	1.6	-3.8	-1.2	5.8	6.1	5.2
Total Fund Standard Deviation	7.8	6.4	5.4	5.2	7.4	9.4
Peer Median Standard Deviation	9.2	8.8	7.0	6.3	7.3	9.7
Population	57	57	57	57	57	52

<sup>1</sup> Final universe data provided by InvestorForce. Returns are net of fees.

<sup>2</sup> Fiscal Year begins July 1.

<sup>3</sup> Net of Fees.

Total Fund Aggregate vs Public Plans > \$1 Billion Universe<sup>1</sup>



	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
San Jose Allocation (Russell Overlay Net Position) <sup>2</sup>	12.2	18.5	18.9	2.5	39.6	6.3	2.1
25th Percentile	38.2	22.7	24.2	5.8	21.9	9.2	2.6
Median	29.4	19.0	16.5	3.4	9.2	8.2	1.3
75th Percentile	23.2	14.8	12.3	1.8	4.1	5.8	0.4
Population	40	40	40	40	40	40	40

<sup>1</sup> Final universe data provided by InvestorForce.

<sup>2</sup> Based on 12/31/15 physical exposures, adjusted for synthetic positions provided by Russell Investments.



## San Jose Federated City Employees' Retirement System

## Policy Benchmark Description as of 12/31/15

Time Period	%	Composition
10/1/2014-Present	28	MSCI ACWI IMI
	9	Cambridge Associates Private Equity Composite <sup>1</sup>
	24	Barclays Global Aggregate
	7	NCREIF Property
	6	Bloomberg Commodity Index
	5	DJ Brookfield Global Infrastructure Index
	5	S&P Global Natural Resources
	11	HFRI Macro Index <sup>2</sup>
1/1/2012-9/30/2014	5	60% MSCI ACWI IMI/40% Barclays Global Aggregate <sup>3</sup>
	31	MSCI ACWI IMI
	9	Cambridge Associates Private Equity Composite <sup>1</sup>
	5	NCREIF Property
	2.5	Barclays Intermediate Government
	1.25	Barclays U.S. TIPS
	1.25	Barclays U.S. TIPS 0-5 Years <sup>4</sup>
	5	3-Month LIBOR + 5%
	10	Risk Parity Commodities
	10	CPI-U + 5%
4/1/2011-12/31/2011	25	HFRI Fund of Funds Composite
	16	MSCI ACWI
	9	MSCI ACWI Value
	5	MSCI Emerging Markets
	5	MSCI EAFE Small Cap
	3	MSCI EAFE Growth
	3	Russell 3000
	2.5	Russell 2000 Growth
	2.5	Russell 2000 Value
	7.5	Russell Investments Barclays U.S. TIPS
	5	Barclays Intermediate Government
	2.5	Barclays Long U.S. Credit
	2.5	Merrill Lynch High Yield BB/B
	2.5	CSFB Leveraged Loan
	3	ML 300 Global Convertibles
	5	HFRI Weighted Composite
	5	NCREIF Property
	6	Venture Economics Private Equity

Time Period	%	Composition
4/1/2011-12/31/2011 (continued)	8	Custom Risk Parity Benchmark
	2	S&P Global Infrastructure
	5	3-Month LIBOR + 5%
4/1/2010-3/31/2011	16	MSCI ACWI
	9	MSCI ACWI Value
	5	MSCI Emerging Markets
	5	MSCI EAFE Small Cap
	3	MSCI EAFE Growth
	3	Russell 3000
	2.5	Russell 2000 Growth
	2.5	Russell 2000 Value
	7.5	Russell Investments Barclays U.S. TIPS
	5	Barclays Intermediate Government
	2.5	Barclays Long U.S. Credit
	2.5	Merrill Lynch High Yield BB/B
	2.5	CSFB Leveraged Loan
	3	ML 300 Global Convertibles
	5	HFRI Weighted Composite
	5	NCREIF Property
	6	Venture Economics Private Equity
	8	Dow-Jones UBS Commodities
7/1/09 – 3/31/2010	2	S&P Global Infrastructure
	5	3-Month LIBOR + 5%
	34	Russell 1000
	9	Russell 2000
	29	Barclays Aggregate
	7	S&P Citigroup WGBI
	15	MSCI ACWI ex U.S.
	6	NCREIF Property

<sup>1</sup> Cambridge Associates Private Equity Composite (40% Secondary and 60% Fund of Funds) used since 1Q14. Data for the Venture Economics Private Equity Index was used through 4Q13, but the index was discontinued in early 2014.

<sup>2</sup> HFRI Macro Discretionary Thematic through 6/30/2015, HFRI Macro Index thereafter.

<sup>3</sup> Policy Benchmark from 10/1/14 through 5/31/15, 60% MSCI ACWI IMI/40% Barclays Global Aggregate thereafter.

<sup>4</sup> Barclays U.S. TIPS 1-5 Years through 6/30/14, Barclays U.S. TIPS 0-5 Years thereafter.

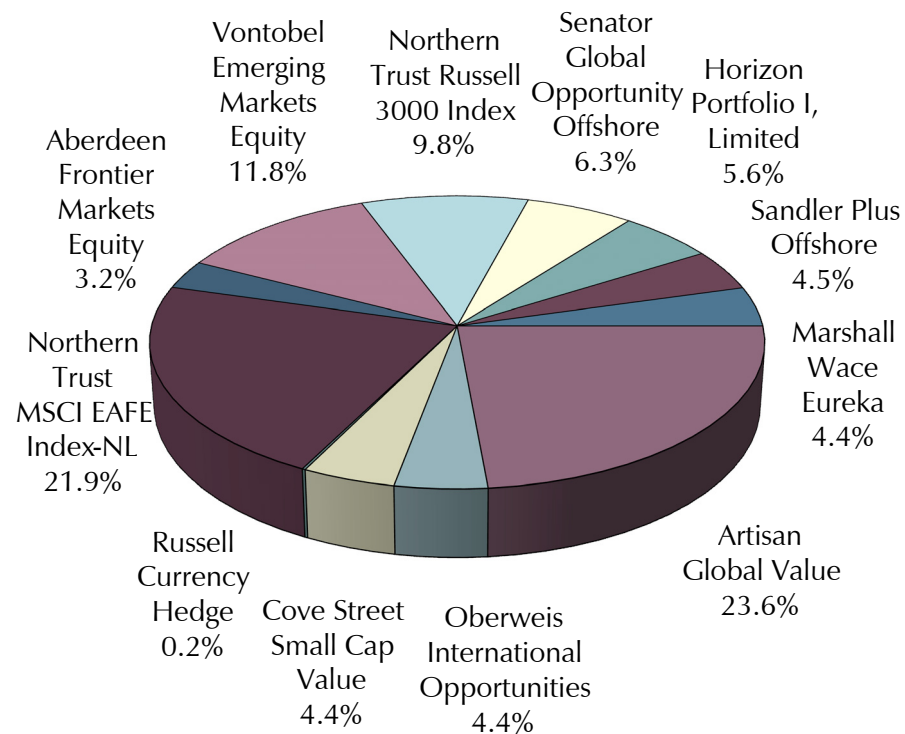


## Plan Detail

**Global Equity Assets  
As of December 31, 2015**

## San Jose Federated City Employees' Retirement System

## Global Equity Assets as of 12/31/15



Risk: (sixty months)	Aggregate Global Equity <sup>1</sup> 12/31/15	MSCI ACWI IMI 12/31/15
Annualized Return (%)	6.4	6.1
Standard Deviation (%)	12.9	14.0
Best Monthly Return (%)	10.5	10.8
Worst Monthly Return (%)	-9.4	-9.8
Beta	0.91	1.00
Correlation to Index	0.99	1.00
Correlation to Total Fund Return	0.96	NA
Sharpe Measure (risk-adjusted return)	0.49	0.43
Information Ratio	0.14	NA

<sup>1</sup> Excludes Long-Short Equity prior to 10/1/14.



	Aggregate Global Equity <sup>1</sup> 12/31/15	MSCI ACWI IMI 12/31/15	Aggregate Global Equity <sup>1</sup> 9/30/15
<b>Capitalization Structure:</b>			
Weighted Average Market Cap. (US\$ billion)	59.7	76.5	56.2
Median Market Cap. (US\$ billion)	3.2	1.3	1.6
Large (% over US\$20 billion)	56	61	58
Medium (% US\$3 billion to US\$20 billion)	34	29	29
Small (% under US\$3 billion)	11	10	13
<b>Fundamental Structure:</b>			
Price-Earnings Ratio	19	18	17
Price-Book Value Ratio	2.6	1.7	2.3
Dividend Yield (%)	2.3	2.5	2.5
Historical Earnings Growth Rate (%)	11	10	9
Projected Earnings Growth Rate (%)	11	10	10

<sup>1</sup> Excludes Long-Short Equity.

<b>Diversification:</b>	<b>Aggregate Global Equity<sup>1</sup> 12/31/15</b>	<b>MSCI ACWI IMI 12/31/15</b>	<b>Aggregate Global Equity<sup>1</sup> 9/30/15</b>
Number of Holdings	3,809	8,695	5,844
% in 5 largest holdings	10	5	8
% in 10 largest holdings	15	8	14

<b>Largest Five Holdings:</b>	<b>% of Portfolio</b>	<b>Economic Sector</b>
HEXPOL 'B'	4.3	Materials
Microsoft	1.5	Software & Services
Oracle	1.4	Software & Services
Bank of New York Mellon	1.3	Diversified Financials
Johnson & Johnson	1.2	Pharmaceuticals & Biotech.

<sup>1</sup> Excludes Long-Short Equity.

Sector Allocation (%):	Aggregate Global Equity <sup>1</sup> 12/31/15	MSCI ACWI IMI 12/31/15	Aggregate Global Equity <sup>1</sup> 9/30/15
Consumer Staples	15	10	14
Financials	25	22	29
Materials	8	5	3
Information Technology	16	15	15
Telecommunication Services	3	3	4
Utilities	2	3	2
Consumer Discretionary	11	13	11
Industrials	9	11	10
Energy	3	6	4
Health Care	8	12	9

<sup>1</sup> Excludes Long-Short Equity.



## San Jose Federated City Employees' Retirement System

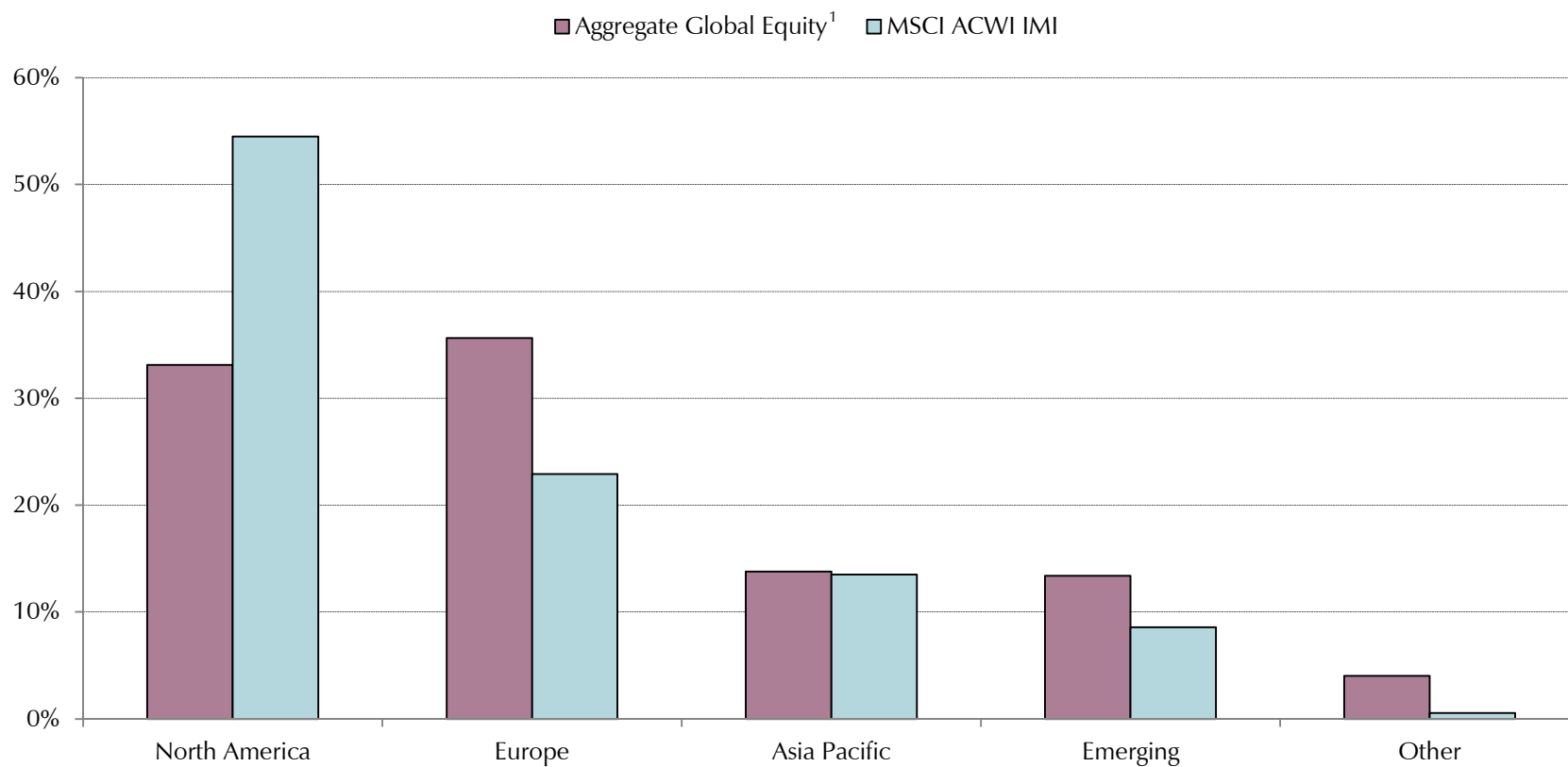
## Global Equity Assets Country & Region Breakdown as of 12/31/15

	Aggregate Global Equity <sup>1</sup> 12/31/15 (%)	MSCI ACWI IMI 12/31/15 (%)
<b>North America</b>	<b>33.1</b>	<b>54.5</b>
United States of America	32.2	51.7
<b>Europe</b>	<b>35.7</b>	<b>22.9</b>
United Kingdom	11.5	6.3
Sweden	5.5	1.1
Switzerland	4.8	3.3
Denmark	2.1	0.7
Netherlands	1.9	1.5
Germany	3.0	3.0
France	2.8	3.0
<b>Asia Pacific</b>	<b>13.8</b>	<b>13.5</b>
Japan	9.0	8.4
Australia	2.2	2.3
Hong Kong	2.1	2.1

	Aggregate Global Equity <sup>1</sup> 12/31/15 (%)	MSCI ACWI IMI 12/31/15 (%)
<b>Emerging</b>	<b>13.4</b>	<b>8.6</b>
India	3.5	0.9
Brazil	1.4	0.5
Mexico	1.2	0.4
Indonesia	1.0	0.2
South Korea	2.3	1.6
China	1.5	1.4
<b>Other</b>	<b>4.0</b>	<b>0.5</b>
Bermuda	1.1	0.2

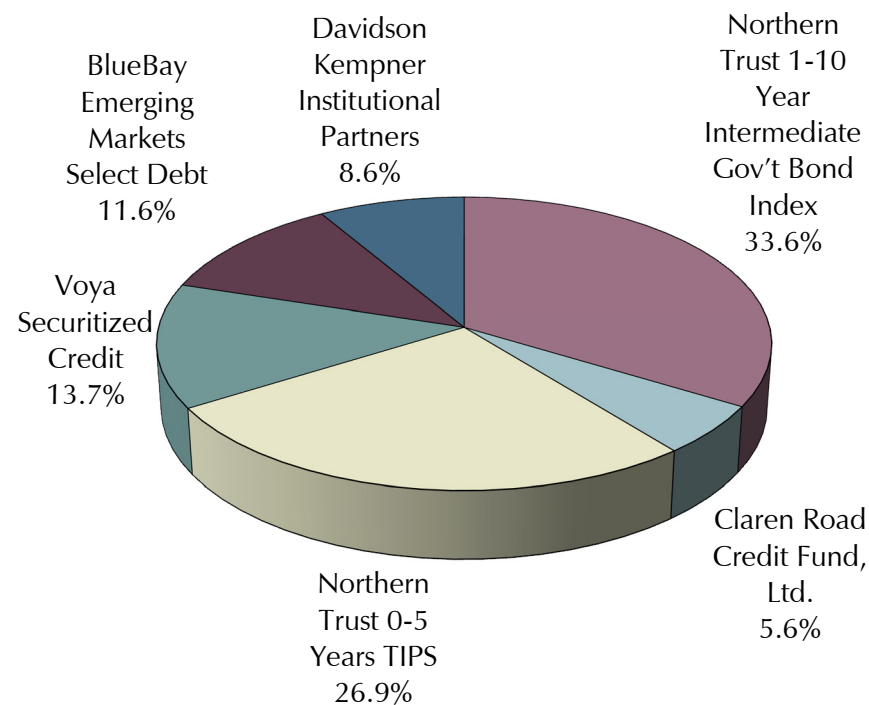
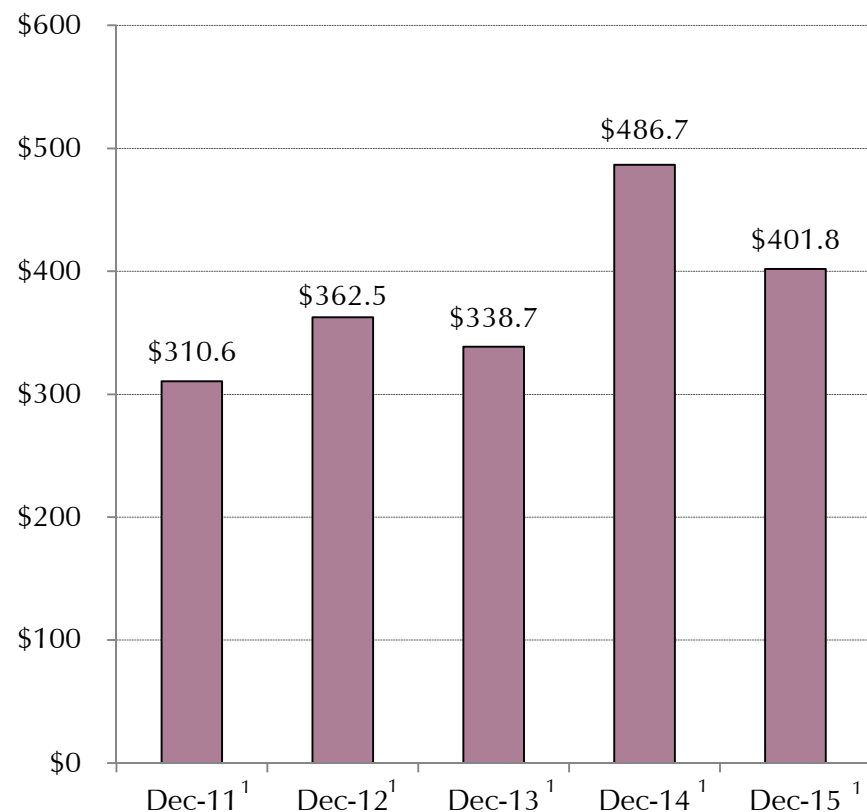
<sup>1</sup> Excludes Long-Short Equity.





<sup>1</sup> Excludes Long-Short Equity.

**Fixed Income Assets  
As of December 31, 2015**



<sup>1</sup> Growth chart is representative of Public Fixed Income and Private Debt prior to 10/1/14, and all Fixed Income Assets thereafter. Reports prior to Q4 2014 only included Public Fixed Income in the charts, resulting in differences in total reported market values.

Risk: (forty-eight months)	Aggregate Fixed Income <sup>1</sup> 12/31/15	Barclays Global Aggregate 12/31/15
Annualized Return (%)	2.4	-0.3
Standard Deviation (%)	1.9	3.8
Best Monthly Return (%)	1.3	2.1
Worst Monthly Return (%)	-0.9	-3.0
Beta	0.26	1.00
Correlation to Index	0.54	1.00
Correlation to Total Fund Return	0.50	NA
Sharpe Measure (risk-adjusted return) <sup>2</sup>	1.23	Neg.
Information Ratio	0.80	NA

<sup>1</sup> Excludes Non-Investment Grade Credit prior to 10/1/14.

<sup>2</sup> A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.

### Duration & Yield:

Average Effective Duration (years)

Yield to Maturity (%)

Aggregate  
Fixed Income<sup>1</sup>  
12/31/15

Barclays Global  
Aggregate  
12/31/15

Aggregate  
Fixed Income<sup>1</sup>  
9/30/15

3.2

6.6

2.9

2.8

1.8

2.4



<sup>1</sup> Excludes Non-Investment Grade Credit.

	Aggregate Fixed Income <sup>1</sup> 12/31/15	Barclays Global Aggregate 12/31/15	Aggregate Fixed Income <sup>1</sup> 9/30/15
<b>Market Allocation (%):</b>			
United States	87	39	87
Foreign (developed markets)	0	55	0
Foreign (emerging markets)	13	6	13
<b>Currency Allocation (%):</b>			
Non-U.S. Dollar Exposure	7	55	6
<b>Sector Allocation (%):</b>			
U.S. Treasury-Nominal	36	15	36
U.S. Treasury-TIPS	31	0	31
U.S. Agency	3	1	3
Mortgage Backed	7	12	6
Corporate	0	18	1
Bank Loans	0	0	0
Local & Provincial Government	0	3	0
Sovereign & Supranational	12	47	11
Commercial Mortgage Backed	6	0	6
Asset Backed	2	0	3
Cash Equivalent	1	0	3
Other	0	3	0

<sup>1</sup> Excludes Non-Investment Grade Credit.

**Portfolio Reviews**  
**As of December 31, 2015**



## Global Equity Portfolio Reviews As of December 31, 2015

## San Jose Federated City Employees' Retirement System

**Mandate:** International Equities,  
Developed Markets

**Active/Passive:** Active

**Market Value:** \$131.7 million

**Portfolio Manager:** David Samra  
Daniel J. O'Keefe

**Location:** San Francisco, California

**Inception Date:** 3/1/2011

**Account Type:** Separately Managed

	Value	Core	Growth
Large			
Medium			
Small			

### Fee Schedule:

0.80% on first \$50 mm; 0.60% on next \$50 mm; 0.50% thereafter

### Liquidity Constraints:

Daily

### Strategy:

Artisan employs a bottom-up investment approach seeking to identify undervalued quality businesses that offer the potential for superior risk/reward outcomes. Artisan runs a somewhat concentrated portfolio of 40 to 60 stocks. They are benchmark-agnostic, and willing to have exposures that are materially different than the benchmark.

### Guidelines:

Benchmark = MSCI ACWI; Max. % per country other than U.S. = 35%; Max. % per industry = 25%; Max. % in debt securities = 10%; Max % outside developed markets = 10% above benchmark weighting

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	Since 3/1/11
<b>Artisan Global Value</b>	<b>4.7</b>	<b>-3.0</b>	<b>-1.7</b>	<b>11.7</b>	<b>11.4</b>
<b>Net of Fees</b>	<b>4.5</b>	<b>-3.3</b>	<b>-2.2</b>	<b>11.1</b>	<b>10.7</b>
MSCI ACWI Value	4.1	-6.7	-6.3	5.7	3.7
Peer Global Equity	4.8	-4.3	0.3	10.4	8.0
Peer Ranking (percentile)	55	36	75	28	7
Risk: (fifty-eight months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
<b>Artisan Global Value</b>	<b>13.1%</b>	<b>0.84</b>	<b>0.86</b>	<b>1.70</b>	<b>0.95</b>
MSCI ACWI Value	13.9	1.00	0.26	NA	1.00

## Artisan Global Value Portfolio Detail as of 12/31/15

	12/31/15		9/30/15	
Capitalization Structure:	Artisan Global Value	MSCI ACWI Value	Artisan Global Value	MSCI ACWI Value
Weighted Average Market Cap. (US\$ billion)	89.8	91.4	80.4	84.1
Median Market Cap. (US\$ billion)	28.9	7.5	27.7	7.2
Large (% over US\$20 billion)	74	73	75	72
Medium (% US\$3 billion to US\$20 billion)	25	25	25	26
Small (% under US\$3 billion)	1	2	1	2
Fundamental Structure:				
Price-Earnings Ratio	15	14	16	14
Price-Book Value Ratio	2.2	1.4	2.2	1.3
Dividend Yield (%)	2.1	3.5	2.3	3.7
Historical Earnings Growth Rate (%)	6	4	7	4
Projected Earnings Growth Rate (%)	9	5	9	6
Sector Allocation (%):				
Information Technology	28	10	25	9
Financials	39	31	41	31
Consumer Staples	7	7	8	9
Industrials	8	9	8	8
Health Care	8	10	9	9
Consumer Discretionary	5	7	4	6
Telecommunication Services	2	5	2	6
Materials	0	5	0	5
Utilities	0	6	0	6
Energy	3	11	3	10
Diversification:				
Number of Holdings	41	1,332	45	1,310
% in 5 largest holdings	23	9	23	8
% in 10 largest holdings	42	15	40	14
Region Allocation (%):				
North America	55	55	52	55
Europe	30	23	34	23
Asia Pacific	0	13	1	13
Emerging	11	9	8	9
Other	4	0	4	0
Largest Five Holdings:		Industry		
Oracle	5.2	Software & Services		
Bank of New York Mellon	4.8	Diversified Financials		
Microsoft	4.7	Software & Services		
Royal Bank of Scotland	4.1	Banks		
Arch Capital	4.1	Insurance		

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

**Mandate:** International Equities,  
Developed Markets

**Active/Passive:** Passive

**Market Value:** \$122.3 million

**Portfolio Manager:** Team

**Location:** Chicago, Illinois

**Inception Date:** 11/1/2012

**Account Type:** Commingled

	Value	Core	Growth
Large			
Medium			
Small			

### Fee Schedule:

0.05% on all assets

### Liquidity Constraints:

Daily

### Strategy:

The Northern Trust MSCI EAFE Index strategy seeks to replicate the return of the MSCI EAFE index. Northern Trust employs a proprietary process in combination with low-cost trade execution to accomplish this objective. To efficiently manage cash flows, Northern Trust seeks to maximize the liquidity of trade lists and match the relevant benchmark's systemic risk. The result is a portfolio that tightly tracks the index while incurring lower transaction costs.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	Since 11/1/12
Northern Trust MSCI EAFE Index-NL	4.7	-6.0	-0.5	5.3	6.9
Net of Fees	4.7	-6.0	-0.5	5.3	6.9
MSCI EAFE	4.7	-6.0	-0.8	5.0	6.6

## Northern Trust MSCI EAFE Index-NL Portfolio Detail as of 12/31/15

	12/31/15		9/30/15	
	Northern Trust MSCI EAFE Index-NL	MSCI EAFE	Northern Trust MSCI EAFE Index-NL	MSCI EAFE
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	55.5	53.9	53.0	52.8
Median Market Cap. (US\$ billion)	8.5	8.7	8.0	8.1
Large (% over US\$20 billion)	66	65	64	64
Medium (% US\$3 billion to US\$20 billion)	33	34	34	34
Small (% under US\$3 billion)	1	1	1	1
<b>Fundamental Structure:</b>				
Price-Earnings Ratio	17	17	16	16
Price-Book Value Ratio	1.7	1.7	1.5	1.5
Dividend Yield (%)	3.2	3.2	3.3	3.3
Historical Earnings Growth Rate (%)	10	8	7	7
Projected Earnings Growth Rate (%)	8	8	9	9
<b>Sector Allocation (%):</b>				
Consumer Discretionary	16	13	13	13
Information Technology	6	5	5	5
Consumer Staples	12	12	12	12
Financials	26	26	26	26
Utilities	4	4	4	4
Materials	6	6	7	7
Telecommunication Services	4	5	5	5
Energy	4	5	5	5
Industrials	12	13	12	12
Health Care	10	12	12	12
<b>Diversification:</b>				
Number of Holdings	947	925	938	910
% in 5 largest holdings	10	8	8	8
% in 10 largest holdings	16	12	13	13
<b>Region Allocation (%):</b>				
North America	0	0	0	0
Europe	62	64	66	66
Asia Pacific	37	35	33	33
Emerging	0	0	0	0
Other	1	1	1	1
<b>Largest Five Holdings:</b>				
		<b>Industry</b>		
Toyota Motor	3.5	Automobiles & Components		
Westpac Banking	1.7	Banks		
SAP	1.6	Software & Services		
Nestle	1.6	Food, Beverage & Tobacco		
Diageo	1.4	Food, Beverage & Tobacco		

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

## Vontobel Emerging Markets Equity Portfolio Detail as of 12/31/15

**Mandate:** International Equities,  
Emerging Markets

**Active/Passive:** Active

**Market Value:** \$66.0 million

**Portfolio Manager:** Rajiv Jain

**Location:** New York, New York

**Inception Date:** 7/1/2013

**Account Type:** Commingled

	Value	Core	Growth
Large			
Medium			
Small			

### Fee Schedule:

0.95% on first \$150 mm; 0.85% thereafter

### Liquidity Constraints:

Daily

### Strategy:

Vontobel believes that long-term, stable, and superior earnings growth drives investment returns and risk-adjusted outperformance. Thus they seek to invest in businesses that are predictable (strong franchise, low capital intensity, shareholder oriented management, etc.), sustainable (ability to replicate or exceed past success in terms of growth, operating margins, ROE, ROA etc.), and are trading at an attractive margin of safety (to at least a 25% discount to their assessment of intrinsic value). They believe in building concentrated portfolios (50 to 90 stocks) of high conviction positions with little attention paid to the benchmark.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 7/1/13
<b>Vontobel Emerging Markets Equity</b>	<b>2.1</b>	<b>-8.5</b>	<b>-7.8</b>	<b>-0.9</b>
<b>Net of Fees</b>	<b>1.9</b>	<b>-8.9</b>	<b>-8.6</b>	<b>-1.7</b>
MSCI Emerging Markets	0.7	-17.4	-14.9	-4.3
Peer Emerging Markets	0.9	-14.8	-12.9	-3.2
Peer Ranking (percentile)	31	4	15	23

	12/31/15		9/30/15	
	Vontobel Emerging Markets Equity	MSCI Emerging Markets	Vontobel Emerging Markets Equity	MSCI Emerging Markets Equity
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	46.6	38.1	39.5	33.4
Median Market Cap. (US\$ billion)	16.4	4.2	15.8	4.2
Large (% over US\$20 billion)	63	38	61	35
Medium (% US\$3 billion to US\$20 billion)	36	53	38	55
Small (% under US\$3 billion)	2	10	2	10

<b>Fundamental Structure:</b>				
Price-Earnings Ratio	24	14	22	13
Price-Book Value Ratio	4.8	1.5	4.2	1.3
Dividend Yield (%)	2.1	2.5	2.3	2.7
Historical Earnings Growth Rate (%)	17	10	19	10
Projected Earnings Growth Rate (%)	13	13	13	12

<b>Sector Allocation (%):</b>				
Consumer Staples	45	8	39	9
Utilities	4	3	4	3
Health Care	3	3	4	3
Telecommunication Services	4	7	5	7
Consumer Discretionary	7	10	7	9
Materials	2	6	2	7
Industrials	1	7	0	7
Information Technology	14	20	14	18
Energy	0	7	1	8
Financials	21	28	24	29

<b>Diversification:</b>				
Number of Holdings	70	836	71	836
% in 5 largest holdings	25	13	27	13
% in 10 largest holdings	42	19	42	19

<b>Region Allocation (%):</b>				
Asia Pacific	59	71	62	69
Latin America	13	12	17	13
Europe/MidEast/Africa	6	16	6	17
Frontier	1	0	1	0
Other	22	2	15	0

<b>Largest Five Holdings:</b>		<b>Industry</b>
British American Tobacco	7.2	Food, Beverage & Tobacco
Housing Development Financial	5.0	Banks
SABMiller	4.4	Food, Beverage & Tobacco
HDFC Bank	4.3	Banks
ITC	4.0	Food, Beverage & Tobacco

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

## Northern Trust Russell 3000 Index Portfolio Detail as of 12/31/15

**Mandate:** Domestic Equities  
**Active/Passive:** Passive  
**Market Value:** \$54.6 million  
**Portfolio Manager:** Brent D. Reeder  
**Location:** Chicago, Illinois  
**Inception Date:** 9/1/1999  
**Account Type:** Commingled

	Value	Core	Growth
Large			
Medium			
Small			

**Fee Schedule:**  
 0.03% on all assets

**Liquidity Constraints:**  
 Daily

### Strategy:

The Northern Trust strategy seeks to replicate the return of the Russell 3000 Index. Northern Trust employs a proprietary process in combination with low-cost trade execution to accomplish this objective. To efficiently manage cash flows, Northern Trust seeks to maximize the liquidity of trade lists and match the relevant benchmark's systemic risk. The result is a portfolio that tightly tracks the index while incurring lower transaction costs.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	5 YR	Since 9/1/99
Northern Trust Russell 3000 Index	6.3	-1.4	0.6	14.8	12.3	5.4
Net of Fees	6.3	-1.4	0.5	14.8	12.2	5.3
Russell 3000	6.3	-1.4	0.5	14.7	12.2	5.2

	12/31/15 Northern Trust Russell 3000 Index	Russell 3000	9/30/15 Northern Trust Russell 3000 Index	Russell 3000
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	106.0	106.1	97.4	97.4
Median Market Cap. (US\$ billion)	1.7	1.4	1.7	1.4
Large (% over US\$20 billion)	69	69	67	67
Medium (% US\$3 billion to US\$20 billion)	23	23	25	25
Small (% under US\$3 billion)	8	8	8	8

<b>Fundamental Structure:</b>				
Price-Earnings Ratio	21	21	19	19
Price-Book Value Ratio	2.2	2.3	2.3	2.3
Dividend Yield (%)	2.1	2.1	2.1	2.1
Historical Earnings Growth Rate (%)	11	11	11	11
Projected Earnings Growth Rate (%)	11	11	11	11

<b>Sector Allocation (%):</b>				
Financials	18	18	18	18
Consumer Discretionary	14	13	14	14
Energy	6	6	6	6
Industrials	11	11	11	11
Information Technology	20	20	20	20
Telecommunication Services	2	2	2	2
Materials	3	3	3	3
Consumer Staples	9	9	9	9
Utilities	3	3	3	3
Health Care	15	15	14	14

<b>Diversification:</b>				
Number of Holdings	2,672	3,012	2,660	2,979
% in 5 largest holdings	9	9	9	9
% in 10 largest holdings	14	14	14	14

<b>Largest Ten Holdings:</b>		<b>Industry</b>
Apple	2.7	Technology Equipment
Microsoft	2.0	Software & Services
ExxonMobil	1.5	Energy
General Electric	1.3	Capital Goods
Johnson & Johnson	1.3	Pharmaceuticals & Biotech.
Amazon.com	1.2	Retailing
Wells Fargo & Company	1.1	Banks
JP Morgan Chase	1.1	Banks
Berkshire Hathaway	1.1	Diversified Financials
Facebook	1.0	Software & Services

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

**Mandate:** Domestic Equities  
**Active/Passive:** Active  
**Market Value:** \$24.8 million  
**Portfolio Manager:** Jeffrey Bronchick  
**Location:** El Segundo, California  
**Inception Date:** 5/1/2014  
**Account Type:** Separately Managed

	Value	Core	Growth
Large			
Medium			
Small			

**Fee Schedule:**  
0.80% on all assets

**Liquidity Constraints:**  
Daily

### Strategy:

Cove Street Capital manages a fundamental, bottom-up research driven value portfolio of small capitalization companies. It is a relatively concentrated portfolio, usually consisting of between 30-40 companies. The strategy focuses on finding statistically cheap companies with high quality business models.

### Guidelines:

Maximum of 10% in non-U.S. issuers, preferred stock, convertibles or other equity equivalents. Maximum of 15% in single issuer, 30% in any single industry. Maximum cash balance of 15%.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 5/1/14
<b>Cove Street Small Cap Value</b>	<b>4.3</b>	<b>-6.8</b>	<b>-1.7</b>	<b>-0.5</b>
<b>Net of Fees</b>	<b>4.3</b>	<b>-7.0</b>	<b>-2.3</b>	<b>-1.1</b>
Russell 2000 Value	2.9	-8.2	-7.5	-1.7
Peer Small Cap Value	2.5	-7.3	-5.1	0.3
Peer Ranking (percentile)	10	42	14	61

## Cove Street Small Cap Value Portfolio Detail as of 12/31/15

	12/31/15		9/30/15	
	Cove Street Small Cap Value	Russell 2000 Value	Cove Street Small Cap Value	Russell 2000 Value
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	1.4	1.7	1.2	1.6
Median Market Cap. (US\$ million)	569.5	592.8	517.7	586.2
Large (% over US\$20 billion)	0	0	0	0
Medium (% US\$3 billion to US\$20 billion)	13	12	13	11
Small (% under US\$3 billion)	87	88	87	89
<b>Fundamental Structure:</b>				
Price-Earnings Ratio	29	18	31	17
Price-Book Value Ratio	2.1	1.5	2.0	1.5
Dividend Yield (%)	0.5	2.4	0.5	2.3
Historical Earnings Growth Rate (%)	6	8	1	8
Projected Earnings Growth Rate (%)	13	9	13	10
<b>Sector Allocation (%):</b>				
Consumer Discretionary	31	10	34	10
Information Technology	18	11	21	11
Industrials	18	12	14	12
Materials	8	3	5	3
Health Care	5	5	5	4
Consumer Staples	3	3	3	3
Telecommunication Services	0	1	0	1
Energy	2	4	3	5
Utilities	0	7	0	7
Financials	15	44	15	44
<b>Diversification:</b>				
Number of Holdings	35	1,349	35	1,304
% in 5 largest holdings	25	2	27	2
% in 10 largest holdings	43	5	45	4
<b>Largest Ten Holdings:</b>				
		<b>Industry</b>		
Carrols Restaurant Group, Inc.	6.0	Consumer Services		
Forestar Group	5.3	Real Estate		
Fmc	5.0	Materials		
Viasat	5.0	Technology Equipment		
Heritage-Crystal Clean	4.0	Commercial Services		
Liberty Global Lilac Class A	3.7	Media		
GP Strategies	3.5	Commercial Services		
Hallmark Finl.Services	3.4	Insurance		
American Vanguard Corporation	3.4	Materials		
Colfax	3.4	Capital Goods		

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

**Mandate:** International Equities  
**Active/Passive:** Active  
**Market Value:** \$24.5 million  
**Portfolio Manager:** Ralf Scherschmidt  
**Location:** Lisle, Illinois  
**Inception Date:** 11/1/2015  
**Account Type:** Separately Managed

	Value	Core	Growth
Large			
Medium			
Small			

### Fee Schedule:

1.00% on first \$50 mm; 0.90% on next \$50 mm; 0.80% on next \$50 mm

### Liquidity Constraints:

Daily

### Strategy:

The Oberweis International Opportunities strategy seeks to identify and capitalize on the investment opportunities offered by smaller companies in Europe, the UK, Canada, Asia, Japan, and Latin America. The strategy focuses on identifying less well-known small-cap companies which traditionally receive less coverage than larger companies, consequently providing unique opportunities to unearth hidden values.

### Performance (%):

	4Q15	Fiscal YTD <sup>1</sup>	Since 11/1/15
<b>Oberweis International Opportunities</b>	<b>NA</b>	<b>NA</b>	<b>4.7</b>
<b>Net of Fees</b>	<b>NA</b>	<b>NA</b>	<b>4.7</b>
MSCI EAFE Small Cap	6.8	-0.5	0.8
Peer International Small Cap	5.2	-2.2	0.1
Peer Ranking (percentile)	NA	NA	1

## Oberweis International Opportunities Portfolio Detail as of 12/31/15

	12/31/15	
	Oberweis International Opportunities	MSCI EAFE Small Cap
<b>Capitalization Structure:</b>		
Weighted Average Market Cap. (US\$ billion)	4.4	2.3
Median Market Cap. (US\$ billion)	3.5	0.9
Large (% over US\$20 billion)	0	0
Medium (% US\$3 billion to US\$20 billion)	64	27
Small (% under US\$3 billion)	36	73
<b>Fundamental Structure:</b>		
Price-Earnings Ratio	24	17
Price-Book Value Ratio	3.3	1.4
Dividend Yield (%)	1.4	2.3
Historical Earnings Growth Rate (%)	18	12
Projected Earnings Growth Rate (%)	25	14
<b>Sector Allocation (%):</b>		
Information Technology	19	10
Consumer Discretionary	24	18
Consumer Staples	10	7
Health Care	11	8
Telecommunication Services	1	2
Energy	2	2
Materials	8	8
Utilities	0	2
Industrials	16	22
Financials	10	22
<b>Diversification:</b>		
Number of Holdings	96	2,189
% in 5 largest holdings	10	2
% in 10 largest holdings	19	3
<b>Region Allocation (%):</b>		
North America	7	0
Europe	53	57
Asia Pacific	40	41
Emerging	0	0
Other	0	2
<b>Largest Five Holdings:</b>		
CCL Inds.'B'	2.1	Materials
Admiral Group	2.0	Insurance
Nexon	2.0	Software & Services
Swedish Orphan Biovitrum	1.9	Pharmaceuticals & Biotech.
Betfair Group	1.9	Software & Services

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

## Aberdeen Frontier Markets Equity Portfolio Detail as of 12/31/15

**Mandate:** International Equities,  
Frontier Markets

**Active/Passive:** Active

**Market Value:** \$17.6 million

**Portfolio Manager:** Devan Kaloo

**Location:** London, United Kingdom

**Inception Date:** 12/1/2013

**Account Type:** Commingled

	Value	Core	Growth
Large			
Medium			
Small			

### Fee Schedule:

1.50% on all assets

### Liquidity Constraints:

Monthly

### Strategy:

The firm believes, given the inefficiency of markets, that competitive long-term returns are achieved by identifying high quality stocks at attractive valuations and holding them for the long term. The firm believes that sound fundamentals drive stock prices over time and they employ a fundamental bottom-up investment approach based upon a rigorous and disciplined proprietary research effort which originates with direct company due diligence visits. The objective of the Frontier Markets Equity strategy is to achieve total return in excess of the MSCI Frontier Markets Index through investing in companies listed, domiciled or headquartered, or with a significant portion of their revenues, profits and/or assets derived from frontier economies.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 12/1/13
<b>Aberdeen Frontier Markets Equity</b>	<b>-1.0</b>	<b>-9.0</b>	<b>-9.8</b>	<b>-5.5</b>
<b>Net of Fees</b>	<b>-1.3</b>	<b>-9.7</b>	<b>-11.2</b>	<b>-7.0</b>
MSCI Frontier Markets	-1.2	-11.7	-14.5	-3.2
MSCI Frontier Markets ex GCC	0.4	-7.6	-11.8	-7.2
Peer Frontier Markets	-1.2	-10.0	-10.3	-2.5
Peer Ranking (percentile)	42	23	42	68

	12/31/15		9/30/15	
	Aberdeen Frontier Markets Equity	MSCI Frontier Markets	Aberdeen Frontier Markets Equity	MSCI Frontier Markets
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	3.5	4.1	3.9	4.2
Median Market Cap. (US\$ billion)	2.0	1.4	1.9	1.4
Large (% over US\$20 billion)	0	0	4	0
Medium (% US\$3 billion to US\$20 billion)	40	44	39	42
Small (% under US\$3 billion)	60	56	57	58
<b>Fundamental Structure:</b>				
Price-Earnings Ratio	17	11	18	11
Price-Book Value Ratio	3.6	1.6	3.4	1.5
Dividend Yield (%)	3.6	4.1	3.3	4.0
Historical Earnings Growth Rate (%)	10	10	11	10
Projected Earnings Growth Rate (%)	13	9	13	12
<b>Sector Allocation (%):</b>				
Consumer Staples	32	9	31	9
Health Care	9	3	8	3
Industrials	8	3	8	3
Information Technology	5	0	5	0
Consumer Discretionary	2	0	2	0
Utilities	0	1	0	1
Telecommunication Services	12	13	12	14
Materials	3	7	1	8
Energy	4	9	6	9
Financials	25	53	27	53
<b>Diversification:</b>				
Number of Holdings	47	120	46	122
% in 5 largest holdings	25	22	23	23
% in 10 largest holdings	44	33	42	32
<b>Region Allocation (%):</b>				
Asia	23	17	21	17
Europe & CIS	8	10	7	10
Americas	0	11	0	9
Africa	30	28	30	30
Middle East	5	32	7	33
Emerging	14	1	15	0
Other	20	1	20	0
<b>Largest Five Holdings:</b>				
Safaricom	5.6	Telecom Services		
Vietnam Dairy Products	5.5	Food, Beverage & Tobacco		
John Keells Holdings	5.1	Capital Goods		
Epam Systems	4.9	Software & Services		
East African Breweries	4.3	Food, Beverage & Tobacco		

<sup>1</sup> Fiscal Year begins July 1.





**Long-Short Equity Portfolio Reviews  
As of December 31, 2015**

**Mandate:** Hedge Fund,  
Event Driven

**Market Value:** \$35.4 million

**Portfolio Manager:** Team

**Location:** New York, New York

**Inception Date:** 4/1/2013

**Account Type:** Limited Partnership

**# of Investments:** Not Provided

**Fee Schedule:**  
2.0% management fee and 20% performance fee with a high water mark

**Liquidity Constraints:**  
Quarterly with 60 days' notice

**Strategy:**  
Senator will migrate their portfolio across capital markets as an economic cycle takes shape. The firm tends to focus on high quality franchise assets they can purchase below their intrinsic value. A catalyst to change the value of the security is essential for Senator.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 4/1/13
Senator Global Opportunity Offshore Fund, Ltd. <sup>2</sup>	0.6	-7.4	-2.8	7.1
HFRI Event Driven Index	0.3	-5.2	-2.9	2.3

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Senator maintains a policy to not providing details in a requested template or format. Regional, sector, security type and holdings did not populate due to lack of detail from the manager.

## San Jose Federated City Employees' Retirement System

## Horizon Portfolio I, Limited Portfolio Detail as of 12/31/15

**Mandate:** Hedge Fund  
Long/Short Equity

**Market Value:** \$31.6 million

**Portfolio Manager:** Team

**Location:** Tokyo, Japan

**Inception Date:** 7/1/2013

**Account Type:** Limited Partnership

**# of Investments:** 2074

**Fee Schedule:**  
2.0% management fee and 20% performance fee with a high water mark

**Liquidity Constraints:**  
1 year soft lock, quarterly with 45 days' notice thereafter

**Strategy:**  
Horizon is a Japan-focused investment manager. The firm engages three distinct teams to manage the portfolio; Fundamental, Flow and Asia ex-Japan. The majority of exposure will be invested in Japanese equities with near 0% net exposure, ranging between +/-10%. Turnover in the portfolio is around once per month, and risk is focused to limit the impact of any single position to less than 0.25% of fund NAV.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 7/1/13
<b>Horizon Portfolio I, Limited</b>	<b>1.2</b>	<b>2.3</b>	<b>3.9</b>	<b>7.7</b>
HFRI Equity Hedge (Long/Short Equity)	2.3	-4.1	-0.4	4.1

Geographic Exposure (%):	12/31/2015		9/30/2015	
	Gross	Net	Gross	Net
North America	3	0	3	0
Developed Europe	9	0	11	1
Developed Asia	140	5	129	11
Emerging Markets	0	0	0	0
Sector Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Consumer	32	27	29	31
Energy	6	6	7	8
Financials	22	28	30	25
Health Care	9	8	8	7
Industrials	27	26	31	28
Materials	13	12	14	12
Staples	13	12	13	11
Technology	22	18	20	21
Telecom	4	3	3	2
Utilities	3	2	3	4
Market Capitalization Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Large Cap	114	102	117	109
Mid Cap	29	32	32	32
Small Cap	8	9	8	10

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

## Sandler Plus Offshore Fund, Ltd. Portfolio Detail as of 12/31/15

**Mandate:** Hedge Fund  
Long/Short Equity

**Market Value:** \$25.3 million

**Portfolio Manager:** Team

**Location:** New York, New York

**Inception Date:** 5/1/2013

**Account Type:** Limited Partnership

**# of Investments:** 208

**Fee Schedule:**  
2.0% management fee, 20% performance fee with a high water mark

**Liquidity Constraints:**  
Quarterly with 30 days' notice

**Strategy:**  
Sandler uses fundamental analysis to expose investors to changes in secular growth through a business cycle. The firm will seek specific themes that drive a sector or industry toward or away from growth. The portfolio will have a high level of turnover as market and technical features are evaluated for entry or exit points for securities.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 5/1/13
<b>Sandler Plus Offshore Fund, Ltd.</b>	<b>3.9</b>	<b>6.8</b>	<b>13.0</b>	<b>9.2</b>
HFRI Equity Hedge (Long/Short Equity)	2.3	-4.1	-0.4	3.6

Geographic Exposure (%):	12/31/2015		9/30/2015	
	Gross	Net	Gross	Net
North America	218	24	163	7
Developed Europe	16	14	9	-1
Developed Asia	2	2	0	0
Emerging Markets	1	-1	0	0

Sector Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Consumer	54	42	47	79
Energy	11	6	10	22
Financials	35	23	27	36
Health Care	21	19	31	42
Industrials	38	27	35	53
Materials	9	8	14	8
Staples	18	13	10	19
Technology	47	30	36	62
Telecom	1	2	4	4
Utilities	1	1	1	0

Market Capitalization Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Large Cap	135	89	109	151
Mid Cap	84	78	101	167
Small Cap	17	5	5	6

Top 5 Holdings (%):	
Facebook Inc	8
Sandler Momentum_	-7
Visa Inc Class A Com Stk	7
Industrial Select Sect Spdr	-5
Tupperware Brands Corporation Com Stk	-4

<sup>1</sup> Fiscal Year begins July 1.



## San Jose Federated City Employees' Retirement System

## Marshall Wace MW Eureka Portfolio Detail as of 12/31/15

**Mandate:** Hedge Fund  
Long/Short Equity

**Market Value:** \$24.3 million

**Portfolio Manager:** Team

**Location:** New York, New York

**Inception Date:** 4/1/2014

**Account Type:** Limited Partnership

**# of Investments:** 4475

**Fee Schedule:**  
2.0% management fee and 20% performance fee with a high water mark

**Liquidity Constraints:**  
Monthly with 90 days' notice

**Strategy:**  
The Eureka fund processes opportunities from two sources, internally managed offerings at Marshall Wace and the firm's TOPS program. TOPS is a methodology that analyzes information submitted by sell-side research personnel and compiles a portfolio of ideas for the fund.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 4/1/14
<b>Marshall Wace MW Eureka</b>	<b>1.9</b>	<b>3.4</b>	<b>11.7</b>	<b>11.0</b>
HFRI Equity Hedge (Long/Short Equity)	2.3	-4.1	-0.4	0.1

Geographic Exposure (%):	12/31/2015		9/30/2015	
	Gross	Net	Gross	Net
North America	85	4	70	-4
Developed Europe	85	24	78	22
Developed Asia	45	5	40	5
Emerging Markets	38	4	33	-2

Sector Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Consumer	40	36	40	42
Energy	9	8	9	11
Financials	55	48	60	68
Health Care	31	26	28	29
Industrials	32	25	29	33
Materials	17	17	17	21
Staples	25	18	18	18
Technology	21	19	22	25
Telecom	16	18	17	19
Utilities	6	6	6	6

Market Capitalization Gross Exposure (%):	12/31/2015	9/30/2015	6/30/2015	3/31/2015
Large Cap	26	22	28	29
Mid Cap	210	184	206	228
Small Cap	14	12	12	14

Top 5 Holdings (%):	
Sabmiller Plc	5
Zoetis Inc	3
Vodafone Group	2
T-Mobile Us Inc	2
Bayer Ag-Reg	2

<sup>1</sup> Fiscal Year begins July 1.



## Fixed Income Portfolio Reviews As of December 31, 2015

**Global Core Portfolio Reviews  
As of December 31, 2015**

## San Jose Federated City Employees' Retirement System

## Northern Trust 1-10 Year Intermediate Gov't Bond Index Portfolio Detail as of 12/31/15

**Mandate:** Investment Grade Bonds

**Active/Passive:** Passive

**Market Value:** \$135.2 million

**Portfolio Manager:** Team

**Location:** Chicago, Illinois

**Inception Date:** 10/1/2012

**Account Type:** Commingled

	Short	Int.	Long
High			
Medium			
Low			

### Fee Schedule:

0.05% on all assets

### Liquidity Constraints:

Daily

### Strategy:

The Northern Trust 1-10 Year Intermediate Government Bond Index Fund seeks to hold a portfolio representative of the intermediate government securities sector of the United States bond and debt market, as characterized by the Barclays Capital Intermediate Government Bond Index.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	Since 10/1/12
<b>Northern Trust 1-10 Year Intermediate Gov't Bond Index</b>	<b>-0.8</b>	<b>0.3</b>	<b>1.1</b>	<b>0.8</b>	<b>0.7</b>
<b>Net of Fees</b>	<b>-0.8</b>	<b>0.3</b>	<b>1.1</b>	<b>0.8</b>	<b>0.7</b>
Barclays Intermediate Gov't Bond Index	-0.8	0.4	1.2	0.8	0.8

	12/31/15		9/30/15	
	Northern Trust Intermediate Gov't 1-10 Year	Barclays Intermediate Gov't Bond Index	Northern Trust Intermediate Gov't 1-10 Year	Barclays Intermediate Gov't Bond Index
<b>Duration &amp; Yield:</b>				
Average Effective Duration (years)	3.8	3.8	3.7	3.8
Yield to Maturity (%)	1.5	1.5	1.1	1.1
<b>Quality Structure (%):</b>				
Average Quality	AAA	AAA	AAA	AAA
AAA (includes Treasuries and Agencies)	100	97	100	97
AA	0	3	0	3
A	0	0	0	0
BBB	0	0	0	0
BB	0	0	0	0
B	0	0	0	0
Below B	0	0	0	0
Non-Rated	0	0	0	0
<b>Sector Allocation (%):</b>				
U.S. Treasury-Nominal	92	93	92	92
U.S. Treasury-TIPS	0	0	0	0
U.S. Agency	7	7	8	8
Mortgage Backed	0	0	0	0
Corporate	0	0	0	0
Bank Loans	0	0	0	0
Local & Provincial Government	0	0	0	0
Sovereign & Supranational	0	0	0	0
Commercial Mortgage Backed	0	0	0	0
Asset Backed	0	0	0	0
Cash Equivalent	0	0	0	0
Other	0	0	0	0
<b>Market Allocation (%):</b>				
United States	100	100	100	100
Foreign (developed markets)	0	0	0	0
Foreign (emerging markets)	0	0	0	0
<b>Currency Allocation (%):</b>				
Non-U.S. Dollar Exposure	0	0	0	0

<sup>1</sup> Fiscal Year begins July 1.





## San Jose Federated City Employees' Retirement System

**Mandate:** TIPS  
**Active/Passive:** Passive  
**Market Value:** \$108.3 million  
**Portfolio Manager:** Team  
**Location:** Chicago, Illinois  
**Inception Date:** 7/1/2014  
**Account Type:** Separately Managed

	Short	Int.	Long
High			
Medium			
Low			

### Fee Schedule:

0.05% on all assets

### Liquidity Constraints:

Daily

### Strategy:

The Northern Trust TIPS index strategy seeks to track the risk and return characteristics of the Barclays U.S. 0-5 Year TIPS Index. The Index represents the Treasury Inflation-Protected Securities segment of the U.S. fixed income market. The strategy provides the desired exposure using quantitative techniques to maintain neutrality relative to index exposures while avoiding excessive transactions costs.

### Guidelines:

The portfolio will have a weighted average duration that will approximate the duration of the Barclays U.S. 0-5 Year TIPS Index.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 7/1/14
<b>Northern Trust 0-5 Year TIPS</b>	<b>-0.3</b>	<b>-1.0</b>	<b>-0.1</b>	<b>-2.0</b>
<b>Net of Fees</b>	<b>-0.3</b>	<b>-1.0</b>	<b>-0.1</b>	<b>-2.0</b>
Barclays U.S. TIPS 0-5 Years	-0.3	-1.0	0.0	-1.9

## Northern Trust 0-5 Year TIPS Portfolio Detail as of 12/31/15

	12/31/15		9/30/15	
	Northern Trust TIPS 0-5 Years	Barclays U.S. TIPS 0-5 Years	Northern Trust TIPS 0-5 Years	Barclays U.S. TIPS 0-5 Years
<b>Duration &amp; Yield:</b>				
Average Effective Duration (years)	1.5	1.2	1.4	1.3
Yield to Maturity (%) <sup>2</sup>	1.2	1.2	1.1	1.2
<b>Quality Structure (%):</b>				
Average Quality	AAA	AAA	AAA	AAA
AAA (includes Treasuries and Agencies)	100	100	100	100
AA	0	0	0	0
A	0	0	0	0
BBB	0	0	0	0
BB	0	0	0	0
B	0	0	0	0
Below B	0	0	0	0
Non-Rated	0	0	0	0
<b>Sector Allocation (%):</b>				
U.S. Treasury-Nominal	0	0	0	0
U.S. Treasury-TIPS	100	100	100	100
U.S. Agency	0	0	0	0
Mortgage Backed	0	0	0	0
Corporate	0	0	0	0
Bank Loans	0	0	0	0
Local & Provincial Government	0	0	0	0
Sovereign & Supranational	0	0	0	0
Commercial Mortgage Backed	0	0	0	0
Asset Backed	0	0	0	0
Cash Equivalent	0	0	0	0
Other	0	0	0	0
<b>Market Allocation (%):</b>				
United States	100	100	100	100
Foreign (developed markets)	0	0	0	0
Foreign (emerging markets)	0	0	0	0
<b>Currency Allocation (%):</b>				
Non-U.S. Dollar Exposure	0	0	0	0

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> This figure is an estimated yield-to-maturity (YTM) for the fund. It is calculated by adding the trailing 12-month inflation adjustment to the "real" (i.e., before inflation) YTM of the fund. Adding the 12-month inflation adjustment allows the fund's yield to be more directly comparable to those of other bond funds. Investors should recognize that the actual YTM will depend upon the level of inflation experienced going forward.



## San Jose Federated City Employees' Retirement System

**Mandate:** Fixed Income  
**Active/Passive:** Active  
**Market Value:** \$55.0 million  
**Portfolio Manager:** Team  
**Location:** Atlanta, Georgia  
**Inception Date:** 8/1/2015  
**Account Type:** Separately Managed

	Short	Int.	Long
High			
Medium			
Low			

**Fee Schedule:**  
 0.45% on all assets

**Liquidity Constraints:**  
 Daily

### Strategy:

Voya's Securitized Credit strategy combines a top down and bottom up approach to identifying undervalued securitized assets. Permissible securitized assets include agency and non-agency mortgages and MBS, ABS, CLOs, and CMBS. Voya leverages the breadth of a large securitized investment team, macroeconomic research team, as well as proprietary security analysis and tracking tools to manage the portfolio. In addition to the core securitized credit strategy, the custom portfolio can also allocate up to 25% of its market value to Voya's Mortgage Derivative strategy, a strategy that focuses on the mortgage derivatives market and finding inefficiently priced securities within it. This strategy generally focuses in principal only, interest-only, and inverse interest-only derivatives.

### Guidelines:

No more than 10% in a single issuer or specific investments listed as permissible; no more than 20% in assets defined as 'less liquid'. Borrowing limited to no more than 20% of portfolio NAV.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	Since 8/1/15
<b>Voya Securitized Credit</b>	<b>-1.5</b>	<b>NA</b>	<b>0.1</b>
<b>Net of Fees</b>	<b>-1.5</b>	<b>NA</b>	<b>0.1</b>
Barclays U.S. Securitized	-0.2	1.1	0.5

## Voya Securitized Credit Portfolio Detail as of 12/31/15

	12/31/15		9/30/15	
	Voya Securitized Credit	Barclays U.S. Securitized	Voya Securitized Credit	Barclays U.S. Securitized
<b>Duration &amp; Yield:</b>				
Average Effective Duration (years)	3.4	4.3	1.4	4.2
Yield to Maturity (%)	5.8	2.7	4.7	2.6
<b>Quality Structure (%):</b>				
Average Quality	B	AAA	B	AAA
AAA (includes Treasuries and Agencies)	2	99	11	99
AA	2	1	2	1
A	5	0	2	0
BBB	10	0	8	0
BB	15	0	5	0
B	15	0	11	0
Below B	51	0	60	0
Non-Rated	0	0	0	0
<b>Sector Allocation (%):</b>				
U.S. Treasury-Nominal	0	0	0	0
U.S. Treasury-TIPS	0	0	0	0
U.S. Agency	0	0	0	0
Mortgage Backed	45	92	36	92
Corporate	0	0	0	0
Bank Loans	0	0	0	0
Local & Provincial Government	0	0	0	0
Sovereign & Supranational	0	0	0	0
Commercial Mortgage Backed	40	6	38	6
Asset Backed	13	2	16	2
Cash Equivalent	2	0	11	0
Other	0	0	0	0
<b>Market Allocation (%):</b>				
United States	100	100	100	100
Foreign (developed markets)	0	0	0	0
Foreign (emerging markets)	0	0	0	0
<b>Currency Allocation (%):</b>				
Non-U.S. Dollar Exposure	0	0	0	0

<sup>1</sup> Fiscal Year begins July 1.



**Non-Investment Grade Credit Portfolio Reviews  
As of December 31, 2015**

**Mandate:** Hedge Fund,  
Event Driven

**Market Value:** \$34.4 million

**Portfolio Manager:** Team

**Location:** New York, New York

**Inception Date:** 2/1/2013

**Account Type:** Limited Partnership

**# of Investments:** Not Provided

**Fee Schedule:**  
1.5% management fee, 20% performance fee

**Liquidity Constraints:**  
Quarterly with 60 days' notice or Monthly with 60 days' notice and a 1.5% fee

**Strategy:**  
The firm will invest across four major event focused disciplines: distressed securities, merger arbitrage, convertible bonds and volatility, and long-short equity. This multi-strategy event fund seeks low volatility and a consistent return for clients. The firm seeks to minimize loss to 1.0% of the portfolio, thus limiting most positions to less than 8%.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	Since 2/1/13
Davidson Kempner Institutional Partners, L.P. <sup>2</sup>	0.2	-0.1	1.5	4.8
HFRI Event Driven Index	0.3	-5.2	-2.9	2.6

<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Davidson Kempner maintains a policy not to provide details in requested template or format. Regional, sector, security type, and holdings are not shown due to lack of detail from manager.

## Emerging Markets Portfolio Review As of December 31, 2015

## San Jose Federated City Employees' Retirement System

## BlueBay Emerging Markets Select Debt Portfolio Detail as of 12/31/15

**Mandate:** Fixed Income  
**Active/Passive:** Active  
**Market Value:** \$46.6 million  
**Portfolio Manager:** Team  
**Location:** London, United Kingdom  
**Inception Date:** 8/1/2015  
**Account Type:** Commingled

	Short	Int.	Long
High			
Medium			
Low			

**Fee Schedule:**  
 0.55% on all assets

**Liquidity Constraints:**  
 Daily

### Strategy:

BlueBay invests opportunistically in emerging markets hard currency sovereign debt, local currency debt and corporate debt (up to a maximum of 20%). BlueBay's approach for investing in emerging markets debt reflects their belief that the asset class continues to be inefficient, with the underlying sovereigns generally improving relative to developed markets. They believe that local markets are at an earlier stage of development relative to hard currency/developed bond markets, resulting in higher pricing volatility and real interest rate premia.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	Since 8/1/15
<b>BlueBay Emerging Markets Select Debt</b>	<b>0.2</b>	<b>NA</b>	<b>-5.1</b>
<b>Net of Fees</b>	<b>-0.1</b>	<b>NA</b>	<b>-5.5</b>
50% JPM EMBI GD 50% JPM GBI-EM	0.6	-5.6	-4.6
Peer Emerging Market Debt	0.7	-4.4	-3.5
Peer Ranking (percentile)	63	NA	66

	12/31/15 BlueBay Emerging Markets Select Debt	50% JPM EMBI GD 50% JPM GBI-EM	9/30/15 BlueBay Emerging Markets Select Debt	50% JPM EMBI GD 50% JPM GBI-EM
<b>Duration &amp; Yield:</b>				
Average Effective Duration (years)	5.3	5.7	5.7	5.7
Yield to Maturity (%)	6.6	6.7	6.6	6.7

<b>Quality Structure (%):</b>				
Average Quality	BB	BBB-	BB+	BBB-
AAA (includes Treasuries and Agencies)	0	0	0	0
AA	0	3	0	3
A	17	24	17	24
BBB	36	43	40	42
BB	22	18	19	19
B	8	9	7	8
Below B	7	3	5	3
Non-Rated	9	0	11	1

<b>Sector Allocation (%):</b>				
U.S. Treasury-Nominal	0	0	0	0
U.S. Treasury-TIPS	0	0	0	0
U.S. Agency	0	0	0	0
Mortgage Backed	0	0	0	0
Corporate	2	0	7	0
Bank Loans	0	0	0	0
Local & Provincial Government	0	0	0	0
Sovereign & Supranational	92	100	84	100
Commercial Mortgage Backed	0	0	0	0
Asset Backed	0	0	0	0
Cash Equivalent	6	0	10	0
Other	0	0	0	0

<b>Market Allocation (%):</b>				
United States	0	0	0	0
Foreign (developed markets)	0	0	0	0
Foreign (emerging markets)	100	100	100	100

<b>Currency Allocation (%):</b>				
Non-U.S. Dollar Exposure	51	50	47	50

<sup>1</sup> Fiscal Year begins July 1.



**Real Assets Portfolio Reviews  
As of December 31, 2015**

## Commodities Portfolio Reviews As of December 31, 2015



## San Jose Federated City Employees' Retirement System

## First Quadrant Balanced Risk Commodity Fund Portfolio Detail as of 12/31/15

**Mandate:** Commodity  
**Active/Passive:** Active  
**Market Value:** \$54.8 million  
**Portfolio Manager:** Team  
**Location:** Pasadena, California  
**Inception Date:** 4/1/2011  
**Account Type:** Commingled

**Fee Schedule:**  
 0.35% on all assets

**Liquidity Constraints:**  
 Daily

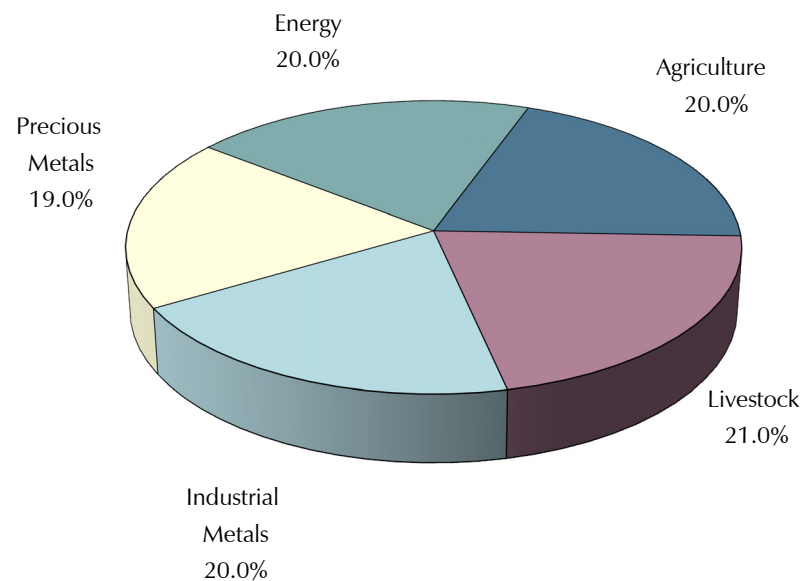
### Strategy:

First Quadrant believes that there are inherent flaws to commodity indices, and they seek to produce a strategy which providing investors a higher correlation to inflation over the long run. First Quadrant utilizes futures and swaps to gain exposure to five commodity complexes, representing twenty specific commodities, and targets 20% risk to each of the commodity complexes. The complexes are energy, industrial metals, precious metals, agriculture, and livestock. The firm employs a quantitative methodology and uses risk as the weighting for each commodity product, making adjustments to the allocations depending upon the perceived volatility environment (high risk, low risk, or moderate risk). The firm will modify the investment exposure based upon the predicted environment ranging from 88% (in a high volatility environment) to 146% (in a low volatility environment). Collateral for the portfolio is actively managed and invested in U.S. Treasuries and agency securities.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	Since 4/1/11
<b>First Quadrant Balanced Risk Commodity Fund</b>	<b>-5.3</b>	<b>-19.8</b>	<b>-24.9</b>	<b>-15.7</b>	<b>-13.4</b>
Custom Risk Parity Commodity Benchmark <sup>2</sup>	-7.4	-18.5	-20.5	-13.0	-10.6
Bloomberg Commodity Index	-10.5	-23.5	-24.7	-17.3	-14.9
Peer Commodities	-10.0	-23.0	-24.8	-17.6	-14.8
Peer Ranking (percentile)	10	25	53	20	18

Risk: (fifty-seven months)	Standard Deviation	Beta	Sharpe Measure <sup>3</sup>	Info. Ratio	Correlation to Index
<b>First Quadrant Balanced Risk Commodity Fund</b>	<b>11.9%</b>	<b>1.10</b>	<b>Neg.</b>	<b>Neg.</b>	<b>0.96</b>
Custom Risk Parity Commodity Benchmark <sup>2</sup>	10.7	1.00	Neg.	NA	1.00

### Current Allocation:



<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Custom Risk Parity Benchmark provided by Credit Suisse.

<sup>3</sup> A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



## San Jose Federated City Employees' Retirement System

## Credit Suisse Risk Parity Commodity Fund Portfolio Detail as of 12/31/15

**Mandate:** Commodity  
**Active/Passive:** Active  
**Market Value:** \$51.0 million  
**Portfolio Manager:** Christopher A. Burton  
**Location:** New York, New York  
**Inception Date:** 4/1/2011  
**Account Type:** Commingled

**Fee Schedule:**  
 0.42% on first \$100 mm; 0.37% thereafter

**Liquidity Constraints:**  
 Daily

### Strategy:

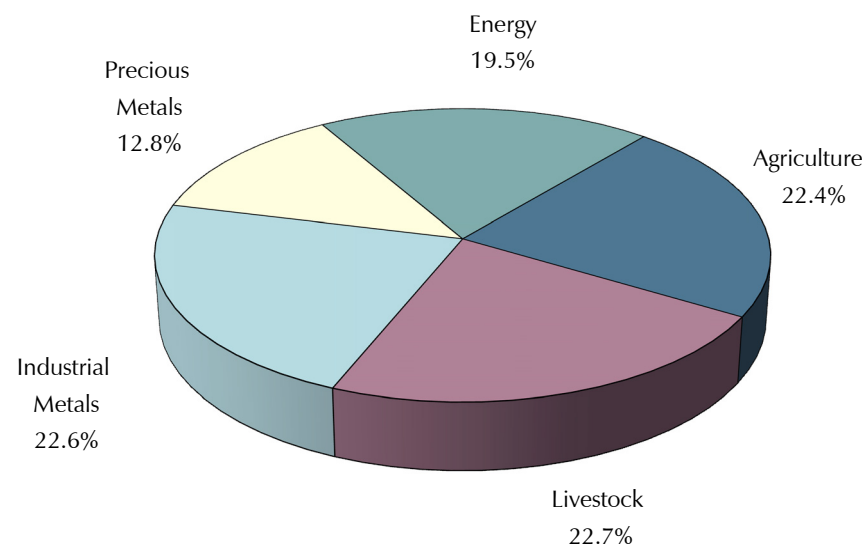
Credit Suisse Asset Management (CSAM) seeks to provide a commodity-based investment return with reduced risk, measured by standard deviation, versus traditional commodity indices. The team aims to capture the spot return of commodities while employing active management techniques to exploit commodity market inefficiencies. The commodities team at CSAM utilizes futures to replicate the risk-based index. The portfolio consists of five commodity complexes (energy, industrial metals, precious metals, agriculture, and livestock) and 24 commodities included in the S&P- Goldman Sachs Commodities Index. CSAM allocates 20% of capital to each of the commodity complexes. Within each commodity complex, the strategy equal weights the specific commodities. The portfolio is rebalanced on a monthly basis. Active strategies used by CSAM seek to exploit the time period (roll date) the fund purchases commodities, using a quantitative and qualitative assessment. Collateral for the fund is actively managed and invested in U.S. Treasuries and agency securities.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	1 YR	3 YR	Since 4/1/11
<b>Credit Suisse Risk Parity Commodity Fund</b>	<b>-7.4</b>	<b>-18.8</b>	<b>-20.7</b>	<b>-13.0</b>	<b>-10.5</b>
Custom Risk Parity Commodity Benchmark <sup>2</sup>	-7.4	-18.5	-20.5	-13.0	-10.6
Bloomberg Commodity Index	-10.5	-23.5	-24.7	-17.3	-14.9
Peer Commodities	-10.0	-23.0	-24.8	-17.6	-14.8
Peer Ranking (percentile)	14	21	17	12	12

Risk: (fifty-seven months)	Standard Deviation	Beta	Sharpe Measure <sup>3</sup>	Info. Ratio	Correlation to Index
<b>Credit Suisse Risk Parity Commodity Fund</b>	<b>10.6%</b>	<b>0.99</b>	<b>Neg.</b>	<b>0.03</b>	<b>1.00</b>
Custom Risk Parity Commodity Benchmark <sup>2</sup>	10.7	1.00	Neg.	NA	1.00

### Current Allocation:



<sup>1</sup> Fiscal Year begins July 1.

<sup>2</sup> Custom Risk Parity Benchmark provided by Credit Suisse.

<sup>3</sup> A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



## Infrastructure Portfolio Review As of December 31, 2015

## San Jose Federated City Employees' Retirement System

## Rhumblin DJ Brookfield Global Infrastructure Portfolio Detail as of 12/31/15

**Mandate:** Infrastructure  
**Active/Passive:** Active  
**Market Value:** \$120.9 million  
**Portfolio Manager:** Team  
**Location:** Boston, Massachusetts  
**Inception Date:** 6/1/2015  
**Account Type:** Separately Managed

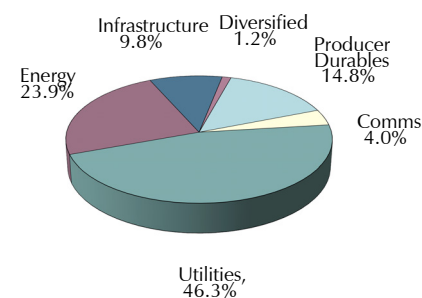
**Fee Schedule:**  
 0.10% on all assets

**Liquidity Constraints:**  
 Daily

### Strategy:

The Rhumblin Dow Jones Brookfield Infrastructure Index aims to measure the stock performance of companies worldwide whose primary business is the ownership and operation of (rather than service of) infrastructure assets. To be included in the index, a company must have more than 70% of estimated cash flows (based on publicly available information) derived from the following infrastructure sectors: airports, toll roads, ports, communications, electricity transmission & distribution, oil & gas storage & transportation, and water.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	Since 6/1/15
<b>Rhumblin DJ Brookfield Global Infrastructure</b>	<b>-2.8</b>	<b>-10.8</b>	<b>-14.3</b>
DJ Brookfield Global Infrastructure Index	-2.9	-11.2	-14.8



### Country Allocation:

	Portfolio Allocation (%)
<b>United States</b>	<b>47.3</b>
<b>International Developed Markets</b>	<b>48.3</b>
Canada	11.2
United Kingdom	11.3
Hong Kong	2.3
Spain	5.8
Australia	5.0
Italy	4.3
Japan	2.4
France	2.2
Luxembourg	1.3
Singapore	0.4
Netherlands	0.4
New Zealand	0.5
Switzerland	0.4
Germany	0.3
Belgium	0.2
<b>Emerging Markets</b>	<b>4.4</b>
Mexico	0.8
China	3.4
Brazil	0.2

<sup>1</sup> Fiscal Year begins July 1.



**Natural Resources Portfolio Review**  
**As of December 31, 2015**

## San Jose Federated City Employees' Retirement System

## Rhumblin S&P Global Large MidCap Commodity & NR Portfolio Detail as of 12/31/15

**Mandate:** Natural Resources  
**Active/Passive:** Passive  
**Market Value:** \$84.2 million  
**Portfolio Manager:** Team  
**Location:** Boston, Massachusetts  
**Inception Date:** 6/1/2015  
**Account Type:** Separately Managed

**Fee Schedule:**  
 0.048% on all assets

**Liquidity Constraints:**  
 Daily

**Strategy:**  
 This passive index fund seeks an investment return that approximates the performance of the S&P Global Large MidCap Commodities and Resources index. The index has equal exposure to three major natural resources industries: energy, materials, and agriculture. It generally holds over 75% in large capitalization companies and the balance in mid capitalization stocks, typically holding 220 to 260 securities. While the index invests in over thirty countries, the most exposure is in the United States, Canada, and the United Kingdom.

Performance (%):	4Q15	Fiscal YTD <sup>1</sup>	Since 6/1/15
<b>Rhumblin S&amp;P Global Large MidCap Commodity &amp; NR</b>	<b>-1.4</b>	<b>-24.1</b>	<b>-28.0</b>
S&P Global Large MidCap Commodity and Resources	-1.5	-24.2	-28.2
S&P Global Natural Resources	0.6	-22.1	-25.9

	12/31/15		9/30/15	
	Rhumblin S&P Global Large MidCap Commodity & NR	S&P Global Large MidCap Commodity and Resources	Rhumblin S&P Global Large MidCap Commodity & NR	S&P Global Large MidCap Commodity and Resources
<b>Capitalization Structure:</b>				
Weighted Average Market Cap. (US\$ billion)	55.6	52.1	51.4	51.8
Median Market Cap. (US\$ billion)	6.0	6.0	6.6	6.1
Large (% over US\$20 billion)	57	54	56	55
Medium (% US\$3 billion to US\$20 billion)	39	41	39	39
Small (% under US\$3 billion)	5	5	5	5
<b>Fundamental Structure:</b>				
Price-Earnings Ratio	16	16	14	14
Price-Book Value Ratio	1.3	1.2	1.3	1.3
Dividend Yield (%)	4.2	4.1	4.2	4.2
Historical Earnings Growth Rate (%)	-5	-6	-5	-5
Projected Earnings Growth Rate (%)	-3	-3	2	2
<b>Sector Allocation (%):</b>				
Energy	36	33	35	35
Consumer Staples	8	8	9	8
Consumer Discretionary	0	0	0	0
Financials	0	0	0	0
Health Care	0	0	0	0
Industrials	0	0	0	0
Information Technology	0	0	0	0
Telecommunication Services	0	0	0	0
Utilities	0	0	0	0
Materials	56	59	56	57
<b>Diversification:</b>				
Number of Holdings	182	180	184	181
% in 5 largest holdings	29	28	27	27
% in 10 largest holdings	44	42	43	42
<b>Region Allocation (%):</b>				
North America	51	49	50	49
Europe	28	28	28	28
Asia Pacific	11	11	11	11
Emerging	10	11	11	11
Other	1	1	1	1
<b>Largest Five Holdings:</b>				
		<b>Industry</b>		
Monsanto	7.9	Materials		
ExxonMobil	7.3	Energy		
Syngenta	6.2	Materials		
BHP Billiton	4.1	Materials		
Chevron	3.8	Energy		

<sup>1</sup> Fiscal Year begins July 1.



# **Global Macroeconomic Outlook December 2015**

Global Economic Outlook<sup>1</sup>

**Global growth projections were lowered as commodity prices remain weak, China's economy slows, and the U.S. dollar continues to be strong.**

- The IMF reduced their 2016 global growth forecast from 3.6% to 3.4% and reduced its 2017 forecast by a similar amount to 3.6%.
- In advanced economies, growth is projected to slightly increase in 2016 from last year (2.1% versus 1.9%) and level-off in 2017. In the U.S., the improving labor and housing markets and accommodative monetary policy should help growth, while the strong dollar will likely detract. In Europe, consumption should improve due to lower oil prices and interest rates, while in Japan unprecedented stimulus and low energy costs should help growth.
- Growth in emerging economies is forecasted to increase in 2016 and 2017, but at a slower pace than previously predicted with a wide range of circumstances across countries. Lower commodity prices, higher interest rates in the U.S., and a slowing China remain key issues with varied impact among countries.

	Real GDP (%)			Inflation (%)		
	IMF 2016 Forecast	IMF 2017 Forecast	Actual 10 Year Average	IMF 2016 Forecast	IMF 2017 Forecast	Actual 10 Year Average
World	3.4	3.6	3.7	3.4	3.6	4.1
U.S.	2.6	2.6	1.4	1.1	1.8	2.0
European Union	1.7	1.7	1.0	1.1	1.5	1.5
Japan	1.0	0.3	0.5	0.4	1.6	0.2
China	6.3	6.0	9.5	1.8	2.2	2.9
Emerging Markets (ex. China)	3.4	4.2	4.5	7.8	7.2	7.6

<sup>1</sup> Source: IMF. World Economic Outlook, update January 2016. "Actual 10 Year Average" represents data from 2006 to 2015. Data after 2014 is an estimate.



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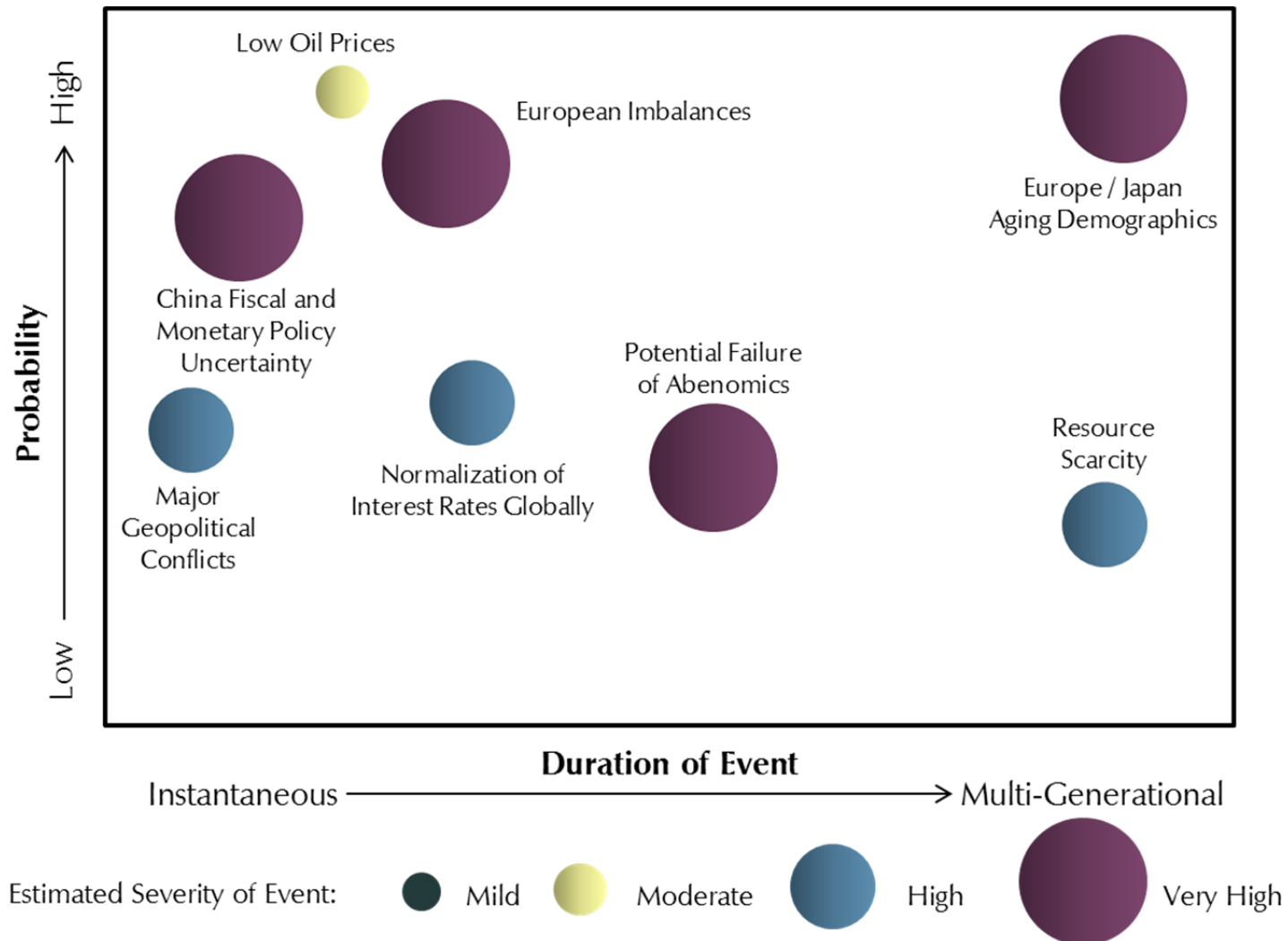
### Global Economic Outlook, Continued

**A divergence in monetary policy is likely, with Europe, Japan, and China providing additional stimulus and the U.S. tightening, albeit slowly.**

- At their December meeting, the Federal Reserve voted to increase interest rates by 0.25% to 0.50%, the first increase in nine years. Expectations are for the Fed to increase rates one or two times in 2016, given recent equity market declines and slowing growth globally.
- The European Central Bank further reduced its deposit rate to -0.3% at its year-end meeting, but stopped short of increasing its bond-buying program. The recent decline in markets and continued low inflation could lead to further monetary stimulus.
- At the Bank of Japan's December meeting, they maintained the pace of monetary stimulus, but announced that operational changes would be implemented. Specifically announced, were an increase in the duration of the bond portfolio and the purchase of ETFs that target companies that actively invest in capital markets. Given continued low inflation and weak growth, we expect that the Bank of Japan will further expand its already aggressive monetary policy in 2016.
- China's fourth quarter GDP came in at 6.8% annualized, the slowest rate in twenty-five years. If China's economy continues to slow it is likely that further stimulus including rate cuts, reductions in bank reserve requirements, and possibly infrastructure spending will be announced. China's recent inclusion in the IMF's basket of currencies could lead to a further currency devaluing, under the guise of allowing it to float more freely.

**Several issues are of primary concern: 1) declining growth in China, along with uncertain fiscal and monetary policies; 2) continued economic sluggishness and financial risk in Europe; 3) weakening economic activity in the U.S.; 4) divergent growth in emerging economies.**

### Macroeconomic Risk Matrix



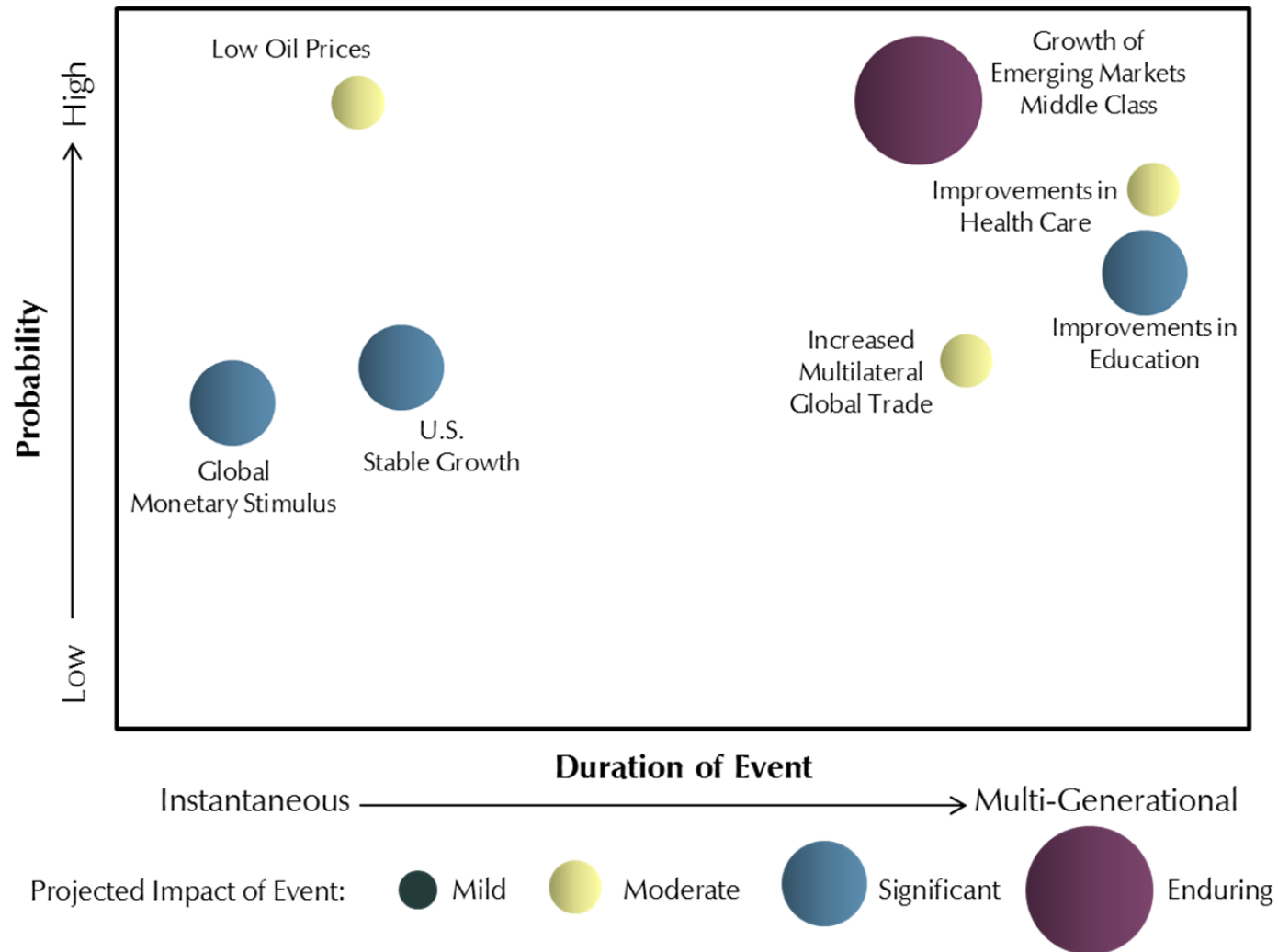
**Macroeconomic Risk Overviews**

<b>Low Oil Prices</b>	An extended period of low oil prices will particularly hurt countries such as Iran, Russia, and Venezuela that depend heavily on oil export revenues. Low prices will continue to hurt oil exploration and production (E&P) companies, and companies that support the oil industry. Recently, the stress of low oil prices has particularly affected E&P companies, with bond defaults ticking-up. The risk of increased geopolitical tensions also exists with depressed oil prices.
<b>European Imbalances</b>	The crisis is rooted in structural issues in the eurozone related to the combination of a single currency combined with 17 fiscal authorities. The events in 2015 related to Greece's third bailout highlighted the continued tensions in Europe. Allowing countries to leave the Eurozone could set a dangerous precedent, especially if they ultimately experience growth due to depressed currencies. Alternatively, providing debt forgiveness for some countries could lead to others looking for similar treatment. The massive influx of refugees into Europe from the Middle East and North Africa exacerbate economic stresses. The impending referendum on whether the UK will stay in the European Union could also prove disruptive.
<b>Potential Failure of Abenomics</b>	Japan is engaged in a historic stimulus program, referred to as "Abenomics" to fight its decades of deflation. The plan includes monetary, fiscal, and structural components. If Japan overshoots with its policies, or dramatically changes them unexpectedly, it could prove disruptive to markets and growth.
<b>Europe/Japan Aging Demographics</b>	In Japan and Europe, birth rates have declined, resulting in populations becoming older and smaller relative to the rest of the world. These demographic trends will have a negative long-term impact on GDP growth and fiscal budgets, amplifying debt problems.
<b>Major Geopolitical Conflicts</b>	Tensions between Saudi Arabia and Iran recently increased due to the nuclear agreement and the Saudi's execution of 47 individuals, including an important Shia cleric. Any further escalation in the oil rich area could have far-reaching implications. Other unresolved geopolitical issues remain, including the civil war in Syria, the rise of ISIS, North Korea's nuclear tests, and the ongoing tensions between Russia and Ukraine.

**Macroeconomic Risk Overviews, Continued**

<b>China Fiscal and Monetary Policy Uncertainty</b>	China's recent policies, first to support its equity markets and then to devalue its currency, created heightened volatility in global markets. The process of transitioning from a model of growth based on fixed asset investment by the government to a model of consumption-based growth will be difficult. Similar measures responding to slowing growth or to support stock prices could prove disruptive and decrease confidence in China's government.
<b>Normalization of Interest Rates Globally</b>	After the Global Financial Crisis, the developed world, particularly the U.S., injected massive amounts of liquidity into the financial system in an effort to prevent depression-like declines in economic activity. Additionally, the world's central banks reduced short-term interest rates to record lows. Once monetary stimulus is withdrawn, it is likely that interest rates will normalize and weigh on growth globally, particularly in emerging markets.
<b>Resource Scarcity</b>	The increasing world population, urbanization, and a growing middle class, particularly in emerging economies, could all lead to a scarcity of resources, including food, water, land, energy, and minerals. As demand continues to grow and supply declines, certain commodity prices may skyrocket, hurting the living standards of many and increasing the risk of geopolitical conflicts.

**Positive Macroeconomic Trends Matrix**



**Positive Macroeconomic Trends Overviews**

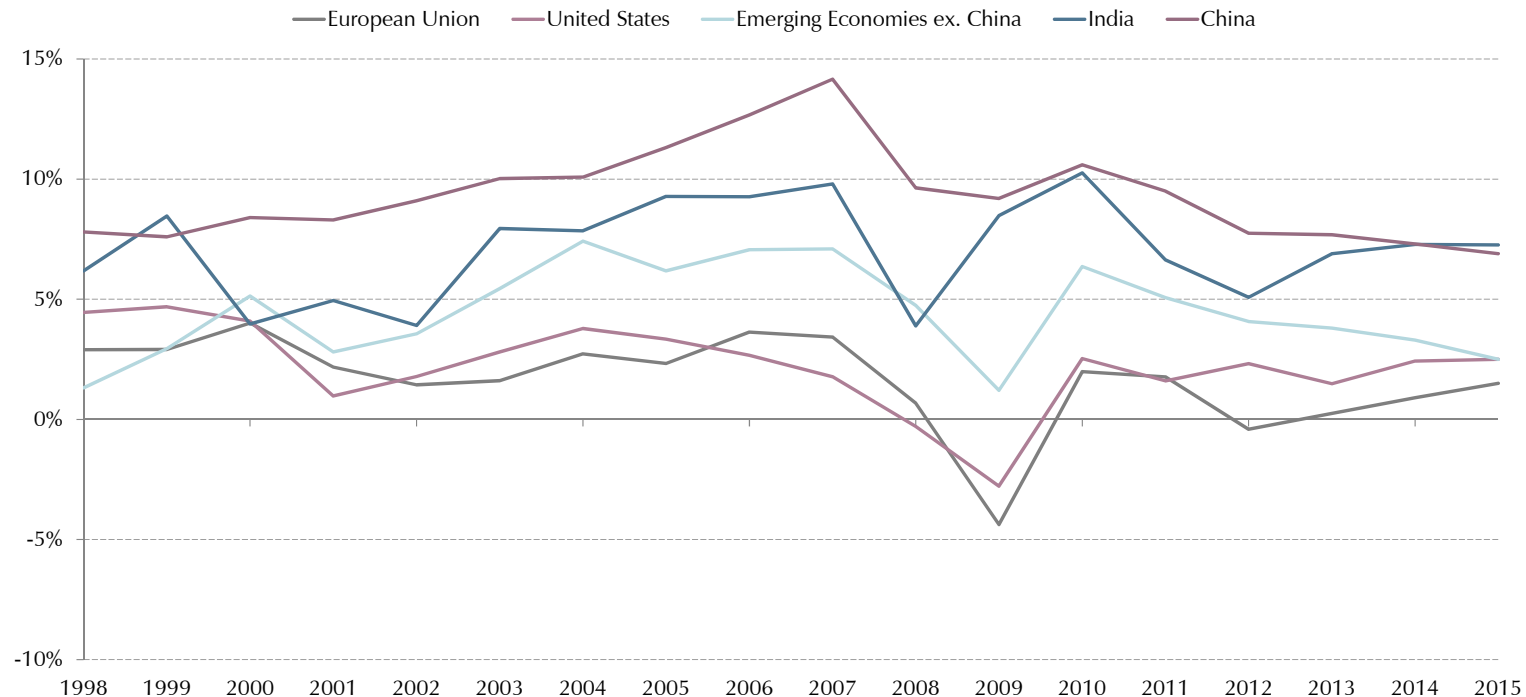
<b>Low Oil Prices</b>	Low oil prices will likely have a positive impact on global growth, particularly for energy importers like China, Japan, and India. Consumers should also benefit from falling oil prices in the form of lower prices for gasoline and heating oil.
<b>U.S. Stable Growth</b>	The U.S. economy has stabilized since the Global Financial Crisis, with GDP growth improving and unemployment declining. Continued stabilization in the world's largest economy should improve employment and growth domestically, and increase demand for goods and services from abroad.
<b>Growth of Emerging Markets Middle Class</b>	In emerging economies, the size of the middle class is projected to grow significantly over the next twenty years. The growing middle class in the emerging economies should increase consumption globally, which in turn will drive GDP growth and create jobs.
<b>Increased Multilateral Global Trade</b>	The pace of globalization has accelerated, particularly in emerging economies. Increased trade and investment, and access to foreign capital and export markets for corporations, should lead to higher efficiencies and greater global growth.
<b>Improvements in Education/Healthcare</b>	Literacy rates and average life spans have increased globally, particularly in the emerging economies. Higher literacy rates will drive future growth, helping people learn new skills and improve existing skills. When people live longer, it increases incentives to make long-term investments in human capital (i.e., education and training), resulting in a more productive work force and ultimately more growth.

### Positive Macroeconomic Trends Overviews, Continued

#### Global Monetary Stimulus

Developed market central banks embarked on a massive monetary stimulus campaign in the aftermath of the Global Financial Crisis. The U.S., European, and Japanese central banks continue to maintain interest rates at record lows. Japan has embarked on an unprecedented asset purchase program, while the European Central Bank recently began its own program. In contrast, the U.S. ended its bond buying last year and increased interest rates in December. Additionally, emerging market central banks including Russia, India, and China, reduced interest rates to stimulate slowing growth. If central banks continue to provide liquidity and keep interest rates low, this should stimulate growth.

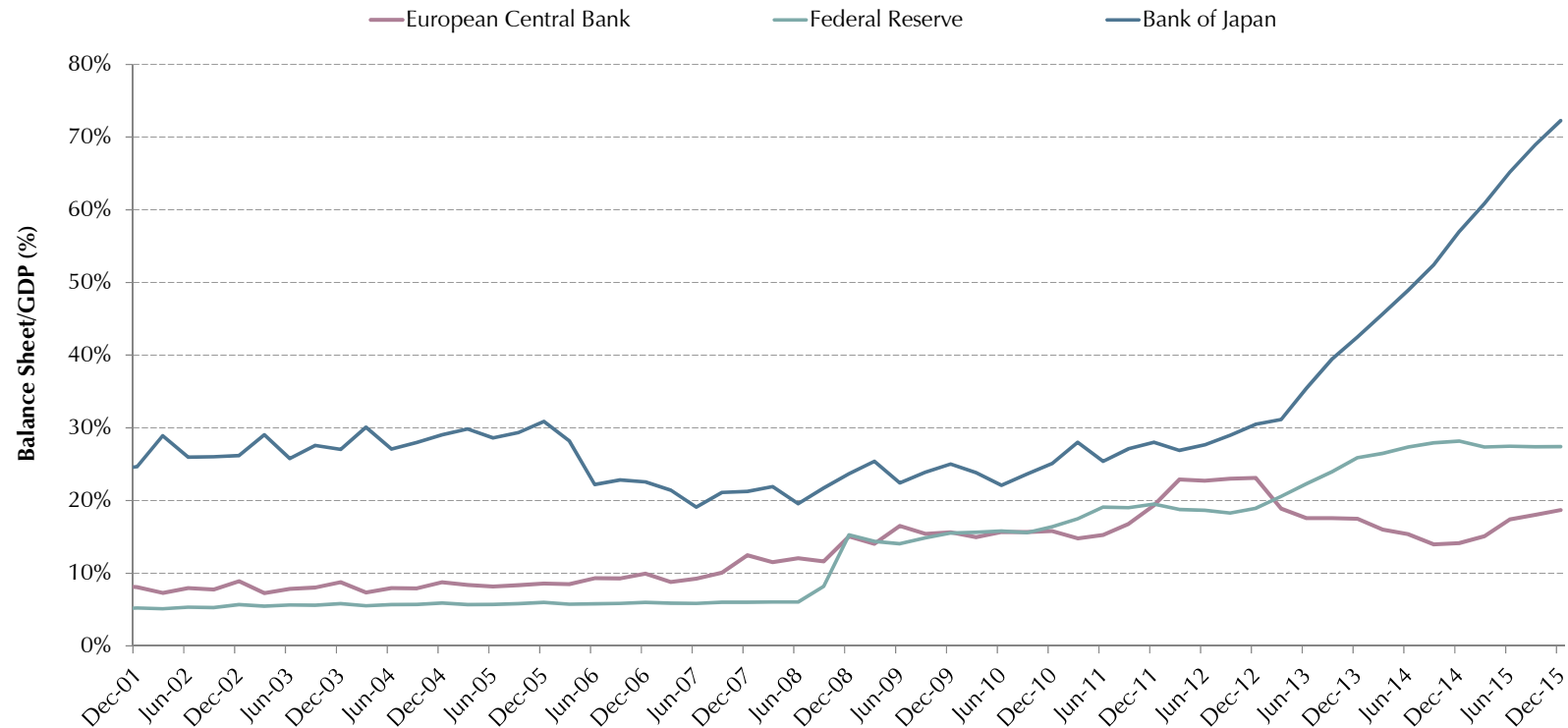
### Global Real Gross Domestic Product (GDP) Growth<sup>1</sup>



- Global growth remains weak, with the dynamic of emerging economies growing faster than developed economies remaining intact.
- Slowing growth in China, the world's second largest economy, will remain a key issue, particularly affecting commodity exporters. Growth in India, a bright spot within emerging economies, has surpassed China's growth, a trend that should continue.

<sup>1</sup> Source: IMF. World Economic Outlook Update, January 2016. GDP data after 2014 are IMF estimates.

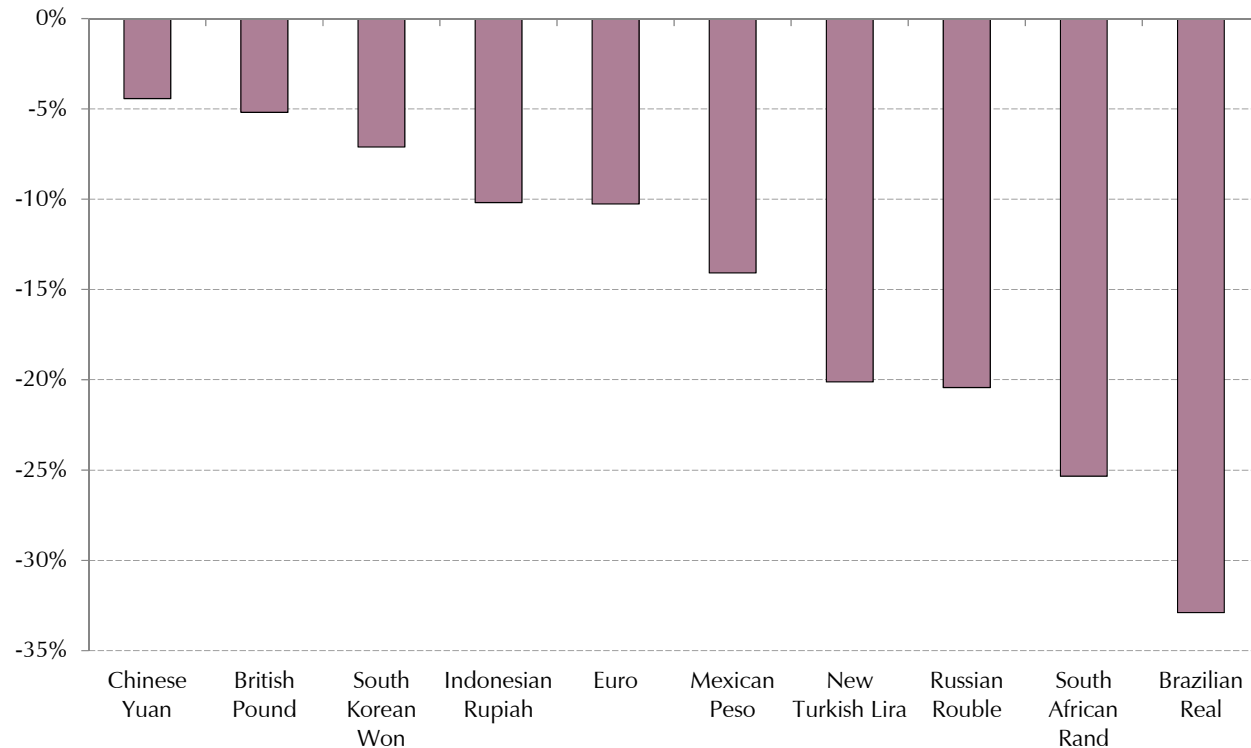


Central Bank Balance Sheets as a Percentage of GDP<sup>1</sup>

- Monetary policy has diverged in major central banks. The U.S. ended its bond-buying program (quantitative easing) and increased interest rates in December, while Japan and Europe continue to actively expand their balance sheets.
- Given continued slow growth and low inflationary pressures, it is likely that Japan and Europe will extend and increase their purchase programs in 2016.

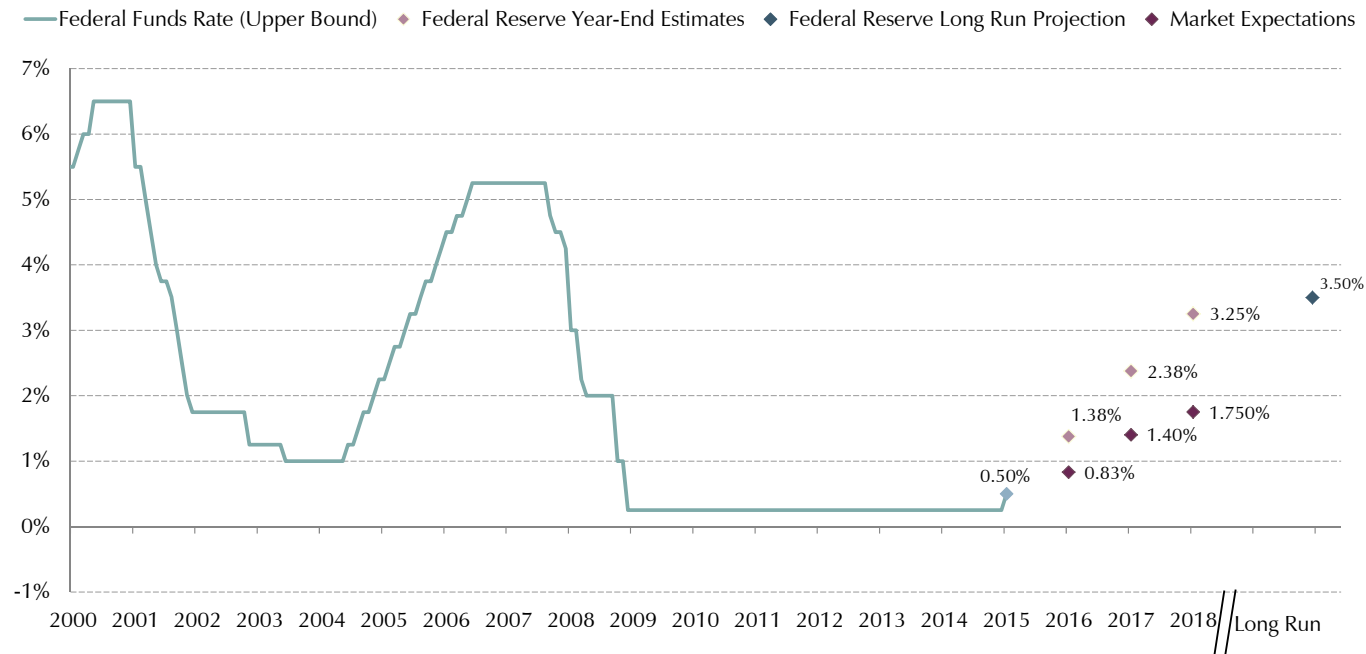
<sup>1</sup> Source: Bloomberg. IMF World Economic Outlook, October 2015. Balance sheet data is as of December 31, 2015. GDP data after 2014 are IMF estimates.

### Major Currency Values versus the U.S. Dollar<sup>1</sup>



- In 2015, the U.S. dollar strengthened against most major currencies, particularly emerging markets, largely due to relatively stable growth and expectations that the Federal Reserve would increase interest rates.
- Domestic importers and consumers should benefit from continued dollar strength, while U.S. exporters, commodities, and foreign companies with dollar debt should be negatively impacted.

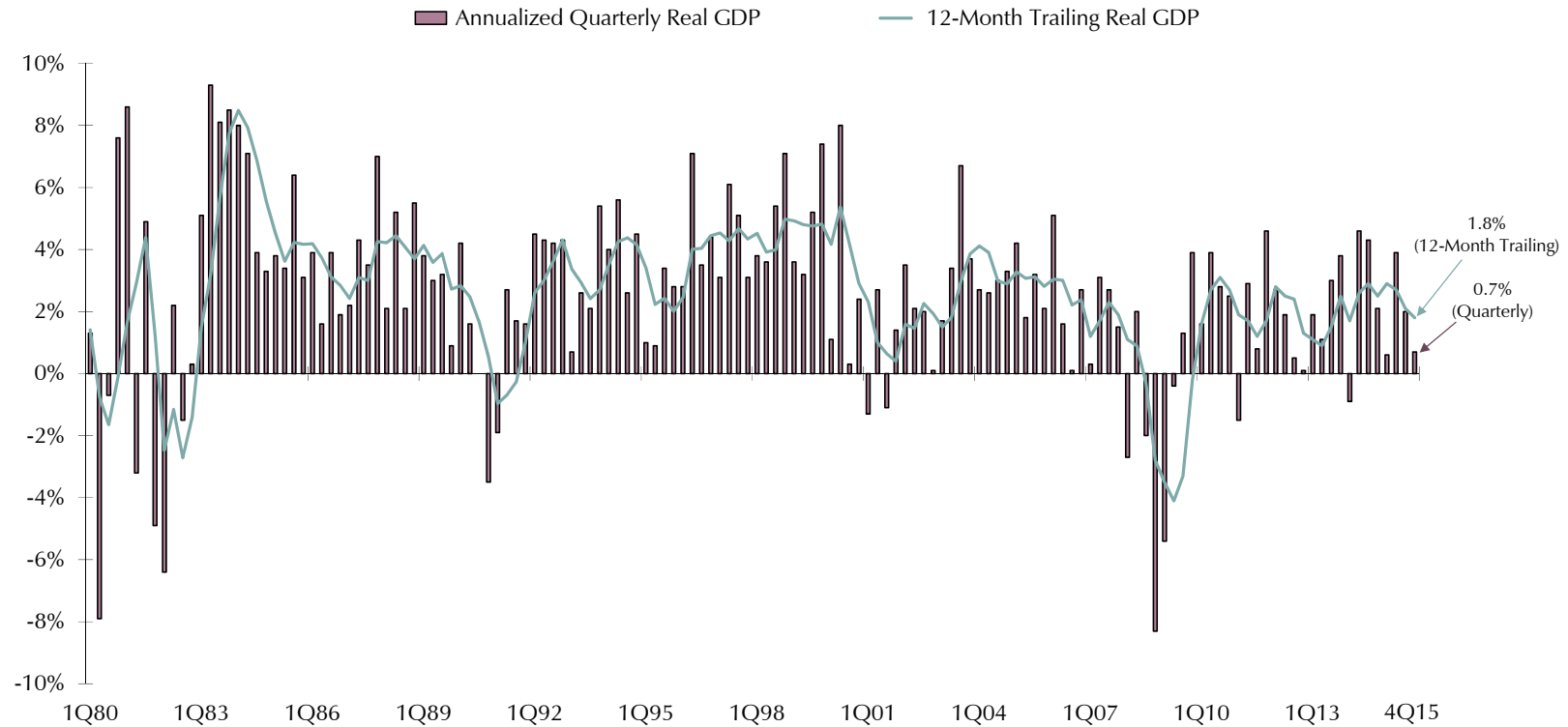
<sup>1</sup> Source: Thomson Reuters. Represents depreciation against the U.S. dollar in 2015.

Federal Funds Rate<sup>1</sup>

- The Federal Reserve increased interest rates in December by 0.25% representing the first rate increase in nearly a decade.
- The pace and trajectory of future increases remains uncertain particularly given the recent signs of slowing global growth.

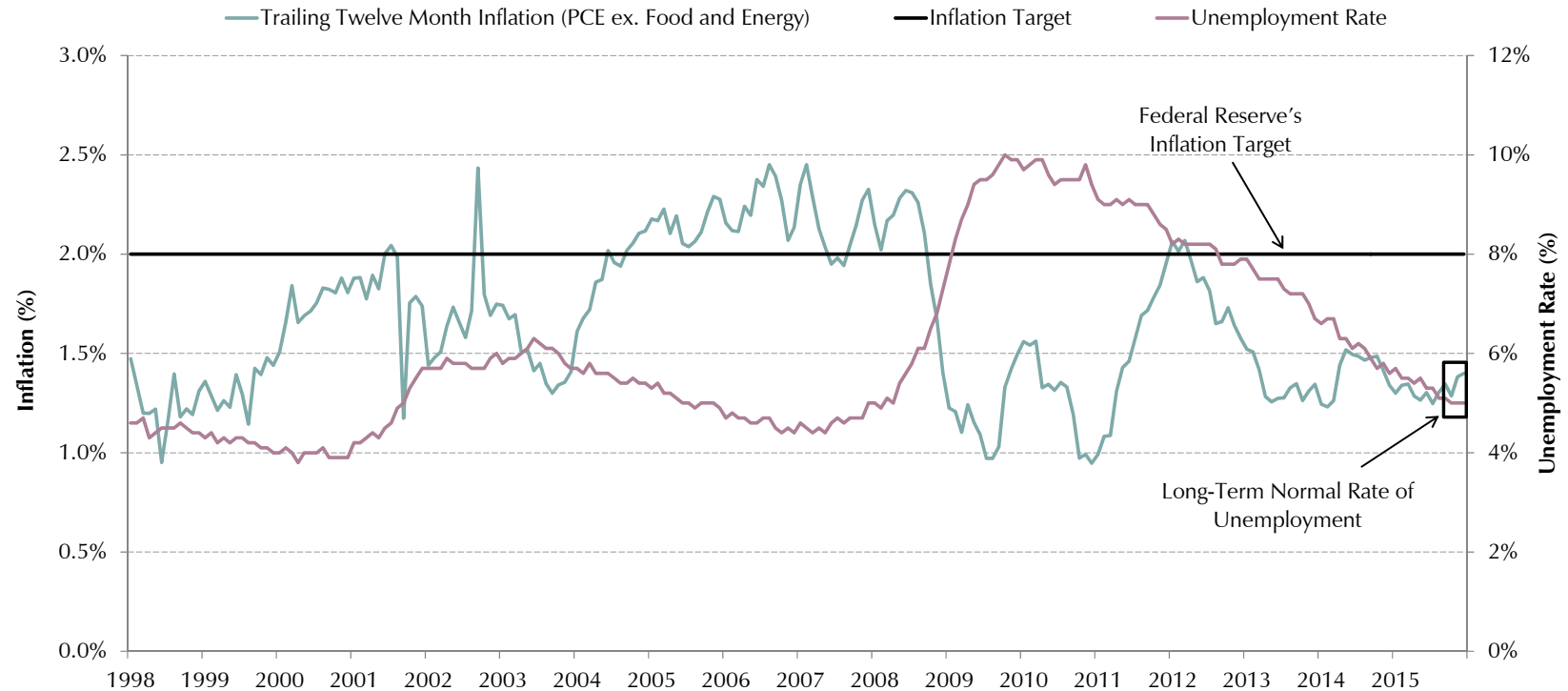
<sup>1</sup> Source: Bloomberg and Federal Reserve December Economic Projections. The FOMC Year-End Estimates are the median estimates of the forecasts of the federal funds rate by the 17 FOMC participants at the end of the specified calendar year or over the long run. Data is as of December 31, 2015 for market expectations that represents the fed funds future rate at the end of the specified calendar year.

### U.S. Real Gross Domestic Product (GDP) Growth<sup>1</sup>



- U.S. GDP growth declined in the final quarter of 2015 to an annualized rate of 0.7%, down from the 2.0% level of the prior quarter.
- Continued pressure on exports from a strong U.S. dollar and a decline in consumer spending weighed on growth.

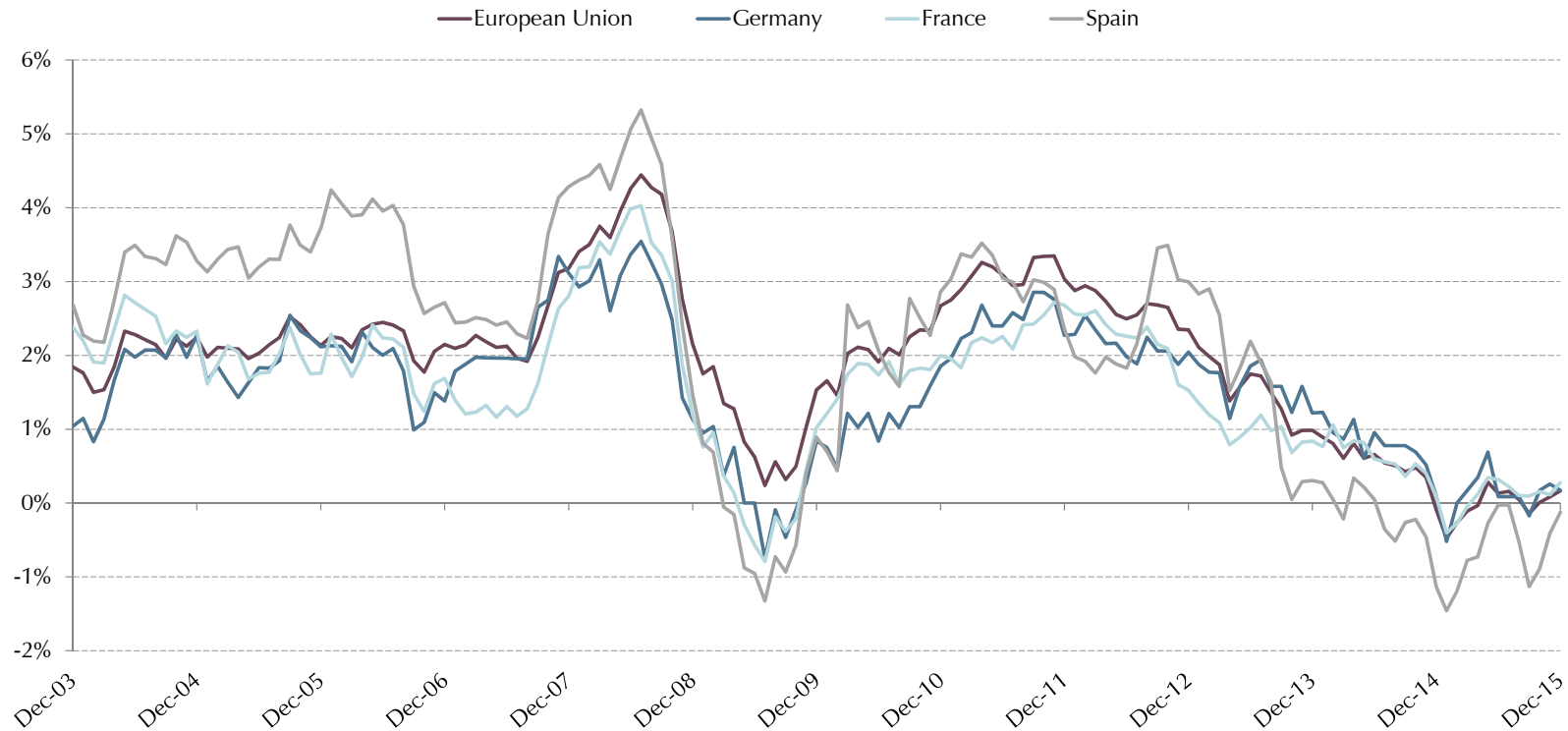
<sup>1</sup> Source: U.S. Bureau of Economic Analysis. Data is as of the fourth quarter of 2015.

U.S. Inflation & Employment<sup>1</sup>

- The path of future rate increases in the U.S. is complicated by the Federal Reserve's dual mandate of maintaining stable prices and maximum employment.
- Despite recent declines in unemployment, the Fed's preferred measure of inflation (PCE ex. food and energy) remains below target.

<sup>1</sup> Source: Bureau of Labor Statistics. Data is of December 31, 2015. Federal Open Market Committee (FOMC) participants' recent estimates of long-term normal unemployment had a median value of 4.9% and a range of 4.7% to 5.8%.

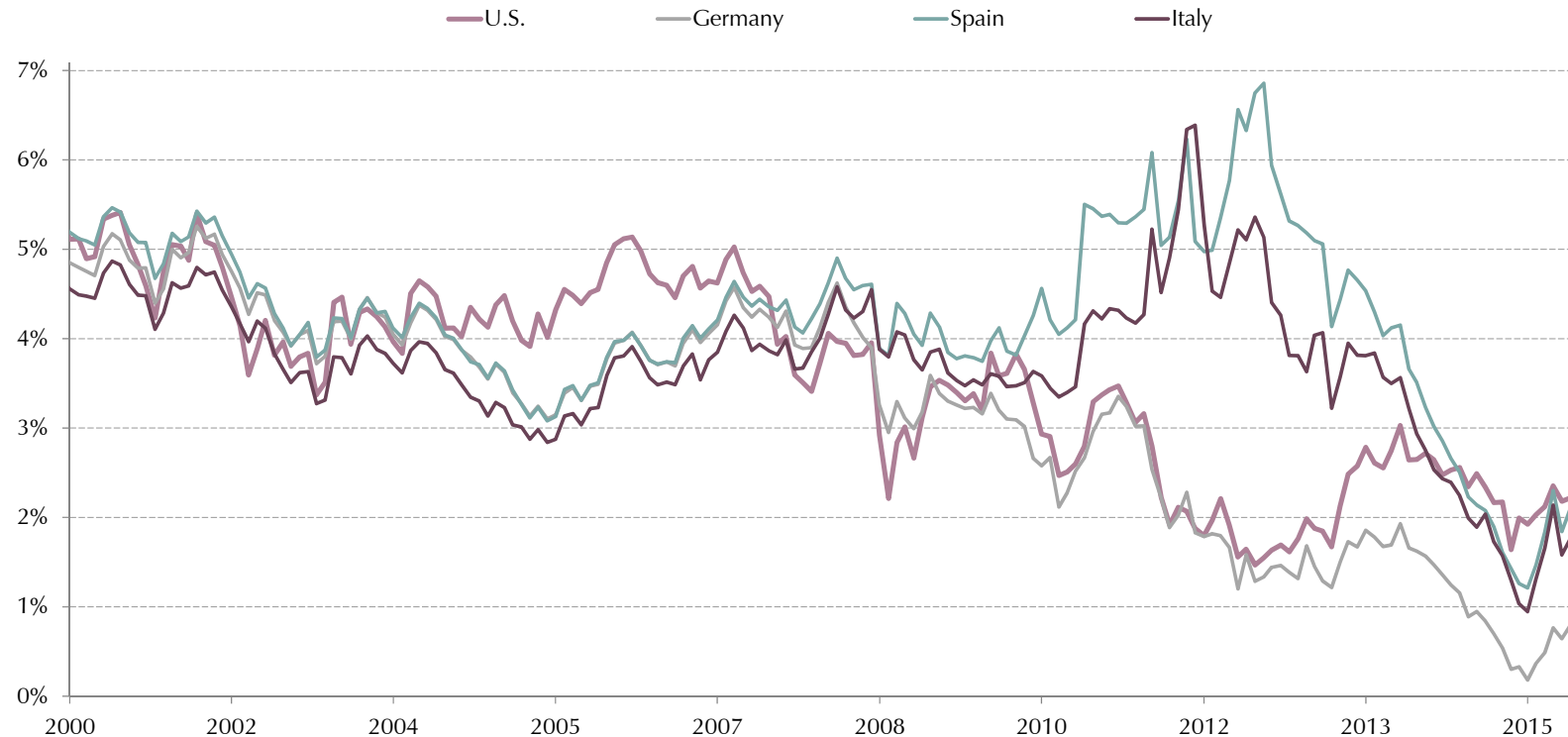
### European Annual Inflation<sup>1</sup>



- Inflation remains low in Europe, given slow growth and declining energy prices.
- Given weak inflationary pressures and growth, it is likely that the ECB will extend, or expand, its asset-purchase program.

<sup>1</sup> Source: Eurostat. Data is as of December 31, 2015.

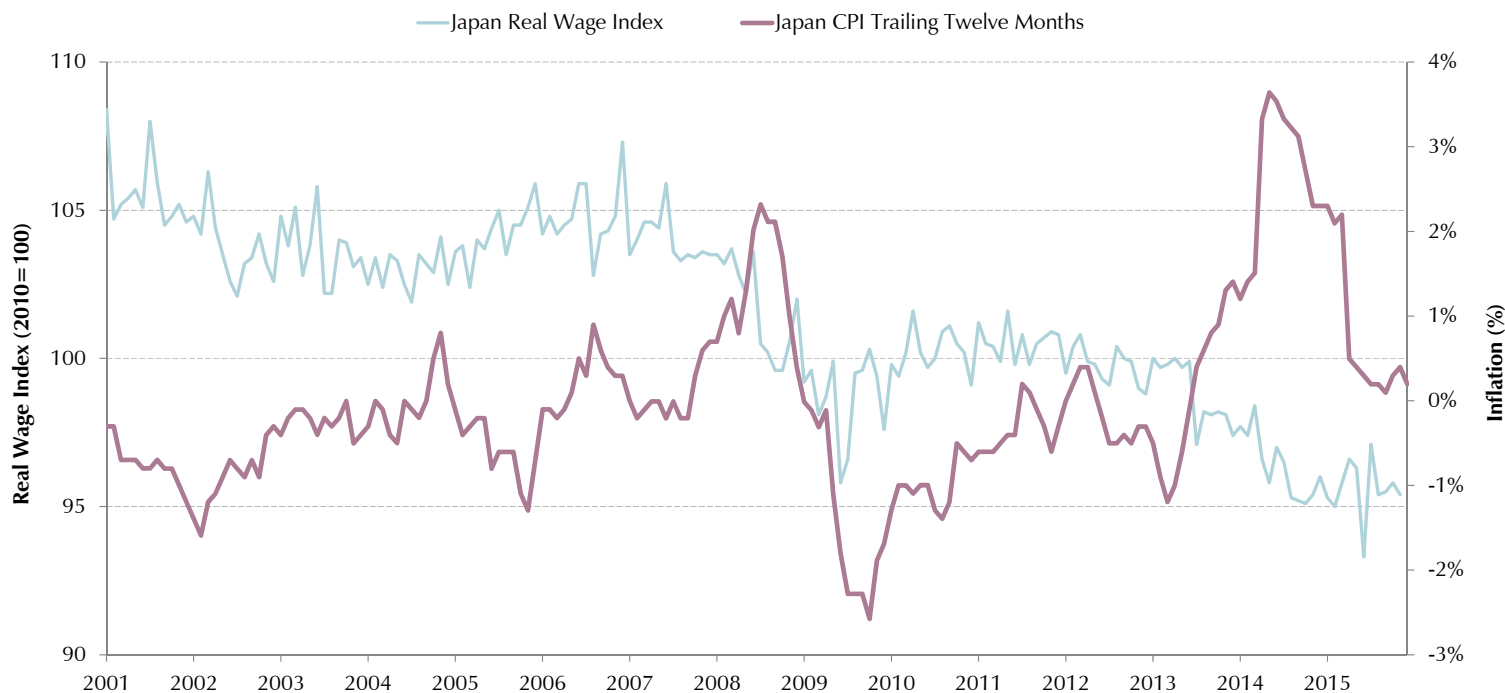
### 10-Year Government Bond Yields<sup>1</sup>



- Bond yields increased in the fourth quarter in the U.S. and Germany, but declined in peripheral Europe.
- The yield on the 10-year U.S. Treasury increased 0.23% during the quarter as the Fed began to tighten, while yields in Germany increased slightly (0.63% versus 0.59%). Low inflation and monetary easing have kept bond yields on peripheral European countries like Ireland, Spain, and Italy below the U.S., despite higher financial risk.

<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2015.

### Japanese Economic Conditions<sup>1</sup>



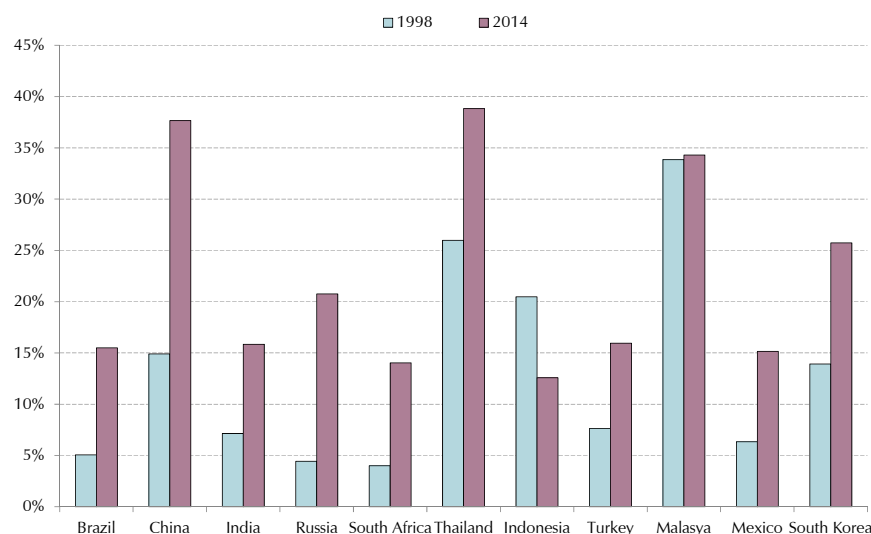
- Despite an unprecedented stimulus program aimed at increasing growth and fighting deflation, prices and wages remain low in Japan.
- In December, Japan's central bank announced some changes to its stimulus program including increasing exposure to longer-term bonds and equities, but kept the size of the program the same.
- A slowdown in emerging economies, key trading partners for Japan, could continue to weigh on growth.

<sup>1</sup> Source: Thomson Reuters and Bloomberg. Inflation data is as of December 31, 2015 and real wage data is as of November 30, 2015.

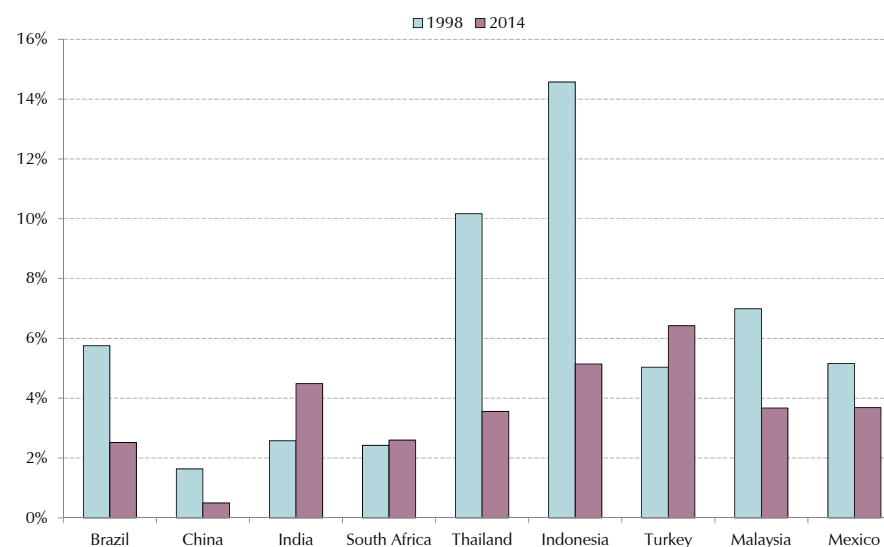


## Emerging Market Conditions<sup>1</sup>

Central Bank Reserves as Percentage of GDP



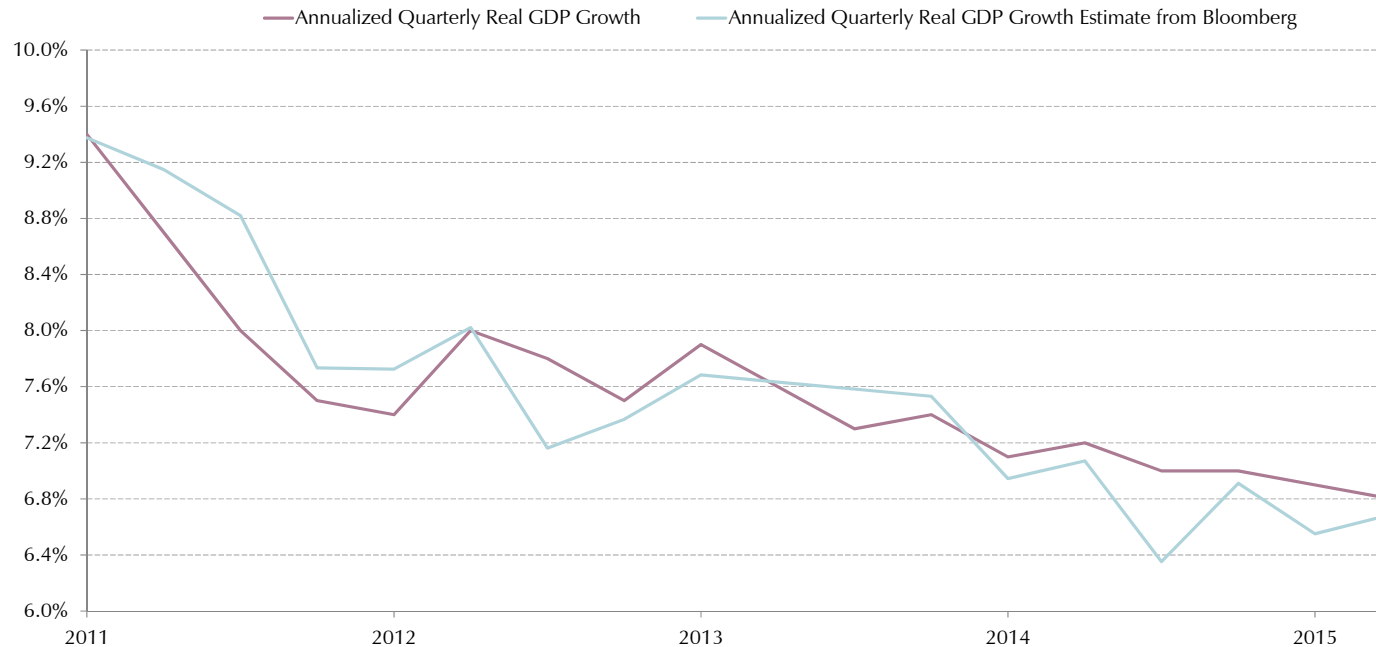
External Debt Service as Percentage of GDP



- Emerging markets have recently experienced lower investment returns, due in part to slowing growth in China, declining commodity prices, and a stronger U.S. dollar. Despite recent weakness, the long-term growth thesis remains in place for emerging markets.
- Contrasting current conditions with those during the Asian Financial Crisis in 1998, emerging economies generally have higher cash reserves and lower debt burdens, and less debt denominated in foreign currencies, making them better equipped to cope with currency fluctuations.

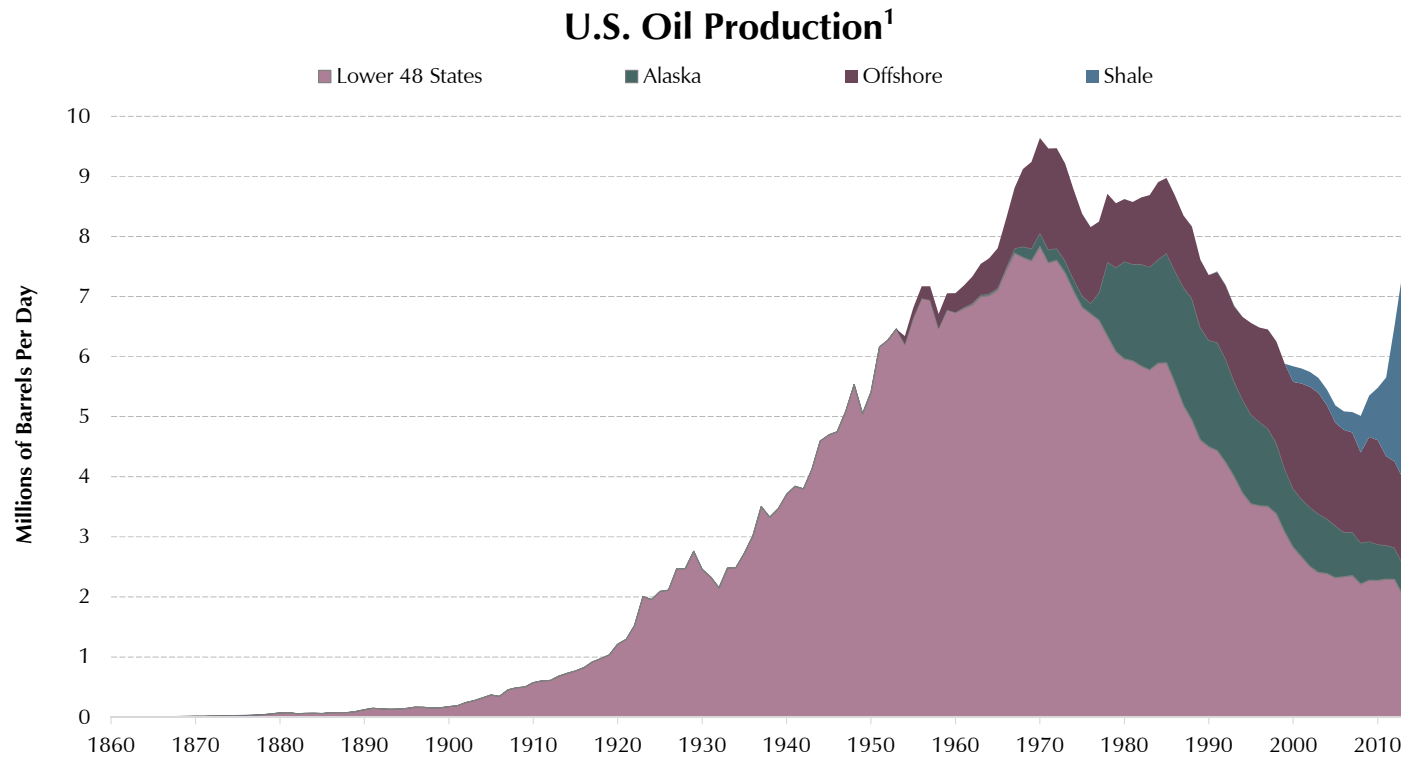
<sup>1</sup> Source: IMF, World Bank, and Research Affiliates. Data for 2014 are estimates.

### Chinese Real Gross Domestic Product (GDP) Growth<sup>1</sup>



- China's economy continues to show signs of slowing as it moves from a growth model based on fixed asset investment and manufacturing to one of consumption.
- A key question remains regarding the true growth rate in China, with many estimating that actual growth is below the government reported number.
- The impact of a meaningful slowdown in China's economy would be far-reaching, as it is the second largest economy in the world, but more importantly, it is the dominate contributor to global growth.

<sup>1</sup> Source: Bloomberg and National Bureau of Statistics of China. Data is as of Q4 2015.



- A large driver of the recent decline in oil prices has been increased supply from “fracking” in the U.S.
- Other contributors to falling prices include a stronger U.S. dollar and slowing global demand, particularly from China.
- Looking ahead, lower oil prices should benefit consumers and oil importers and hurt oil-related companies and exporters.

<sup>1</sup> Sources: Hamilton (2014) and Energy Information Administration.

## Summary

**Four primary concerns face the global economy in 2016: 1) declining growth in China along with uncertain fiscal and monetary policies; 2) continued economic sluggishness and financial risk in Europe; 3) weakening economic activity in the U.S.; 4) divergent growth in emerging economies.**

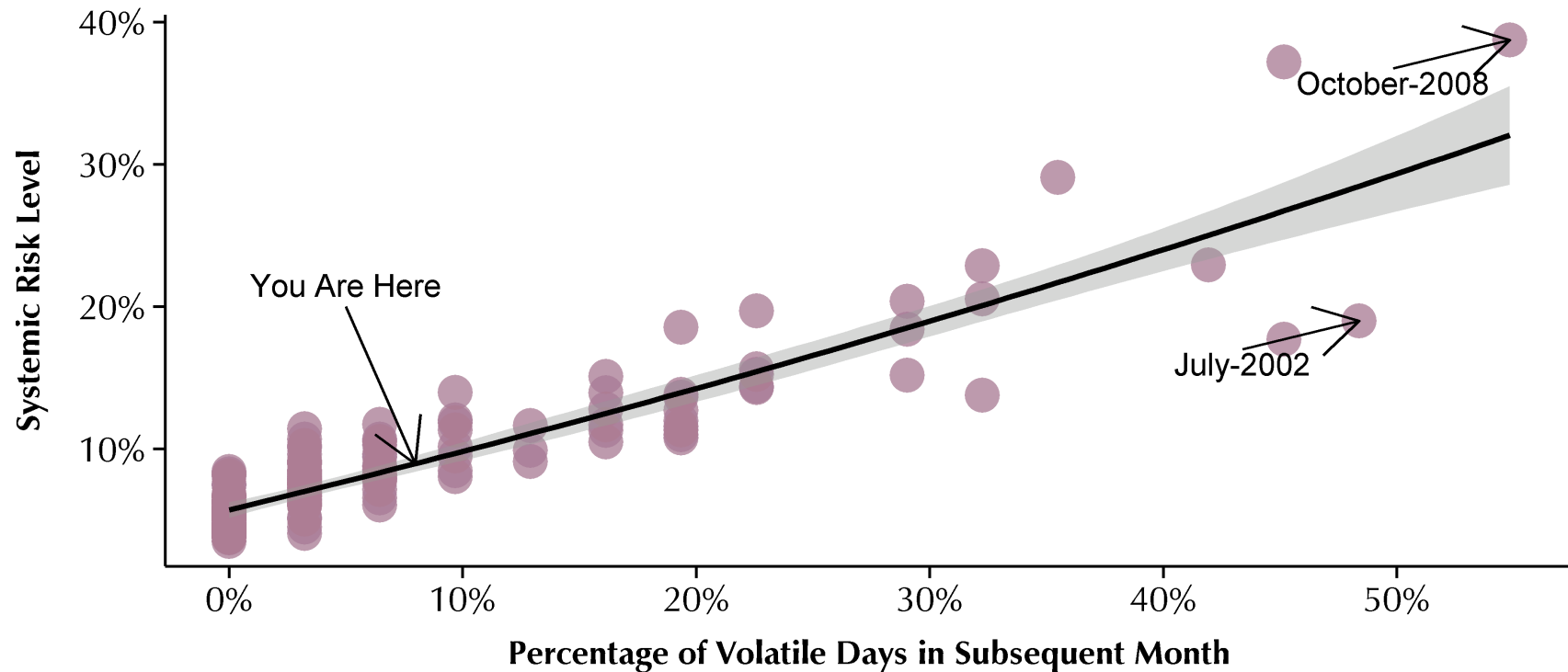
- Given China's size and contribution to global growth, a slowing of its economy could have a meaningful impact, particularly on countries that depend on its trade. A continued decline in the yuan will weigh on competing exports and hurt demand for goods abroad. Further unexpected shifts in fiscal and monetary policy by China could lead to market volatility.
- Although there have been recent increases in European growth and prices, both remain weak. Structural issues related to having one currency and multiple fiscal authorities remains. Although Greece received its third bailout in 2015, high debt levels remain there and elsewhere (e.g., Italy and Portugal). A prolonged slowdown, or further issues with the solidarity of the euro, could weigh heavily on global demand and be disruptive to markets and growth.
- Slowing growth globally, a strong dollar, and declining oil prices could weigh on economic activity in the U.S. Corporate profits remain vulnerable after a period where companies increased margins by cost cutting. The strength of the dollar should particularly weigh on multinational companies, while low energy prices should pressure oil and related companies.
- Growth in emerging market economies will likely remain uneven, with commodity export-dependent economies particularly hurt by a sustained slowdown in global growth and prices. Higher interest rates in the U.S. could also attract capital away from emerging economies. Despite varied headwinds, there are bright spots within emerging markets including India with their growth projected to surpass China.

## Capital Markets Outlook

### Capital Markets Outlook<sup>1</sup>

- Investors are faced with four primary issues in the near-term: 1) historically low bond yields, 2) the potential for a transition into a rising rate environment, 3) the potential for deteriorating corporate earnings, and 4) the possibility of much lower energy prices for a sustained period.
  - The price of the U.S. stock market relative to ten-year average earnings has trended up after the financial crisis, and remains above its historical average (28.4x versus 21.8x).
    - Small cap domestic stocks' valuations remain expensive relative to large cap stocks.
  - Developed international and emerging market stocks are trading at lower valuations than U.S. stocks.
    - Sovereign debt issues and weak economic growth in Europe, and a cyclical slowdown in emerging economies, are weighing down valuations.
  - Risk across markets measured by our Systemic Risk metric have returned to be within a reasonable zone after experiencing a 'critical' elevation that began in August.
    - However, monetary policy changes by central banks and political upheaval will continue to have a meaningful impact.
  - At the end of December, spreads for high yield corporate and investment grade bonds (6.6% and 1.7%, respectively) were just above their long-term averages.
  - At 2.3%, the yield on the ten-year Treasury remained far below its post-WWII average of 5.6%.
  - Crude Oil prices continue on a steep decline which has had wide ranging effects across several markets.

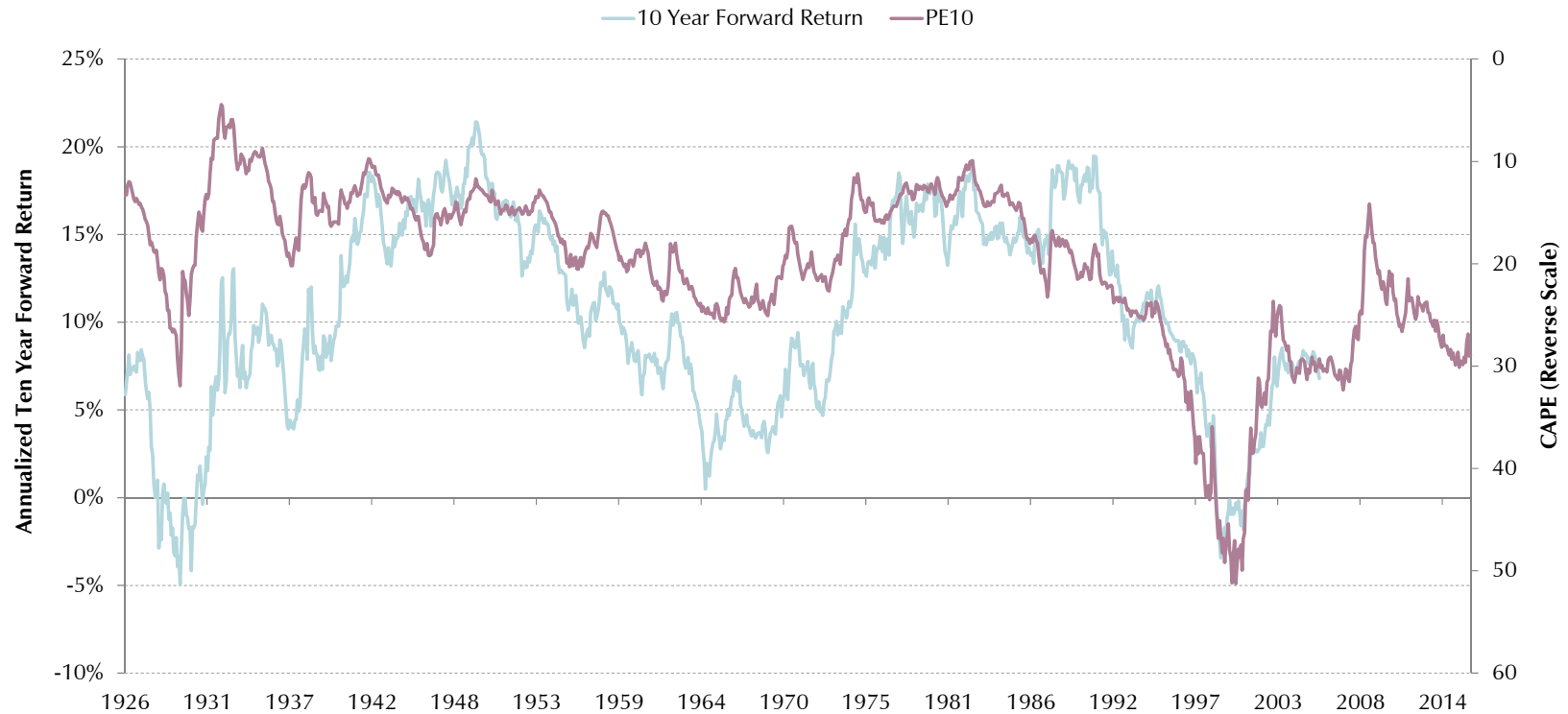
<sup>1</sup> Sources: Thomson Reuters, U.S. Treasury, and Standard & Poor's. Data is as of December 31, 2015.

**Systemic Risk and Volatile Market Days<sup>1</sup>**

- Systemic Risk, which measures risk across markets, is important because the more contagion of risk that exists between assets, the more likely it is that markets will experience volatile periods.
- After a short recovery from sustained high Systemic Risk this past fall, Systemic Risk levels have begun to creep back up in January.

<sup>1</sup> Source: Meketa Investment Group, as of January 11, 2015. Volatile days are defined as the top 10 percent of realized turbulence which is a multivariate distance between asset returns.

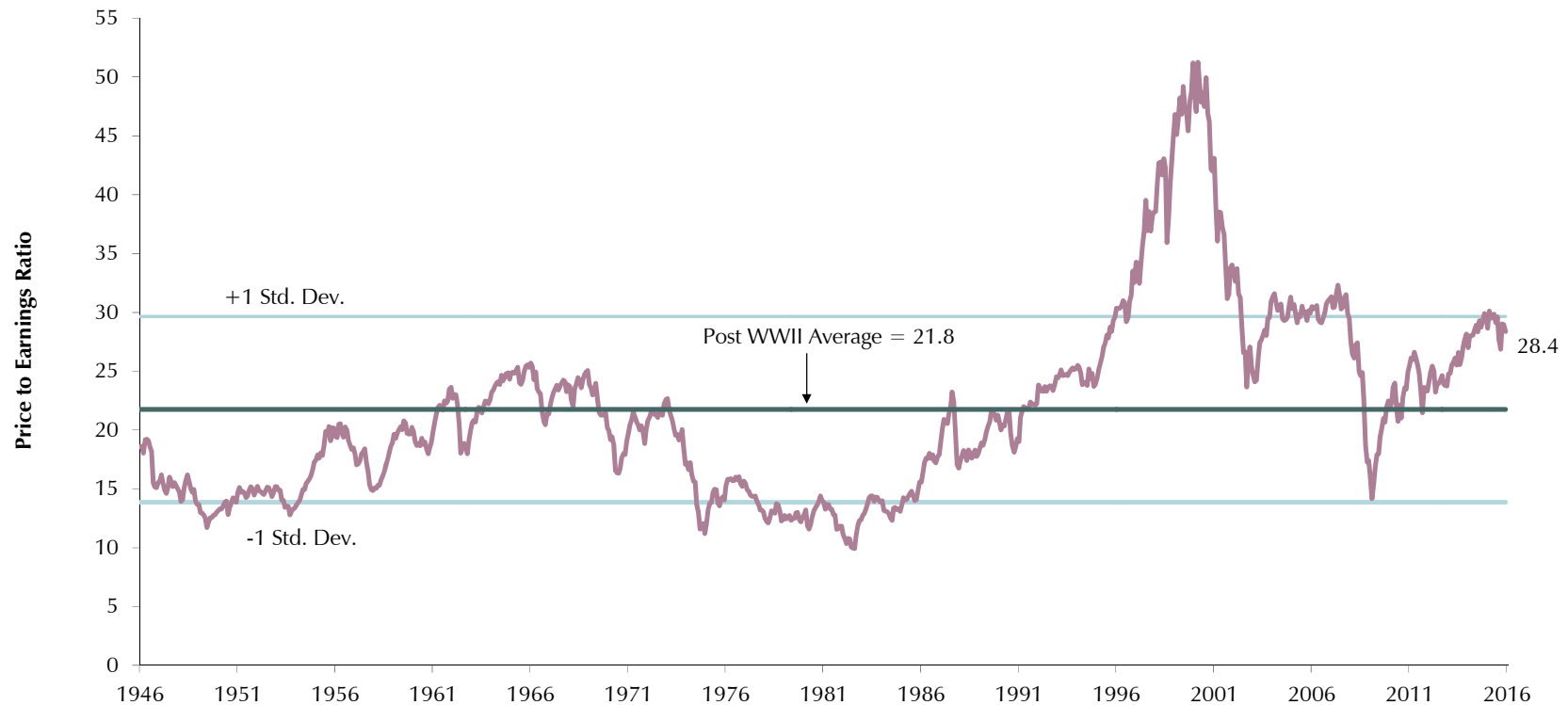
### The U.S. Cyclically Adjusted P/E<sup>1</sup> and Long-Term Equity Returns



- One of the most powerful predictors of long-term equity returns has been the Cyclically Adjusted Price to Earnings Ratio (CAPE).
- This fundamentally driven measure is highly correlated with future returns, which are shown in the chart above using the CAPE metric on a reverse scale.

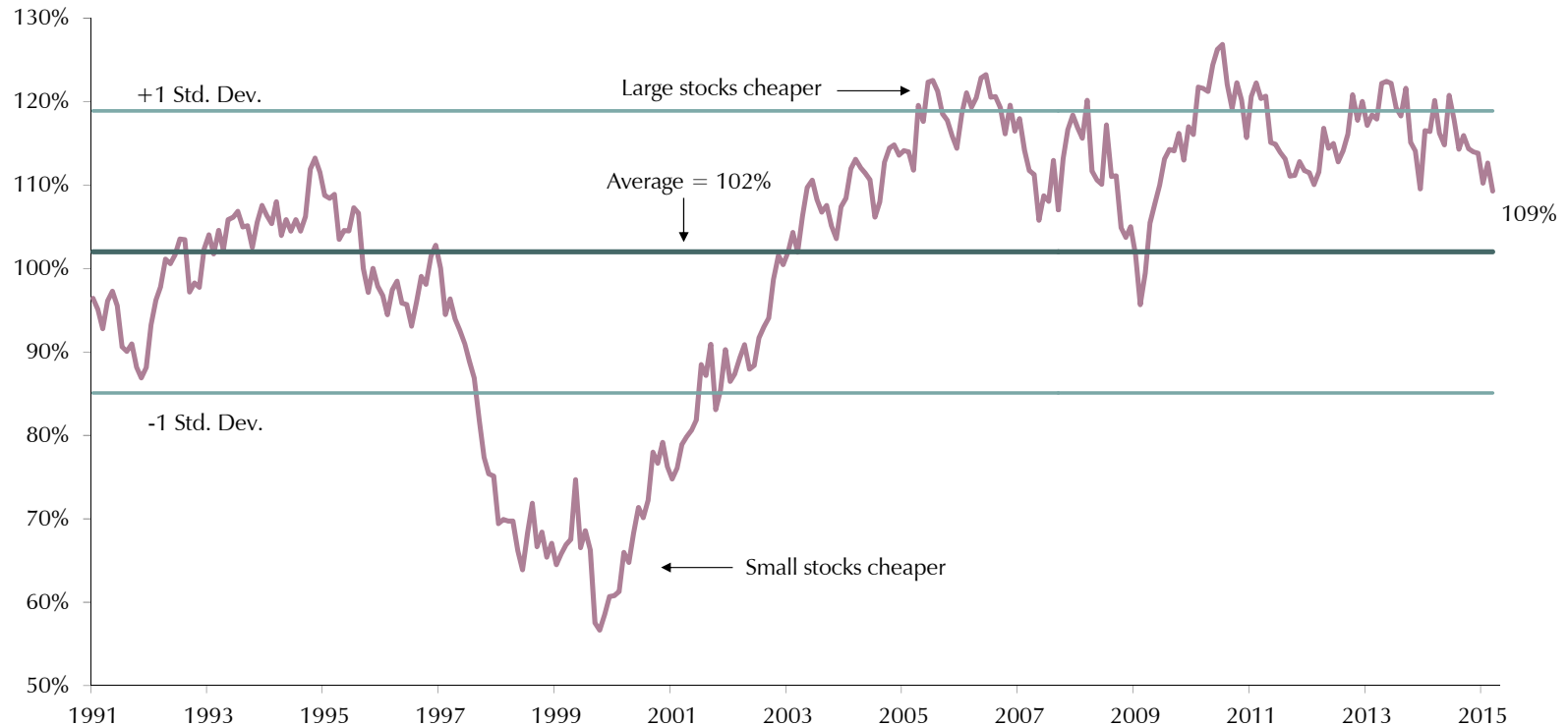
<sup>1</sup> Source: PE data are from Robert Shiller's website from 1926 - 1946; S&P and Thomson Reuters 1946 – present. S&P 500 equity returns are from Morningstar Direct for the entire period. Data is from January 31, 1926 to December 31, 2015.



U.S. Equity Cyclically Adjusted P/E<sup>1</sup>

- The cyclically adjusted P/E ratio for the S&P 500 finished December at 28.4x, above its post-WWII average of 21.8x.
- Due to the recent pullback in equity markets, this metric has fallen slightly below the positive standard deviation threshold. Historically, a P/E ratio at this level has led to roughly average future returns over a 10 year horizon.

<sup>1</sup> Source: Standard & Poor's. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is from January 31, 1946 to December 31, 2015.

Small Cap P/E vs. Large Cap P/E<sup>1</sup>

- The P/E ratio of small cap stocks (Russell 2000) relative to large cap stocks (Russell 1000) points to comparatively expensive small cap stocks.
- This relative valuation metric has remained largely range bound since 2010.

<sup>1</sup> Source: Russell Investments. Earnings figures represent 12-month "as reported" earnings. Data is as of December 31, 2015.

Growth P/E vs. Value P/E<sup>1</sup>

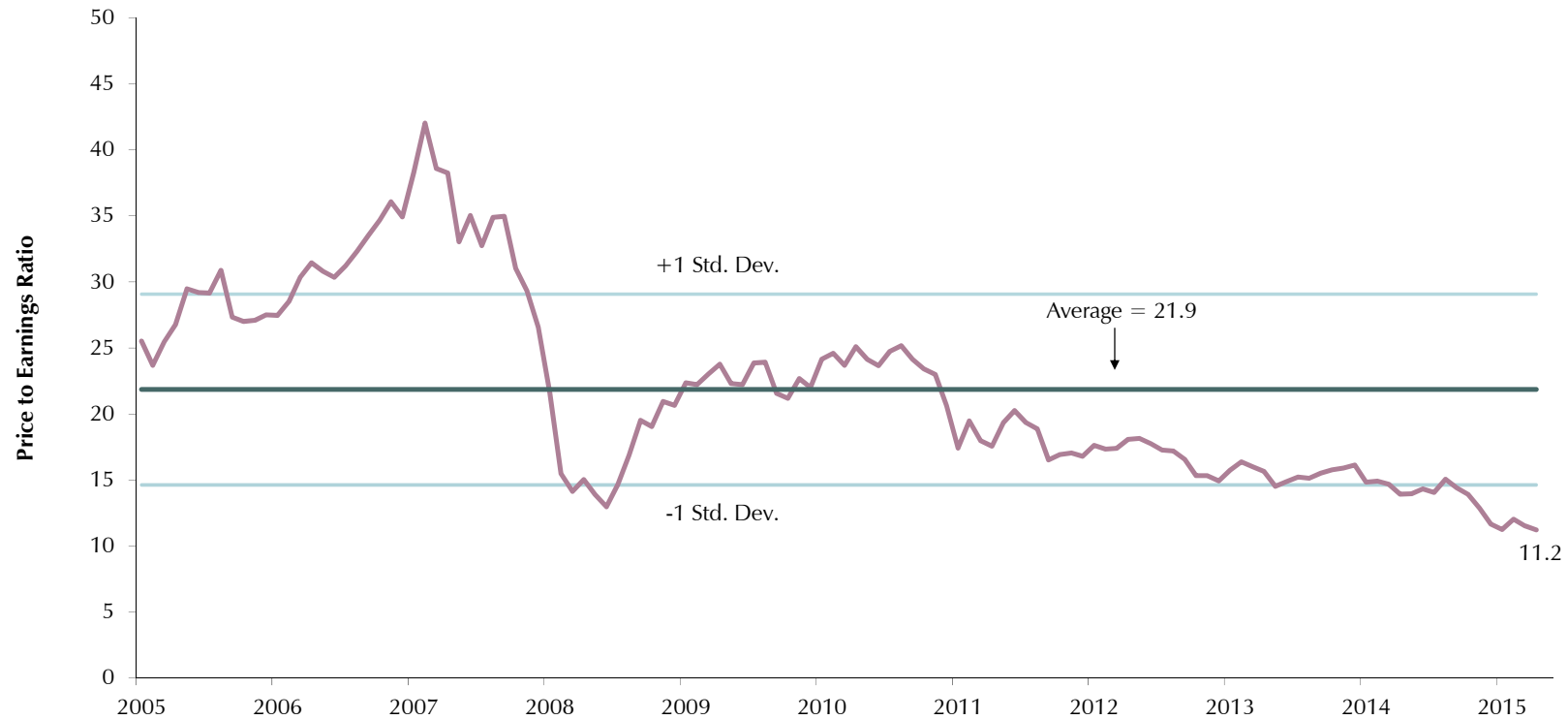
- The P/E ratio of growth stocks (Russell 3000 Growth) relative to value stocks (Russell 3000 Value) finished December at 129%, well above its level four years prior but still below its long-term average.
- Of note, the long-term average was sharply influenced by the technology bubble of the late 1990s.

<sup>1</sup> Source: Russell Investments. Earnings figures represent 12-month "as reported" earnings. Data is as of December 31, 2015.

Developed International Equity Cyclically Adjusted P/E<sup>1</sup>

- Valuations for the MSCI EAFE (ex-Japan) remain more than one standard deviation cheaper than their historical average.
- Sovereign debt concerns and the slow pace of economic growth in Europe likely account for the low valuation levels.

<sup>1</sup> Source: MSCI and Thomson Reuters. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2015.

Emerging Market Equity Cyclically Adjusted P/E<sup>1</sup>

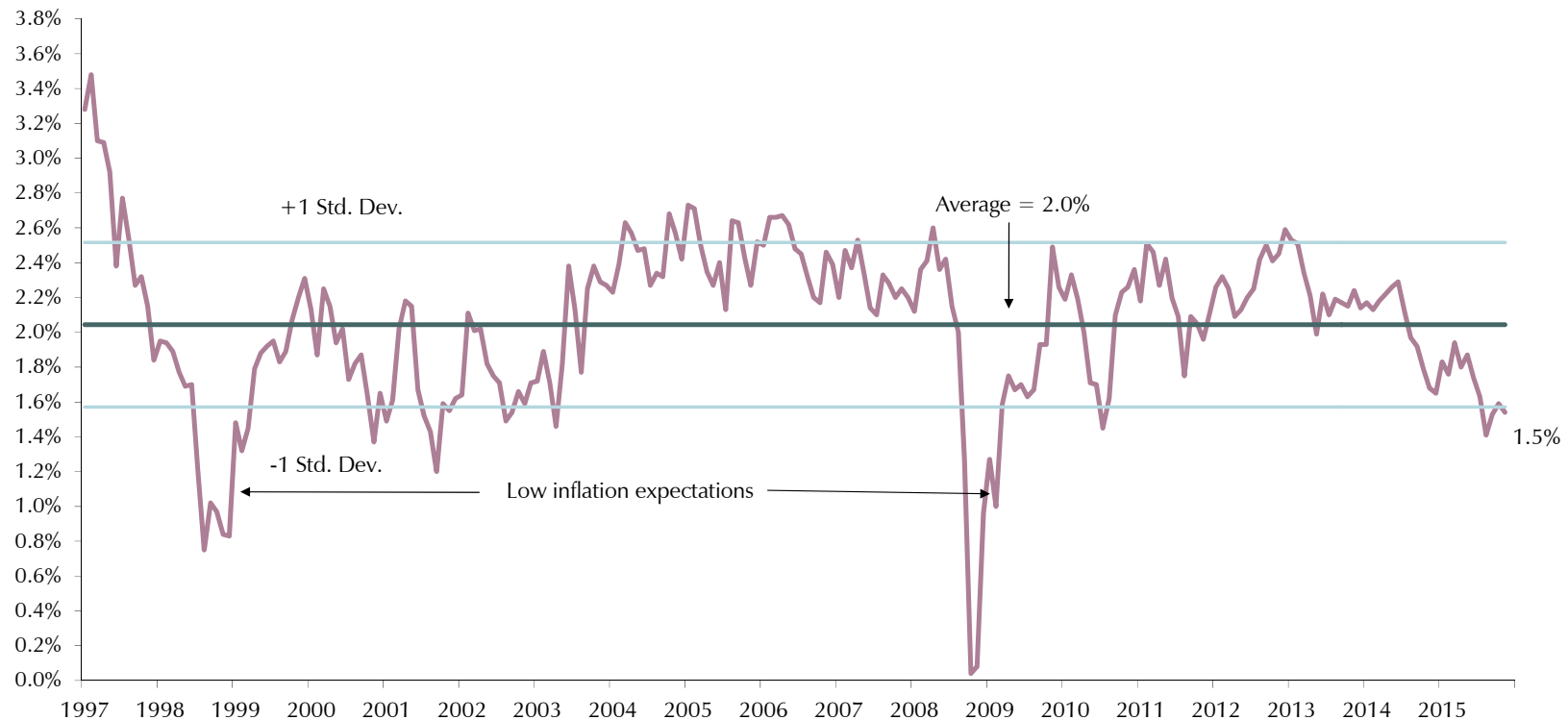
- Emerging market equities (MSCI Emerging Markets) are priced more than one standard deviation below their (brief) historical average.
- By this metric, emerging market equities are trading at a much lower valuation than U.S. equities, and at a slightly lower valuation than non-U.S. developed market equities.

<sup>1</sup> Source: MSCI and Thomson Reuters. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2015.

**Ten-Year Treasury Yields<sup>1</sup>**

- Ten-year Treasury yields finished December at 2.3%, well below both their post-WWII average and the levels of one year ago.
- Markets have begun to focus on the path of central bank interest rates; the most recent FOMC meeting began the first rising rate environment since 2006, but the guidance remains relatively dovish.

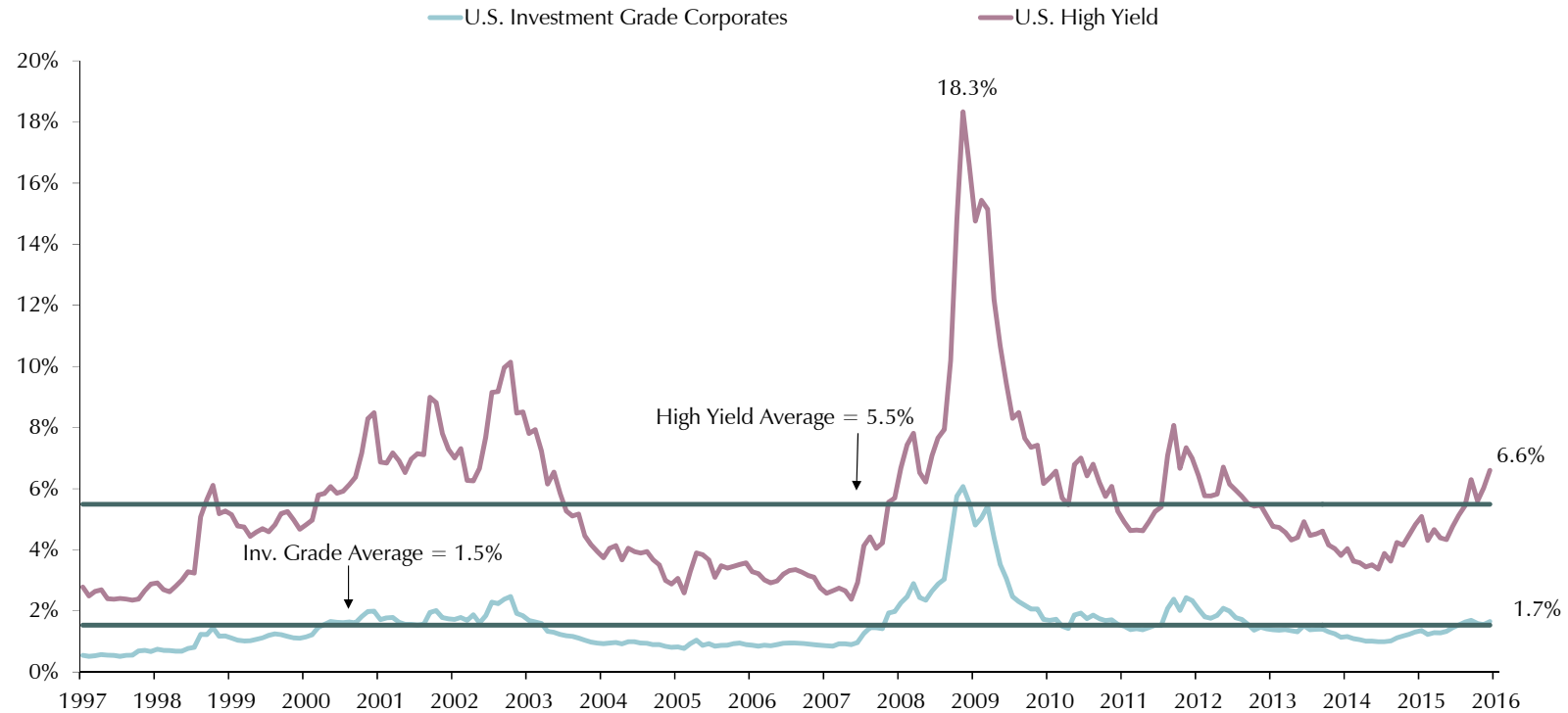
<sup>1</sup> Source: U.S. Treasury. Data is as of December 31, 2015.

**Ten-Year Breakeven Inflation<sup>1</sup>**

- Breakeven (or expected) inflation, the difference between the nominal yield on a ten-year Treasury and the real yield on a ten-year TIPS, has fallen well below its long-term average.
- Sharp falls in commodity prices have put pressure on inflation. The most recent Year over Year (YoY) inflation rate was only 0.5%, and deflation from commodities (especially energy) is a major headwind.

<sup>1</sup> Source: U.S. Treasury and Federal Reserve. Data is as of December 31, 2015 for TIPS and Treasuries. Inflation is measured by the Consumer Price Index (CPI-U NSA) for which the most recent data point is from November 30, 2015.

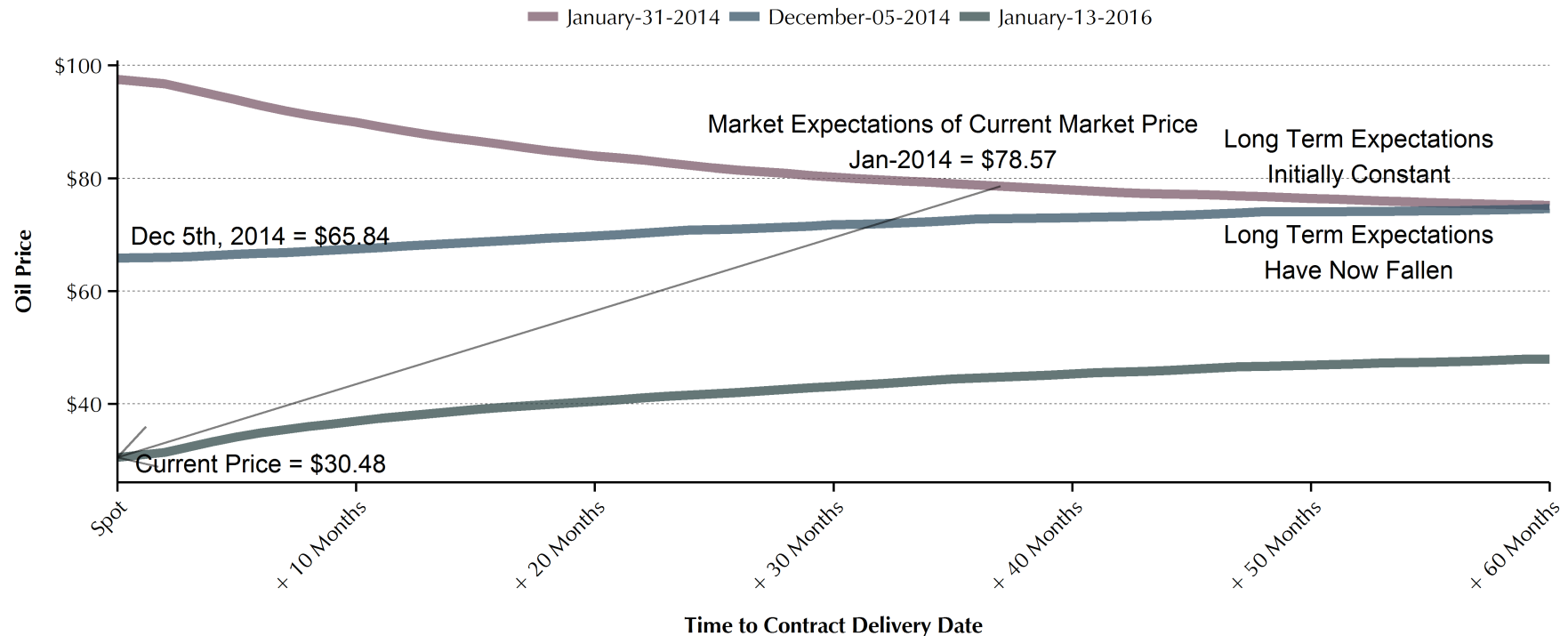
### Credit Spreads<sup>1</sup>



- Credit spreads (versus U.S. Treasury bonds) for both high yield and investment grade corporate bonds finished December close to their respective historical averages.
- The recent jump in market risk caused a widening in spreads, especially within high yield which was affected by oil price declines.

<sup>1</sup> Source: Barclays Capital. High Yield is proxied by the Barclays High Yield index and Investment Grade Corporates are proxied by the Barclays U.S. Corporate Investment Grade index. Data is as of December 31, 2015.



Oil Price Futures Curves<sup>1</sup>

- The chart above shows the WTI Crude Oil futures prices as of January and December of 2014 and December of this year. This highlights how large the recent price fall has been, especially relative to expectations.
- Looking further out on the curve we can see that initially, long-term price expectations remained the same. As the oil price has continued to fall, long-term expectations have settled at a lower price.

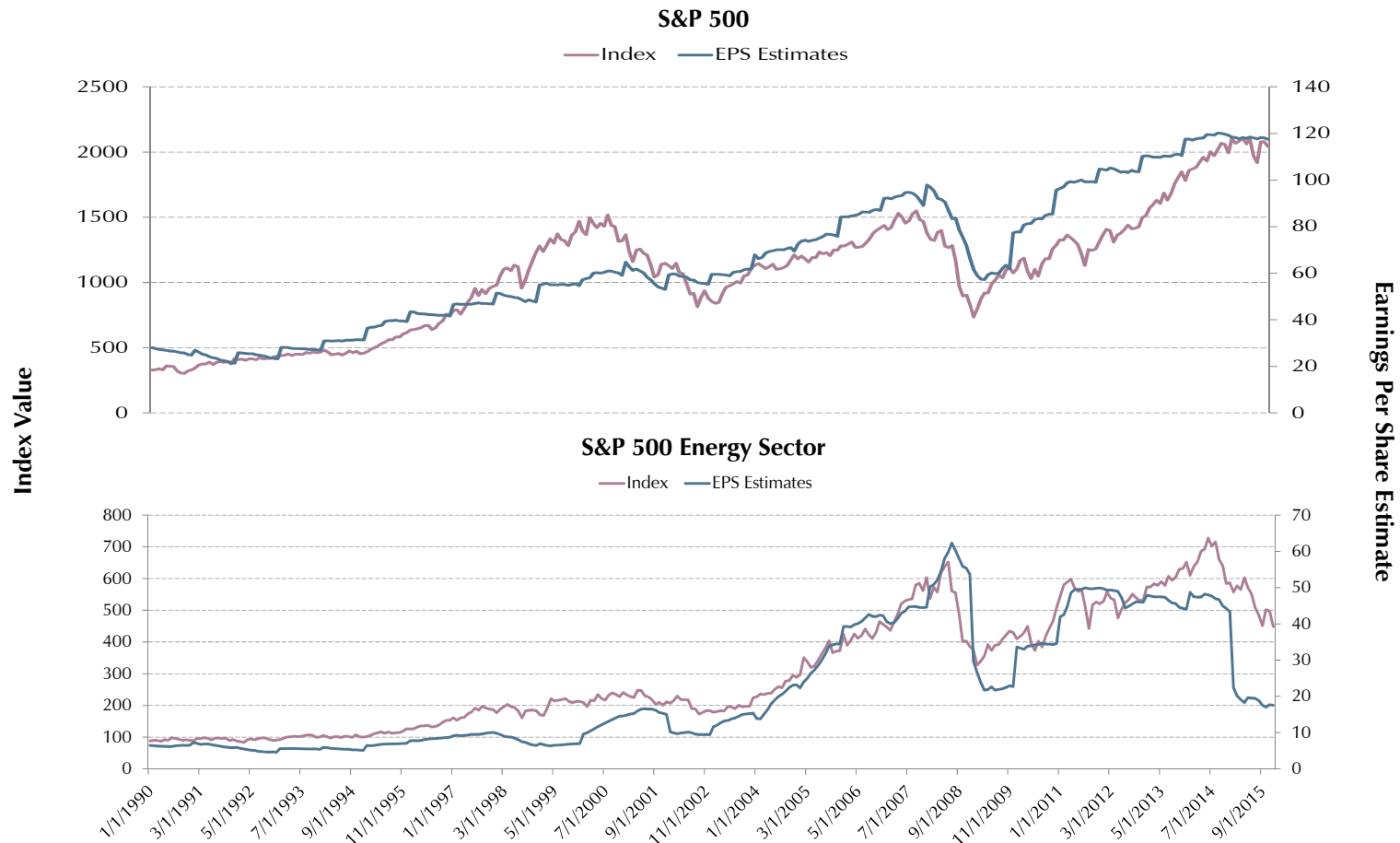
<sup>1</sup> Source: WTI Crude Oil Futures Price via Bloomberg. Data is as of December 15, 2015.

### U.S. High Yield Sectors<sup>1</sup>



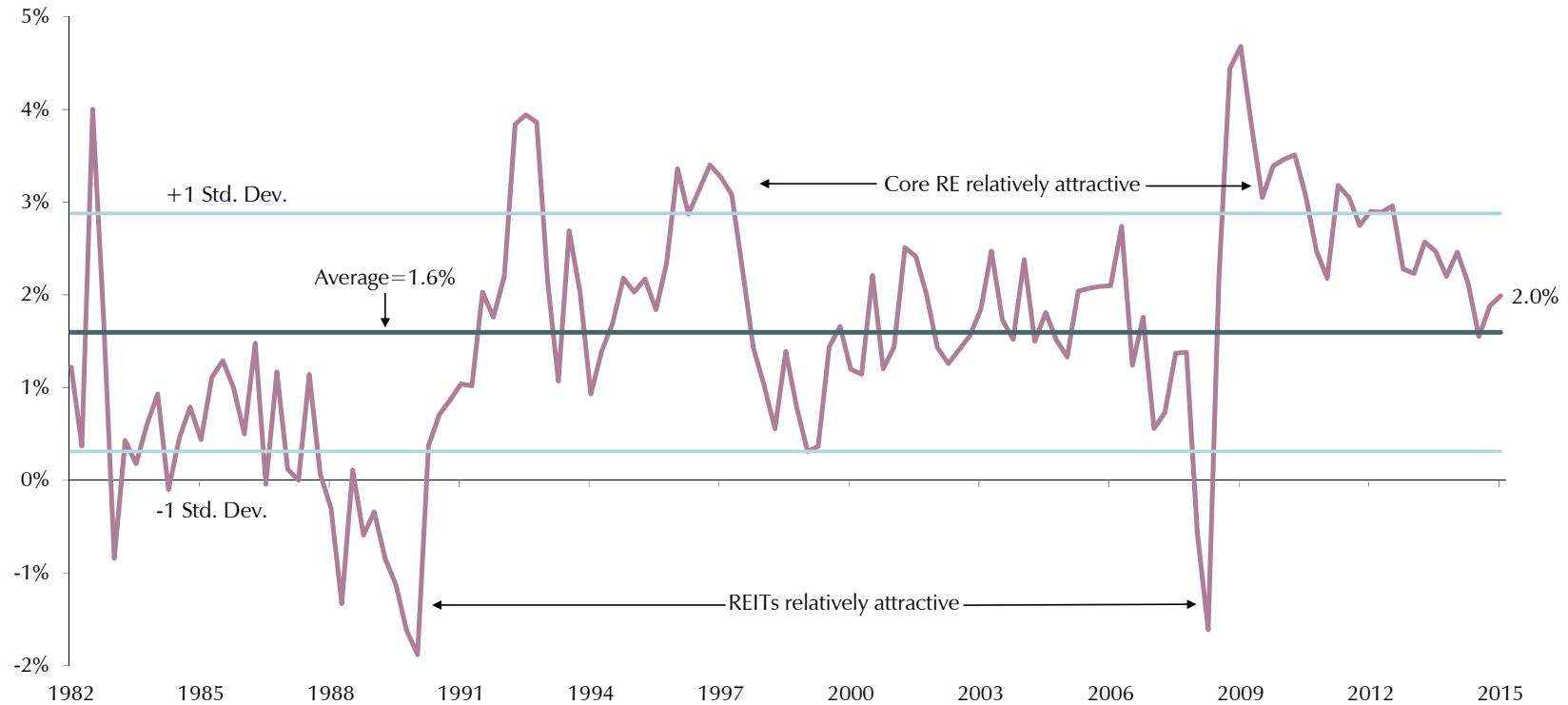
- The oil price decline has been a major contributing factor to the recent widening of spreads within U.S. High Yield.
- The energy sector represents roughly 15% of the index, and as illustrated above, most widening of spreads has come from the energy sector.

<sup>1</sup> Source: Barclays and Thompson Reuters. Data is as of December 15, 2015.

U.S. Corporate Earnings<sup>1</sup>

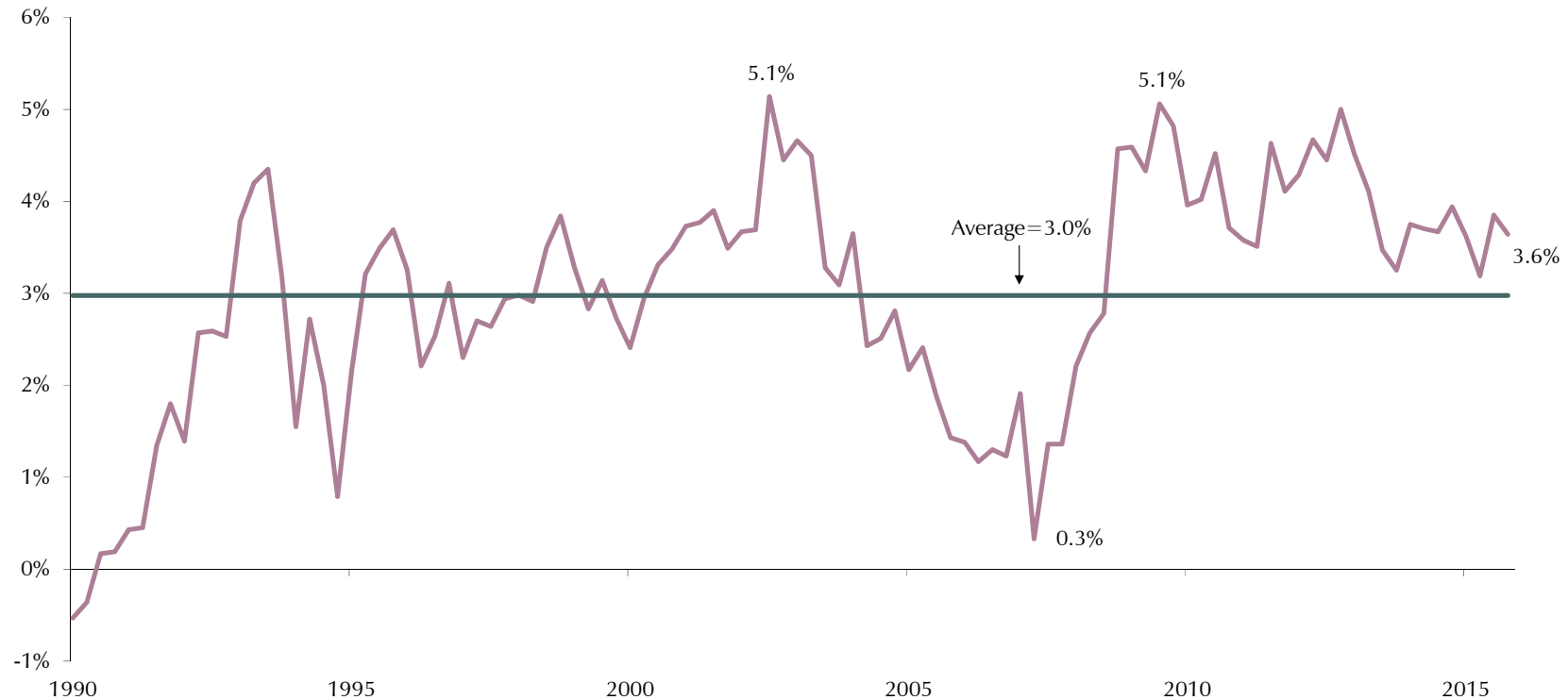
- The oil price decline has also had a major effect on U.S. earnings expectations. Earnings have fallen recently in that sector but much less than estimates. Aggregating all sectors, estimates have recently fallen only slightly.

<sup>1</sup> Source: Bloomberg. Earnings Per Share Estimates are the average current quarter estimates of market analyst. Data is as of December 31, 2015.

Core Real Estate vs. REITs<sup>1</sup>

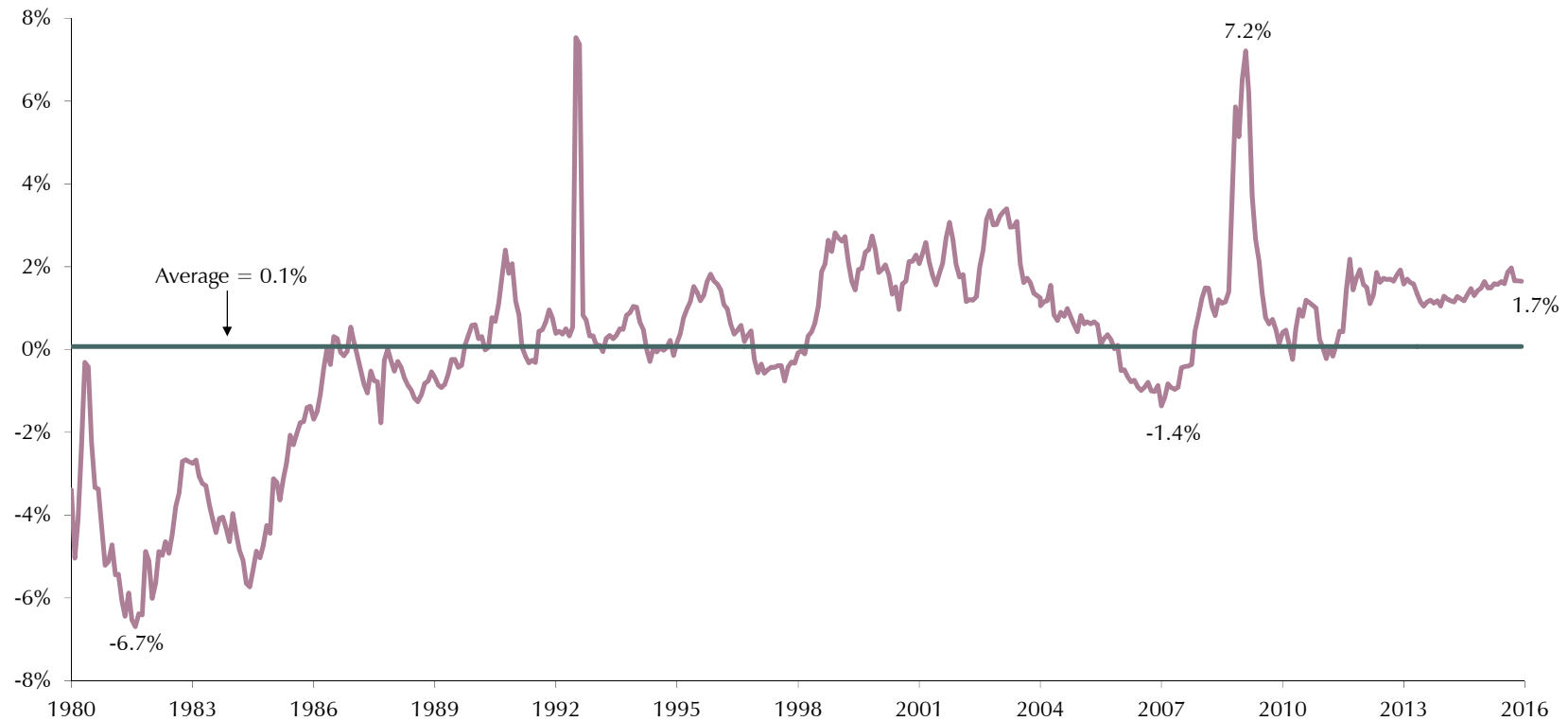
- At the end of December, the spread between core real estate cap rates and REIT yields was 2.0%, reaching just above the long term historical average level.
- REITs were yielding 3.9%, well below the 10.1% level of early 2009.

<sup>1</sup> Sources: Thomson Reuters and NCREIF. Core Real Estate is proxied by the transaction-based cap rate for the NCREIF NPI index and REITs are proxied by the yield for the NAREIT Equity index. NPI transactional capitalization rates are calculated on a quarterly basis and lagged in their release. Data is as of September 30, 2015 for the NCREIF NPI and December 31, 2015 for the NAREIT Equity index.

**Core Real Estate Spread vs. Ten-Year Treasury<sup>1</sup>**

- At 3.6%, the difference between the 5.9% cap rate for core real estate and the 2.3% yield for the ten-year Treasury has come back towards its historical average.
- Still, the absolute level of core real estate cap rates is near a historical low.

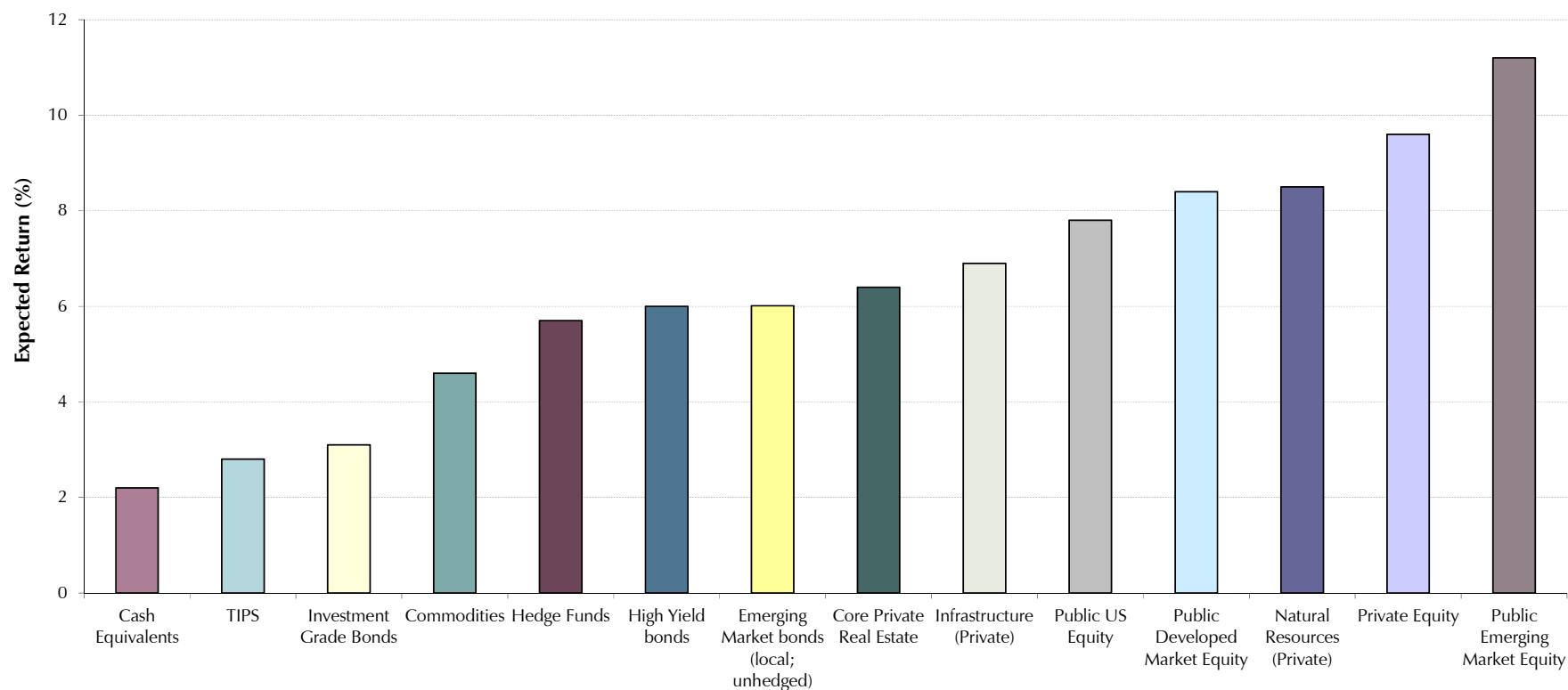
<sup>1</sup> Source: NCREIF, U.S. Treasury. NPI transactional capitalization rates are calculated on a quarterly basis. Data is as of September 30, 2015 for the NCREIF NPI and December 31, 2015 for the ten-year Treasury.

**REITs Dividend Yield Spread vs. Ten-Year Treasury<sup>1</sup>**

- REIT yield spreads were 1.7% at the end of December. This spread gradually increased last year despite strong REIT performance.
- As with core real estate, the absolute level of REIT dividend yields is near a historical low.

<sup>1</sup> Source: NAREIT, U.S. Treasury. REITs are proxied by the yield for the NAREIT Equity index. Data is as of December 31, 2015.

### Long-Term Outlook<sup>1</sup>



- Based on Meketa Investment Group's long-term expectations, only a handful of asset classes are priced to produce returns above 8% per year. All of these asset classes incorporate a high degree of volatility.

<sup>1</sup> Twenty-year expected returns based upon Meketa Investment Group's 2015 Annual Asset Study.

### Total Return Comparison of Barclays U.S. Aggregate Minus Barclays U.S. TIPS<sup>1</sup>

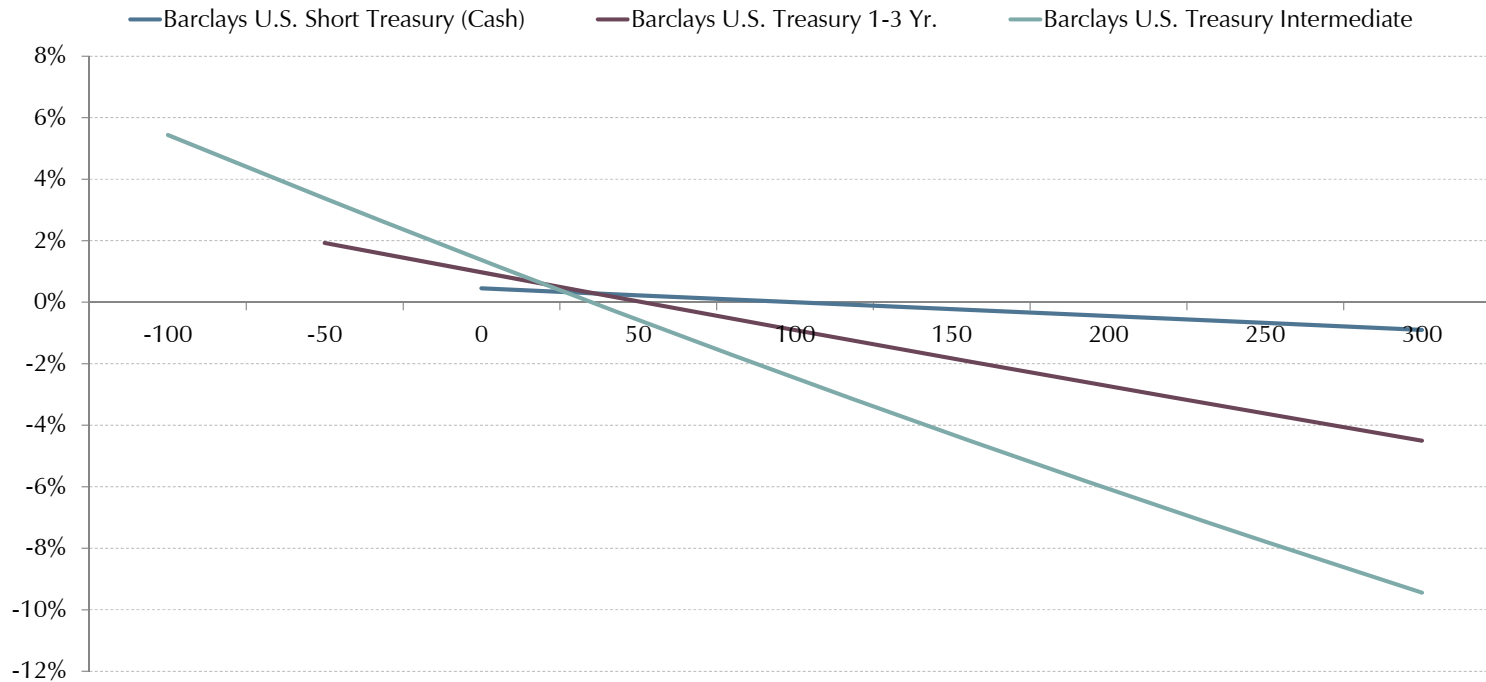
		Changes In Rates (bps)				
		-100	-50	0	50	100
Inflation Rate Scenarios	4.0%	-5.22%	-3.74%	-2.42%	-1.25%	-0.25%
	3.0%	-4.22%	-2.74%	-1.42%	-0.25%	0.75%
	2.0%	-3.22%	-1.74%	-0.42%	0.75%	1.75%
	1.0%	-2.22%	-0.74%	0.58%	1.75%	2.75%
	0.0%	-1.22%	0.26%	1.58%	2.75%	3.75%

### Total Return Scenario: 100 bps Rate Increase and 2% Inflation

Total Return Over Longer Holding Periods	1 Year	3 Year	5 Year	7 Year	10 Year
Barclays U.S. Aggregate	-3.17%	1.09%	1.96%	2.34%	2.62%
Barclays U.S. Treasury U.S. TIPS	-4.92%	0.86%	2.06%	2.58%	2.97%

<sup>1</sup> Data is as of December 31, 2015 via Barclays, Bloomberg, and Thomson Reuters. Scenario assumes that the rate increase happens over one year.



Total Return Given Changes in Interest Rates (bps)<sup>1</sup>

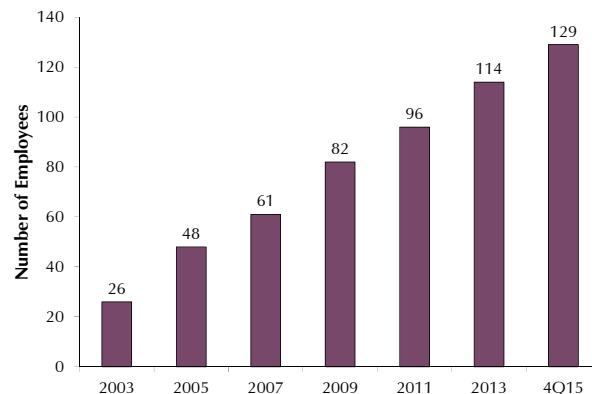
	Total Return for Given Changes in Interest Rates (bps)									Statistics	
	-100	-50	0	50	100	150	200	250	300	Duration	YTW
Barclays U.S. Short Treasury (Cash)			0.5%	0.2%	0.0%	-0.2%	-0.4%	-0.7%	-0.9%	0.45	0.45%
Barclays U.S. Treasury 1-3 Yr.		1.9%	1.0%	0.0%	-0.9%	-1.8%	-2.7%	-3.6%	-4.5%	1.9	0.97%
Barclays U.S. Treasury Intermediate	5.4%	3.4%	1.4%	-0.6%	-2.5%	-4.3%	-6.1%	-7.8%	-9.4%	3.95	1.37%
Barclays U.S. Treasury Long	22.3%	12.0%	2.7%	-5.5%	-12.7%	-18.9%	-24.1%	-28.3%	-31.4%	17.5	2.74%

<sup>1</sup> Data represents the expected total return from a given change in interest rates (shown in basis points) over a 12-month period assuming a parallel shift in rates. Data is as of December 31, 2015 via Barclays and Thomson Reuters.

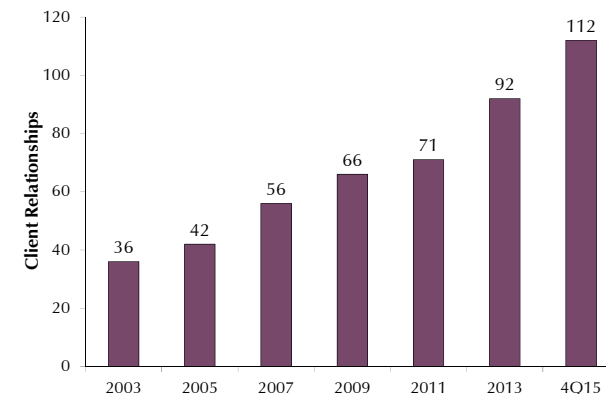
## **Meketa Investment Group Corporate Update**

- Staff of 129, including 79 investment professionals and 27 CFA Charterholders
- 112 clients, with over 190 funds throughout the United States
- Significant investment in staff and resources
- Offices in Boston, Chicago, Miami, Portland (OR), San Diego, and London
- Clients have aggregate assets of over \$780 billion
  - Over \$40 billion in assets committed to alternative investments
    - Private Equity      ▪ Infrastructure      ▪ Natural Resources
    - Real Estate      ▪ Hedge Funds      ▪ Commodities

### Employee Growth



### Client Growth



**Meketa Investment Group is proud to work for 4.9 million American families everyday**



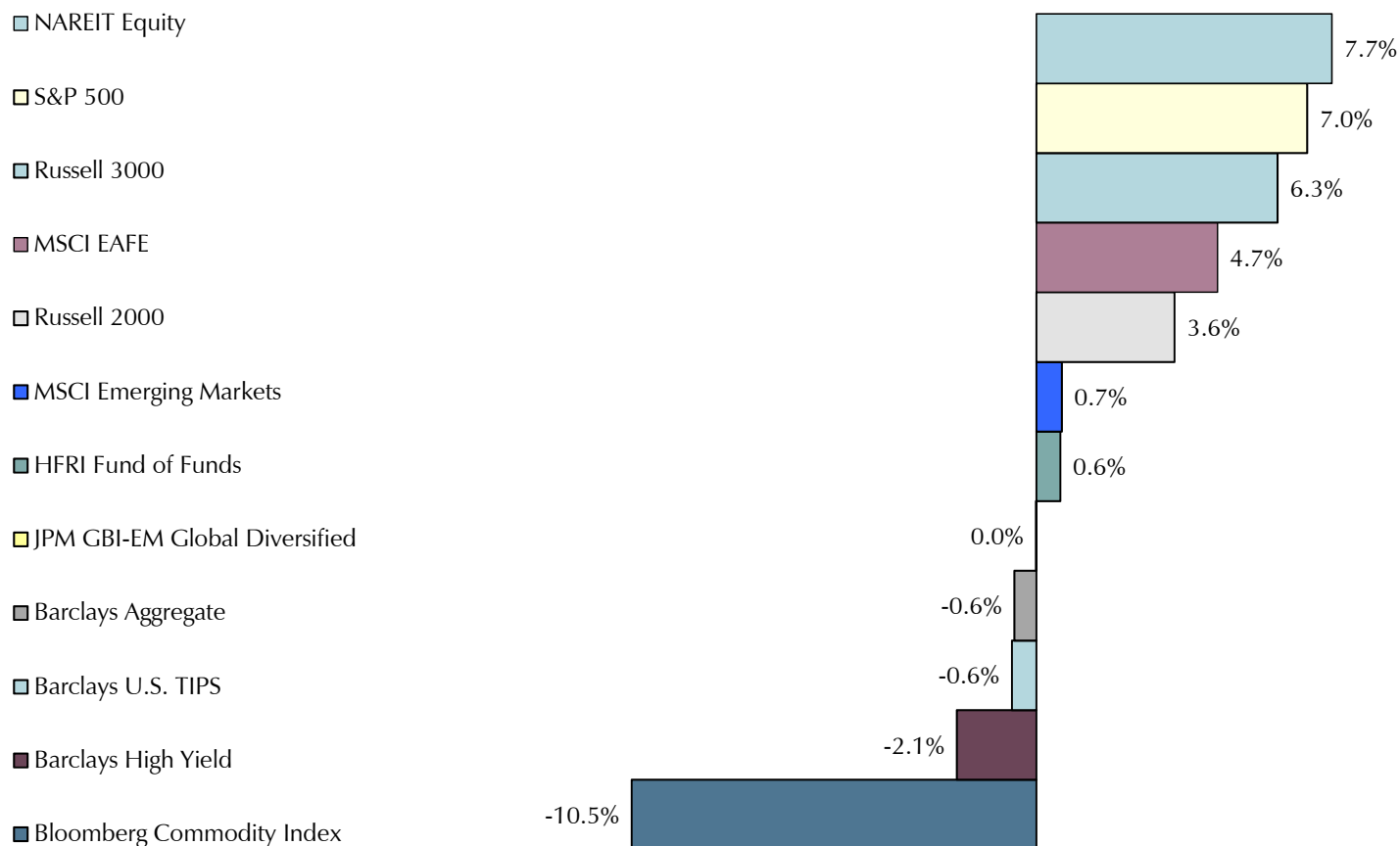
### Asset Classes Followed Intensively by Meketa Investment Group

Domestic Equities	International Equities	Private Equity	Real Assets	Fixed Income	Hedge Funds
<ul style="list-style-type: none"> <li>- Passive</li> <li>- Enhanced Index</li> <li>- Large Cap</li> <li>- Midcap</li> <li>- Small Cap</li> <li>- Microcap</li> <li>- 130/30</li> </ul>	<ul style="list-style-type: none"> <li>- Large Cap Developed</li> <li>- Small Cap Developed</li> <li>- Emerging Markets</li> <li>- Frontier Markets</li> </ul>	<ul style="list-style-type: none"> <li>- Buyouts</li> <li>- Venture Capital</li> <li>- Private Debt</li> <li>- Special Situations</li> <li>- Secondaries</li> <li>- Fund of Funds</li> </ul>	<ul style="list-style-type: none"> <li>- Public REITs</li> <li>- Core Real Estate</li> <li>- Value Added Real Estate</li> <li>- Opportunistic Real Estate</li> <li>- Infrastructure</li> <li>- Timber</li> <li>- Natural Resources</li> <li>- Commodities</li> </ul>	<ul style="list-style-type: none"> <li>- Short-Term</li> <li>- Core</li> <li>- Core Plus</li> <li>- TIPS</li> <li>- High Yield</li> <li>- Bank Loans</li> <li>- Distressed</li> <li>- Global</li> <li>- Emerging Markets</li> </ul>	<ul style="list-style-type: none"> <li>- Long/Short Equity</li> <li>- Event Driven</li> <li>- Relative Value</li> <li>- Fixed Income Arbitrage</li> <li>- Multi Strategy</li> <li>- Market Neutral</li> <li>- Global Macro</li> <li>- Fund of Funds</li> <li>- Portable Alpha</li> </ul>

## Appendices

## The World Markets Fourth Quarter of 2015

The World Markets  
Fourth Quarter of 2015

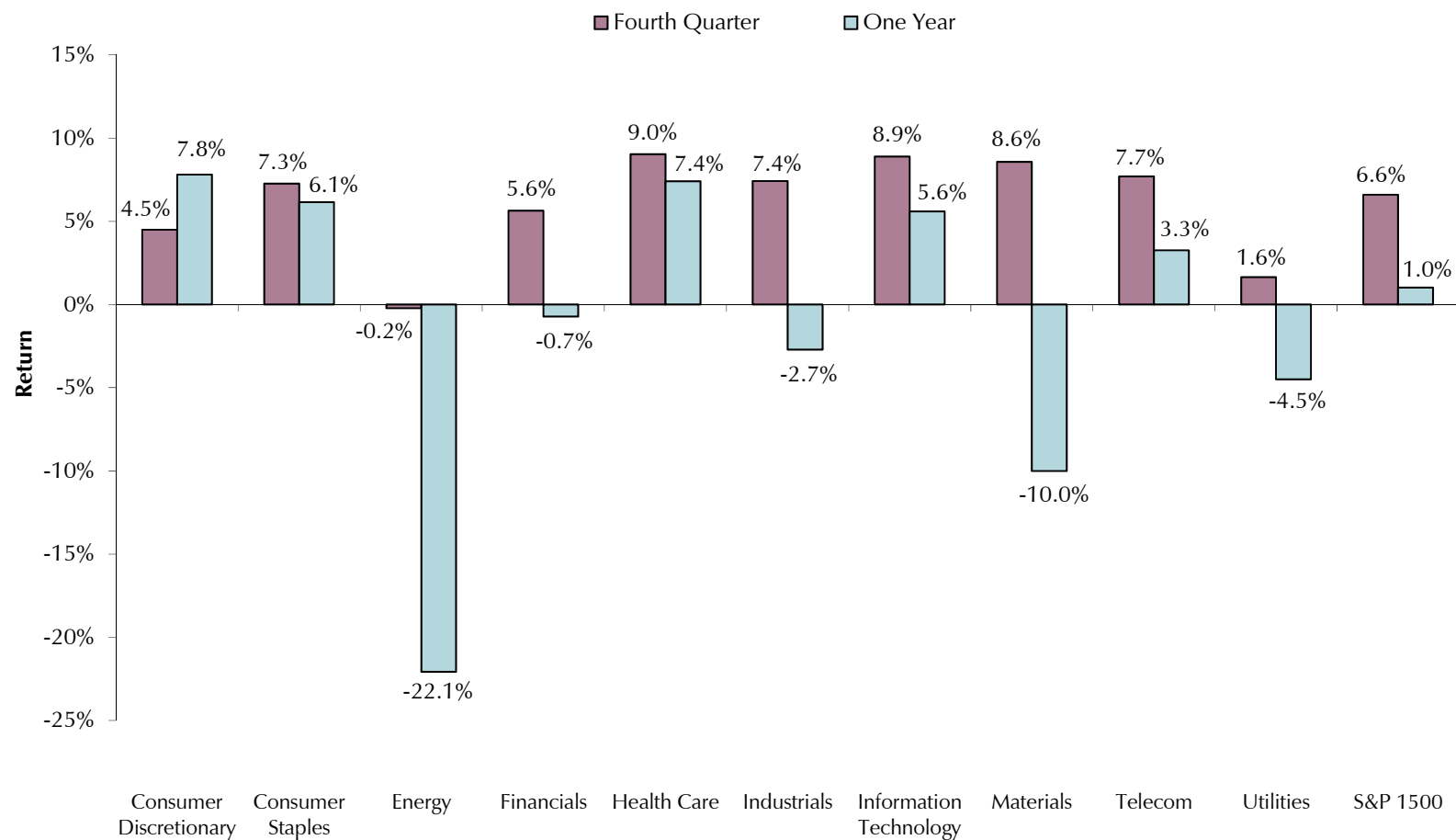


## Index Returns

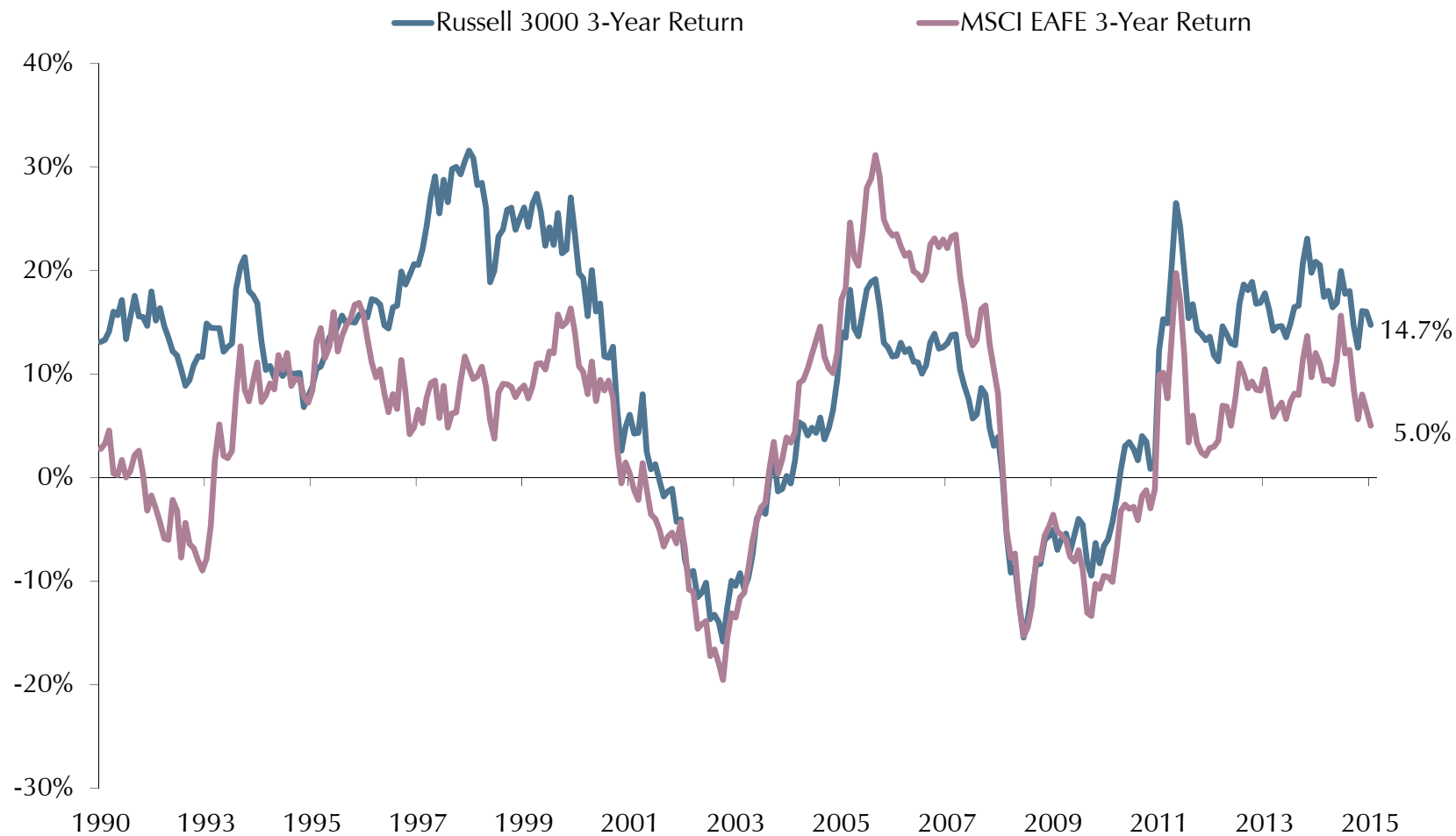
	4Q15 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Domestic Equity</b>					
Russell 3000	6.3	0.5	14.7	12.2	7.4
Russell 1000	6.5	0.9	15.0	12.4	7.4
Russell 1000 Growth	7.3	5.7	16.8	13.5	8.5
Russell 1000 Value	5.6	-3.8	13.1	11.3	6.2
Russell MidCap	3.6	-2.4	14.2	11.4	8.0
Russell MidCap Growth	4.1	-0.2	14.9	11.5	8.2
Russell MidCap Value	3.1	-4.8	13.4	11.3	7.6
Russell 2000	3.6	-4.4	11.7	9.2	6.8
Russell 2000 Growth	4.3	-1.4	14.3	10.7	8.0
Russell 2000 Value	2.9	-7.5	9.1	7.7	5.6
<b>Foreign Equity</b>					
MSCI ACWI (ex. U.S.)	3.2	-5.7	1.5	1.1	2.9
MSCI EAFE	4.7	-0.8	5.0	3.6	3.0
MSCI EAFE (local currency)	6.3	5.3	12.3	7.9	3.2
MSCI EAFE Small Cap	6.8	9.6	10.4	6.3	4.6
MSCI Emerging Markets	0.7	-14.9	-6.8	-4.8	3.6
MSCI Emerging Markets (local currency)	1.5	-5.8	0.8	0.9	6.0
<b>Fixed Income</b>					
Barclays Universal	-0.5	0.4	1.5	3.5	4.7
Barclays Aggregate	-0.6	0.5	1.4	3.2	4.5
Barclays U.S. TIPS	-0.6	-1.4	-2.3	2.5	3.9
Barclays High Yield	-2.1	-4.5	1.7	5.0	7.0
JPMorgan GBI-EM Global Diversified	0.0	-14.9	-10.0	-3.5	4.3
<b>Other</b>					
NAREIT Equity	7.7	2.8	10.6	11.9	7.4
Bloomberg Commodity Index	-10.5	-24.7	-17.3	-13.5	-6.4
HFRI Fund of Funds	0.6	-0.4	3.9	2.1	2.3



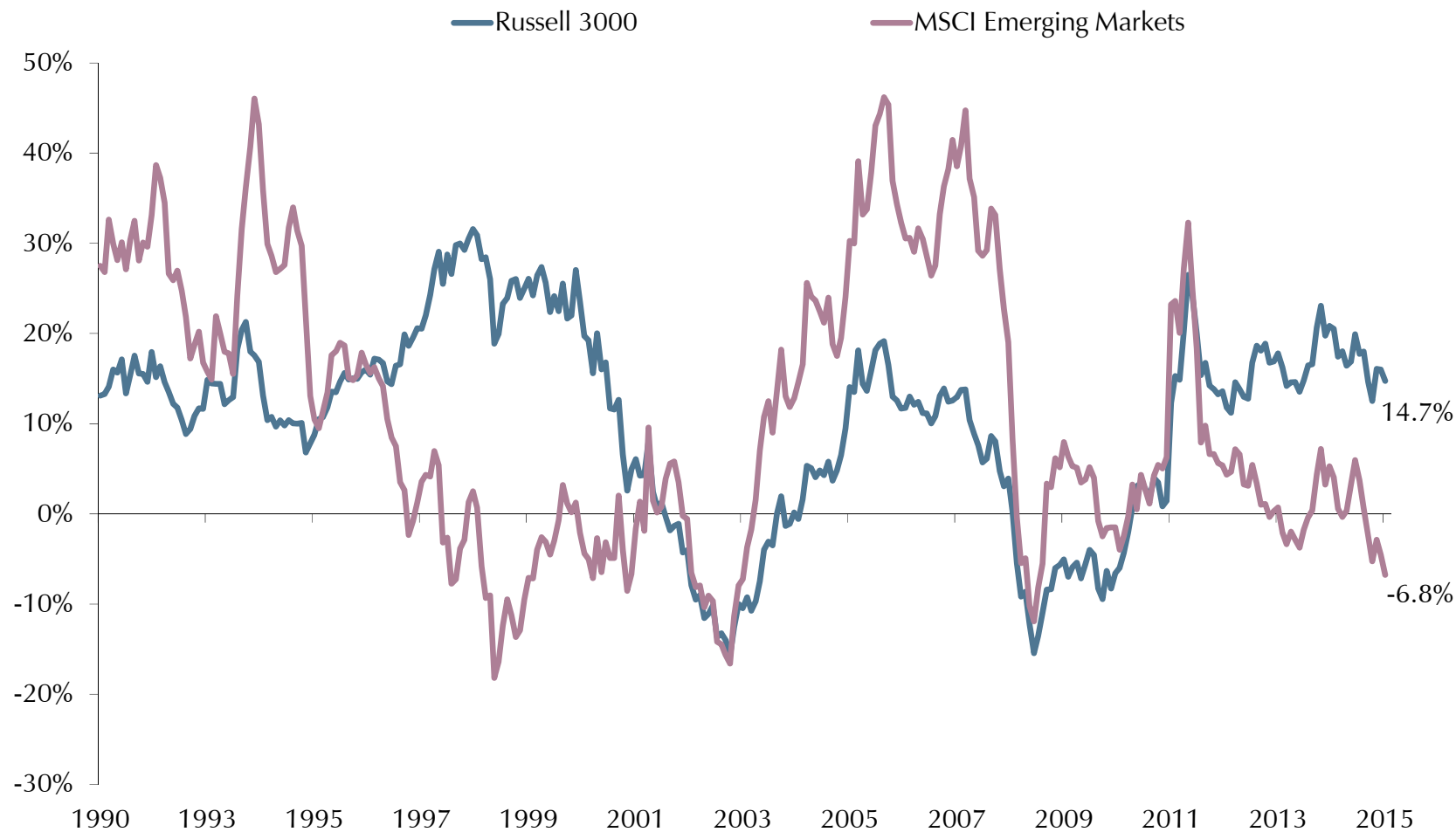
### S&P Sector Returns



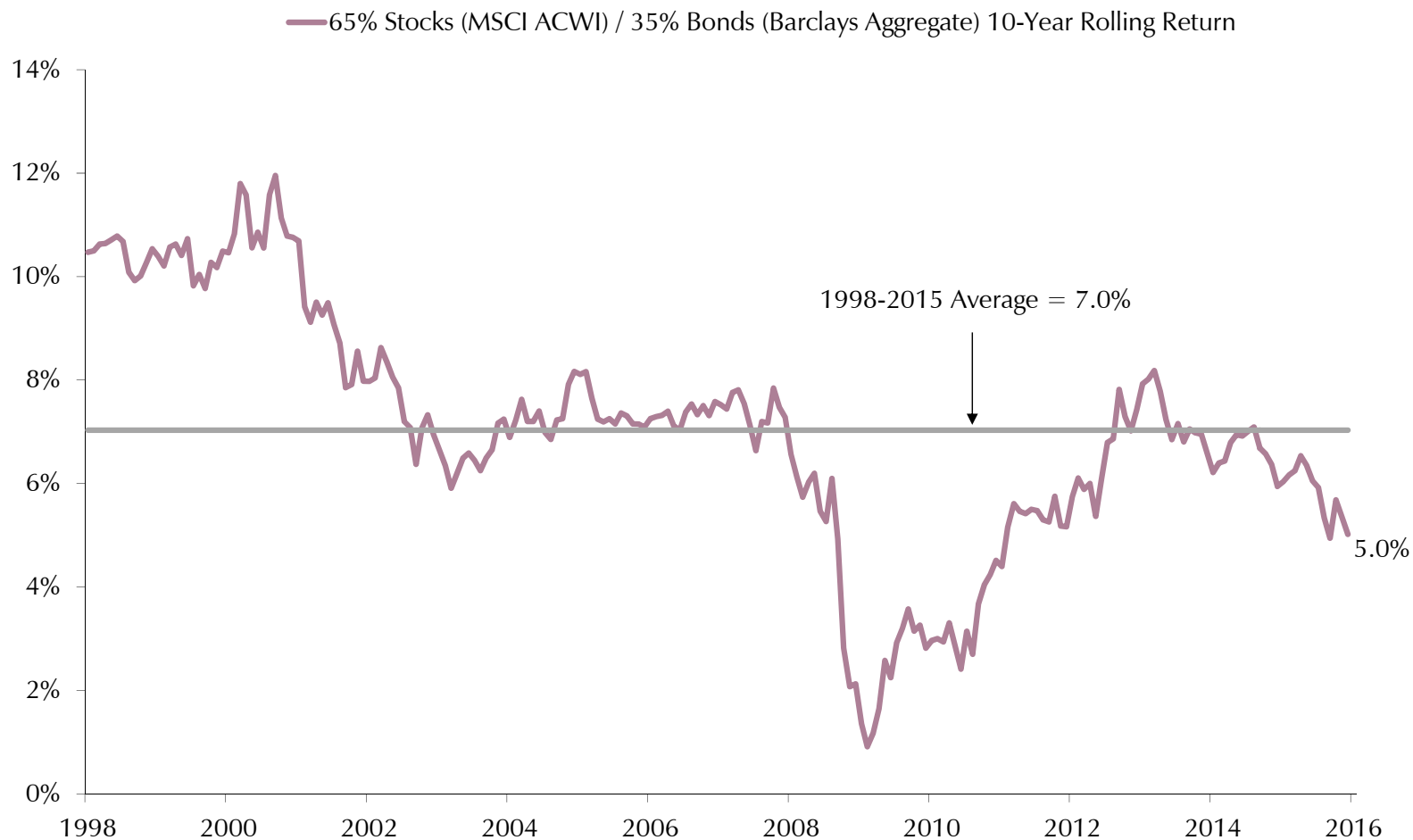
### U.S. and Developed Market Foreign Equity Rolling Three Year Returns



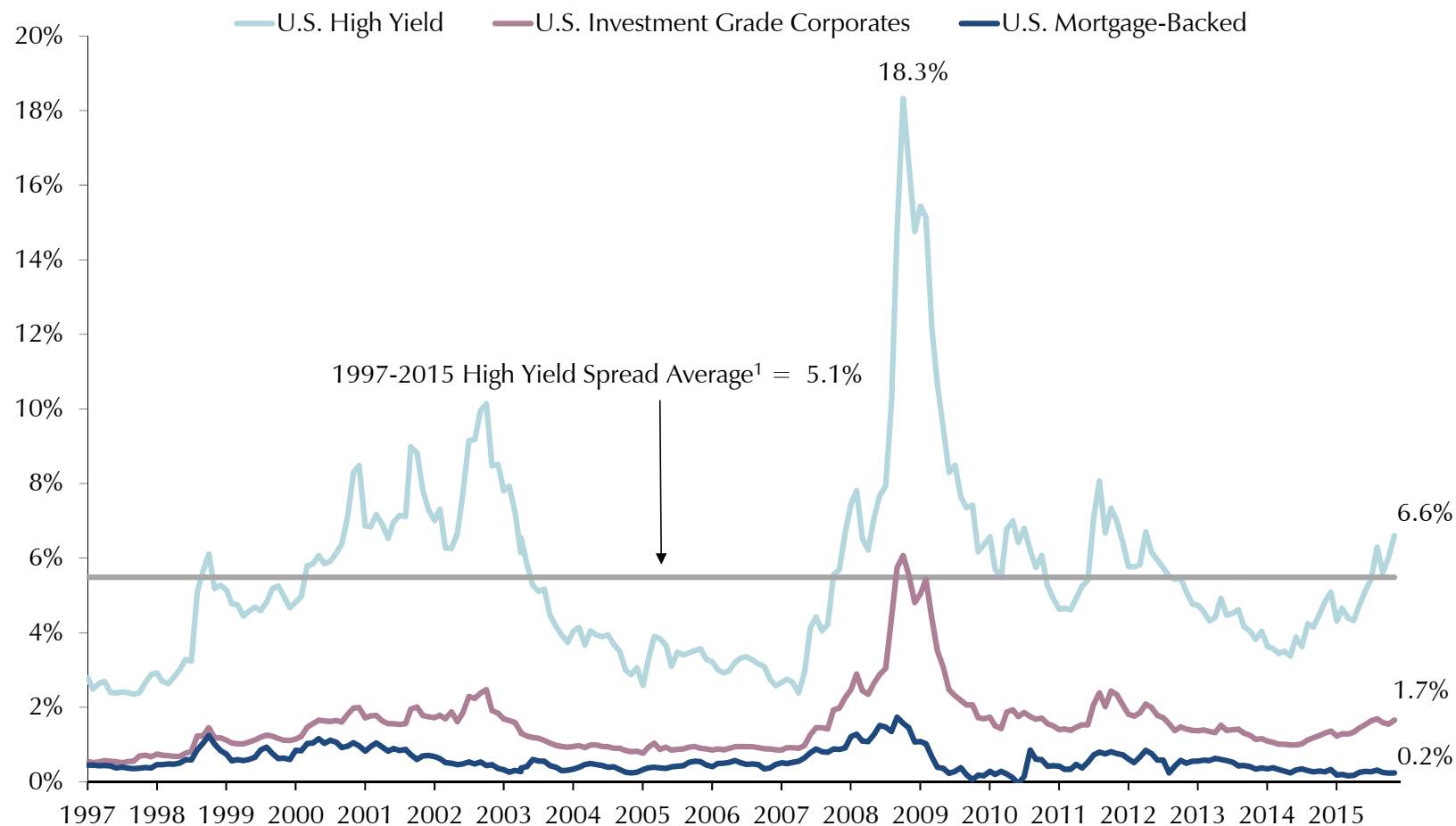
### U.S. and Emerging Market Equity Rolling Three Year Returns



### Rolling Ten-Year Returns: 65% Stocks and 35% Bonds

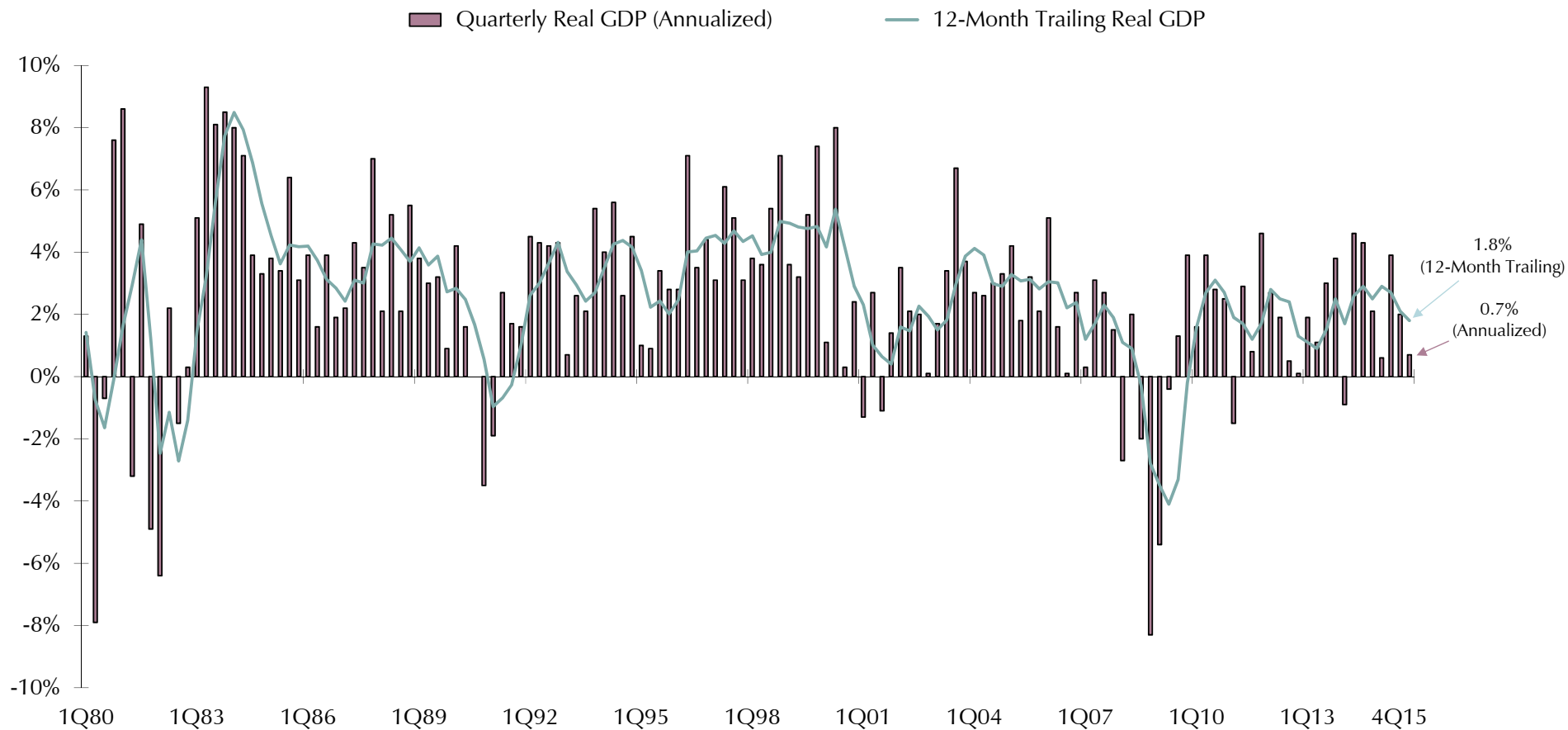


### Credit Spreads vs. U.S. Treasury Bonds

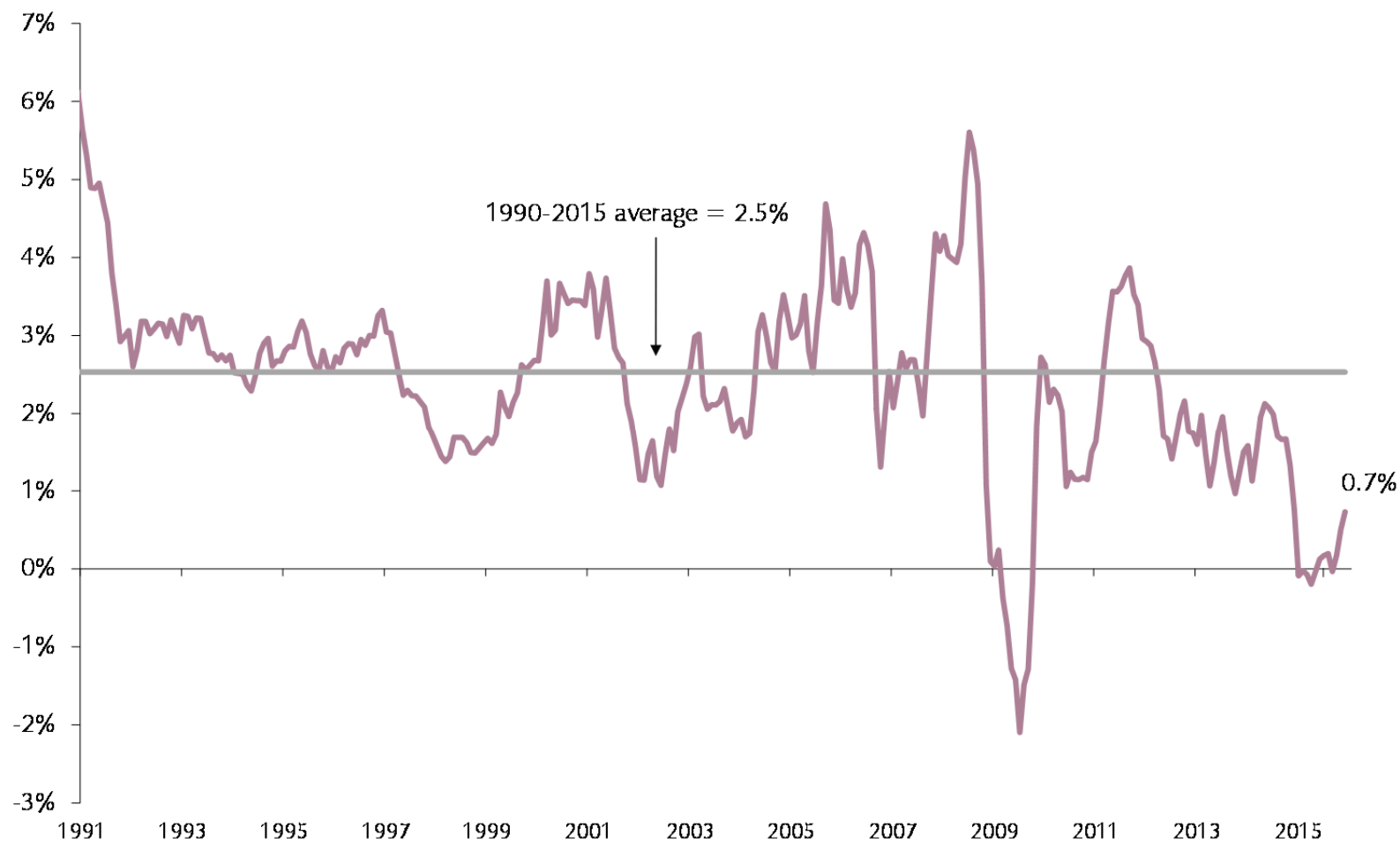


<sup>1</sup> Median high yield spread average was 5.1% from 1997-2015.

### U.S. Real Gross Domestic Product (GDP) Growth

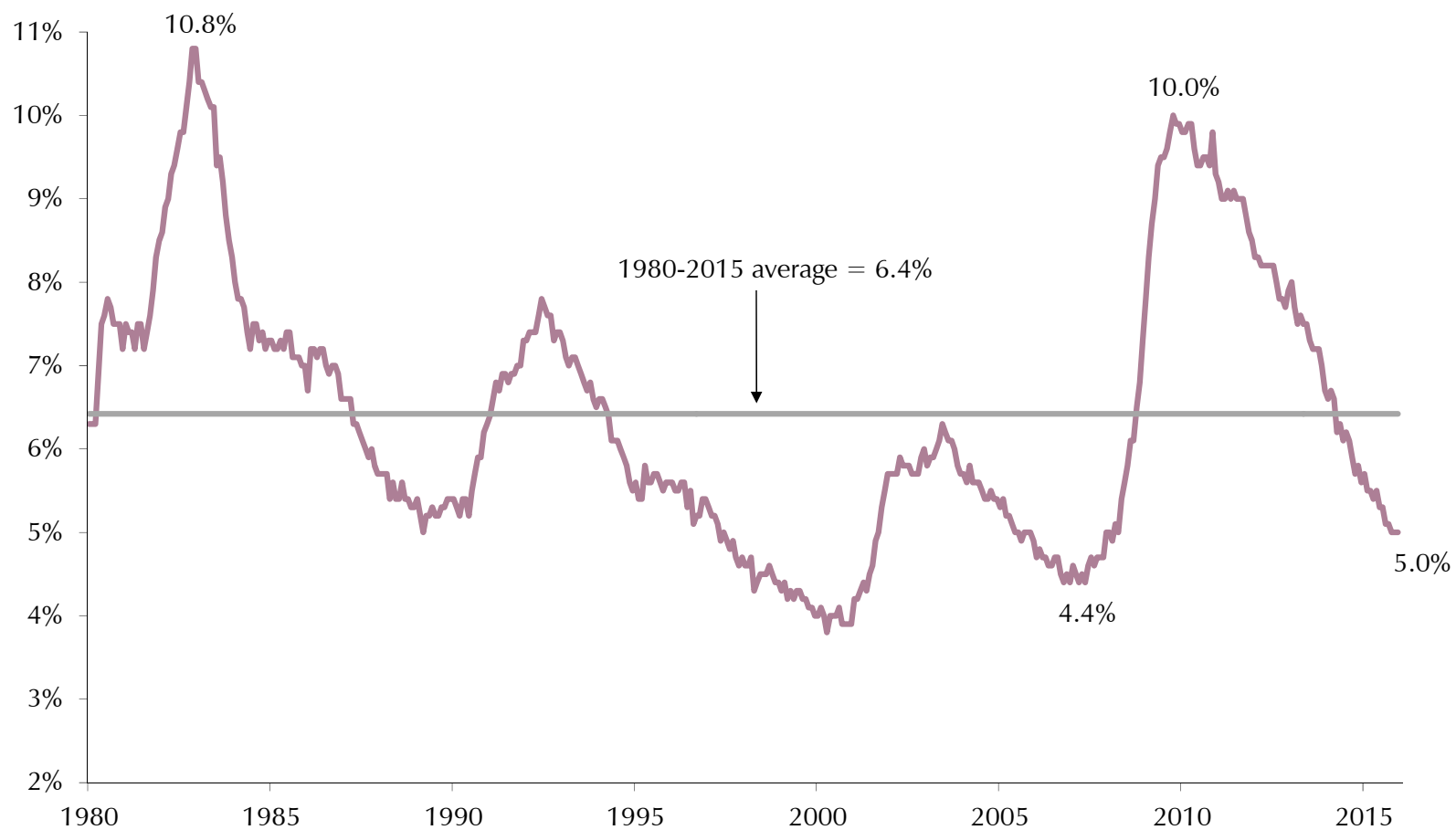


**U.S. Inflation (CPI)  
Trailing Twelve Months<sup>1</sup>**



<sup>1</sup> Data is non-seasonally adjusted CPI, which may be volatile in the short-term.

### U.S. Unemployment





## Glossary and Notes As of December 31, 2015

**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit

above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Sources: [Investment Terminology](#), International Foundation of Employee Benefit Plans, 1999.  
[The Handbook of Fixed Income Securities](#), Fabozzi, Frank J., 1991.

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.