



# Sacramento Regional Transit District Agenda

**COMBINED QUARTERLY MEETING OF THE RETIREMENT BOARDS FOR THE  
EMPLOYEES AND RETIREES OF THE SACRAMENTO REGIONAL TRANSIT DISTRICT**

**9:00 A.M., WEDNESDAY, DECEMBER 12, 2018**

**REGIONAL TRANSIT AUDITORIUM**

**1400 29<sup>TH</sup> STREET, SACRAMENTO, CALIFORNIA**

**Website Address: [www.sacrt.com](http://www.sacrt.com)**

(29th St. Light Rail Station/Bus 38, 67, 68)

**MEETING NOTE:** *This is a joint and concurrent meeting of the five independent Retirement Boards for the pension plans for the employees and retirees of the Sacramento Regional Transit District. This single, combined agenda designates which items will be subject to action by which board(s). Members of each board may be present for the other boards' discussions and actions, except during individual closed sessions.*

**ROLL CALL**

- ATU Retirement Board: Directors: Li, Morin, Niz, De La Torre  
Alternates: Jennings, McGee Lee
- IBEW Retirement Board: Directors: Li, Morin, Ohlson, Bibbs  
Alternates: Jennings, McCleskey
- AEA Retirement Board: Directors: Li, Morin, Devorak, Robison  
Alternates: Jennings, McGoldrick
- AFSCME Retirement Board: Directors: Li, Morin, Parks, Guimond  
Alternates: Jennings, Thompson
- MCEG Retirement Board: Directors: Li, Morin, Lonergan, Thorn  
Alternates: Jennings, Flores

**PUBLIC ADDRESSES BOARD ON MATTERS ON CONSENT AND MATTERS NOT ON THE AGENDA**

At this time the public may address the Retirement Board(s) on subject matters pertaining to Retirement Board business listed on the Consent Calendar, any Closed Sessions or items not listed on the agenda. Remarks may be limited to 3 minutes subject to the discretion of the Common Chair. Members of the public wishing to address one or more of the Boards may submit a "Public Comment Speaker Card" to the Assistant Secretary. While the Retirement Boards encourage your comments, State law prevents the Boards from discussing items that are not set forth on this meeting agenda. The Boards and staff take your comments very seriously and, if appropriate, will follow up on them.

**CONSENT CALENDAR**

		<u>ATU</u>	<u>IBEW</u>	<u>AEA</u>	<u>AFSCME</u>	<u>MCEG</u>
1. Motion:	Approving the Minutes for the September 12, 2018 Quarterly Retirement Board Meeting (AEA). (Weekly)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Motion:	Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<u>ATU</u>	<u>IBEW</u>	<u>AEA</u>	<u>AFSCME</u>	<u>MCEG</u>
3. Motion:	Approving the Minutes for the September 12, 2018 Quarterly Retirement Board Meeting (AFSCME). (Weekly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Motion:	Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Motion:	Approving the Minutes for the September 12, 2018 Quarterly Retirement Board Meeting (ATU). (Weekly)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Motion:	Approving the Minutes for the November 2, 2018 Special Retirement Board Meeting (ATU). (Weekly)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Motion:	Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the ATU Pension Plan (ATU). (Adelman)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Motion:	Approving the Minutes for the September 12, 2018 Quarterly Retirement Board Meeting (IBEW). (Weekly)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Motion:	Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the IBEW Pension Plan (IBEW). (Adelman)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Motion:	Approving the Minutes for the September 12, 2018 Quarterly Retirement Board Meeting (MCEG). (Weekly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Motion:	Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Motion:	Adoption of the Revised Regional Transit District Retirement Boards 2019 Meeting Calendar (ALL). (Weekly)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13. Resolution:	Adopting Amended Retirement Board Member and Staff Education and Travel Policy (ALL). (Weekly).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **NEW BUSINESS**

		<u>ATU</u>	<u>IBEW</u>	<u>AEA</u>	<u>AFSCME</u>	<u>MCEG</u>
14. Information:	Investment Performance Review by Dimensional Fund Advisors (DFA) for the ATU/IBEW and Salaried Employee Retirement Plans for the Domestic Small Cap Equity Asset Class for the Quarter Ended September 30, 2018 (ALL). (Adelman)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15. Information:	Investment Performance Review of the S&P 500 Index and MSCI EAFE Funds by State Street Global Advisors (SSgA) for the ATU/IBEW and Salaried Employee Retirement Funds for the Quarter Ended September 30, 2018 (ALL). (Adelman)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16. Motion:	Receive and File the Investment Performance Reports for the ATU, IBEW and Salaried Employee Funds for the Quarter Ended September 30, 2018 (ALL). (Adelman)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
17. Information:	Educational Session on Private Equity Presented by Callan LLC (ALL). (Adelman)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18. Motion:	Election of Governing Board Officers of the Retirement Plan for Sacramento Regional Transit District Employees who are Members of AFSCME (AFSCME). (Weekly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>ATU</u>	<u>IBEW</u>	<u>AEA</u>	<u>AFSCME</u>	<u>MCEG</u>
19. Information: Educational Session on Local Government Ethics (Compliant with AB 1234) by Hanson Bridgett LLP (ALL). (Weekly)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
20. Information: Update on Staff Roles and Responsibilities Related to Pension Administration (ALL). (Weekly)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- REPORTS FROM COMMITTEES**
- REPORTS, IDEAS AND COMMUNICATIONS**
- RECESS TO CLOSED SESSION**
- RECONVENE IN OPEN SESSION**
- CLOSED SESSION REPORT**
- ADJOURN**

**NOTICE TO THE PUBLIC**

It is the policy of the Boards of Directors of the Sacramento Regional Transit District Retirement Plans to encourage participation in the meetings of the Boards of Directors. At each open meeting, members of the public shall be provided with an opportunity to directly address the Board on items of interest to the public that are within the subject matter jurisdiction of the Boards.

This agenda may be amended up to 72 hours prior to the meeting being held. An agenda, in final form, is located by the front door of Regional Transit's building at 1400 – 29<sup>th</sup> Street and posted to RT's website at [www.sacrt.com](http://www.sacrt.com).

Any person(s) requiring accessible formats of the agenda or assisted listening devices/sign language interpreters should contact the Human Resources Manager at 916-556-0280 or TDD 916/483-4327 at least 72 business hours in advance of the Board Meeting.

Copies of staff reports or other written documentation relating to each item of business referred to on the agenda are on file with the Human Resources Administrative Technician at 916-556-0298 and/or Clerk to the Board of Directors of the Sacramento Regional Transit District and are available for public inspection at 1400 29<sup>th</sup> Street, Sacramento, CA. Any person who has questions concerning any agenda item may call the Human Resources Administrative Technician of Sacramento Regional Transit District to make inquiry.

**Sacramento Regional Transit District  
MCEG Retirement Board Meeting  
Wednesday, September 12, 2018  
MEETING SUMMARY**

**ROLL CALL**

The Retirement Board was brought to order at 9:02 a.m. A quorum was present comprised as follows: Directors Li, Lonergan and Thorn were present. Director Morin and Alternates Sanchez-Ochoa and Jennings were absent.

This meeting was held as a common meeting of the five Sacramento Regional Transit District Retirement Boards.

By MCEG Resolution No. 17-09-194 for calendar year 2018, the Governing Board Member in attendance served as Common Chair of this Retirement Board meeting.

**PUBLIC ADDRESSES BOARD ON MATTERS NOT ON THE AGENDA**

None.

**CONSENT CALENDAR**

- 17. Motion: Approving the Minutes for the June 20, 2018 Quarterly Retirement Board Meeting (MCEG). (Weekly)
- 18. Motion: Receive and File Administrative Reports for the Quarter Ended June 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)
- 19. Motion: Adopting Regional Transit Retirement Boards 2019 Meeting Calendar (ALL). (Weekly)
- 20. Information: Update on Roles and Responsibilities Related to Pension Administration (ALL). (Weekly)

Director Li moved to adopt MCEG Retirement Board Items 17-19. Director Lonergan seconded the motion. Items 17-19 were carried unanimously by roll call vote: Ayes: Directors Li, Lonergan and Thorn. Noes: None.

**NEW BUSINESS**

21. Information: Investment Performance Review by Atlanta Capital for the ATU, IBEW, and Salaried Retirement Funds for the Domestic Small Cap Equity Asset Class for the Quarter Ended June 30, 2018 (ALL). (Adelman)

Jamie Adelman introduced Michael Jaje from Atlanta Capital, who provided the performance results for the Domestic Small Cap Equity Asset Class for the quarter ended June 30, 2018 and was available for questions.

22. Information: Investment Performance Review by Boston Partners for the ATU, IBEW and Salaried Retirement Funds for the Domestic Large Cap Equity Asset Class for the Quarter Ended June 30, 2018 (ALL). (Adelman)

Jamie Adelman introduced Carolyn Margiotti from Boston Partners, who provided the performance results for the Domestic Large Cap Equity Class for the quarter ended June 30, 2018 and was available for questions.

23. Motion: Receive and File Investment Performance Results for the ATU, IBEW and Salaried Employee Retirement Plans for the Quarter Ended June 30, 2018 (ALL). (Adelman)

Jamie Adelman introduced Uvan Tseng and Anne Heaphy with Callan LLC, who provided the investment performance reports for quarter ended June 30, 2018 and were available for questions. In response to questions from Director Li and AEA Director Devorak, Mr. Tseng advised that, despite current performance by the emerging market equity manager, the long-term forecast for emerging markets is for higher growth than most developed nations, and that the current allocation remains appropriate. Ms. Heaphy noted that the manager produced returns of 27% in 2017. Jamie Adelman added that the emerging market equity allocation is only 5% of the Plans' portfolio.

Director Li moved to adopt Item 23. Director Lonergan seconded the motion. Item 23 was carried unanimously by roll call vote: Ayes: Directors Li, Lonergan and Thorn. Noes: None.

24. Information: Educational Session on Hedge Funds and Multi-Asset Class Investments Presented by Callan LLC (ALL). (Adelman)

Uvan Tseng introduced Kevin Machiz with Callan LLC, who provided an educational presentation on Hedge Funds and Multi-Asset Class Investments. In response to questions from Director Li, Mr. Machiz explained that many public retirement plans have exposure to hedge funds, and that the primary goal of the strategy is to provide diversification and downside protection. ATU Director Niz commented that the lack of

an appropriate benchmark and potential for additional fees was a concern regarding investment by the Plans in a hedge fund. Brent Bernegger asked whether the Boards could establish guidelines for selecting hedge funds or whether all hedge funds were unrestricted with respect to investments. Mr. Machiz responded that limitations would be established through the initial selection process, for example, by selecting with a conservative hedge fund manager. In response to a question from Mr. Bernegger regarding SEC monitoring of hedge funds, Mr. Machiz explained that the SEC is authorized to review hedge funds' financial statements, but that hedge funds are not required to file public reports. Any additional information requested by the Boards would need to be negotiated. Mr. Machiz explained that as part of its due diligence during the manager search process, Callan would screen all hedge funds with respect to the information the fund would be willing to provide to the Retirement Boards. Ms. Adelman explained that this is the first in a series of three educational presentations the Boards requested, and that Callan will provide educational presentations on private equity and real estate investments at subsequent meetings.

25. Resolution: Approving a Contract with Callan LLC to Provide Retirement Fund Investment Performance Advisory and Evaluation Services for the ATU, IBEW, and Salaried Plans (ALL). (Adelman)

Jamie Adelman provided a summary of the RFP process for Investment Performance Advisory and Evaluation Services for the ATU, IBEW, and Salaried Plans, the current contract for which will expire on December 31, 2018, as provided in the Staff Report. Ms. Adelman described how many responses to the RFP were received, the make-up of the Evaluation Committee, the evaluation process implemented by the Evaluation Committee, and the results. Based on the Committee's evaluation under the RFP criteria, Callan LLC had the highest composite score. Staff and Legal Counsel have completed negotiations with Callan for the proposed contract. The Evaluation Committee and Staff recommend that the Boards award the five-year contract for Investment Performance Advisory and Evaluation Services for the ATU, IBEW, and Salaried Plans to Callan LLC.

Director Lonergan moved to adopt Item 25. Director Li seconded the motion. Item 25 was carried unanimously by roll call vote: Ayes: Directors Li, Lonergan and Thorn. Noes: None.

### **REPORTS FROM COMMITTEES**

None.

### **REPORTS, IDEAS AND COMMUNICATIONS**

26. Information: Conference Report-Out: Callan College and CALAPRS (ALL).

The following Retirement Board member attended the Callan College training on July 24-25, 2018:

IBEW Retirement Board Member: Jon McCleskey

The following Retirement Board members attended the CALAPRS trustee training on August 27-29, 2018:

IBEW Retirement Board Member: Jon McCleskey  
AFSCME Retirement Board Member: Peter Guimond

Alternates Jon McCleskey and Peter Guimond provided reports on the benefits of the training. Both Alternate Directors expressed that the trainings met their expectations and provided excellent opportunities to acquire knowledge about topics that are relevant to their responsibilities with respect to the Plans.

**The meeting was adjourned at 10:58 a.m.**

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Henry Li, Chair

ATTEST:

Roger Thorn, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
11	12/12/18	Retirement	Action	10/30/18

Subject: Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)

## ISSUE

Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)

## RECOMMENDED ACTION

Motion: Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)

## FISCAL IMPACT

None.

## DISCUSSION

Table 1 below shows the employer and employee contribution rates for all of the Sacramento Regional Transit District Retirement Plans, by Plan and tier, as of the date indicated.

**Table 1**

### **Employer Contribution Rates As of September 30, 2018**

	<b>ATU</b>	<b>IBEW</b>	<b>Salary</b>
	Contribution Rate	Contribution Rate	Contribution Rate
Classic	28.15%	25.03%	34.30%
Classic w/Contribution*	25.15%		
PEPRA**	21.65%	19.78%	29.05%

\*Includes members hired during calendar year 2015, employee rate 3%

\*\*PEPRA employee rates: ATU - 6.5%, IBEW and Salary 5.25%

## Unaudited Financial Statements

Attached hereto are unaudited financial statements for the quarter and the year-to-date ended September 30, 2018. The financial statements are presented on an accrual basis and consist of a Statement of Fiduciary Net Position (balance sheet) (Attachment 1), a Statement of

Approved:

Presented:

Final 12/03/18

VP of Finance/CFO

Treasury Controller

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Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
11	12/12/18	Retirement	Action	10/30/18

Subject: Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)

Changes in Fiduciary Net Position (income statement) for the quarter ended September 30, 2018 (Attachment 2), and a year-to-date Statement of Changes in Fiduciary Net Position (Attachment 3).

The Statement of Fiduciary Net Position includes a summary of fund assets showing the amounts in the following categories: investments, prepaid assets, and other receivables. This statement also provides amounts due from/to the District and Total Fund Equity (net position).

The Statement of Changes in Fiduciary Net Position includes activities in the following categories: investment gains/losses, dividends, interest income, unrealized gains/losses, benefit contributions/payouts, and investment management and administrative expenses.

### Asset Rebalancing

Pursuant to Section IV, Asset Rebalancing Policy of the Statement of Investment Objectives and Policy Guidelines for the ATU, IBEW and Salaried Employees' Retirement Funds, the Retirement Boards have delegated authority to manage pension plan assets in accordance with the approved rebalancing policy to the District's Treasury Controller. The Treasury Controller is required to report asset rebalancing activity to the Boards at their quarterly meetings. Rebalancing can occur for one or more of the following reasons:

1. The Pension Plan ended the month with an accounts receivable or payable balance due to the District. A payable or receivable is the net amount of the monthly required contribution (required contribution is the percentage of covered payroll determined by the annual actuarial valuation) less the Plan's actual expenses.
2. The Pension Plan hires or removes a Fund Manager, in which case securities must be moved to a new fund manager.
3. The Pension Plan investment mix is under or over the minimum or maximum asset allocation as defined in the Statement of Investment Objectives and Policy Guidelines.

Attached hereto as Attachment 4 is the Salaried Plan's Schedule of Cash Activities for the three months ended September 30, 2018. The schedule of cash activities includes a summary of Plan activities showing the amounts in the following categories: District's pension contributions to the Plan, payments to retirees, and the Pension Plan's cash expenditures paid. This schedule also lists the rebalancing activity that occurred for the three months ended September 30, 2018. The Salaried Plan reimbursed \$3,573.28 to the District as the result of the net cash activity between the pension plan expenses and the required pension contributions.

Attached hereto as Attachment 5 is the Salaried Plan's Asset Allocation as of September 30, 2018. This statement shows the Salaried Plan's asset allocation as compared to targeted allocation percentages as defined in the Statement of Investment Objectives and Policy Guidelines.

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
11	12/12/18	Retirement	Action	10/30/18

Subject: Receive and File Administrative Reports for the Quarter Ended September 30, 2018 for the Salaried Pension Plan (AEA/AFSCME/MCEG). (Adelman)

Attached hereto as Attachment 6 is a reconciliation between the Callan Performance Report and the ATU, IBEW and Salaried Pension Plans' unaudited financial statements. The reports differ in that the unaudited financial statements reflect both investment activities and the pension fund's inflows and outflows. Callan's report only reflects the investment activities. The "Net Difference" amounts shown are the results of Callan and State Street using different valuations for the same securities and/or litigation settlements received by the Plans.

Included also as Attachment 7 is a reconciliation between the Callan Performance Report and the Schedule of Cash Activities for payments made from/to the District. Callan's report classifies gains from trades and litigation income as "net new investments." Finance staff classifies gains from trades and litigation income in the Pension Plan's unaudited Statement of Changes in Fiduciary Net Position as "Other Income," which is combined in the category of "Interest, Dividend, & Other Inc".

Attached hereto as Attachment 8 is a schedule reflecting Fund Managers' quarterly investment returns and their investment fees. Additionally, the schedule reflects annual rates of return on investment net of investment fees for the one-year and three-year periods ended September 30, 2018 as compared to their benchmarks.

Attached hereto as Attachment 9 is a schedule reflecting employee transfers from one union/employee group to another, as well as any transfers of plan assets from the ATU Plan to the Salaried Plan, all retirements, and retiree deaths during the three months ended September 30, 2018.

**Sacto Regional Transit District Retirement Plan - Salaried  
Statement of Fiduciary Net Position**

Accrual Basis

As of September 30, 2018

	Sep 30, 18
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
Long-Term Investments	
100000 · Custodial Assets	96,483,596.83
Total Long-Term Investments	96,483,596.83
Total Checking/Savings	96,483,596.83
Other Current Assets	
1110120 · Prepays	7,524.22
Total Other Current Assets	7,524.22
Total Current Assets	96,491,121.05
<b>TOTAL ASSETS</b>	<b>96,491,121.05</b>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Accounts Payable	
3110102 · Administrative Expense Payable	15,957.98
3110110 · Other Pay - Due to RT	35,288.37
3110122 · MetWest	22,765.27
3110124 · Boston Partners	20,499.32
3110126 · State Street	14,678.12
3110128 · Atlanta Capital	17,050.21
3110129 · S&P Index - SSgA	2,025.36
3110130 · EAFE - SSgA	939.64
3110132 · Pyrford	15,456.57
Total Accounts Payable	144,660.84
Total Current Liabilities	144,660.84
Total Liabilities	144,660.84
Equity	
3340101 · Retained Earnings	93,130,088.73
Net Income	3,216,371.48
Total Equity	96,346,460.21
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>96,491,121.05</b>

# Sacto Regional Transit District Retirement Plan - Salaried Statement of Changes in Fiduciary Net Position

July through September 2018

Accrual Basis

	Jul - Sep 18	% of Income
<b>Income</b>		
Interest, Dividend, & Other Inc	395,656.93	7.4%
Investment Income	2,953,533.29	54.9%
RT Required Contribution	1,990,323.93	37.0%
6630110 - Employee Contribution	38,030.26	0.7%
<b>Total Income</b>	<b>5,377,544.41</b>	<b>100.0%</b>
<b>Cost of Goods Sold</b>		
8531210 - AEA - Retirement Benefits Paid	820,931.26	15.3%
8531211 - AFSCME-Retirement Benefits Paid	444,227.82	8.3%
8531212 - MCEG - Retirement Benefits Paid	712,418.19	13.2%
8531213 - Employee Contribution Refunds	22,460.77	0.4%
8532004 - Invest Exp - MetropolitanWest	22,765.27	0.4%
8532013 - Invest Exp - Boston Partners	20,499.32	0.4%
8532020 - Invest Exp - Callan	7,081.17	0.1%
8532021 - Invest Exp - State Street	11,012.16	0.2%
8532023 - Invest Exp - JP Morgan	0.00	0.0%
8532024 - Invest Exp - Atlanta Capital	17,050.21	0.3%
8532025 - Invest Exp - S&P Index SSgA	2,025.36	0.0%
8532026 - Invest Exp - EAFE SSgA	939.64	0.0%
8532027 - Invest Exp - AQR	10,351.09	0.2%
8532028 - Invest Exp - Pyrford	15,456.57	0.3%
<b>Total COGS</b>	<b>2,107,218.83</b>	<b>39.2%</b>
<b>Gross Profit</b>	<b>3,270,325.58</b>	<b>60.8%</b>
<b>Expense</b>		
8533002 - Admin Exp - Actuary	7,359.09	0.1%
8533007 - Admin Exp - CALPRS Dues/Courses	0.00	0.0%
8533010 - Admin Exp - Travel	204.96	0.0%
8533014 - Admin Exp - Fiduciary Insurance	3,224.67	0.1%
8533020 - Admin Exp - Procurement Costs	0.00	0.0%
8533025 - Admin Exp - Information Service	250.00	0.0%
8533026 - Admin Exp - Legal Services	19,759.99	0.4%
8533028 - Admin Exp - Staff Training	83.34	0.0%
8533029 - Admin Exp - Administrator	19,738.71	0.4%
8533050 - Admin Exp - Misc Exp	0.00	0.0%
8533051 - Admin Exp - Audit	3,333.34	0.1%
<b>Total Expense</b>	<b>53,954.10</b>	<b>1.0%</b>
<b>Net Income</b>	<b>3,216,371.48</b>	<b>59.8%</b>

**Sacto Regional Transit District Retirement Plan - Salaried  
Statement of Changes in Fiduciary Net Position  
July through September 2018**

Accrual Basis

	Jul - Sep 18	% of Income
<b>Income</b>		
Interest, Dividend, & Other Inc	395,656.93	7.4%
Investment Income	2,953,533.29	54.9%
RT Required Contribution	1,990,323.93	37.0%
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<b>Total Income</b>	<b>5,377,544.41</b>	<b>100.0%</b>
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8531212 · MCEG - Retirement Benefits Paid	712,418.19	13.2%
8531213 · Employee Contribution Refunds	22,460.77	0.4%
8532004 · Invest Exp - MetropolitanWest	22,765.27	0.4%
8532013 · Invest Exp - Boston Partners	20,499.32	0.4%
8532020 · Invest Exp - Callan	7,081.17	0.1%
8532021 · Invest Exp - State Street	11,012.16	0.2%
8532023 · Invest Exp - JP Morgan	0.00	0.0%
8532024 · Invest Exp - Atlanta Capital	17,050.21	0.3%
8532025 · Invest Exp - S&P Index SSgA	2,025.36	0.0%
8532026 · Invest Exp - EAFE SSgA	939.64	0.0%
8532027 · Invest Exp - AQR	10,351.09	0.2%
8532028 · Invest Exp - Pyrford	15,456.57	0.3%
<b>Total COGS</b>	<b>2,107,218.83</b>	<b>39.2%</b>
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<b>Expense</b>		
8533002 · Admin Exp - Actuary	7,359.09	0.1%
8533007 · Admin Exp - CALPRS Dues/Courses	0.00	0.0%
8533010 · Admin Exp - Travel	204.96	0.0%
8533014 · Admin Exp - Fiduciary Insurance	3,224.67	0.1%
8533020 · Admin Exp - Procurement Costs	0.00	0.0%
8533025 · Admin Exp - Information Service	250.00	0.0%
8533026 · Admin Exp - Legal Services	19,759.99	0.4%
8533028 · Admin Exp - Staff Training	83.34	0.0%
8533029 · Admin Exp - Administrator	19,738.71	0.4%
8533050 · Admin Exp - Misc Exp	0.00	0.0%
8533051 · Admin Exp - Audit	3,333.34	0.1%
<b>Total Expense</b>	<b>53,954.10</b>	<b>1.0%</b>
<b>Net Income</b>	<b>3,216,371.48</b>	<b>59.8%</b>

**Sacramento Regional Transit District  
Retirement Fund - Salaried  
Schedule of Cash Activities  
For the Three Months Period Ended September 30, 2018**

	July 2018	August 2018	September 2018	Quarter Totals
Beginning Balance:				
Due (from)/to District - June 30, 2018	(75,846.18)	32,889.41	46,530.05	(75,846.18)
Monthly Activity:				
<u>Deposits</u>				
District Pension Contributions @ 29.05 to 34.30%	685,049.11	663,982.15	641,292.67	1,990,323.93
Employee Pension Contributions	14,852.67	12,583.84	10,593.75	38,030.26
Total Deposits	699,901.78	676,565.99	651,886.42	2,028,354.19
<u>Expenses</u>				
Payout to Retirees:				
AEA	(278,258.43)	(270,720.95)	(271,951.88)	(820,931.26)
AFSCME	(148,075.94)	(148,075.94)	(148,075.94)	(444,227.82)
MCEG	(237,472.73)	(237,472.73)	(237,472.73)	(712,418.19)
Employee Contribution Refunds	(56,491.04)	(13,418.50)	(9,042.27)	(78,951.81)
Payout to Retirees Subtotal	(720,298.14)	(669,688.12)	(666,542.82)	(2,056,529.08)
Fund Investment Management Expenses:				
Boston Partners	-	(19,656.68)	-	(19,656.68)
SSgA S&P 500 Index	-	-	-	-
Atlanta Capital	-	-	-	-
Pyrford	-	-	-	-
SSgA EAFE MSCI	-	-	-	-
Metropolitan West	-	-	-	-
Callan	(3,523.28)	(3,537.69)	(3,543.48)	(10,604.45)
State Street	-	(3,673.10)	-	(3,673.10)
Fund Invest. Mgmt Exp. Subtotal	(3,523.28)	(26,867.47)	(3,543.48)	(33,934.23)
Administrative Expenses				
Actuarial Services	(3,140.59)	(1,789.77)	(2,784.66)	(7,715.02)
Legal Services	-	(6,586.67)	(6,586.67)	(13,173.34)
Travel	-	(204.96)	-	(204.96)
Investigation Information Services	-	(250.00)	-	(250.00)
Audit Fees	-	(11,433.34)	-	(11,433.34)
Staff Training	-	-	(83.34)	(83.34)
Pension Administration	(5,829.18)	(6,275.71)	(7,633.82)	(19,738.71)
Administrative Exp. Subtotal	(8,969.77)	(26,540.45)	(17,088.49)	(52,598.71)
Total Expenses	(732,791.19)	(723,096.04)	(687,174.79)	(2,143,062.02)
Monthly Net Owed from/(to) District	(32,889.41)	(46,530.05)	(35,288.37)	(114,707.83)
Payment from/(to) the District	75,846.18	(32,889.41)	(46,530.05)	(3,573.28)
Ending Balance:				
Due (from)/to the District (=Beginning balance + monthly balance-payment to District)	32,889.41	46,530.05	35,288.37	35,288.37

**RT Combined Pension Plans - ATU, IBEW and Salaried  
Asset Allocation \*  
As of September 30, 2018**

Asset Class	Net Asset Market Value 9/30/2018	Actual Asset Allocation	Target Asset Allocation	% Variance	\$ Variance	Target Market Value
<b>FUND MANAGERS:</b>						
<b>Domestic Equity:</b>						
Large Cap Value - Boston Partners - Z8	\$ 47,524,698	16.24%	16.00%	0.24%	\$ 688,927	
Large Cap Growth - SSGA S&P 500 Index - XH	49,869,560	17.04%	16.00%	1.04%	3,033,790	
<b>Total Large Cap Domestic Equity</b>	<b>97,394,258</b>	<b>33.27%</b>	<b>32.00%</b>	<b>1.27%</b>	<b>3,722,717</b>	<b>\$ 93,671,541</b>
<b>Small Cap - Atlanta Capital - XB</b>	<b>25,866,261</b>	<b>8.84%</b>	<b>8.00%</b>	<b>0.84%</b>	<b>2,448,376</b>	<b>23,417,885</b>
<b>International Equity:</b>						
<b>Large Cap Growth:</b>						
Pyrford - ZD	27,096,117	9.26%	9.50%	-0.24%	(712,622)	
<b>Large Cap Core:</b>						
SSGA MSCI EAFE - XG	11,397,852	3.89%				
Value - Brandes - XE	9,337	0.00%				
<b>Total Core</b>	<b>11,407,189</b>	<b>3.90%</b>	<b>4.50%</b>	<b>-0.60%</b>	<b>(1,765,372)</b>	
<b>Small Cap:</b>						
AQR - ZB	14,273,676	4.88%	5.00%	-0.12%	(362,502)	
<b>Emerging Markets</b>						
DFA - ZA	16,049,953	5.48%	6.00%	-0.52%	(1,513,461)	
<b>Total International Equity</b>	<b>68,826,935</b>	<b>23.51%</b>	<b>25.00%</b>	<b>-1.49%</b>	<b>(4,353,957)</b>	<b>73,180,892</b>
<b>Fixed Income:</b>						
Met West - XD	100,636,113	34.38%	35.00%	-0.62%	(1,817,135)	102,453,248
<b>Total Combined Net Asset</b>	<b>\$ 292,723,567</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>\$ 1</b>	<b>\$ 292,723,567</b>

Asset Allocation Policy Ranges*:	Minimum	Target	Maximum
<b>Domestic Equity</b>	<b>35%</b>	<b>40%</b>	<b>45%</b>
Large Cap (50/50 value/growth)	28%	32%	36%
Small Cap	5%	8%	11%
<b>International Equity</b>	<b>20%</b>	<b>25%</b>	<b>30%</b>
Large Cap Developed Markets	10%	14%	18%
Small Cap Developed Markets	3%	5%	7%
Emerging Markets	4%	6%	8%
<b>Domestic Fixed Income</b>	<b>30%</b>	<b>35%</b>	<b>40%</b>

\* Per the Statement of Investment Objectives and Policy Guidelines as of 6/20/2018.

**Reconciliation between Callan Report  
and  
Consolidated Pension Fund Balance Sheet  
As of September 30, 2018**

<b>Per Both Pension Fund Balance Sheets:</b>	
ATU Allocated Custodial Assets	137,167,739
IBEW Allocated Custodial Assets	59,072,231
Salaried Allocated Custodial Assets	<u>96,483,597</u>
<b>Total Consolidated Net Asset</b>	<u><u>292,723,567</u></u>
<b>Per Callan Report:</b>	
Total Investments	<u><u>292,722,475</u></u>
<b>Net Difference</b>	<u><u>1,092</u></u> *

\* The "Net Difference" amounts shown are the results of Callan and State Street using different valuations for the same securities and a timing difference on the AQR statement.

**Reconciliation between Callan Report  
and  
Consolidated Pension Fund Income Statement  
For the Quarter Ended September 30, 2018**

<b>Per Both Pension Fund Income Statements:</b>	
ATU - Interest, Dividends, and Other Income	554,208
ATU - Investment Income	3,874,456
IBEW - Interest, Dividends, and Other Income	235,582
IBEW - Investment Income	1,730,740
Salaried - Interest, Dividends, and Other Income	385,306
Salaried - Investment Income	<u>2,953,533</u>
<b>Total Investment Income</b>	<u><u>9,733,825</u></u>
<b>Per Callan Report:</b>	
Investment Returns	<u><u>9,719,762</u></u>
<b>Net Difference</b>	<u><u>14,063</u></u> **

\*\* The "Net Difference" amounts shown are the results of Callan and State Street using different valuations for the same securities and a timing difference on the AQR statement.



**Reconciliation between Callan Report  
and  
Consolidated Schedule of Cash Activities  
For the Quarter Ended September 30, 2018**

	<u>July</u>	<u>August</u>	<u>September</u>	<u>Total</u>
<b>Payments from/(to) the District</b>				
Boston Partners - ATU				-
Boston Partners - IBEW				-
Boston Partners - Salaried				-
S&P 500 Index - ATU				-
S&P 500 Index - IBEW				-
S&P 500 Index - Salaried				-
Atlanta Capital - ATU		(313,301)	(258,842)	(572,143)
Atlanta Capital - IBEW		(62,386)	(58,620)	(121,006)
Atlanta Capital - Salaried		(32,889)	(46,530)	(79,419)
Metropolitan West - ATU	(327,866)			(327,866)
Metropolitan West - IBEW	(56,407)			(56,407)
Metropolitan West - Salaried	75,846			75,846
<b>Total Payments from/(to) the District</b>	<u>(308,427)</u>	<u>(408,576)</u>	<u>(363,992)</u>	<u>(1,080,995)</u>
<b>Transfers In/(Out) of Investment Funds</b>				
Boston Partners	-	-	-	-
S&P 500 Index	-	-	-	-
Atlanta Capital	-	(408,576)	(363,992)	(772,568)
Metropolitan West	(308,427)	-	-	(308,427)
<b>Total Transfers In/(Out) of Investment Funds</b>	<u>(308,427)</u>	<u>(408,576)</u>	<u>(363,992)</u>	<u>(1,080,995)</u>
<b>Variance between Payments and Transfers</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Per Callan Report:</b>				
Net New Investment/(Withdrawals)				<u>(1,080,995)</u>
<b>Net Difference</b>				<u>-</u>

**Consolidated Schedule of Cash Activities  
For the 12-Months September 30, 2018**

	<u>4Q17</u>	<u>1Q18</u>	<u>2Q18</u>	<u>3Q18</u>	<u>Total</u>
<b>Payments from/(to) the District</b>					
Boston Partners - ATU	(656,620)	(711,871)	(2,810,287)	-	(4,178,778)
Boston Partners - IBEW	(155,075)	(46,224)	(987,443)	-	(1,188,742)
Boston Partners - Salaried	(207,896)	333,215	(1,461,943)	-	(1,336,624)
S&P 500 Index - ATU	(382,811)	(1,056,615)	(1,770,269)	-	(3,209,695)
S&P 500 Index - IBEW	(95,328)	(151,776)	(804,753)	-	(1,051,857)
S&P 500 Index - Salaried	(84,552)	213,560	(1,395,393)	-	(1,266,385)
Atlanta Capital - ATU	-	(220,607)	(1,844,745)	(572,143)	(2,637,495)
Atlanta Capital - IBEW	-	-	(788,042)	(121,006)	(909,048)
Atlanta Capital - Salaried	-	220,607	(1,435,641)	(79,419)	(1,294,453)
JP Morgan - ATU	-	-	-	-	-
JP Morgan - IBEW	-	-	-	-	-
JP Morgan - Salaried	-	-	-	-	-
Pyrford - ATU	-	(244,192)	-	-	(244,192)
Pyrford - IBEW	-	-	-	-	-
Pyrford - Salaried	-	244,192	-	-	244,192
EAFE - ATU	-	(100,683)	-	-	(100,683)
EAFE - Salaried	-	100,683	-	-	100,683
AQR - ATU	-	(133,244)	-	-	(133,244)
AQR - Salaried	-	133,244	-	-	133,244
DFA - ATU	-	(133,058)	-	-	(133,058)
DFA - Salaried	-	133,058	-	-	133,058
Metropolitan West - ATU	-	(796,599)	5,485,262	(327,866)	4,360,797
Metropolitan West - IBEW	-	-	2,418,623	(56,407)	2,362,216
Metropolitan West - Salaried	-	796,599	4,211,226	75,846	5,083,671
<b>Total Payments from/(to) the District</b>	<u>(1,582,282)</u>	<u>(1,419,711)</u>	<u>(1,183,405)</u>	<u>(1,080,995)</u>	<u>(5,266,393)</u>

**Sacramento Regional Transit District**  
**ATU, IBEW and Salaried Retirement Plans**  
**Schedule of Fund Investment Returns and Expenses**  
**09/30/18**

	1 Year		1 Year			3 Years		3 Years		
	1 Year	%	Net of Fees Returns	Bench-Mark Returns	Favorable/ (Unfavor) Basis Pts	3 Years	%	Net of Fees Returns	Bench-Mark Returns	Favorable/ (Unfavor) Basis Pts
<b>Boston Partners</b>										
Investment Returns	6,154,949	100.00%				18,725,609	100.00%			
Investment Expenses	(251,772)	4.09%				(707,337)	3.78%			
Net Gain/(Loss)	5,903,177	95.91%	13.49%	9.45%	404.00	18,018,272	96.22%	14.81%	13.55%	126.00
<b>S&amp;P 500</b>										
Investment Returns	7,809,022	100.00%				21,155,599	100.00%			
Investment Expenses	(24,082)	0.31%				(97,827)	0.46%			
Net Gain/(Loss)	7,784,940	99.69%	17.84%	17.91%	(7.00)	21,057,772	99.54%	17.29%	17.31%	(2.00)
<b>Atlanta Capital</b>										
Investment Returns	5,604,008	100.00%				12,549,425	100.00%			
Investment Expenses	(202,024)	3.60%				(570,693)	4.55%			
Net Gain/(Loss)	5,401,984	96.40%	23.83%	15.24%	859.00	11,978,732	95.45%	18.44%	17.12%	132.00
<b>Pyrford</b>										
Investment Returns	783,356	100.00%				1,142,298	100.00%			
Investment Expenses	(185,862)	23.73%				(246,299)	21.56%			
Net Gain/(Loss)	597,494	76.27%	2.27%	2.74%	(47.00)	895,999	78.44%	N/A	N/A	N/A
<b>EAFE</b>										
Investment Returns	340,354	100.00%				3,126,410	100.00%			
Investment Expense	(11,465)	3.37%				(39,466)	1.26%			
Net Gain/(Loss)	328,889	96.63%	2.98%	2.74%	24.00	3,086,944	98.74%	9.51%	9.23%	28.00
<b>Brandes</b>										
Investment Returns	(115)	100.00%				(2,005)	100.00%			
Investment Expenses	-	0.00%				-	0.00%			
Net Gain/(Loss)	(115)	100.00%	N/A	N/A	N/A	(2,005)	100.00%	N/A	N/A	N/A
<b>AQR</b>										
Investment Returns	45,937	100.00%				2,794,787	100.00%			
Investment Expenses	(147,503)	321.10%				(289,982)	10.38%			
Net Gain/(Loss)	(101,566)	-221.10%	0.13%	3.73%	(360.00)	2,504,805	89.62%	N/A	N/A	N/A
<b>DFA</b>										
Investment Returns	(408,802)	100.00%				4,438,861	100.00%			
Investment Expense	(84,467)	-20.66%				(262,293)	5.91%			
Net Gain/(Loss)	(493,269)	120.66%	-2.48%	-0.81%	(167.00)	4,176,568		11.48%	12.36%	(88.00)
<b>Metropolitan West</b>										
Investment Returns	(490,140)	100.00%				4,599,949	100.00%			
Investment Expenses	(269,144)	-54.91%				(750,641)	16.32%			
Net Gain/(Loss)	(759,284)	154.91%	-0.78%	-1.22%	44.00	3,849,308	83.68%	1.51%	1.31%	20.00
<b>Total Fund</b>										
Investment Returns	19,838,569	100.00%				73,296,623	100.00%			
Investment Expenses	(1,176,319)	5.93%				(3,138,858)	4.28%			
Net Gain/(Loss)	18,662,250	94.07%	6.86%	6.89%	(3.00)	70,157,765	95.72%	9.41%	9.95%	(54.00)

**Sacramento Regional Transit District  
 Schedule of Transfers and Retirements  
 For the Time Period July 1, 2018 to September 30, 2018**

**Retirements:**

<b>Employee #</b>	<b>Previous Position</b>	<b>Pension Group</b>	<b>Retirement Date</b>
2720	Light Rail Service Worker	IBEW	7/1/2018
3403	Network & End Operations Administrator	MCEG	7/1/2018
2785	Maintenance Supervisor	AFSC	7/1/2018
2972	Bus Operator	ATUL	7/18/2018
2961	Bus Operator	ATUL	7/28/2018
1654	Administrative Technician	AEAS	8/1/2018
2981	Bus Operator	ATUL	8/31/2018
3028	Community Bus Services Dispatcher	AFSC	9/1/2018
1689	Maintenance Supervisor	AEAS	9/1/2018
1624	Schedule Analyst II	AEAS	9/1/2018

**Deaths:**

<b>Employee #</b>	<b>Pension Group</b>	<b>Type</b>	<b>Date of Death</b>
2889	AEA	Survivor Beneficiary	7/4/2018
1283	ATU	Survivor Beneficiary	7/28/2018
1100	AEA	Life Alone	8/23/2018
3796	ATU	Survivor Beneficiary	9/4/2018

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
12	12/12/18	Open	Action	11/14/18

Subject: Amendment of the Regional Transit District Retirement Boards Regular Meeting Calendar for 2019 (ALL). (Weekly)

## ISSUE

Amendment of the Regional Transit District (RT) Retirement Boards Regular Meeting Calendar for 2019 (ALL). (Weekly)

## RECOMMENDED ACTION

Adopt Resolution No. 18-12-\_\_\_\_, Amending the Regional Transit District Retirement Boards Regular Meeting Calendar for 2019.

## FISCAL IMPACT

None, as a result of this action.

## DISCUSSION

The RT Retirement Boards adopted their Regular meeting Calendar for 2019 at their September 12, 2018 Quarterly meeting.

Due to a scheduling conflict, staff proposes the Boards move the March 13, 2019 Quarterly meeting to March 20, 2019 as shown on the attached amended meeting calendar, marked as Exhibit A.

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Approved:

Final 12/03/18

Treasury Controller

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Presented:

Pension & Retiree Services Administrator

M:\Workgroups\Pension Administration\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\HB Edits\12-12-18 IP Adopting the March 2019 Retirement Board Meeting Date - Issue Paper.doc

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the AEA Retirement Board for the Retirement Plan for RT Employees Who Are Members of AEA on this date:

December 12, 2018

**AMENDING THE REGIONAL TRANSIT DISTRICT RETIREMENT BOARD REGULAR MEETING CALENDAR FOR 2019**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF AEA AS FOLLOWS:

THAT, the Regular Meeting Calendar for 2019, which was adopted at the September 12, 2018 Quarterly Retirement Board meeting, is hereby amended to move the March 13, 2019 meeting to March 20, 2019.

\_\_\_\_\_  
Russel Devorak, Chair

A T T E S T:

Sue Robison, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the AFSCME Retirement Board for the Retirement Plan for RT Employees Who Are Members of AFSCME on this date:

December 12, 2018

**AMENDING THE REGIONAL TRANSIT DISTRICT RETIREMENT BOARD REGULAR MEETING CALENDAR FOR 2019**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF AFSCME AS FOLLOWS:

THAT, the Regular Meeting Calendar for 2019, which was adopted at the September 12, 2018 Quarterly Retirement Board meeting, is hereby amended to move the March 13, 2019 meeting to March 20, 2019.

\_\_\_\_\_  
\_\_\_\_\_, Chair

A T T E S T:

\_\_\_\_\_, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the ATU Retirement Board for the Retirement Plan for RT Employees Who Are Members of ATU Local Union 256 on this date:

December 12, 2018

**AMENDING THE REGIONAL TRANSIT DISTRICT RETIREMENT BOARD REGULAR MEETING CALENDAR FOR 2019**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF ATU LOCAL UNION 256 AS FOLLOWS:

THAT, the Regular Meeting Calendar for 2019, which was adopted at the September 12, 2018 Quarterly Retirement Board meeting, is hereby amended to move the March 13, 2019 meeting to March 20, 2019.

\_\_\_\_\_  
Ralph Niz, Chair

A T T E S T:

Corina DeLaTorre, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the IBEW Retirement Board for the Retirement Plan for RT Employees  
Who Are Members of IBEW Local Union 1245 on this date:

December 12, 2018

**AMENDING THE REGIONAL TRANSIT DISTRICT RETIREMENT BOARD REGULAR  
MEETING CALENDAR FOR 2019**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF IBEW LOCAL  
UNION 1245 AS FOLLOWS:

THAT, the Regular Meeting Calendar for 2019, which was adopted at the  
September 12, 2018 Quarterly Retirement Board meeting, is hereby amended to move the  
March 13, 2019 meeting to March 20, 2019.

\_\_\_\_\_  
Eric Ohlson, Chair

A T T E S T:

Constance Bibbs, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary



RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the MCEG Retirement Board for the Retirement Plan for RT Employees  
Who Are Members of MCEG on this date:

December 12, 2018

**AMENDING THE REGIONAL TRANSIT DISTRICT RETIREMENT BOARD REGULAR  
MEETING CALENDAR FOR 2019**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF MCEG AS  
FOLLOWS:

THAT, the Regular Meeting Calendar for 2019, which was adopted at the  
September 12, 2018 Quarterly Retirement Board meeting, is hereby amended to move the  
March 13, 2019 meeting to March 20, 2019.

\_\_\_\_\_  
Mark Lonergan, Chair

A T T E S T:

Roger Thorn, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

2019 RETIREMENT BOARD CALENDAR

SACRAMENTO REGIONAL TRANSIT RETIREMENT BOARD  
REGIONAL TRANSIT AUDITORIUM (ROOM 114) – 1400 29<sup>TH</sup> STREET  
SACRAMENTO, CALIFORNIA

9:00 AM

Wednesday.....Regular Meeting.....March 20, 2019  
Wednesday.....Regular Meeting.....June 12, 2019  
Wednesday.....Regular Meeting.....September 11, 2019  
Wednesday.....Regular Meeting.....December 11, 2019  
  
Wednesday.....Special Meeting.....\*February 27, 2019  
Wednesday.....Special Meeting.....\*April 24, 2019  
Wednesday.....Special Meeting.....\*July 24, 2019  
Wednesday.....Special Meeting.....\*October 23, 2019

*\*Special Meeting dates are tentative. If necessary, these dates can be utilized for items that require attention prior to the scheduled quarterly Board Meeting.*

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
13	12/12/18	Open	Action	12/04/18

Subject: Adopting Amended Retirement Board Member and Staff Education and Travel Policy (All). (Weekly)

## ISSUE

Amendment of Retirement Board Education and Travel Policy (ALL). (Weekly)

## RECOMMENDED ACTION

Adopt Resolution No. 18-12-\_\_\_\_\_ Amending the Retirement Board Member and Staff Education and Travel Policy.

## FISCAL IMPACT

There is no fiscal impact associated with this action.

## DISCUSSION

On June 14, 2017, the Retirement Boards approved resolutions amending the Retirement Board Member and Staff Education and Travel Policy (“Policy”). The Policy provides that new Retirement Board members will make reasonable efforts to attend Principles of Pension Management offered by California Association of Public Retirement Systems (CALAPRS), or similar introductory trustee training, as soon as reasonably possible following appointment or election. (See section 8.c.) The Policy further provides that the Treasury Controller will approve additional trainings for Retirement Board Members or Retirement Board Staff that fall within the established procurement authority and under the \$1,500 annual training budget established by the Boards, and that all other trainings will be approved by the Boards. (See sections 16 and 17.) The Policy does not specifically address CALAPRS trainings, other than the introductory trustee training.

Staff recommends amending the Policy to authorize the Treasury Controller to approve Retirement Board Member attendance at the CALAPRS Principles of Pension Management for Trustees, the CALAPRS Advanced Principles of Pension Management for Trustees or any of the courses for Retirement Board staff in the CALAPRS Courses for Retirement Plan Administration series. In addition, the Policy should be amended to clarify that costs associated with attending advanced CALAPRS trainings are not paid from the \$1,500 annual training budget. Attendance by Retirement Board members at these trainings will further the Policy objective of ensuring that all Retirement Board Members are provided with adequate opportunity and support to acquire the knowledge they need to effectively carry out their Retirement Board duties in a fiduciary capacity.

Although, there is no fiscal impact associated with the amendment of this Policy, the course tuition for the CALAPRS Advanced Principles of Pension Management for Trustees is currently \$3,100 per participant, not including travel and per diem costs.

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Approved:

Presented:

FINAL 12/6/18

Treasury Controller

Pension and Retiree Services Administrator

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
13	12/12/18	Open	Action	12/04/18

Subject: Adopting Amended Retirement Board Education and Travel Policy (All). (Weekly)

Staff recommends adoption of the amended Retirement Board Member Education and Travel Policy set forth at Exhibit A.

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Approved:

FINAL 12/06/18  
Treasury Controller

Presented:

Pension and Retiree Services Administrator

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the Retirement Board for the Retirement Plan for RT Employees Who  
Are Members of ATU Local Union 256 on this date:

December 12, 2018

**ADOPTING AN AMENDED RETIREMENT  
BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF THE ATU LOCAL  
UNION 256 (RETIREMENT BOARD) AS FOLLOWS:

THAT, the Retirement Board Member and Staff Education and Travel Policy as set  
forth in Exhibit A is hereby adopted.

\_\_\_\_\_  
RALPH NIZ, Chair

A T T E S T:

Corina De La Torre, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the Retirement Board for the Retirement Plan for RT Employees Who  
Are Members of AEA on this date:

December 12, 2018

**ADOPTING AN AMENDED RETIREMENT  
BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF AEA  
(RETIREMENT BOARD) AS FOLLOWS:

THAT, the Retirement Board Member and Staff Education and Travel Policy as set  
forth in Exhibit A is hereby adopted.

\_\_\_\_\_  
RUSSEL DEVORAK, Chair

A T T E S T:

Sue Robison, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the Retirement Board for the Retirement Plan for RT Employees Who  
Are Members of AFSCME on this date:

December 12, 2018

**ADOPTING AN AMENDED RETIREMENT  
BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF THE AFSCME  
(RETIREMENT BOARD) AS FOLLOWS:

THAT, the Retirement Board Member and Staff Education and Travel Policy as set  
forth in Exhibit A is hereby adopted.

\_\_\_\_\_  
CHARLES MALLONEE, Chair

A T T E S T:

Gary Parks, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the Retirement Board for the Retirement Plan for RT Employees Who  
Are Members of MCEG on this date:

December 12, 2018

**ADOPTING AN AMENDED RETIREMENT  
BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF THE ATU LOCAL  
UNION 256 (RETIREMENT BOARD) AS FOLLOWS:

THAT, the Retirement Board Member and Staff Education and Travel Policy as set  
forth in Exhibit A is hereby adopted.

\_\_\_\_\_  
MARK LONERGAN, Chair

A T T E S T:

Roger Thorn, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary



RESOLUTION NO. 18-12-\_\_\_\_\_

Adopted by the Retirement Board for the Retirement Plan for RT Employees Who  
Are Members of IBEW, Local Union 1245 on this date:

December 12, 2018

**ADOPTING AN AMENDED RETIREMENT  
BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

BE IT HEREBY RESOLVED BY THE RETIREMENT BOARD FOR THE  
RETIREMENT PLAN FOR RT EMPLOYEES WHO ARE MEMBERS OF THE IBEW  
LOCAL UNION 1245 (RETIREMENT BOARD) AS FOLLOWS:

THAT, the Retirement Board Member and Staff Education and Travel Policy as set  
forth in Exhibit A is hereby adopted.

\_\_\_\_\_  
ERIC OHLSON, Chair

A T T E S T:

Constance Bibbs, Secretary

By: \_\_\_\_\_  
Valerie Weekly, Assistant Secretary

**EXHIBIT A**

**RETIREMENT BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

**PREAMBLE**

1. The Retirement Board's fiduciary duties of loyalty, skill, care and diligence extend across all facets of Plan administration, including the investment and management of public pension funds. Retirement Board Members acknowledge the need to acquire the necessary knowledge for prudently discharging their fiduciary duties in their roles as Retirement Board Members. Accordingly, the Retirement Board has adopted this Education and Travel Policy to provide Retirement Board Members with rules and guidelines for obtaining necessary education on matters related to public pension administration and investments.
2. This Policy will be implemented in compliance with the relevant provisions of the California Constitution, and applied consistently with the existing philosophy, objectives, policies and guidelines approved by the Retirement Board.

**POLICY OBJECTIVES**

3. The objectives of this Policy are to:
  - a. Ensure that all Retirement Board Members are provided with adequate opportunity and support to acquire the knowledge they need to effectively carry out their Retirement Board duties in a fiduciary capacity;
  - b. Raise awareness of the importance of fiduciary education for Retirement Board Members, and the level of expected Retirement Board Member commitment to that education;
  - c. Provide guidelines by which the Sacramento Regional Transit District (SacRT) will reimburse Retirement Board Members and Retirement Board Staff for qualifying travel expenditures; and
  - d. Ensure that travel expenditures incurred are prudent and cost effective.

**POLICY GUIDELINES**

**General Provisions**

4. Retirement Board Members agree to develop and maintain a sufficient level of knowledge and understanding of relevant issues pertaining to Plan administration throughout their terms on the Retirement Board.

5. Retirement Board Members agree to pursue appropriate education across a range of relevant pension-related topics designed to help them become proficient in performing their Retirement Board duties, rather than limiting their education to particular areas. The general topics include:
  - a. Governance and fiduciary duty;
  - b. Ethics;
  - c. Investment policy and asset allocation;
  - d. Benefits administration;
  - e. Actuarial policies and funding;
  - f. Technology; and
  - g. Regulatory and legal issues.
6. Appropriate educational tools for Retirement Board Members include, but are not limited to:
  - a. Conferences, seminars, webinars, workshops, roundtables, courses or similar events;
  - b. Association meetings or events;
  - c. In-house trainings such as the New Trustee Orientation program; and d. Relevant periodicals, listservs, journals, textbooks or similar materials.
7. Retirement Board Staff will regularly identify appropriate educational opportunities and distribute information about those opportunities to Retirement Board Members. Retirement Board Members are also encouraged to suggest educational opportunities that provide value to the Retirement Board. If a Retirement Board Member requests overnight lodging or other significant travel-related expenses, the conference or seminar that the Retirement Board Member should include an average of at least five hours of substantive educational content per day.
8. Retirement Board Members will make every reasonable effort to satisfy the following minimum standards and goals:
  - a. Acquire and maintain an appropriate level of knowledge and skill in each of the topic areas listed in Item 5 to ensure prudent Plan administration in accordance with the Retirement Board Members' fiduciary duties.
  - b. Attend the in-house New Trustee Orientation within three months of election or appointment, or before sitting at the first Retirement Board meeting as a voting member, whichever is earliest.

- c. Attend Principles of Pension Management offered by California Association of Public Retirement Systems (CALAPRS), or similar introductory trustee training, as soon as reasonably possible following appointment or election, but no later than 24 months following appointment or election. The Retirement Board may waive this requirement if it is determined that the new Retirement Board Member received this education prior to the member's election or appointment and a waiver would serve the best interests of the Plan.
  - d. Obtain 24 hours of education within two years of assuming office and for every subsequent two-year period in which the Retirement Board Member continues to sit on the Retirement Board. The 24 hours of education can consist of any of the opportunities listed in Item 6.
  - e. Participate in any in-house educational seminars or trainings that may be offered from time to time.
9. A Sacramento Regional Transit District (SacRT) employee functioning as a Retirement Board Member will not suffer a loss of compensation while obtaining, or traveling to or from, training pursuant to this Policy during his or her regularly scheduled working hours.
  10. On an semi-annual basis, Retirement Board Staff will notify Retirement Board Members of their progress toward the educational goals established in this Policy.
  11. On an annual basis, Retirement Board Staff will submit a report to the Retirement Board on the educational activities of the Retirement Board Members. At a minimum, the report will summarize:
    - a. conference attendance;
    - b. attendance at in-house educational sessions held during the year; and
    - c. other educational activities.

### **Orientation Program**

12. Retirement Board Staff will conduct an orientation program covering the general topics outlined in Item 5 above, for each new Retirement Board Member within three months of election or appointment or before the Retirement Board Member sits at the first Retirement Board meeting as a voting member, whichever is earliest. The aim of the orientation program will be to ensure that new Retirement Board Members are in a position to contribute fully to Retirement Board and committee deliberations, and effectively carry out their fiduciary duties while serving on the Retirement Board.
13. As soon as possible following their election or appointment to the Retirement Board, new Retirement Board Members will:
  - a. Be provided with a Retirement Board Member Handbook and any other documents that the Pension and Retiree Services Administrator deems necessary;

- b. Be oriented by the Retirement Board Chairperson, or the Chairperson's designee, on current issues before the Retirement Board; and
  - c. Be introduced to other Retirement Board Members.
14. Prior to attending their first meeting of the Retirement Board as a trustee, new Retirement Board Members will endeavor to attend a meeting of the Retirement Board as an observer.

### **In-House Educational Seminars**

15. Retirement Board Staff will coordinate at least two in-house educational seminars each year such as:
- a. AB 1234 Public Sector Ethics training, which is a required 2-hour training every two years; and
  - b. One or more other trainings covering one or more of the topics listed in Item 5. Retirement Board Members may suggest topics.

In-house seminars may be added to regular Retirement Board meetings or organized as stand-alone sessions.

### **Approval and Reporting of Conference Attendance**

16. The Treasury Controller will approve attendance by Retirement Board Members at advanced CALAPRS trainings, including Principles of Pension Management for Trustees, and Advanced Principles of Pension Management for Trustees, and attendance by Retirement Board Members or Staff at any of the courses in CALAPRS Courses for Retirement Plan Administration series. The Treasury Controller will approve other trainings for Retirement Board Members or Retirement Board Staff that fall within the established procurement authority and under the \$1,500 annual training budget established by resolution on June 6, 2011. The \$1,500 budget does not cover costs associated with the introductory trustee training offered by CALAPRS, or advanced CALAPRS trainings. Costs associated with attending such CALAPRS trainings are not drawn down from this \$1,500 budget.
17. The Retirement Board must approve trainings that do not qualify under Item 16 above.
18. In authorizing attendance to a conference or seminar, priority will be given to Retirement Board Members who have not previously attended the same or a similar conference or seminar, so as to carry out the Retirement Board's intent to distribute conference and seminar opportunities on a fair and equitable basis.
19. If more than two members of a Retirement Board will be attending a training together outside of a noticed public meeting, the Retirement Board Members may not engage in discussions regarding the business of the Retirement Board while at the training. However, attendance at educational conference seminars and social activities by more than two members of Retirement Board is not a violation of this provision.

20. Board Members will inform Retirement Board Staff of all pension and investment-related conferences attended. This information will be used for education tracking purposes only.
21. Requests for reimbursement of travel-related expenses are subject to Sacramento Regional Transit District's Reimbursement of Expense Policy and Procedures.
22. Upon returning from a conference, attendees will submit oral or written reports to Retirement Board Staff and fellow Retirement Board members on the content and quality of the conference or other training opportunity attended. Attendees will also provide a copy of any materials distributed at the conference.
23. Retirement Board Staff will retain and catalogue all relevant conference materials submitted by Retirement Board Members. If appropriate, copies of the materials will be distributed to other Retirement Board Members.

### **Reporting of Other Training Opportunities**

24. Retirement Board Staff will regularly notify Retirement Board Members of other educational opportunities, such as webinars and industry articles. These notifications will generally be via email.
25. Following participation in any other educational activity or training, Retirement Board Members will notify Retirement Board Staff of their activity for training tracking purposes.

### **Publication**

26. A copy of this policy will be provided to Retirement Board Members and other interested parties upon request.

### **POLICY REVIEW**

27. The Retirement Board will review this policy at least every three (3) years to ensure that it remains relevant and appropriate.

### **POLICY HISTORY**

28. The Retirement Board adopted the original policy on November 20, 2006, and adopted a revised policy on June 14, 2017. The Retirement Board adopted this revised policy on December 12, 2018.

**EXHIBIT – ATTACHMENT #1**

**RETIREMENT BOARD MEMBER AND STAFF EDUCATION AND TRAVEL POLICY**

**PREAMBLE**

1. The Retirement Board's fiduciary duties of loyalty, skill, care and diligence extend across all facets of Plan administration, including the investment and management of public pension funds. Retirement Board Members acknowledge the need to acquire the necessary knowledge for prudently discharging their fiduciary duties in their roles as Retirement Board Members. Accordingly, the Retirement Board has adopted this Education and Travel Policy to provide Retirement Board Members with rules and guidelines for obtaining necessary education on matters related to public pension administration and investments.
2. This Policy will be implemented in compliance with the relevant provisions of the California Constitution, and applied consistently with the existing philosophy, objectives, policies and guidelines approved by the Retirement Board.

**POLICY OBJECTIVES**

3. The objectives of this Policy are to:
  - a. Ensure that all Retirement Board Members are provided with adequate opportunity and support to acquire the knowledge they need to effectively carry out their Retirement Board duties in a fiduciary capacity;
  - b. Raise awareness of the importance of fiduciary education for Retirement Board Members, and the level of expected Retirement Board Member commitment to that education;
  - c. Provide guidelines by which the Sacramento Regional Transit District (SacRT) will reimburse Retirement Board Members and Retirement Board Staff for qualifying travel expenditures; and
  - d. Ensure that travel expenditures incurred are prudent and cost effective.

**POLICY GUIDELINES**

**General Provisions**

4. Retirement Board Members agree to develop and maintain a sufficient level of knowledge and understanding of relevant issues pertaining to Plan administration throughout their terms on the Retirement Board.

5. Retirement Board Members agree to pursue appropriate education across a range of relevant pension-related topics designed to help them become proficient in performing their Retirement Board duties, rather than limiting their education to particular areas. The general topics include:
  - a. Governance and fiduciary duty;
  - b. Ethics;
  - c. Investment policy and asset allocation;
  - d. Benefits administration;
  - e. Actuarial policies and funding;
  - f. Technology; and
  - g. Regulatory and legal issues.
6. Appropriate educational tools for Retirement Board Members include, but are not limited to:
  - a. Conferences, seminars, webinars, workshops, roundtables, courses or similar events;
  - b. Association meetings or events;
  - c. In-house trainings such as the New Trustee Orientation program; and d. Relevant periodicals, listservs, journals, textbooks or similar materials.
7. Retirement Board Staff will regularly identify appropriate educational opportunities and distribute information about those opportunities to Retirement Board Members. Retirement Board Members are also encouraged to suggest educational opportunities that provide value to the Retirement Board. If a Retirement Board Member requests overnight lodging or other significant travel-related expenses, the conference or seminar that the Retirement Board Member should include an average of at least five hours of substantive educational content per day.
8. Retirement Board Members will make every reasonable effort to satisfy the following minimum standards and goals:
  - a. Acquire and maintain an appropriate level of knowledge and skill in each of the topic areas listed in Item 5 to ensure prudent Plan administration in accordance with the Retirement Board Members' fiduciary duties.
  - b. Attend the in-house New Trustee Orientation within three months of election or appointment, or before sitting at the first Retirement Board meeting as a voting member, whichever is earliest.



- c. Attend Principles of Pension Management offered by California Association of Public Retirement Systems (CALAPRS), or similar introductory trustee training, as soon as reasonably possible following appointment or election, but no later than 24 months following appointment or election. The Retirement Board may waive this requirement if it is determined that the new Retirement Board Member received this education prior to the member's election or appointment and a waiver would serve the best interests of the Plan.
  - d. Obtain 24 hours of education within two years of assuming office and for every subsequent two-year period in which the Retirement Board Member continues to sit on the Retirement Board. The 24 hours of education can consist of any of the opportunities listed in Item 6.
  - e. Participate in any in-house educational seminars or trainings that may be offered from time to time.
9. A Sacramento Regional Transit District (SacRT) employee functioning as a Retirement Board Member will not suffer a loss of compensation while obtaining, or traveling to or from, training pursuant to this Policy during his or her regularly scheduled working hours.
  10. On an semi-annual basis, Retirement Board Staff will notify Retirement Board Members of their progress toward the educational goals established in this Policy.
  11. On an annual basis, Retirement Board Staff will submit a report to the Retirement Board on the educational activities of the Retirement Board Members. At a minimum, the report will summarize:
    - a. conference attendance;
    - b. attendance at in-house educational sessions held during the year; and
    - c. other educational activities.

### **Orientation Program**

12. Retirement Board Staff will conduct an orientation program covering the general topics outlined in Item 5 above, for each new Retirement Board Member within three months of election or appointment or before the Retirement Board Member sits at the first Retirement Board meeting as a voting member, whichever is earliest. The aim of the orientation program will be to ensure that new Retirement Board Members are in a position to contribute fully to Retirement Board and committee deliberations, and effectively carry out their fiduciary duties while serving on the Retirement Board.
13. As soon as possible following their election or appointment to the Retirement Board, new Retirement Board Members will:
  - a. Be provided with a Retirement Board Member Handbook and any other documents that the Pension and Retiree Services Administrator deems necessary;

- b. Be oriented by the Retirement Board Chairperson, or the Chairperson's designee, on current issues before the Retirement Board; and
  - c. Be introduced to other Retirement Board Members.
14. Prior to attending their first meeting of the Retirement Board as a trustee, new Retirement Board Members will endeavor to attend a meeting of the Retirement Board as an observer.

### **In-House Educational Seminars**

15. Retirement Board Staff will coordinate at least two in-house educational seminars each year such as:
- a. AB 1234 Public Sector Ethics training, which is a required 2-hour training every two years; and
  - b. One or more other trainings covering one or more of the topics listed in Item 5. Retirement Board Members may suggest topics.

In-house seminars may be added to regular Retirement Board meetings or organized as stand-alone sessions.

### **Approval and Reporting of Conference Attendance**

16. The Treasury Controller -will approve [attendance by Retirement Board Members at advanced CALAPRS trainings, including Principles of Pension Management for Trustees, and Advanced Principles of Pension Management for Trustees, and attendance by Retirement Board Members or Staff at any of the courses in CALAPRS Courses for Retirement Plan Administration series. The Treasury Controller will approve other](#) trainings for Retirement Board Members or Retirement Board Staff that fall within the established procurement authority and under the \$1,500 annual training budget established by resolution on June 6, 2011. The \$1,500 budget does not cover costs associated with [the introductory trustee training offered by CALAPRS, or advanced CALAPRS trainings](#). Costs associated with [attending such CALAPRS](#) trainings ~~Board members attending the annual CALAPRS training~~ are not drawn down from this \$1,500 budget.
17. The Retirement Board must approve trainings that do not qualify under Item 16 above.
18. In authorizing attendance to a conference or seminar, priority will be given to Retirement Board Members who have not previously attended the same or a similar conference or seminar, so as to carry out the Retirement Board's intent to distribute conference and seminar opportunities on a fair and equitable basis.
19. If more than two members of a Retirement Board will be attending a training together outside of a noticed public meeting, the Retirement Board Members may not engage in discussions regarding the business of the Retirement Board while at the training. However, attendance at educational conference seminars and social activities by more than two members of Retirement Board is not a violation of this provision.

20. Board Members will inform Retirement Board Staff of all pension and investment-related conferences attended. This information will be used for education tracking purposes only.
21. Requests for reimbursement of travel-related expenses are subject to Sacramento Regional Transit District's Reimbursement of Expense Policy and Procedures.
22. Upon returning from a conference, attendees will submit oral or written reports to Retirement Board Staff and fellow Retirement Board members on the content and quality of the conference or other training opportunity attended. Attendees will also provide a copy of any materials distributed at the conference.
23. Retirement Board Staff will retain and catalogue all relevant conference materials submitted by Retirement Board Members. If appropriate, copies of the materials will be distributed to other Retirement Board Members.

### **Reporting of Other Training Opportunities**

24. Retirement Board Staff will regularly notify Retirement Board Members of other educational opportunities, such as webinars and industry articles. These notifications will generally be via email.
25. Following participation in any other educational activity or training, Retirement Board Members will notify Retirement Board Staff of their activity for training tracking purposes.

### **Publication**

26. A copy of this policy will be provided to Retirement Board Members and other interested parties upon request.

### **POLICY REVIEW**

27. The Retirement Board will review this policy at least every three (3) years to ensure that it remains relevant and appropriate.

### **POLICY HISTORY**

28. The Retirement Board adopted the original policy on November 20, 2006, [and adopted a revised policy on June 14, 2017](#). The Retirement Board adopted this revised policy on ~~June 14, 2017~~ [December 12, 2018](#).

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
14	12/12/18	Retirement	Information	11/05/18

Subject: Investment Performance Review by Dimensional Fund Advisors (DFA) for the ATU, IBEW and Salaried Retirement Funds for the International Emerging Markets Asset Class for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## ISSUE

Investment Performance Review by Dimensional Fund Advisors (DFA) for the ATU, IBEW and Salaried Retirement Funds for the International Emerging Markets Asset Class for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## RECOMMENDED ACTION

Information Only

## FISCAL IMPACT

None.

## DISCUSSION

Retirement funds are invested consistent with the Statement of Investment Objectives and Policy Guidelines (Policy) adopted by each Retirement Board (Board). The Board shall meet at least every eighteen (18) months with each investment manager to review the performance of its investment, the adherence to the Policy, and any material changes to its organization. The Policy also establishes the Retirement Funds' asset allocation policy and the asset classes in which the Plans funds are invested. The asset classes established by the Policy are (1) Domestic Large Capitalization Equity, (2) Domestic Small Capitalization Equity, (3) International Large Capitalization Equity, (4) International Small Capitalization Equity, (5) International Emerging Markets, and (6) Domestic Fixed-Income.

DFA is the Retirement Boards' International Emerging Markets fund manager. DFA will be presenting performance results for the quarter ended September 30, 2018, shown in Attachment 1, and answering any questions.

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Approved:

Presented:

Final 12/03/18

VP of Finance/CFO

Treasury Controller

J:\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\FI IPs\12-12-18 Fund Manager Reveiw - DFA.docx

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# Sacramento Regional Transit District Pension Funds

December 12, 2018

Ted Simpson, CFA, Vice President

This information is provided for registered investment advisors and institutional investors and is not intended for public use.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Consider the investment objectives, risks, and charges and expenses of the Dimensional funds carefully before investing. For this and other information about the Dimensional funds, please read the prospectus carefully before investing. Prospectuses are available by calling Dimensional Fund Advisors collect at (512) 306-7400 or at [us.dimensionalfund.com/prospectus](http://us.dimensionalfund.com/prospectus).

Dimensional funds are distributed by DFA Securities LLC.

# Relationship Summary: Sacramento Regional Transit District

As of September 30, 2018

Inception Date: 5/17/2013	
Beginning Value	\$10,799,116
Net Investment Contributions	\$3,333,361
Reinvested Income	\$1,485,189
Change in Market Value	\$432,287
<b>Market Value (9/30/2018)</b>	<b>\$16,049,953</b>

Performance for the portfolio is reported net of all advisory fees and includes reinvestment of dividends and other earnings.

Performance data shown represents past performance and is no guarantee of future results. Current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain the most current month-end performance data, visit [us.dimensional.com](http://us.dimensional.com).

See "Appendix: Standardized Performance Data and Disclosures" to learn how to obtain complete information on performance, investment objectives, risks, advisory fees, and expenses of Dimensional's funds.

# Firm Update

As of September 30, 2018

## Organizational Updates

- More than 1,300 employees globally
- \$596 billion in assets under management

## Upcoming Events

- |              |               |                        |
|--------------|---------------|------------------------|
| Spring, 2019 | San Francisco | Institutional Luncheon |
| Summer, 2019 | Santa Monica  | Institutional Forum    |

## Recently Published



### The Impact of Implementing Profitability in Equity Strategies: A Four-Year Study

Integrating the profitability dimension into the structure of Dimensional equity strategies may increase expected return potential in a systematic, transparent, and reliable manner.



### Value and Profitability Premiums Across Sectors

There is ample evidence of positive value and profitability premiums within different markets and regions, but there has been less empirical research on the presence of these premiums within sectors.



### Have Investors Benefited from Momentum Strategies?

Most mutual funds focusing on momentum have not been able to capture the momentum premium after costs. We believe momentum signals should be used to inform buy and sell decisions.

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# Agenda

- Dimensional
- Investment Philosophy
- Portfolio Management and Trading
- Characteristics and Performance
- Summary
- Appendix



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# Dimensional

# Dimensional Fund Advisors

Putting financial science to work for clients

We use information in market prices throughout our investment process to build solutions that pursue higher expected returns.

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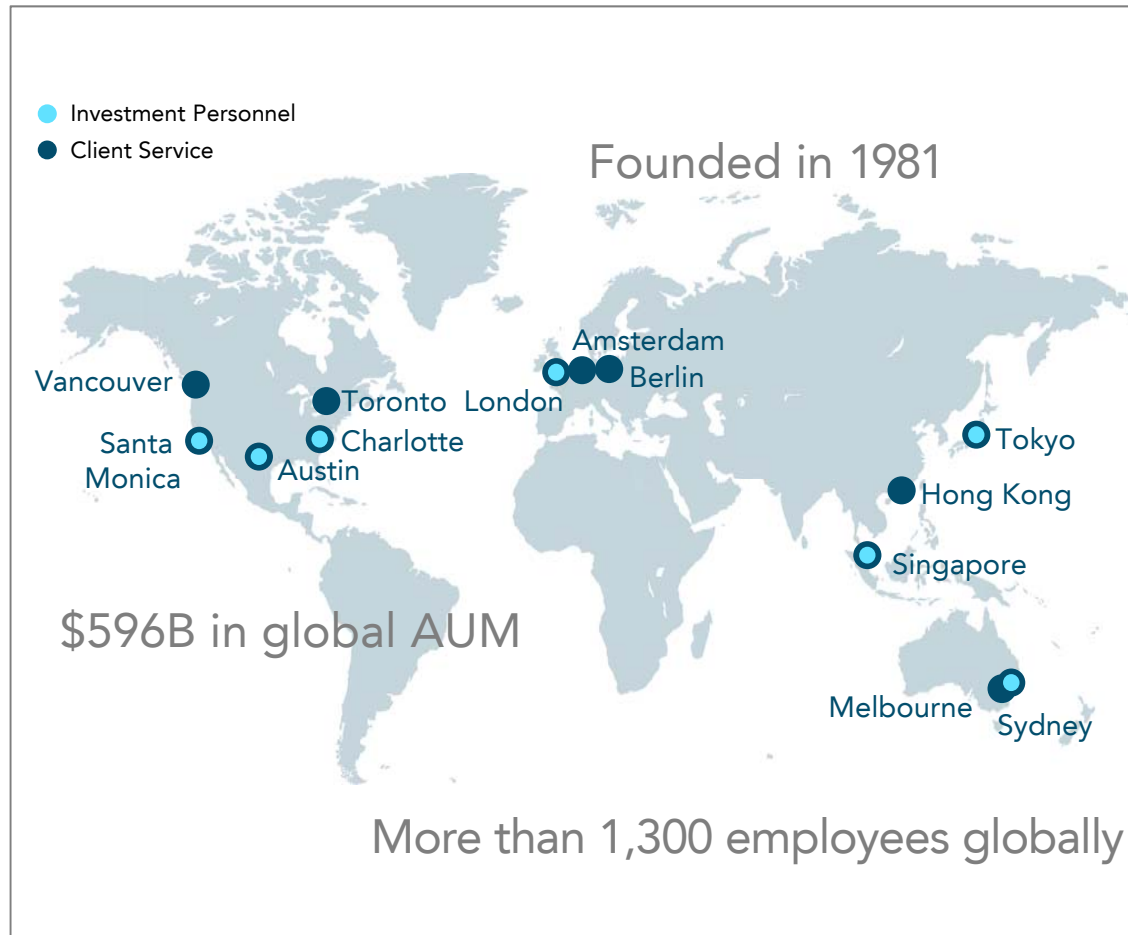
We add value by identifying relevant dimensions of expected returns and continually balancing the tradeoffs among competing premiums, diversification, and costs.

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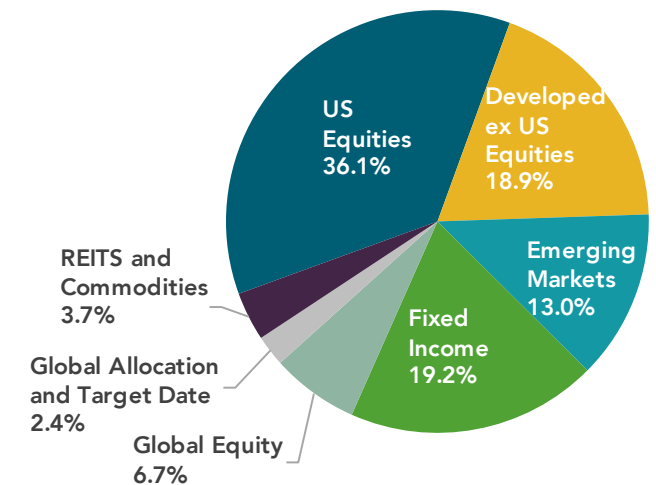
We work with clients to understand their long-term needs and to add to their success.

# About the Firm

Dimensional is a global investment firm that has been serving investors for more than 35 years



Dimensional offers investment solutions across asset classes, including global equities, fixed income, and REITs.



Dimensional Fund Advisors LP founded in 1981. Global AUM and number of employees as of September 30, 2018. Locations with offices operated by Dimensional. "Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., Dimensional Japan Ltd., and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services. All assets in US dollars. Numbers may not total 100% due to rounding.

# Leading Financial Economists and Researchers

## Academics Who Serve as Dimensional Directors<sup>1</sup>

<b>Eugene Fama<sup>2</sup>, PhD, Nobel laureate</b>	University of Chicago
<b>Kenneth French<sup>2</sup>, PhD</b>	Dartmouth College

## Academics Who Serve as Independent Directors on Dimensional's US Mutual Fund Board<sup>3</sup>

<b>George Constantinides, PhD</b>	University of Chicago
<b>Douglas Diamond, PhD</b>	University of Chicago
<b>Edward Lazear, PhD</b>	Stanford University
<b>Roger Ibbotson, PhD</b>	Yale University
<b>Myron Scholes, PhD, Nobel laureate</b>	Stanford University
<b>Abbie Smith, PhD</b>	University of Chicago

## Academics Providing Ongoing Consulting Services to Dimensional

<b>Robert Merton, PhD, Nobel laureate</b>	Massachusetts Institute of Technology
<b>Robert Novy-Marx, PhD</b>	University of Rochester
<b>Sunil Wahal, PhD</b>	Arizona State University

## Leaders of Dimensional's Internal Research Staff

**Gerard O'Reilly, PhD**  
Co-Chief Executive Officer,  
Chief Investment Officer, and  
Dimensional Director

**Marlena Lee, PhD**  
Co-Head of Research

**Savina Rizova, PhD**  
Co-Head of Research

**Stanley Black, PhD**  
Vice President

**Wes Crill, PhD**  
Vice President

**Wei Dai, PhD**  
Vice President

**James Davis, PhD**  
Vice President

**Dave Twardowski, PhD**  
Vice President

As of February 7, 2018.

1. "Dimensional Directors" refers to the Board of Directors of the general partner of Dimensional Fund Advisors LP.

2. Provide consulting services to Dimensional Fund Advisors LP.

3. "Dimensional's US Mutual Fund Board" refers to The DFA Investment Trust Company, DFA Investment Dimensions Group Inc., Dimensional Investment Group Inc. and Dimensional Emerging Markets Value Fund Inc.

"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., Dimensional Japan Ltd., and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

# Experienced Teams Help Ensure Consistency

High degree of practitioners' knowledge and experience across market cycles

## Investment Committee<sup>1</sup>

Average 22 Years of Industry Experience

**David Booth**, Founder and Executive Chairman

**David Butler**, Co-Chief Executive Officer, Head of Global Financial Advisor Services, and Dimensional Director

**Gerard O'Reilly**, Co-Chief Executive Officer, Chief Investment Officer, and Dimensional Director

**Joseph Chi**, Investment Committee Chairman and Co-Head of Portfolio Management

**Robert Deere**, Senior Investment Director

**Jed Fogdall**, Co-Head of Portfolio Management

**Joseph Kolerich**, Senior Portfolio Manager

**Mary Phillips**, Senior Portfolio Manager

**David Plecha**, Global Head of Fixed Income

**Savina Rizova**, Co-Head of Research

**Karen Umland**, Senior Portfolio Manager

**Ryan Wiley**, Co-Head of Global Equity Trading

## Portfolio Management

Average 13 Years of Industry Experience

### Austin

**Jed Fogdall**, Co-Head of Portfolio Management

#### Senior Portfolio Managers:

Arun Keswani, Joseph Kolerich, Joel Schneider, Lukas Smart

#### Portfolio Managers:

Ashish Bhagwanjee, William Collins-Dean, Gavin Crabb, Damian Dormer, Joseph Hohn, Alan Hutchison, Marc Corona Leblond, Brendan McAndrews, John Morrison, Pamela Noble, Andres Torres, Ethan Wren, Matthew Zenz

### Charlotte

#### Senior Portfolio Managers:

Marcus Axthelm, Mary Phillips

#### Portfolio Managers:

Horacio Carias, Travis Meldau

### Santa Monica

**Joseph Chi**, Co-Head of Portfolio Management

**Robert Deere**, Senior Investment Director

**David Plecha**, Global Head of Fixed Income

#### Senior Portfolio Managers:

Daniel Ong, Allen Pu, Grady Smith, Karen Umland

#### Portfolio Managers:

Patrick Brown, Mitchell Firestein, John Hertzler, David Shao, Brian Walsh

### London

**Nathan Lacaze**, Co-CEO, Dimensional Fund Advisors Ltd. and Head of EMEA Portfolio Management

#### Senior Portfolio Managers:

Paul Foley, Joel Kim

#### Portfolio Managers:

Kipp Cummins, Alexander Fridman, Krati Gupta, Althea Trevor, Adam Ward, Jim Whittington

### Sydney

**Bhanu Singh**, Head of Asia Pacific Portfolio Management and Director

**Robert Ness**, Senior Portfolio Manager

#### Portfolio Managers:

Murray Cockerell, Stephen Garth, Slava Platkov, Gillian Wilson, Craig Wright

### Tokyo

**Kotaro Hama**, Portfolio Manager

### Singapore

**Emily Cornell**, Portfolio Manager

## Trading

Average 13 Years of Industry Experience

### Austin

**Senior Traders:** Christian Gunther, David LaRusso, Christopher Rink, Scott Van Pelt

**Traders:** Joel Mitter, Robert Richardson, Elizabeth Van Pelt

### Charlotte

**Polly Weiss**, Senior Trader

### Santa Monica

**Ryan Wiley**, Co-Head of Global Equity Trading

**Le Tran**, Senior Trader

**Traders:** Claudette Higdon, Erhan Oktay

### London

**John Romiza**, Co-CEO, Dimensional Fund Advisors Ltd. and Co-Head of Global Equity Trading

**Senior Traders:** Mark Butterworth, William Letheren

**Traders:** Frances Ritter, Mathieu Roland, James Simpson, Archit Soni

### Sydney

**Jason Lapping**, Head of International Equity Trading

**Senior Traders:** David Vrolyk, Sam Willis

**Jian Du**, Trader

### Singapore

**Traders:** Jonathan Smith, Hayato Yonemori

As of October 9, 2018.

1. Dimensional Fund Advisors LP Investment Committee.

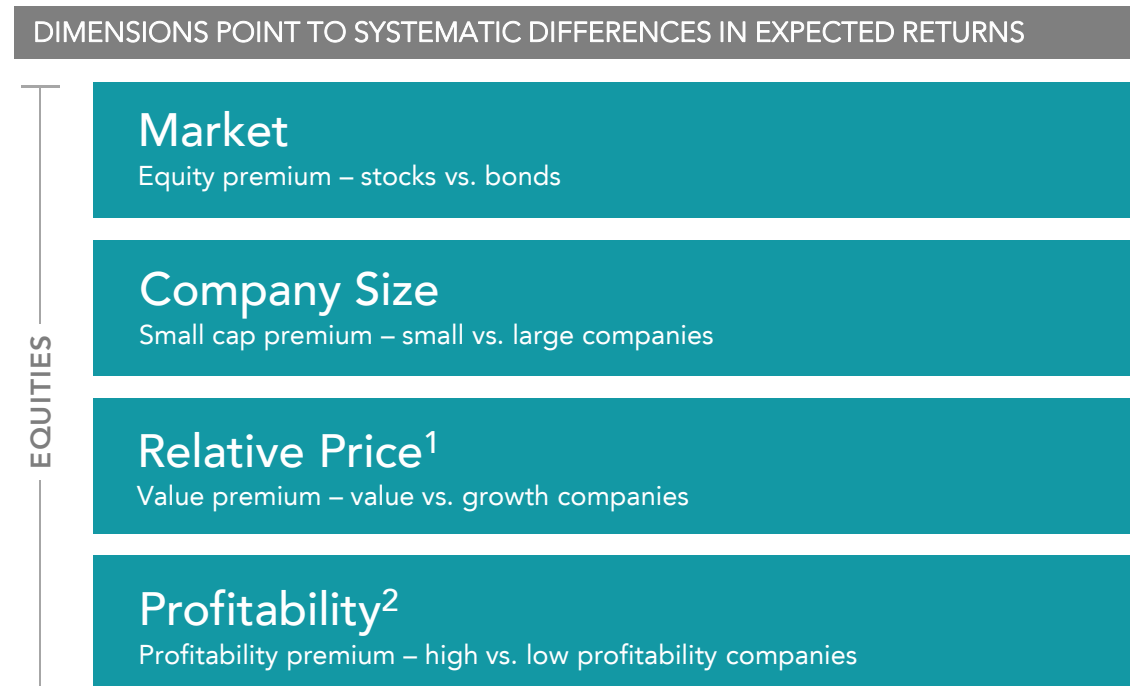
Locations with offices operated by Dimensional. "Dimensional" refers to the Dimensional entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., Dimensional Japan Ltd., and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

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# Investment Philosophy

# Dimensions of Expected Returns

Expected returns are driven by prices investors pay and cash flows they expect to receive



To be considered a dimension of expected return, a premium must be:

- Sensible
- Persistent
- Pervasive
- Robust
- Cost-effective

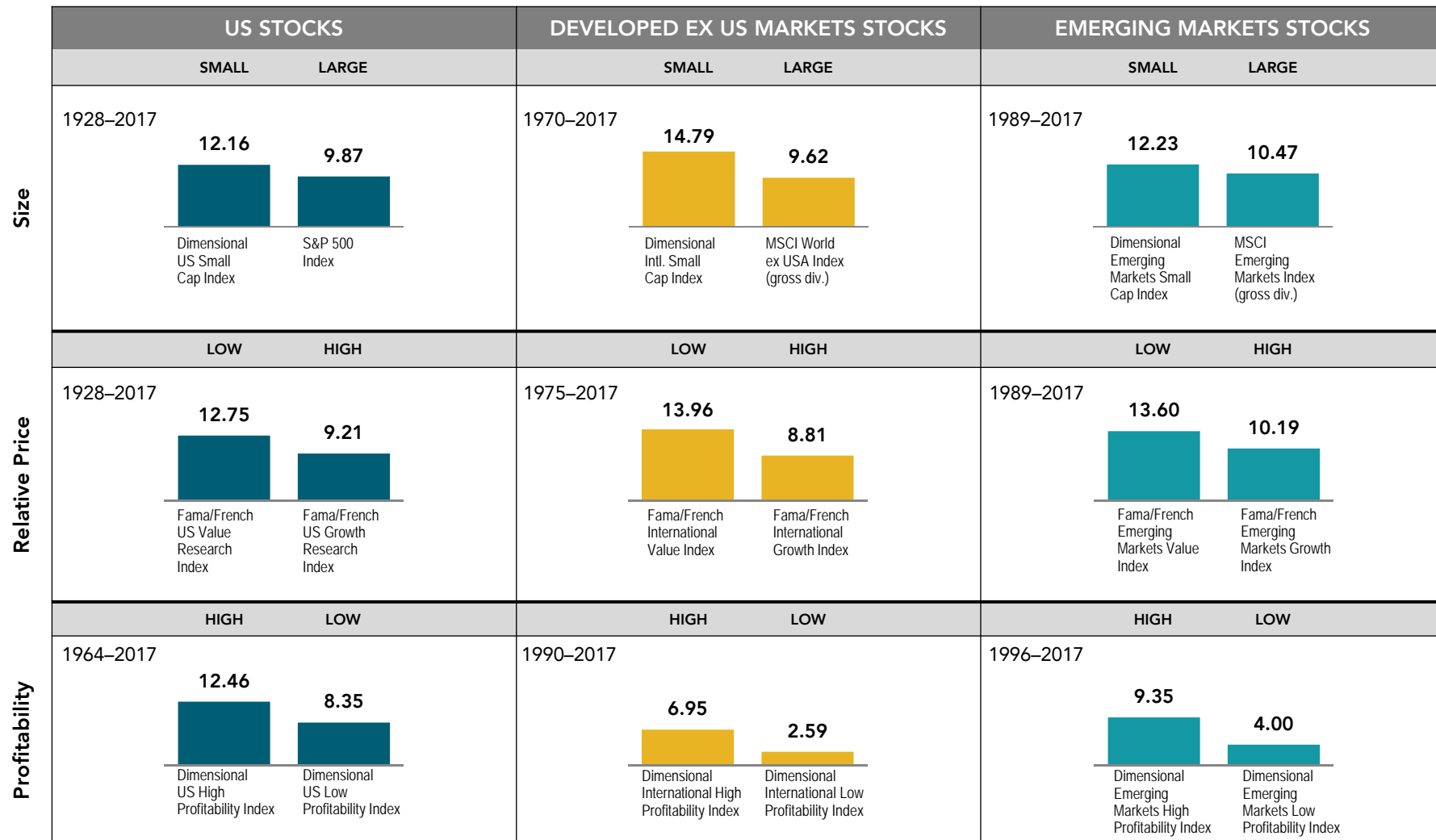
Diversification does not eliminate the risk of market loss.

1. Relative price as measured by the price-to-book ratio; value stocks are those with lower price-to-book ratios.

2. Profitability is a measure of current profitability, based on information from individual companies' income statements.

# Dimensions of Expected Returns

Illustrative index performance: Annualized compound returns (%) in US dollars



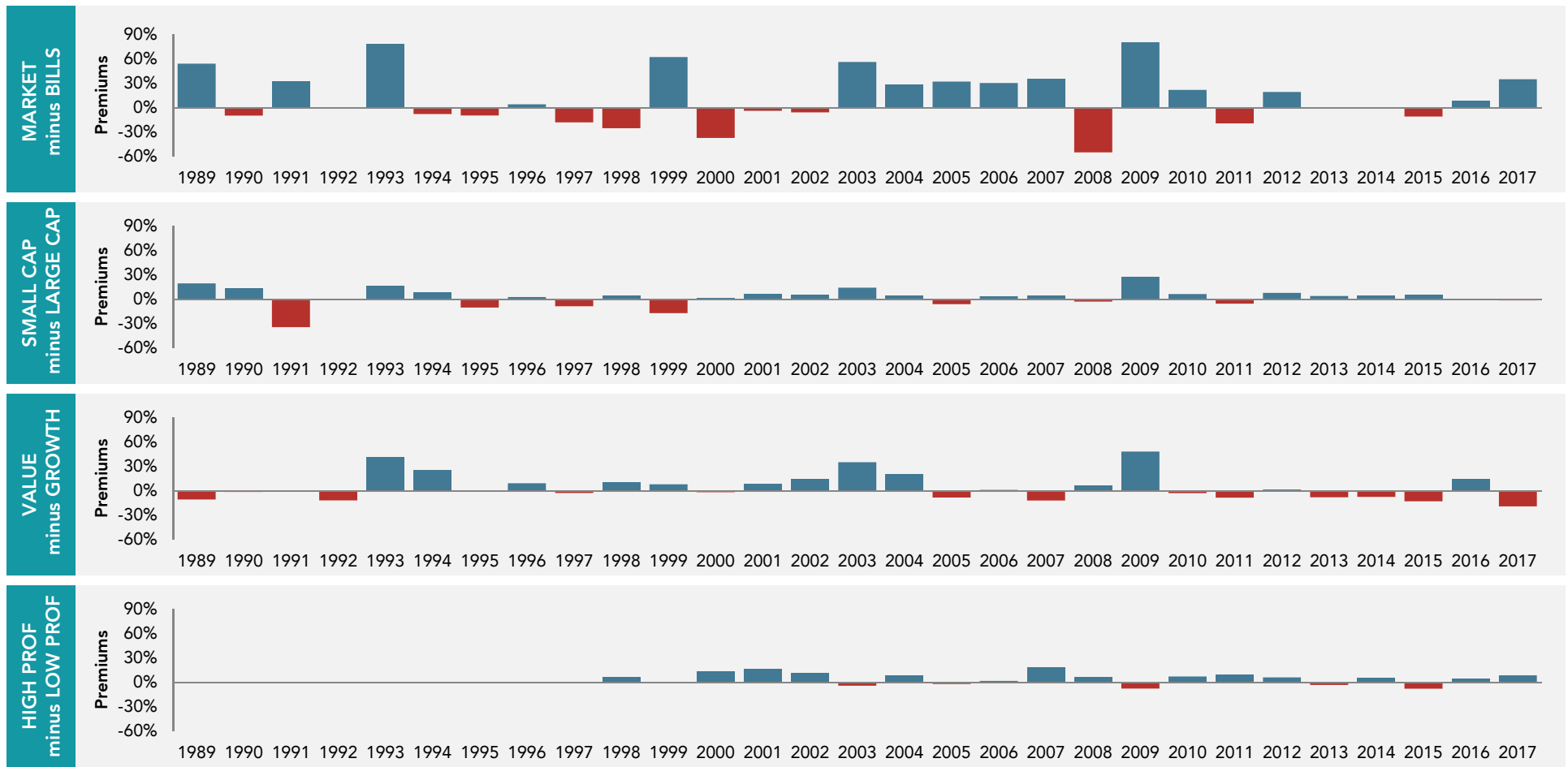
Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book.

Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. See "Index Descriptions" in the appendix for descriptions of Dimensional and Fama/French index data. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. MSCI data © MSCI 2018, all rights reserved.



# Yearly Observations of Premiums

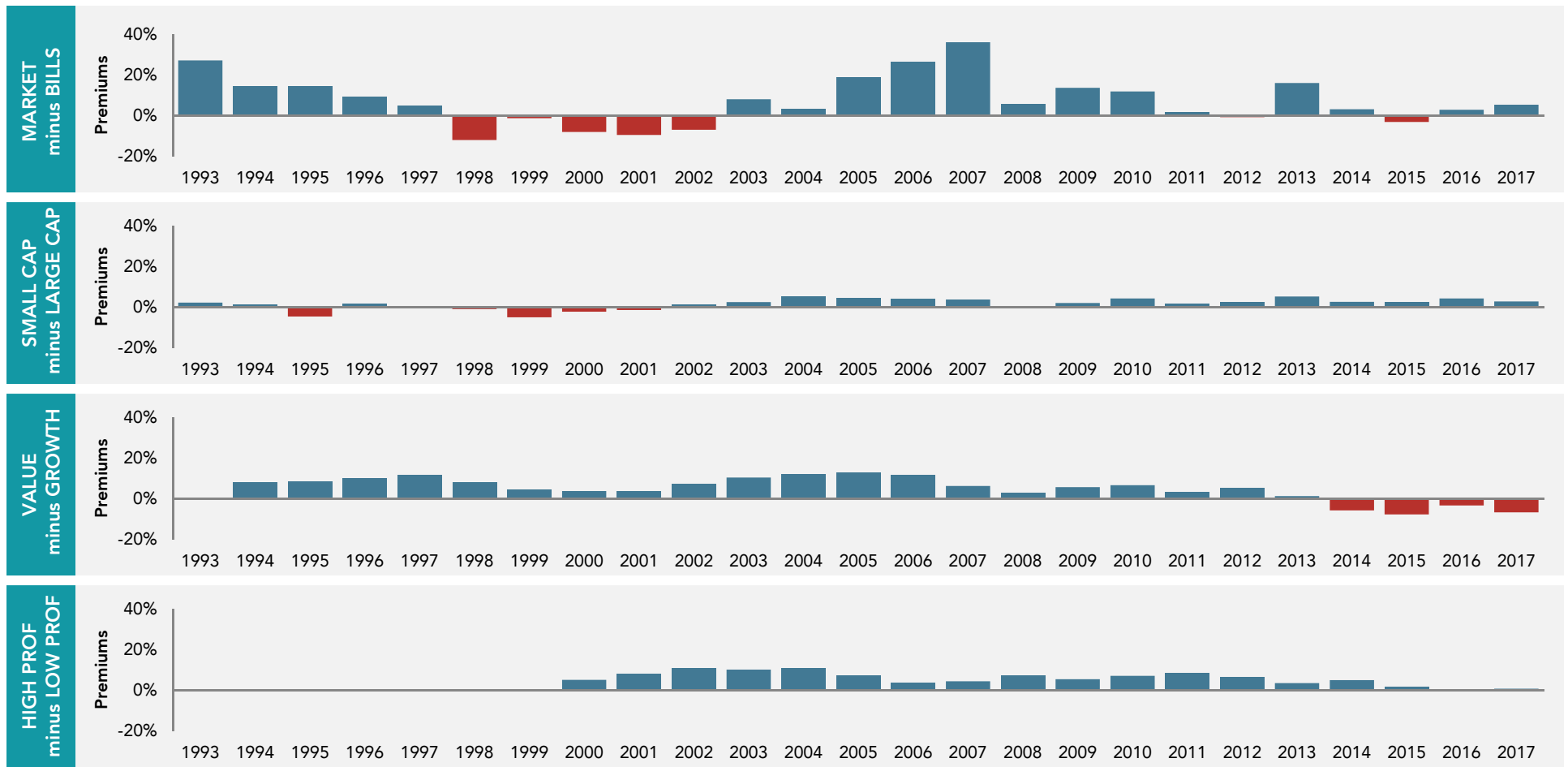
Equity, size, relative price, and profitability: Emerging Markets



Equity premium: Fama/French Emerging Markets Index minus one-month US Treasury Bills. Size premium: Dimensional Emerging Markets Small Cap Index minus MSCI Emerging Markets Index (gross dividends). Relative price premium: Fama/French Emerging Markets Value Index minus Fama/French Emerging Markets Growth Index. Profitability premium: Dimensional Emerging Markets High Profitability Index minus the Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. One-Month Treasury Bills is the 1A SBBI US 30 Day TBILL TR USD, provided by Ibbotson Associates via Morningstar Direct. Dimensional indices use Bloomberg data. Fama/French indices provided by Ken French. MSCI data copyright MSCI 2018, all rights reserved. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.**

# Historical Observations of Five-Year Premiums

Equity, size, relative price, and profitability: Emerging Markets



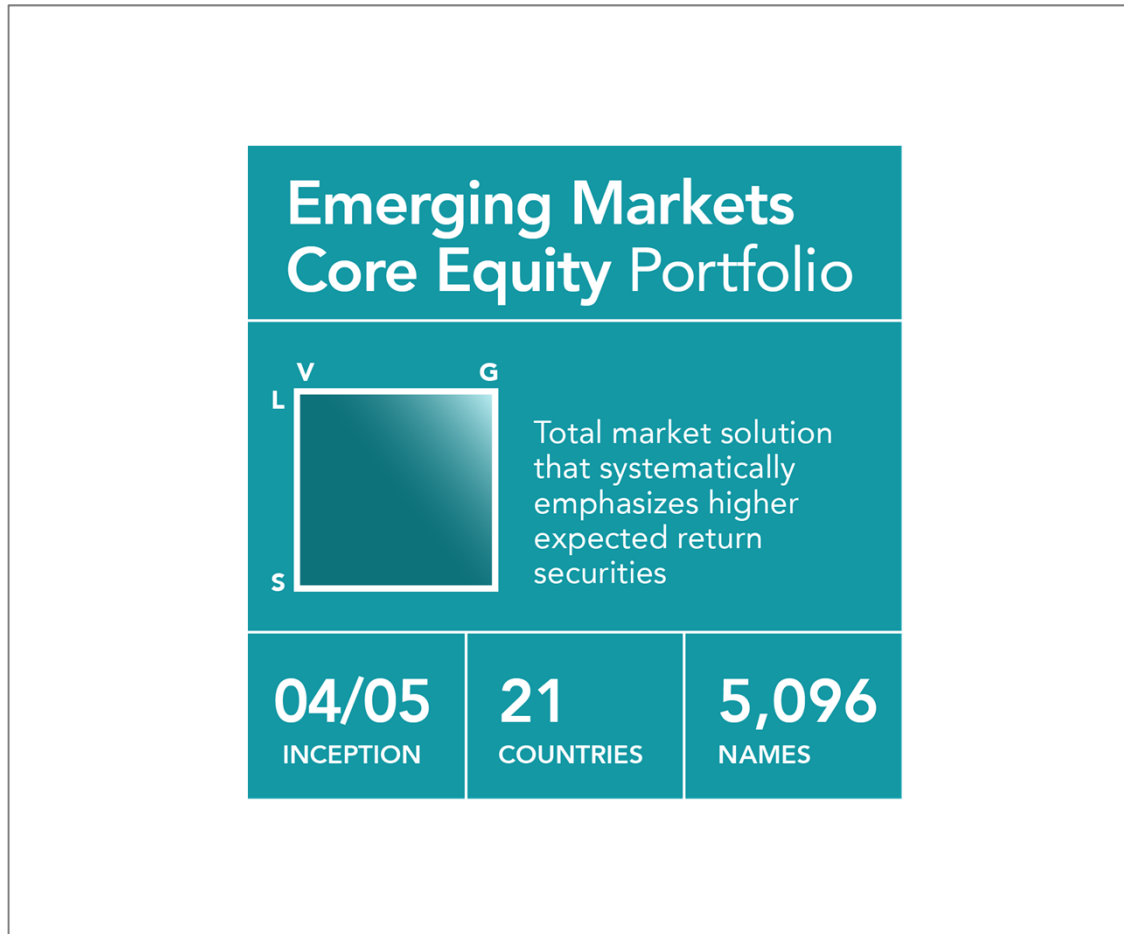
Five-year rolling equity premium is computed as the five-year annualized compound return on the Fama/French Emerging Markets Index minus the five-year annualized compound return of one-month US Treasury Bills. Five-year rolling size premium is computed as the five-year annualized compound return on the Dimensional Emerging Markets Small Cap Index minus the five-year annualized compound return on the MSCI Emerging Markets Index (gross dividends). Five-year rolling relative price premium is computed as the five-year annualized compound return on the Fama/French Emerging Markets Value Index minus the five-year annualized compound return on the Fama/French Emerging Markets Growth Index. The five-year rolling profitability premium is computed as the five-year annualized compound return on the Dimensional Emerging Markets High Profitability Index minus the five-year annualized compound return on the Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. One-Month Treasury Bills is the IA SBBI US 30 Day TBILL TR USD, provided by Ibbotson Associates via Morningstar Direct. Dimensional indices use Bloomberg data. Fama/French indices provided by Ken French. MSCI data copyright MSCI 2018, all rights reserved. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.**

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# Portfolio Management and Trading

# Emerging Markets Core Equity Portfolio

Using an integrated approach to add value across all aspects of the investment process



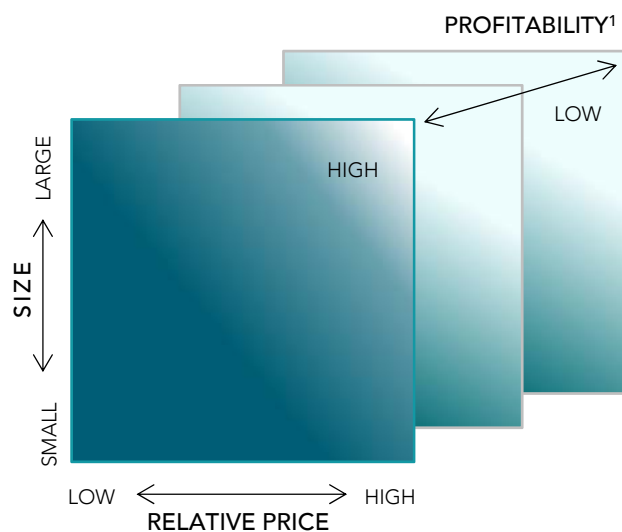
- Structured based on systematic expected premiums:
  - Market
  - Company size
  - Relative price (value)
  - Profitability
- Offers broad sector and security diversification
- Balances competing premiums and manages implementation costs by using a disciplined and patient trading strategy

Number of names shown are as of September 30, 2018. Holdings are subject to change.

Number of countries shown include approved markets for investment as of the most recent published prospectus, February 28, 2018. Additional countries may be designated as approved markets for future investment.

# Portfolio Construction: Security Selection and Weighting

## Emerging Markets Core Equity Portfolio



- A total market solution focused on the dimensions of expected returns in a cost-effective way
- Increased emphasis on higher expected return securities:
  - Lower relative price
  - Higher profitability
  - Lower market cap

As of 9/30/2018	Weighted Average Market Cap (millions)	Aggregate Price-to-Book	Weighted Average Profitability
Emerging Markets Core Equity Portfolio	\$47,311	1.49	0.27
MSCI Emerging Markets Index	\$88,632	1.65	0.26

1. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Holdings are subject to change. MSCI data copyright MSCI 2018, all rights reserved.

# Efficient Portfolio Engineering

Creating a core equity portfolio as of September 30, 2018

## EMERGING MARKETS CORE EQUITY PORTFOLIO vs. MSCI EMERGING MARKETS IMI WEIGHTS

	VALUE	NEUTRAL	GROWTH	TOTAL
LARGE CAP	<b>17%</b> 0.19	<b>24%</b> 0.28	<b>14%</b> 0.40	<b>55%</b> 0.35
	<b>22%</b> 0.17	<b>27%</b> 0.25	<b>24%</b> 0.35	
MID CAP	<b>6%</b> 0.18	<b>8%</b> 0.29	<b>5%</b> 0.41	<b>18%</b> 0.37
	<b>4%</b> 0.16	<b>6%</b> 0.26	<b>4%</b> 0.37	
SMALL CAP	<b>13%</b> 0.15	<b>9%</b> 0.25	<b>5%</b> 0.37	<b>26%</b> 0.36
	<b>5%</b> 0.16	<b>5%</b> 0.21	<b>3%</b> 0.36	
<b>TOTAL</b>	<b>36%</b> 0.31	<b>41%</b> 0.38	<b>24%</b> 0.31	<b>100%</b> 1.00

- Most indices are market-cap weighted.
- The core equity portfolio is designed to put greater emphasis on securities with higher expected returns: small cap, lower relative price, and higher profitability.

1. Profitability ("PROF") is measured as operating income before depreciation and amortization minus interest expense scaled by book. Numbers may not total 100% due to rounding. In this analysis, REITs and utilities are excluded. Large Cap is defined as approximately the largest 70% of market capitalization in each country or region; Mid Cap is approximately the next 15%; and Small Cap is approximately the smallest 15%. Growth is defined as approximately the highest 30% of securities based on price-to-book in each country or region; Neutral is approximately the next 40%; and Value is approximately the lowest 30%. Weights are as of quarter-end. MSCI data copyright MSCI 2018, all rights reserved. The prospectus benchmark for the Emerging Markets Core Equity Portfolio is the MSCI Emerging Markets Index (net div.).

# Refining the Universe

## Considerations and potential exclusions

### Structural

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- REITs<sup>1</sup>
- Highly regulated utilities<sup>1</sup>

### Event Driven

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- Merger or target of acquisition
- Upcoming announcements
- Share classes with foreign restrictions and with significant premiums
- Recent IPO
- Bankruptcy
- Extraordinary events

### Ongoing

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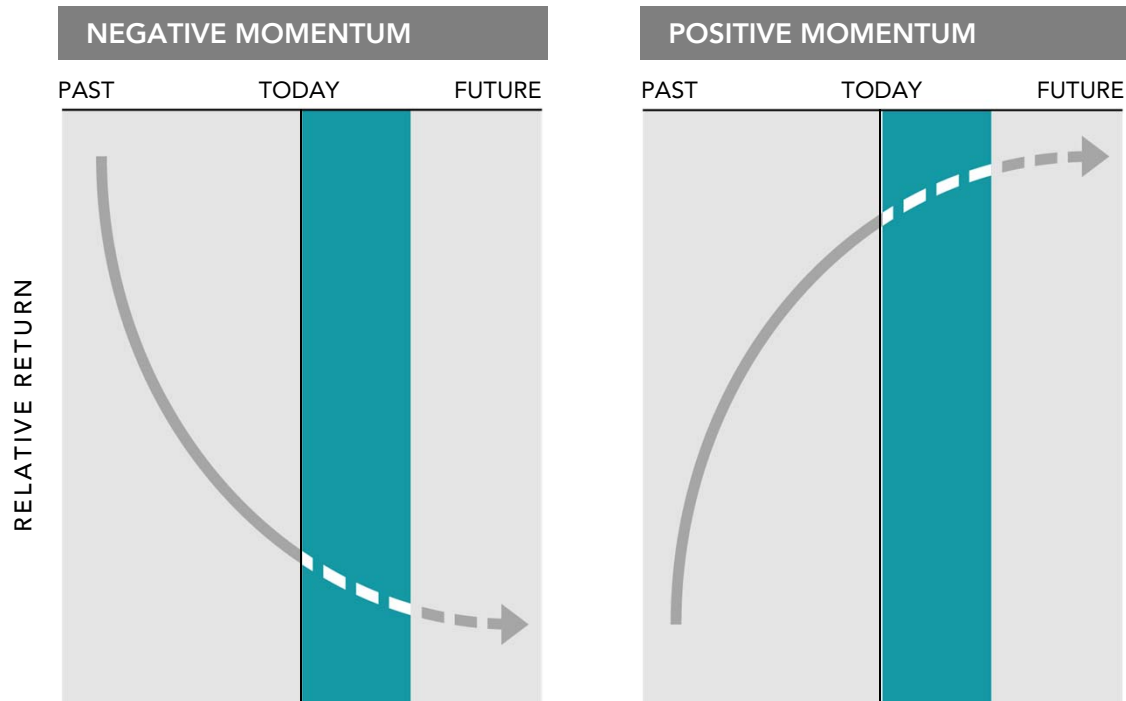
- Listing requirements
- Limited operating history
- Insufficient data
- Insufficient float or liquidity

Considerations and potential exclusions apply to securities Dimensional determines to fall within these categories at the time of potential purchase. This is not a complete list of all possible considerations and potential exclusions and is subject to change in all respects.

1. Not applicable to all strategies; also may not apply to certain companies organized as REITs.

# Managing Momentum

We incorporate momentum when making buy and sell decisions



**Delay buys** of securities otherwise eligible for purchase.

**Delay sells** of securities otherwise eligible for sale.

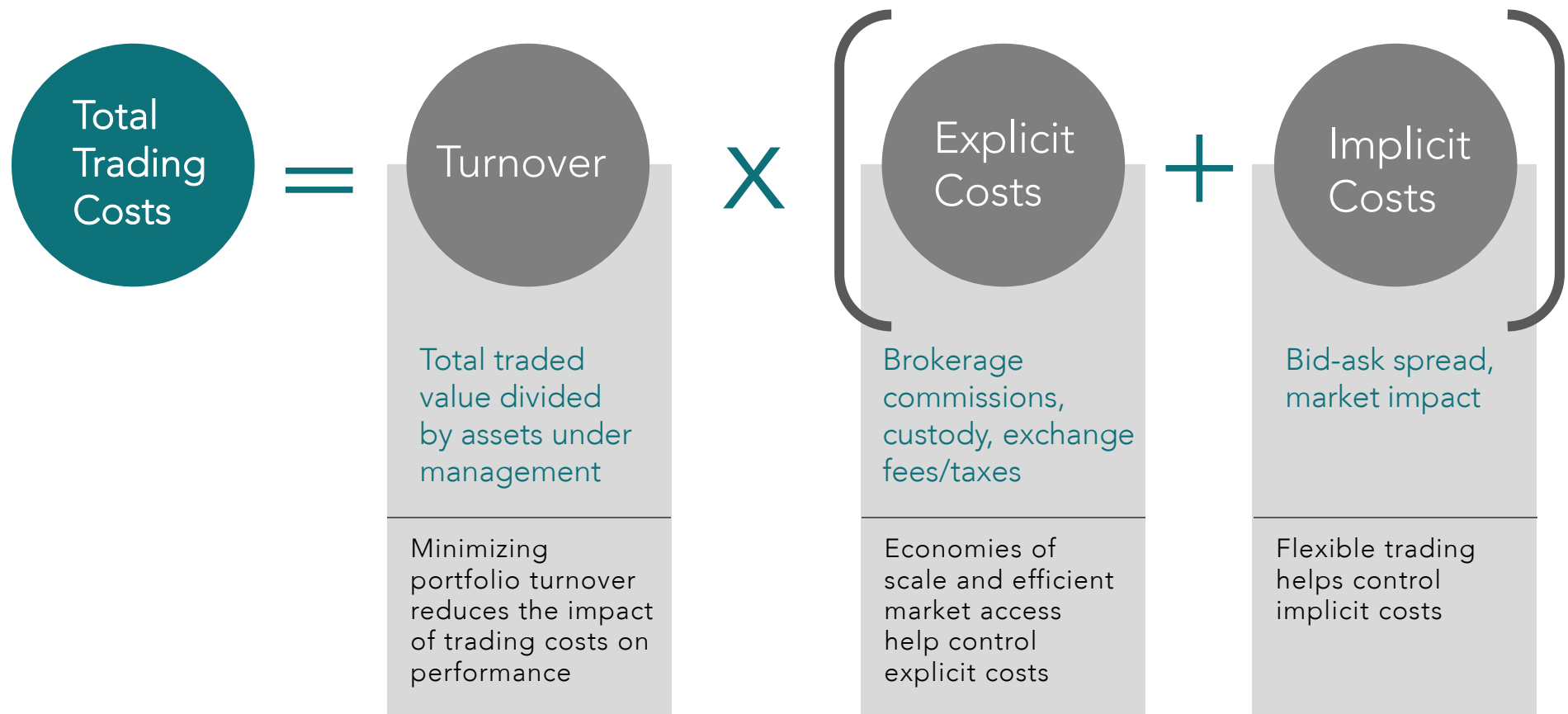
Stock returns may exhibit momentum:

- Stocks with large relative underperformance tend to have negative excess returns in the next period.
- Stocks with large relative outperformance tend to have positive excess returns in the next period.



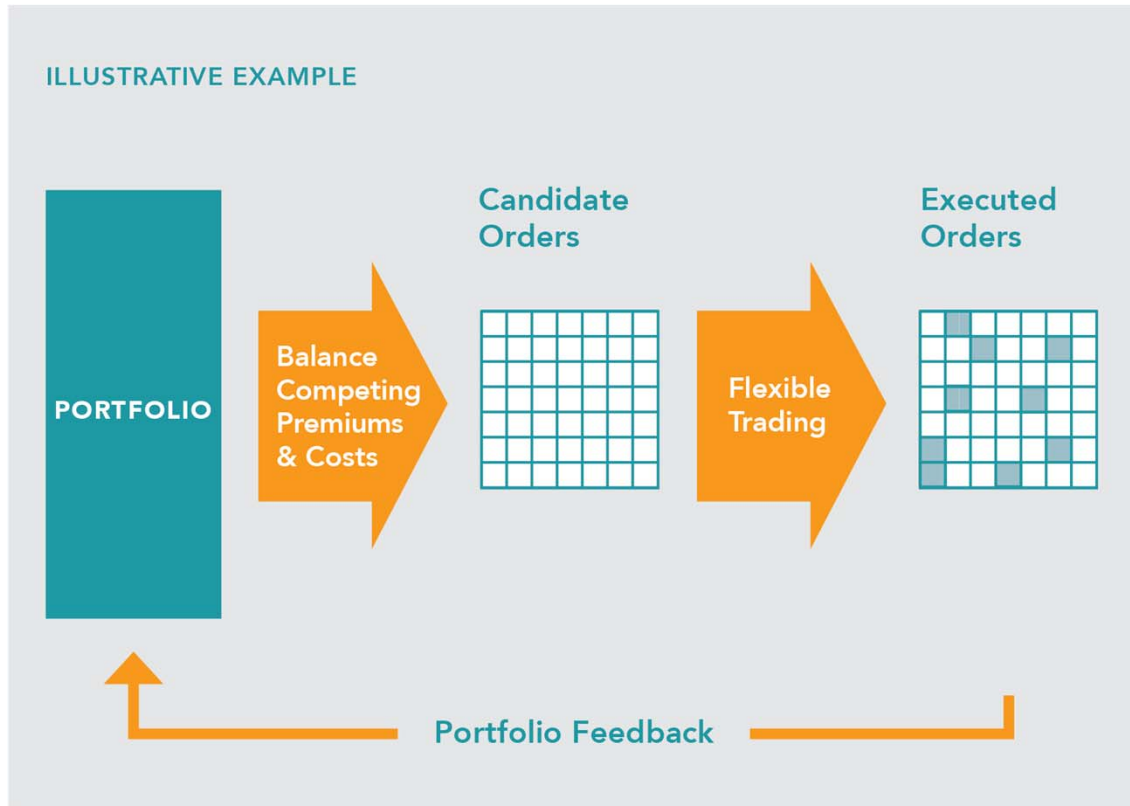
# Trading Costs Matter

Dimensional's flexible approach helps reduce the total costs of trading



# Integrated Portfolio Implementation

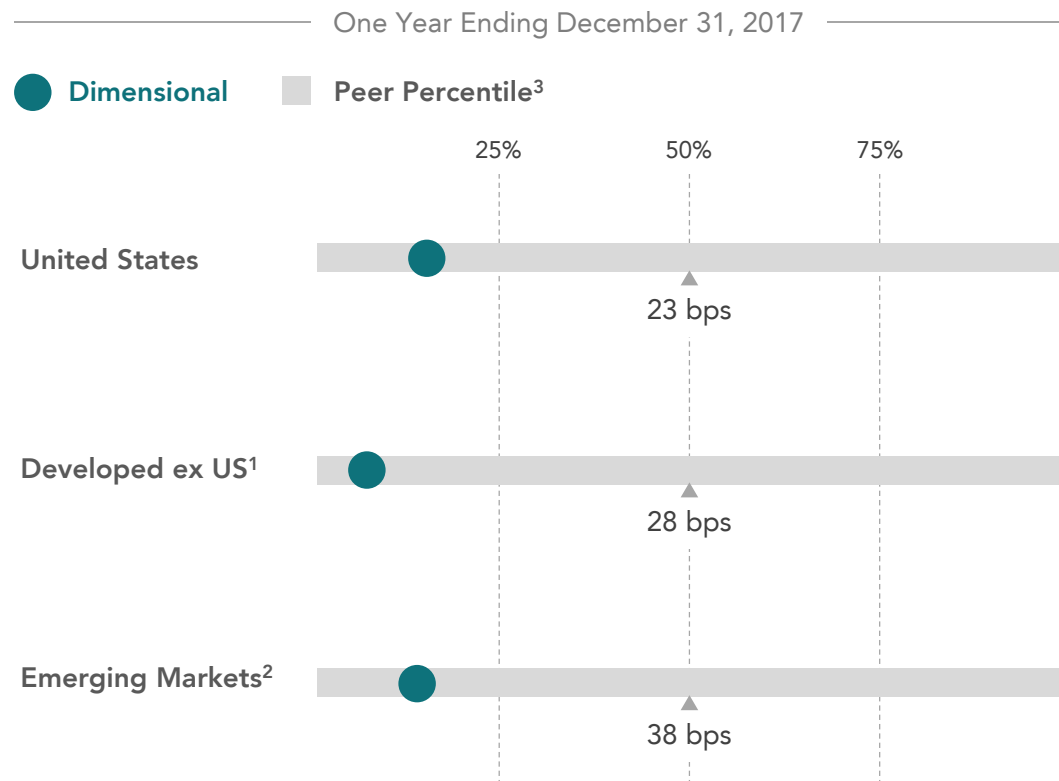
Efficiently balancing expected premiums with the costs of turnover on a daily basis



- We continuously evaluate the portfolio:
  - Buy/sell decisions consider expected daily premiums vs. transactions costs.
  - Spread trading over time to minimize market impact.
- Our process is built to focus on higher expected returns every day while considering costs.

# Dimensional Implicit Costs Relative to Peers

ITG Post-Trade Analytics™ – Peer Trade Cost Analysis



- Trading costs negatively impact returns
- Lower implicit costs contribute to lower total trading costs
- Dimensional uses both third party and internally developed benchmarks to evaluate the implicit costs of trading.

Past performance is not a guarantee of future results. Date range reflects most recent data available.

1. MSCI Developed ex US.

2. MSCI Emerging.

3. Ranking provided by ITG. Ranking from 1-100% where 1 is lowest implicit cost and 100 is highest implicit cost.

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# Characteristics and Performance

# Characteristics

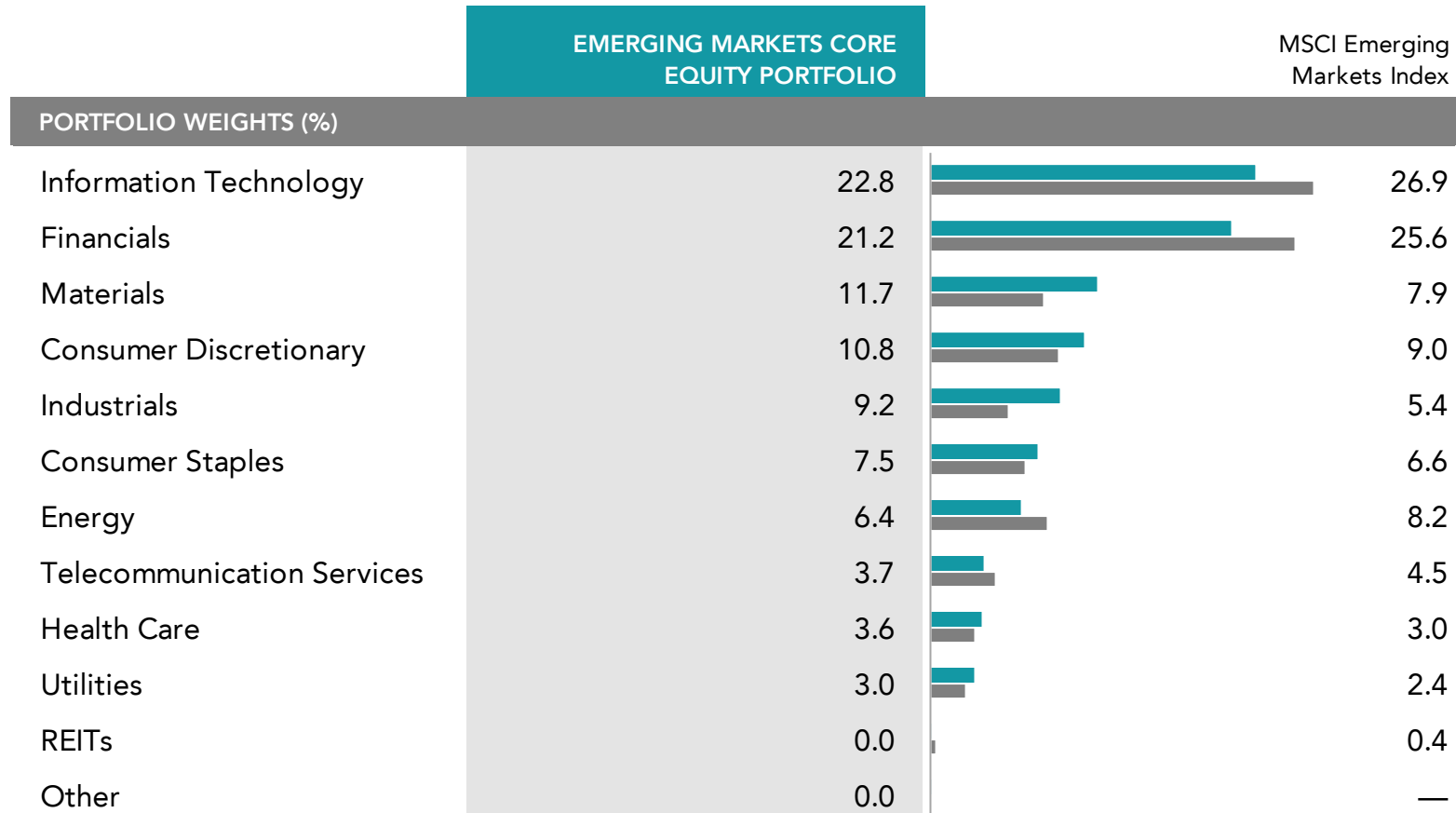
As of September 30, 2018

	EMERGING MARKETS CORE EQUITY PORTFOLIO	MSCI Emerging Markets Index
<b>MARKET CHARACTERISTICS</b>		
Total Value of Eligible Universe (millions)	\$5,344,530	\$5,179,431
Number of Holdings	5,096	1,151
<b>SIZE CHARACTERISTICS</b>		
Wtd. Average Market Cap (millions)	\$47,311	\$88,632
Median Market Cap (millions)	\$397	\$6,090
<b>VALUATION CHARACTERISTICS</b>		
Aggregate Price-to-Book	1.49	1.65
Wtd. Average Dividend-to-Price	2.61%	2.50%
<b>PROFITABILITY CHARACTERISTICS</b>		
Wtd. Average Profitability <sup>1</sup>	0.27	0.26

1. Operating income before depreciation and amortization minus interest expense scaled by book. Holdings are subject to change. MSCI data copyright MSCI 2018, all rights reserved.

# Sector Allocations

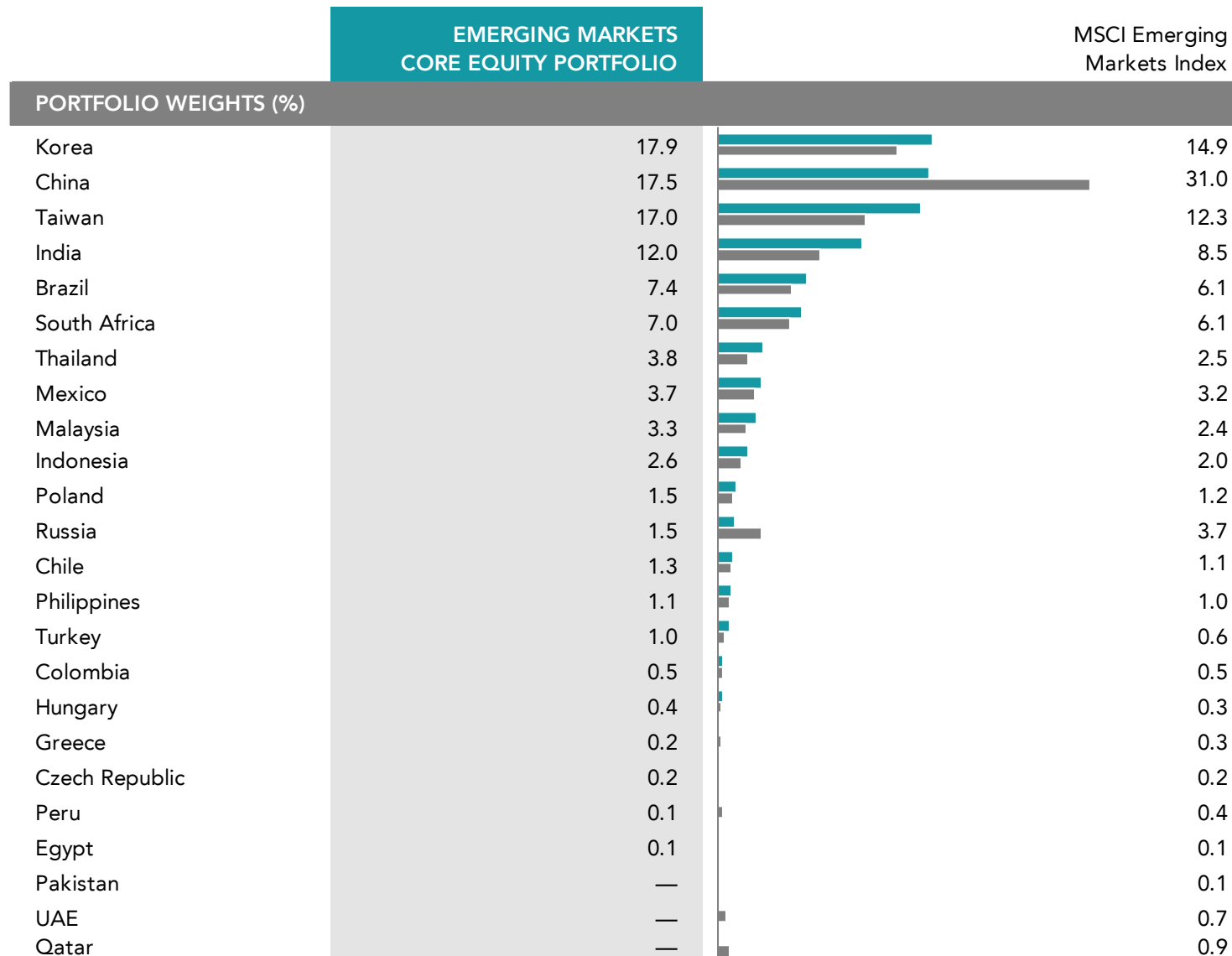
As of September 30, 2018



Numbers may not total 100% due to rounding. MSCI data copyright MSCI 2018, all rights reserved. Real Estate Investment Trusts (REITs) are shown as a separate category to illustrate their exclusion from certain funds. REITs are classified according to GICS Industry code. GICS was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices LLC, a division of S&P Global.

# Country Allocations

As of September 30, 2018



Holdings are subject to change. Numbers may not total 100% due to rounding and/or de minimis country exclusions. MSCI data copyright MSCI 2018, all rights reserved. Does not include de minimis country exposure that may occur due to corporate actions or similar events.

# Emerging Markets Environment

MSCI Emerging Markets IMI (net dividends)

## YEAR TO DATE AS OF SEPTEMBER 30, 2018

	Value	Neutral	Growth
Large	-2.31%	-8.97%	-9.05%
Mid	-12.47%	-8.16%	-6.42%
Small	-13.49%	-10.71%	-15.45%

## 1 YEAR AS OF SEPTEMBER 30, 2018

	Value	Neutral	Growth
Large	4.81%	-3.34%	-0.98%
Mid	-4.91%	-0.80%	1.87%
Small	-8.37%	-4.17%	-3.34%

## CUMULATIVE RETURNS SINCE ACCOUNT 1ST FULL MONTH: JUNE 1, 2013—SEPTEMBER 30, 2018

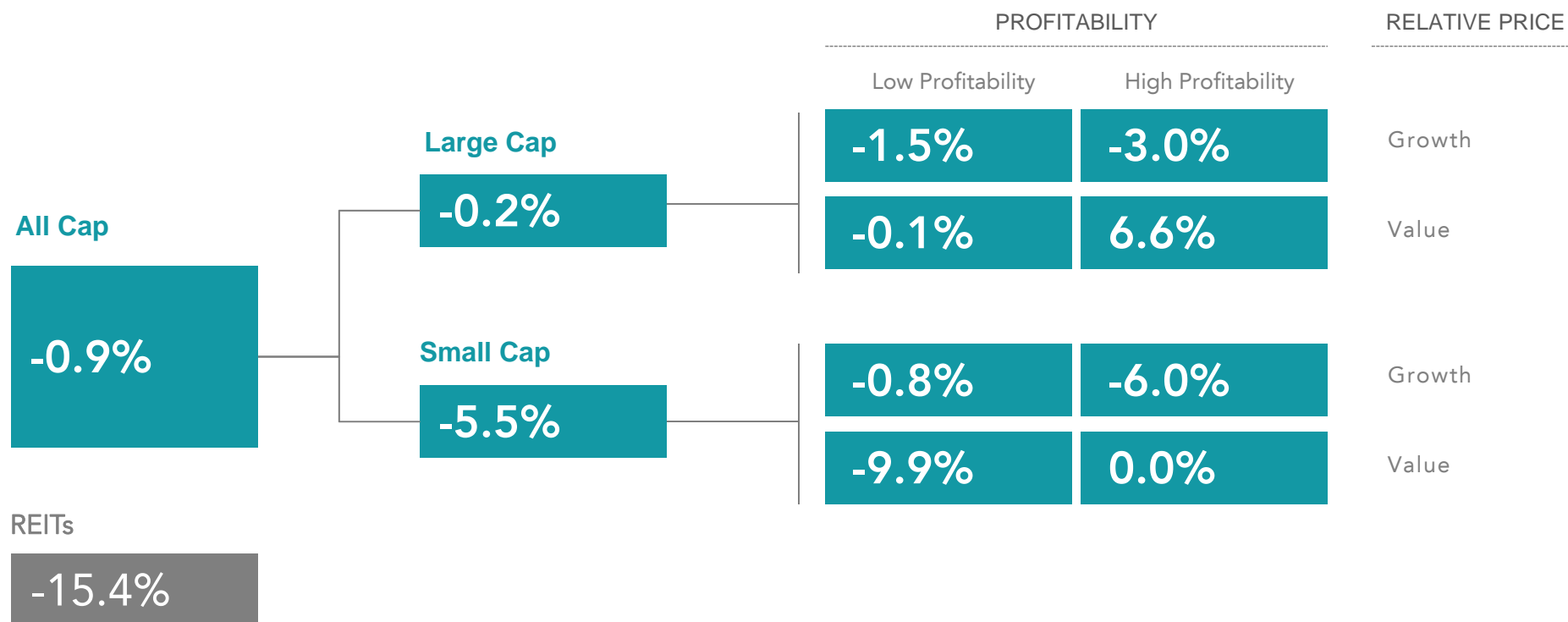
	Value	Neutral	Growth
Large	15.86%	8.62%	45.16%
Mid	6.16%	8.86%	15.89%
Small	13.07%	6.90%	4.43%

Companies are classified as small, mid, and large by computing breakpoints based on total market capitalization in each country or region. Within the US, large is defined as the largest 70% of market cap, mid is the next 20%, and small is the smallest 10%. Within the non-US developed markets, large is the largest 70% of market cap, mid is the next 17.5%, and small is the smallest 12.5%. Within emerging markets, large is the largest 70% of market cap, mid is the next 15%, and small is the smallest 15%. Designations between value, neutral, and growth are constructed in each country or region based on price to book ratios. Value is defined as the 30% of market cap with the lowest price to book ratios, neutral is the next 40%, and growth is the highest 30%. Return is the compounded monthly group return for the specified time periods. MSCI data copyright MSCI 2018, all rights reserved. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.



# Emerging Markets Equity Market Overview

Returns (%), 1 Year as of September 30, 2018



All returns are computed from index published security weights of the MSCI Emerging Markets IMI Index, Dimensional computed security returns, and Dimensional classification of securities based on size, value, and profitability parameters. Additional information available upon request. All returns are in USD. Large Cap is defined as approximately the largest 85% of market capitalization in each country or region; Small Cap is approximately the smallest 15%. Relative price and profitability returns are calculated within the relevant size categories with GICS industry REITs excluded. Designations between value and growth are based on price-to-book ratios. Value is defined as the 50% of market cap with the lowest price-to-book ratios by size category and growth is the highest 50%. High profitability is defined as the 50% of market cap with the highest profitability by size category and low profitability is the lowest 50%. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Stocks without size, relative price, or profitability metrics are excluded from the analysis. Countries not in the Dimensional investable universe are excluded from the analysis. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.** MSCI is the source and owner of the trademarks, service marks, and copyrights related to the MSCI Indexes.

# Performance

As of September 30, 2018

Annualized Returns <sup>1</sup> (%)	3rd Quarter 2018	Year to Date	1 Year	3 Years	5 Years	10 Years	Since 6/13 Account 1st Full Month	Since 5/05 Portfolio 1st Full Month
<b>EMERGING MARKETS CORE EQUITY PORTFOLIO</b>	-1.21	-9.46	-2.48	11.50	3.57	6.17	2.99	8.04
MSCI Emerging Markets Index (net dividends)	-1.09	-7.68	-0.81	12.36	3.61	5.40	3.20	7.74

Calendar Year Returns (%)	<b>EMERGING MARKETS CORE EQUITY PORTFOLIO</b>	MSCI Emerging Markets Index (net dividends)	Account Value
2008	-50.66	-53.33	<b>SACRAMENTO REGIONAL TRANSIT DISTRICT PENSION TRUST FUNDS</b> \$16,049,952
2009	83.58	78.51	
2010	23.62	18.88	
2011	-20.65	-18.42	
2012	20.49	18.22	
2013	-2.64	-2.60	
2014	-0.91	-2.19	
2015	-14.86	-14.92	
2016	12.35	11.19	
2017	36.55	37.28	

Performance for the portfolio is reported net of all advisory fees and includes reinvestment of dividends and other earnings. Performance data shown represents past performance and is no guarantee of future results. Current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain the most current month-end performance data, visit [us.dimensional.com](http://us.dimensional.com).

1. Returns for periods shorter than one year are not annualized.

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# Summary

# Dimensional Fund Advisors

A global investment firm with a research-based, transparent, and process-driven approach

An investment philosophy supported by rigorous theoretical and empirical research

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A dynamic investment process informed by more than 35 years of experience managing tradeoffs that matter for performance

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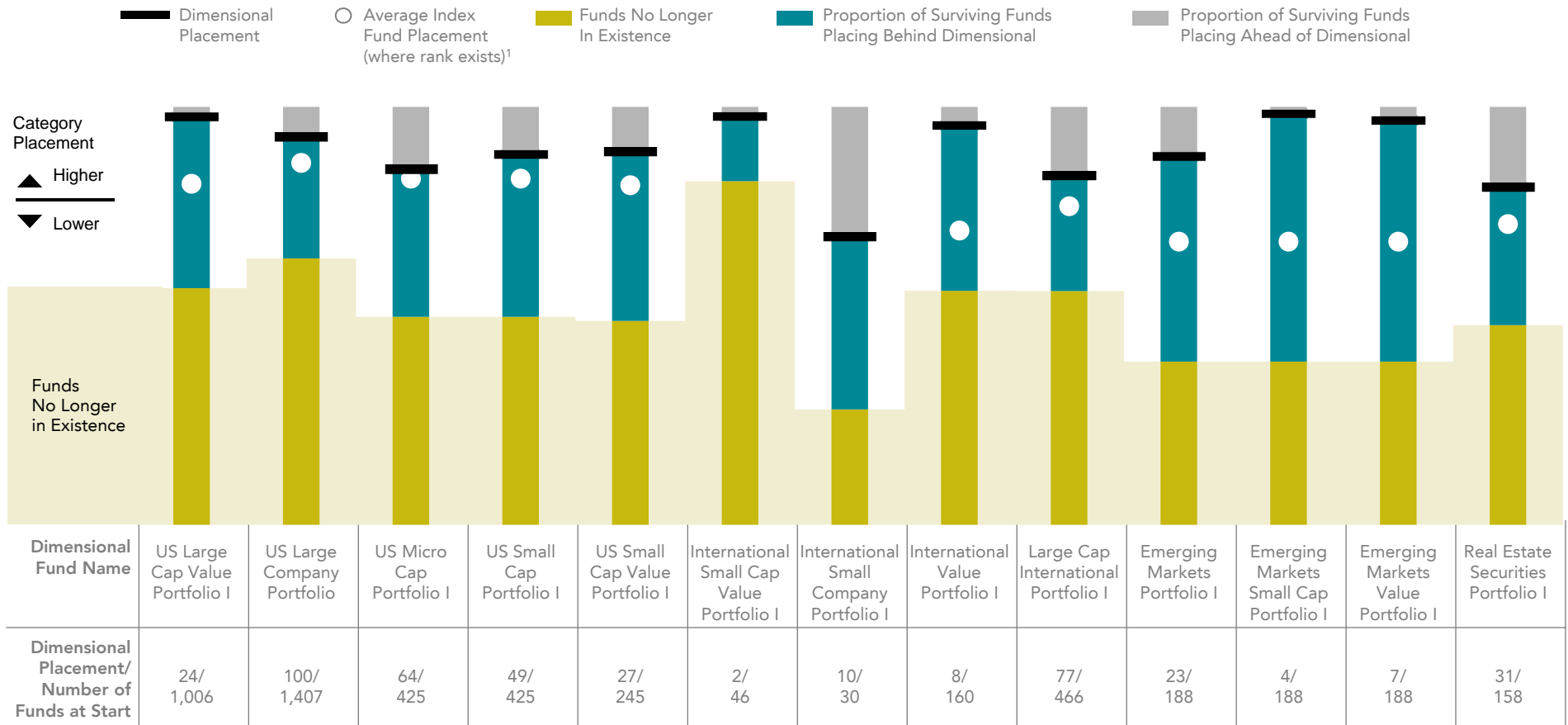
Investment solutions that target dimensions of expected returns

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A firmwide commitment to our clients

# Flagship Equity Funds

Relative 15-year performance as of September 30, 2018



1. Average Index Fund Placement is provided where index fund(s) with a 15-year Morningstar Total Return Absolute Rank exist in the category as of September 30, 2018. Dimensional placement is the Morningstar 15-Year Total Return Absolute Category Rank sourced from Morningstar. Number of funds starting the period is the number of share classes, within the respective Morningstar Category, with return histories as of the start of the 15-year period ending in September 30, 2018. The Morningstar category data is provided at the individual fund share class level. Multiple share classes of a fund typically have a common portfolio but impose different expense structures. Proportion of Surviving Funds Placing Ahead (Behind) of Dimensional is the proportion of ranked funds with a higher (lower) Morningstar 15-Year Total Return Absolute Category Rank than the corresponding Dimensional fund. The Average Index Fund Placement is the average, as determined by Dimensional, of the Morningstar 15-Year Total Return Absolute Category Rank for index funds within the respective Morningstar category as of September 30, 2018. All funds are US-domiciled. Funds may have experienced negative performance over the time period. Past performance is no guarantee of future results. Visit [us.dimensional.com](http://us.dimensional.com) for standardized performance information for Dimensional's funds. See "Relative Performance for Standardized Periods" in the appendix for further information.

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# Appendix

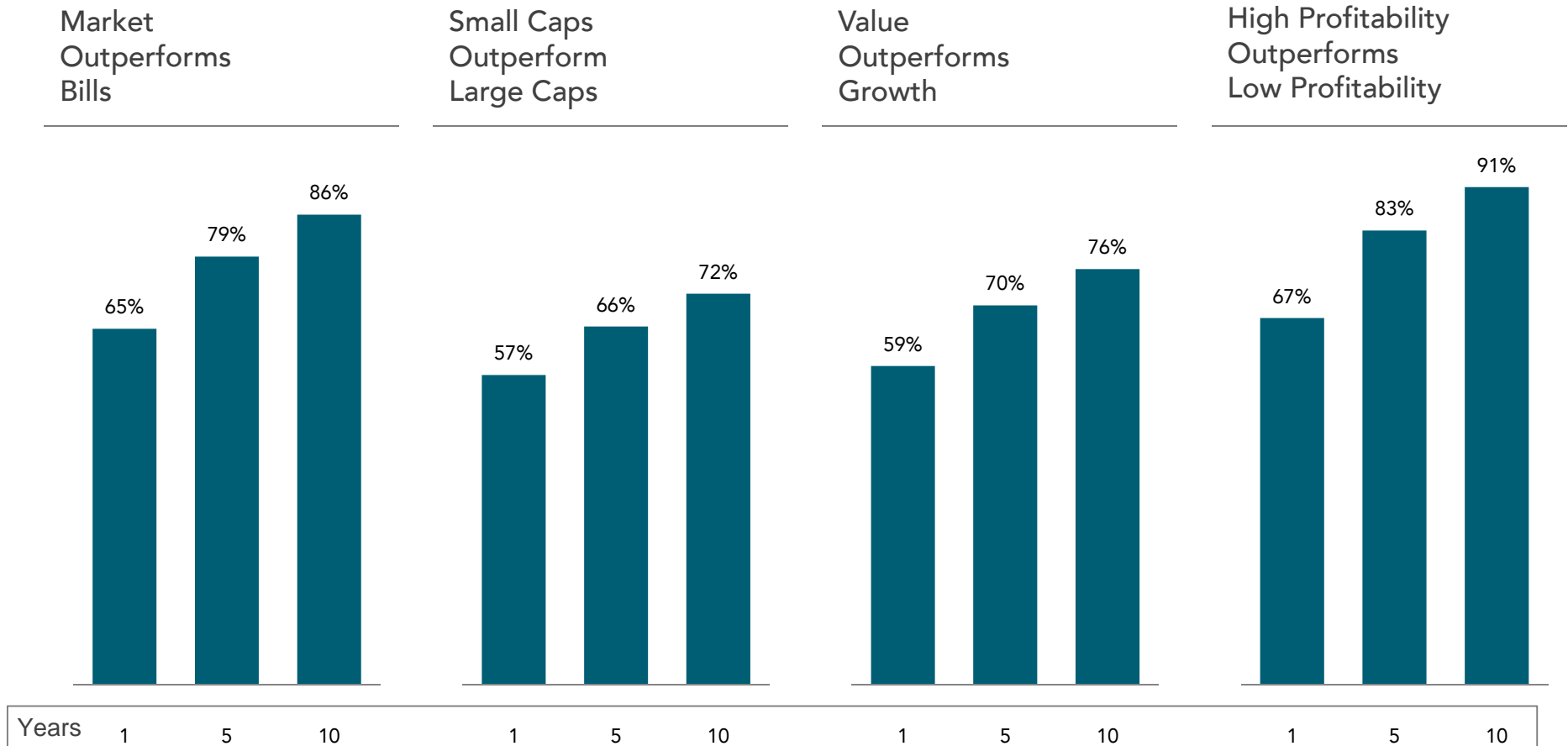
# Fees

	Net Expense Ratio <sup>1</sup> (%)	Total (Gross) Expense Ratio <sup>1</sup> (%)	Management Fee <sup>1</sup> (%)
Emerging Markets Core Equity Portfolio	0.53	0.53	0.47

1. Fee and expense information as of the prospectus date 2/28/18. Certain Portfolios have entered into fee waiver and/or expense assumption arrangements with the Advisor. In these cases, the Advisor has contractually agreed, under certain circumstances, to waive certain fees and/or assume certain expenses of the Portfolio. Unless otherwise stated in the prospectus, the Advisor may amend or discontinue these arrangements at any time, one year from the date of the prospectus. The net expense ratio reflects the total annual fund operating expenses of the Portfolio after taking into account any such fee waiver and/or expense assumption arrangements. Please read the Portfolio's prospectus for details and more information.

# Estimated Probability of Outperformance

The probability of outperformance increases over time but is never guaranteed



Probability of outperformance is computed using one-hundred thousand simulations that bootstrap historical monthly returns from July 1926 to December 2017 for "Market Outperforms Bills" and "Value Outperforms Growth", from June 1927 to December 2017 for "Small Caps Outperform Large Caps", and from July 1963 to December 2017 for "High Prof Outperforms Low Prof". Bootstrapping is a statistical method that relies on random sampling with replacement (i.e. each random sample from a dataset is placed back into the sampling universe before the next sample is taken) to estimate properties of a sample statistic. Market Outperforms Bills: Fama/French Total US Market Index vs. one-month US Treasury Bills. Small Caps Outperform Large Caps: Dimensional US Small Cap Index vs. S&P 500 Index. Value Outperforms Growth: Fama/French US Value Research Index vs. Fama/French US Growth Research Index. High Prof Outperforms Low Prof: Dimensional US High Profitability Index vs. Dimensional US Low Profitability Index. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. See "Index Descriptions" in the appendix for descriptions of Dimensional and Fama/French index data. The projections or other information generated by bootstrapped samples regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results will vary with each use and over time. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.



# Top 10 Holdings

As of September 30, 2018

## EMERGING MARKETS CORE EQUITY PORTFOLIO

Security	Weight %
Samsung Electronics Co Ltd	3.9
Taiwan Semiconductor Manufacturing Co Ltd	3.0
Tencent Holdings Ltd	1.6
Vale SA	1.1
Alibaba Group Holding Ltd	0.9
Itau Unibanco Holding SA	0.8
SK Hynix Inc	0.8
Infosys Ltd	0.7
China Mobile Ltd	0.7
China Construction Bank Corp	0.7
<b>Total</b>	<b>14.1</b>

## MSCI EMERGING MARKETS INDEX

Security	Weight %
Tencent Holdings Ltd	4.5
Samsung Electronics Co Ltd	4.5
Taiwan Semiconductor Manufacturing Co Ltd	4.1
Alibaba Group Holding Ltd	3.7
Naspers Ltd	1.8
China Construction Bank Corp	1.6
Baidu Inc	1.2
China Mobile Ltd	1.2
Ping An Insurance Group Co of China Ltd	1.1
Industrial & Commercial Bank of China Ltd	1.0
<b>Total</b>	<b>24.7</b>

# Summary of Portfolio Risk Management

Provides diversification and broad oversight with minimal style drift

## Emerging Markets Strategies

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### Concentration Risk

- Highly diversified across countries
  - Country diversification leads to diversification across multiple currencies
  - Sector target weights typically capped at their approximate weight in a broadly diversified, sector-neutral universe plus an additional 10%
  - Industry groups generally capped at 25%
  - Guidelines target a maximum 5% per issue at time of purchase
- 

### Implementation Risk

- Team managed
  - Approved exchanges only; ongoing evaluation of listing requirements, liquidity, and settlement mechanism
- 

### Operational Risk

- Charles River customized Order Management System
  - Comprehensive pre- and post-trade compliance
  - Independent accountant, custodian bank, and auditors
  - Independent SSAE 16 audit performed annually
- 

### Style Risk

- Monitor characteristics of individual securities and overall strategy to prevent style drift
-

# Standardized Performance Data and Disclosures

**Performance data shown represents past performance. Past performance is no guarantee of future results, and current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain performance data for Dimensional portfolios current to the most recent month end, access our website at [us.dimensional.com](http://us.dimensional.com).**

**Consider the investment objectives, risks, and charges and expenses of the Dimensional funds carefully before investing. For this and other information about the Dimensional funds, please read the prospectus carefully before investing. Prospectuses are available by calling Dimensional Fund Advisors collect at (512) 306-7400 or at [us.dimensional.com/prospectus](http://us.dimensional.com/prospectus). Dimensional funds are distributed by DFA Securities LLC.**

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

**Risks** include loss of principal and fluctuating value. Investment value will fluctuate, and shares, when redeemed, may be worth more or less than original cost.

**Small and micro cap** securities are subject to greater volatility than those in other asset categories.

**International and emerging markets** investing involves special risks such as currency fluctuation and political instability. Investing in emerging markets may accentuate these risks.

**Sector-specific investments** focus on a specific segment of the market, which can increase investment risks.

**Fixed income securities** are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks, including changes in credit quality, liquidity, prepayments, call risk, and other factors. Municipal securities are subject to the risks of adverse economic and regulatory changes in their issuing states.

**Real estate investment** risks include changes in real estate values and property taxes, interest rates, cash flow of underlying real estate assets, supply and demand, and the management skill and creditworthiness of the issuer.

**Sustainability funds** use environmental and social screens that may limit investment opportunities for the fund.

**Commodities** include increased risks, such as political, economic, and currency instability, and may not be suitable for all investors. The Portfolio may be more volatile than a diversified fund because the Portfolio invests in a smaller number of issuers and commodity sectors.

**The fund prospectuses contain more information about investment risks.**

# Relative Performance for Standardized Periods

Funds with more than 15 years of history as of September 30, 2018

Fund Name	Ticker	Morningstar Category (US Fund)	Prior Year			Prior 5 Years			Prior 10 Years			Prior 15 Years		
			Dimensional Placement/ Funds at Start <sup>1</sup>	Number of Ranked Investments <sup>2</sup>	Average Index Fund Placement <sup>3</sup>	Dimensional Placement/ Funds at Start <sup>1</sup>	Number of Ranked Investments <sup>2</sup>	Average Index Fund Placement <sup>3</sup>	Dimensional Placement/ Funds at Start <sup>1</sup>	Number of Ranked Investments <sup>2</sup>	Average Index Fund Placement <sup>3</sup>	Dimensional Placement/ Funds at Start <sup>1</sup>	Number of Ranked Investments <sup>2</sup>	Average Index Fund Placement <sup>3</sup>
<b>US Large Cap Value Portfolio I</b>	<b>DFLVX</b>	<b>Large Value</b>	<b>496/1,349</b>	<b>1,274</b>	<b>507</b>	<b>107/1,195</b>	<b>948</b>	<b>270</b>	<b>57/1,313</b>	<b>696</b>	<b>238</b>	<b>24/1,006</b>	<b>437</b>	<b>185</b>
<b>US Large Company Portfolio</b>	<b>DFUSX</b>	<b>Large Blend</b>	<b>250/1,479</b>	<b>1,383</b>	<b>466</b>	<b>81/1,429</b>	<b>1,058</b>	<b>254</b>	<b>128/1,711</b>	<b>794</b>	<b>240</b>	<b>100/1,407</b>	<b>511</b>	<b>188</b>
<b>US Micro Cap Portfolio I</b>	<b>DFSCX</b>	<b>Small Blend</b>	<b>308/831</b>	<b>778</b>	<b>203</b>	<b>103/686</b>	<b>539</b>	<b>155</b>	<b>65/672</b>	<b>388</b>	<b>161</b>	<b>64/425</b>	<b>214</b>	<b>73</b>
<b>US Small Cap Portfolio I</b>	<b>DFSTX</b>	<b>Small Blend</b>	<b>372/831</b>	<b>778</b>	<b>203</b>	<b>166/686</b>	<b>539</b>	<b>155</b>	<b>44/672</b>	<b>388</b>	<b>161</b>	<b>49/425</b>	<b>214</b>	<b>73</b>
<b>US Small Cap Value Portfolio I</b>	<b>DFSVX</b>	<b>Small Value</b>	<b>130/430</b>	<b>415</b>	<b>126</b>	<b>129/383</b>	<b>317</b>	<b>119</b>	<b>70/390</b>	<b>226</b>	<b>110</b>	<b>27/245</b>	<b>126</b>	<b>46</b>
US Targeted Value Portfolio I	DFVFX	Small Value	116/430	415	126	102/383	317	119	68/390	226	110	11/245	126	46
<b>Large Cap International Portfolio I</b>	<b>DFALX</b>	<b>Foreign Large Blend</b>	<b>125/818</b>	<b>783</b>	<b>240</b>	<b>165/701</b>	<b>535</b>	<b>237</b>	<b>135/676</b>	<b>379</b>	<b>192</b>	<b>77/466</b>	<b>206</b>	<b>110</b>
<b>International Value Portfolio I</b>	<b>DFIVX</b>	<b>Foreign Large Value</b>	<b>40/332</b>	<b>317</b>	<b>100</b>	<b>45/315</b>	<b>225</b>	<b>108</b>	<b>38/302</b>	<b>146</b>	<b>56</b>	<b>8/160</b>	<b>71</b>	<b>47</b>
<b>International Small Cap Value Portfolio I</b>	<b>DISVX</b>	<b>Foreign Small/Mid Value</b>	<b>35/70</b>	<b>63</b>	<b>20</b>	<b>11/51</b>	<b>40</b>	<b>14</b>	<b>9/58</b>	<b>22</b>	<b>9</b>	<b>2/46</b>	<b>9</b>	<b>—</b>
<b>International Small Company Portfolio I</b>	<b>DFISX</b>	<b>Foreign Small/Mid Blend</b>	<b>43/115</b>	<b>109</b>	<b>31</b>	<b>20/83</b>	<b>65</b>	<b>29</b>	<b>21/66</b>	<b>49</b>	<b>18</b>	<b>10/30</b>	<b>22</b>	<b>—</b>
Asia Pacific Small Company Portfolio I	DFRSX	Pacific/Asia ex-Japan Stk	24/93	84	27	53/109	59	36	20/62	28	15	12/49	21	11
Continental Small Company Portfolio I	DFCSX	Europe Stock	80/140	129	58	1/105	74	32	5/98	53	35	3/110	46	33
Japanese Small Company Portfolio I	DFJSX	Japan Stock	36/53	49	22	7/38	26	13	5/46	14	10	1/40	8	7
Enhanced US Large Co. Portfolio I	DFELX	Large Blend	616/1,479	1,383	466	139/1,429	1,058	254	82/1,711	794	240	127/1,407	511	188
<b>Emerging Markets Portfolio I</b>	<b>DFEMX</b>	<b>Diversified Emerging Mkts</b>	<b>189/876</b>	<b>838</b>	<b>279</b>	<b>155/673</b>	<b>508</b>	<b>277</b>	<b>79/338</b>	<b>218</b>	<b>131</b>	<b>23/188</b>	<b>115</b>	<b>60</b>
<b>Emerging Markets Small Cap Portfolio I</b>	<b>DEMSX</b>	<b>Diversified Emerging Mkts</b>	<b>515/876</b>	<b>838</b>	<b>279</b>	<b>56/673</b>	<b>508</b>	<b>277</b>	<b>2/338</b>	<b>218</b>	<b>131</b>	<b>4/188</b>	<b>115</b>	<b>60</b>
<b>Emerging Markets Value Portfolio I</b>	<b>DFEVX</b>	<b>Diversified Emerging Mkts</b>	<b>45/876</b>	<b>838</b>	<b>279</b>	<b>158/673</b>	<b>508</b>	<b>277</b>	<b>76/338</b>	<b>218</b>	<b>131</b>	<b>7/188</b>	<b>115</b>	<b>60</b>
Tax-Managed International Value Portfolio	DTMIX	Foreign Large Value	41/332	317	100	51/315	225	108	42/302	146	56	9/160	71	47
Tax-Managed US Equity Portfolio	DTMEX	Large Blend	220/1,479	1,383	466	190/1,429	1,058	254	161/1,711	794	240	91/1,407	511	188
Tax-Managed US Marketwide Value Portfolio	DTMMX	Large Value	407/1,349	1,274	507	150/1,195	948	270	47/1,313	696	238	16/1,006	437	185
Tax-Managed US Small Cap Portfolio	DFTSX	Small Blend	395/831	778	203	170/686	539	155	127/672	388	161	92/425	214	73
Tax-Managed US Targeted Value Portfolio	DTMVX	Small Value	157/430	415	126	66/383	317	119	58/390	226	110	42/245	126	46
<b>Real Estate Securities Portfolio I</b>	<b>DFREX</b>	<b>Real Estate</b>	<b>73/277</b>	<b>253</b>	<b>115</b>	<b>34/255</b>	<b>191</b>	<b>61</b>	<b>34/229</b>	<b>138</b>	<b>58</b>	<b>31/158</b>	<b>83</b>	<b>44</b>
One-Year Fixed Income Portfolio I	DFIHX	Ultrashort Bond	153/193	183	81	87/150	113	59	38/110	59	57	23/103	45	—
Short-Term Government Portfolio I	DFGX	Short Government	84/109	105	55	24/126	93	42	8/131	69	39	11/143	62	41
Short Term Municipal Bond I	DFSMX	Muni National Short	96/202	196	129	101/196	158	113	69/164	101	59	60/144	77	—
Two-Year Global Fixed Income Portfolio I	DFGFX	World Bond	44/325	310	112	160/348	246	148	130/202	137	116	80/136	82	—
Five-Year Global Fixed Income Portfolio I	DFGBX	World Bond	61/325	310	112	86/348	246	148	92/202	137	116	66/136	82	—
Intermediate Government Fixed Income Portfolio I	DFIGX	Intermediate Government	185/256	235	114	49/272	199	91	25/286	149	81	14/276	114	67

## Flagship equity funds are shown in bold.

1. Dimensional placement is the Morningstar 1-, 5-, 10-, or 15-year Total Return Absolute Category Rank sourced from Morningstar. Number of funds starting the period is the number of share classes, within the respective Morningstar Category, with return histories as of the start of the 1-, 5-, 10-, or 15-year period ending in September 30, 2018.

2. Number of Ranked Investments is sourced from Morningstar for each category and is the number of funds that were ranked as of the end of the 1-, 5-, 10-, or 15-year period ending September 30, 2018.

3. Average Index Fund Placement is provided where index fund(s) with a 1-, 5-, 10-, or 15-year Morningstar Total Return Absolute Rank exist in the category as of September 30, 2018. The Average Index Fund Rank is the average, as determined by Dimensional, of the Morningstar 1-, 5-, 10-, or 15-Year Total Return Absolute Category Rank for index funds within the respective Morningstar category as of September 30, 2018.

The Morningstar category data is provided at the individual fund share class level. Multiple share classes of a fund typically have a common portfolio but impose different expense structures. The table includes Dimensional Funds ranked by Morningstar and available on or before 15 years prior to September 30, 2018. Dimensional Funds currently available but previously restricted to clients of LWI Financial Inc. are excluded due to different historical fee structures. All funds are US-domiciled. Funds may have experienced negative performance over the time period. Past performance is no guarantee of future results. Visit [us.dimensional.com](http://us.dimensional.com) for standardized performance information for Dimensional's funds. 40

# Standardized Performance Data and Disclosures

	Symbol	AVERAGE ANNUAL TOTAL RETURNS <sup>1</sup> (%)					FEES AND EXPENSES <sup>2</sup> (%)			
		1 Year	5 Years	10 Years	Since Inception	Inception Date	Net Expense Ratio	Total (Gross) Expense Ratio	Management Fee	Management Fee after Fee Waiver
<b>US Equity Portfolios</b>										
Enhanced US Large Company Portfolio	DFELX	16.28	13.67	12.20	8.97	7/2/1996	0.15	0.24	0.20	0.20
US Core Equity 1 Portfolio	DFEOX	17.27	12.89	12.13	9.25	9/15/2005	0.19	0.19	0.17	0.17
US Core Equity 2 Portfolio	DFQTX	15.27	11.94	11.67	8.86	9/15/2005	0.22	0.22	0.20	0.20
US High Relative Profitability Portfolio	DURPX	23.15	—	—	22.23	5/16/2017	0.25	0.28	0.20	0.20
US Large Cap Equity Portfolio	DUSQX	17.83	13.21	—	13.82	6/25/2013	0.18	0.18	0.15	0.15
US Large Cap Growth Portfolio	DUSLX	23.78	14.59	—	16.29	12/20/2012	0.20	0.19	0.17	0.17
US Large Cap Value Portfolio	DFLVX	11.34	11.82	11.29	10.38	2/19/1993	0.27	0.37	0.35	0.25
US Large Company Portfolio	DFUSX	17.85	13.88	11.94	6.41	9/23/1999	0.08	0.08	0.06	0.06
US Micro Cap Portfolio	DFSCX	14.30	11.40	12.13	12.18	12/23/1981	0.52	0.52	0.50	0.50
US Small Cap Growth Portfolio	DSCGX	15.61	11.04	—	14.62	12/20/2012	0.39	0.39	0.35	0.35
US Small Cap Portfolio	DFSTX	12.93	10.80	12.40	10.83	3/19/1992	0.37	0.37	0.35	0.35
US Small Cap Value Portfolio	DFSVX	9.79	9.31	10.81	11.84	3/2/1993	0.52	0.52	0.50	0.50
US Targeted Value Portfolio	DFFVX	10.02	9.69	10.84	11.66	2/23/2000	0.37	0.37	0.35	0.35
US Vector Equity Portfolio	DFVEX	11.83	10.59	10.97	8.41	12/30/2005	0.32	0.32	0.30	0.30

1. Performance information as of 09/30/18.

2. Fee and expense information as of the prospectus dated 02/28/18.

Certain Portfolios have entered into fee waiver and/or expense assumption arrangements with the Advisor. In these cases, the Advisor has contractually agreed, under certain circumstances, to waive certain fees and/or assume certain expenses of the Portfolio. Unless otherwise stated in the prospectus, the Advisor may amend or discontinue these arrangements at any time, one year from the date of the prospectus. The net expense ratio reflects the total annual fund operating expenses of the Portfolio after taking into account any such fee waiver and/or expense assumption arrangements. Please read the Portfolio's prospectus for details and more information.

# Standardized Performance Data and Disclosures

	Symbol	AVERAGE ANNUAL TOTAL RETURNS <sup>1</sup> (%)					FEES AND EXPENSES <sup>2</sup> (%)			
		1 Year	5 Years	10 Years	Since Inception	Inception Date	Net Expense Ratio	Total (Gross) Expense Ratio	Management Fee	Management Fee after Fee Waiver
<b>Non-US Equity Portfolios</b>										
Asia Pacific Small Company Portfolio	DFRSX	2.56	3.21	7.19	8.03	1/5/1993	0.54	0.64	0.60	0.50
Continental Small Company Portfolio	DFCSX	-1.54	9.41	8.75	9.70	4/15/1988	0.56	0.66	0.60	0.50
Emerging Markets Core Equity Portfolio	DFCEX	-2.48	3.57	6.17	7.65	4/5/2005	0.53	0.53	0.47	0.47
Emerging Markets Portfolio	DFEMX	-0.88	3.59	5.36	6.87	4/25/1994	0.48	0.58	0.52	0.42
Emerging Markets Small Cap Portfolio	DEMSX	-5.08	4.60	8.55	10.95	3/5/1998	0.73	0.93	0.85	0.65
Emerging Markets Value Portfolio	DFEVX	2.37	3.58	5.40	10.11	4/1/1998	0.57	0.67	0.60	0.50
International Core Equity Portfolio	DFIEX	1.87	5.50	6.57	5.43	9/15/2005	0.30	0.30	0.27	0.27
International High Relative Profitability Portfolio	DIHRX	3.43	—	—	6.76	5/16/2017	0.35	0.40	0.25	0.25
International Large Cap Growth Portfolio	DILRX	3.80	5.06	—	7.15	12/20/2012	0.30	0.31	0.25	0.25
International Small Cap Growth Portfolio	DISMX	3.41	8.49	—	10.82	12/20/2012	0.55	0.63	0.50	0.50
International Small Cap Value Portfolio	DISVX	-3.00	6.59	8.51	7.67	12/29/1994	0.68	0.68	0.65	0.65
International Small Company Portfolio	DFISX	1.00	7.10	8.87	7.26	9/30/1996	0.53	0.53	0.40	0.40
International Value Portfolio	DFIVX	1.90	4.08	4.82	6.41	2/15/1994	0.43	0.63	0.60	0.40
International Vector Equity Portfolio	DFVOX	1.25	5.76	7.14	5.65	8/14/2008	0.49	0.49	0.45	0.45
Japanese Small Company Portfolio	DFJSX	5.74	10.34	10.22	5.83	1/31/1986	0.54	0.64	0.60	0.50
Large Cap International Portfolio	DFALX	3.08	4.50	5.23	5.79	7/17/1991	0.24	0.24	0.20	0.20
UK Small Company Portfolio	DFUKX	0.90	4.31	10.10	9.24	3/4/1986	0.59	0.71	0.60	0.50
World ex US Core Equity Portfolio	DFWIX	0.45	4.85	—	5.49	4/9/2013	0.38	0.38	0.32	0.32
World ex US Targeted Value Portfolio	DWUSX	-3.10	5.71	—	8.38	11/1/2012	0.67	0.67	0.58	0.58
World ex US Value Portfolio	DFWVX	1.48	4.22	—	5.50	8/23/2010	0.52	0.75	0.47	0.47

1. Performance information as of 09/30/18.

2. Fee and expense information as of the prospectus dated 02/28/18.

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# Standardized Performance Data and Disclosures

	Symbol	AVERAGE ANNUAL TOTAL RETURNS <sup>1</sup> (%)					FEES AND EXPENSES <sup>2</sup> (%)			
		1 Year	5 Years	10 Years	Since Inception	Inception Date	Net Expense Ratio	Total (Gross) Expense Ratio	Management Fee	Management Fee after Fee Waiver
<b>Tax Managed Portfolios</b>										
TA US Core Equity 2 Portfolio	DFTCX	15.35	12.06	11.67	8.22	10/4/2007	0.24	0.24	0.22	0.22
After Taxes on Distributions		14.58	11.45	11.22	7.81					
After Taxes on Distributions & Sale of Fund Shares		9.30	9.48	9.61	6.64					
TA World ex US Core Equity Portfolio	DFTWX	0.70	4.94	6.41	3.54	3/6/2008	0.36	0.36	0.32	0.32
After Taxes on Distributions		-0.17	4.36	5.97	3.10					
After Taxes on Distributions & Sale of Fund Shares		0.52	3.82	5.22	2.83					
Tax-Managed International Value Portfolio	DTMIX	1.89	3.86	4.76	5.91	4/16/1999	0.53	0.53	0.50	0.50
After Taxes on Distributions		0.85	3.16	4.25	5.36					
After Taxes on Distributions & Sale of Fund Shares		1.26	2.99	3.90	5.04					
Tax-Managed US Equity Portfolio	DTMEX	17.96	13.48	11.81	8.70	9/25/2001	0.22	0.22	0.20	0.20
After Taxes on Distributions		17.35	12.98	11.39	8.37					
After Taxes on Distributions & Sale of Fund Shares		10.70	10.68	9.73	7.31					
Tax-Managed US Marketwide Value Portfolio	DTMMX	12.04	11.55	11.43	7.96	12/14/1998	0.37	0.57	0.55	0.35
After Taxes on Distributions		10.54	10.77	10.88	7.54					
After Taxes on Distributions & Sale of Fund Shares		7.69	9.05	9.39	6.68					
Tax-Managed US Small Cap Portfolio	DFTSX	12.56	10.77	11.24	9.97	12/15/1998	0.52	0.52	0.50	0.50
After Taxes on Distributions		11.51	9.94	10.74	9.61					
After Taxes on Distributions & Sale of Fund Shares		7.93	8.38	9.24	8.61					
Tax-Managed US Targeted Value Portfolio	DTMVX	8.87	10.18	11.00	10.44	12/11/1998	0.44	0.44	0.42	0.42
After Taxes on Distributions		7.51	9.01	10.29	9.81					
After Taxes on Distributions & Sale of Fund Shares		5.94	7.85	8.99	8.99					

1. Performance information as of 09/30/18. Assumed highest marginal tax rate in effect for capital gains and ordinary income. Income from funds managed for tax efficiency may be subject to an alternative minimum tax and/or any applicable state and local taxes.

2. Fee and expense information as of the prospectus dated 02/28/18.

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# Standardized Performance Data and Disclosures

	Symbol	AVERAGE ANNUAL TOTAL RETURNS <sup>1</sup> (%)					FEES AND EXPENSES <sup>2</sup> (%)		
		1 Year	5 Years	10 Years	Since Inception	Inception Date	Net Expense Ratio	Total (Gross) Expense Ratio	Management Fee
<b>Fixed Income Portfolios</b>									
California Intermediate-Term Municipal Bond Portfolio	DCIBX	-0.60	2.10	—	2.03	11/29/2011	0.23	0.23	0.20
California Municipal Real Return Portfolio	DCARX	—	—	—	0.41	11/1/2017	0.25	0.25	0.20
California Short-Term Municipal Bond Portfolio	DFCMX	0.19	0.79	1.52	1.62	4/2/2007	0.22	0.22	0.20
Diversified Fixed Income Portfolio	DFXIX	-0.53	—	—	-0.67	8/10/2016	0.15	0.29	0.12
Five-Year Global Fixed Income Portfolio	DFGBX	0.29	1.68	3.04	5.12	11/6/1990	0.27	0.27	0.25
Global Core Plus Fixed Income Portfolio	DGCFX	—	—	—	-0.46	1/11/2018	0.30	0.31	0.25
Inflation-Protected Securities Portfolio	DIPSX	-0.05	1.23	3.43	3.89	9/18/2006	0.12	0.12	0.10
Intermediate Government Fixed Income Portfolio	DFIGX	-2.28	1.50	3.26	5.86	10/19/1990	0.12	0.12	0.10
Intermediate-Term Extended Quality Portfolio	DFTEX	-2.07	3.15	—	3.51	7/20/2010	0.22	0.22	0.20
Intermediate-Term Municipal Bond Portfolio	DFTIX	-0.91	1.90	—	1.33	3/1/2012	0.23	0.23	0.20
Investment Grade Portfolio	DFAPX	-1.82	2.29	—	2.94	3/7/2011	0.22	0.22	0.20
LTIP Portfolio	DRXIX	0.93	3.19	—	0.58	3/7/2012	0.15	0.14	0.10
MN Municipal Bond Portfolio	DMNBX	-0.87	—	—	-1.05	7/25/2017	0.32	0.41	0.25
Municipal Bond Portfolio	DFMPX	-0.78	—	—	1.15	3/10/2015	0.23	0.24	0.20
Municipal Real Return Portfolio	DMREX	0.54	—	—	0.79	11/4/2014	0.23	0.24	0.20
NY Municipal Bond Portfolio	DNYMX	-0.22	—	—	1.44	6/16/2015	0.25	0.25	0.20
One-Year Fixed Income Portfolio	DFIHX	1.13	0.69	1.08	4.55	7/25/1983	0.17	0.17	0.15
Selectively Hedged Global Fixed Income Portfolio	DFSHX	0.60	0.36	1.53	1.03	1/9/2008	0.17	0.17	0.15
Short-Duration Real Return Portfolio	DFAIX	1.61	—	—	1.08	11/5/2013	0.24	0.23	0.20
Short-Term Extended Quality Portfolio	DFEQX	0.34	1.50	—	2.81	3/4/2009	0.22	0.22	0.20
Short-Term Government Portfolio	DFFGX	-0.88	0.67	2.02	4.82	6/1/1987	0.19	0.19	0.17
Short-Term Municipal Bond Portfolio	DFSMX	0.16	0.75	1.38	1.67	8/20/2002	0.22	0.22	0.20
Targeted Credit Portfolio	DTCPX	0.11	—	—	1.60	5/20/2015	0.20	0.23	0.19
Two-Year Fixed Income Portfolio	DFCFX	0.66	0.64	1.17	2.89	6/6/1996	0.21	0.21	0.15
Two-Year Global Fixed Income Portfolio	DFGFX	0.87	0.74	1.20	3.03	2/9/1996	0.17	0.17	0.15
Two-Year Government Portfolio	DFYGX	0.29	0.41	1.07	2.86	6/6/1996	0.23	0.23	0.15
World ex US Government Fixed Income Portfolio	DWFIX	2.74	4.43	—	4.08	12/6/2011	0.20	0.21	0.18
<b>Commodities Portfolio</b>									
Commodity Strategy Portfolio	DCMSX	2.19	-5.86	—	-5.68	11/9/2010	0.33	0.33	0.30

1. Performance information as of 09/30/18.

2. Fee and expense information as of the prospectus dated 02/28/18.

Certain Portfolios have entered into fee waiver and/or expense assumption arrangements with the Advisor. In these cases, the Advisor has contractually agreed, under certain circumstances, to waive certain fees and/or assume certain expenses of the Portfolio. Unless otherwise stated in the prospectus, the Advisor may amend or discontinue these arrangements at any time, one year from the date of the prospectus. The net expense ratio reflects the total annual fund operating expenses of the Portfolio after taking into account any such fee waiver and/or expense assumption arrangements. Please read the Portfolio's prospectus for details and more information.



# Standardized Performance Data and Disclosures

	Symbol	AVERAGE ANNUAL TOTAL RETURNS <sup>1</sup> (%)					FEES AND EXPENSES <sup>2</sup> (%)		
		1 Year	5 Years	10 Years	Since Inception	Inception Date	Net Expense Ratio	Total (Gross) Expense Ratio	Management Fee
<b>Global Portfolios</b>									
Global Allocation 25/75 Portfolio	DGTSX	3.20	3.43	4.67	4.38	12/24/2003	0.26	0.42	0.20
Global Allocation 60/40 Portfolio	DGSIX	6.76	6.44	7.45	6.54	12/24/2003	0.28	0.49	0.25
Global Equity Portfolio	DGEIX	11.12	9.67	9.75	8.58	12/24/2003	0.30	0.57	0.30
Global Small Company Portfolio	DGLIX	6.54	—	—	12.01	1/18/2017	0.49	1.14	0.45
Selectively Hedged Global Equity Portfolio	DSHGX	9.23	9.01	—	11.30	11/14/2011	0.35	0.62	0.30
World Core Equity Portfolio	DREIX	9.59	9.23	—	10.80	3/7/2012	0.35	0.60	0.30
<b>Real Estate Portfolios</b>									
Global Real Estate Securities Portfolio	DFGEX	4.57	7.53	6.99	5.34	6/4/2008	0.24	0.37	0.20
International Real Estate Securities Portfolio	DFITX	3.68	4.34	5.43	0.79	3/1/2007	0.28	0.28	0.25
Real Estate Securities Portfolio	DFREX	4.38	9.44	7.66	9.87	1/5/1993	0.18	0.19	0.17
<b>Social and Sustainability Portfolios</b>									
Emerging Markets Social Core Equity Portfolio	DFESX	-2.34	3.69	5.97	5.65	8/31/2006	0.55	0.55	0.47
Emerging Markets Sustainability Core 1 Portfolio	DESIX	—	—	—	-11.86	3/27/2018	0.65	0.69	0.50
International Social Core Equity Portfolio	DSCLX	1.77	5.29	—	7.95	11/1/2012	0.36	0.36	0.29
International Sustainability Core 1 Portfolio	DFSPX	2.06	4.97	5.93	3.21	3/12/2008	0.35	0.35	0.30
Social Fixed Income Portfolio	DSFIX	-1.93	—	—	-0.22	4/5/2016	0.27	0.29	0.20
US Social Core Equity 2 Portfolio	DFUEX	15.77	11.56	11.15	7.53	10/1/2007	0.28	0.28	0.25
US Sustainability Core 1 Portfolio	DFSIX	18.87	13.09	12.04	10.57	3/12/2008	0.25	0.26	0.23

1. Performance information as of 09/30/18.

2. Fee and expense information as of the prospectus dated 02/28/18.

Certain Portfolios have entered into fee waiver and/or expense assumption arrangements with the Advisor. In these cases, the Advisor has contractually agreed, under certain circumstances, to waive certain fees and/or assume certain expenses of the Portfolio. Unless otherwise stated in the prospectus, the Advisor may amend or discontinue these arrangements at any time, one year from the date of the prospectus. The net expense ratio reflects the total annual fund operating expenses of the Portfolio after taking into account any such fee waiver and/or expense assumption arrangements. Please read the Portfolio's prospectus for details and more information.

# Index Descriptions

**Dimensional US Small Cap Index** was created by Dimensional in March 2007 and is compiled by Dimensional. It represents a market-capitalization-weighted index of securities of the smallest US companies whose market capitalization falls in the lowest 8% of the total market capitalization of the Eligible Market. The Eligible Market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market. Exclusions: Non-US companies, REITs, UITs, and investment companies. From January 1975 to the present, the index also excludes companies with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat. The index monthly returns are computed as the simple average of the monthly returns of 12 sub-indices, each one reconstituted once a year at the end of a different month of the year. The calculation methodology for the Dimensional US Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

**Dimensional US High Profitability Index** was created by Dimensional in January 2014 and represents an index consisting of US companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. It is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat.

**Dimensional US Low Profitability Index** was created by Dimensional in January 2014 and represents an index consisting of US companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three low-profitability subgroups. It is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat.

**Dimensional International Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional. July 1981–December 1993: It includes non-US developed securities in the bottom 10% of market capitalization in each eligible country. All securities are market capitalization weighted. Each country is capped at 50%. Rebalanced semiannually. January 1994–Present: Market-capitalization-weighted index of small company securities in the eligible markets excluding those with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of a different quarter of the year. Prior to July 1981, the index is 50% UK and 50% Japan. The calculation methodology for the Dimensional International Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

# Index Descriptions

**Dimensional International Low Profitability Index** was created by Dimensional in January 2013 and represents an index consisting of non-US developed companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three low-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

**Dimensional International High Profitability Index** was created by Dimensional in January 2013 and represents an index consisting of non-US developed companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

**Dimensional Emerging Markets Low Profitability Index** was created by Dimensional in April 2013 and represents an index consisting of emerging markets companies and is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three low-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

**Dimensional Emerging Markets High Profitability Index** was created by Dimensional in April 2013 and represents an index consisting of emerging markets companies and is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

**Dimensional Emerging Markets Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional. January 1989–December 1993: Fama/French Emerging Markets Small Cap Index. January 1994–Present: Dimensional Emerging Markets Small Index Composition: Market-capitalization-weighted index of small company securities in the eligible markets excluding those with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of a different quarter of the year. Source: Bloomberg. The calculation methodology for the Dimensional Emerging Markets Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

The Dimensional Indices have been retrospectively calculated by Dimensional Fund Advisors LP and did not exist prior to their index inception dates. Accordingly, results shown during the periods prior to each Index's index inception date do not represent actual returns of the Index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP.

# Index Descriptions

**Fama/French US Value Research Index:** Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

**Fama/French US Growth Research Index:** Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

**Fama/French Total US Market Index:** Provided by Fama/French from CRSP securities data. Includes all US operating companies trading on the NYSE, AMEX or Nasdaq NMS. Excludes ADRs, Investment Companies, Tracking Stocks, non-US incorporated companies, Closed-end funds, Certificates, Shares of Beneficial Interests and Berkshire Hathaway Inc (Permco 540).

**Fama/French International Value Index:** 2008–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the lower 30% price-to-book range. 1975–2007: Provided by Fama/French from MSCI securities data.

**Fama/French International Growth Index:** 2008–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the higher 30% price-to-book range. 1975–2007: Provided by Fama/French from MSCI securities data.

**Fama/French Emerging Markets Value Index:** 2009–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the lower 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.

**Fama/French Emerging Markets Growth Index:** 2009–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the higher 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.

# Presenters' Biographies



## **Ted Simpson, CFA**

### Vice President

Ted Simpson, a Vice President on the Institutional Services team, is responsible for developing and maintaining relationships with public pension funds, foundations, endowments, Taft-Hartley plan sponsors, and corporate pension and defined contribution plans.

Since joining Dimensional in 2002, Ted has held a number of positions within the firm. He began as a marketing consultant before taking a leadership role in the firm's defined contribution market initiative. Later, Ted got involved with Dimensional's consultant relations effort and eventually helped manage the group. Most recently, he has shifted his attention to working directly with clients.

Prior to joining Dimensional, Ted worked for Salomon Brothers, Legal & General, Mattel, Lion Nathan, and a fee-only RIA. He earned an MBA in marketing, strategy, and organizational behavior from the Kellogg School of Management at Northwestern University and a BA in politics and economics from Princeton University. Ted is a CFA® charterholder and holds FINRA licenses 24, 7, and 63.

# Client Service Team



**Ted Simpson, CFA**

**Vice President**

20 Years of Investment Experience  
17<sup>th</sup> Year with Firm

**Previous Employment:** Mattel, Salomon Brothers

**Education:** MBA, Northwestern University;  
AB, Princeton University

Email: [Ted.Simpson@dimensional.com](mailto:Ted.Simpson@dimensional.com)

Phone: (310) 917 - 1446



**Rebecca Eby**

**Senior Associate**

6 Years of Investment Experience  
1<sup>st</sup> Year with Firm

**Previous Employment:** Citigroup, Bank of Tokyo-Mitsubishi UFJ, Ltd.

**Education:** MBA, University of Chicago Booth School of Business; BS, Georgetown University

Email: [Inst\\_RD\\_Support-West@dimensional.com](mailto:Inst_RD_Support-West@dimensional.com)

Phone: (512) 314 - 6541



**Ahmed Khan**

**Senior Associate**

6 Years of Investment Experience  
3<sup>rd</sup> Year with Firm

**Previous Employment:** Aon Hewitt

**Education:** MS, DePaul University; BA, DePaul University

Email: [Inst\\_RD\\_Support-West@dimensional.com](mailto:Inst_RD_Support-West@dimensional.com)

Phone: (310) 576 - 1171



**Lauren Peiffer**

**Associate**

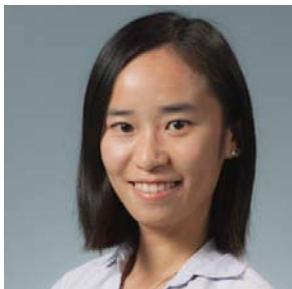
4 Years of Investment Experience  
2<sup>nd</sup> Year with Firm

**Previous Employment:** Cambridge Associates

**Education:** BS, Washington & Lee University

Email: [Inst\\_RD\\_Support-West@dimensional.com](mailto:Inst_RD_Support-West@dimensional.com)

Phone: (512) 306 - 4369



**Weideng He**

**Senior Associate**

7 Years of Investment Experience  
3<sup>rd</sup> Year with Firm

**Previous Employment:** Barclays Capital

**Education:** MS, University of Southern California;  
BA, Waseda University

Email: [Inst\\_RD\\_Support-West@dimensional.com](mailto:Inst_RD_Support-West@dimensional.com)

Phone: (512) 306 - 2658



**Dudley Okongo**

**Associate**

3 Years of Investment Experience  
1<sup>st</sup> Year with Firm

**Previous Employment:** eVestment

**Education:** BA, Emory University

Email: [Inst\\_RD\\_Support-West@dimensional.com](mailto:Inst_RD_Support-West@dimensional.com)

Phone: (310) 576 - 1175

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
15	12/12/18	Retirement	Information	11/05/18

Subject: Investment Performance Review of the S&P 500 Index and MSCI EAFE Funds by State Street Global Advisors (SSgA) for the ATU, IBEW and Salaried Employee Retirement Funds for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## ISSUE

Investment Performance Review of the S&P 500 Index and MSCI EAFE Funds by State Street Global Advisors (SSgA) for the ATU, IBEW and Salaried Employee Retirement Funds for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## RECOMMENDED ACTION

Information Only

## FISCAL IMPACT

None.

## DISCUSSION

Retirement funds are invested consistent with the Statement of Investment Objectives and Policy Guidelines (Policy) adopted by each Retirement Board (Board). The Board shall meet at least every eighteen (18) months with each investment manager to review the performance of its investment, the adherence to the Policy, and any material changes to its organization. The Policy also establishes the Retirement Funds' asset allocation policy and the asset classes in which the Plans' funds are invested. The asset classes established by the Policy are (1) Domestic Large Capitalization Equity, (2) Domestic Small Capitalization Equity, (3) International Large Capitalization Equity, (4) International Small Capitalization Equity, (5) International Emerging Markets, and (6) Domestic Fixed-Income.

SSgA is the fund manager for the Retirement Boards' Domestic Large Capitalization Equity S&P 500 Index Fund, as well as the Retirement Boards' International Large Capitalization Equity MSCI EAFE Index Fund. SSgA will be presenting performance results, for both funds, for the quarter ended September 30, 2018, shown on Attachment 1, and answering any questions.

---

Approved:

Presented:

Final 12/03/18

VP of Finance/CFO

Treasury Controller

J:\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\FI IPs\12-12-18 Fund Manager Review - SSgA S&P 500 and MSCI EAFE.docx

# Sacramento Regional Transit District

This material is solely for the private use of Sacramento Regional Transit District and is not intended for public dissemination.



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# Table of Contents

1. State Street Global Advisors: Firm Overview
2. Account Summary
3. Equity Indexing Skillfully Delivered
4. Portfolio Review for S&P 500<sup>®</sup> Index Strategy
5. Portfolio Review for MSCI EAFE<sup>®</sup> Index Strategy

## **Appendices**

Appendix A: GIPS<sup>®</sup> Presentations

Appendix B: Important Disclosures

The information contained in this document is current as of the date presented unless otherwise noted.

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# State Street Global Advisors Firm Overview

Third Quarter – 2018

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# About State Street Corporation

Four Businesses Under One Strong Global Enterprise,  
responsible for 10% of the world's assets<sup>1</sup>

---

## Asset Servicing

Customized servicing solutions across traditional and alternative investments, with \$33.99T under our care<sup>2</sup>

---

## Research and Trading

Data-driven insights and technology platforms that improve clients' access to global financial markets

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## Data and Analytics

Data management tools, analysis and software that can help clients make better investment decisions

---

## Asset Management

Active and index investment strategies and solutions that help clients reach their financial goals

<sup>1</sup> State Street and McKinsey Global Institute, Global Capital Markets December 31, 2017. This represents State Street's year-end 2017 Assets Under Custody and Administration, AUCA, (USD \$33.10t) as a proportion of total global financial assets (USD \$270.35t).

<sup>2</sup> Approximately \$33.99 trillion in assets under custody and administration as of September 30, 2018

---

# About State Street Global Advisors

---

**Mission:** To invest responsibly to enable economic prosperity and social progress

---

**\$2.81**

Trillion in Assets<sup>1</sup>

---

**2800+**

Clients

---

**14**

Million DC Participants<sup>2</sup>

---

**63**

Countries with Clients

---

**10**

Investment Centers<sup>3</sup>

---

**24-hour**

Global Trading Capability<sup>4</sup>

<sup>1</sup> AUM reflects approximately \$28 billion (as of September 30, 2018), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.

<sup>2</sup> As of December 31, 2017.

<sup>3</sup> As of September 30, 2018.

<sup>4</sup> During regional market hours.

---

# A Leading Partner to Institutions and Intermediaries

---

## #1

---

asset manager serving sovereign wealth funds, government retirement plans globally, and US endowment and foundations

---

## #2

---

defined benefit provider in the US

---

## #3

---

largest asset manager

---

largest ETF provider

---

largest index manager (excluding ETFs)

---

asset manager serving central banks

---

## Top 10

---

Institutional Money Market provider

---

US Defined Contribution Investment Only manager

---

Outsourced CIO services

---

ETF Model Portfolio manager

Source: P&I Research Center, as of 12/31/2017 and Morningstar, as of 12/31/2017

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# Guiding Principles

Since 1978 we've had a drive to always reinvent the way we invest for our clients.

---

## Start with Rigor

---

Our more than 500 investment professionals worldwide take a highly risk-aware approach to all investing challenges.

---

## Build from Breadth

---

We build from a universe of active and index strategies to create cost effective solutions.

---

## Invest as Stewards

---

We help our portfolio companies understand that what's fair for people and sustainable for the planet can deliver long-term performance.

---

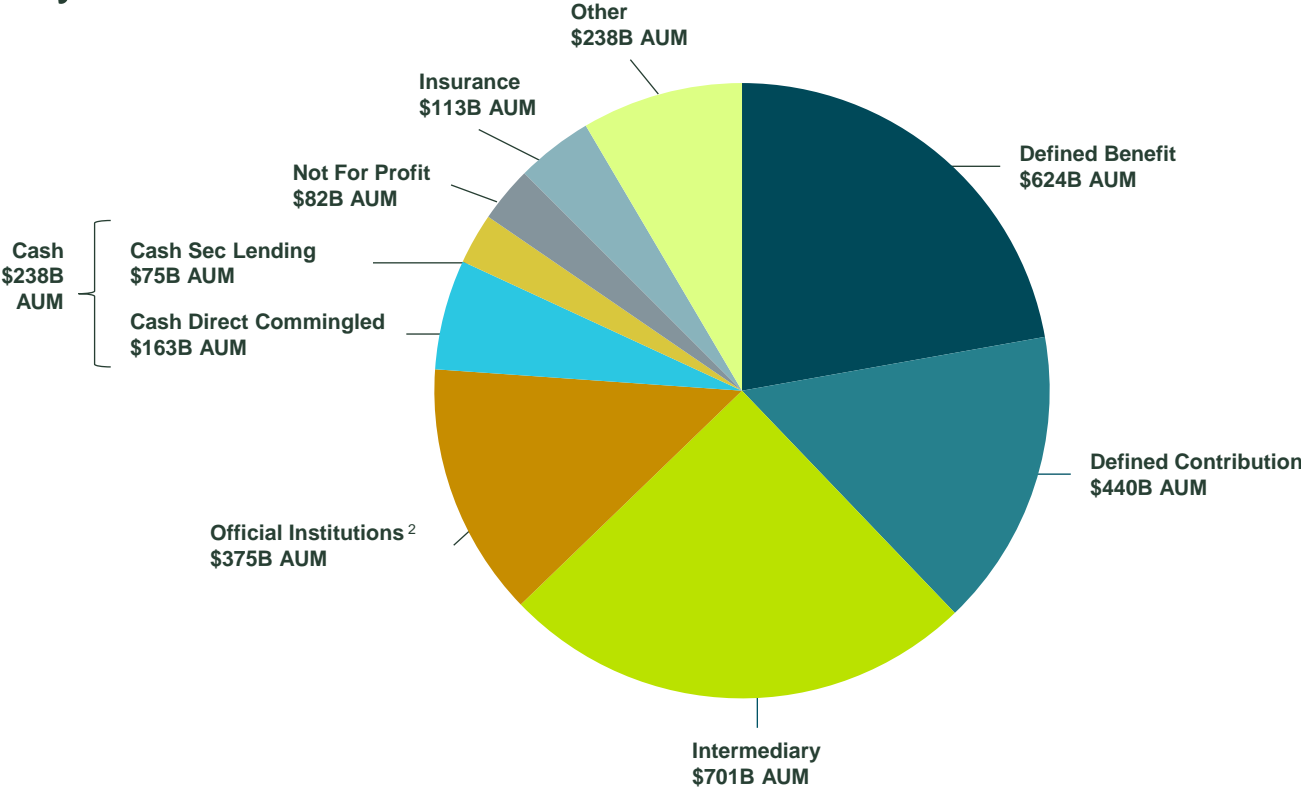
## Invent the Future

---

We created the oldest and largest ETF and we're pioneers in index, active, and ESG investing

# US\$2.8 Trillion in Assets Under Management<sup>1</sup>

Clients by AUM



<sup>1</sup> AUM reflects approximately \$28 billion (as of September 30, 2018), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated. <sup>2</sup> Official Institutions is a client type that includes all plan type assets including DB and DC.

---

# Investment Philosophy

---

## **Understanding Multiple Dimensions**

Creating successful investment outcomes starts with understanding the multiple dimensions of a client's long-term objectives and liabilities.

---

## **Knowing Markets are Not Always Efficient**

Due to behavioral biases, informational inefficiencies and limits to arbitrage, markets are not always efficient, leading to opportunities for excess returns.

---

## **Focusing on Asset Allocation**

The primary driver of long-term returns is asset allocation

---

Investors need efficient access to a broad universe of capital market exposure.

---

Focus should be on underlying risks, not asset class labels.

---

## **Achieving Capital- & Risk-Efficient Portfolios**

A thoughtful and precise combination of market-, factor- and idiosyncratic-risk, along with manager skill, are key to achieving capital-, and risk-efficient portfolios

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# ESG in Action:

## Wall Street, Meet Fearless Girl

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Starting in 2017, our Asset Stewardship team has called on companies in our investment portfolio to increase the number of women on their boards, and made clear we would use our proxy voting power to effect change if they failed to act.



Photo: Sculpture by Kristen Visbal  
Source: State Street Global Advisors Asset Stewardship Team June 2018

---

### 1200+

companies engaged in the US, UK, Australia, Japan, Canada and continental Europe because they had no women on their boards

---

### 500+

companies voted against during the 2017 proxy season, and another 500+ in the 2018 season

---

### 301

companies out of those engaged that have now added a female director to the board; 28 more have committed to doing so

# Our Active and Index Capabilities Cover the Risk/Reward Spectrum

## Equity

**\$1.8T**

Active  
Quantitative  
Fundamental

Smart Beta

Index

## Fixed Income & Cash <sup>1</sup>

**\$740B**

Active

Smart Beta

Index

Cash Management

## Multi-Asset

**\$145B**

Strategic & Tactical  
Asset Allocation

Outcome Oriented  
Target Date Funds  
Real Assets  
Inflation Protection  
Absolute Return

Exposure Management

Model Portfolios

## Alternatives <sup>2</sup>

**\$136B**

Hedge Funds

Private Equity

Private & Public Real Estate

Currency

Commodities

Real Assets

**Environmental, Social & Governance**

**Defined Benefit / Defined Contribution Solutions**

**Outsourced Chief Investment Officer (OCIO)**

**Alternatives Program Management**

Period end as of September 30, 2018

<sup>1</sup>Cash includes both floating- and constant-net-asset-value portfolios held in commingled structures or separate accounts. <sup>2</sup>Alternatives Includes real estate investment trusts, currency and commodities, including SPDR® Gold Shares ETF and SPDR® Long Dollar Gold Trust ETF. We are not the investment manager for the SPDR® Gold Shares ETF and SPDR® Long Dollar Gold Trust ETF, but acts as the marketing agent.

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# What Keeps Clients Awake at Night?

## Investor Challenges and Needs

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### The End of Norms

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Rising protectionism

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Retaliatory tax cuts

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Heightened geopolitical risks

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### Life after Easy Money

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Switch from monetary to fiscal stimulus raises risk of policy mistakes

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Volatility and inflation risk return

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### Risk Rises as Cycle Matures

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Actively manage equity and fixed income exposures

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Valuations matter

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Hedge your tail risks

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### Value for Fees

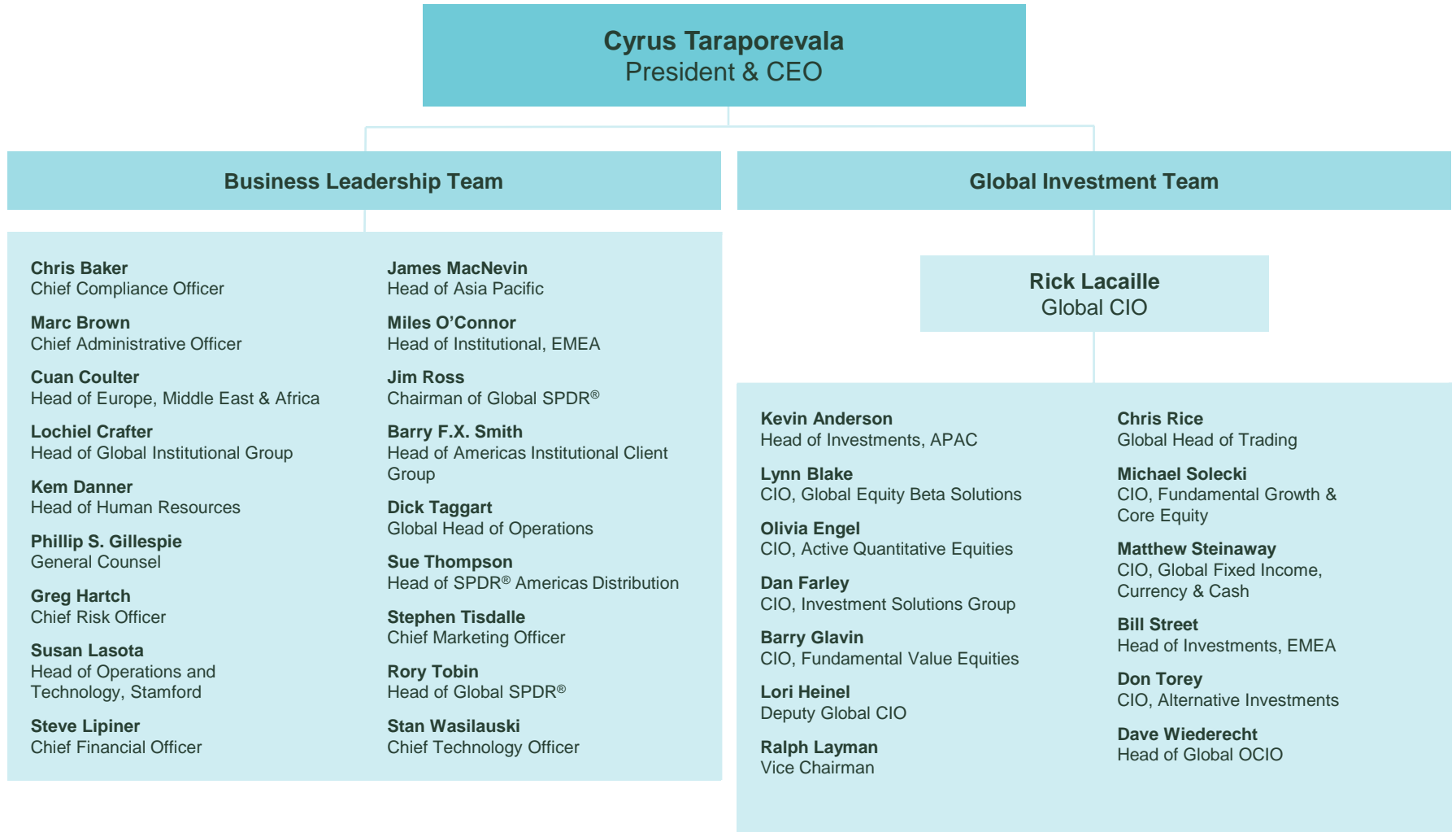
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Systematize where effective

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Demand true alpha

# Executive Management Group



As of July 23, 2018

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# Account Summary

# Retirement Plan for Sacramento Regional Transit District Employees

## Investment Summary

As of September 30, 2018:

	Market Value (\$)
State Street MSCI EAFE Index NL Fund	11,397,848
State Street S&P 500 Flagship NL Fund	49,869,585
<b>Total</b>	<b>61,267,434</b>

## Statement of Asset Changes

The following changes took place in the Retirement Plan for Sacramento Regional Transit District Employees account for the period of June 20, 2012 to September 30, 2018:

	Starting Balance 6/20/2012 (\$)	Contributions (\$)	Withdrawals (\$)	Appreciation/ (Depreciation)* (\$)	Ending Balance 9/30/18 (\$)
State Street MSCI EAFE Index NL Fund	14,237,110	2,509,036	(12,201,601)	6,741,024	11,397,848
State Street S&P 500 Flagship NL Fund	33,494,835	1,802,533	(22,050,165)	36,442,963	49,869,585
<b>Total</b>	<b>47,718,701</b>	<b>4,311,569</b>	<b>(34,251,766)</b>	<b>43,183,988</b>	<b>61,267,434</b>

Source: SSGA

\* Includes dividends, interest, and realized/unrealized gains and losses.

# Retirement Plan for Sacramento Regional Transit District Employees

## Summary of Performance

Following are the gross and net returns for the Retirement Plan for Sacramento Regional Transit District Employees portfolios versus the corresponding benchmarks as of September 30, 2018:

	One Month (%)	Quarter To Date (%)	Year to Date (%)	One Year (%)	Three Years (%)	Five Years (%)	Since Inception (%)	Inception Date
<b>State Street MSCI EAFE Index NL Fund</b>								<b>Jun/2012</b>
Total Returns (Gross)	0.91	1.40	-1.11	3.07	9.62	4.76	8.72	
MSCI EAFE® Index	0.87	1.35	-1.43	2.74	9.23	4.42	8.38	
<b>Difference</b>	<b>0.04</b>	<b>0.04</b>	<b>0.33</b>	<b>0.34</b>	<b>0.38</b>	<b>0.34</b>	<b>0.34</b>	
Total Returns (Net)	0.90	1.37	-1.18	2.97	9.51	4.66	N/A	
MSCI EAFE® Index	0.87	1.35	-1.43	2.74	9.23	4.42	N/A	
<b>Difference</b>	<b>0.03</b>	<b>0.02</b>	<b>0.25</b>	<b>0.23</b>	<b>0.27</b>	<b>0.24</b>	N/A	
<b>State Street S&amp;P 500 Flagship NL Fund</b>								<b>Jun/2012</b>
Total Returns (Gross)	0.57	7.73	10.57	17.93	17.35	14.00	15.40	
S&P 500®	0.57	7.71	10.56	17.91	17.30	13.95	15.35	
<b>Difference</b>	<b>0.00</b>	<b>0.02</b>	<b>0.01</b>	<b>0.02</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	
Total Returns (Net)	0.57	7.71	10.53	17.87	17.29	13.94	N/A	
S&P 500®	0.57	7.71	10.56	17.91	17.30	13.95	N/A	
<b>Difference</b>	<b>0.00</b>	<b>0.00</b>	<b>-0.03</b>	<b>-0.04</b>	<b>-0.01</b>	<b>-0.01</b>	N/A	

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized.

The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

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# Equity Indexing Skillfully Delivered



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# Who We Are

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# Why State Street Global Advisors for Index, Smart Beta & ESG Investing

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## Core Focus Area and Key Strength

- 40 year history of delivering high quality, broad based index solutions
- Index represents 80%<sup>1</sup> of assets under management and 68%<sup>1</sup> of revenues
- >98%<sup>1</sup> of equity index funds have historically tracked within their tolerance bands

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## Industry Leader and Innovator

- ✓ Launched first US ETF
- ✓ In-house index creation
- ✓ Developing smart beta since 2006

Groundbreaking efforts in ESG research and integrated portfolio solutions. In-house proprietary ESG framework and screening tool

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## Experienced and Reliable Team

- 19 year average portfolio manager tenure
- Utilize a globally consistent investment management platform and processes
- Strategic focus on implementation and risk management
- Deep Research expertise with innovative heritage

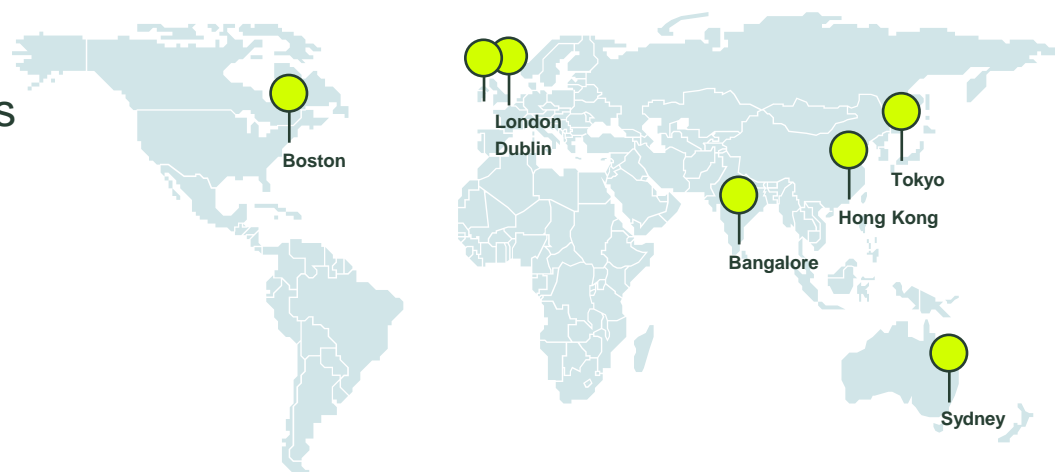
<sup>1</sup>Source: State Street Global Advisors, June 2018

# State Street Global Equity Beta Solutions

**160+** Dedicated professionals to equity indexing across the firm

**30+** Traders & analysts

**10+** Equity strategists & specialists



<b>CIO</b>	Exp Yrs
Lynn Blake, CFA	31

## Team Highlights

Investment Team Members	65
Average Experience Years	19
Number of CFA Charter Holders	24
Number of PhDs	3

<b>Senior Leadership</b>	Exp Yrs
Mike Feehily, CFA (US)	26
Richard Hannam, ASIP (EMEA)	34
Susan Darroch, (Asia Pac)	33
Jennifer Bender, PhD <sup>2</sup> (Research)	22
Rakhi Kumar*, (ESG/ Stewardship)	17
David Arrighini, CFA (TEMC)	28
Shayne White (Technology)	26

<b>Portfolio Strategists</b>	Exp Yrs
Ana Harris	14
Johnnie Yung	32
Heather Apperson	14
Yvette Murphy	10
Strategy Team Members	8
Average Experience Years	14

As of October 15, 2018. <sup>1</sup> Includes Global Equity Beta Solutions Team Members who may not be reflected in the organization chart above. <sup>2</sup> Does not manage assets for the Global Equity Beta Solutions team. CFA® is a trademark of the CFA Institute. CAIA® is a registered trademark of the Chartered Alternative Investment Analyst Association.

# ESG & Asset Stewardship

## Head of ESG & Asset Stewardship

Rakhi Kumar



## Our Belief

Companies embracing ESG best practice have strong, effective, independent boards and are able to incorporate sustainability into their long term strategy.

## ESG

- **Proprietary** ESG research and innovation driving multi asset classes solutions
- **Strong focus** on independent board leadership, financial impacts of climate change and other crucial ESG issues like gender diversity

## Asset Stewardship

- **Alignment** of asset stewardship, portfolio management, research, technology and ESG solutions
- Commissioned the **Fearless Girl** statue and developed the **Gender Diversity Index**

## 30+ Years

of commitment to ESG investors

## \$202B<sup>1</sup>

assets under management in ESG

## 301<sup>2</sup> of the 700

companies we called on made positive progress on board gender diversity

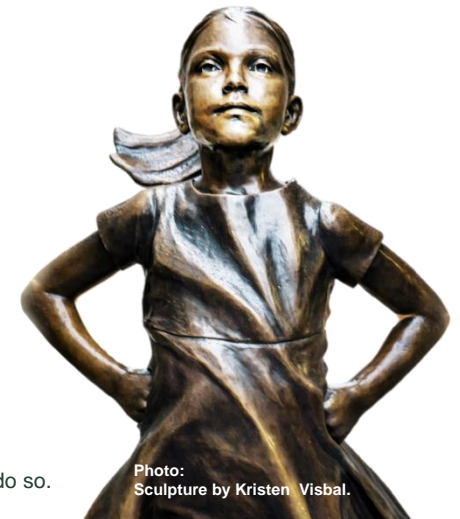


Photo:  
Sculpture by Kristen Visbal.

Source: State Street Global Advisors. As of June 30, 2018. <sup>1</sup> As of June 30, 2018. <sup>2</sup> 152 added a female board member, and 34 pledged to do so.

# Global Trading

17 year global desk in place

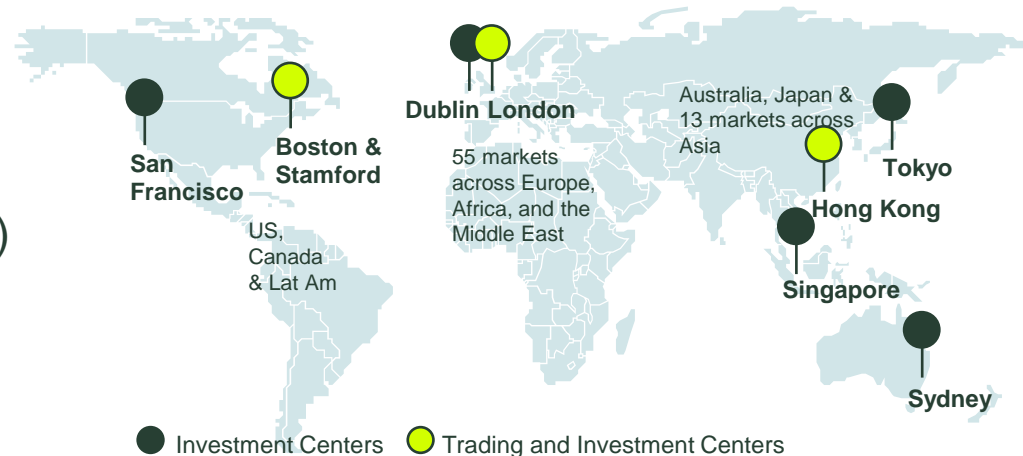
24 hour trading capabilities

30+ Traders (Equity & Fixed Income)

+18 year's average experience

\$2.3 Trillion dollars traded in 2017

2.9 Million tickets executed in 2017



## What Differentiates Us from the Competition?

### Spectrum of Trading Tools

- **Internal crossing network:** Use of security & unit level crossing when possible to minimize transactions costs
- **Algo Wheel:** Seeks to reward better performing algorithmic trading strategies and remove trader bias through a performance driven broker selection process

### Trading Analytics Group (TCA)

- Cross asset class team performing transaction cost analysis, data and analytics reporting, as well as market research
- TCA results incorporated into Algo selection process
- Quarterly review of best execution and governance oversight framework

### Connectivity & Expertise

- Regional trading desks with local expertise — coverage across 95 global markets
- Strong partnership between trading, portfolio management and research helps drive value-add strategies and routine implementation decisions

As of December 31, 2017. \* Does not include the Heads of Regional Trading Desks. Asset classes include equity, fixed income, futures and currency. Figures are in USD.

# Industry Trends Q3 2018

<b>Flows/Markets</b>	<p><b>Investors continued to de-risk , although US equity markets hit new highs and rates edged higher.</b></p> <ul style="list-style-type: none"> <li>Concerns over slowing growth, global trade and rising rates drove investor sentiment. Non-US equities, specifically EM continued to see outflows.</li> <li>Recent investor surveys showing the largest overweight in US equities in three years and don't expect a rotation in bonds until US 10 yr yields hit 3.7%<sup>1</sup></li> </ul>	
<b>Smart Beta / Factor Investing</b>	<p><b>Focus area for institutions but implementation and manager solutions vary</b></p> <ul style="list-style-type: none"> <li>30% YoY growth rate in smart beta strategies since 2012, while 'standard' passive strategies grew 13% a year during the same period<sup>2</sup></li> <li>Thoughtful implementation coupled with the ability to clearly capture and attribute factor contributions are key manager differentiators</li> <li>Seeing renewed interest in low volatility and value strategies given the market environment</li> </ul>	
<b>Self Indexing</b>	<p><b>Increasing number of asset managers announcing plans to self index</b></p> <ul style="list-style-type: none"> <li>Benefits include increased flexibility, lower explicit cost (i.e., licensing fees) and potentially lower implicit costs</li> <li>Increasing number of ETF managers moving towards self indexed products in fixed income and smart beta</li> </ul>	
<b>Asset Stewardship &amp; ESG</b>	<p><b>Dedication to asset stewardship &amp; ESG initiatives becoming more common</b> — however standards still vary</p> <ul style="list-style-type: none"> <li>In a recent survey, 84%<sup>3</sup> of respondents said to be pursuing or considering ESG integration in their investment process. 60% of respondents began doing so in the last four years.</li> <li>Institutions demanding more transparency — what do I own and what is the impact? Reporting on ESG metrics likely to become the norm but the industry is still establishing a base line measurement framework</li> </ul>	
<b>Noteworthy Index Events</b>	<p><b>MSCI</b></p> <ul style="list-style-type: none"> <li>Consultation underway to increase China A from 5% to 20%, as well as add midcap stocks. Announcement set for Feb 2019</li> <li>Saudi Arabia and Argentina to be promoted to Emerging Market status in May 2019</li> <li>In March 2019, companies with unequal voting structures, will be eligible for inclusion in MSCI standard indices</li> </ul>	<p><b>FTSE</b></p> <ul style="list-style-type: none"> <li>Announces formal addition of China A shares. Estimated around 5% initially and set to be added in multiple tranches</li> </ul>

<sup>1</sup> BAML Monthly Manager Survey, September and October, 2018. <sup>2</sup> Boston Consulting Group, May 4, 2018. Unless otherwise noted, all data as of June 30, 2018. <sup>3</sup> Morgan Stanley, Sustainability Signals, June 2018

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# What We Do

# A Long History of Indexing Innovation

1970s	1990s	2000s	2010s
Standard Indices		FTSE RAFI US 1000 S&P HY Div Aristocrats	Nikkei 225
			FTSE RAFI ALL World 3000 MSCI Min Volatility
			RAFI Low Vol MSCI World Equally- weighted
			Russell 1000 Single Factors FTSE EDHEC Risk Efficient EM MSCI Quality Mix Series
			Kensho New Economies Indices
Our Proprietary Strategies: Tilted, Optimized, ESG (Multifactor)	<b>State Street Global Advisors launched International Index Fund and S&amp;P Strategy (1979)</b>	SSGA S&P 500 Equal Weighted (1993)	SSGA US Valuation- Tilted
		SSGA Global Managed Vol	SSGA Europe Managed Vol
		SSGA Global Size Tilted	SSGA Canadian Div Tilted
		SSGA Global Valuation Tilted	SSGA Global Multi-factor
			SSGA US Multi-factor
			SSGA Europe Multi-factor
			Gender Diversity Index — Multi-Factor Optimized
			US Cap Weighted Self Indices — Multi-Factor + ESG

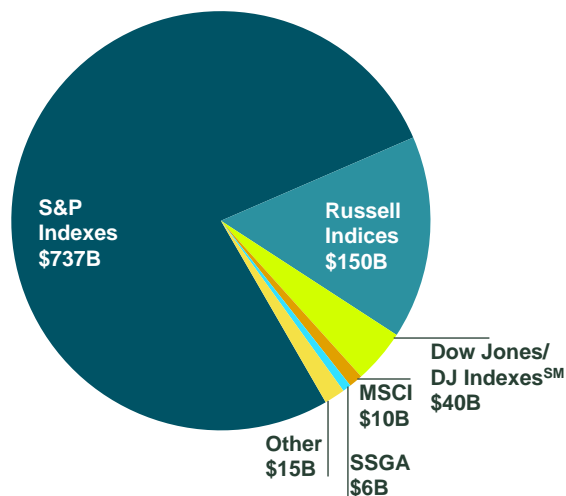
Source: State Street Global Advisors, as of June 30, 2018. Inception date of select portfolios.



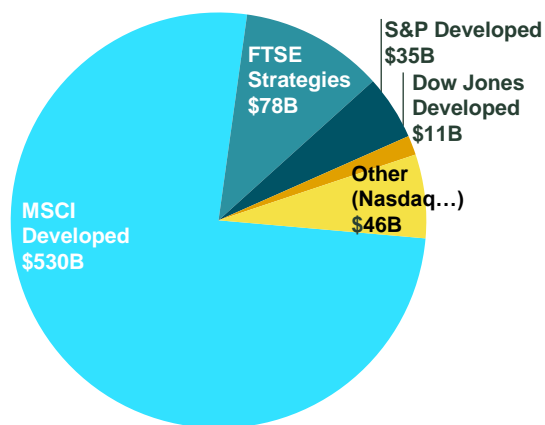
# A Leading Manager of Global Indexed Assets

Total Global Equity Beta Solutions Assets Under Management: \$1.72 Trillion (USD) as of September 30, 2018

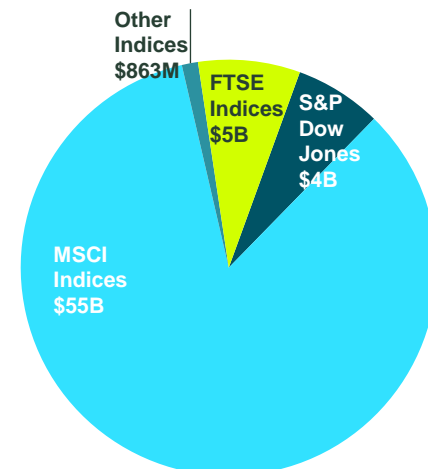
**US Index AUM**  
\$960B



**International & Global Equity AUM** \$699B



**Emerging Markets Equity AUM** \$66B



Source: State Street Global Advisors. As of September 30, 2018.

\*Exclusive of Emerging Markets Equities invested in other MSCI-benchmarked strategies such as MSCI ACWI and MSCI ACWI ex-US.

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# How We Do It

# Index Equity Management Techniques

Benchmark returns can be achieved through....

## Replication

Hold all or the majority of securities in the index at approximately market cap weight

Typically applied to reasonable sized portfolios with minimal liquidity or accessibility constraints

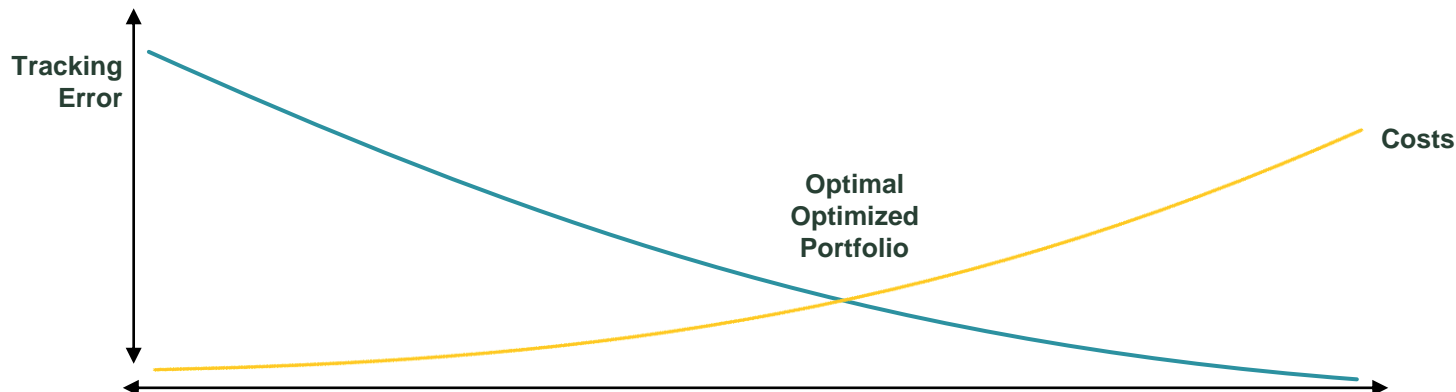
- i.e. US large cap or developed international

## Optimization

Construct a portfolio with the same risk & return characteristics of the index but with a smaller subset of securities

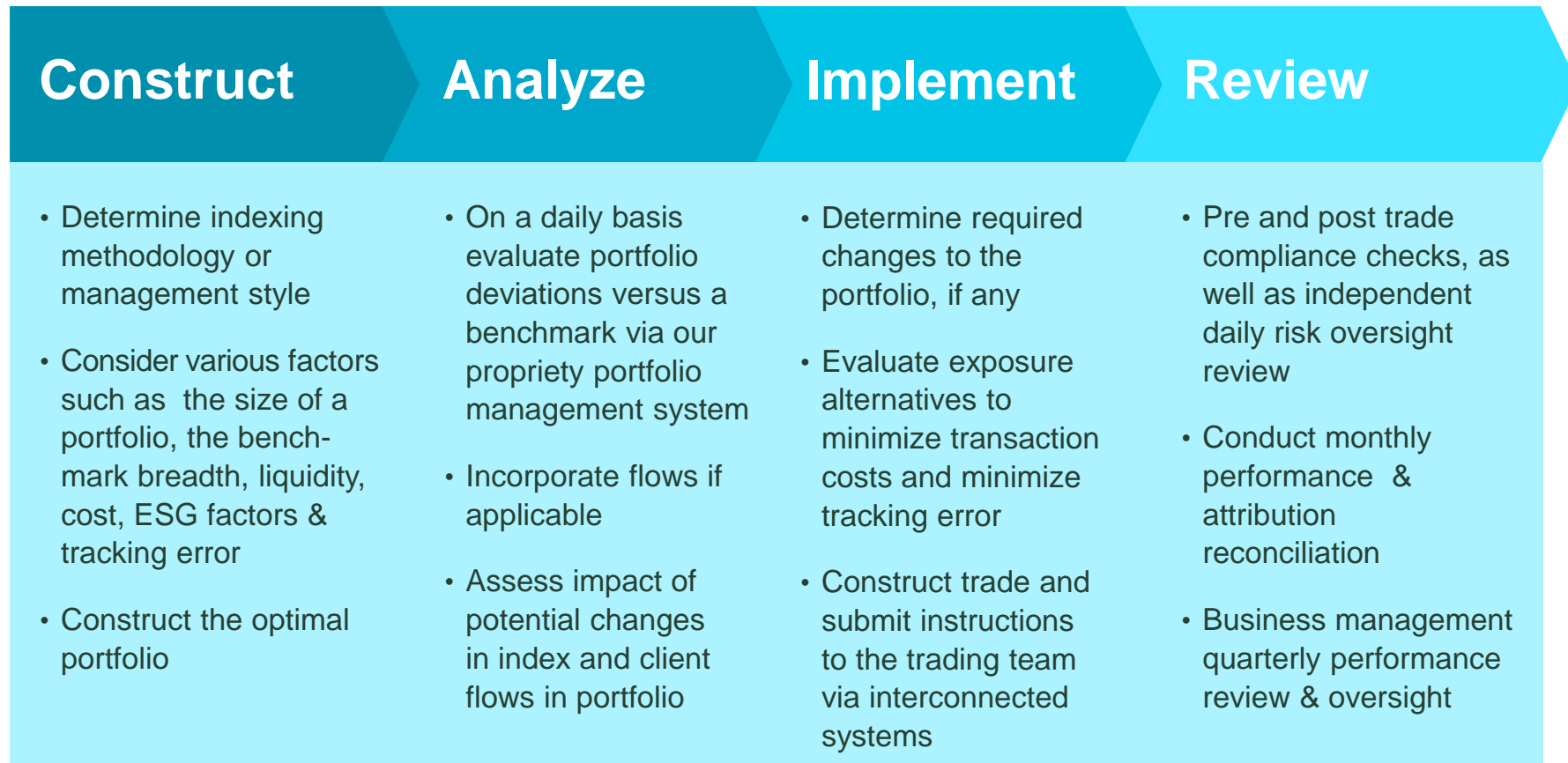
Typically applied to liquidity constrained portfolios

- i.e. International small cap (EM) or smaller sized portfolios



# Investment Process

A tried and tested process marrying human insight and technology



Source: State Street Global Advisors

# Improving Risk Controls & Oversight Through Technology

## Features of our portfolio management system:

- Full data integration with other State Street Global Advisors applications and risk/oversight teams
- Designed and customized to our process, workflow and portfolio universe
- Provides a comprehensive portfolio view for portfolio management, as well as risk and oversight
- Dedicated software development resources to ensure continuous development and improvements



Source: State Street Global Advisors

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# How We Add Value

# Why choosing the right index manager matters?

**Indexes make numerous assumptions, which can lead to mistracking (+/-), and wealth erosion if not managed with precision and skill**

Index Assumptions	Reality
No transaction costs	Effective implementation techniques can minimize implicit and explicit costs (i.e. internal crossing)
All trades executed at market on close	Trading strategies can reduce turnover and improve execution
Dividends reinvested at ex date — before cash received	Equitize cash with futures when possible to minimize cash drag
Maximum foreign dividend withholding tax rate	Investors realize different withholding tax rates relative to the index, resulting in income via tax reclaims
Assumed corporate action elections	Multiple options may exist presenting opportunities to add value
Dividends are the only income source	Income from securities litigation payments or securities lending can help offset negative tracking*

\*Other sources of tracking deviation may include but are not limited to transactions costs, taxes, cash drag, futures tracking versus the benchmark or securities mis-weights.

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# Adding Value Through Effective Implementation

## Index Reconstitution

Pursue the best outcome for the client

## Portfolio Rebalancing

Be pragmatic  
It doesn't always make sense to trade

## Index Events

Research corporate actions/events to assess impact fully and manage risk

## Trading

Determine the most cost-efficient approach

## Scrip Dividends

Look for the Premium Cash versus stock

## Derivatives

Used to overlay cash and synthesize full exposure to equity markets

## Stock Lending

Can help offset costs and potentially add value

## Core Beta Research

Continuously look for opportunities to improve and evolve implementation



# Portfolio Rebalancing: Be Pragmatic

Example: S&P Quarterly Rebalance March 2017

	S&P500 Index	S&P400 Index	S&P600 Index
Rebalance Turnover	0.87%	4.27%	4.13%
Traded	0.55% approx. <small>(Typical State Street Global Advisors S&amp;P500 portfolio)</small>	3.92% <small>(Typical State Street Global Advisors S&amp;P400 portfolio)</small>	3.75% <small>(Typical State Street Global Advisors S&amp;P600 portfolio)</small>
Reduction in Turnover	24%	8%	9%

By monitoring ex-ante tracking closely, we can avoid trading some of the smaller names of a given index rebalance. This **reduces the overall turnover** of a portfolio and also **reduces the transaction costs** associated with it.

Source: State Street Global Advisors. For illustrative purposes only

# Internal Crossing: A Powerful Source of Cost Savings & Liquidity

	Total Value <sup>4</sup>	In-kind <sup>3</sup> /Internal Crossing/ Unit Crossing	Estimated Cost Savings <sup>5</sup>	Transaction Cost Savings <sup>5</sup>
<b>US Market Case Study<sup>1</sup> (2015–2017)</b>	\$108.5 Billion	90.1% of the Total	0.06% of the Total	<b>\$64.4M</b>
<b>Non-US Developed Case Study<sup>2</sup> (2015–2017)</b>	\$30.9 Billion	75.9% of the Total	0.23% of the Total	<b>\$71.1M</b>

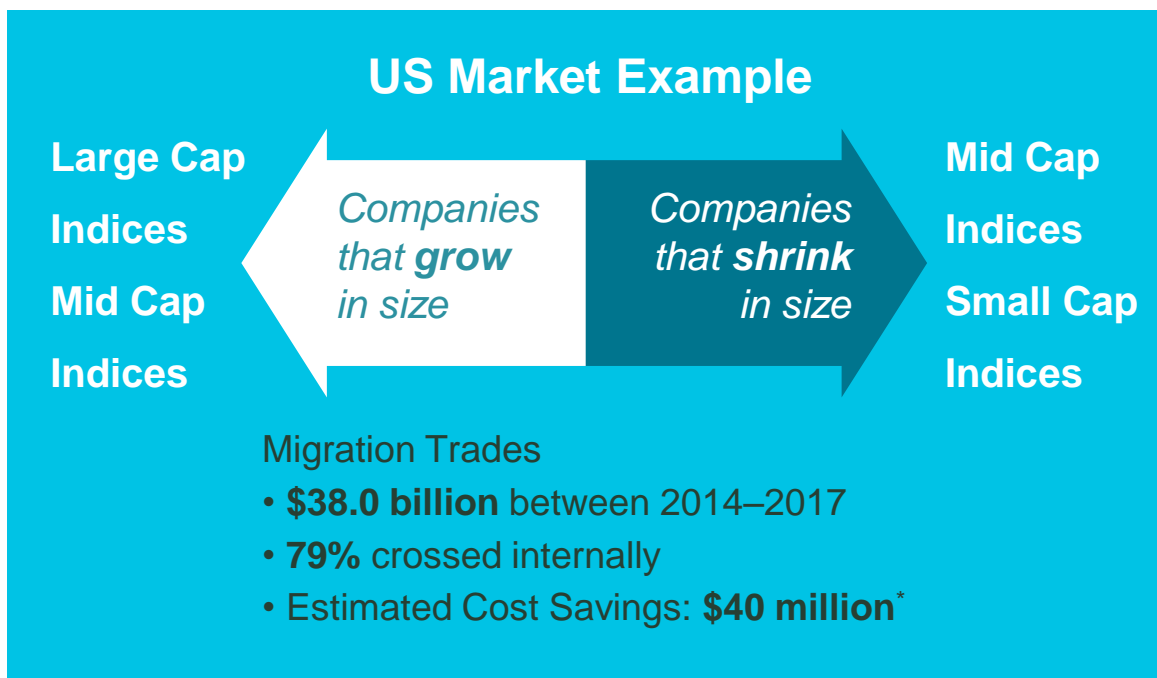
Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors. <sup>1</sup>Based on actual client order flow trading activity in the S&P 500<sup>®</sup> Defined Contribution Commingled Fund. <sup>2</sup>Based on actual client order flow trading activity in the Bi-Monthly EAFE ERISA Commingled Funds. <sup>3</sup>In-kind transfers are redemptions/contributions made via security transfers. <sup>4</sup>For calendar years 2015–2017. It is not known whether similar results have been achieved after 2017. <sup>5</sup>This represents estimated average savings across all aggregate trading over the period. These estimates are based on subjective judgments and assumptions and do not reflect the effect of unforeseen economic and market factors on decision making. There is no guarantee that a particular client transaction will experience the same level of savings. In fact, savings could differ substantially. Any savings is contingent upon other activity taking place on a given transaction day. Had other funds been selected, different results of transaction cost savings may have been achieved. All figures are in USD.

# Minimizing Turnover Through Internal Crossing

## Index Migrations

Companies regularly move between indices

A diverse book of business creates opportunities to reduce transaction costs around index change events



As of December 2017 updated annually. Source: State Street Global Advisors. All figures are in USD. Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors. \*Impact and spread cost estimates are based on calculations provided by vendor tools that specialize in these estimations but are proprietary to the vendor. Commissions, taxes, and other explicit cost estimates are based on standard schedules published within State Street Global Advisors but may vary from the results experienced in actual trading. Savings are calculated by multiplying the estimated market trading costs (ranging from 10 to 20 basis points—depending on liquidity type and region) by the relevant trade volume amount. US large cap stocks account for about 64% of the noted savings.

# Global Organized Trading (GOT): Adding Value Through Trading

## Strategy Design Using Expert Inputs

## GOT Results

Trading

Historically achieving better trading prices relative to the index provides meaningful results

Portfolio Management

Research

2015\*: \$70M+

2016\*: \$11M+

Transaction Costs

2017\*: \$48M+

Source: State Street Global Advisors. As of December 31, 2017. Figures in USD and approximate. <sup>1</sup>This represents the aggregate gain/loss for both base and special situations. <sup>2</sup>This includes MSCI, FTSE and S&P events. Only 2017 includes other ad-hoc intra-quarter dates.

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# Derivatives and Other Exposures

**While the goal is to remain fully invested in stocks & invest locally but ....**  
**it may not be possible or the most pragmatic approach**

## **Index Futures**

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Portfolios hold some residual cash to either to accommodate daily cash flows or because of dividend accruals

Futures provide a cost-efficient and liquid way of gaining exposure to the underlying index while minimizing cash drag and trading costs

## **Other Exposures**

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Investing locally is preferred; however, accessibility and cost in some markets can presents challenges

ADRs/ GDRs or swaps can be used in place of locally listed securities

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# Why Choose State Street Global Advisors?

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## Indexing Skillfully Delivered

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## Research

Embedded research team delivering innovative solutions – such as factors, ESG and core beta implementation strategies

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## Client Centric Focus

Listen, understand and adapt to client needs and challenges

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## Performance

Deliver performance by striking the appropriate balance between return, risk and costs (>98% of funds have consistently tracked within expectations)\*

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## Team

Tenured and stable team with dedicated portfolio managers averaging 19 years experience

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## Asset Stewardship

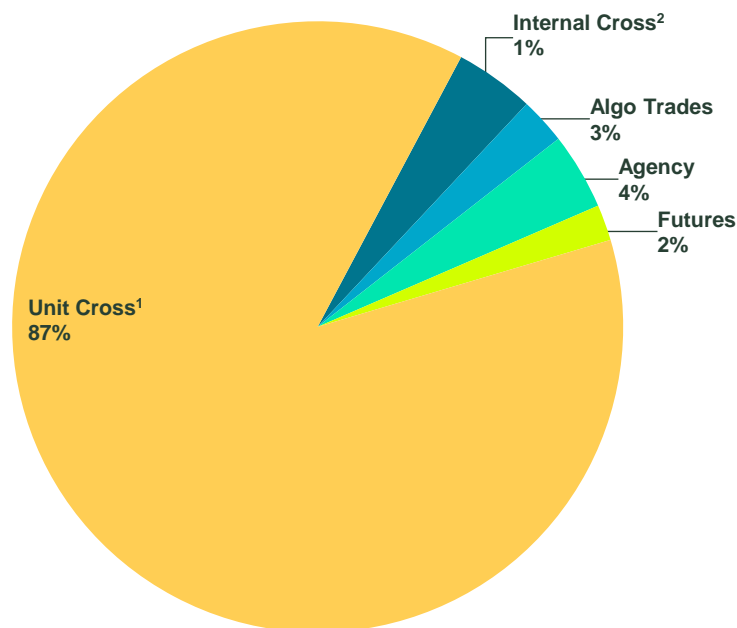
Effective steward of client assets with a coordinated firm wide proxy voting platform and focused engagement

Source: State Street Global Advisors. \*Based on cumulative quarterly gross-of-fees returns for 1,322GEBS managed pooled, and separate account portfolios from April 1, 2018 to June 30, 2018. Tracking error based on the difference between portfolio and benchmark cumulative returns.

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# Portfolio Review for S&P 500<sup>®</sup> Index Strategy

# Internal Liquidity: A Powerful Cost Saving Resource



Total Order Flows 2015-2017 \$100.5B

**93%** of the S&P 500 Index Strategy's cash flows traded at **low or zero cost\***

Source: State Street Global Advisors

\*For the 3 most recent calendar years as of the slide creation date, 2015–2017. Data based on the weighted average results (by order volume) of a one or more of SSGA's commingled funds participating in crossing activities. The figures above relate to the Total Order Flow which represents investor-initiated contributions and redemptions into and out of participating funds. There is no guarantee that a particular client transaction will experience the same level of low cost trading. Low cost trading percentages are calculated by subtracting agency trades from total trades and then dividing by total trades. Availability of internal crossing at SSGA may be affected by your asset class, vehicle type, jurisdiction, or other factors.

<sup>1</sup>Unit crosses are transactions where client contributions/redemptions in a participating fund are matched with offsetting client contributions/redemptions in the same fund.

<sup>2</sup>Internal crosses are equity transactions for one SSGA managed fund that are matched, where possible, with offsetting equity transactions from other eligible SSGA managed funds. Figures in USD

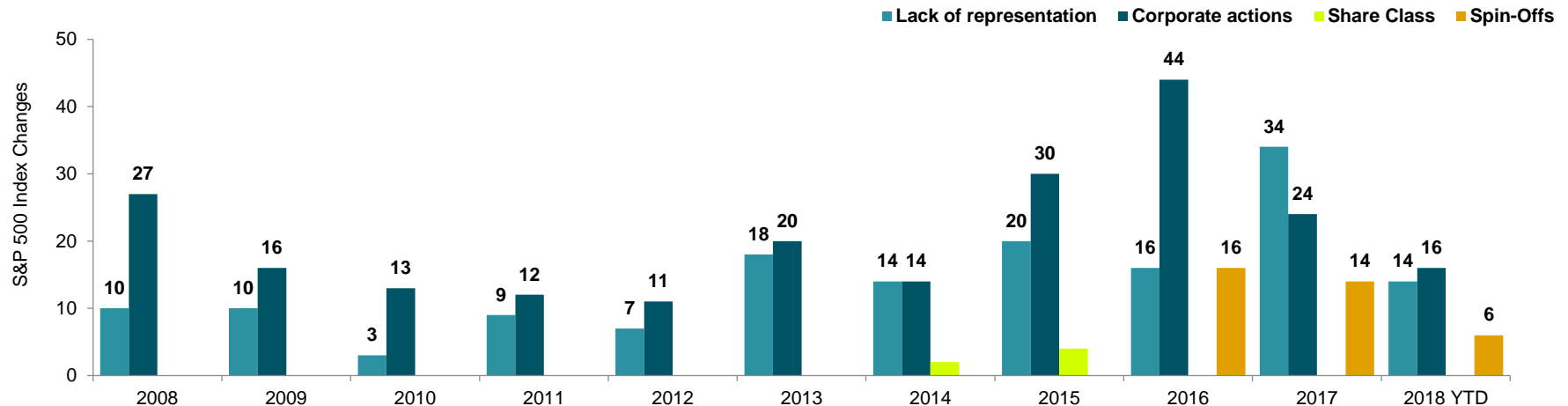


# Index Change Analysis — S&P 500®

## Index

2018

- 18 additions/deletions so far in 2018
- 16 additions/deletions were due to acquisition activity, 14 were due to securities being more representative of the mid-cap index (lack of representation)
- S&P 500 now contains 505 positions (but still 500 companies) after the additions of MSCI Inc, Energy Inc, Twitter Inc, Broadridge Financial Solutions Inc., HollyFrontier Corporation and FleetCor Technologies Inc. and other 12 companies.



As of September 30, 2018

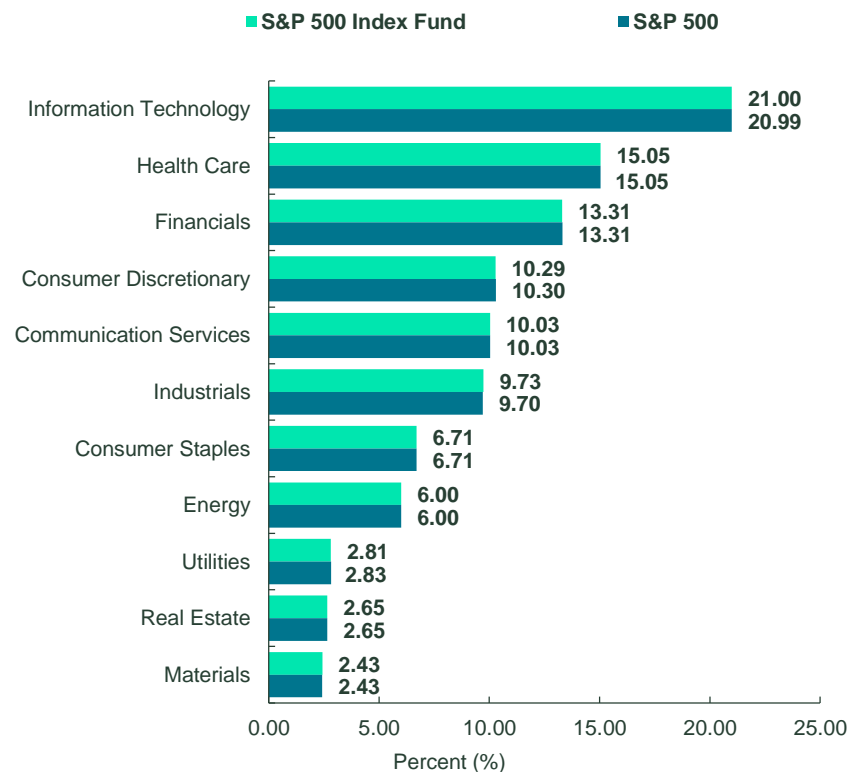
Source: Standard & Poor's®

Index changes are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

# What Does the Portfolio Look Like?

## Seeks to deliver risk characteristics of the benchmark

Characteristics	Portfolio	Benchmark*	
<b>Value Indicators</b>			
Price/Earnings Ratio (Forward 12 Months)	18.25	18.25	
Price/Book Ratio	3.50	3.50	
Price/Cash Flow	13.90	13.90	
Annual Dividend Yield (Trailing 12 Months)	1.88	1.88	
<b>Growth Indicators</b>			
Estimated 3–5yr EPS Growth	13.62	13.62	
Return on Equity	22.01	22.01	
<b>Risk Indicators</b>			
Beta (Trailing 36 Months)	1.00	-	
Standard Deviation (Annualized 36 Months)	9.06	9.05	
<b>Structures</b>			
Composite AUM (\$M)	66,354.61	-	
Weighted Average Market Cap (\$B)	218.9	219.0	
Index Historical Turnover (5 Year Average)	-	4.16	
Total Number of Holdings	506	505	
<b>Top 10 Holdings</b>			
	Portfolio Weight (%)	Benchmark Weight (%)	Relative Weight* (%)
Apple Inc.	4.21	4.21	-0.00
Microsoft Corporation	3.57	3.57	-0.00
Amazon.com, Inc.	3.34	3.34	-0.00
Berkshire Hathaway Inc. Class B	1.70	1.70	-0.00
Facebook, Inc. Class A	1.61	1.61	-0.00
JPMorgan Chase & Co.	1.54	1.54	-0.00
Johnson & Johnson	1.51	1.51	-0.00
Alphabet Inc. Class C	1.49	1.50	-0.00
Alphabet Inc. Class A	1.47	1.47	-0.00
Exxon Mobil Corporation	1.46	1.46	-0.00

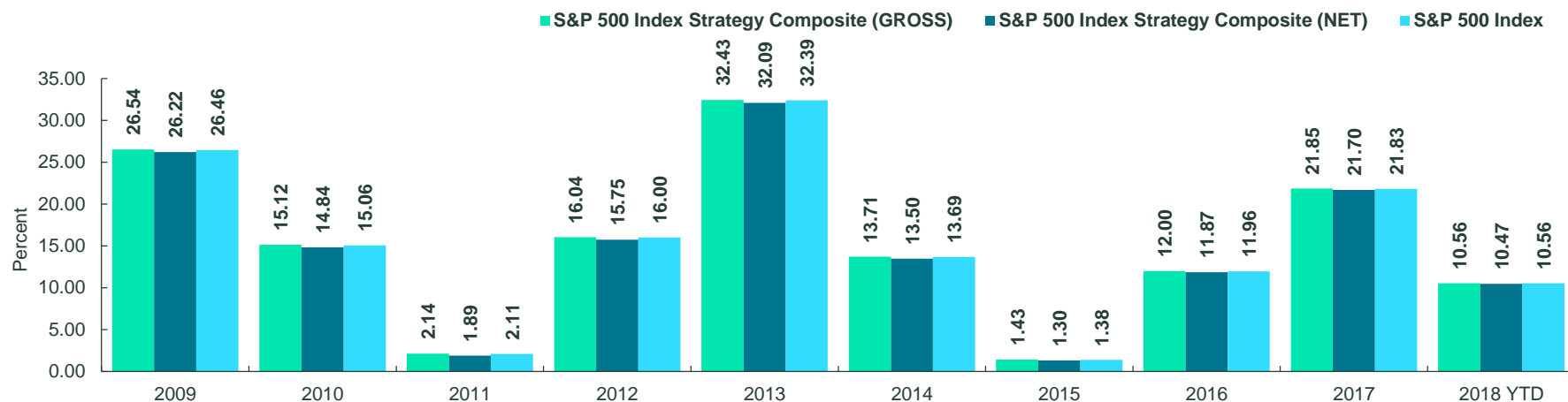


As of September 30, 2018. Sources: FactSet, State Street Global Advisors. Past performance is not a guarantee of future results. The Supplemental Information above (except for beta, standard deviation, and Composite AUM (USD), is that of a single representative account within the Composite, which is subject to change. The representative account was chosen because it has no material restrictions and fairly represents the investment style of the Strategy. The Supplemental Information should not be deemed to be reflective of (and could differ from) the overall Composite or any other single account within the Composite. This information should not be considered a recommendation to invest in a particular sector or to buy or sell any security shown. It is not known whether the sectors or securities shown will be profitable in the future. The specific securities listed do not represent all of the securities purchased, sold, or recommended for advisory clients. \* Benchmark is the S&P 500 Index.

# S&P 500 Index Strategy Composite Performance

Annualized returns for the period ending September 30, 2018 (USD)

	QTR (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception* (%)
S&P 500 Index Strategy (Gross)	7.71	10.56	17.92	17.34	13.97	12.01	10.87
S&P 500 Index	7.71	10.56	17.91	17.31	13.95	11.97	10.84
<b>Difference</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>0.03</b>
S&P 500 Index Strategy (Net)	7.68	10.47	17.78	17.20	13.81	11.79	N/A
S&P 500 Index	7.71	10.56	17.91	17.31	13.95	11.97	N/A
<b>Difference</b>	<b>-0.03</b>	<b>-0.10</b>	<b>-0.13</b>	<b>-0.11</b>	<b>-0.13</b>	<b>-0.18</b>	<b>N/A</b>

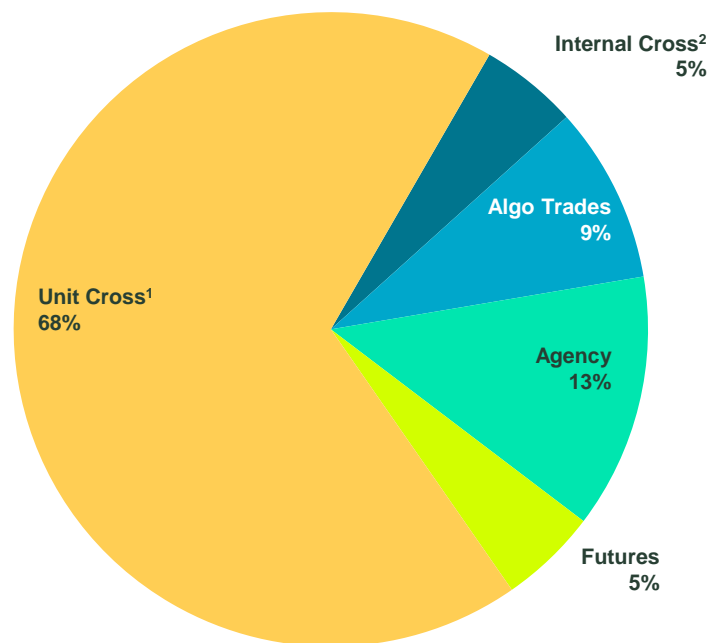


Inception Date: January 1, 1986. Past performance is not a guarantee of future results. All returns reflect capital gains and losses, income, and the reinvestment of dividends (net of withholding taxes), and are calculated in US dollars. Performance returns for periods of less than one year are not annualized. The performance shown is of a composite consisting of all discretionary accounts using this investment strategy. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. "(Gross)" returns are gross of fees and expenses other than actual trading fees and expenses, and reflect all items of income, gain, and loss. "(Net)" returns are provided net of actual trading, audit, custody, administrative and legal fees and expenses, and since 9/30/2014, reflect the highest investment management fee on the actual fee schedule. A GIPS presentation is also available upon request. gPASP500

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# Portfolio Review for MSCI EAFE<sup>®</sup> Index Strategy

# Internal Liquidity: A Powerful Cost Saving Resource



**Total Order Flows 2015-2017 \$3.13B**

**78%** of the MSCI EAFE Index Strategy's cash flows traded at **low or zero cost\***

Source: State Street Global Advisors

\*For the 3 most recent calendar years as of the slide creation date, 2015–2017. Data based on the weighted average results (by order volume) of one or more of State Street Global Advisors's commingled funds. There is no guarantee that a particular client transaction will experience the same level of low cost trading. <sup>1</sup>Unit crosses are transactions where client contributions/redemptions in a commingled fund are matched with offsetting client contributions/redemptions in the same commingled fund. <sup>2</sup>Internal crosses are equity transactions for one State Street Global Advisors managed fund that are matched, where possible, with offsetting equity transactions from other eligible State Street Global Advisors managed funds. Low cost trading percentages are calculated by subtracting agency trades from total trades and then dividing by total trades. Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors.

Figures in USD

# What Does the Portfolio Look Like?

## Seeks to deliver risk characteristics of the benchmark

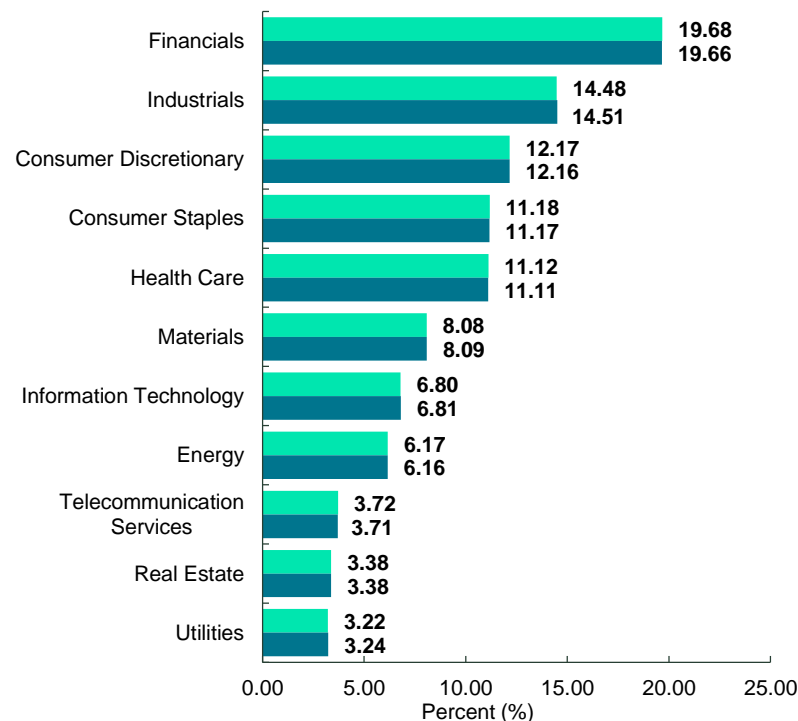
### Characteristics

	Portfolio	Benchmark *
<b>Value Indicators</b>		
Price/Earnings Ratio (Forward 12 Months)	14.26	14.24
Price/Book Ratio	1.67	1.67
Price/Cash Flow	8.03	8.00
Annual Dividend Yield (Trailing 12 Months)	3.17	3.18
<b>Growth Indicators</b>		
Estimated 3-5yr EPS Growth	8.89	8.91
Return on Equity	15.22	15.22
<b>Risk Indicators</b>		
Beta (Trailing 36 Months)	1.00	-
Standard Deviation (Annualized 36 Months)	10.66	10.62
<b>Structures</b>		
Composite AUM (\$B)	33,973.33	-
Weighted Average Market Cap (\$B)	50.52	50.46
Historical Turnover (5 Year Average)	-	3.88
Total Number of Holdings	930	923

### Top 10 Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Relative Weight* (%)
Nestle Sa-reg	1.81	1.78	0.03
Novartis Ag-reg	1.30	1.29	0.01
Hsbc Holdings Plc	1.21	1.23	-0.02
Roche Holding Ag-genusschein	1.18	1.18	0.00
Royal Dutch Shell Plc-a Shs	1.09	1.09	0.00
Total Sa	1.07	1.08	-0.01
Bp Plc	1.06	1.07	-0.01
Toyota Motor Corp	0.99	0.97	0.02
Royal Dutch Shell Plc-b Shs	0.91	0.91	0.00
Sap Se	0.84	0.85	-0.01

■ INTL INDX SF ■ MSCI EAFE



As of September 30, 2018. Sources: FactSet, GICS®, MSCI, Inc., Thomson Reuters Worldscope. The Supplemental Information above is that of a single representative account within the Composite, which is subject to change. The representative account was chosen because it has no material restrictions and fairly represents the investment style of the Strategy. The Supplemental Information should not be deemed to be reflective of (and could differ from) the overall Composite or any other single account within the Composite. This information should not be considered a recommendation to invest in a particular sector or to buy or sell any security shown. It is not known whether the sectors or securities shown will be profitable in the future. The specific securities listed do not represent all of the securities purchased, sold, or recommended for advisory clients. You should not assume that investments in the securities identified and discussed were or will be profitable. \* Benchmark is MSCI EAFE Index.

# MSCI EAFE® Index Strategy Country Weights

Region/Country	Portfolio Weight (%)	Benchmark Weight*(%)	Difference(%)
<b>EMEA</b>	<b>63.53</b>	<b>63.68</b>	<b>-0.15</b>
United Kingdom	17.45	17.50	-0.05
France	11.18	11.21	-0.03
Germany	9.38	9.41	-0.03
Switzerland	8.23	8.25	-0.02
Netherlands	3.33	3.34	-0.01
Spain	2.95	2.95	0.00
Sweden	2.72	2.73	-0.01
Italy	2.29	2.29	0.00
Denmark	1.68	1.68	0.00
Finland	1.05	1.06	-0.01
Belgium	1.01	1.01	0.00
Norway	0.79	0.78	0.01
Israel	0.55	0.55	0.00
Ireland	0.52	0.52	0.00
Austria	0.24	0.24	0.00
Portugal	0.16	0.16	0.00

Region/Country	Portfolio Weight (%)	Benchmark Weight*(%)	Difference(%)
<b>Asia/Pacific Rim</b>	<b>29.67</b>	<b>29.56</b>	<b>0.11</b>
Japan	24.65	24.56	0.09
Australia	6.79	6.76	0.03
Hong Kong	3.53	3.52	0.01
Singapore	1.27	1.27	0.00
New Zealand	0.22	0.21	0.01
<b>Total Portfolio</b>	<b>100.00</b>	<b>100.00</b>	<b>0.00</b>

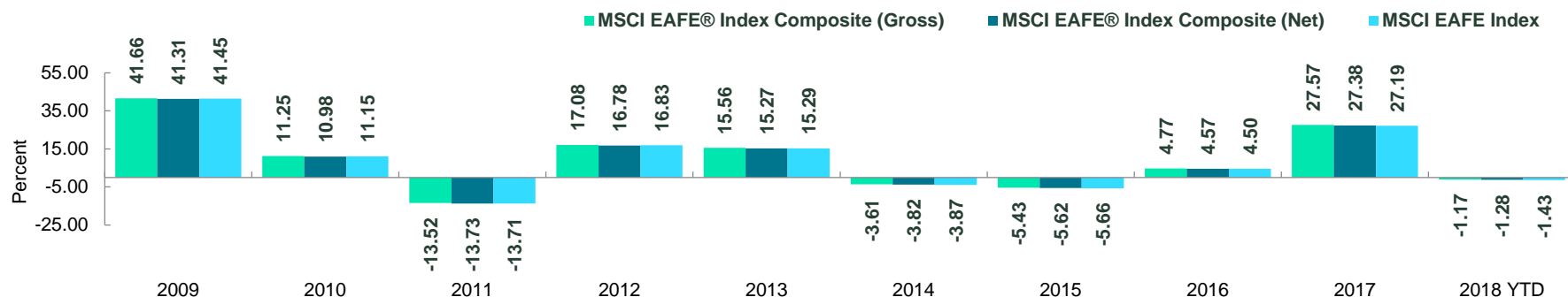
As of September 30, 2018. Sources: FactSet, GICS®, MSCI, Inc., Thomson Reuters Worldscope. The Supplemental Information above is that of a single representative account within the Composite, which is subject to change. The representative account was chosen because it has no material restrictions and fairly represents the investment style of the Strategy. The Supplemental Information should not be deemed to be reflective of (and could differ from) the overall Composite or any other single account within the Composite. This information should not be considered a recommendation to invest in a particular sector or to buy or sell any security shown. It is not known whether the sectors or securities shown will be profitable in the future.

\*Benchmark: MSCI EAFE Index.

# MSCI EAFE® Index Composite Performance

## Annualized returns for the period ending September 30, 2018 (USD)

	QTR (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception* (N/A)
MSCI EAFE® Index Composite (Gross) <sup>1,2</sup>	1.39	-1.17	3.01	9.52	4.68	5.64	8.87
MSCI EAFE Index <sup>4</sup>	1.35	-1.43	2.74	9.23	4.42	5.38	8.68
<b>Value Added</b>	<b>0.03</b>	<b>0.26</b>	<b>0.27</b>	<b>0.29</b>	<b>0.26</b>	<b>0.26</b>	<b>0.19</b>
MSCI EAFE® Index Composite (Net) <sup>1,3</sup>	1.35	-1.28	2.86	9.38	4.50	5.37	N/A
MSCI EAFE Index <sup>4</sup>	1.35	-1.43	2.74	9.23	4.42	5.38	N/A
<b>Value Added</b>	<b>-0.01</b>	<b>0.15</b>	<b>0.12</b>	<b>0.14</b>	<b>0.09</b>	<b>-0.01</b>	<b>N/A</b>



\*Inception Date: January 1985

Source: State Street Global Advisors \*GIPS net of fee composite performance data prior to 2004 is not available.

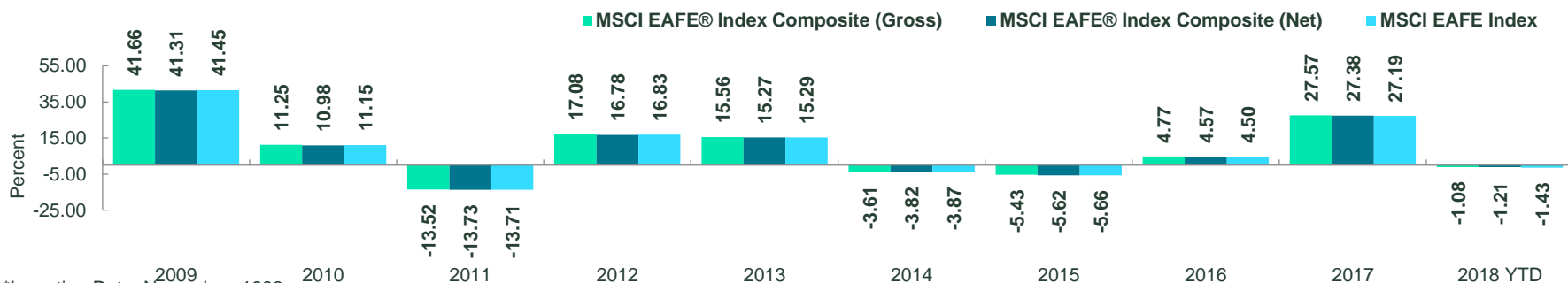
<sup>1</sup>Returns greater than one year are annualized. Returns represent past performance and are not a guarantee of future results. Current performance may differ from the performance shown. Returns shown are asset-weighted using Composite member market values, where the Composite member's return calculations are time-weighted and reflect the reinvestment of dividends and other income. <sup>2</sup>These performance figures are provided gross of fees and expenses other than actual trading fees and expenses, and reflect all items of income, gain, and loss. <sup>3</sup>These performance figures (i) are provided net of actual trading, audit, custody, administrative and legal fees and expenses; (ii) beginning on 9/30/2014, adjusted quarterly to reflect the highest investment management fee on the actual fee schedule, inclusive of incentive fee, if any, of any account within the Composite ("Management Fee") at the relevant time; prior to 9/30/2014, adjusted for an assumed investment management fee, which is equal to or higher than the Management Fee (except in each case certain small accounts-subject to a minimum investment management fee-may have incurred an actual investment management fee higher than that fee assumed in calculating the performance shown above); and (iii) reflect all items of income, gain and loss. <sup>4</sup>Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income and the reinvestment of dividends (net of withholding tax rates) and other income and are calculated in US dollars. It is not possible to invest directly in an index. Performance returns are calculated in US dollars. Calculation for value added returns may show rounding differences. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. gP-EAFE



# Daily MSCI EAFE® Index Composite Performance

## Annualized returns for the period ending September 30, 2018 (USD)

	QTR (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception* (%)
Daily MSCI EAFE® Index Composite (Gross) <sup>1,2</sup>	1.39	-1.08	3.12	9.66	4.74	5.53	5.29
MSCI EAFE Index <sup>4</sup>	1.35	-1.43	2.74	9.23	4.42	5.38	5.12
<b>Value Added</b>	<b>0.03</b>	<b>0.36</b>	<b>0.38</b>	<b>0.43</b>	<b>0.33</b>	<b>0.15</b>	<b>0.17</b>
Daily MSCI EAFE® Index Composite (Net) <sup>1, 3</sup>	1.34	-1.21	2.93	9.47	4.53	5.30	N/A
MSCI EAFE Index <sup>4</sup>	1.35	-1.43	2.74	9.23	4.42	5.38	N/A
<b>Value Added</b>	<b>-0.01</b>	<b>0.22</b>	<b>0.20</b>	<b>0.23</b>	<b>0.12</b>	<b>-0.08</b>	<b>N/A</b>



\*Inception Date: November 1993

Source: State Street Global Advisors. \*GIPS net of fee composite performance data prior to 2004 is not available.

<sup>1</sup> Returns greater than one year are annualized. Returns represent past performance and are not a guarantee of future results. Current performance may differ from the performance shown. Returns shown are asset-weighted using Composite member market values, where the Composite member's return calculations are time-weighted and reflect the reinvestment of dividends and other income. <sup>2</sup> These performance figures are provided gross of fees and expenses other than actual trading fees and expenses, and reflect all items of income, gain, and loss. <sup>3</sup> These performance figures (i) are provided net of actual trading, audit, custody, administrative and legal fees and expenses; (ii) beginning on 9/30/2014, adjusted quarterly to reflect the highest investment management fee on the actual fee schedule, inclusive of incentive fee, if any, of any account within the Composite ("Management Fee") at the relevant time; prior to 9/30/2014, adjusted for an assumed investment management fee, which is equal to or higher than the Management Fee (except in each case certain small accounts-subject to a minimum investment management fee-may have incurred an actual investment management fee higher than that fee assumed in calculating the performance shown above); and (iii) reflect all items of income, gain and loss. <sup>4</sup> Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income and the reinvestment of dividends (net of withholding tax rates) and other income and are calculated in US dollars. It is not possible to invest directly in an index. Performance returns are calculated in US dollars. Calculation for value added returns may show rounding differences. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. gP-DEAFE

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# Appendix A: GIPS® Presentations

# GIPS® Report: MSCI EAFE Index Composite

## As of December 31, 2017

### Gross Returns

Period	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Inception Jan 1985
MSCI EAFE Index Composite	4.23	25.35	25.35	8.07	8.16	2.20	N/A
MSCI EAFE(R) Index	4.23	25.03	25.03	7.80	7.90	1.94	N/A

Year	MSCI EAFE Index Composite	MSCI EAFE(R) Index
2017	25.35	25.03
2016	1.27	1.00
2015	-0.58	-0.81
2014	-4.67	-4.90
2013	23.02	22.78
2012	17.63	17.32
2011	-11.92	-12.14
2010	7.97	7.75
2009	32.05	31.78
2008	-43.16	-43.38

Year	No. of Portfolios at Period End	Composite Dispersion	3 Yr Annualized Standard Deviation — Composite	3 Yr Annualized Standard Deviation — Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2017	7	0.18	11.84	11.83	39,387,432,678	1.45	2,714,705
2016	10	0.17	12.47	12.46	32,964,694,830	1.44	2,291,833
2015	8	0.15	12.45	12.46	30,222,391,500	1.38	2,188,091
2014	7	0.13	13.00	13.03	29,428,863,233	1.23	2,383,493
2013	7	0.15	16.22	16.25	29,266,714,685	1.28	2,279,237
2012	8	0.16	19.29	19.37	29,108,751,239	1.44	2,023,842
2011	8	N/A	22.40	22.43	25,311,047,591	1.43	1,768,142
2010	*	N/A	26.20	26.23	22,035,409,578	1.45	1,518,977
2009	7	N/A	23.59	23.58	18,390,630,133	1.35	1,360,125
2008	6	N/A	19.23	19.24	12,171,065,237	1.28	949,988

gP-EAFE

\* 5 portfolios or less.

\*\* Less than 3 years.

Quarterly and YTD returns are not annualized.

**Investment Objective:** The Strategy seeks an investment return that approximates as closely as practicable, before expenses, the performance of its benchmark index (the "Index") over the long term.

**Investment Strategy:** The Strategy is managed using a "passive" or "indexing" investment approach, by which SSGA attempts to match, before expenses, the performance of the Index. SSGA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. Equity securities held by the Strategy may be denominated in foreign currencies and may be held outside the United States. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSGA may employ a sampling or optimization technique to construct the portfolio in question. SSGA may also utilize other pooled investment vehicles, including those managed by SSGA and its affiliates, as substitutes for gaining direct exposure to securities or a group of securities in the Index. From time to time securities are added to or removed from the Index. SSGA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, prior to or after their removal or addition to the Index. The Strategy may at times purchase or sell index futures contracts, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.

**STATE STREET  
GLOBAL ADVISORS.**

### Footnotes

**Firm Definition:** For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of Charitable Asset Management which is held out to the marketplace as a distinct business entity. Prior to January 2011, SSGA-Global excluded its wrap fee business and assets accounted for on a book value basis (global cash and stable value assets). Prior to July 2017, SSGA-Global excluded Fiduciary Advisory Solutions. In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS Compliant firm. On January 01, 2012 SSGA Ireland Limited assets were merged into SSGA-Global. In July 2016, SSGA acquired the asset management and advisory services business conducted by GE Asset Management Inc. formerly part GE Asset Management Limited ("GEAM") a GIPS Compliant firm. On July 01, 2017 GEAM assets were merged into SSGA-Global.

**Composite Description:** The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below.

**Compliance Statement:** SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 01, 2000. The period prior to January 01, 2000 (where shown) is not in compliance, as not all actual fee-paying portfolios are in a composite. SSGA-Global has been independently verified for the periods January 01, 2000 through December 31, 2016. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global".

**List Available:** A complete list of the firm's composites and their descriptions is available upon request.

**Creation Date:** The composite was created on January 01, 2009.

**Benchmark Description:** The benchmark for the composite is the MSCI EAFE(R) Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss.

**Currency:** Performance is presented in USD.

**Use of Subadvisors:** None.

**Fees:** Returns are expressed gross of management fees. The results do not reflect the deduction of investment management fees. Some members of this composite may accrue administration fees. The client's return will be reduced by the management fee. For example, if an annualized gross return of 10% was achieved over a 5-year period and a management fee of 1% per year was charged and deducted annually, then the resulting total return would be reduced from 61% to 54%.

**Fee Schedule:** Management fees are 0.060% of the first \$50,000,000; 0.050% of the next \$50,000,000; and 0.040% thereafter. The minimum annual management fee for commingled funds is \$5M. The minimum annual management fee for separately managed accounts is \$250,000. Management fees may be adjusted based upon specific client requirements.

**Derivatives Use:** SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage.

**Calculation Methodology:** Additional information is available upon request regarding the firm's policies and procedures for calculating and reporting performance results as well as valuation procedures.

**Annualized Returns:** All returns for periods greater than one year have been annualized.

**Withholding Taxes Differences:** None.

**Exchange Rates Differences Between Composite & Benchmark:** None.

**Minimum Asset Level for Inclusion:** 0

**Dispersion:** Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year.

**Significant Events:** In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In May 2010, Lynn Blake assumed the role as global head of Index Equity following the retirement of Paul Brakke. In July 2014, on the departure of Maria Dwyer, Matt Steinauer was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinauer. Matt Steinauer resumed his position as Head of Global Cash Management. In March 2015, Timothy Corbett was appointed Head of Global Investment Risk replacing Fred Gjerstad who has since left the firm. In March 2015, Ronald O' Hanley was appointed CEO and President of State Street Global Advisors replacing Scott Powers who retired. In June 2015, Greg Ehret was named President continuing to report to Ron O'Hanley, chief executive officer of SSGA. In August 2015, Matt Steinauer was appointed as Chief Risk Officer for SSGA, replacing David Saulnier who has since left the firm. In December 2015, Ronald O' Hanley, Chief Executive Officer of SSGA, re-assumed the role of President of the company upon the departure of Greg Ehret. Steven Lipiner was appointed Chief Financial Officer replacing Keith Crawford who was appointed head of global mergers and acquisitions. On March 30, 2016, SSGA agreed to acquire GE Asset Management (GEAM). The transaction was finalized on July 01, 2016. In July 2016, Ralph Layman became Vice Chairman of SSGA. In November 2017, Jay Hooley announced his retirement as CEO by the end of 2018, to be succeeded by Ron O' Hanley who was also appointed President and COO. Cyrus Taraporevala will become President and CEO of State Street Global Advisors.

**Past and Future Performance:** Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially.

# GIPS® Report: Daily MSCI EAFE Index Composite

## As of December 31, 2017

### Gross Returns

Period	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Inception Nov 1993
Daily MSCI EAFE Index Composite	4.24	25.56	25.56	8.16	8.21	2.24	N/A
MSCI EAFE Index	4.23	25.03	25.03	7.80	7.90	1.94	N/A

Year	Daily MSCI EAFE Index Composite	MSCI EAFE Index
2017	25.56	25.03
2016	1.39	1.00
2015	-0.61	-0.81
2014	-4.68	-4.90
2013	23.00	22.78
2012	17.68	17.32
2011	-11.93	-12.14
2010	8.10	7.75
2009	32.17	31.78
2008	-43.21	-43.38

Year	No. of Portfolios at Period End	Composite Dispersion	3 Yr Annualized Standard Deviation — Composite	3 Yr Annualized Standard Deviation — Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2017	*	N/A	11.87	11.83	2,146,404,981	0.08	2,714,705
2016	*	N/A	12.50	12.46	3,388,057,416	0.15	2,291,833
2015	*	N/A	12.47	12.46	3,365,805,185	0.15	2,188,091
2014	*	N/A	13.02	13.03	1,642,052,469	0.07	2,383,493
2013	*	N/A	16.60	16.25	1,381,195,855	0.06	2,279,237
2012	*	N/A	19.62	19.37	1,548,347,979	0.08	2,023,842
2011	*	N/A	22.87	22.43	1,697,293,512	0.10	1,768,142
2010	*	N/A	26.40	26.23	2,847,496,783	0.19	1,518,977
2009	*	N/A	23.81	23.58	3,791,345,722	0.28	1,360,125
2008	*	N/A	19.25	19.24	6,760,949,024	0.71	949,988

gP-DEAFE

\* 5 portfolios or less. \*\* Less than 3 years.

Quarterly and YTD returns are not annualized.

**Investment Objective:** The Strategy seeks an investment return that approximates as closely as practicable, before expenses, the performance of its benchmark index (the "Index") over the long term.

**Investment Strategy:** The Strategy is managed using a "passive" or "indexing" investment approach, by which SSGA attempts to match, before expenses, the performance of the Index. SSGA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. Equity securities held by the Strategy may be denominated in foreign currencies and may be held outside the United States. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSGA may employ a sampling or optimization technique to construct the portfolio in question. SSGA may also utilize other pooled investment vehicles, including those managed by SSGA and its affiliates, as substitutes for gaining direct exposure to securities or a group of securities in the Index. From time to time securities are added to or removed from the Index. SSGA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, prior to or after their removal or addition to the Index. The Strategy may at times purchase or sell index futures contracts, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.

### Footnotes

**Firm Definition:** For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of Charitable Asset Management which is held out to the marketplace as a distinct business entity. Prior to January 2011, SSGA-Global excluded its wrap fee business and assets accounted for on a book value basis (global cash and stable value assets). Prior to July 2017, SSGA-Global excluded Fiduciary Advisory Solutions. In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS Compliant firm. On January 01, 2012 SSGA Ireland Limited assets were merged into SSGA-Global. In July 2016, SSGA acquired the asset management and advisory services business conducted by GE Asset Management Inc. formerly part GE Asset Management Limited ("GEAM") a GIPS Compliant firm. On July 01, 2017 GEAM assets were merged into SSGA-Global.

**Composite Description:** The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below.

**Compliance Statement:** SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 01, 2000. The period prior to January 01, 2000 (where shown) is not in compliance, as not all actual fee-paying portfolios are in a composite. SSGA-Global has been independently verified for the periods January 01, 2000 through December 31, 2016. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global".

**List Available:** A complete list of the firm's composites and their descriptions is available upon request.

**Creation Date:** The composite was created on January 01, 2009.

**Benchmark Description:** The benchmark for the composite is the MSCI EAFE Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss.

**Currency:** Performance is presented in USD.

**Use of Subadvisors:** None.

**Fees:** Returns are expressed gross of management fees. The results do not reflect the deduction of investment management fees. Some members of this composite may accrue administration fees. The client's return will be reduced by the management fee. For example, if an annualized gross return of 10% was achieved over a 5-year period and a management fee of 1% per year was charged and deducted annually, then the resulting total return would be reduced from 61% to 54%.

**Fee Schedule:** Management fees are 0.060% of the first \$50,000,000; 0.050% of the next \$50,000,000; and 0.040% thereafter. The minimum annual management fee for commingled funds is \$5M. The minimum annual management fee for separately managed accounts is \$250,000. Management fees may be adjusted based upon specific client requirements.

**Derivatives Use:** SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage.

**Calculation Methodology:** Additional information is available upon request regarding the firm's policies and procedures for calculating and reporting performance results as well as valuation procedures.

**Annualized Returns:** All returns for periods greater than one year have been annualized.

**Withholding Taxes Differences:** None.

**Exchange Rates Differences Between Composite & Benchmark:** None.

**Minimum Asset Level for Inclusion:** 0

**Dispersion:** Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year.

**Significant Events:** In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In May 2010, Lynn Blake assumed the role as global head of Index Equity following the retirement of Paul Brakke. In July 2014, on the departure of Maria Dwyer, Matt Steinauer was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinauer. Matt Steinauer resumed his position as Head of Global Cash Management. In March 2015, Timothy Corbett was appointed Head of Global Investment Risk replacing Fred Gjerstad who has since left the firm. In March 2015, Ronald O' Hanley was appointed CEO and President of State Street Global Advisors replacing Scott Powers who retired. In June 2015, Greg Ehret was named President continuing to report to Ron O' Hanley, chief executive officer of SSGA. In August 2015, Matt Steinauer was appointed as Chief Risk Officer for SSGA, replacing David Saulnier who has since left the firm. In December 2015, Ronald O' Hanley, Chief Executive Officer of SSGA, re-assumed the role of President of the company upon the departure of Greg Ehret. Steven Lipiner was appointed Chief Financial Officer replacing Keith Crawford who was appointed head of global mergers and acquisitions. On March 30, 2016, SSGA agreed to acquire GE Asset Management (GEAM). The transaction was finalized on July 01, 2016. In July 2016, Ralph Layman became Vice Chairman of SSGA. In November 2017, Jay Hooley announced his retirement as CEO by the end of 2018, to be succeeded by Ron O' Hanley who was also appointed President and COO. Cyrus Taraporevala will become President and CEO of State Street Global Advisors.

**Past and Future Performance:** Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially.

# GIPS® Report: S&P 500 Index Composite As of December 31, 2017

## Gross Returns

Period	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Inception Jan 1986
S&P 500 Index Composite	6.66	21.85	21.85	11.45	15.82	8.54	N/A
S&P 500(R)	6.64	21.83	21.83	11.41	15.79	8.50	N/A

Year	S&P 500 Index Composite	S&P 500(R)
2017	21.85	21.83
2016	12.00	11.96
2015	1.43	1.38
2014	13.71	13.69
2013	32.42	32.39
2012	16.04	16.00
2011	2.14	2.11
2010	15.12	15.06
2009	26.54	26.46
2008	-36.93	-37.00

Year	No. of Portfolios at Period End	Composite Dispersion	3 Yr Annualized Standard Deviation — Composite	3 Yr Annualized Standard Deviation — Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2017	19	0.02	9.93	9.92	69,551,830,753	2.56	2,714,705
2016	19	0.03	10.59	10.59	69,105,138,042	3.02	2,291,833
2015	20	0.04	10.48	10.47	62,069,196,320	2.84	2,188,091
2014	20	0.03	8.97	8.97	67,773,578,217	2.84	2,383,493
2013	20	0.04	11.93	11.94	67,232,162,274	2.95	2,279,237
2012	20	0.04	15.08	15.09	55,499,052,765	2.74	2,023,842
2011	18	0.01	18.69	18.71	62,152,623,788	3.52	1,768,142
2010	14	0.02	21.84	21.85	58,677,181,141	3.86	1,518,977
2009	16	0.06	19.62	19.63	56,064,423,967	4.12	1,360,125
2008	12	0.02	15.07	15.08	63,317,399,770	6.67	949,988

gPASP500

\* 5 portfolios or less. \*\* Less than 3 years.

Quarterly and YTD returns are not annualized.

**Investment Objective:** The Strategy seeks an investment return that approximates as closely as practicable, before expenses, the performance of its benchmark index (the "Index") over the long term.

**Investment Strategy:** The Strategy is managed using a "passive" or "indexing" investment approach, by which SSGA attempts to match, before expenses, the performance of the Index. SSGA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. The Strategy may purchase securities in their initial public offerings ("IPOs"). In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSGA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSGA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, prior to or after their removal or addition to the Index. The Strategy may at times purchase or sell index futures contracts, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.

**STATE STREET  
GLOBAL ADVISORS**

## Footnotes

**Firm Definition:** For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of Charitable Asset Management which is held out to the marketplace as a distinct business entity. Prior to January 2011, SSGA-Global excluded its wrap fee business and assets accounted for on a book value basis (global cash and stable value assets). Prior to July 2017, SSGA-Global excluded Fiduciary Advisory Solutions. In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS Compliant firm. On January 01, 2012 SSGA Ireland Limited assets were merged into SSGA-Global. In July 2016, SSGA acquired the asset management and advisory services business conducted by GE Asset Management Inc. formerly part GE Asset Management Limited ("GEAM") a GIPS Compliant firm. On July 01, 2017 GEAM assets were merged into SSGA-Global.

**Composite Description:** The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below.

**Compliance Statement:** SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 01, 2000. The period prior to January 01, 2000 (where shown) is not in compliance, as not all actual fee-paying portfolios are in a composite. SSGA-Global has been independently verified for the periods January 01, 2000 through December 31, 2016. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global".

**List Available:** A complete list of the firm's composites and their descriptions is available upon request.

**Creation Date:** The composite was created on January 01, 2009.

**Benchmark Description:** The benchmark for the composite is the S&P 500(R). Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss.

**Currency:** Performance is presented in USD.

**Use of Subadvisors:** This composite contains portfolios that were managed on a sub-advised basis for the period from September 01, 2002 to August 31, 2008.

**Fees:** Returns are expressed gross of management fees. The results do not reflect the deduction of investment management fees. Some members of this composite may accrue administration fees. The client's return will be reduced by the management fee. For example, if an annualized gross return of 10% was achieved over a 5-year period and a management fee of 1% per year was charged and deducted annually, then the resulting total return would be reduced from 61% to 54%.

**Fee Schedule:** Management fees are 0.030% of the first \$50,000,000; 0.020% of the next \$50,000,000; and 0.020% thereafter. The minimum initial investment for commingled funds is \$5M. The minimum annual management fee for separately managed accounts is \$175,000. Management fees may be adjusted based upon specific client requirements.

**Derivatives Use:** SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage.

**Calculation Methodology:** Additional information is available upon request regarding the firm's policies and procedures for calculating and reporting performance results as well as valuation procedures.

**Annualized Returns:** All returns for periods greater than one year have been annualized.

**Withholding Taxes Differences:** None.

**Exchange Rates Differences Between Composite & Benchmark:** None.

**Minimum Asset Level for Inclusion:** 0

**Dispersion:** Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year.

**Significant Events:** In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In May 2010, Lynn Blake assumed the role as global head of Index Equity following the retirement of Paul Brakke. In July 2014, on the departure of Maria Dwyer, Matt Steinaway was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinaway. Matt Steinaway resumed his position as Head of Global Cash Management. In March 2015, Timothy Corbett was appointed Head of Global Investment Risk replacing Fred Gerstard who has since left the firm. In March 2015, Ronald O' Hanley was appointed CEO and President of State Street Global Advisors replacing Scott Powers who retired. In June 2015, Greg Ehret was named President continuing to report to Ron O'Hanley, chief executive officer of SSGA. In August 2015, Matt Steinaway was appointed as Chief Risk Officer for SSGA, replacing David Saulnier who has since left the firm. In December 2015, Ronald O' Hanley, Chief Executive Officer of SSGA, re-assumed the role of President of the company upon the departure of Greg Ehret. Steven Lipiner was appointed Chief Financial Officer replacing Keith Crawford who was appointed head of global mergers and acquisitions. On March 30, 2016, SSGA agreed to acquire GE Asset Management (GEAM). The transaction was finalized on July 01, 2016. In July 2016, Ralph Layman became Vice Chairman of SSGA. In November 2017, Jay Hooley announced his retirement as CEO by the end of 2018, to be succeeded by Ron O' Hanley who was also appointed President and COO. Cyrus Taraporevala will become President and CEO of State Street Global Advisors.

**Past and Future Performance:** Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially

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# Appendix B: Important Disclosures

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# Important Specific Information

FOR INVESTMENT PROFESSIONAL USE ONLY.

Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Foreign investments involve greater risks than US investments, including political and economic risks and the risk of currency fluctuations. Investing in foreign domiciled securities may involve risk of capital loss from unfavourable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

These investments may have difficulty in liquidating an investment position without taking a significant discount from current market value, which can be a significant problem with certain lightly traded securities.

Investments in mid-sized companies may involve greater risks than in those of larger, better known companies, but may be less volatile than investments in smaller companies.

The MSCI World Index is a trademark of MSCI Inc.

Past performance is not an indicator of future results. Diversification does not ensure a profit or guarantee against loss.

Passively managed strategies do not seek to replicate the performance of a specified index. The strategy is passively managed and may underperform its benchmarks. An investment in the strategy is not appropriate for all investors and is not intended to be a complete investment program. Investing in the strategy involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.

Companies with large market capitalizations go in and out of favor based on market and economic conditions. Larger companies tend to be less volatile than companies with smaller market capitalizations. In exchange for this potentially lower risk, the value of the security may not rise as much as companies with smaller market capitalizations.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Investing involves risk including the risk of loss of principal.

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The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

Passively managed strategies seek to replicate the performance of a specified index. The strategy is passively managed and may underperform its benchmarks. An investment in the strategy is not appropriate for all investors and is not intended to be a complete investment program. Investing in the strategy involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.



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# Important Disclosures

The views expressed in this material are the views of SSGA through the period ended September 30, 2018 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

Investing in commodities entail significant risk and is not appropriate for all investors. Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.

Investments in small/mid sized companies may involve greater risks than in those of larger, better known companies.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

**This document provides summary information regarding the Strategy. This document should be read in conjunction with the Strategy's Disclosure Document, which is available from SSGA. The Strategy Disclosure Document contains important information about the Strategy, including a description of a number of risks.**

Past performance is not a guarantee of future results.

Equity securities are volatile and can decline significantly in response to broad market and economic conditions.

Passively managed funds/strategies invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund/strategy to experience tracking errors relative to performance of the index.

Investing in futures is highly risky. Futures positions are considered highly leveraged because the initial margins are significantly smaller than the cash value of the contracts. The smaller the value of the margin in comparison to the cash value of the futures contract, the higher the leverage. There are a number of risks associated with futures investing including but not limited to counterparty credit risk, currency risk, derivatives risk, foreign issuer exposure risk, sector concentration risk, leveraging and liquidity risks.

Derivative investments may involve risks such as potential illiquidity of the markets and additional risk of loss of principal.

Companies with large market capitalizations go in and out of favor based on market and economic conditions. Larger companies tend to be less volatile than companies with smaller market capitalizations. In exchange for this potentially lower risk, the value of the security may not rise as much as companies with smaller market capitalizations.

Investments in mid-sized companies may involve greater risks than in those of larger, better known companies, but may be less volatile than investments in smaller companies.

Securities lending programs and the subsequent reinvestment of the posted collateral are subject to a number of risks, including the risk that the value of the investments held in the collateral may decline in value and may at any point be worth less than the original cost of that investment.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Gross-of-fees performance does not reflect the deduction of investment management fees or performance allocations. A client's return will be reduced by the management fees and any other expenses incurred in the management of the account. For example, if an annualized gross return of 10% was achieved over a 5-year period and a management fee of 1% per year was charged and deducted annually, the resulting return would be reduced from 61% to 54%



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# Important Disclosures

Indexing strategies are managed with a passive investment strategy, attempting to track the performance of an unmanaged index of securities. As a result, indexing strategies may hold constituent securities of the Index regardless of the current or projected performance of a specific security, which could cause their return to be lower than if they employed an active strategy. While the strategy seeks to track the performance of the Index as closely as possible, its return may not match or achieve a high degree of correlation with the return of the Index due to operating expenses, transaction costs, cash flows and operational inefficiencies.

All forms of investments carry risks, including the risk of losing all of the invested amount. Such activities may not be suitable for everyone. Past performance is not a guarantee of future results. Diversification does not ensure a profit or guarantee against loss.

All the index performance results referred to are provided exclusively for comparison purposes only. It should not be assumed that they represent the performance of any particular investment.

Passively managed strategies/funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the strategy/fund to experience tracking errors relative to performance of the index.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

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Web: [www.ssga.com](http://www.ssga.com)

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Tracking Code: 2308716.3.1.AM.INST

Expiration Date: February 28, 2019

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# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
16	12/12/18	Retirement	Action	11/05/18

Subject: Receive and File Investment Performance Results for the ATU, IBEW and Salaried Employee Retirement Plans for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## ISSUE

Receive and File Investment Performance Results for the ATU, IBEW and Salaried Employee Retirement Plans for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## RECOMMENDED ACTION

Motion: Receive and File Investment Performance Results for the ATU, IBEW and Salaried Employee Retirement Plans for the Quarter Ended September 30, 2018 (ALL). (Adelman)

## FISCAL IMPACT

None.

## DISCUSSION

Pension funds are invested consistent with the Statement of Investment Objectives and Policy Guidelines adopted by each Retirement Board. Attached are the two investment performance reports prepared by the Boards' pension investment consultants. The first report is the Third Quarter 2018 Market Update (Attachment 1) and the second is the Investment Measurement Service Quarterly Review as of September 30, 2018 (Attachment 2). These reports provide a detailed analysis of the performance of each of the investment managers retained by the Retirement Boards to manage the Retirement Funds for the quarter ended September 30, 2018. The second report compares the performance of each investment manager with benchmark indices, other fund managers of similarly invested portfolios and other indices.

### Investment Compliance Monitoring

In accordance with the Statement of Investment Objectives and Policy Guidelines for the Sacramento Regional Transit District Retirement Plans (Investment Policy), State Street Bank performs daily investment compliance monitoring on the Plans' three (3) actively managed funds. As of September 30, 2018, there were no compliance warnings or alerts to be reported; therefore, the investments are in compliance with the Investment Policy. The final attached report includes the monitoring summary (Attachment 3).

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Approved:

Presented:

Final 12/03/18

VP of Finance/CFO

Treasury Controller

J:\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\FI IPs\12-12-18 Investment Performance.docx

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
16	12/12/18	Open	Action	11/05/18

Subject: Receive and File Investment Performance Results for the ATU, IBEW and Salaried Employee Retirement Plans for the Quarter Ended September 30, 2018 (ALL). (Adelman)

The table below provides an overview of the quarter performance, quarter ending September 30, 2018 – gross of investment management fees:

<i>Investment Manager - Description - Benchmark</i>	Benchmark Index	ATU, IBEW & Salaried Fund	Investment Gains/ (Losses)	Pension Fund Contributions/ (Withdrawals)
Boston Partners (large cap value) Russell 1000 Value	5.70%	<b>8.03%</b>	\$3,533,899	-
S&P 500 Index (large cap value) S&P 500	7.71%	<b>7.73%</b>	\$3,576,918	-
Atlanta Capital (small cap) Russell 2000	3.58%	<b>8.19%</b>	\$2,017,952	\$(772,568)
Brandes (international equities) MSCI EAFE*	-	-	\$80	-
Pyrford (international equities) MSCI EAFE	1.35%	<b>3.65%</b>	\$953,641	-
MSCI EAFE Index (international equities) MSCI EAFE	1.35%	<b>1.40%</b>	\$156,888	-
AQR (small cap international equities) MSCI EAFE SC	(0.88%)	(2.02%)	\$(329,549)	-
Dimensional Fund Advisors (emerging markets) MSCI EM	(1.09%)	<b>(1.08%)</b>	\$(196,346)	-
Metropolitan West (fixed income) Barclays Agg.	0.02%	0.01%	\$6,278	\$(308,427)
Totals	2.82%	3.44%	\$9,719,762	\$(1,080,995)

**Bold** – fund exceeding respective benchmark

\*The investments held in Brandes are foreign tax reclaim receivables. Currently, staff and the custodian do not have an estimated time of receipt. Until receipt of funds, Brandes will remain as a fund manager.

The table below provides an overview of the year to date performance, as of September 30, 2018 – net of investment management fees:

<i>Investment Manager - Description - Benchmark</i>	Benchmark Index	ATU, IBEW & Salaried Fund	Investment Gains/(Loss)	Pension Fund Contributions/ (Withdrawals)
Boston Partners (large cap value) Russell 1000 Value	9.45%	<b>13.49%</b>	\$5,903,177	\$(6,704,144)
S&P 500 Index (large cap value) S&P 500	17.91%	17.84%	\$7,784,940	\$(5,527,937)
Atlanta Capital (small cap) Russell 2000	15.24%	<b>23.83%</b>	\$5,401,984	\$(4,840,996)
Brandes (international equities) MSCI EAFE*	-	-	\$(115)	-
JPMorgan (international equities) MSCI EAFE	-	-	-	-
Pyrford (international equities) MSCI EAFE	2.74%	2.27%	\$597,494	-
MSCI EAFE Index (international equities) MSCI EAFE	2.74%	<b>2.98%</b>	\$328,889	-
AQR (small cap international equities) MSCI EAFE SC	3.73%	0.13%	\$(101,566)	-
Dimensional Fund Advisors (emerging markets) MSCI EM	(0.81)%	(2.48)%	\$(493,269)	-
Metropolitan West (fixed income) Barclays Agg.	(1.22)%	<b>(0.78)%</b>	\$(759,284)	\$11,806,684
Totals	6.89%	6.86%	\$18,662,250	\$(5,266,393)

**Bold** – fund exceeding respective benchmark

December 12, 2018



**Sacramento Regional  
Transit District**

Third Quarter 2018  
Market Update

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**Anne Heaphy**

Fund Sponsor Consulting

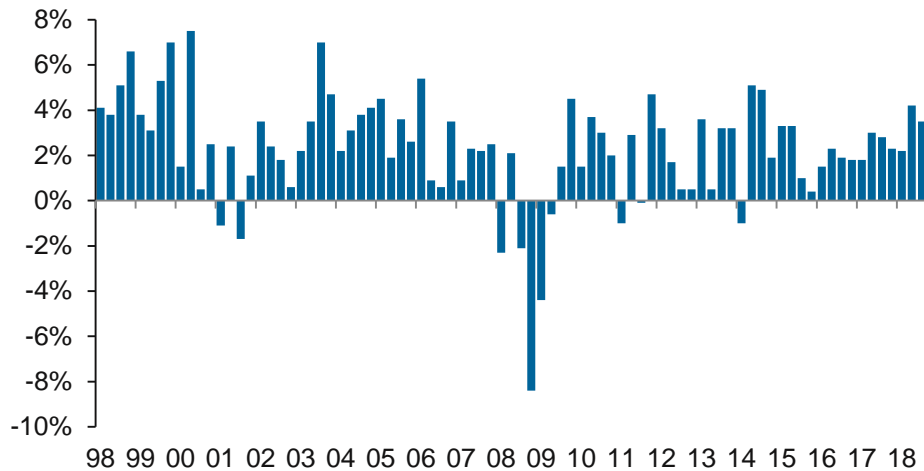
**Uvan Tseng, CFA**

Fund Sponsor Consulting

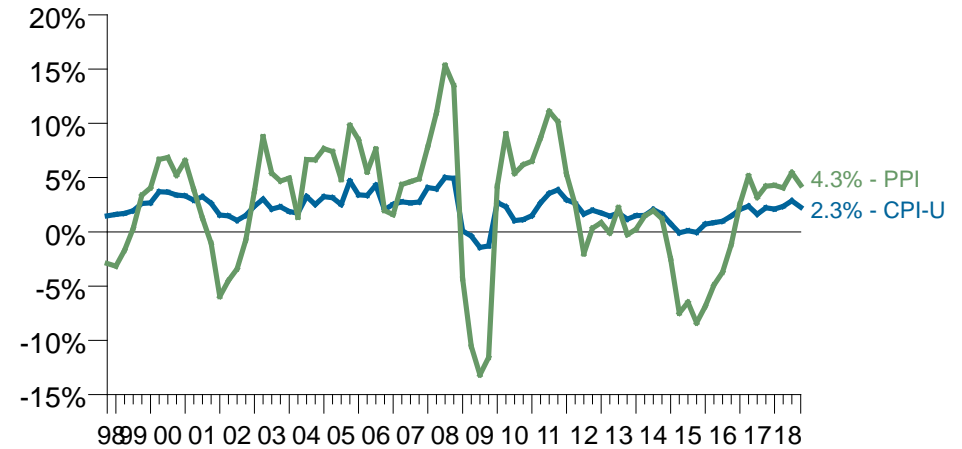
# Economic Commentary

Third Quarter 2018

### Quarterly Real GDP Growth



### Inflation Year-Over-Year



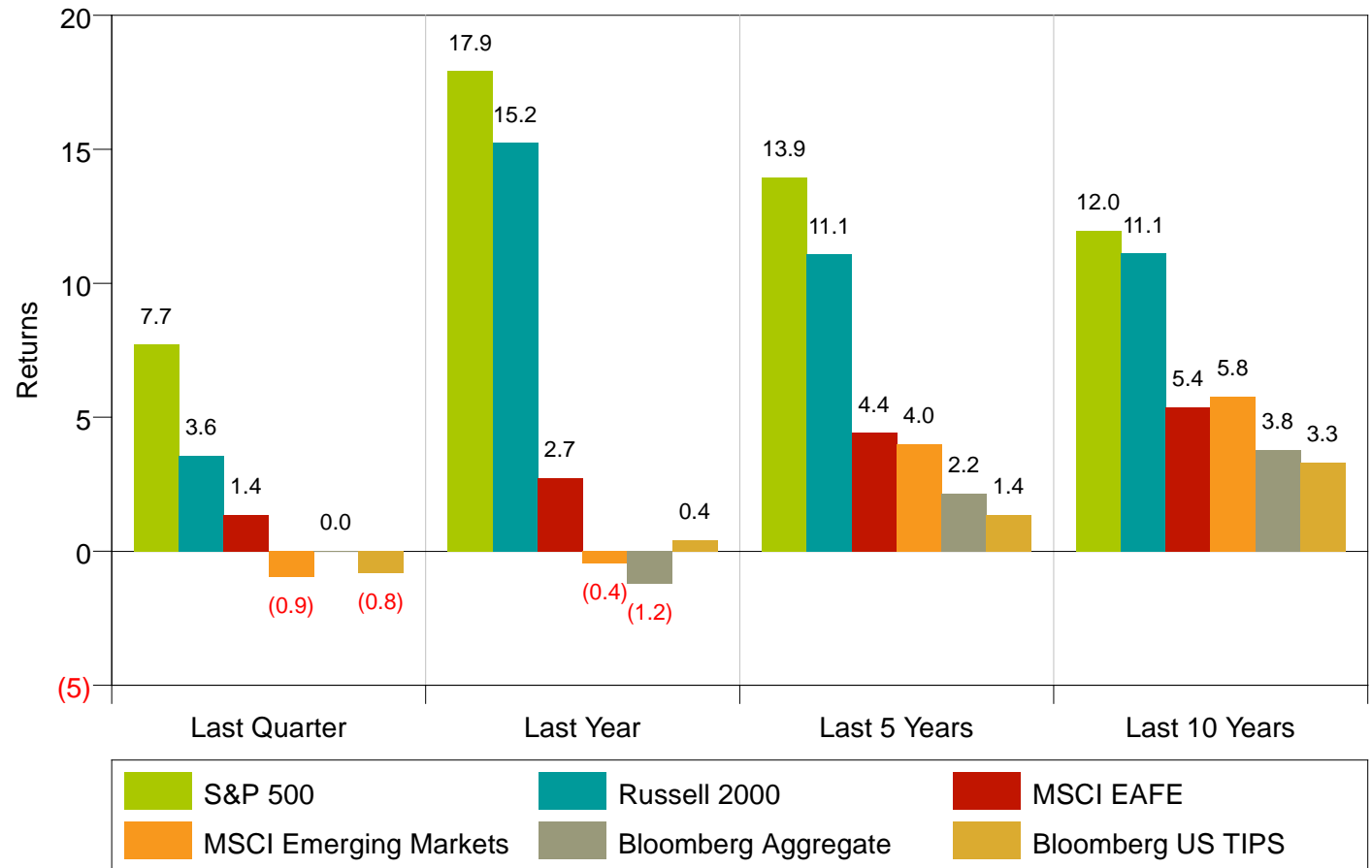
- The U.S. economy may be nearing peak growth for this cycle:
  - GDP clocked a solid 3.5% gain in the third quarter, following a robust 4.2% jump in the second quarter.
- The unemployment rate dropped to 3.7% in September, the lowest reading since 2000.
  - Wages are inching up; consumer spending remains robust, as does consumer confidence.
- The Fed raised rates for the third time in 2018, bringing the Fed Funds rate to 2.0-2.25%.
- Inflation on the rise?
  - Headline CPI rose 2.3% during the quarter, down from the 2.9% reported in the second quarter.
  - Core CPI (ex-food and energy) rose 2.2%, slightly above the Fed's 2% target.

Source: Bureau of Economic Analysis, Bureau of Labor Statistics

# Asset Class Performance

Periods Ended September 30, 2018

Asset Class Performance  
for Periods Ended September 30, 2018



YTD as of 12/11/18:

S&P 500:

Russell 2000:

MSCI EAFE:

MSCI Emerging Markets:

Bloomberg Aggregate:

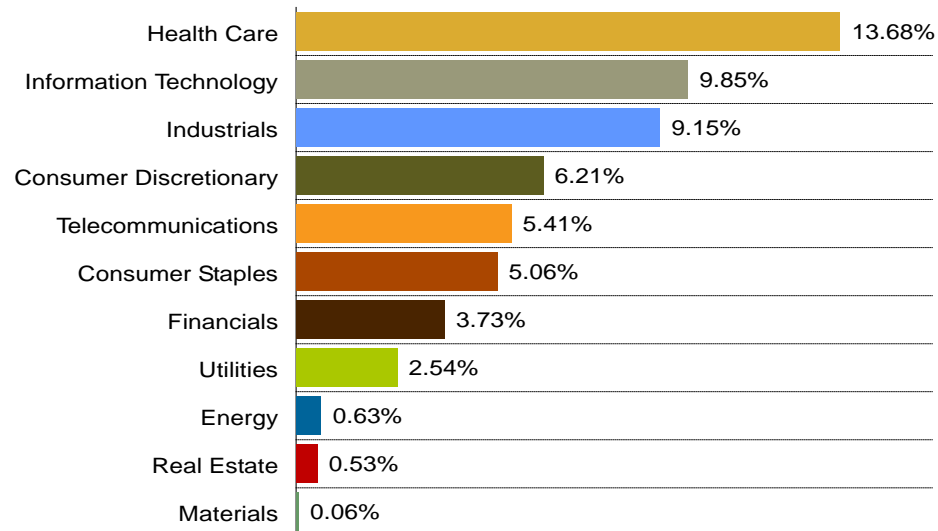
Bloomberg TIPS:



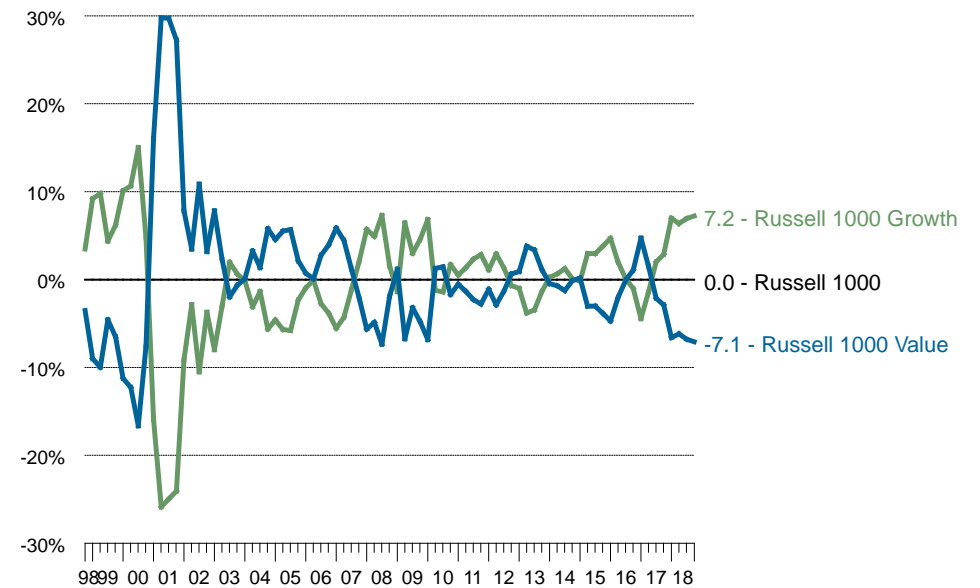
# U.S. Equity

Third Quarter 2018

## Russell 3000 Sector Returns



## Rolling One-Year Relative Returns (versus Russell:1000 Index)



## Third Quarter Index Returns

Russell 3000:	7.12
S&P 500:	7.71
Russell Mid Cap:	5.00
Russell 2000:	3.58

Source: Russell Investment Group

# U.S. Equity Style Returns

Periods Ended September 30, 2018

	3Q 2018			Annualized 1 Year Returns		
	Value	Core	Growth	Value	Core	Growth
Large	6.9%	8.4%	9.6%	9.8%	19.3%	27.9%
Mid	3.3%	5.0%	7.6%	8.8%	14.0%	21.1%
Small	1.6%	3.6%	5.5%	9.3%	15.2%	21.1%

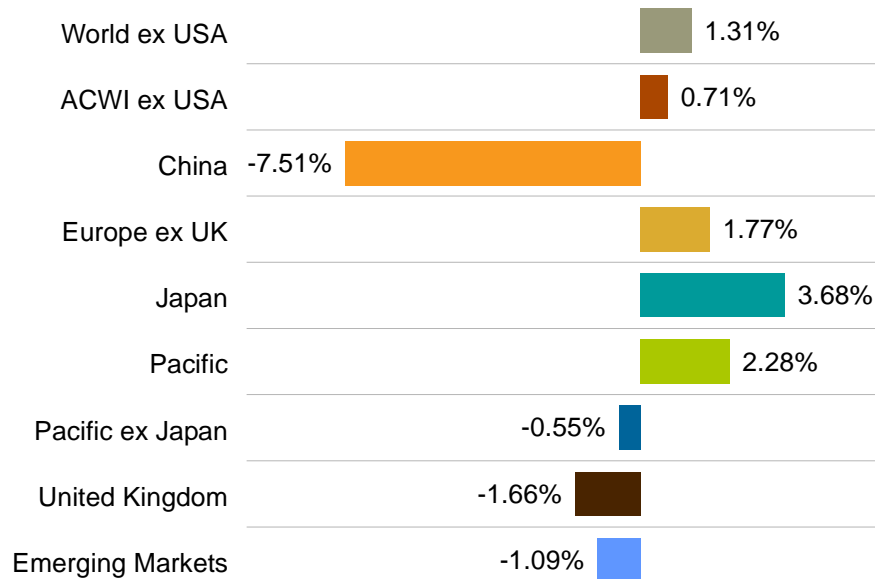
- U.S. equity markets posted broad-based gains in the quarter fueled by strong economic growth, robust corporate earnings, and heightened stock buybacks. Several major indices hit record levels during the quarter; the S&P 500 saw its biggest gain in five years. Volatility was muted despite ongoing trade war threats.
- Large Cap Outpaced Small Cap
  - FAANG (Facebook, Amazon, Apple, Netflix, Google) stocks plus Microsoft had a more muted impact, but still contributed nearly 25% of the S&P 500's quarterly return.
  - All sectors landed in positive territory led by Health Care (+14.5%), Industrials (+10%), and Communication Services (+9.9%).
- Growth Continued to Outperform Value
  - Growth outpacing Value this year by the widest margin in 15 years (R1G YTD: +17.1% vs. R1V YTD: +3.9%) driven by ongoing FAANG stock euphoria.
  - Momentum continued as the leading factor; Value is worst-performing style for last 18 months.

Large Cap Core is represented by the Russell Top 200 Index, Large Cap Value is represented by the Russell Top 200 Value Index and Large Cap Growth is represented by the Russell Top 200 Growth Index. Mid Cap Core is represented by the Russell Mid Cap Index, Mid Cap Value is represented by the Russell Mid Cap Value Index and Mid Cap Growth is represented by the Russell Mid Cap Growth Index. Small Cap Core is represented by the Russell 2000 Index, Small Cap Value is represented by the Russell 2000 Value Index and Small Cap Growth is represented by the Russell 2000 Growth Index.

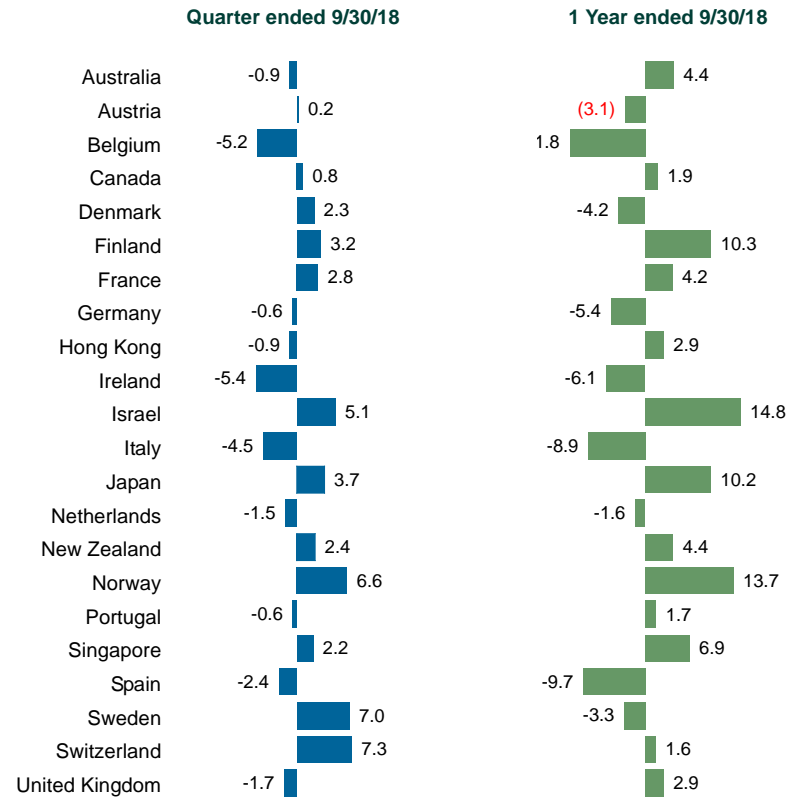
# Non-US Equity

## Third Quarter 2018

Non-U.S. Quarterly Performance (U.S. Dollar)  
as of September 30, 2018



## Developed Country Returns



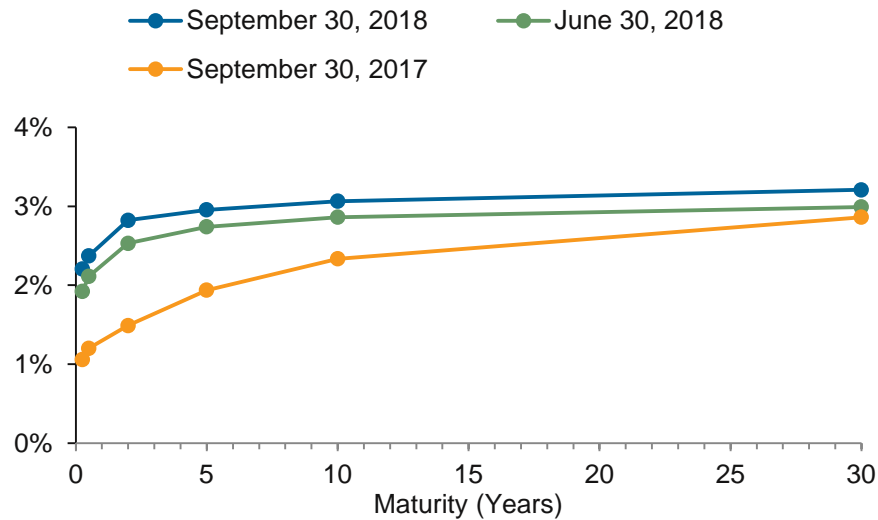
- Non-U.S. Developed in Positive Territory but Lags U.S.
  - Dollar rallied against euro and yen given strong U.S. economy and Fed’s contractionary monetary policy.
  - Strong earnings boosted Health Care & Telecomm; Energy benefited from positive supply-demand dynamics. Real Estate, Financials, and Staples adversely impacted by rising rates.
- Emerging Markets Faltered
  - Emerging markets pressured by rising dollar, U.S. interest rates, and trade frictions.
  - China weakened by economic slowdown; regulatory concerns weighed on Chinese Tech companies.
  - Energy top performer on rising oil prices; Consumer Discretionary negatively impacted by China and India.

Source: MSCI, Callan

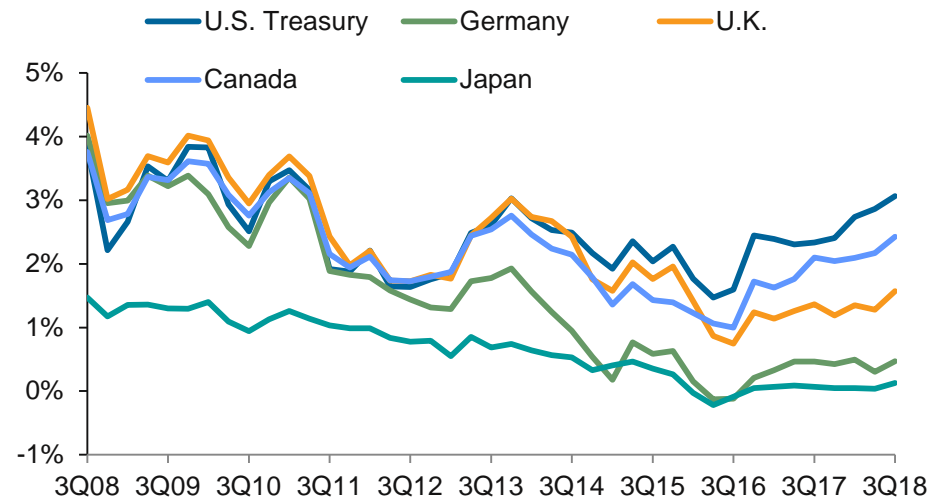
# Fixed Income

Third Quarter 2018

## U.S. Treasury Yield Curves



## 10-Year Global Government Bond Yields




- Fixed income performance was flat. Yield curve rose across maturity spectrum on better-than-expected corporate earnings and solid U.S. economic data.
  - 10-year U.S. Treasury yield reached a high of 3.10% before settling at 3.06%.
  - The yield curve flattened with shorter-term rates rising faster than longer-term.
- Investment Grade Corporates Earned Strong Quarter
  - +0.97% for the quarter; -2.3% YTD
  - New issuance remained strong with an average of 2-3x oversubscribed demand throughout the quarter.
- High Yield Top Performer for Quarter
  - +2.4% for the quarter; +2.6% YTD
  - Bond issuance was \$41 billion, 33% lower than 3Q17.

Source: Bloomberg

# Performance By Asset Class

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	3 Qtrs. 2018
Russell 2000 Value	Bloomberg Barclays Agg	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	MSCI Emerging Markets	Bloomberg Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth	Bloomberg Barclays Agg	MSCI Emerging Markets	Russell 2000 Growth	S&P 500 Growth	S&P 500 Growth	Russell 2000 Value	MSCI Emerging Markets	S&P 500 Growth
14.02%	10.26%	55.82%	25.55%	34.00%	32.17%	39.38%	5.24%	78.51%	29.09%	7.84%	18.23%	43.30%	14.89%	5.52%	31.74%	37.28%	17.24%
Bloomberg Barclays Agg	Bloomberg Barclays High Yield	Russell 2000 Growth	Russell 2000 Value	MSCI World ex USA	MSCI World ex USA	MSCI World ex USA	Bloomberg Barclays High Yield	Bloomberg Barclays High Yield	Russell 2000	Bloomberg Barclays High Yield	Russell 2000 Value	Russell 2000	S&P 500	S&P 500	Russell 2000	S&P 500 Growth	Russell 2000 Growth
8.43%	-1.37%	48.54%	22.25%	14.47%	25.71%	12.44%	-26.16%	58.21%	26.85%	4.98%	18.05%	38.82%	13.69%	1.38%	21.31%	27.44%	15.76%
Bloomberg Barclays High Yield	MSCI Emerging Markets	Russell 2000	MSCI World ex USA	S&P 500 Value	Russell 2000 Value	S&P 500 Growth	Russell 2000 Value	Russell 2000 Growth	Russell 2000 Value	S&P 500 Growth	S&P 500 Value	Russell 2000 Value	S&P 500 Value	Bloomberg Barclays Agg	S&P 500 Value	MSCI World ex USA	Russell 2000
5.28%	-6.16%	47.25%	20.38%	5.82%	23.48%	9.13%	-28.92%	34.47%	24.50%	4.65%	17.68%	34.52%	12.36%	0.55%	17.40%	24.21%	11.51%
Russell 2000	Russell 2000 Value	Russell 2000 Value	Russell 2000	S&P 500	S&P 500 Value	Russell 2000 Growth	Russell 2000	MSCI World ex USA	MSCI Emerging Markets	S&P 500	MSCI World ex USA	S&P 500 Growth	Bloomberg Barclays Agg	Russell 2000 Growth	Bloomberg Barclays High Yield	Russell 2000 Growth	S&P 500
2.49%	-11.43%	46.03%	18.33%	4.91%	20.81%	7.05%	-33.79%	33.67%	18.88%	2.11%	16.41%	32.75%	5.97%	-1.38%	17.13%	22.17%	10.56%
MSCI Emerging Markets	MSCI World ex USA	MSCI World ex USA	S&P 500 Value	Russell 2000 Value	Russell 2000	Bloomberg Barclays Agg	S&P 500 Growth	S&P 500 Growth	Bloomberg Barclays High Yield	S&P 500 Value	Russell 2000	S&P 500	Russell 2000 Growth	MSCI World ex USA	S&P 500	S&P 500	Russell 2000 Value
-2.61%	-15.80%	39.42%	15.71%	4.71%	18.37%	6.97%	-34.92%	31.57%	15.12%	-0.48%	16.35%	32.39%	5.60%	-3.04%	11.96%	21.83%	7.14%
Russell 2000 Growth	Russell 2000	S&P 500 Value	Russell 2000 Growth	Russell 2000	S&P 500	S&P 500	S&P 500	Russell 2000	S&P 500 Value	Russell 2000 Growth	S&P 500	S&P 500 Value	Russell 2000	S&P 500 Value	Russell 2000 Growth	S&P 500 Value	S&P 500 Value
-9.23%	-20.48%	31.79%	14.31%	4.55%	15.79%	5.49%	-37.00%	27.17%	15.10%	-2.91%	16.00%	31.99%	4.89%	-3.13%	11.32%	15.36%	3.51%
S&P 500 Value	S&P 500 Value	Bloomberg Barclays High Yield	Bloomberg Barclays High Yield	Russell 2000 Growth	Russell 2000 Growth	S&P 500 Value	Russell 2000 Growth	S&P 500	S&P 500	Russell 2000	Bloomberg Barclays High Yield	MSCI World ex USA	Russell 2000 Value	Russell 2000	MSCI Emerging Markets	Russell 2000	Bloomberg Barclays High Yield
-11.71%	-20.85%	28.97%	11.13%	4.15%	13.35%	1.99%	-38.54%	26.47%	15.06%	-4.18%	15.81%	21.02%	4.22%	-4.41%	11.19%	14.65%	2.57%
S&P 500	S&P 500	S&P 500	S&P 500	S&P 500 Growth	Bloomberg Barclays High Yield	Bloomberg Barclays High Yield	S&P 500 Value	S&P 500 Value	S&P 500 Growth	Russell 2000 Value	S&P 500 Growth	Bloomberg Barclays High Yield	Bloomberg Barclays High Yield	Bloomberg Barclays High Yield	S&P 500 Growth	Russell 2000 Value	MSCI World ex USA
-11.89%	-22.10%	28.68%	10.88%	4.00%	11.85%	1.87%	-39.22%	21.17%	15.05%	-5.50%	14.61%	7.44%	2.45%	-4.47%	6.89%	7.84%	-1.50%
S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	S&P 500 Growth	Bloomberg Barclays High Yield	S&P 500 Growth	Russell 2000	MSCI World ex USA	Russell 2000 Value	MSCI World ex USA	MSCI World ex USA	Russell 2000 Growth	Bloomberg Barclays Agg	MSCI Emerging Markets	Russell 2000 Value	MSCI World ex USA	Bloomberg Barclays High Yield	Bloomberg Barclays Agg
-12.73%	-23.59%	25.66%	6.13%	2.74%	11.01%	-1.57%	-43.56%	20.58%	8.95%	-12.21%	14.59%	-2.02%	-2.19%	-7.47%	2.75%	7.50%	-1.60%
MSCI World ex USA	Russell 2000 Growth	Bloomberg Barclays Agg	Bloomberg Barclays Agg	Bloomberg Barclays Agg	Bloomberg Barclays Agg	Russell 2000 Value	MSCI Emerging Markets	Bloomberg Barclays Agg	Bloomberg Barclays Agg	MSCI Emerging Markets	Bloomberg Barclays Agg	MSCI Emerging Markets	MSCI World ex USA	MSCI Emerging Markets	Bloomberg Barclays Agg	Bloomberg Barclays Agg	MSCI Emerging Markets
-21.40%	-30.26%	4.10%	4.34%	2.43%	4.33%	-9.78%	-53.33%	5.93%	6.54%	-18.42%	4.21%	-2.60%	-4.32%	-14.92%	2.65%	3.54%	-7.68%



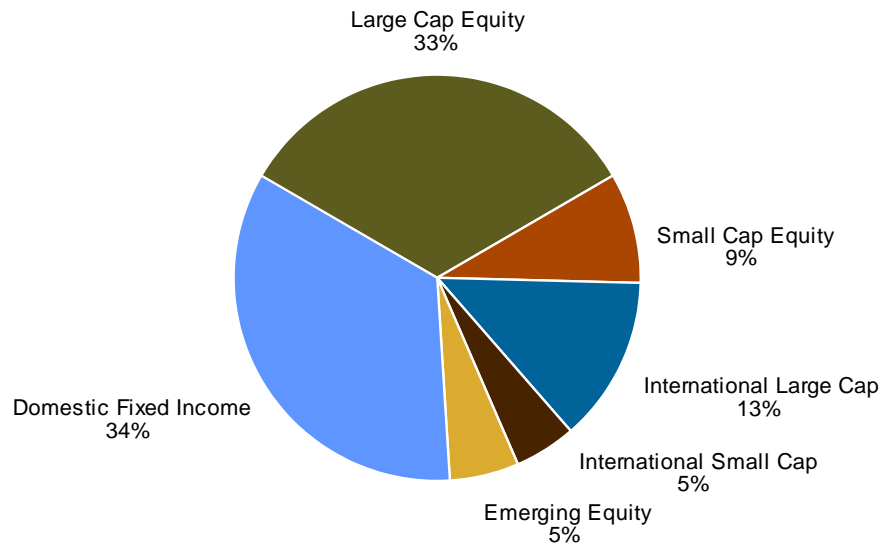
**Sacramento Regional  
Transit District**

Total Fund Overview

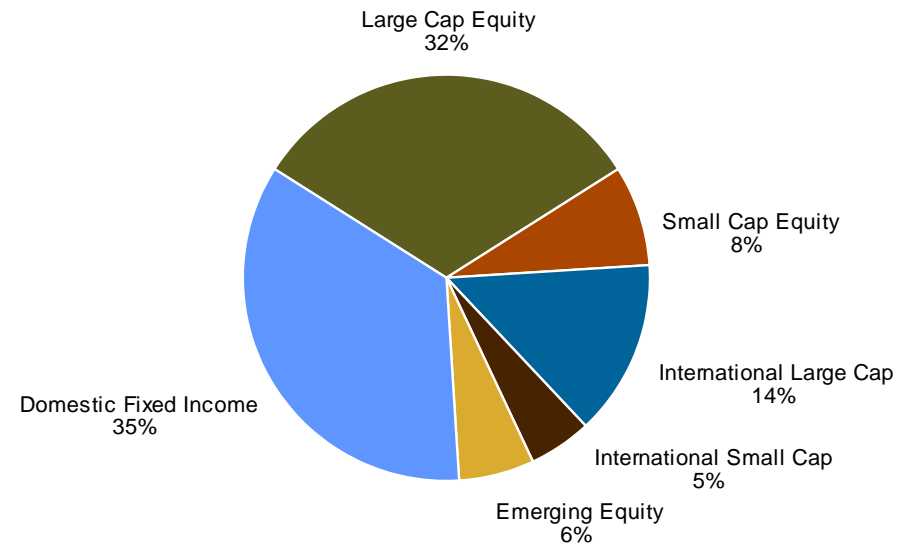
# RT Asset Allocation

As of September 30, 2018

**Actual Asset Allocation**



**Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	97,393	33.3%	32.0%	1.3%	3,722
Small Cap Equity	25,866	8.8%	8.0%	0.8%	2,448
International Large Cap	38,503	13.2%	14.0%	(0.8%)	(2,478)
International Small Cap	14,274	4.9%	5.0%	(0.1%)	(362)
Emerging Equity	16,050	5.5%	6.0%	(0.5%)	(1,513)
Domestic Fixed Income	100,636	34.4%	35.0%	(0.6%)	(1,817)
Total	292,722	100.0%	100.0%		

# Total Fund

## Performance Attribution

### Relative Attribution Effects for Quarter ended September 30, 2018

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	32%	32%	7.88%	7.71%	0.05%	0.01%	0.06%
Small Cap Equity	9%	8%	8.19%	3.58%	0.40%	0.00%	0.40%
International Large Cap	13%	14%	2.97%	1.35%	0.21%	0.01%	0.22%
International Small Cap	5%	5%	(2.02%)	(0.88%)	(0.06%)	(0.00%)	(0.06%)
Emerging Equity	6%	6%	(1.08%)	(1.09%)	0.00%	0.01%	0.01%
Domestic Fixed Income	35%	35%	0.01%	0.02%	(0.00%)	(0.01%)	(0.01%)
<b>Total</b>			<b>3.44%</b>	<b>= 2.82%</b>	<b>+ 0.60%</b>	<b>+ 0.02%</b>	<b>0.62%</b>

### One Year Relative Attribution Effects

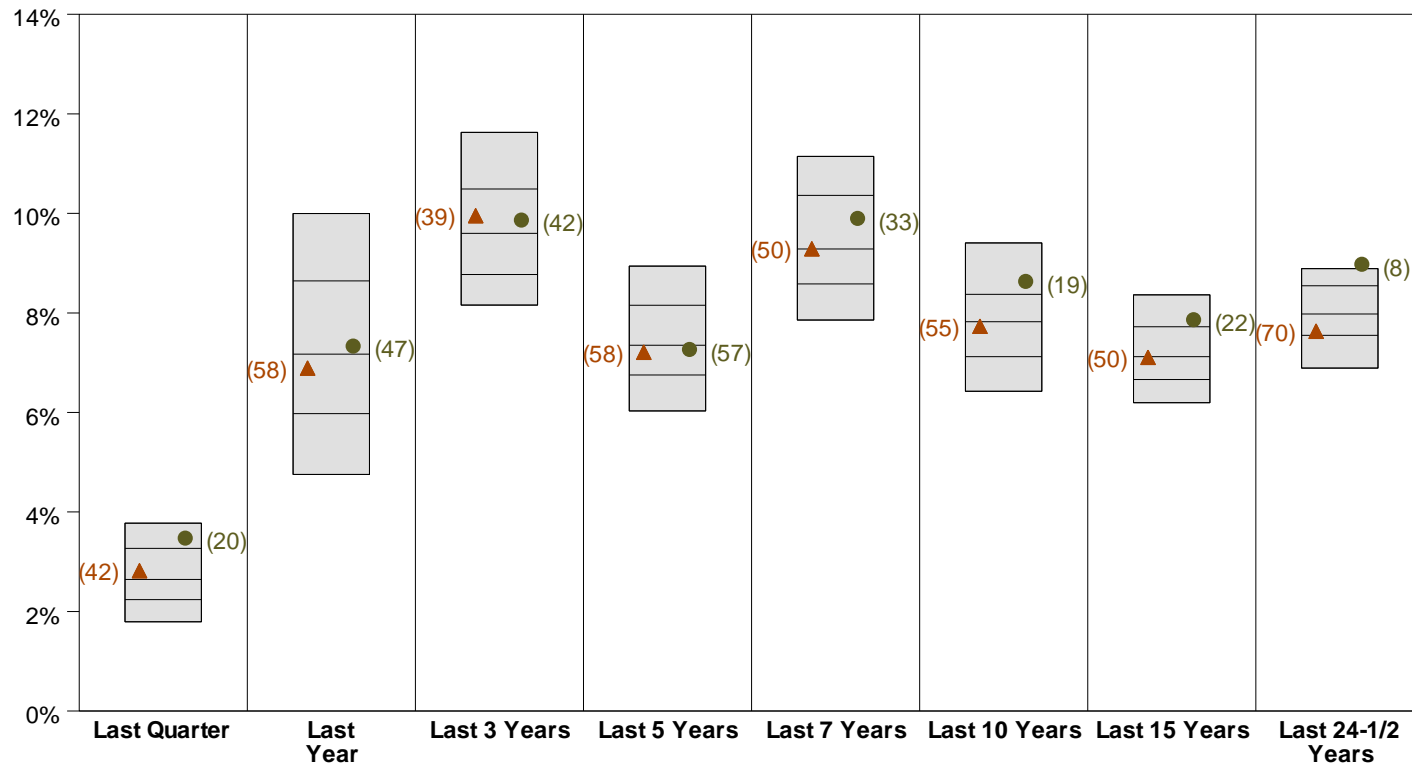
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	33%	32%	16.02%	17.91%	(0.55%)	0.03%	(0.52%)
Small Cap Equity	9%	8%	24.82%	15.24%	0.78%	0.01%	0.78%
International Large Cap	13%	14%	3.00%	2.74%	0.03%	0.02%	0.04%
International Small Cap	5%	5%	1.08%	3.73%	(0.14%)	(0.00%)	(0.14%)
Emerging Equity	6%	6%	(1.97%)	(0.81%)	(0.07%)	(0.01%)	(0.08%)
Domestic Fixed Income	33%	35%	(0.51%)	(1.22%)	0.25%	0.09%	0.33%
<b>Total</b>			<b>7.30%</b>	<b>= 6.89%</b>	<b>+ 0.28%</b>	<b>+ 0.13%</b>	<b>0.41%</b>



# Total Fund

Performance as of September 30, 2018

Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 15 Years	Last 24-1/2 Years
10th Percentile	3.78	10.00	11.63	8.94	11.15	9.41	8.36	8.89
25th Percentile	3.27	8.64	10.49	8.15	10.36	8.37	7.72	8.55
Median	2.64	7.17	9.60	7.35	9.28	7.82	7.12	7.98
75th Percentile	2.24	5.98	8.77	6.75	8.58	7.12	6.66	7.55
90th Percentile	1.79	4.75	8.16	6.03	7.86	6.43	6.20	6.89
<b>Total Fund</b> ●	3.44	7.30	9.83	7.23	9.87	8.60	7.83	8.94
<b>Target</b> ▲	2.82	6.89	9.95	7.21	9.29	7.73	7.11	7.63

# Total Fund

## Manager Asset Allocation

	September 30, 2018			June 30, 2018
	Market Value	Net New Inv.	Inv. Return	Market Value
<b>Consolidated Plan</b>				
<b>Domestic Equity</b>	<b>\$123,259,422</b>	<b>\$(772,568)</b>	<b>\$9,128,770</b>	<b>\$114,903,221</b>
<b>Large Cap</b>	<b>\$97,393,161</b>	<b>\$0</b>	<b>\$7,110,818</b>	<b>\$90,282,343</b>
Boston Partners	47,523,601	0	3,533,899	43,989,701
SSgA S&P 500	49,869,560	0	3,576,918	46,292,642
<b>Small Cap</b>	<b>\$25,866,261</b>	<b>\$(772,568)</b>	<b>\$2,017,952</b>	<b>\$24,620,877</b>
Atlanta Capital	25,866,261	(772,568)	2,017,952	24,620,877
<b>International Equity</b>	<b>\$68,826,940</b>	<b>\$0</b>	<b>\$584,715</b>	<b>\$68,242,226</b>
<b>International Large Cap</b>	<b>\$38,503,306</b>	<b>\$0</b>	<b>\$1,110,609</b>	<b>\$37,392,697</b>
Brandes	9,337	0	80	9,257
SSgA EAFE	11,397,852	0	156,888	11,240,964
Pyrford	27,096,117	0	953,641	26,142,476
<b>International Small Cap</b>	<b>\$14,273,681</b>	<b>\$0</b>	<b>\$(329,549)</b>	<b>\$14,603,230</b>
AQR	14,273,681	0	(329,549)	14,603,230
<b>Emerging Equity</b>	<b>\$16,049,953</b>	<b>\$0</b>	<b>\$(196,346)</b>	<b>\$16,246,299</b>
DFA Emerging Markets	16,049,953	0	(196,346)	16,246,299
<b>Fixed Income</b>	<b>\$100,636,113</b>	<b>\$(308,427)</b>	<b>\$6,278</b>	<b>\$100,938,262</b>
Metropolitan West	100,636,113	(308,427)	6,278	100,938,262
<b>Total Plan - Consolidated</b>	<b>\$292,722,475</b>	<b>\$(1,080,995)</b>	<b>\$9,719,762</b>	<b>\$284,083,708</b>

# Total Fund

## Manager Returns as of September 30, 2018

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
<b>Domestic Equity</b>	<b>7.95%</b>	<b>17.86%</b>	<b>17.03%</b>	<b>13.22%</b>	<b>17.45%</b>
Domestic Equity Benchmark**	6.88%	17.42%	17.34%	13.46%	16.87%
<b>Large Cap Equity</b>	<b>7.88%</b>	<b>16.02%</b>	<b>16.39%</b>	<b>12.92%</b>	<b>17.15%</b>
Boston Partners	8.03%	14.11%	15.39%	11.83%	17.08%
Russell 1000 Value Index	5.70%	9.45%	13.55%	10.72%	15.02%
SSgA S&P 500	7.73%	17.90%	17.35%	14.00%	-
S&P 500 Index	7.71%	17.91%	17.31%	13.95%	16.91%
<b>Small Cap Equity</b>	<b>8.19%</b>	<b>24.82%</b>	<b>19.38%</b>	<b>14.32%</b>	<b>18.54%</b>
Atlanta Capital	8.19%	24.82%	19.38%	14.32%	18.54%
Russell 2000 Index	3.58%	15.24%	17.12%	11.07%	16.43%
<b>International Equity</b>	<b>0.94%</b>	<b>1.44%</b>	<b>9.57%</b>	<b>4.05%</b>	<b>7.57%</b>
International Benchmark***	0.32%	2.11%	10.37%	4.49%	8.18%
<b>International Large Cap</b>	<b>2.97%</b>	<b>3.00%</b>	<b>8.92%</b>	<b>4.09%</b>	-
SSgA EAFE	1.40%	3.07%	9.62%	4.75%	-
Pyrford	3.65%	2.98%	-	-	-
MSCI EAFE Index	1.35%	2.74%	9.23%	4.42%	8.30%
<b>International Small Cap</b>	<b>(2.02%)</b>	<b>1.08%</b>	-	-	-
AQR	(2.02%)	1.08%	-	-	-
MSCI EAFE Small Cap Index	(0.88%)	3.73%	12.39%	7.96%	11.46%
<b>Emerging Markets Equity</b>	<b>(1.08%)</b>	<b>(1.97%)</b>	<b>12.13%</b>	<b>4.18%</b>	-
DFA Emerging Markets	(1.08%)	(1.97%)	12.13%	4.18%	-
MSCI Emerging Markets Index	(1.09%)	(0.81%)	12.36%	3.61%	5.03%
<b>Domestic Fixed Income</b>	<b>0.01%</b>	<b>(0.51%)</b>	<b>1.79%</b>	<b>2.50%</b>	<b>3.11%</b>
Met West	0.01%	(0.51%)	1.79%	2.50%	3.11%
Bloomberg Aggregate Index	0.02%	(1.22%)	1.31%	2.16%	2.02%
<b>Total Plan</b>	<b>3.44%</b>	<b>7.30%</b>	<b>9.83%</b>	<b>7.23%</b>	<b>9.87%</b>
Target*	2.82%	6.89%	9.95%	7.21%	9.29%

\* Current Quarter Target = 35.0% Bloomberg Aggregate Index, 32.0% S&P 500 Index, 14.0% MSCI EAFE Index, 8.0% Russell 2000 Index, 6.0% MSCI Emerging Markets Index, and 5.0% MSCI EAFE Small Cap Index.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

\*\*\* International Benchmark = MSCI EAFE until 6/30/2013, 78.26% MSCI EAFE + 21.74% MSCI EM until 4/30/2015, 76% MSCI EAFE + 24% MSCI EM until 7/31/2016, and 56% MSCI EAFE + 24% MSCI EM + 20% MSCI EAFE Small Cap thereafter.

# Total Fund

## Manager Calendar Year Returns

	12/2017- 9/2018	2017	2016	2015	2014
<b>Domestic Equity</b>	<b>10.49%</b>	<b>19.78%</b>	<b>14.58%</b>	<b>0.06%</b>	<b>10.85%</b>
Domestic Equity Benchmark**	10.80%	20.41%	13.85%	0.26%	12.07%
<b>Large Cap Equity</b>	<b>8.39%</b>	<b>21.10%</b>	<b>13.38%</b>	<b>(1.17%)</b>	<b>12.81%</b>
Boston Partners	6.22%	20.32%	14.71%	(3.75%)	11.87%
Russell 1000 Value Index	3.92%	13.66%	17.34%	(3.83%)	13.45%
SSgA S&P 500	10.54%	21.86%	12.03%	1.46%	13.77%
S&P 500 Index	10.56%	21.83%	11.96%	1.38%	13.69%
<b>Small Cap Equity</b>	<b>18.53%</b>	<b>15.01%</b>	<b>19.17%</b>	<b>5.14%</b>	<b>3.49%</b>
Atlanta Capital	18.53%	15.01%	19.17%	5.14%	3.49%
Russell 2000 Index	11.51%	14.65%	21.31%	(4.41%)	4.89%
<b>International Equity</b>	<b>(3.59%)</b>	<b>28.25%</b>	<b>2.55%</b>	<b>(4.17%)</b>	<b>(3.72%)</b>
International Benchmark***	(3.09%)	29.51%	3.26%	(4.30%)	(4.25%)
<b>International Large Cap</b>	<b>(0.80%)</b>	<b>22.63%</b>	<b>1.35%</b>	<b>(1.17%)</b>	<b>(4.41%)</b>
SSgA EAFE	(1.11%)	25.47%	1.37%	(0.56%)	(4.55%)
MSCI EAFE Index	(1.43%)	25.03%	1.00%	(0.81%)	(4.90%)
<b>International Small Cap</b>	<b>(4.42%)</b>	<b>33.76%</b>	-	-	-
AQR	(4.42%)	33.76%	-	-	-
MSCI EAFE Small Cap Index	(2.19%)	33.01%	2.18%	9.59%	(4.95%)
<b>Emerging Markets Equity</b>	<b>(9.10%)</b>	<b>37.32%</b>	<b>12.99%</b>	<b>(14.33%)</b>	<b>(0.28%)</b>
DFA Emerging Markets	(9.10%)	37.32%	12.99%	(14.33%)	(0.28%)
MSCI Emerging Markets Index	(7.68%)	37.28%	11.19%	(14.92%)	(2.19%)
<b>Domestic Fixed Income</b>	<b>(0.98%)</b>	<b>3.89%</b>	<b>2.87%</b>	<b>0.51%</b>	<b>6.37%</b>
Met West	(0.98%)	3.89%	2.87%	0.51%	6.37%
Bloomberg Aggregate Index	(1.60%)	3.54%	2.65%	0.55%	5.97%
<b>Total Plan</b>	<b>2.87%</b>	<b>16.14%</b>	<b>7.65%</b>	<b>(0.97%)</b>	<b>5.61%</b>
Target*	2.93%	16.39%	7.40%	(0.71%)	5.82%

\* Current Quarter Target = 35.0% Bloomberg Aggregate Index, 32.0% S&P 500 Index, 14.0% MSCI EAFE Index, 8.0% Russell 2000 Index, 6.0% MSCI Emerging Markets Index, and 5.0% MSCI EAFE Small Cap Index.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

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September 30, 2018



**Sacramento Regional Transit District  
Retirement Plans**

**Investment Measurement Service  
Quarterly Review**

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## Table of Contents

### September 30, 2018

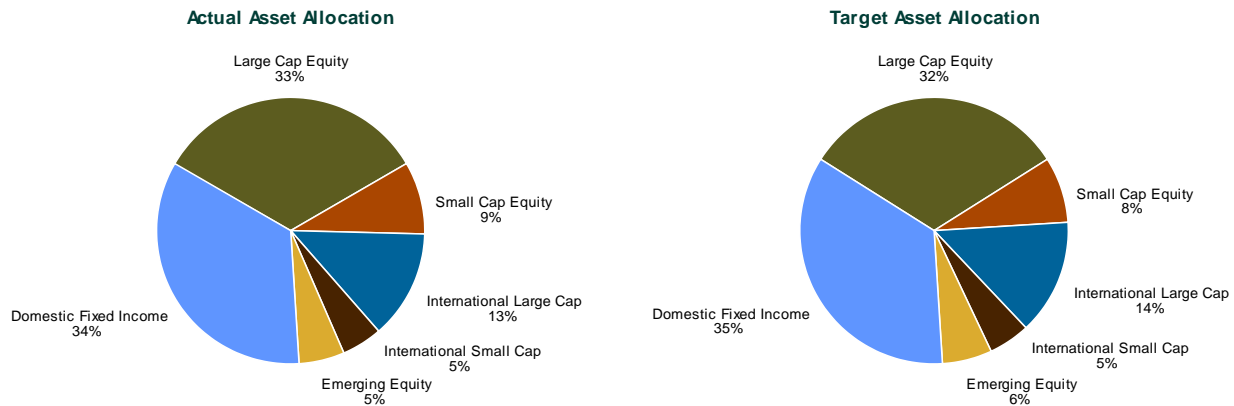
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<b>Executive Summary</b>	1
<b>Capital Markets Review</b>	3
<b>Combined Plan</b>	
Actual vs Target Asset Allocation	9
Quarterly Total Plan Attribution	10
Cumulative Total Plan Attribution	11
Total Fund Performance	13
Historical Asset Allocation	14
Asset Growth Summary	16
Investment Manager Performance	17
<b>Domestic Equity</b>	
Domestic Equity	23
Large Cap	27
SSgA S&P 500	31
Boston Partners	35
Atlanta Capital	44
<b>International Equity</b>	
International Equity	54
SSgA EAFE	59
Pyrford	65
AQR	73
DFA Emerging Markets	81
<b>Domestic Fixed Income</b>	
Metropolitan West Asset Management	90
<b>Definitions</b>	95
<b>Callan Research/Education</b>	98
<b>Disclosures</b>	101



**Sacramento Regional Transit District**  
Executive Summary for Period Ending September 30, 2018

**Asset Allocation**



**Performance**

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
<b>Total Plan</b>	<b>3.44</b>	<b>7.30</b>	<b>9.83</b>	<b>7.23</b>	<b>9.87</b>	<b>8.60</b>
	2.82	6.89	9.95	7.21	9.29	7.73

**Recent Developments**

N/A

**Organizational Issues**

N/A

**Manager Performance**

Manager	Peer Group Ranking		
	Last Year	Last 3 Years	Last 7 Years
Boston Partners	23	39	13
Atlanta Capital	25	24	36
Pyrford	44	[73]	[94]
AQR	59	[67]	[63]
DFA	27	72	[67]
MetWest	54	93	77

*Brackets indicate performance linked with manager's composite*

**Watch List**

N/A

**Items Outstanding**

N/A

\*Current quarter target = 35% Bloomberg Barclays Aggregate Index, 32% S&P 500 Index, 8% Russell 2000 Index, 14% MSCI EAFE Index, 5% MSCI EAFE Small Cap Index, and 6% MSCI Emerging Markets Index.





**U.S. EQUITY**

The U.S. equity market posted broad-based gains in the third quarter fueled by strong economic growth, robust corporate earnings, and heightened stock buybacks. Several major indices hit record levels during the quarter, and the 7.7% gain for the S&P 500 was its biggest since the fourth quarter of 2013. Volatility was muted in spite of persistent headlines around trade war threats and the ever-changing negotiations.

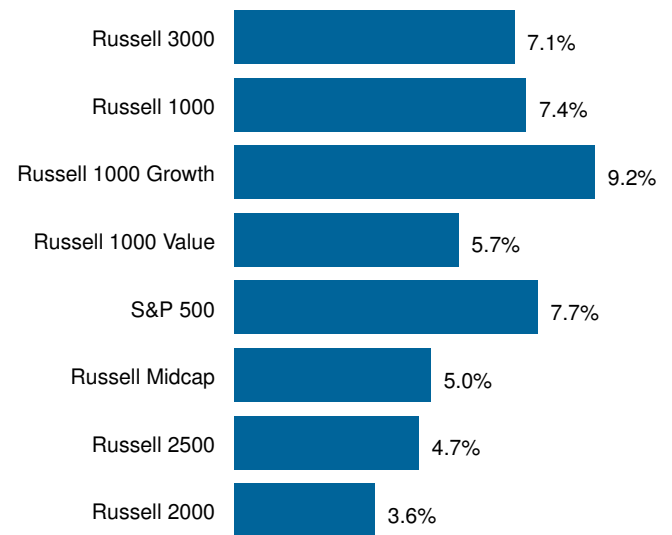
**Large Cap Outpaced Small Cap** (Russell 1000: +7.4%; Russell 2000: +3.6%)

- Tax reform and domestic prosperity contributed to an acceleration in corporate earnings growth, and valuations remained elevated as strong sentiment persisted given positive economic data.
- Amazon (+17.8%), Apple (+22.4%), and Microsoft (+16.4%) were strong contributors to large cap outperformance.
- FAANG stocks plus Microsoft had a more muted impact than in previous quarters, but still contributed nearly 25% of the S&P 500's quarterly return.
- All sectors landed in positive territory with Health Care (+14.5%), Industrials (+10%), and Communication Services (+9.9%) as the strongest performers.
- The new Communication Services sector represents 10% of the S&P 500 and includes several FAANG stocks such as Alphabet, Facebook, and Netflix; Tech and Consumer Discretionary now represent lower weightings in the index.

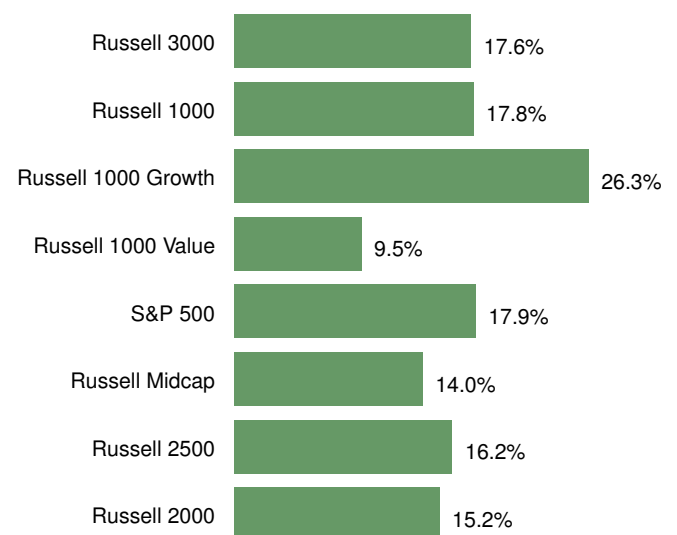
**Growth Continued to Outperform Value** (Russell 1000 Growth: +9.2%; Russell 1000 Value: +5.7%)

- Divergence between Growth and Value approaching historical high; Growth outpacing Value this year by the widest margin in 15 years within large cap (Russell 1000 Growth YTD: +17.1% vs. Russell 1000 Value YTD: +3.9%) due largely to ongoing euphoria of the FAANG stocks.
- Momentum continued as the leading factor for the quarter and year-to-date; value has been the worst-performing style for the last 18 months.

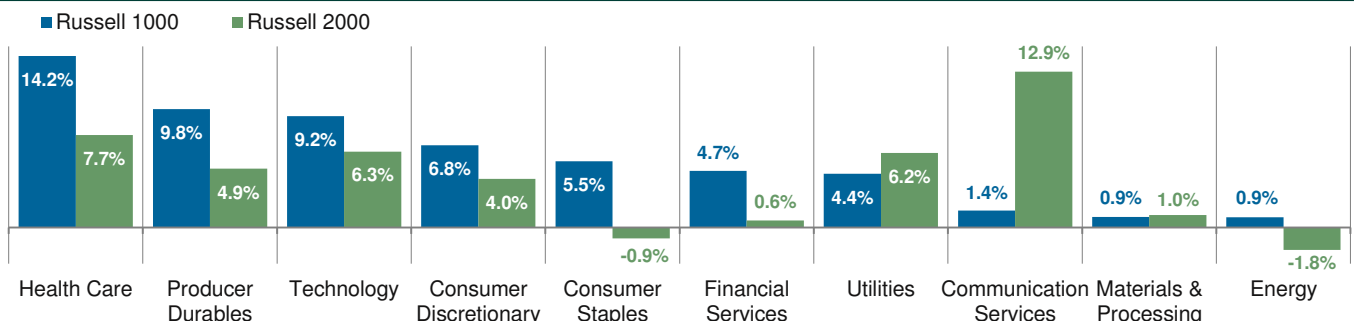
**U.S. Equity: Quarterly Returns**



**U.S. Equity: One-Year Returns**



**Russell Sector Returns, Quarter ended September 30, 2018**



Sources: FTSE Russell, Standard & Poor's

**NON-U.S./GLOBAL EQUITY**

Market divergence has emerged after synchronized growth in 2017. The U.S. continues to post positive returns while non-U.S. developed and emerging markets have rolled over year-to-date, dragged down by geopolitical and economic uncertainties.

**Global/Non-US Developed** (MSCI EAFE: +1.4%; MSCI Europe: +0.8%; MSCI Japan: +3.7%; MSCI World ex USA: +1.3%)

- The dollar rallied against the euro and yen given the fundamentals of the U.S. economy and Fed's contractionary monetary policy; other central banks maintained status quo
- Global trade tensions coupled with Brexit negotiation and Italy's populism concerns tempered the European market despite solid earnings growth; re-election of Prime Minister Shinzo Abe and GDP growth sparked the Japanese market
- Top sector performers were Health Care, Telecommunication Services, and Energy
- Real Estate, Financials, and Consumer Staples were hurt by rising interest rates and a flattening yield curve
- Style had a de minimis impact; however, Growth moderately outperformed Value. Volatility and small cap factors were out of favor given market uncertainties

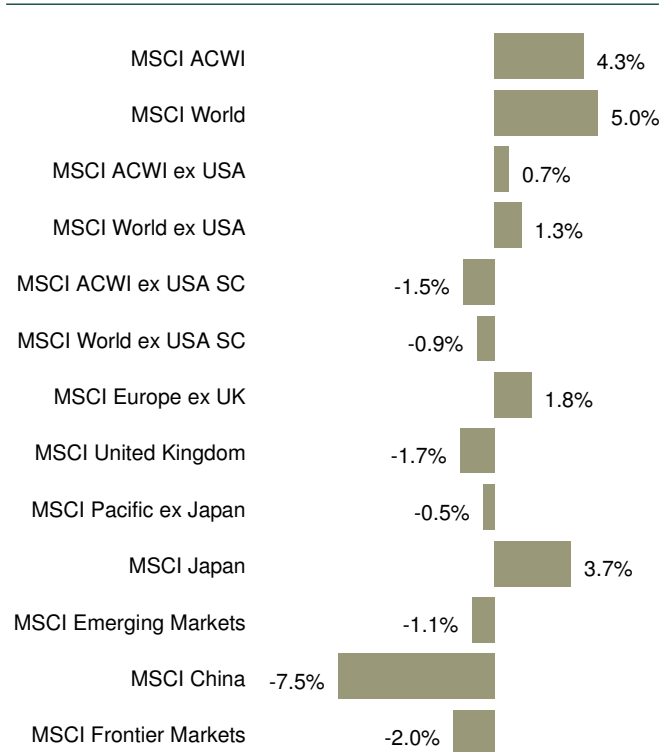
**Emerging Markets** (MSCI EM: -1.1%)

- Emerging markets were under pressure from a rising dollar, U.S. interest rates, and U.S.-China trade frictions
- Turkey was the worst-performing country within emerging markets as the lira and local currency bonds crashed due to the twin deficit, high level of dollar debt, and inflation
- The economic slowdown in China and trade tensions with the U.S. weakened the market
- Brazil and Russia were among the best performers due to climbing oil prices
- Energy was the best performer supported by rising oil prices; Consumer Discretionary was the worst sector performer weighed down by China and India
- Value and large cap factors were in favor as Energy gained traction with rising oil prices and momentum struggled as market leadership rotated away from Asian tech companies

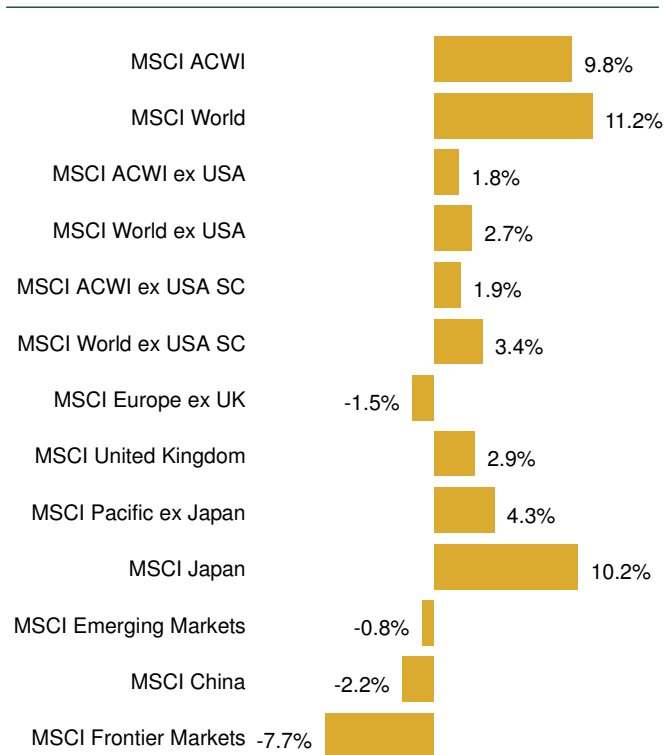
**International Small Cap** (MSCI World ex USA Small Cap: +0.9%; MSCI EM Small Cap: -4.2%)

- Both non-U.S. developed and emerging market small cap underperformed large cap as appetite for risk waned due to rising interest rates/dollar, global trade tensions, and geopolitical conflicts
- Value was favored in both non-U.S. developed and emerging market small cap as the value-oriented Energy sector thrived with rising oil prices

**Global Equity: Quarterly Returns**



**Global Equity: One-Year Returns**



Source: MSCI

**U.S. FIXED INCOME**

Fixed income performance was flat for the third quarter. The U.S. Treasury yield curve rose across the maturity spectrum on better-than-expected corporate earnings and solid U.S. economic data despite increased headline risks from U.S. trade tensions and European political uncertainties. Investors searching for shorter duration spreads helped both the commercial mortgage-backed securities (CMBS) and asset-backed securities (ABS) markets as well, but higher interest rates slowed prepayments and extended the duration of agency MBS, resulting in its underperformance.

In other markets, U.S. below-investment grade debt and bank loans also provided strong results this quarter as a lack of new high yield issuance and demand for bank loans from collateralized loan obligation (CLO) formation provided strong support.

**Bloomberg Barclays US Aggregate Bond Index: +0.02% in 3Q; -1.6% YTD**

- 10-year U.S. Treasury yield rose steadily, reaching a high of 3.10%, before settling at 3.06% as strong economic data repriced investors' inflation expectations and increased the probability of a December rate hike by the Federal Reserve
- The yield curve flattened with short-term interest rates rising quicker than the longer-term rate. The spread between the 2-year and 10-year key rates narrowed 9 bps to 24 bps from last quarter, the tightest in 10 years

**Investment Grade Corporates: +1.0% in 3Q; -2.3% YTD**

- New issuance remained strong with an average of 2-3x oversubscribed demand throughout the quarter
- Spreads continued to narrow this quarter despite leverages increasing within the sector
- Higher rates and weaker overall fundamentals caused this sector to post negative results year to date

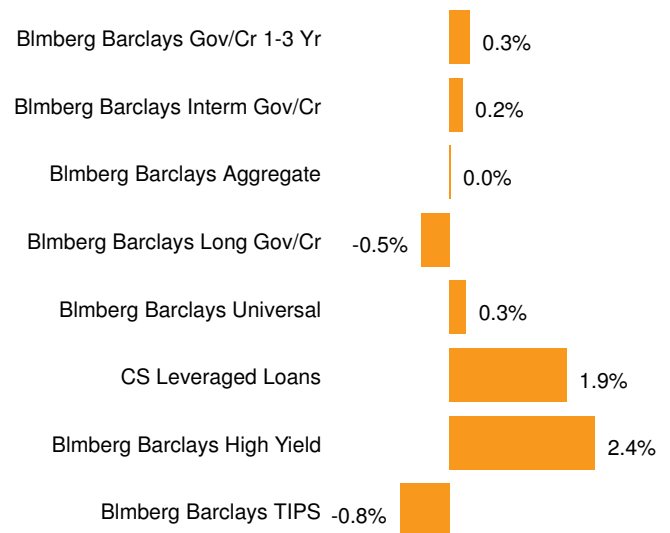
**High Yield: +2.4% in 3Q; +2.6% YTD**

- Low new issuance volume and stable fundamentals compressed spreads
- Bond issuance was \$41 billion, 33% lower than 3Q17

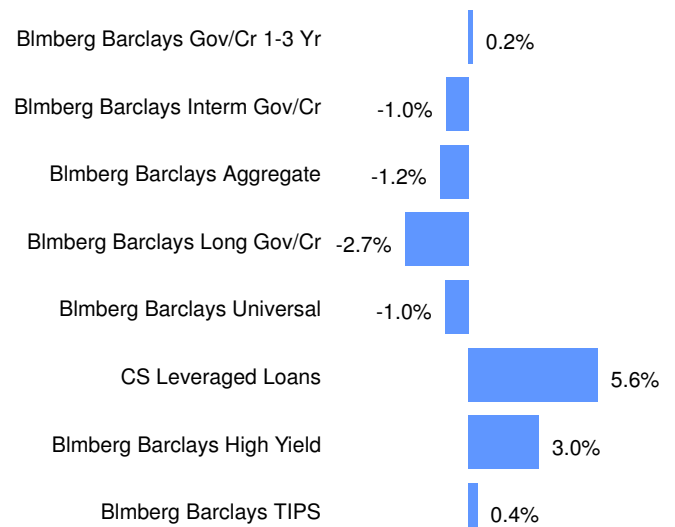
**Bank Loans: +1.8% in 3Q; +4.0% YTD**

- Demand continues for floating rate securities despite covenant-lite structures and higher spread duration
- Heavy issuance continued through the quarter; YTD leveraged loan issuance is above \$900 billion, driven by leveraged buyout and mergers-and-acquisitions activities
- CLO formation also increased demand in the third quarter

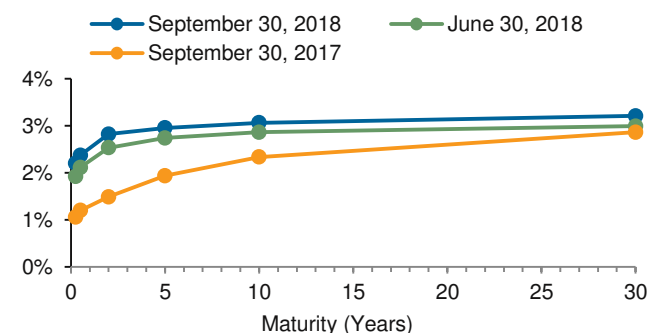
**U.S. Fixed Income: Quarterly Returns**



**U.S. Fixed Income: One-Year Returns**



**U.S. Treasury Yield Curves**



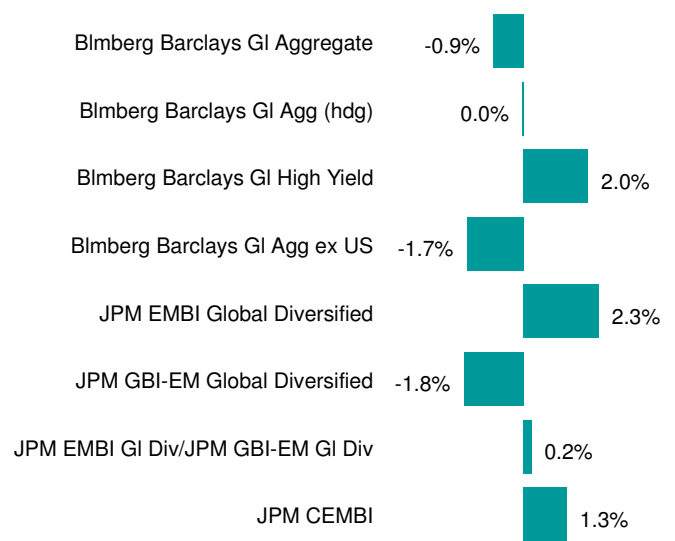
Sources: Bloomberg, Bloomberg Barclays, Credit Suisse

**NON-U.S. FIXED INCOME**

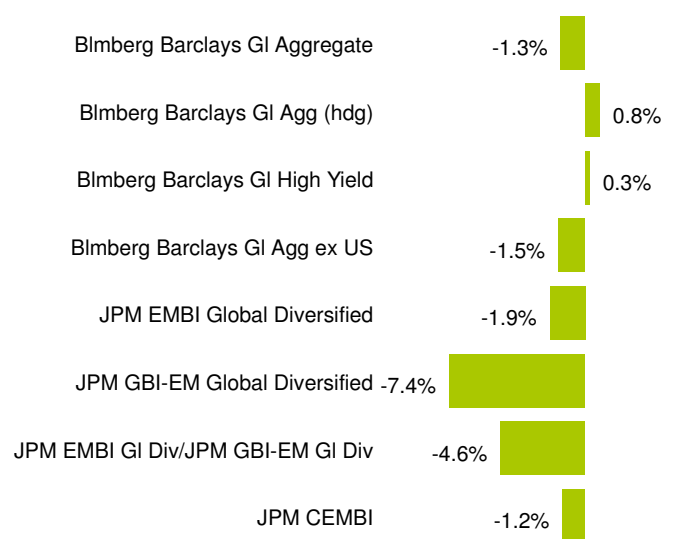
**Volatility Hinders Local EM Debt**

- The quarterly return for the JPM EMBI Global Diversified Index (USD denominated) was +2.3% with all sub-regions delivering positive results. Local currency emerging markets, however, fared more poorly. The JPM GBI-EM Global Diversified Index fell 1.8% for the quarter, but also endured significant intra-quarter volatility including a 6.1% drop in August.
- Further, return dispersion among countries was significant. Argentina (-35%) has seen its peso fall more than 50% this year to a record low as investors were spooked by previous currency debacles and worries over the economic picture. In addition to securing support from the International Monetary Fund, the country's central bank hiked short-term interest rates 15 percentage points to a global high of 60%. Turkey (-27%) endured a similar currency rout, though for different reasons. U.S.-imposed sanctions and concerns over central bank policy were the twin drivers of the lira's weakness. Turkey hiked short rates by 6.25 percentage points to 24% to stem its currency slide.
- Elsewhere, returns were far more modest (positive or negative) with only Russia (-6%) and Mexico (+6%) being noteworthy.
- Issuers in Europe faced a different challenge as political uncertainties surrounding Italy caused that market to weaken.

**Global Fixed Income: Quarterly Returns**

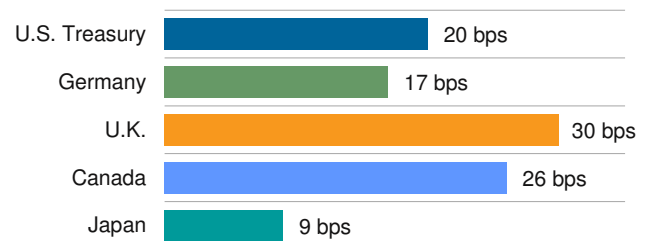


**Global Fixed Income: One-Year Returns**



**Change in 10-Year Global Government Bond Yields**

**2Q18 to 3Q18**

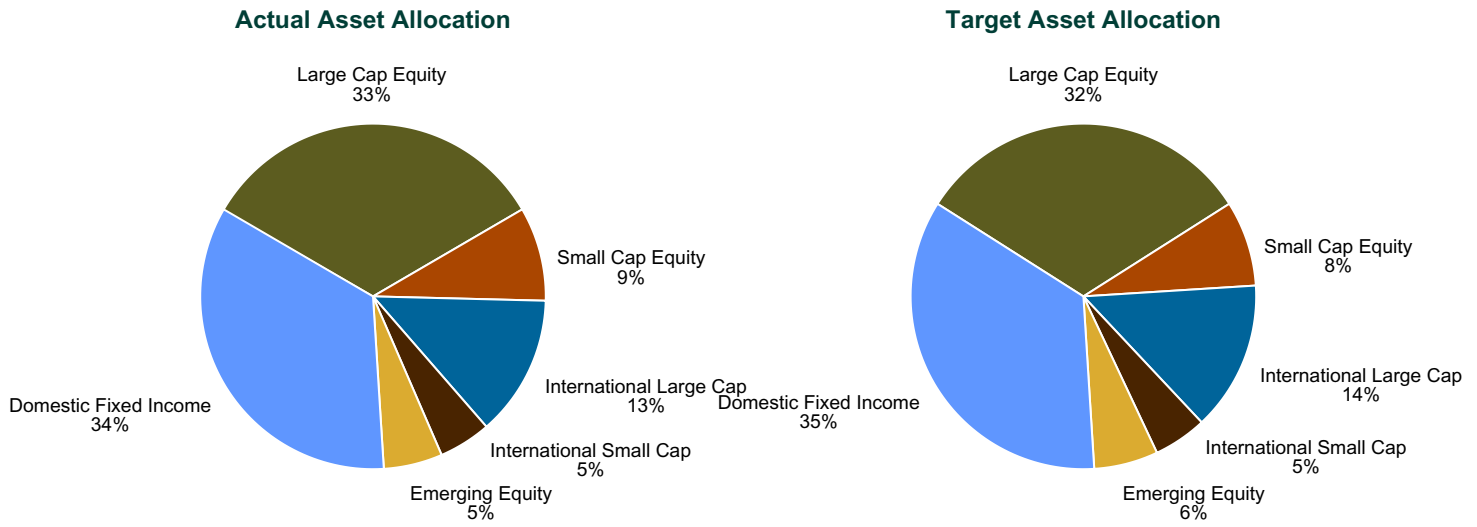


Sources: Bloomberg, Bloomberg Barclays, JP Morgan



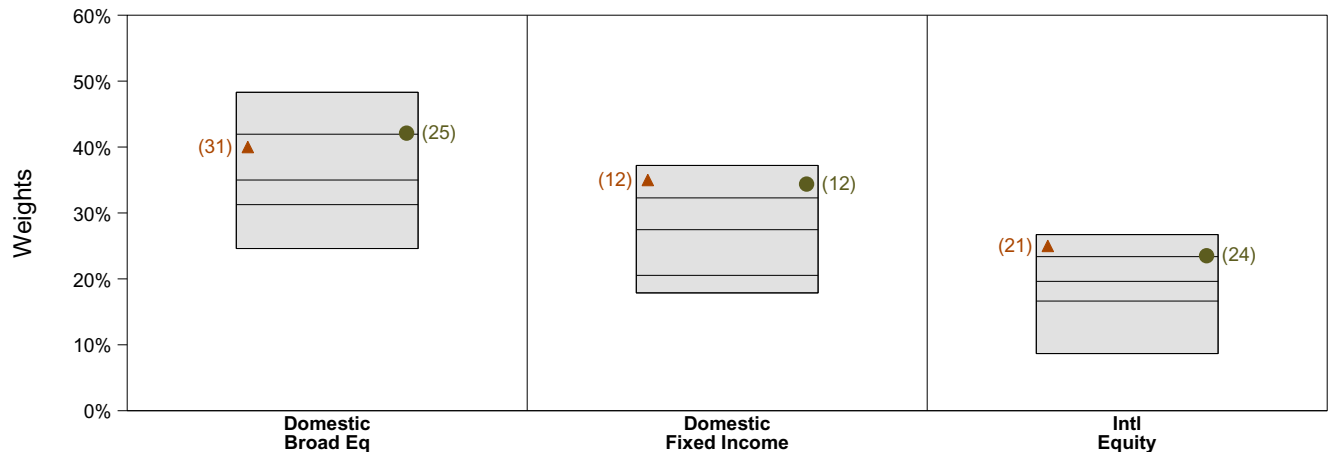
## Actual vs Target Asset Allocation As of September 30, 2018

The top left chart shows the Fund's asset allocation as of September 30, 2018. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Spons- Mid (100M-1B).



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	97,393	33.3%	32.0%	1.3%	3,722
Small Cap Equity	25,866	8.8%	8.0%	0.8%	2,448
International Large Cap	38,503	13.2%	14.0%	(0.8%)	(2,478)
International Small Cap	14,274	4.9%	5.0%	(0.1%)	(362)
Emerging Equity	16,050	5.5%	6.0%	(0.5%)	(1,513)
Domestic Fixed Income	100,636	34.4%	35.0%	(0.6%)	(1,817)
Total	292,722	100.0%	100.0%		

### Asset Class Weights vs Callan Public Fund Spons- Mid (100M-1B)



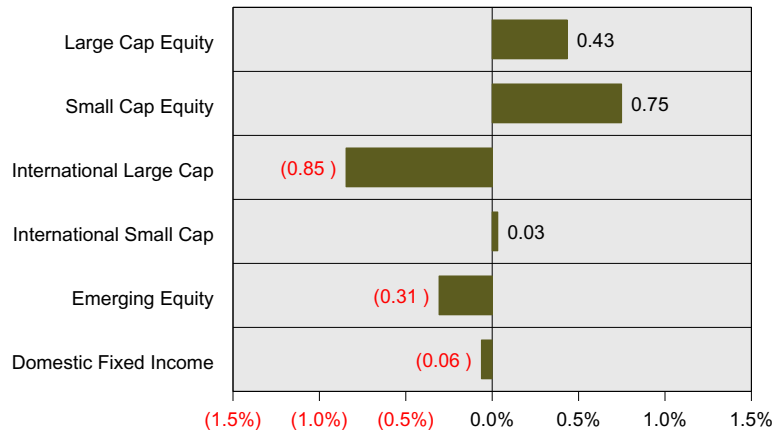
	Domestic Broad Eq	Domestic Fixed Income	Intl Equity
10th Percentile	48.30	37.21	26.72
25th Percentile	41.94	32.29	23.37
Median	35.00	27.46	19.62
75th Percentile	31.26	20.54	16.63
90th Percentile	24.60	17.87	8.67
<b>Fund</b> ●	42.11	34.38	23.51
<b>Target</b> ▲	40.00	35.00	25.00
% Group Invested	96.55%	98.28%	91.38%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

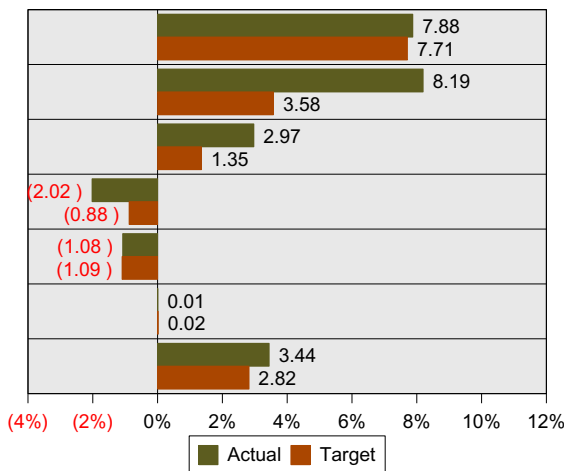
## Quarterly Total Fund Relative Attribution - September 30, 2018

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

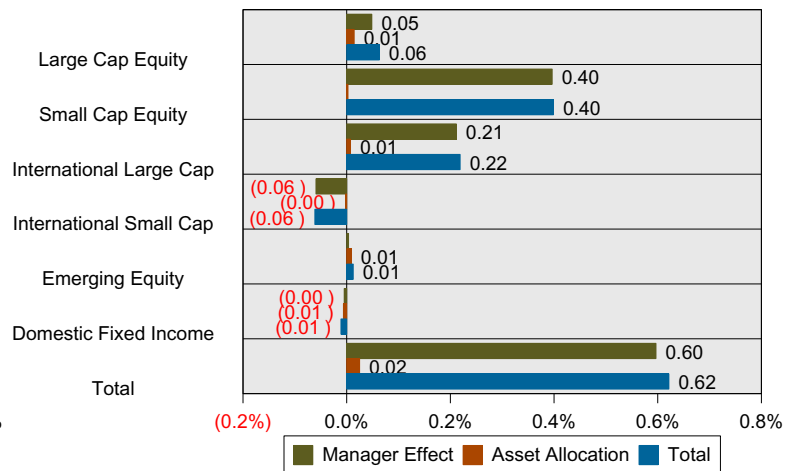
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended September 30, 2018

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	32%	32%	7.88%	7.71%	0.05%	0.01%	0.06%
Small Cap Equity	9%	8%	8.19%	3.58%	0.40%	0.00%	0.40%
International Large Cap	13%	14%	2.97%	1.35%	0.21%	0.01%	0.22%
International Small Cap	5%	5%	(2.02%)	(0.88%)	(0.06%)	(0.00%)	(0.06%)
Emerging Equity	6%	6%	(1.08%)	(1.09%)	0.00%	0.01%	0.01%
Domestic Fixed Income	35%	35%	0.01%	0.02%	(0.00%)	(0.01%)	(0.01%)
<b>Total</b>			<b>3.44%</b>	<b>2.82%</b>	<b>+ 0.60%</b>	<b>+ 0.02%</b>	<b>0.62%</b>

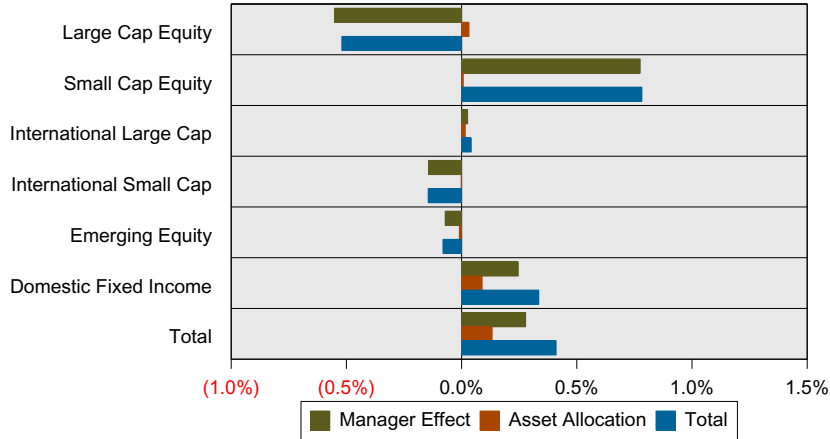
\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.



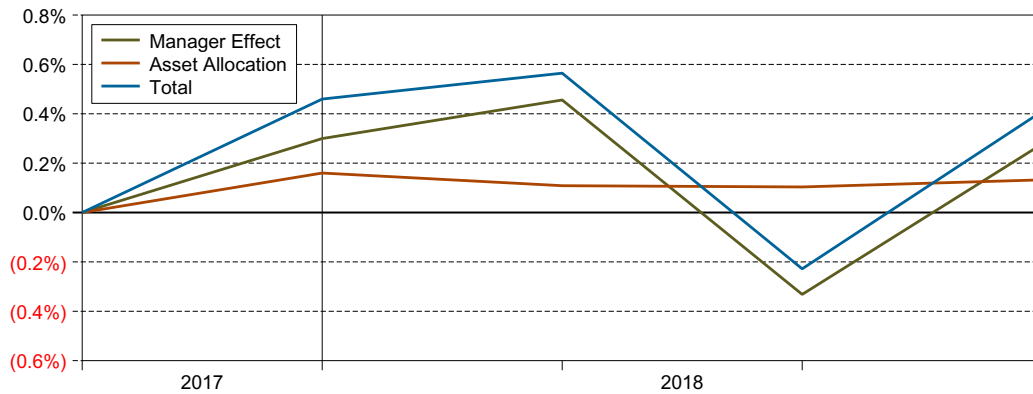
## Cumulative Total Fund Relative Attribution - September 30, 2018

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

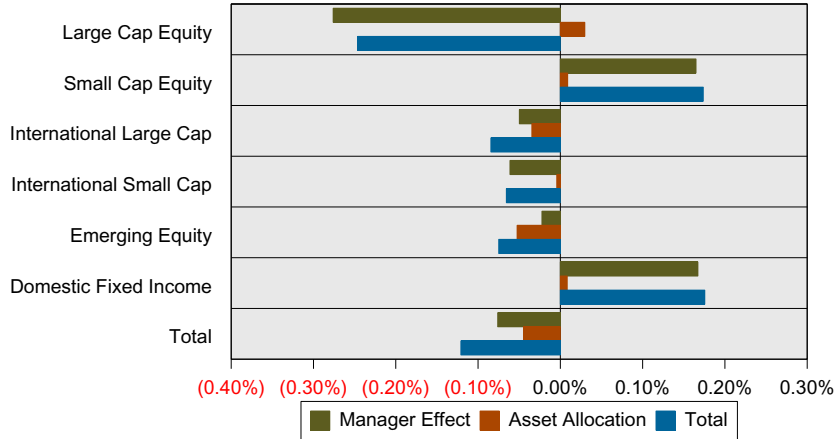
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	33%	32%	16.02%	17.91%	(0.55%)	0.03%	(0.52%)
Small Cap Equity	9%	8%	24.82%	15.24%	0.78%	0.01%	0.78%
International Large Cap	13%	14%	3.00%	2.74%	0.03%	0.02%	0.04%
International Small Cap	5%	5%	1.08%	3.73%	(0.14%)	(0.00%)	(0.14%)
Emerging Equity	6%	6%	(1.97%)	(0.81%)	(0.07%)	(0.01%)	(0.08%)
Domestic Fixed Income	33%	35%	(0.51%)	(1.22%)	0.25%	0.09%	0.33%
<b>Total</b>			<b>7.30%</b>	<b>6.89%</b>	<b>+ 0.28%</b>	<b>+ 0.13%</b>	<b>0.41%</b>

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

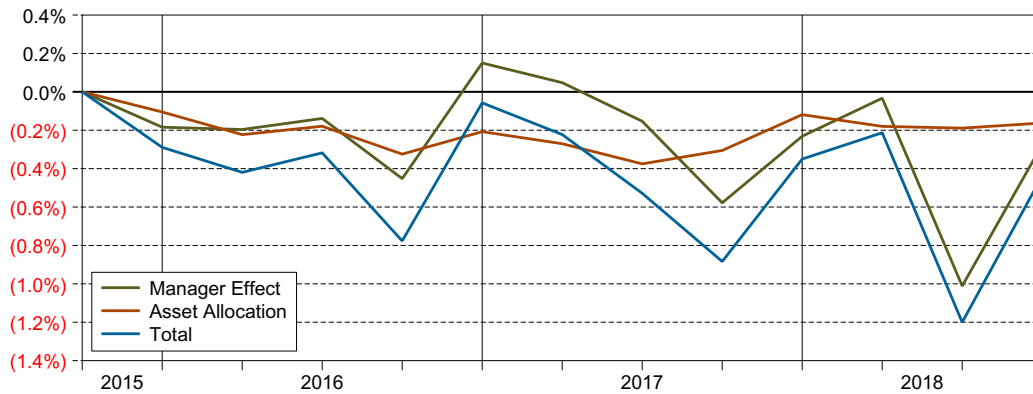
## Cumulative Total Fund Relative Attribution - September 30, 2018

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	33%	32%	16.39%	17.31%	(0.28%)	0.03%	(0.25%)
Small Cap Equity	9%	8%	19.38%	17.12%	0.16%	0.01%	0.17%
International Large Cap	14%	15%	8.92%	9.23%	(0.05%)	(0.03%)	(0.08%)
International Small Cap	4%	4%	7.75%	8.97%	(0.06%)	(0.00%)	(0.07%)
Emerging Equity	6%	6%	12.13%	12.36%	(0.02%)	(0.05%)	(0.07%)
Domestic Fixed Income	34%	35%	1.79%	1.31%	0.17%	0.01%	0.18%
<b>Total</b>			<b>9.83%</b>	<b>9.95%</b>	<b>(0.08%)</b>	<b>(0.04%)</b>	<b>(0.12%)</b>

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

# Total Fund

## Period Ended September 30, 2018

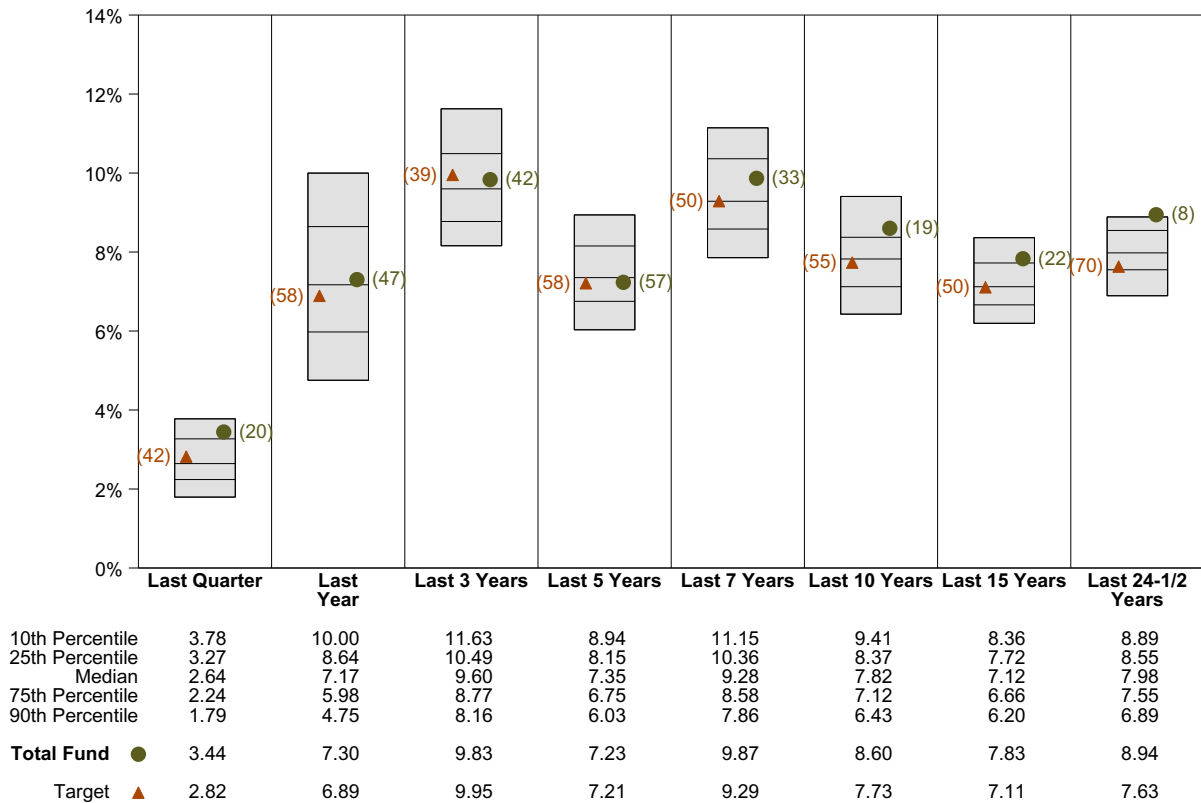
### Investment Philosophy

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

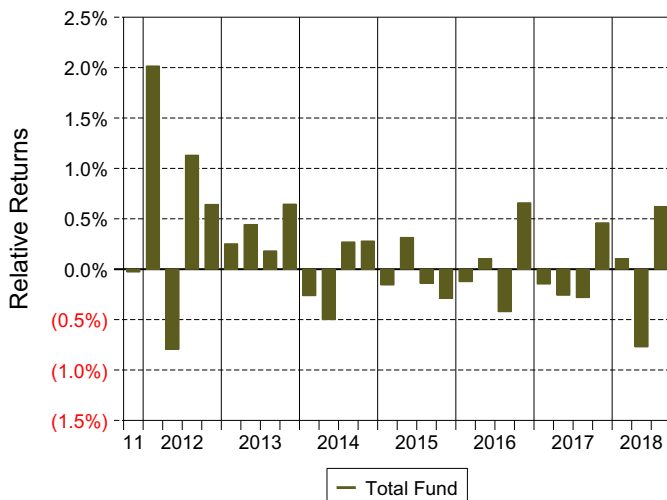
### Quarterly Summary and Highlights

- Total Fund's portfolio posted a 3.44% return for the quarter placing it in the 20 percentile of the Callan Public Fund Spons- Mid (100M-1B) group for the quarter and in the 47 percentile for the last year.
- Total Fund's portfolio outperformed the Target by 0.62% for the quarter and outperformed the Target for the year by 0.41%.

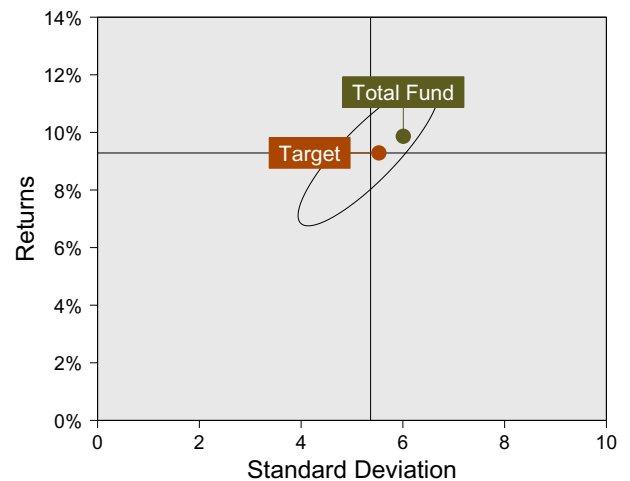
### Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



### Relative Return vs Target



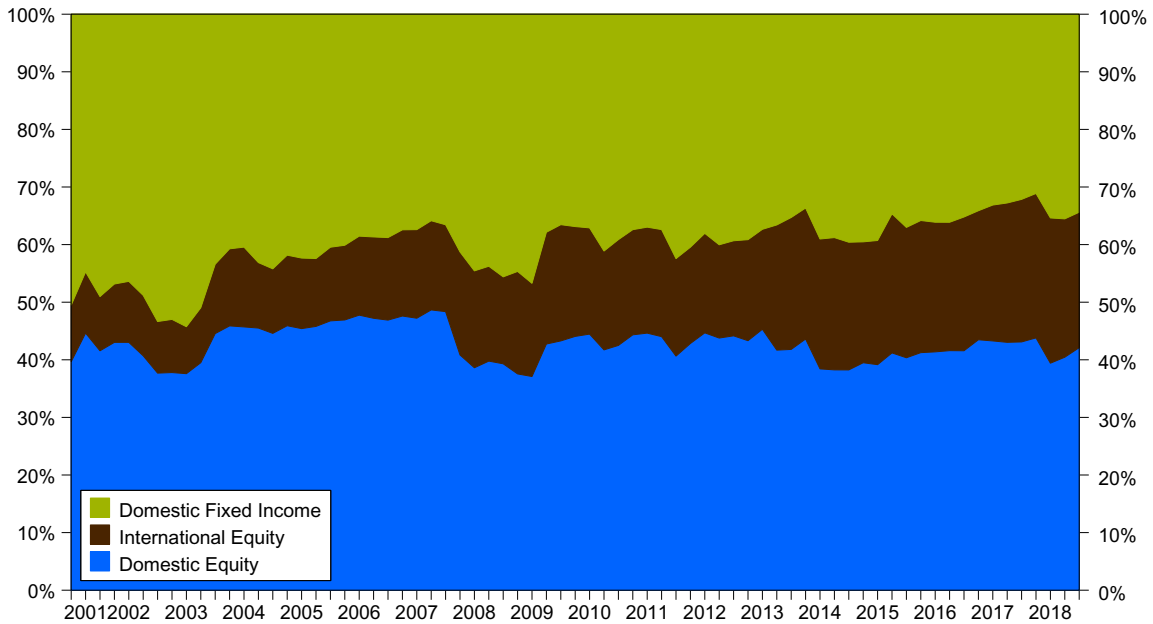
### Callan Public Fund Spons- Mid (100M-1B) (Gross) Annualized Seven Year Risk vs Return



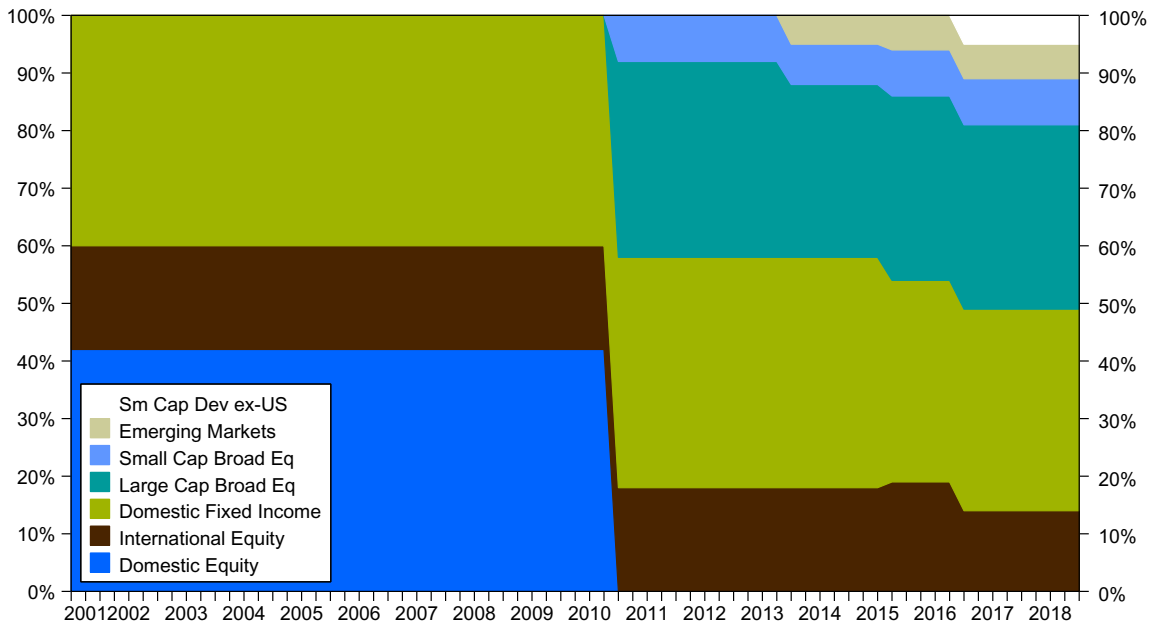
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

### Actual Historical Asset Allocation



### Target Historical Asset Allocation



\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2018, with the distribution as of June 30, 2018. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	September 30, 2018 Market Value	Net New Inv.	Inv. Return	June 30, 2018 Market Value
<b>Consolidated Plan</b>				
<b>Domestic Equity</b>	<b>\$123,259,422</b>	<b>\$(772,568)</b>	<b>\$9,128,770</b>	<b>\$114,903,221</b>
<b>Large Cap</b>	<b>\$97,393,161</b>	<b>\$0</b>	<b>\$7,110,818</b>	<b>\$90,282,343</b>
Boston Partners	47,523,601	0	3,533,899	43,989,701
SSgA S&P 500	49,869,560	0	3,576,918	46,292,642
<b>Small Cap</b>	<b>\$25,866,261</b>	<b>\$(772,568)</b>	<b>\$2,017,952</b>	<b>\$24,620,877</b>
Atlanta Capital	25,866,261	(772,568)	2,017,952	24,620,877
<b>International Equity</b>	<b>\$68,826,940</b>	<b>\$0</b>	<b>\$584,715</b>	<b>\$68,242,226</b>
<b>International Large Cap</b>	<b>\$38,503,306</b>	<b>\$0</b>	<b>\$1,110,609</b>	<b>\$37,392,697</b>
Brandes	9,337	0	80	9,257
SSgA EAFE	11,397,852	0	156,888	11,240,964
Pyrford	27,096,117	0	953,641	26,142,476
<b>International Small Cap</b>	<b>\$14,273,681</b>	<b>\$0</b>	<b>\$(329,549)</b>	<b>\$14,603,230</b>
AQR	14,273,681	0	(329,549)	14,603,230
<b>Emerging Equity</b>	<b>\$16,049,953</b>	<b>\$0</b>	<b>\$(196,346)</b>	<b>\$16,246,299</b>
DFA Emerging Markets	16,049,953	0	(196,346)	16,246,299
<b>Fixed Income</b>	<b>\$100,636,113</b>	<b>\$(308,427)</b>	<b>\$6,278</b>	<b>\$100,938,262</b>
Metropolitan West	100,636,113	(308,427)	6,278	100,938,262
<b>Total Plan - Consolidated</b>	<b>\$292,722,475</b>	<b>\$(1,080,995)</b>	<b>\$9,719,762</b>	<b>\$284,083,708</b>

## Sacramento Regional Transit District Asset Growth

Ending September 30, 2018 (\$ Thousands)	Ending Market Value	=	Beginning Market Value	+	Net New Investment	+	Investment Return
<b>Total Plan</b>							
1/4 Year Ended 9/2018	292,722.5		284,083.7		(1,081.0)		9,719.8
1/4 Year Ended 6/2018	284,083.7		284,995.0		(1,267.6)		356.3
1/4 Year Ended 3/2018	284,995.0		288,314.8		(1,183.4)		(2,136.5)
1/4 Year Ended 12/2017	288,314.8		277,835.6		(1,419.7)		11,899.0
1/4 Year Ended 9/2017	277,835.6		270,017.7		(1,582.3)		9,400.2
1/4 Year Ended 6/2017	270,017.7		263,189.7		(1,149.1)		7,977.1
1/4 Year Ended 3/2017	263,189.7		253,159.1		(930.2)		10,960.7
1/4 Year Ended 12/2016	253,159.1		251,635.0		(1,139.0)		2,663.2
1/4 Year Ended 9/2016	251,635.0		244,029.2		(937.8)		8,543.5
1/4 Year Ended 6/2016	244,029.2		240,502.3		(684.5)		4,211.5
1/4 Year Ended 3/2016	240,502.3		238,289.7		(450.0)		2,662.6
1/4 Year Ended 12/2015	238,289.7		232,085.4		(816.4)		7,020.7
1/4 Year Ended 9/2015	232,085.4		246,970.5		(534.9)		(14,350.2)
1/4 Year Ended 6/2015	246,970.5		247,920.3		(766.8)		(183.0)
1/4 Year Ended 3/2015	247,920.3		243,017.9		(295.4)		5,197.8
1/4 Year Ended 12/2014	243,017.9		238,642.3		(1,001.3)		5,377.0
1/4 Year Ended 9/2014	238,642.3		241,859.7		(632.5)		(2,584.9)
1/4 Year Ended 6/2014	241,859.7		235,305.8		(752.1)		7,306.0
1/4 Year Ended 3/2014	235,305.8		233,171.6		(781.9)		2,916.1
1/4 Year Ended 12/2013	233,171.6		222,071.8		(913.1)		12,012.9

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2018. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended September 30, 2018

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
<b>Domestic Equity</b>	<b>7.95%</b>	<b>17.86%</b>	<b>17.03%</b>	<b>13.22%</b>	<b>17.45%</b>
Domestic Equity Benchmark**	6.88%	17.42%	17.34%	13.46%	16.87%
<b>Large Cap Equity</b>	<b>7.88%</b>	<b>16.02%</b>	<b>16.39%</b>	<b>12.92%</b>	<b>17.15%</b>
Boston Partners	8.03%	14.11%	15.39%	11.83%	17.08%
Russell 1000 Value Index	5.70%	9.45%	13.55%	10.72%	15.02%
SSgA S&P 500	7.73%	17.90%	17.35%	14.00%	-
S&P 500 Index	7.71%	17.91%	17.31%	13.95%	16.91%
<b>Small Cap Equity</b>	<b>8.19%</b>	<b>24.82%</b>	<b>19.38%</b>	<b>14.32%</b>	<b>18.54%</b>
Atlanta Capital	8.19%	24.82%	19.38%	14.32%	18.54%
Russell 2000 Index	3.58%	15.24%	17.12%	11.07%	16.43%
<b>International Equity</b>	<b>0.94%</b>	<b>1.44%</b>	<b>9.57%</b>	<b>4.05%</b>	<b>7.57%</b>
International Benchmark***	0.32%	2.11%	10.37%	4.49%	8.18%
<b>International Large Cap</b>	<b>2.97%</b>	<b>3.00%</b>	<b>8.92%</b>	<b>4.09%</b>	-
SSgA EAFE	1.40%	3.07%	9.62%	4.75%	-
Pyrford	3.65%	2.98%	-	-	-
MSCI EAFE Index	1.35%	2.74%	9.23%	4.42%	8.30%
<b>International Small Cap</b>	<b>(2.02%)</b>	<b>1.08%</b>	-	-	-
AQR	(2.02%)	1.08%	-	-	-
MSCI EAFE Small Cap Index	(0.88%)	3.73%	12.39%	7.96%	11.46%
<b>Emerging Markets Equity</b>	<b>(1.08%)</b>	<b>(1.97%)</b>	<b>12.13%</b>	<b>4.18%</b>	-
DFA Emerging Markets	(1.08%)	(1.97%)	12.13%	4.18%	-
MSCI Emerging Markets Index	(1.09%)	(0.81%)	12.36%	3.61%	5.03%
<b>Domestic Fixed Income</b>	<b>0.01%</b>	<b>(0.51%)</b>	<b>1.79%</b>	<b>2.50%</b>	<b>3.11%</b>
Met West	0.01%	(0.51%)	1.79%	2.50%	3.11%
Bloomberg Aggregate Index	0.02%	(1.22%)	1.31%	2.16%	2.02%
<b>Total Plan</b>	<b>3.44%</b>	<b>7.30%</b>	<b>9.83%</b>	<b>7.23%</b>	<b>9.87%</b>
Target*	2.82%	6.89%	9.95%	7.21%	9.29%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

\*\*\* International Benchmark = MSCI EAFE until 6/30/2013, 78.26% MSCI EAFE + 21.74% MSCI EM until 4/30/2015, 76% MSCI EAFE + 24% MSCI EM until 7/31/2016, and 56% MSCI EAFE + 24% MSCI EM + 20% MSCI EAFE Small Cap thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2018. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended September 30, 2018

	Last 10 Years	Last 15 Years	Last 20 Years	Last 24-1/2 Years
<b>Domestic Equity</b>	<b>12.55%</b>	<b>10.52%</b>	<b>8.30%</b>	-
Domestic Equity Benchmark**	11.98%	9.87%	8.05%	10.29%
Russell 1000 Value Index	9.79%	8.89%	7.64%	9.86%
S&P 500 Index	11.97%	9.65%	7.42%	10.09%
Russell 2000 Index	11.11%	10.12%	9.45%	9.58%
<b>International Equity</b>	<b>4.87%</b>	<b>7.13%</b>	<b>8.31%</b>	-
MSCI EAFE Index	5.38%	6.80%	5.20%	5.16%
<b>Domestic Fixed Income</b>	<b>5.59%</b>	<b>5.14%</b>	<b>5.21%</b>	-
Met West	5.59%	5.14%	-	-
Bloomberg Aggregate Index	3.77%	3.78%	4.48%	5.25%
<b>Total Plan</b>	<b>8.60%</b>	<b>7.83%</b>	<b>7.41%</b>	<b>8.94%</b>
Target*	7.73%	7.11%	6.41%	7.63%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.



## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	12/2017- 9/2018	2017	2016	2015	2014
<b>Domestic Equity</b>	<b>10.49%</b>	<b>19.78%</b>	<b>14.58%</b>	<b>0.06%</b>	<b>10.85%</b>
Domestic Equity Benchmark**	10.80%	20.41%	13.85%	0.26%	12.07%
<b>Large Cap Equity</b>	<b>8.39%</b>	<b>21.10%</b>	<b>13.38%</b>	<b>(1.17%)</b>	<b>12.81%</b>
Boston Partners	6.22%	20.32%	14.71%	(3.75%)	11.87%
Russell 1000 Value Index	3.92%	13.66%	17.34%	(3.83%)	13.45%
SSgA S&P 500	10.54%	21.86%	12.03%	1.46%	13.77%
S&P 500 Index	10.56%	21.83%	11.96%	1.38%	13.69%
<b>Small Cap Equity</b>	<b>18.53%</b>	<b>15.01%</b>	<b>19.17%</b>	<b>5.14%</b>	<b>3.49%</b>
Atlanta Capital	18.53%	15.01%	19.17%	5.14%	3.49%
Russell 2000 Index	11.51%	14.65%	21.31%	(4.41%)	4.89%
<b>International Equity</b>	<b>(3.59%)</b>	<b>28.25%</b>	<b>2.55%</b>	<b>(4.17%)</b>	<b>(3.72%)</b>
International Benchmark***	(3.09%)	29.51%	3.26%	(4.30%)	(4.25%)
<b>International Large Cap</b>	<b>(0.80%)</b>	<b>22.63%</b>	<b>1.35%</b>	<b>(1.17%)</b>	<b>(4.41%)</b>
SSgA EAFE	(1.11%)	25.47%	1.37%	(0.56%)	(4.55%)
MSCI EAFE Index	(1.43%)	25.03%	1.00%	(0.81%)	(4.90%)
<b>International Small Cap</b>	<b>(4.42%)</b>	<b>33.76%</b>	-	-	-
AQR	(4.42%)	33.76%	-	-	-
MSCI EAFE Small Cap Index	(2.19%)	33.01%	2.18%	9.59%	(4.95%)
<b>Emerging Markets Equity</b>	<b>(9.10%)</b>	<b>37.32%</b>	<b>12.99%</b>	<b>(14.33%)</b>	<b>(0.28%)</b>
DFA Emerging Markets	(9.10%)	37.32%	12.99%	(14.33%)	(0.28%)
MSCI Emerging Markets Index	(7.68%)	37.28%	11.19%	(14.92%)	(2.19%)
<b>Domestic Fixed Income</b>	<b>(0.98%)</b>	<b>3.89%</b>	<b>2.87%</b>	<b>0.51%</b>	<b>6.37%</b>
Met West	(0.98%)	3.89%	2.87%	0.51%	6.37%
Bloomberg Aggregate Index	(1.60%)	3.54%	2.65%	0.55%	5.97%
<b>Total Plan</b>	<b>2.87%</b>	<b>16.14%</b>	<b>7.65%</b>	<b>(0.97%)</b>	<b>5.61%</b>
Target*	2.93%	16.39%	7.40%	(0.71%)	5.82%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

Returns are for annualized calendar years.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

\*\*\* International Benchmark = MSCI EAFE until 6/30/2013, 78.26% MSCI EAFE + 21.74% MSCI EM until 4/30/2015, 76% MSCI EAFE + 24% MSCI EM until 7/31/2016, and 56% MSCI EAFE + 24% MSCI EM + 20% MSCI EAFE Small Cap thereafter.

## Investment Manager Returns

The table below details the rates of return for the Sponsor's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	2013	2012	2011	2010	2009
<b>Domestic Equity</b>	<b>36.44%</b>	<b>19.19%</b>	<b>2.08%</b>	<b>15.93%</b>	<b>32.93%</b>
Domestic Equity Benchmark**	33.61%	16.09%	0.94%	17.33%	28.02%
Boston Partners	37.52%	21.95%	1.27%	13.61%	27.06%
Russell 1000 Value Index	32.53%	17.51%	0.39%	15.51%	19.69%
S&P 500 Index	32.39%	16.00%	2.11%	15.06%	26.47%
Russell 2000 Index	38.82%	16.35%	(4.18%)	26.85%	27.17%
<b>International Equity</b>	<b>16.66%</b>	<b>17.28%</b>	<b>(10.64%)</b>	<b>6.51%</b>	<b>28.99%</b>
MSCI EAFE Index	22.78%	17.32%	(12.14%)	7.75%	31.78%
<b>Domestic Fixed Income</b>	<b>(1.03%)</b>	<b>9.48%</b>	<b>6.10%</b>	<b>12.52%</b>	<b>19.88%</b>
Met West	(1.03%)	9.48%	6.10%	12.52%	19.88%
Bloomberg Aggregate Index	(2.02%)	4.21%	7.84%	6.54%	5.93%
<b>Total Plan</b>	<b>17.71%</b>	<b>14.80%</b>	<b>1.22%</b>	<b>12.70%</b>	<b>26.91%</b>
Target*	15.99%	11.68%	1.52%	11.85%	20.02%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

Returns are for annualized calendar years.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2018. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended September 30, 2018

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
<b>Net of Fee Returns</b>					
Domestic Equity	7.84%	17.39%	-	-	-
Domestic Equity Benchmark**	6.88%	17.42%	17.34%	13.46%	16.87%
Large Cap Equity	7.80%	15.68%	-	-	-
Boston Partners	7.89%	13.49%	14.81%	11.25%	16.49%
Russell 1000 Value Index	5.70%	9.45%	13.55%	10.72%	15.02%
SSgA S&P 500	7.71%	17.84%	17.29%	13.94%	-
S&P 500 Index	7.71%	17.91%	17.31%	13.95%	16.91%
Small Cap Equity	7.98%	23.83%	-	-	-
Atlanta Capital	7.98%	23.83%	18.44%	13.42%	17.63%
Russell 2000 Index	3.58%	15.24%	17.12%	11.07%	16.43%
International Equity	0.78%	0.82%	-	-	-
International Equity Benchmark***	0.32%	2.11%	10.37%	4.49%	8.18%
International Large Cap	2.84%	2.48%	-	-	-
SSgA EAFE	1.37%	2.98%	9.51%	4.64%	-
Pyrford	3.47%	2.27%	-	-	-
MSCI EAFE Index	1.35%	2.74%	9.23%	4.42%	8.30%
International Small Cap	(2.26%)	0.13%	-	-	-
AQR	(2.26%)	0.13%	-	-	-
MSCI EAFE Small Cap Index	(0.88%)	3.73%	12.39%	7.96%	11.46%
Emerging Markets Equity	(1.21%)	(2.48%)	-	-	-
DFA Emerging Markets	(1.21%)	(2.48%)	11.48%	3.56%	-
MSCI Emerging Markets Index	(1.09%)	(0.81%)	12.36%	3.61%	5.03%
Domestic Fixed Income	(0.06%)	(0.78%)	-	-	-
Met West	(0.06%)	(0.78%)	1.51%	2.22%	2.83%
Bloomberg Aggregate Index	0.02%	(1.22%)	1.31%	2.16%	2.02%
Total Plan	3.34%	6.86%	9.41%	6.84%	9.45%
Target*	2.82%	6.89%	9.95%	7.21%	9.29%

\* Current Quarter Target = 35.0% Blmbg Aggregate, 32.0% S&P 500 Index, 14.0% MSCI EAFE, 8.0% Russell 2000 Index, 6.0% MSCI EM and 5.0% MSCI EAFE Small Cap.

\*\* Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

\*\*\* International Benchmark = MSCI EAFE until 6/30/2013, 78.26% MSCI EAFE + 21.74% MSCI EM until 4/30/2015, 76% MSCI EAFE + 24% MSCI EM until 7/31/2016, and 56% MSCI EAFE + 24% MSCI EM + 20% MSCI EAFE Small Cap thereafter.



# Domestic Equity Period Ended September 30, 2018

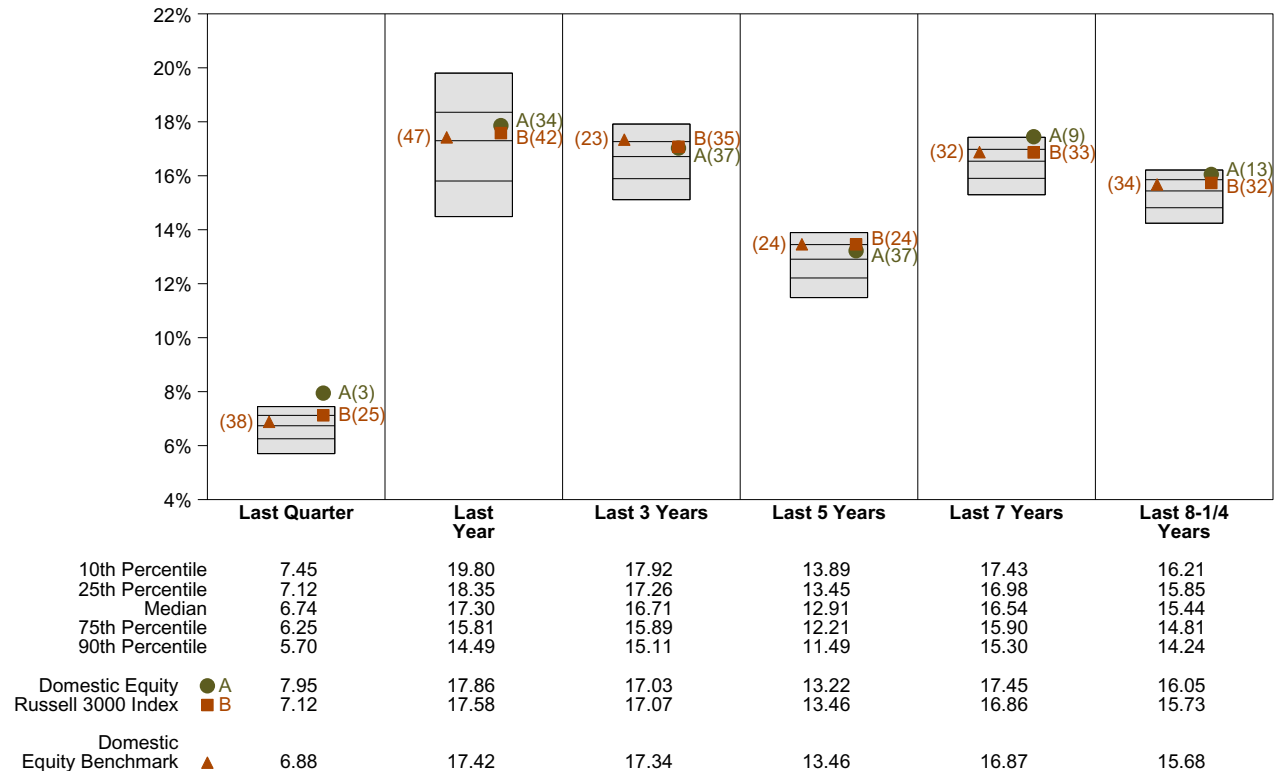
## Investment Philosophy

Domestic Equity Benchmark = 80.95% S&P500 + 19.05% Russell 2000 until 6/30/2010, 80.95% S&P500 + 19.05% Russell 2500 until 6/30/2013, 81.08% S&P500 + 18.92% Russell 2000 until 4/30/2015, and 80% S&P500 + 20% Russell 2000 thereafter.

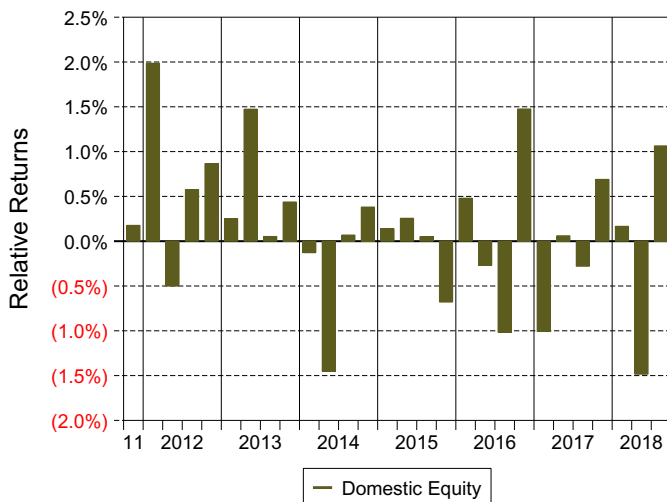
## Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 7.95% return for the quarter placing it in the 3 percentile of the Fund Sponsor - Domestic Equity group for the quarter and in the 34 percentile for the last year.
- Domestic Equity's portfolio outperformed the Domestic Equity Benchmark by 1.06% for the quarter and outperformed the Domestic Equity Benchmark for the year by 0.44%.

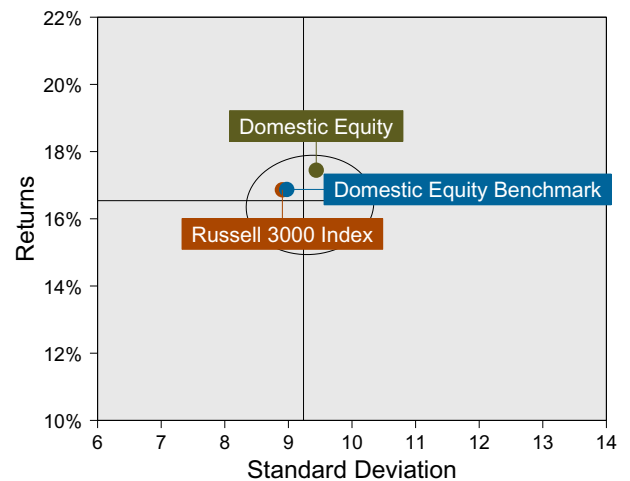
## Performance vs Fund Sponsor - Domestic Equity (Gross)



Relative Returns vs Domestic Equity Benchmark



Fund Sponsor - Domestic Equity (Gross) Annualized Seven Year Risk vs Return

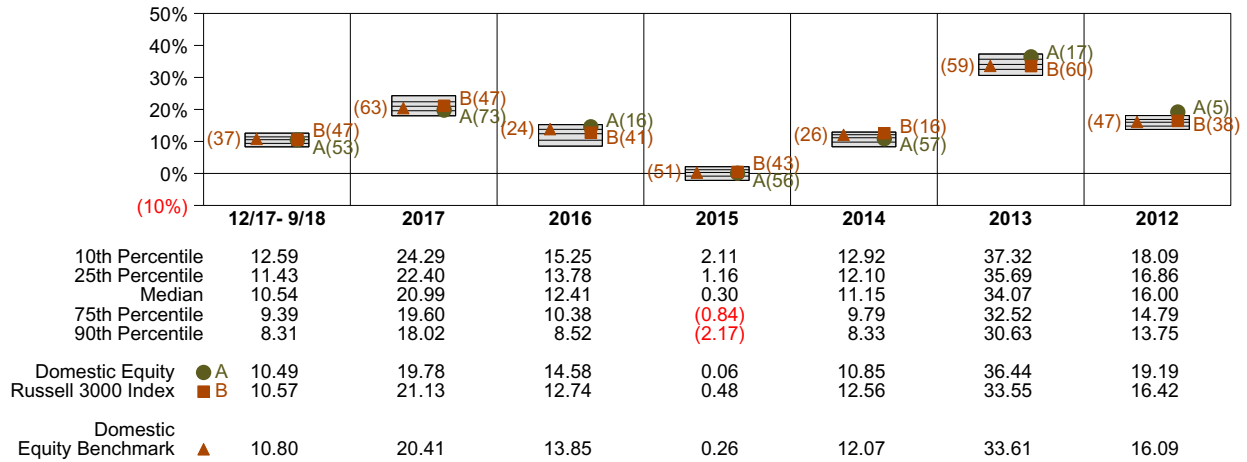


# Domestic Equity Return Analysis Summary

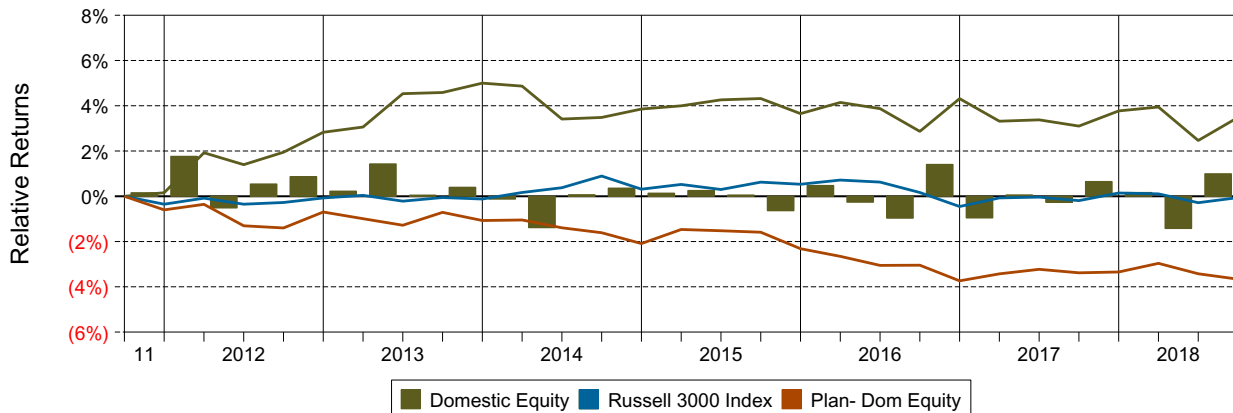
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

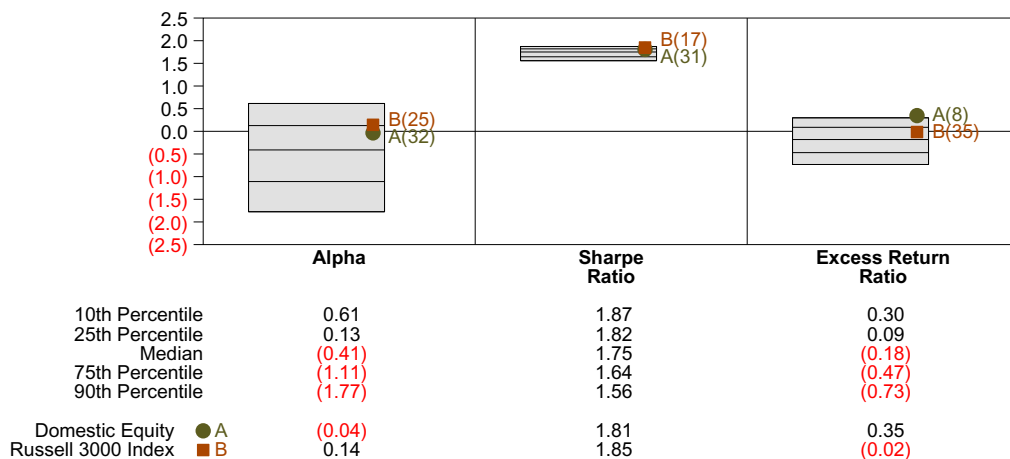
### Performance vs Fund Sponsor - Domestic Equity (Gross)



### Cumulative and Quarterly Relative Return vs Domestic Equity Benchmark



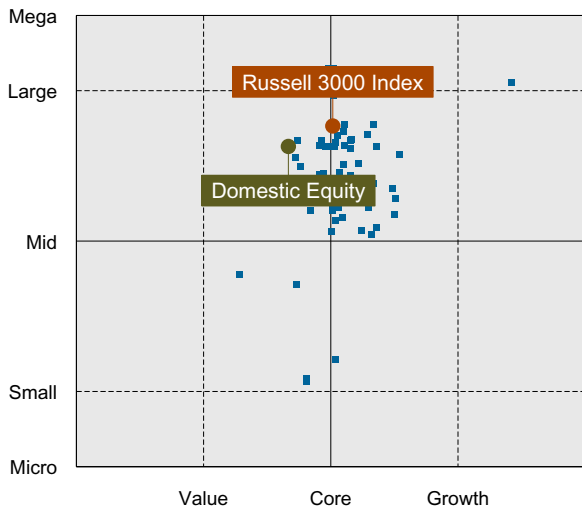
### Risk Adjusted Return Measures vs Domestic Equity Benchmark Rankings Against Fund Sponsor - Domestic Equity (Gross) Seven Years Ended September 30, 2018



# Current Holdings Based Style Analysis Domestic Equity As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

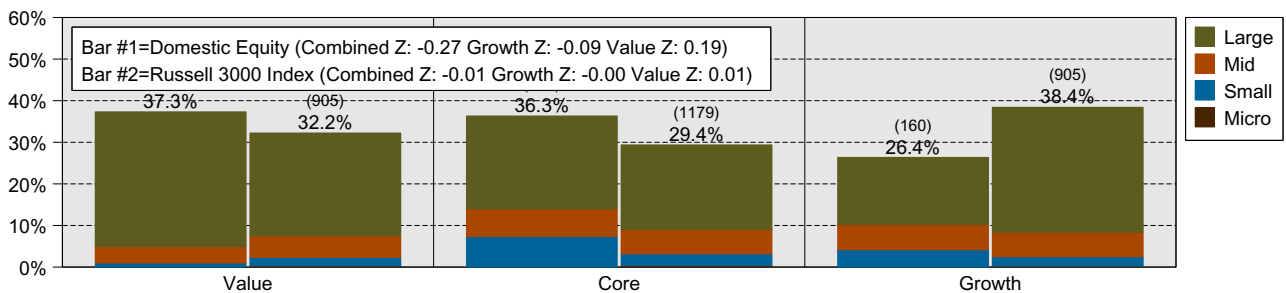
**Style Map vs Plan- Dom Equity Holdings as of September 30, 2018**



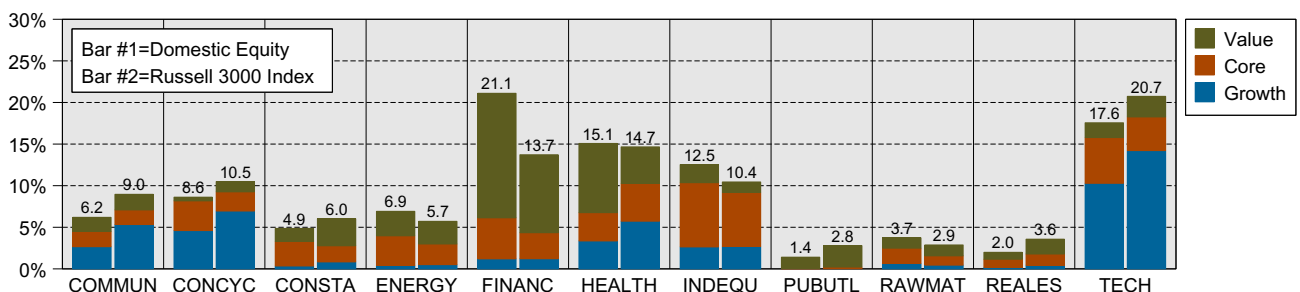
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Large	32.3% (98)	22.3% (106)	16.2% (85)	70.8% (289)
	24.7% (97)	20.4% (107)	30.0% (95)	75.1% (299)
Mid	4.1% (90)	6.6% (92)	6.0% (63)	16.7% (245)
	5.1% (186)	5.8% (201)	5.9% (211)	16.8% (598)
Small	1.0% (5)	7.3% (26)	4.2% (12)	12.5% (43)
	2.1% (328)	2.8% (489)	2.3% (379)	7.1% (1196)
Micro	0.0% (1)	0.0% (0)	0.0% (0)	0.0% (1)
	0.3% (294)	0.4% (382)	0.2% (220)	0.9% (896)
<b>Total</b>	<b>37.3% (194)</b>	<b>36.3% (224)</b>	<b>26.4% (160)</b>	<b>100.0% (578)</b>
	<b>32.2% (905)</b>	<b>29.4% (1179)</b>	<b>38.4% (905)</b>	<b>100.0% (2989)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



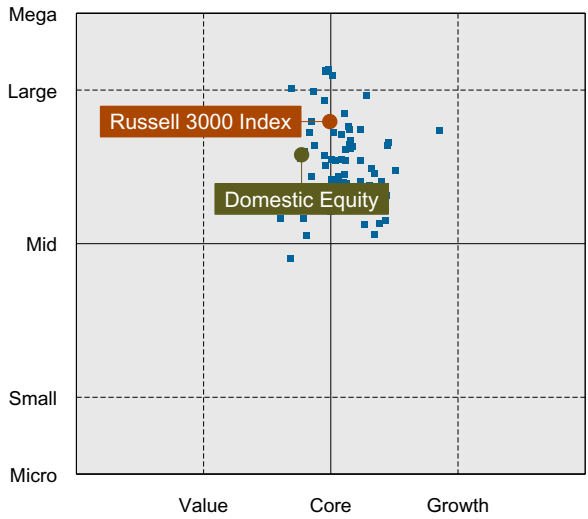
**Sector Weights Distribution Holdings as of September 30, 2018**



# Historical Holdings Based Style Analysis Domestic Equity For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

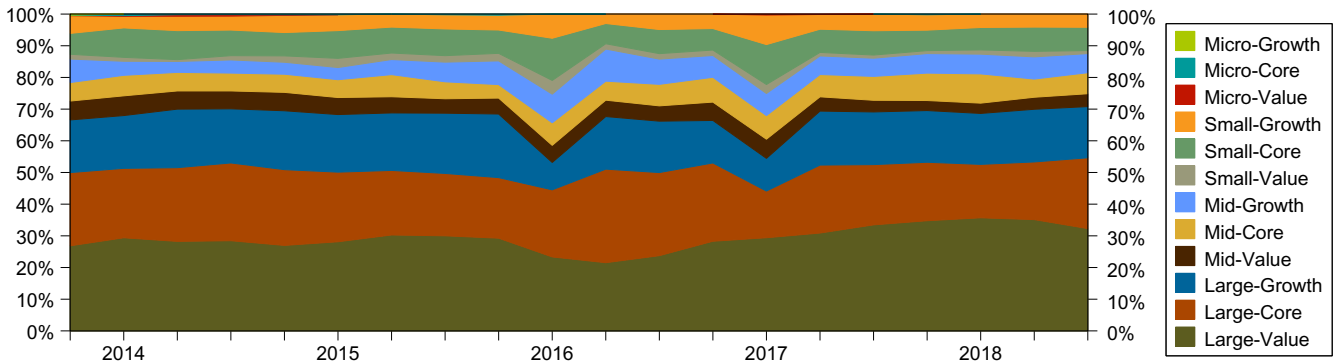
**Average Style Map vs Plan- Dom Equity Holdings for Five Years Ended September 30, 2018**



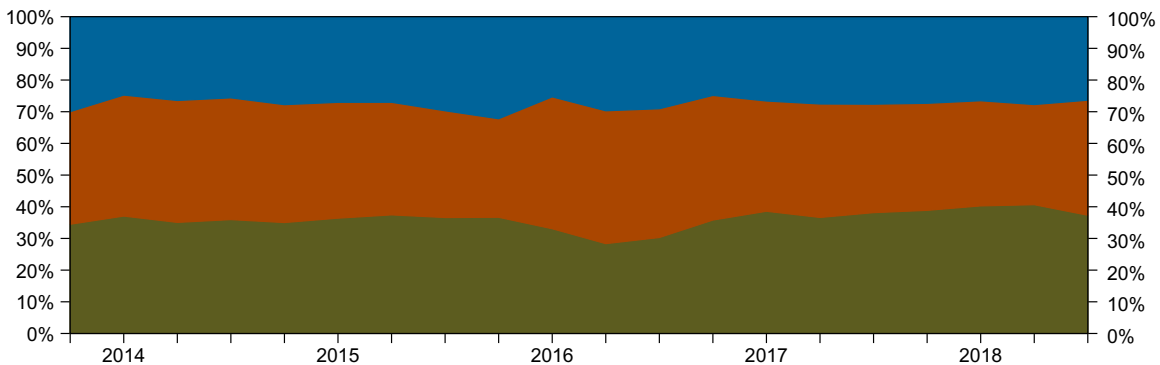
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	29.3% (91)	21.5% (90)	16.3% (88)	<b>67.2% (269)</b>
Large	26.4% (98)	22.6% (98)	24.8% (103)	<b>73.7% (299)</b>
Mid	5.0% (83)	6.6% (80)	6.2% (57)	<b>17.7% (220)</b>
	5.4% (178)	6.3% (215)	6.1% (205)	<b>17.7% (598)</b>
Small	1.8% (9)	8.2% (27)	4.9% (14)	<b>14.9% (50)</b>
	2.2% (338)	3.0% (485)	2.3% (379)	<b>7.6% (1202)</b>
Micro	0.1% (1)	0.1% (1)	0.0% (0)	<b>0.2% (2)</b>
	0.3% (285)	0.4% (374)	0.3% (214)	<b>1.0% (873)</b>
<b>Total</b>	<b>36.1% (184)</b>	<b>36.4% (198)</b>	<b>27.5% (159)</b>	<b>100.0% (541)</b>
	<b>34.3% (899)</b>	<b>32.3% (1172)</b>	<b>33.4% (901)</b>	<b>100.0% (2972)</b>
	Value	Core	Growth	<b>Total</b>

## Domestic Equity Historical Cap/Style Exposures



## Domestic Equity Historical Style Only Exposures



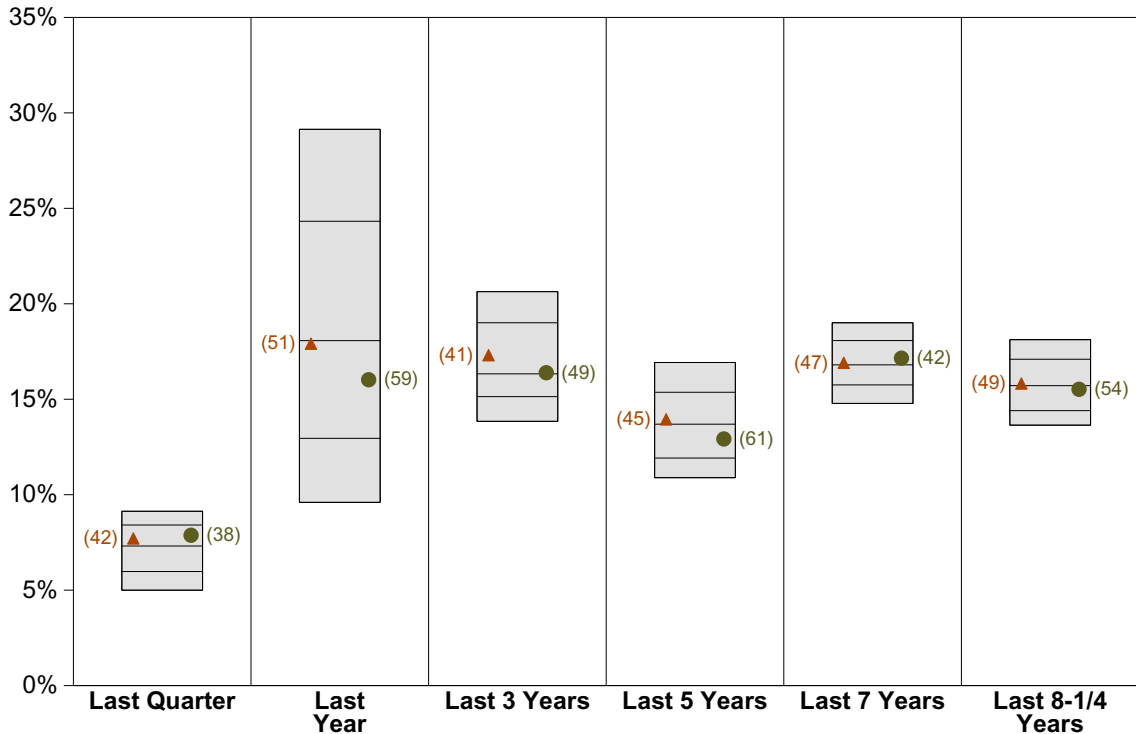


# Large Cap Period Ended September 30, 2018

## Quarterly Summary and Highlights

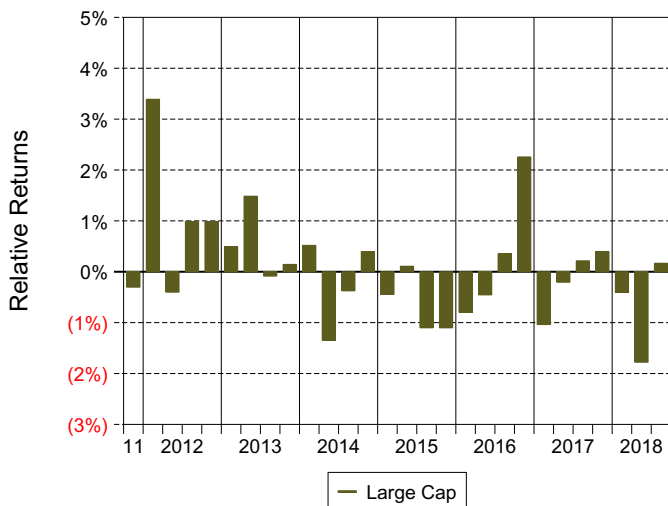
- Large Cap's portfolio posted a 7.88% return for the quarter placing it in the 38 percentile of the Callan Large Capitalization group for the quarter and in the 59 percentile for the last year.
- Large Cap's portfolio outperformed the S&P 500 Index by 0.17% for the quarter and underperformed the S&P 500 Index for the year by 1.89%.

## Performance vs Callan Large Capitalization (Gross)

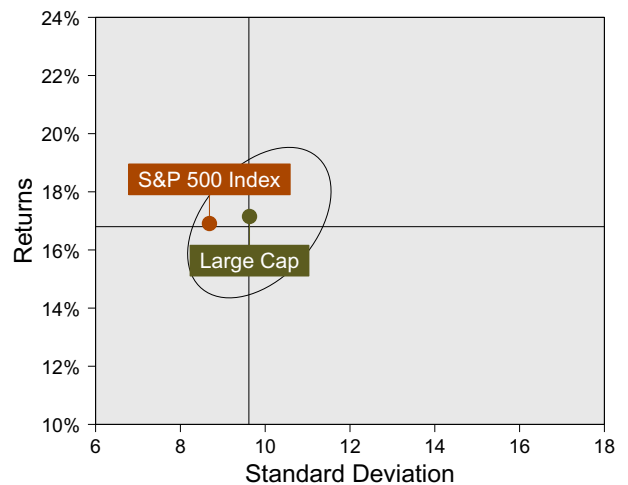


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 8-1/4 Years
10th Percentile	9.13	29.14	20.64	16.92	19.01	18.12
25th Percentile	8.41	24.32	19.01	15.37	18.07	17.09
Median	7.31	18.07	16.33	13.69	16.80	15.71
75th Percentile	5.98	12.95	15.14	11.92	15.75	14.40
90th Percentile	5.00	9.60	13.84	10.89	14.78	13.64
<b>Large Cap</b> ●	7.88	16.02	16.39	12.92	17.15	15.52
<b>S&amp;P 500 Index</b> ▲	7.71	17.91	17.31	13.95	16.91	15.82

Relative Return vs S&P 500 Index



Callan Large Capitalization (Gross)  
Annualized Seven Year Risk vs Return

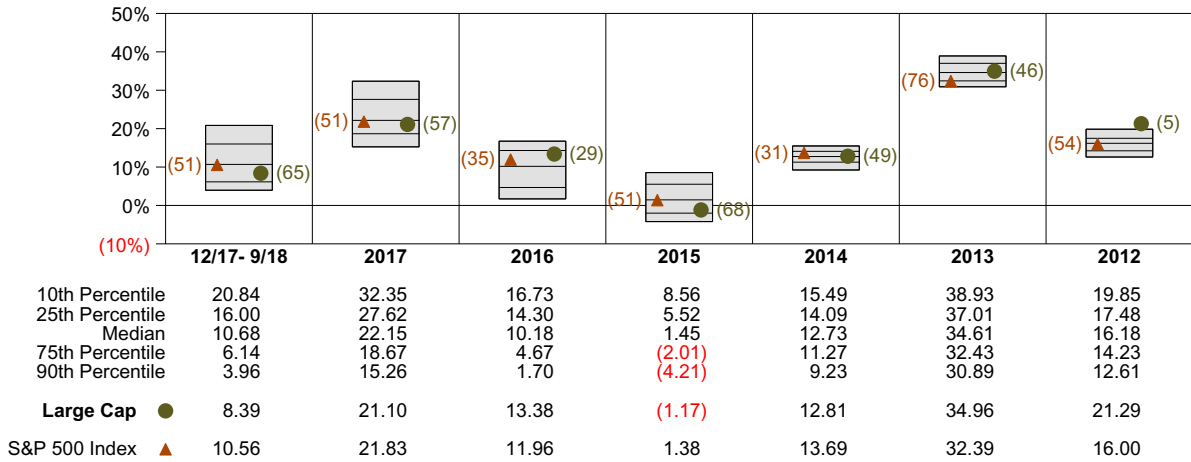


# Large Cap Return Analysis Summary

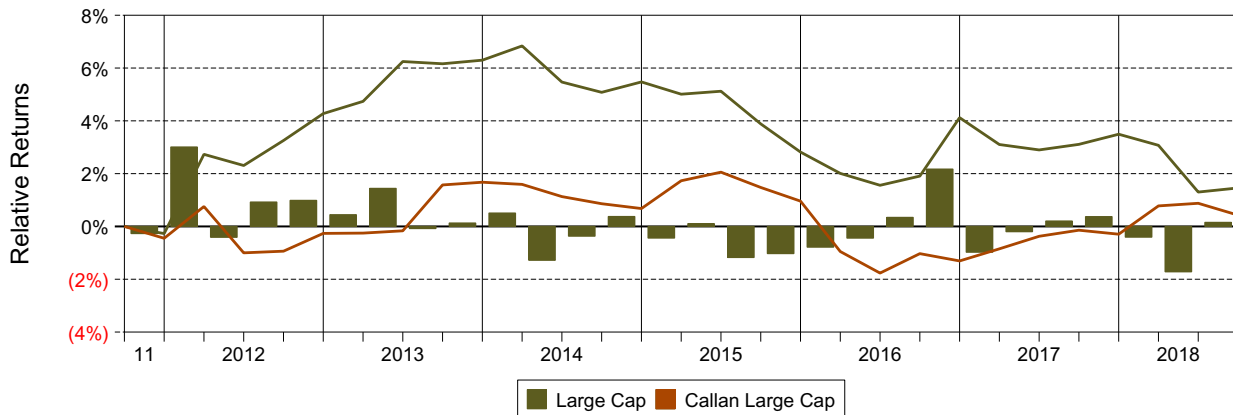
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

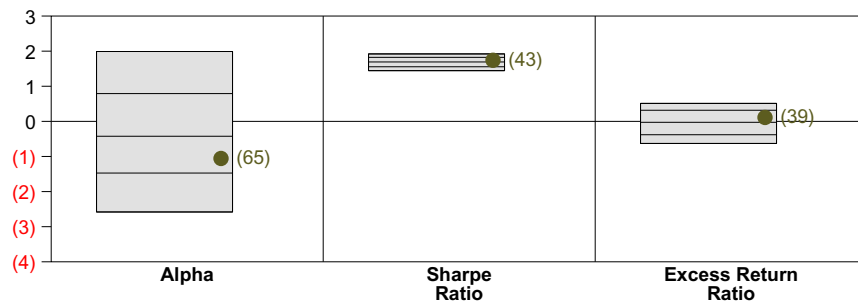
### Performance vs Callan Large Capitalization (Gross)



### Cumulative and Quarterly Relative Return vs S&P 500 Index



### Risk Adjusted Return Measures vs S&P 500 Index Rankings Against Callan Large Capitalization (Gross) Seven Years Ended September 30, 2018



	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	1.99	1.92	0.51
25th Percentile	0.79	1.82	0.32
Median	(0.42)	1.69	(0.03)
75th Percentile	(1.47)	1.56	(0.38)
90th Percentile	(2.58)	1.44	(0.63)
<b>Large Cap</b> ●	(1.06)	1.74	0.11

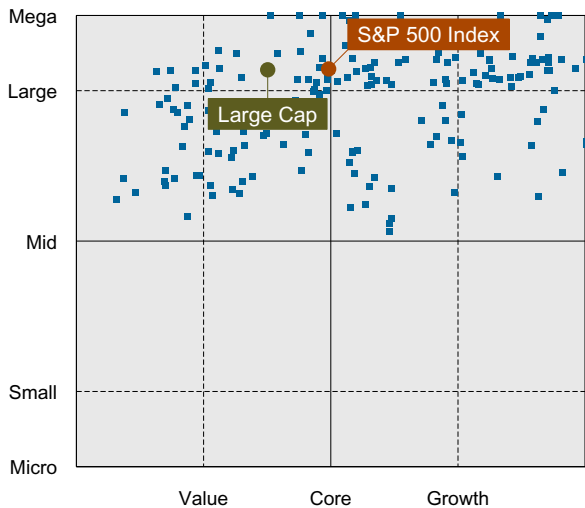
# Current Holdings Based Style Analysis

## Large Cap

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

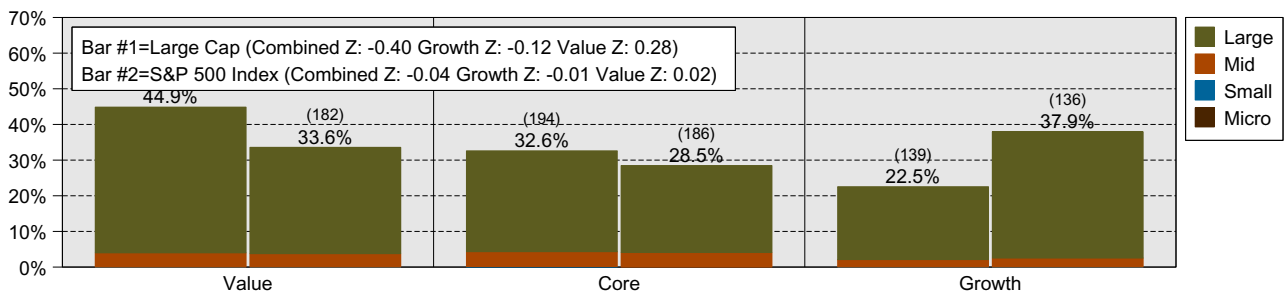
**Style Map vs Callan Large Cap Holdings as of September 30, 2018**



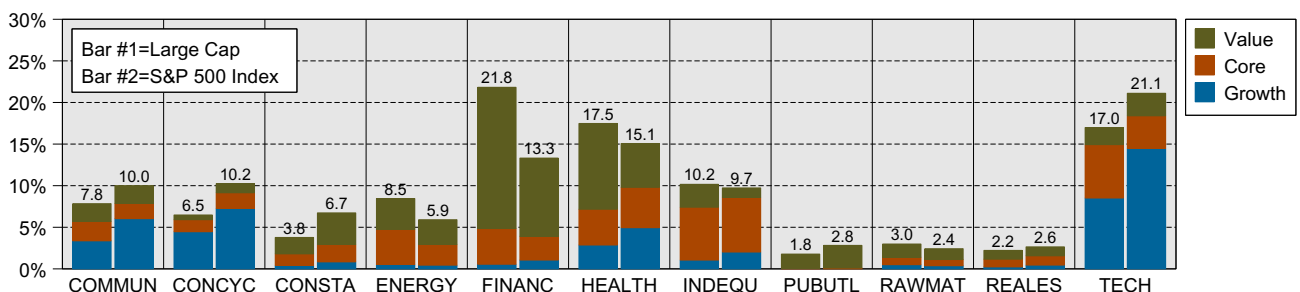
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
<b>Large</b>	40.9% (98)	28.3% (106)	20.4% (85)	<b>89.6% (289)</b>
	29.8% (97)	24.4% (103)	35.4% (84)	<b>89.6% (284)</b>
<b>Mid</b>	4.0% (87)	4.2% (86)	2.1% (53)	<b>10.2% (226)</b>
	3.8% (84)	4.1% (83)	2.5% (51)	<b>10.4% (218)</b>
<b>Small</b>	0.0% (1)	0.2% (2)	0.0% (1)	<b>0.2% (4)</b>
	0.0% (1)	0.0% (0)	0.0% (1)	<b>0.0% (2)</b>
<b>Micro</b>	0.0% (1)	0.0% (0)	0.0% (0)	<b>0.0% (1)</b>
	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0% (0)</b>
<b>Total</b>	<b>44.9% (187)</b>	<b>32.6% (194)</b>	<b>22.5% (139)</b>	<b>100.0% (520)</b>
	<b>33.6% (182)</b>	<b>28.5% (186)</b>	<b>37.9% (136)</b>	<b>100.0% (504)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**



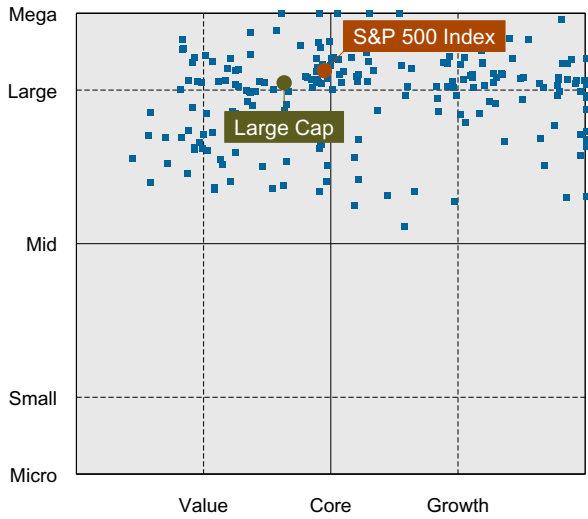
# Historical Holdings Based Style Analysis

## Large Cap

### For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

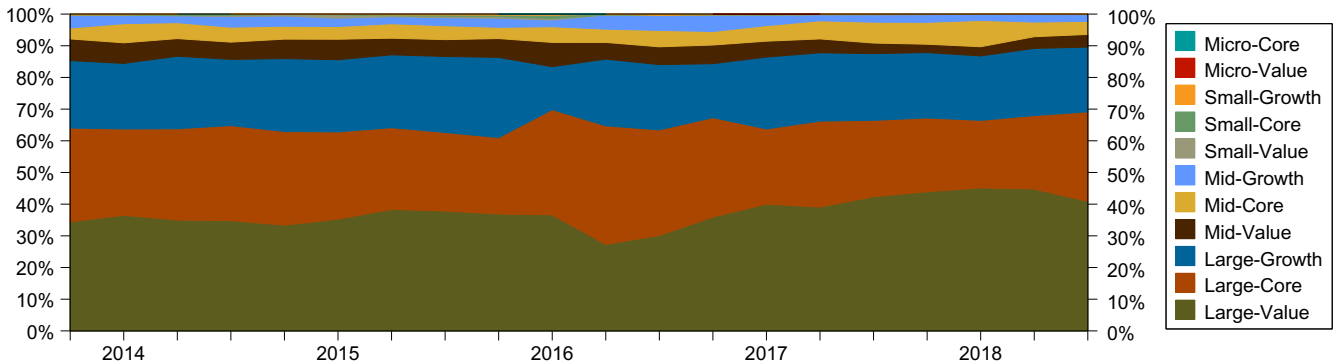
**Average Style Map vs Callan Large Cap Holdings for Five Years Ended September 30, 2018**



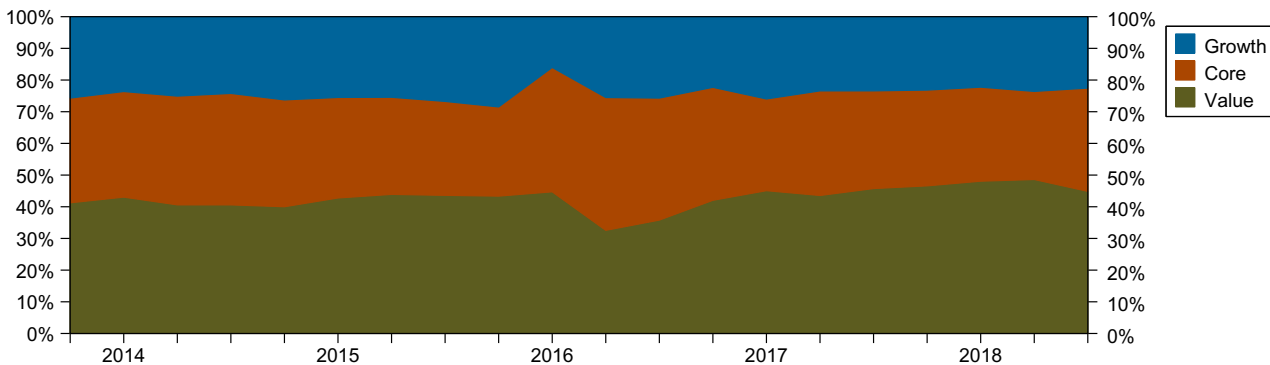
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	37.4% (95)	27.7% (94)	21.2% (92)	<b>86.3% (281)</b>
Large	32.2% (97)	27.4% (95)	29.5% (93)	<b>89.2% (285)</b>
Mid	5.2% (84)	5.0% (79)	2.9% (52)	<b>13.1% (215)</b>
	4.0% (84)	3.9% (78)	2.8% (52)	<b>10.8% (214)</b>
Small	0.2% (4)	0.2% (2)	0.1% (2)	<b>0.6% (8)</b>
	0.0% (3)	0.0% (1)	0.0% (1)	<b>0.1% (5)</b>
Micro	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0% (0)</b>
	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0% (0)</b>
<b>Total</b>	<b>42.8% (183)</b>	<b>32.9% (175)</b>	<b>24.3% (146)</b>	<b>100.0% (504)</b>
	<b>36.3% (184)</b>	<b>31.4% (174)</b>	<b>32.4% (146)</b>	<b>100.0% (504)</b>
	Value	Core	Growth	<b>Total</b>

### Large Cap Historical Cap/Style Exposures



### Large Cap Historical Style Only Exposures



# SSgA S&P 500

## Period Ended September 30, 2018

### Investment Philosophy

SSGA believes that their passive investment strategy can provide market-like returns with minimal transaction costs. Returns prior to 6/30/2012 are linked to a composite history.

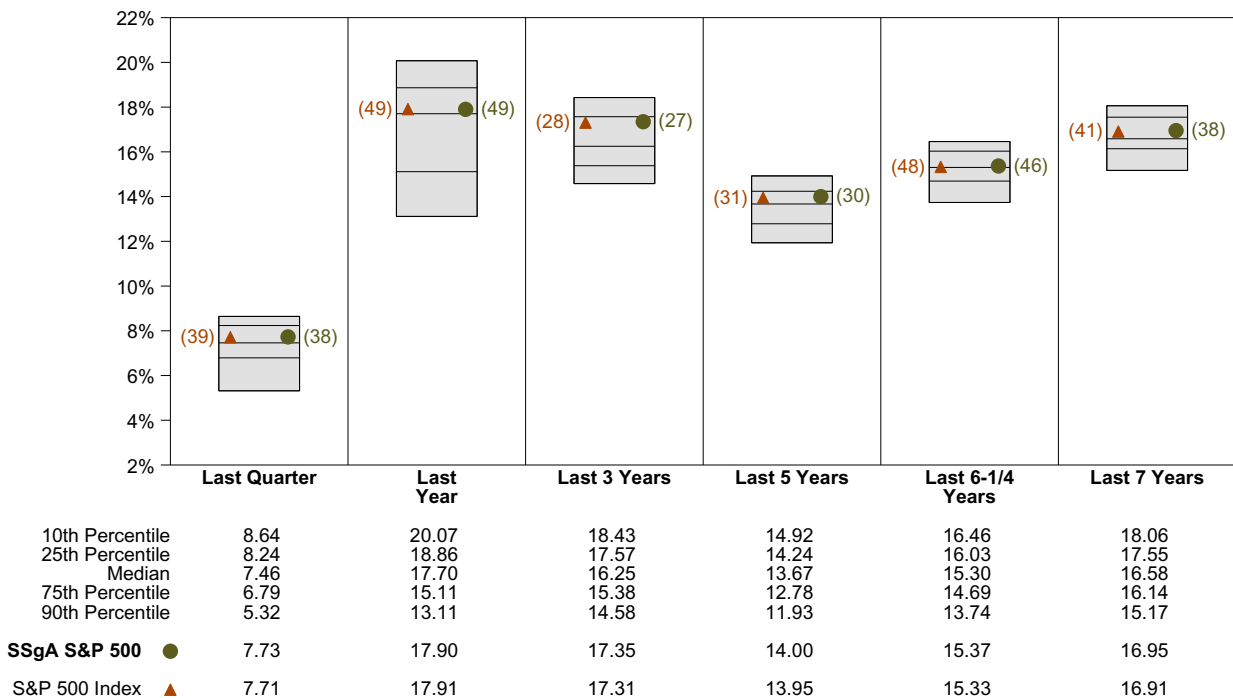
### Quarterly Summary and Highlights

- SSgA S&P 500's portfolio posted a 7.73% return for the quarter placing it in the 38 percentile of the Callan Large Cap Core group for the quarter and in the 49 percentile for the last year.
- SSgA S&P 500's portfolio outperformed the S&P 500 Index by 0.02% for the quarter and underperformed the S&P 500 Index for the year by 0.01%.

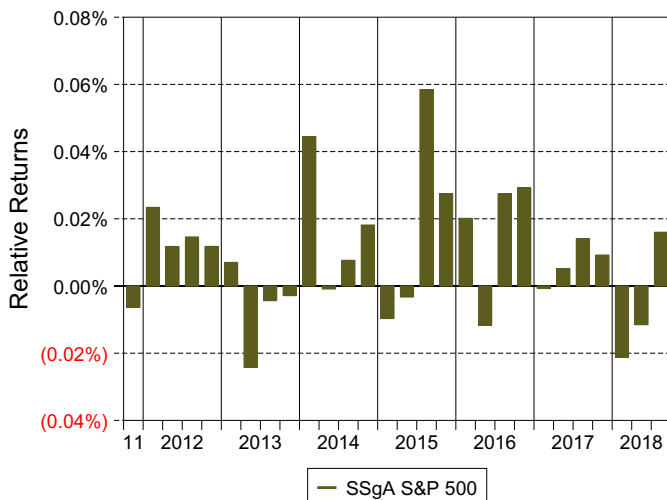
### Quarterly Asset Growth

Beginning Market Value	\$46,292,642
Net New Investment	\$0
Investment Gains/(Losses)	\$3,576,918
Ending Market Value	\$49,869,560

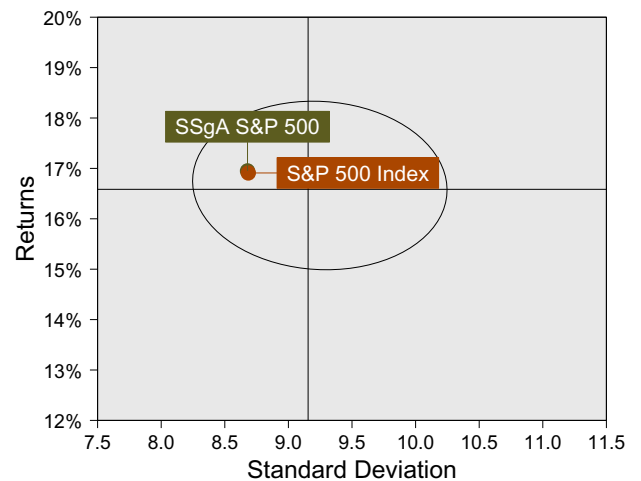
### Performance vs Callan Large Cap Core (Gross)



### Relative Return vs S&P 500 Index



### Callan Large Cap Core (Gross) Annualized Seven Year Risk vs Return

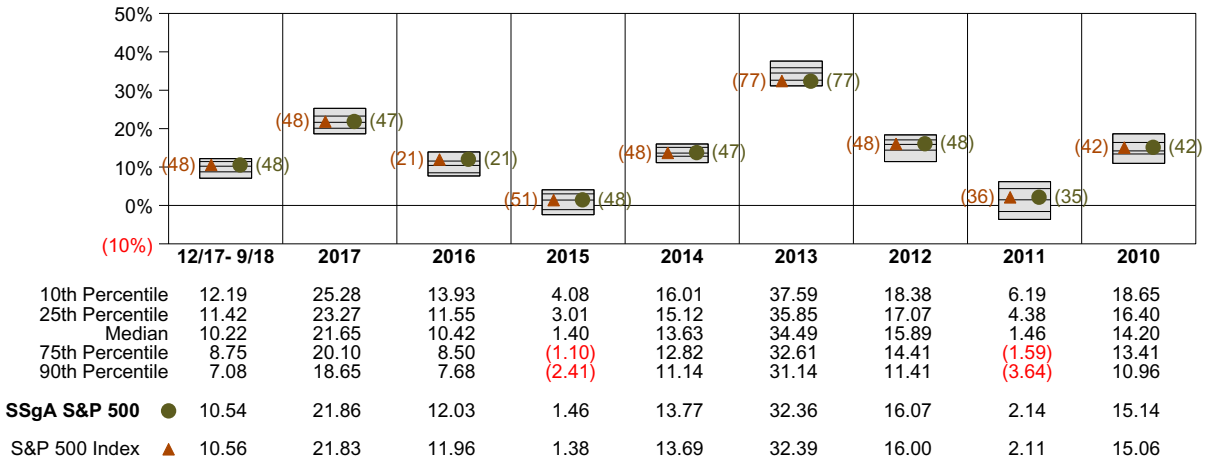


# SSgA S&P 500 Return Analysis Summary

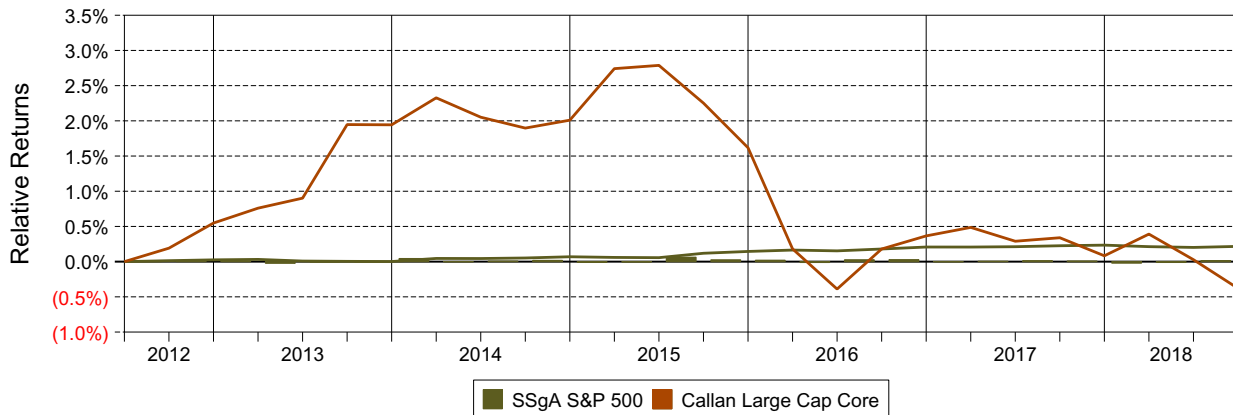
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

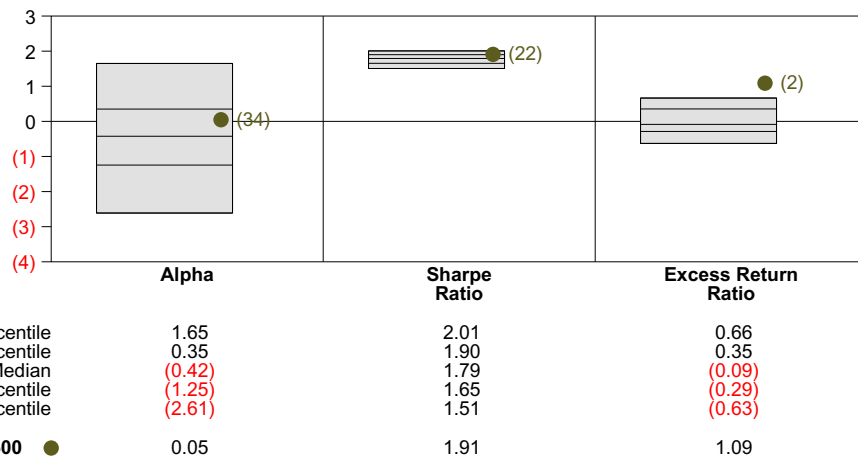
### Performance vs Callan Large Cap Core (Gross)



### Cumulative and Quarterly Relative Return vs S&P 500 Index



### Risk Adjusted Return Measures vs S&P 500 Index Rankings Against Callan Large Cap Core (Gross) Seven Years Ended September 30, 2018

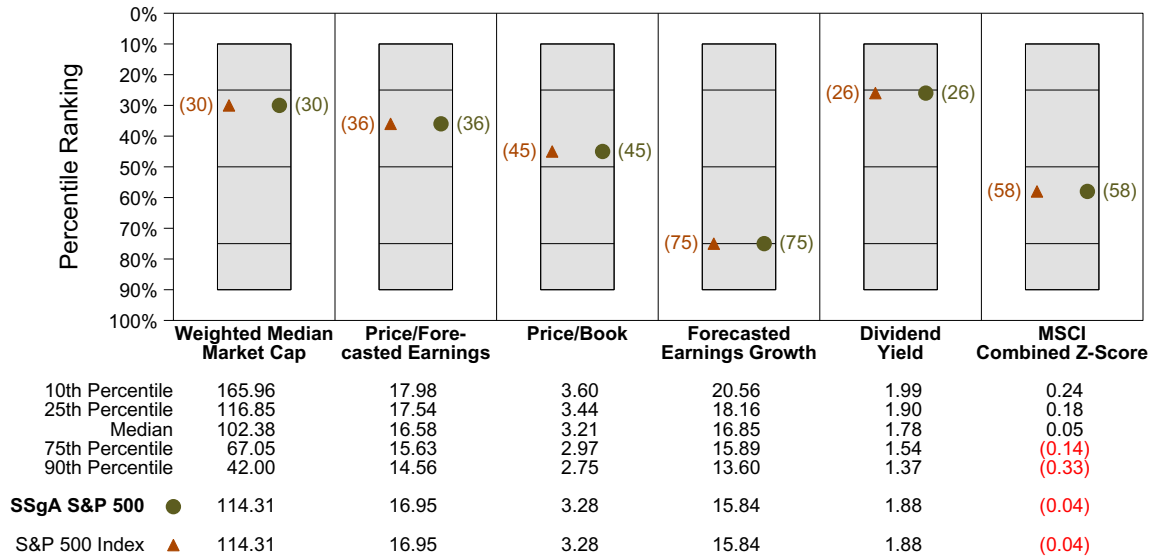


# SSgA S&P 500 Equity Characteristics Analysis Summary

## Portfolio Characteristics

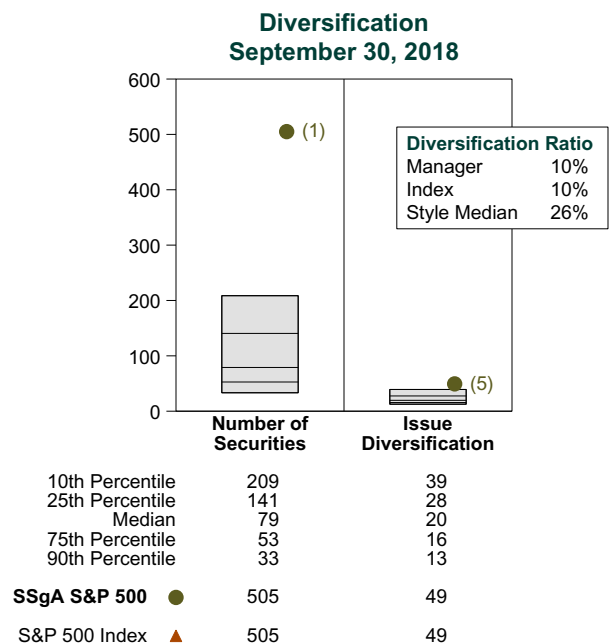
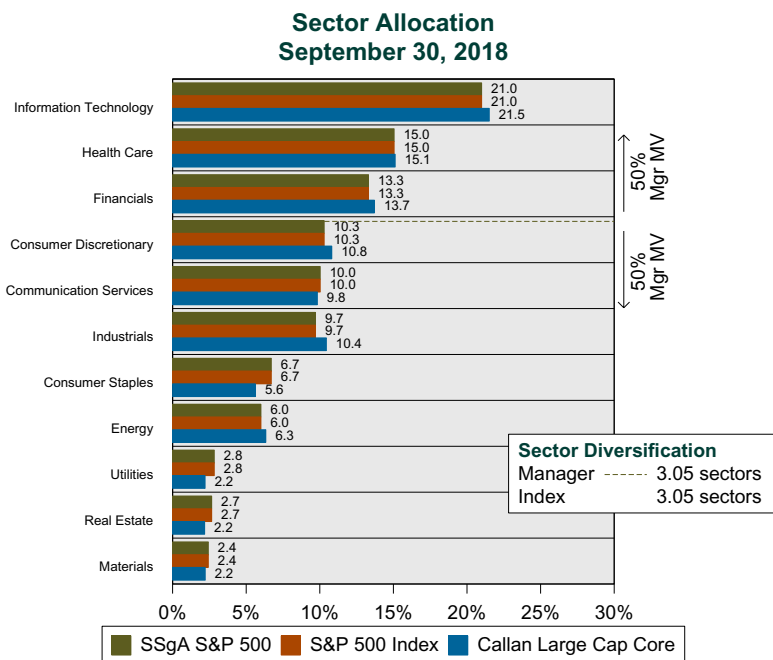
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



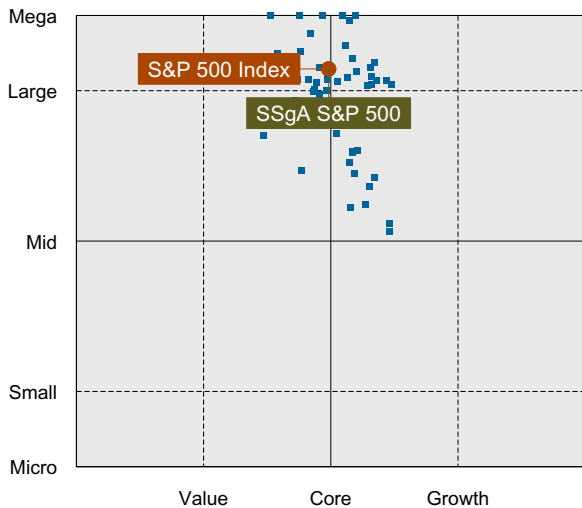
# Current Holdings Based Style Analysis

## SSgA S&P 500

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

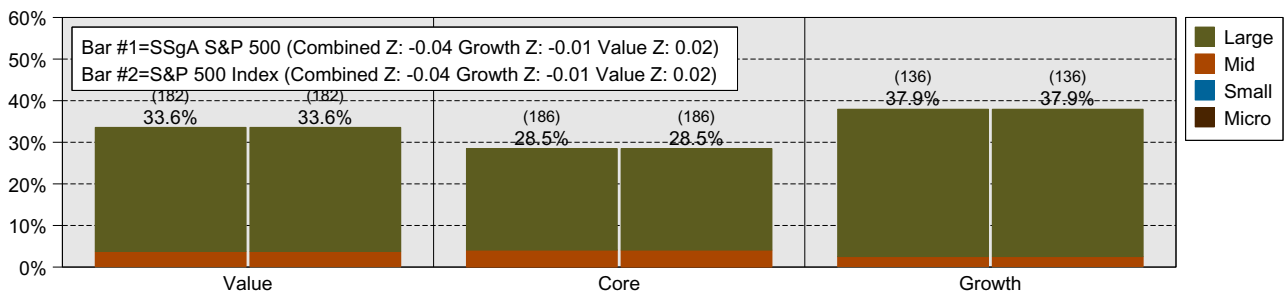
**Style Map vs Callan Large Cap Core Holdings as of September 30, 2018**



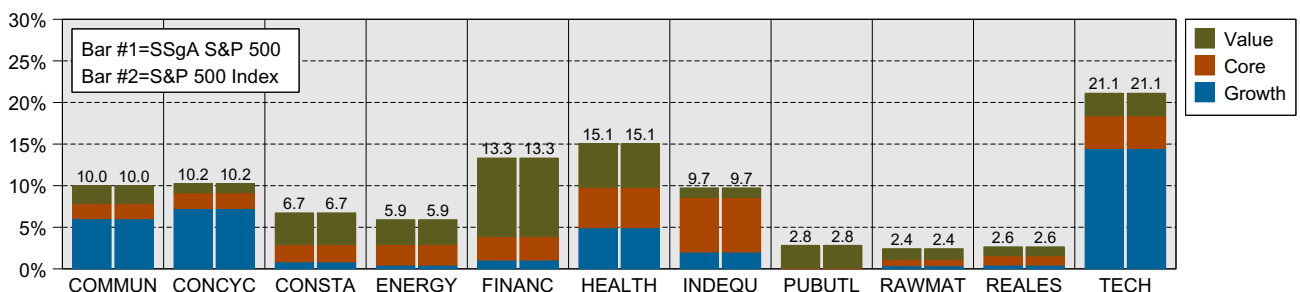
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Large	29.8% (97)	24.4% (103)	35.4% (84)	89.6% (284)
Mid	3.8% (84)	4.1% (83)	2.5% (51)	10.4% (218)
Small	0.0% (1)	0.0% (0)	0.0% (1)	0.0% (2)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Total</b>	<b>33.6% (182)</b>	<b>28.5% (186)</b>	<b>37.9% (136)</b>	<b>100.0% (504)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**





# Boston Partners Period Ended September 30, 2018

## Investment Philosophy

Boston Partners attempts to implement a disciplined investment process designed to find undervalued securities issued by companies with sound fundamentals and positive business momentum. Boston Partners was funded 6/27/05. The first full quarter for this portfolio is 3rd quarter 2005.

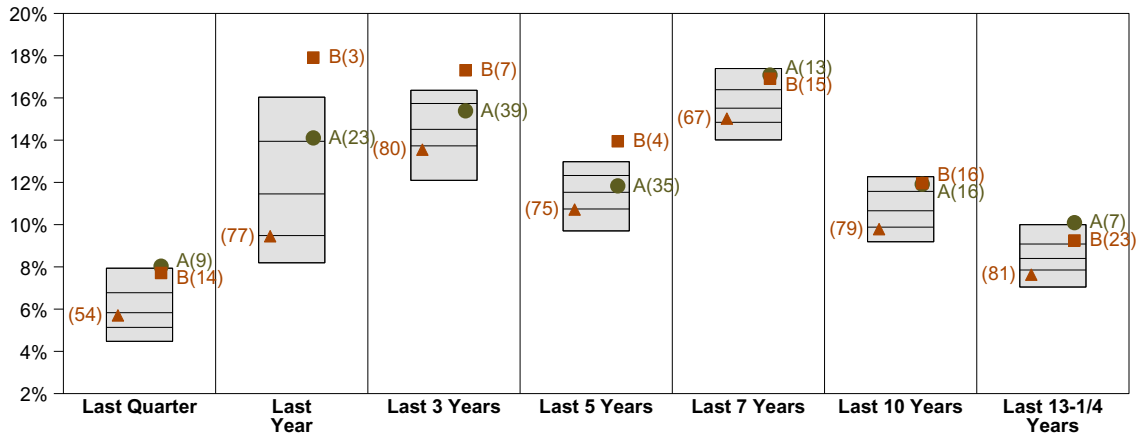
## Quarterly Summary and Highlights

- Boston Partners's portfolio posted a 8.03% return for the quarter placing it in the 9 percentile of the Callan Large Cap Value group for the quarter and in the 23 percentile for the last year.
- Boston Partners's portfolio outperformed the Russell 1000 Value Index by 2.33% for the quarter and outperformed the Russell 1000 Value Index for the year by 4.66%.

## Quarterly Asset Growth

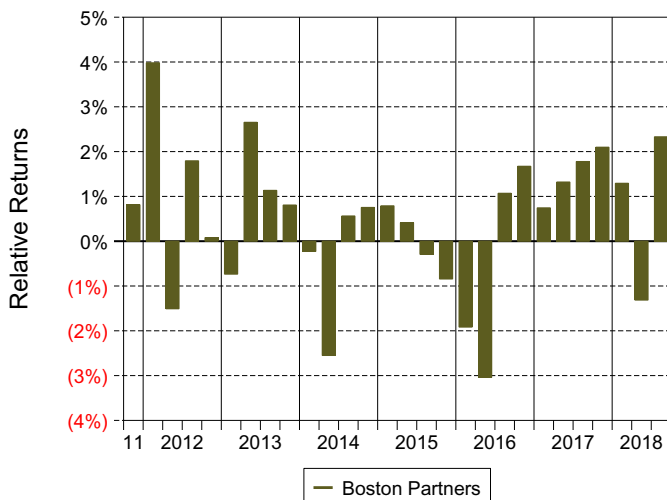
Beginning Market Value	\$43,989,701
Net New Investment	\$0
Investment Gains/(Losses)	\$3,533,899
Ending Market Value	\$47,523,601

## Performance vs Callan Large Cap Value (Gross)

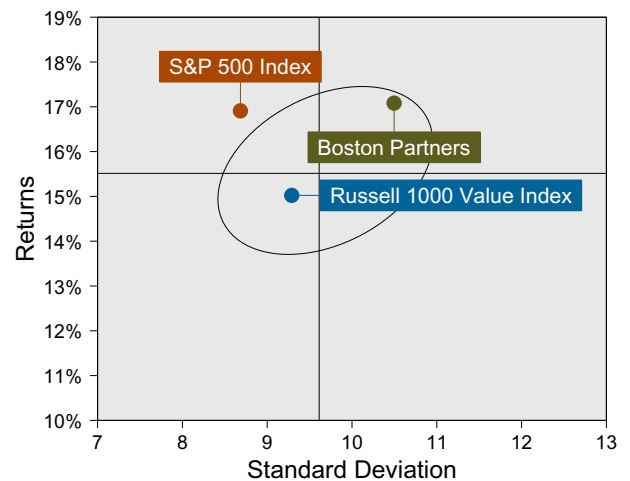


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 13-1/4 Years
10th Percentile	7.94	16.04	16.36	12.98	17.39	12.27	10.00
25th Percentile	6.78	13.95	15.74	12.33	16.39	11.57	9.08
Median	5.83	11.45	14.51	11.53	15.51	10.66	8.40
75th Percentile	5.13	9.48	13.73	10.74	14.84	9.88	7.85
90th Percentile	4.47	8.19	12.10	9.70	14.01	9.19	7.05
Boston Partners ● A	8.03	14.11	15.39	11.83	17.08	11.91	10.09
S&P 500 Index ■ B	7.71	17.91	17.31	13.95	16.91	11.97	9.25
Russell 1000 Value Index ▲	5.70	9.45	13.55	10.72	15.02	9.79	7.63

## Relative Return vs Russell 1000 Value Index



## Callan Large Cap Value (Gross) Annualized Seven Year Risk vs Return

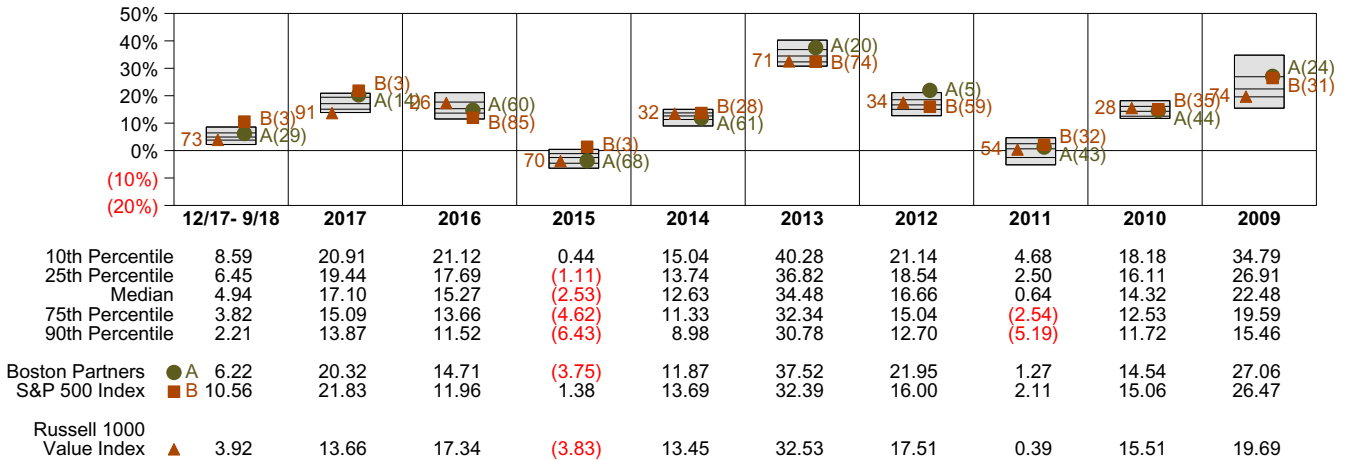


# Boston Partners Return Analysis Summary

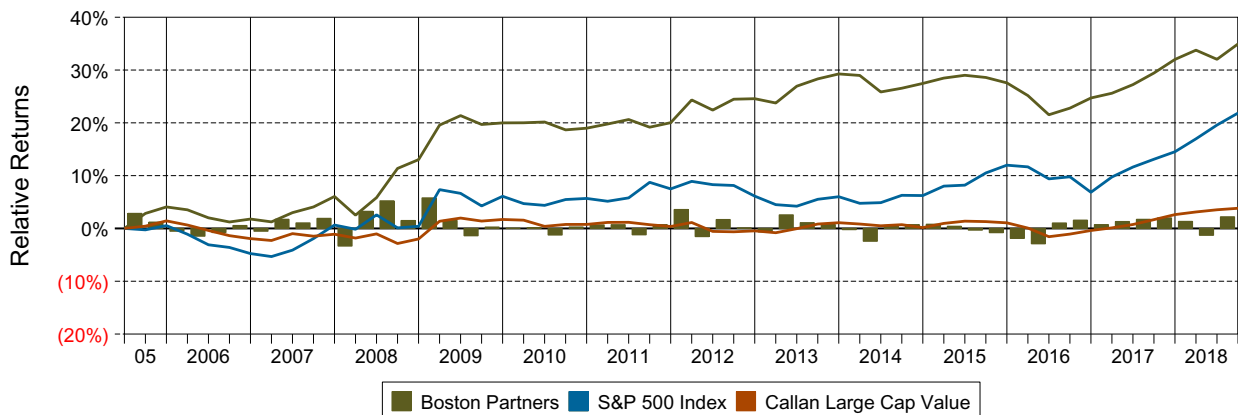
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

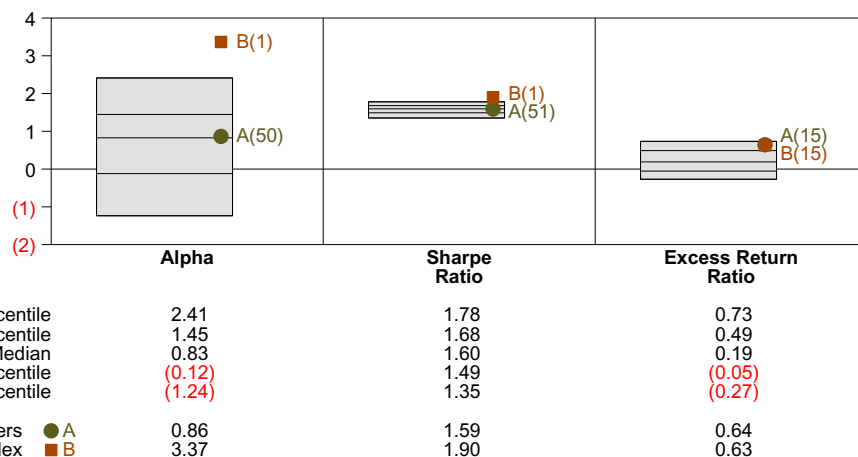
### Performance vs Callan Large Cap Value (Gross)



### Cumulative and Quarterly Relative Return vs Russell 1000 Value Index



### Risk Adjusted Return Measures vs Russell 1000 Value Index Rankings Against Callan Large Cap Value (Gross) Seven Years Ended September 30, 2018

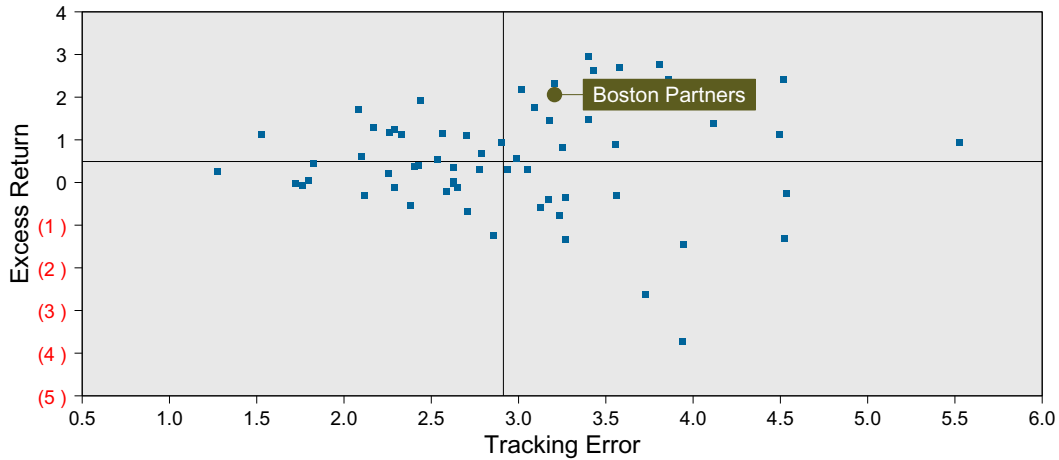


# Boston Partners Risk Analysis Summary

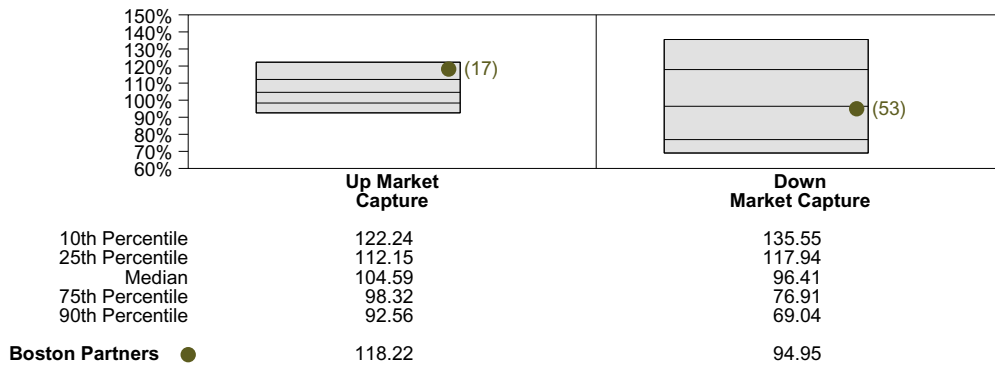
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

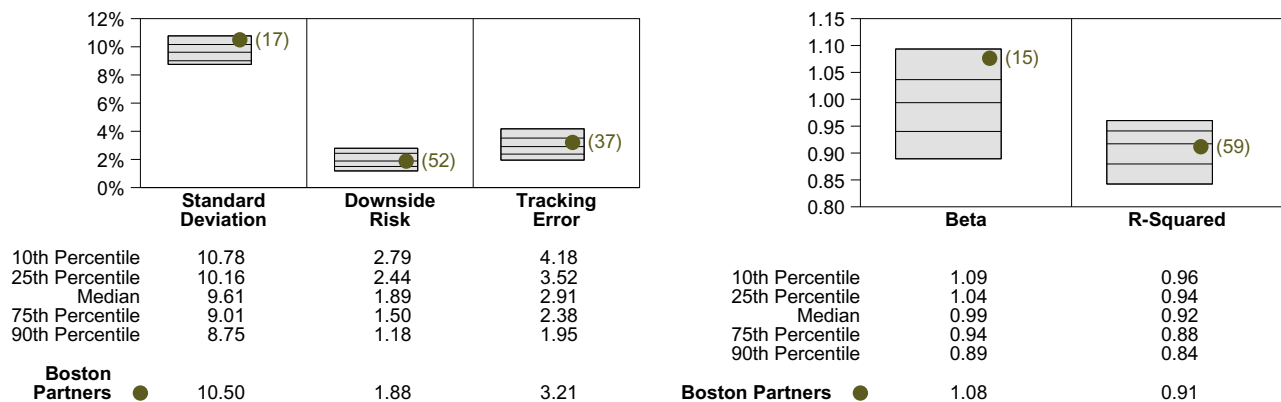
### Risk Analysis vs Callan Large Cap Value (Gross) Seven Years Ended September 30, 2018



### Market Capture vs Russell 1000 Value Index Rankings Against Callan Large Cap Value (Gross) Seven Years Ended September 30, 2018



### Risk Statistics Rankings vs Russell 1000 Value Index Rankings Against Callan Large Cap Value (Gross) Seven Years Ended September 30, 2018

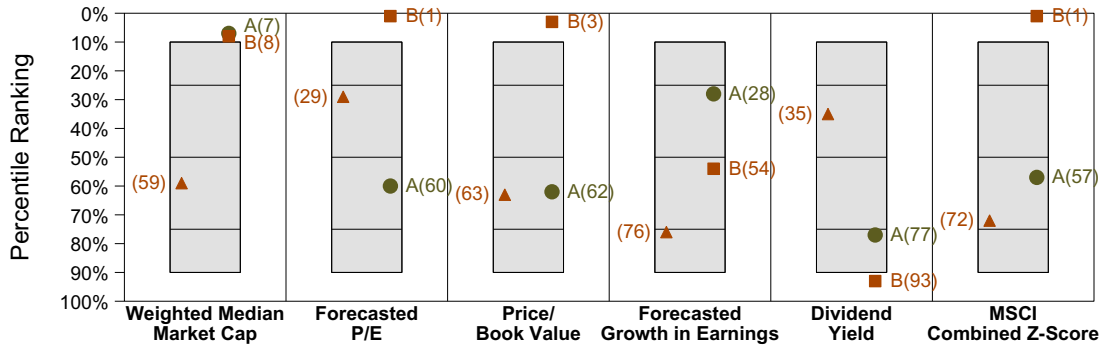


# Boston Partners Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

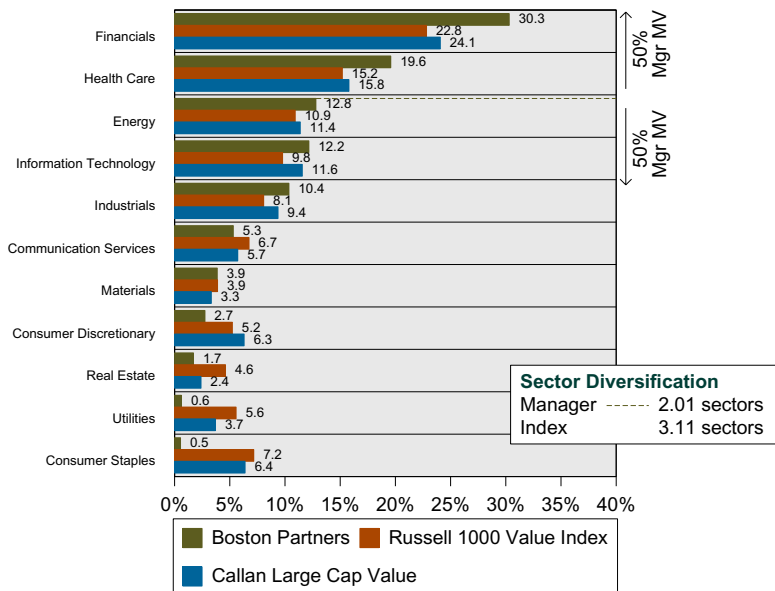
## Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Value as of September 30, 2018



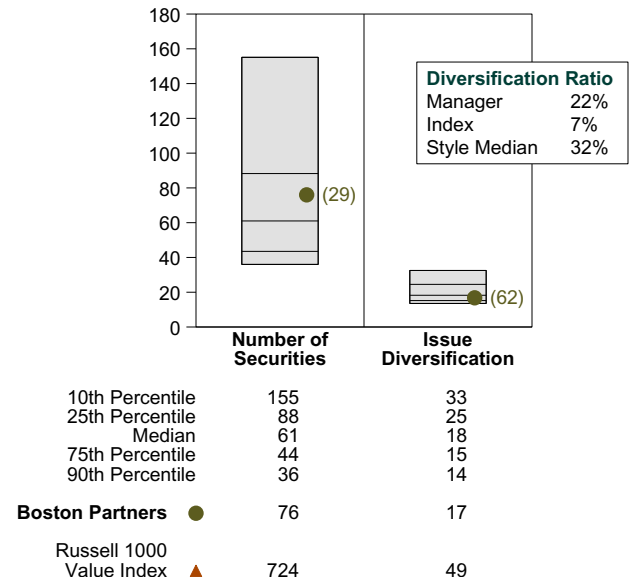
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation September 30, 2018



### Diversification September 30, 2018



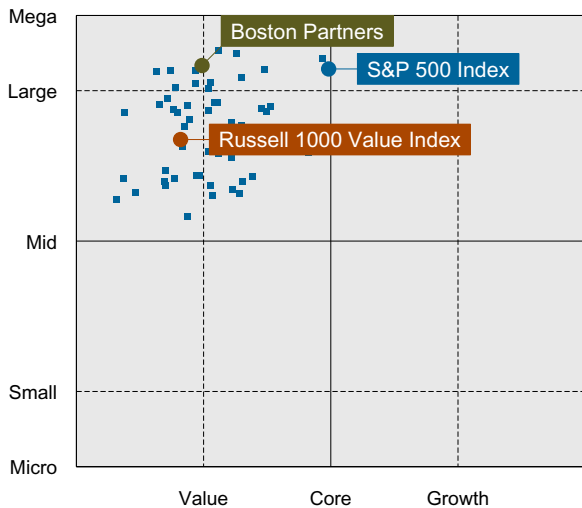
# Current Holdings Based Style Analysis

## Boston Partners

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

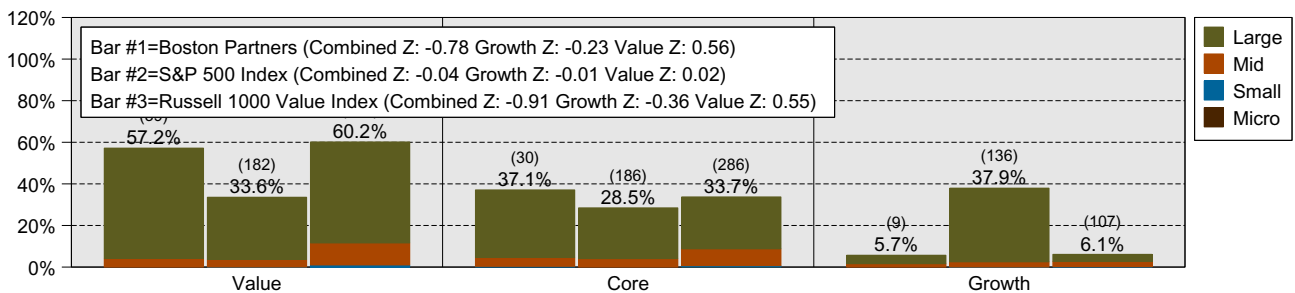
**Style Map vs Callan Large Cap Value Holdings as of September 30, 2018**



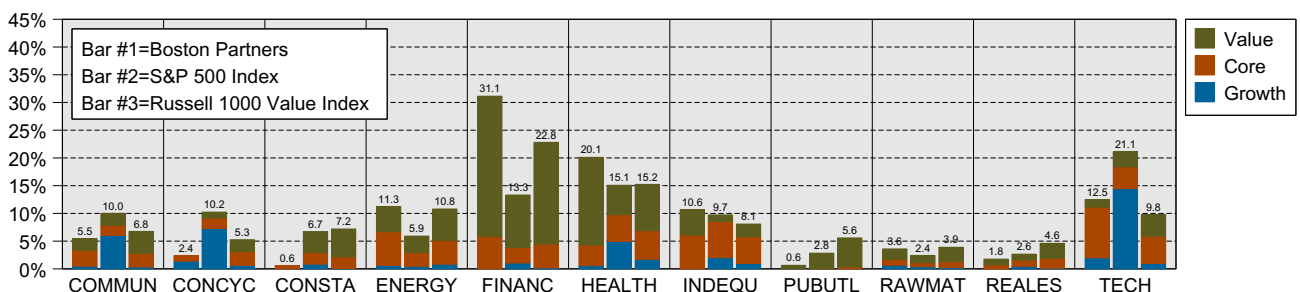
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
<b>Large</b>	52.9% (31) 29.8% (97) 48.6% (96)	32.5% (20) 24.4% (103) 24.9% (86)	4.1% (6) 35.4% (84) 3.4% (21)	89.5% (57) 89.6% (284) 76.9% (203)
<b>Mid</b>	4.3% (7) 3.8% (84) 10.6% (181)	4.2% (8) 4.1% (83) 8.1% (159)	1.6% (3) 2.5% (51) 2.5% (72)	10.1% (18) 10.4% (218) 21.2% (412)
<b>Small</b>	0.0% (0) 0.0% (1) 1.0% (50)	0.3% (2) 0.0% (0) 0.7% (40)	0.0% (0) 0.0% (1) 0.2% (14)	0.3% (2) 0.0% (2) 1.9% (104)
<b>Micro</b>	0.0% (1) 0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0) 0.0% (1)	0.0% (0) 0.0% (0) 0.0% (0)	0.0% (1) 0.0% (0) 0.0% (1)
<b>Total</b>	57.2% (39) 33.6% (182) 60.2% (327)	37.1% (30) 28.5% (186) 33.7% (286)	5.7% (9) 37.9% (136) 6.1% (107)	100.0% (78) 100.0% (504) 100.0% (720)

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



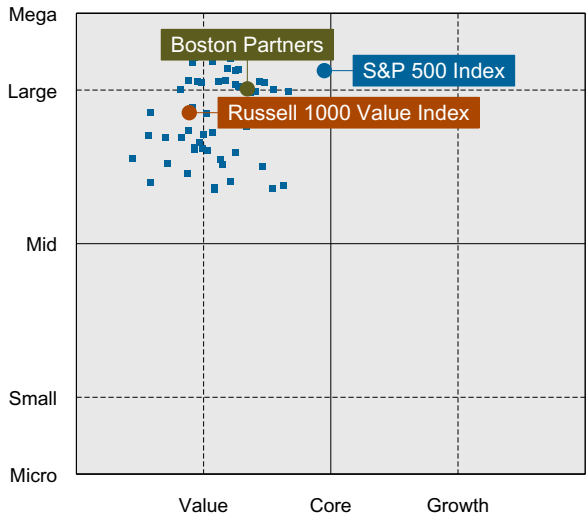
**Sector Weights Distribution Holdings as of September 30, 2018**



# Historical Holdings Based Style Analysis Boston Partners For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

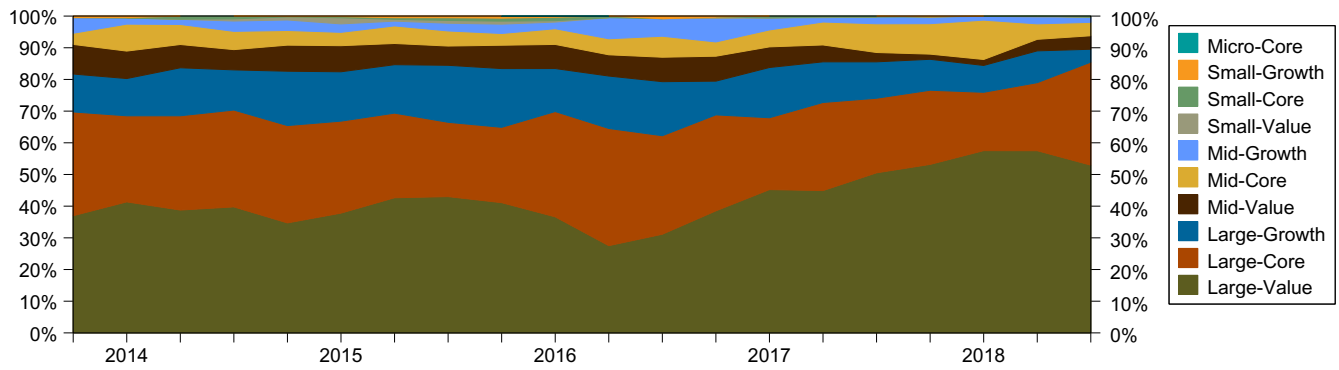
**Average Style Map vs Callan Large Cap Value Holdings for Five Years Ended September 30, 2018**



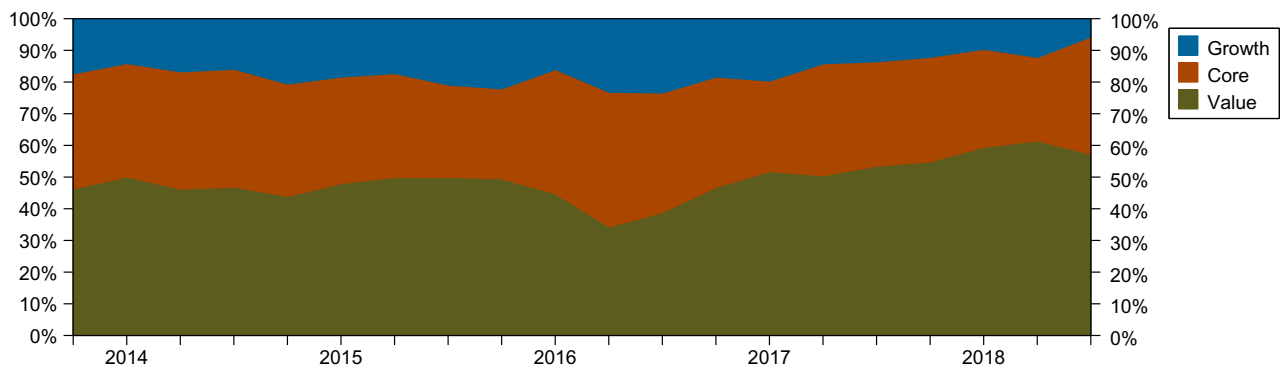
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	Value	Core	Growth	Total
Large	42.6% (27)	27.8% (21)	13.3% (13)	83.7% (61)
	32.2% (97)	27.4% (95)	29.5% (93)	89.2% (285)
	51.2% (94)	22.5% (71)	4.5% (29)	78.3% (194)
Mid	6.2% (9)	6.0% (9)	3.0% (5)	15.3% (23)
	4.0% (84)	3.9% (78)	2.8% (52)	10.8% (214)
	10.3% (165)	6.8% (148)	2.2% (61)	19.3% (374)
Small	0.4% (1)	0.4% (1)	0.2% (1)	1.0% (3)
	0.0% (3)	0.0% (1)	0.0% (1)	0.1% (5)
	1.4% (61)	0.8% (45)	0.2% (16)	2.4% (122)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
<b>Total</b>	<b>49.2% (37)</b>	<b>34.2% (31)</b>	<b>16.6% (19)</b>	<b>100.0% (87)</b>
	<b>36.3% (184)</b>	<b>31.4% (174)</b>	<b>32.4% (146)</b>	<b>100.0% (504)</b>
	<b>62.9% (320)</b>	<b>30.1% (265)</b>	<b>7.0% (106)</b>	<b>100.0% (691)</b>

## Boston Partners Historical Cap/Style Exposures



## Boston Partners Historical Style Only Exposures

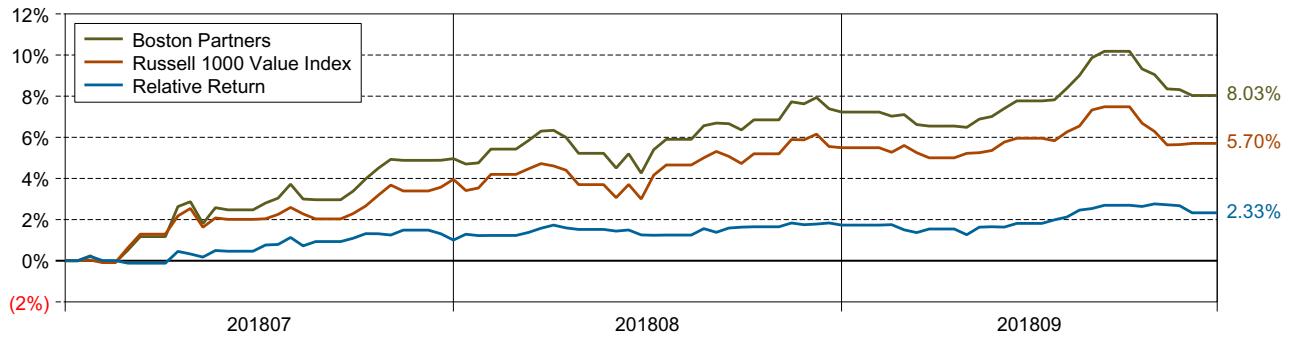


# Boston Partners vs Russell 1000 Value Index Domestic Equity Daily Performance Attribution One Quarter Ended September 30, 2018

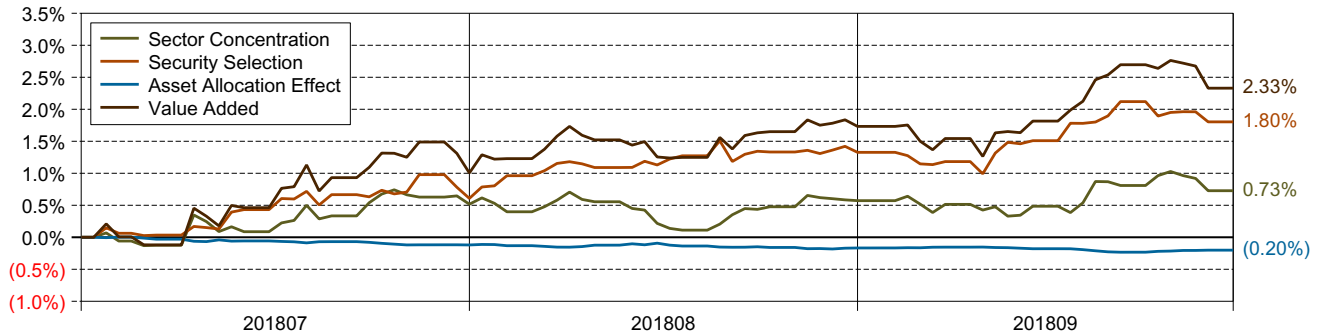
## Return Sources and Timing

The charts below illustrate the timing and cumulative paths of the manager's performance, as well as attributing relative performance to three sources: Sector Concentration, Security Selection, and Asset Allocation. The first chart shows the cumulative absolute return paths for the manager and index. The second chart shows the cumulative relative return path of the manager and the attributed sources of that value-added. The bottom table breaks the annualized attribution factors down to the sector level for more insight into sources of return.

## Cumulative Manager and Benchmark Returns



## Cumulative Attribution Effects vs. Russell 1000 Value Index



## Attribution Effects by Sector vs. Russell 1000 Value Index One Quarter Ended September 30, 2018

Sector	Manager Eff Weight	Index Eff Weight	Manager Return	Index Return	Sector Concentration	Security Selection	Asset Allocation
Communication Services	4.11%	4.60%	6.86%	6.73%	(0.02)%	(0.05)%	-
Consumer Discretionary	3.02%	7.25%	(1.91)%	1.78%	0.17%	(0.13)%	-
Consumer Staples	0.51%	7.23%	12.68%	4.55%	0.08%	0.04%	-
Energy	13.11%	10.86%	4.81%	1.37%	(0.12)%	0.46%	-
Financials	31.82%	23.50%	6.04%	4.19%	(0.11)%	0.61%	-
Health Care	18.17%	14.29%	15.15%	15.63%	0.36%	(0.08)%	-
Industrials	9.81%	8.02%	12.69%	8.37%	0.04%	0.42%	-
Information Technology	12.45%	9.78%	12.47%	7.89%	0.04%	0.57%	-
Materials	4.54%	4.07%	(1.15)%	(0.06)%	(0.02)%	(0.07)%	-
Real Estate	1.83%	4.79%	0.63%	0.95%	0.14%	(0.01)%	-
Utilities	0.62%	5.63%	7.94%	2.45%	0.16%	0.04%	-
Non Equity	2.18%	0.00%	-	-	-	-	(0.20)%
<b>Total</b>	-	-	<b>8.03%</b>	<b>5.70%</b>	<b>0.73%</b>	<b>1.80%</b>	<b>(0.20)%</b>

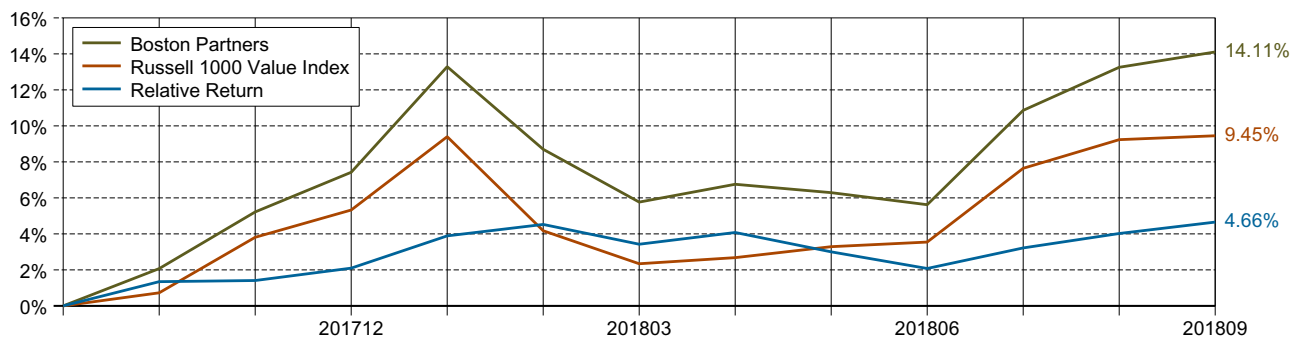
<b>Manager Return</b>	=	<b>Index Return</b>	+	<b>Sector Concentration</b>	+	<b>Security Selection</b>	+	<b>Asset Allocation</b>
<b>8.03%</b>		<b>5.70%</b>		<b>0.73%</b>		<b>1.80%</b>		<b>(0.20)%</b>

## Boston Partners vs Russell 1000 Value Index Domestic Equity Daily Performance Attribution One Year Ended September 30, 2018

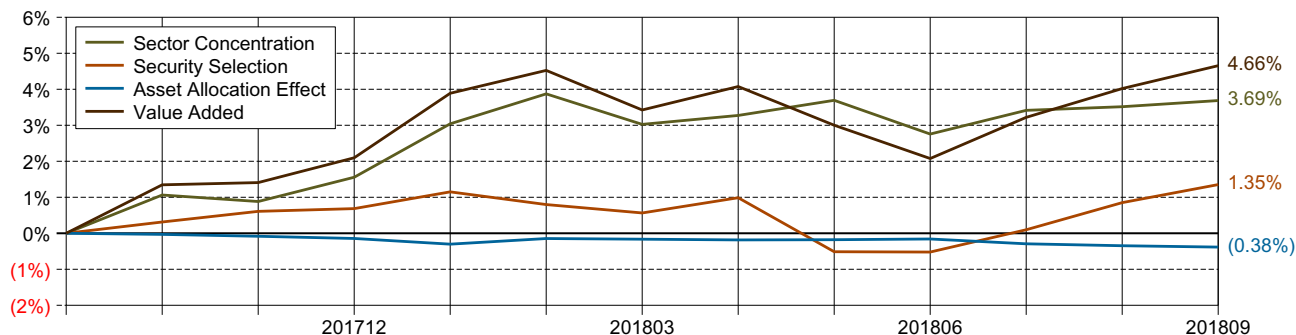
### Return Sources and Timing

The charts below illustrate the timing and cumulative paths of the manager's performance, as well as attributing relative performance to three sources: Sector Concentration, Security Selection, and Asset Allocation. The first chart shows the cumulative absolute return paths for the manager and index. The second chart shows the cumulative relative return path of the manager and the attributed sources of that value-added. The bottom table breaks the annualized attribution factors down to the sector level for more insight into sources of return.

### Cumulative Manager and Benchmark Returns



### Cumulative Attribution Effects vs. Russell 1000 Value Index



### Attribution Effects by Sector vs. Russell 1000 Value Index One Year Ended September 30, 2018

Sector	Manager Eff Weight	Index Eff Weight	Manager Return	Index Return	Sector Concentration	Security Selection	Asset Allocation
Communication Services	1.69%	3.33%	7.48%	(1.99)%	0.30%	0.01%	-
Consumer Discretionary	5.89%	6.93%	(0.37)%	7.91%	0.21%	(0.43)%	-
Consumer Staples	1.22%	7.97%	(7.24)%	(3.68)%	1.03%	(0.21)%	-
Energy	11.65%	11.02%	29.56%	16.36%	0.07%	1.28%	-
Financials	32.48%	26.07%	11.24%	7.86%	(0.15)%	1.14%	-
Health Care	16.39%	13.92%	13.22%	18.97%	0.32%	(0.83)%	-
Industrials	8.93%	8.24%	6.56%	1.86%	(0.03)%	0.36%	-
Information Technology	15.03%	9.15%	28.00%	25.07%	1.07%	0.24%	-
Materials	5.57%	2.77%	7.09%	7.67%	0.18%	(0.06)%	-
Real Estate	0.75%	4.71%	4.88%	3.50%	0.31%	(0.07)%	-
Utilities	0.40%	5.88%	(0.11)%	4.05%	0.38%	(0.08)%	-
Non Equity	2.48%	0.00%	-	-	-	-	(0.38)%
Total	-	-	14.11%	9.45%	3.69%	1.35%	(0.38)%

<b>Manager Return</b>	=	<b>Index Return</b>	+	<b>Sector Concentration</b>	+	<b>Security Selection</b>	+	<b>Asset Allocation</b>
14.11%		9.45%		3.69%		1.35%		(0.38)%



## Boston Partners vs Russell 1000 Value Index Domestic Equity Top 10 Contribution Holdings One Quarter Ended September 30, 2018

### Manager Holdings with Largest (+ or -) Contribution to Performance

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Johnson & Johnson	Health Care	4.35%	92	2.13%	14.59%	14.63%	0.60%	0.18%
Berkshire Hathaway Inc Del Cl B New	Financials	4.14%	92	2.50%	14.71%	14.71%	0.58%	0.14%
Pfizer	Health Care	2.72%	92	1.70%	22.51%	22.51%	0.57%	0.16%
Cisco Sys Inc	Information Technology	3.28%	92	1.59%	13.94%	13.94%	0.43%	0.13%
Cvs Health Corp	Health Care	1.85%	92	0.52%	23.10%	23.26%	0.40%	0.21%
JPMorgan Chase & Co	Financials	3.92%	92	2.81%	8.88%	8.88%	0.34%	0.04%
Merck & Co Inc	Health Care	2.04%	92	1.22%	17.68%	17.67%	0.34%	0.09%
Oracle Corp	Information Technology	2.04%	92	0.90%	17.48%	17.48%	0.34%	0.12%
Andeavor	Energy	1.88%	92	0.15%	17.48%	17.46%	0.31%	0.20%
Cigna Corporation	Health Care	1.36%	92	0.19%	22.26%	22.54%	0.29%	0.19%

### Index Holdings with Largest (+ or -) Contribution to Performance

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Index Perf	Contrib Excess Return
Pfizer	Health Care	2.72%	92	1.70%	22.51%	22.51%	0.35%	0.16%
Berkshire Hathaway Inc Del Cl B New	Financials	4.14%	92	2.50%	14.71%	14.71%	0.35%	0.14%
Johnson & Johnson	Health Care	4.35%	92	2.13%	14.59%	14.63%	0.30%	0.18%
JPMorgan Chase & Co	Financials	3.92%	92	2.81%	8.88%	8.88%	0.24%	0.04%
Cisco Sys Inc	Information Technology	3.28%	92	1.59%	13.94%	13.94%	0.21%	0.13%
Merck & Co Inc	Health Care	2.04%	92	1.22%	17.68%	17.67%	0.20%	0.09%
Qualcomm Inc	Information Technology	-	-	0.69%	-	29.49%	0.18%	(0.15)%
Abbott Laboratories	Health Care	-	-	0.82%	-	20.82%	0.16%	(0.12)%
Oracle Corp	Information Technology	2.04%	92	0.90%	17.48%	17.48%	0.15%	0.12%
Medtronic Plc Shs	Health Care	0.81%	41	0.92%	3.72%	16.17%	0.14%	(0.06)%

### Positions with Largest Positive Contribution to Excess Return

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Cvs Health Corp	Health Care	1.85%	92	0.52%	23.10%	23.26%	0.40%	0.21%
Andeavor	Energy	1.88%	92	0.15%	17.48%	17.46%	0.31%	0.20%
General Electric Co	Industrials	-	-	0.86%	-	(16.26)%	-	0.19%
Cigna Corporation	Health Care	1.36%	92	0.19%	22.26%	22.54%	0.29%	0.19%
Johnson & Johnson	Health Care	4.35%	92	2.13%	14.59%	14.63%	0.60%	0.18%
Intel Corp	Information Technology	-	-	1.70%	-	(4.29)%	-	0.17%
Pfizer	Health Care	2.72%	92	1.70%	22.51%	22.51%	0.57%	0.16%
Berkshire Hathaway Inc Del Cl B New	Financials	4.14%	92	2.50%	14.71%	14.71%	0.58%	0.14%
Southwest Airls Co	Industrials	0.94%	92	0.07%	23.06%	23.06%	0.20%	0.14%
Dxc Technology Co	Information Technology	1.51%	92	0.18%	16.09%	16.26%	0.23%	0.13%

### Positions with Largest Negative Contribution to Excess Return

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Eqst Corp	Energy	0.69%	92	0.10%	(19.80)%	(19.80)%	(0.14)%	(0.16)%
Wells Fargo & Co New	Financials	3.24%	92	1.87%	(4.54)%	(4.50)%	(0.15)%	(0.15)%
Qualcomm Inc	Information Technology	-	-	0.69%	-	29.49%	-	(0.15)%
Abbott Laboratories	Health Care	-	-	0.82%	-	20.82%	-	(0.12)%
Royal Dutch Shell Plc Spon Adr A	Energy	1.82%	92	-	(0.18)%	-	(0.01)%	(0.11)%
Te Connectivity Ltd Reg Shs	Information Technology	1.57%	92	-	(1.86)%	-	0.00%	(0.10)%
Owens Corning New	Industrials	0.55%	92	0.05%	(12.93)%	(14.08)%	(0.08)%	(0.10)%
Cimarex Energy Co	Energy	0.64%	92	0.06%	(8.48)%	(8.48)%	(0.06)%	(0.09)%
Chevron Corp New	Energy	2.80%	92	1.76%	(2.36)%	(2.36)%	(0.07)%	(0.09)%
Ebay	Consumer Discretionary	0.75%	92	0.19%	(8.94)%	(8.94)%	(0.07)%	(0.09)%

# Atlanta Capital Period Ended September 30, 2018

## Investment Philosophy

Atlanta believes that high quality companies produce consistently increasing earnings and dividends, thereby providing attractive returns with moderate risk over the long-term. Returns prior to 6/30/2010 are linked to a composite history.

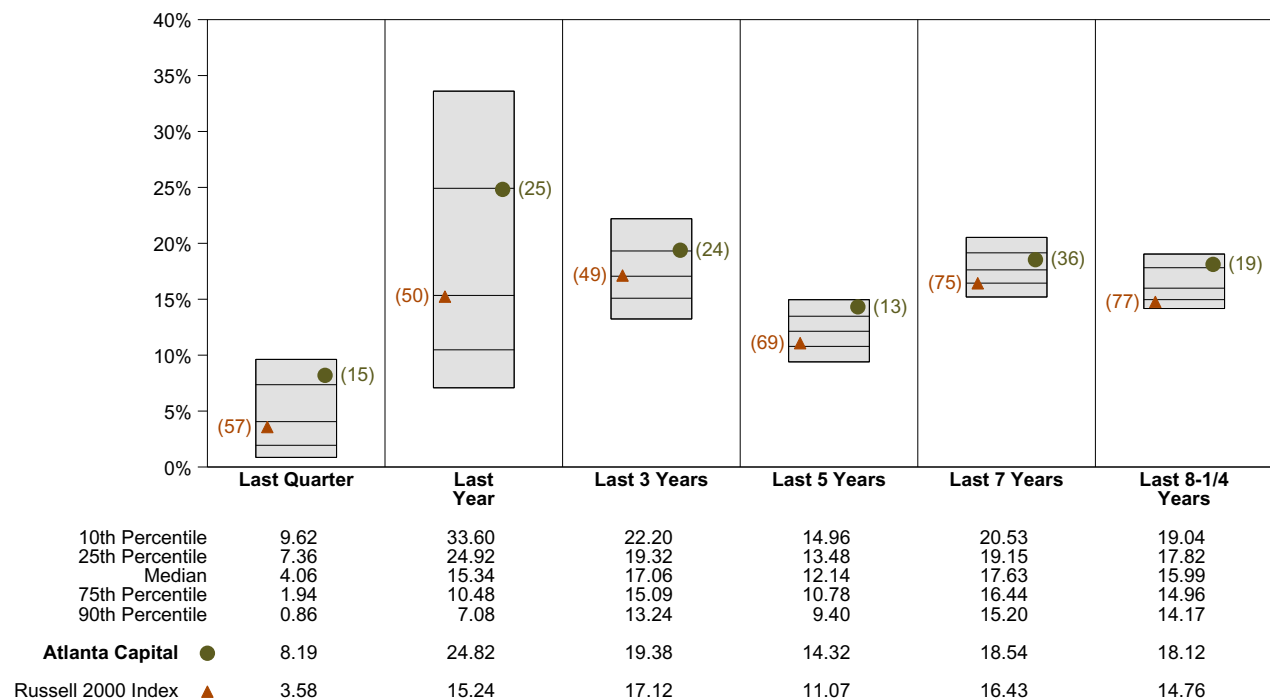
## Quarterly Summary and Highlights

- Atlanta Capital's portfolio posted a 8.19% return for the quarter placing it in the 15th percentile of the Callan Small Capitalization group for the quarter and in the 25th percentile for the last year.
- Atlanta Capital's portfolio outperformed the Russell 2000 Index by 4.62% for the quarter and outperformed the Russell 2000 Index for the year by 9.58%.

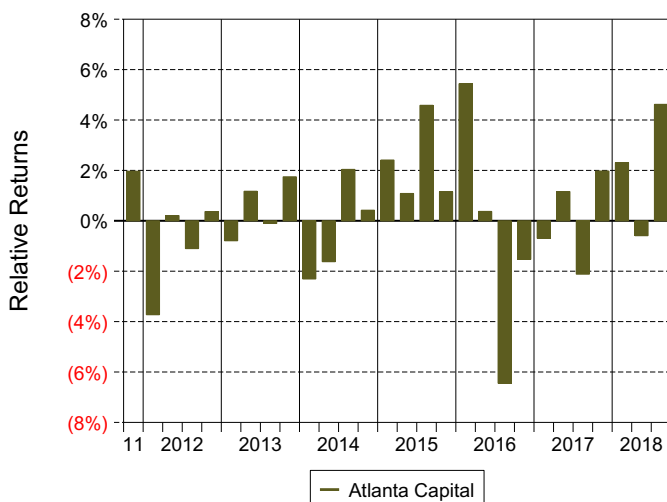
## Quarterly Asset Growth

Beginning Market Value	\$24,620,877
Net New Investment	\$-772,568
Investment Gains/(Losses)	\$2,017,952
Ending Market Value	\$25,866,261

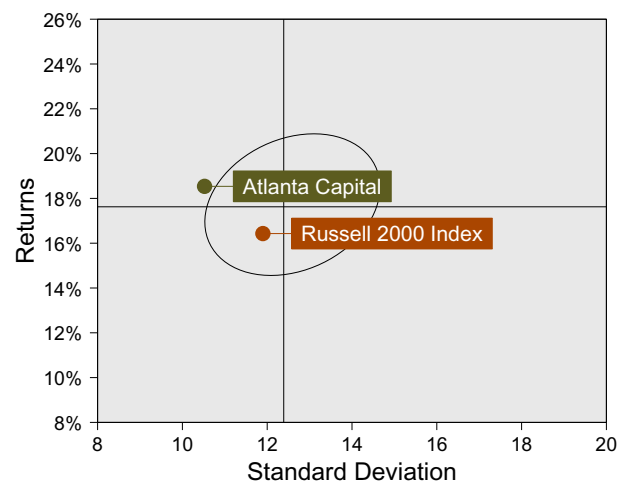
## Performance vs Callan Small Capitalization (Gross)



## Relative Return vs Russell 2000 Index



## Callan Small Capitalization (Gross) Annualized Seven Year Risk vs Return

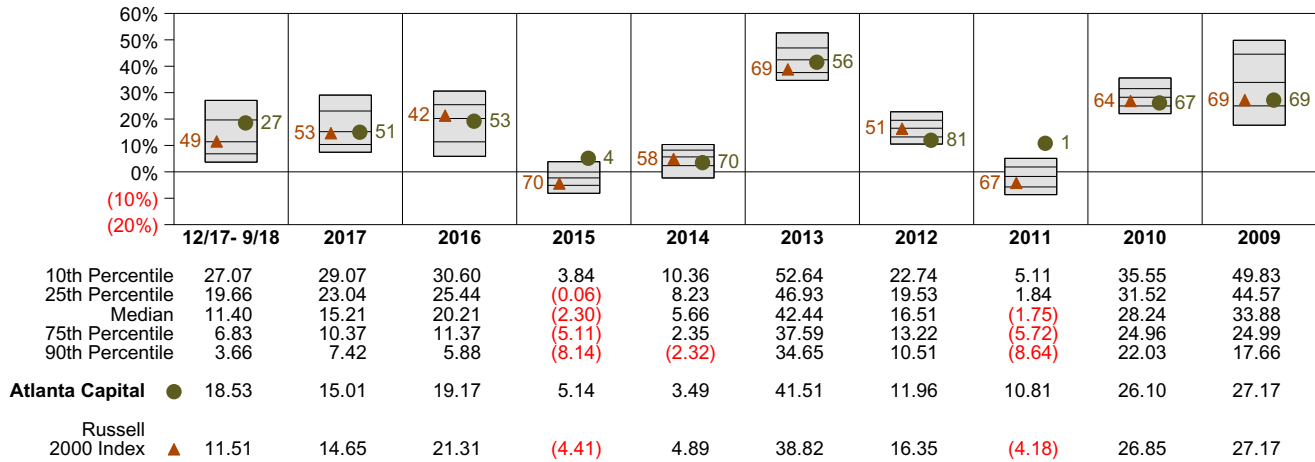


# Atlanta Capital Return Analysis Summary

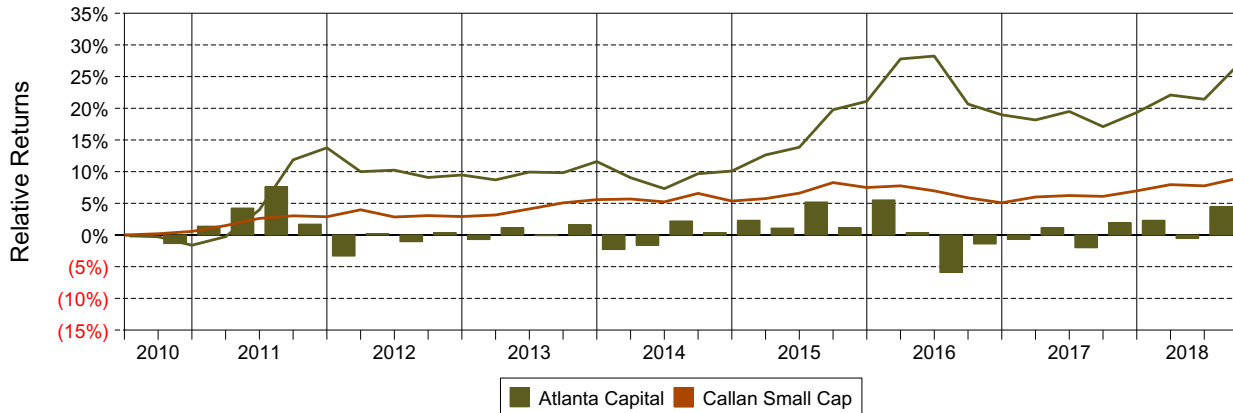
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

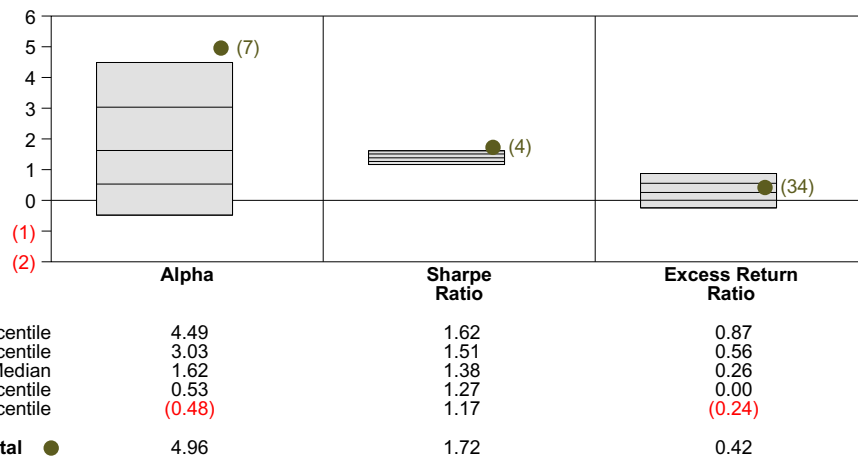
### Performance vs Callan Small Capitalization (Gross)



### Cumulative and Quarterly Relative Return vs Russell 2000 Index



### Risk Adjusted Return Measures vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Seven Years Ended September 30, 2018

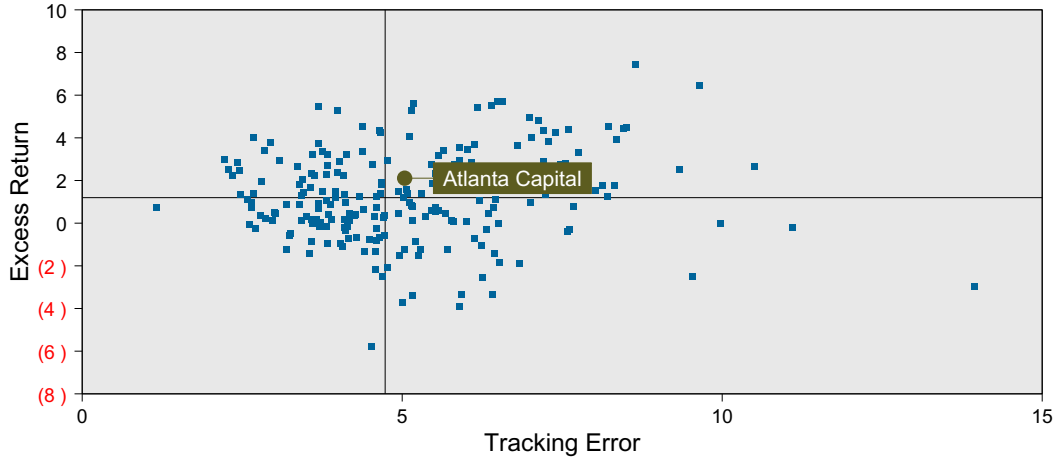


# Atlanta Capital Risk Analysis Summary

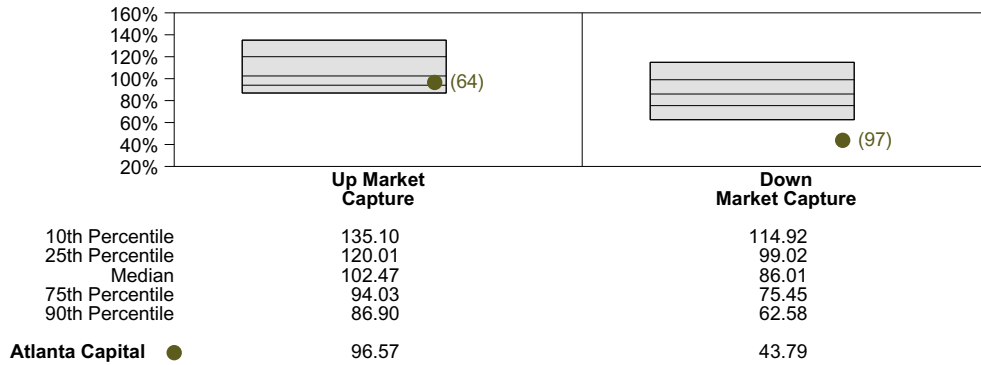
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

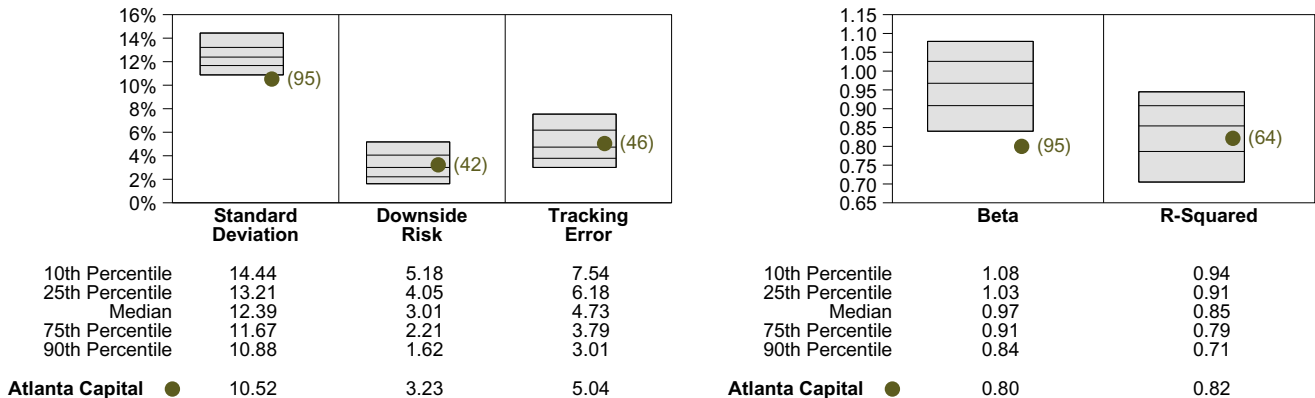
### Risk Analysis vs Callan Small Capitalization (Gross) Seven Years Ended September 30, 2018



### Market Capture vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Seven Years Ended September 30, 2018



### Risk Statistics Rankings vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Seven Years Ended September 30, 2018

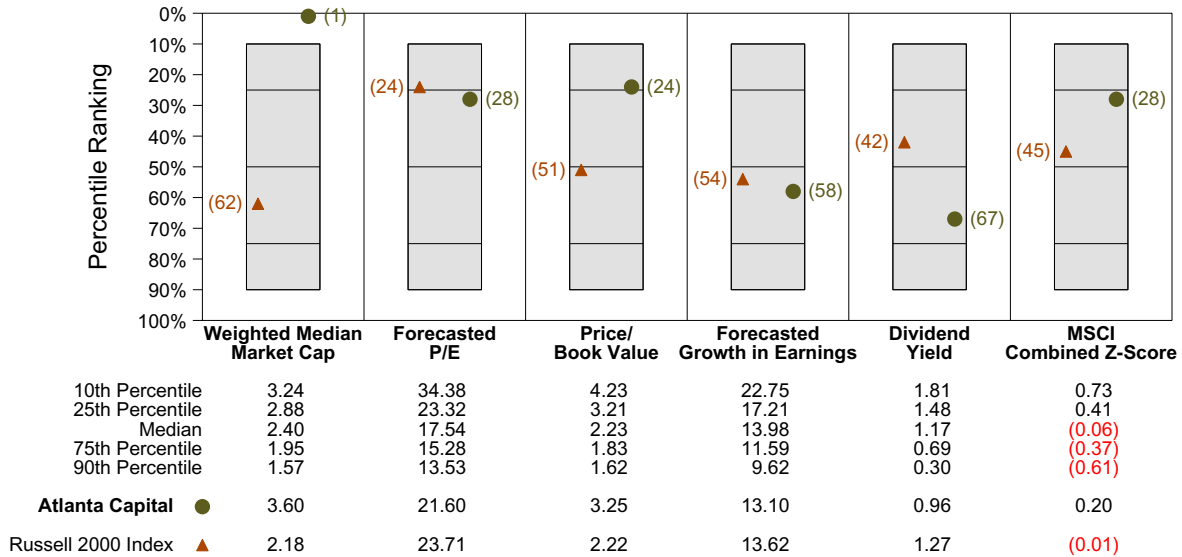


# Atlanta Capital Equity Characteristics Analysis Summary

## Portfolio Characteristics

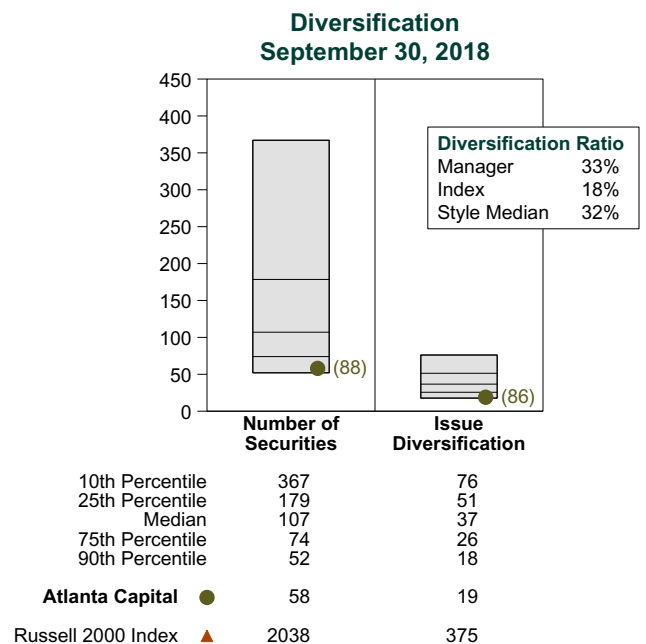
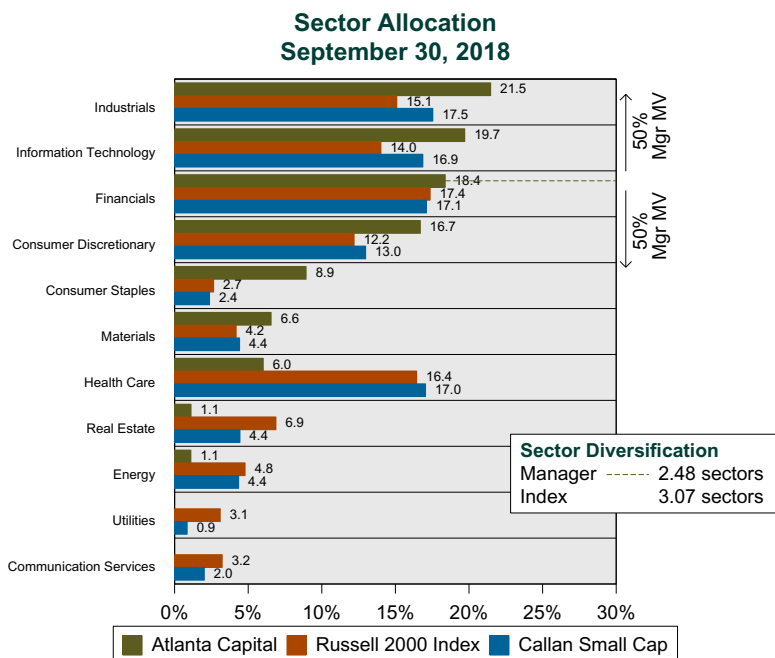
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



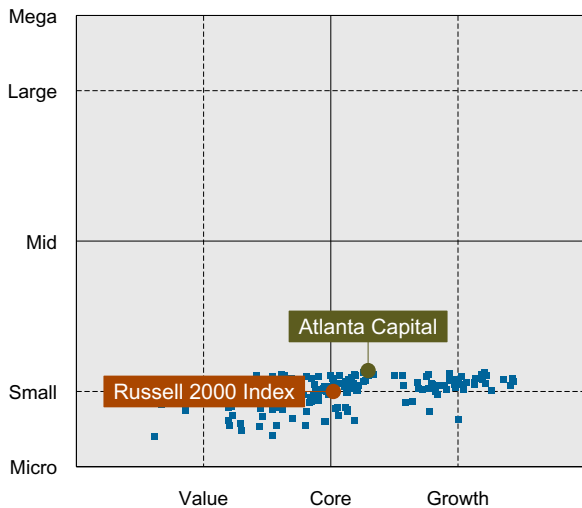
# Current Holdings Based Style Analysis

## Atlanta Capital

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

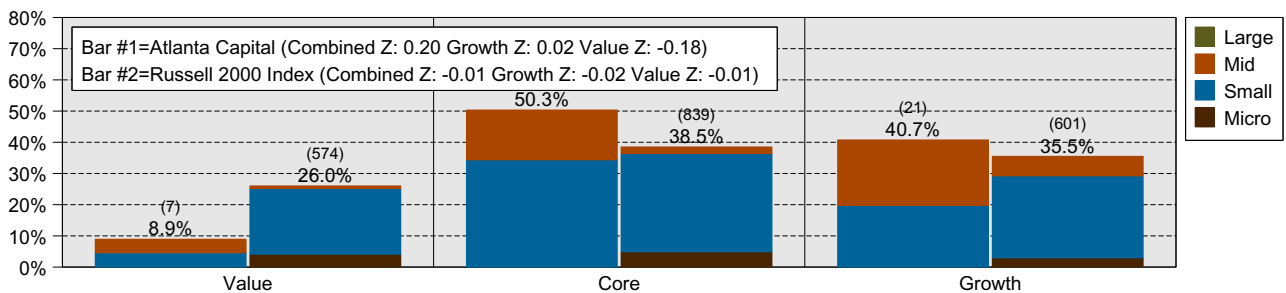
**Style Map vs Callan Small Cap Holdings as of September 30, 2018**



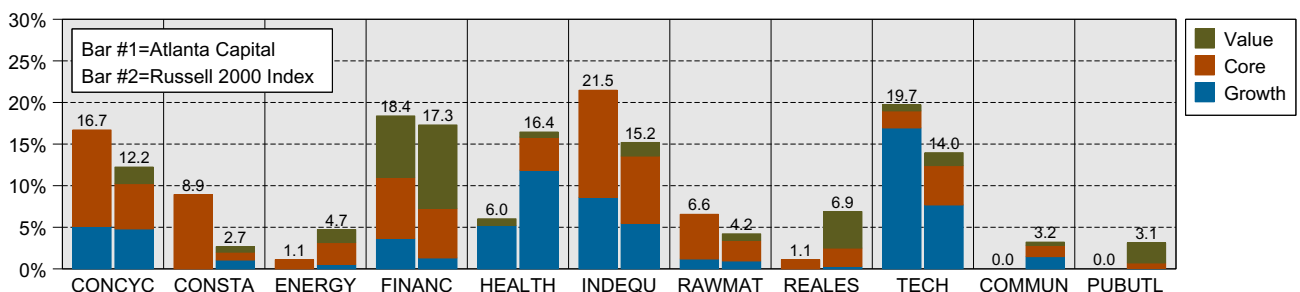
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	4.3% (3)	16.0% (6)	20.9% (10)	41.2% (19)
Small	4.6% (4)	34.4% (24)	19.9% (11)	58.8% (39)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Total</b>	<b>8.9% (7)</b>	<b>50.3% (30)</b>	<b>40.7% (21)</b>	<b>100.0% (58)</b>
	<b>26.0% (574)</b>	<b>38.5% (839)</b>	<b>35.5% (601)</b>	<b>100.0% (2014)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**



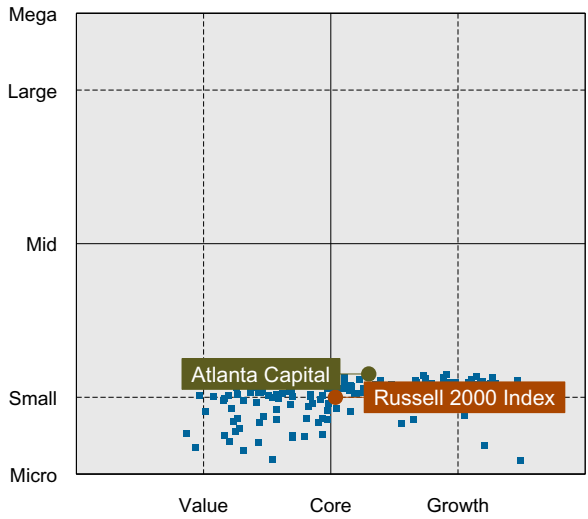
# Historical Holdings Based Style Analysis

## Atlanta Capital

### For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

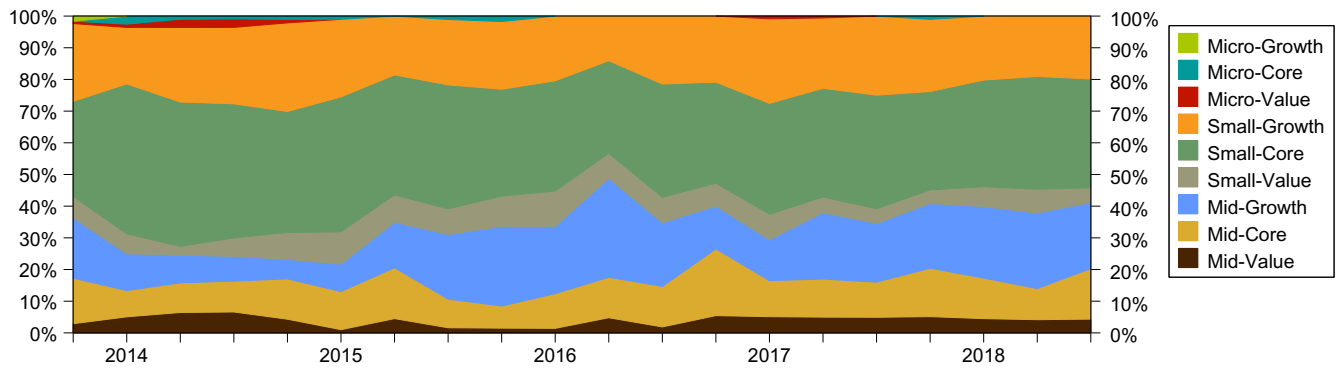
**Average Style Map vs Callan Small Cap Holdings for Five Years Ended September 30, 2018**



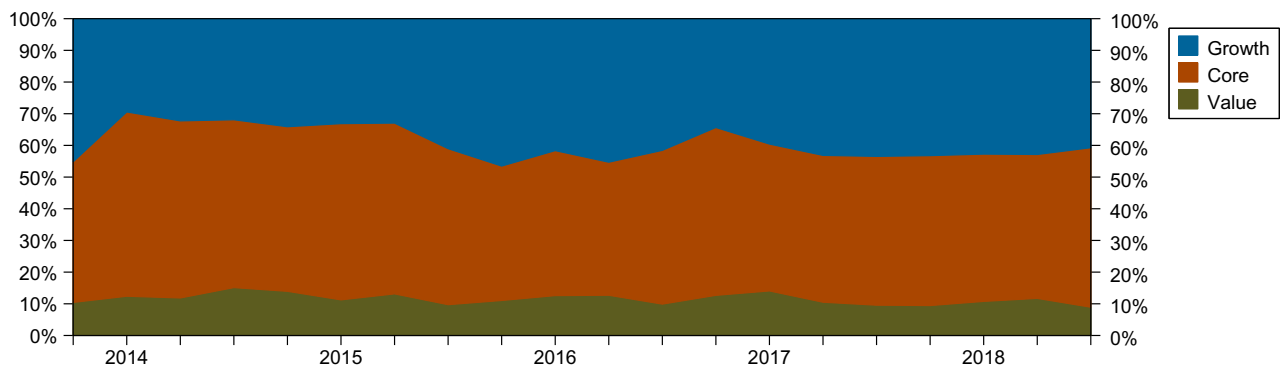
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0% (0)</b>
Large	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0% (0)</b>
Mid	4.0% (3)	12.2% (6)	17.4% (8)	<b>33.6% (17)</b>
Small	7.1% (5)	36.4% (24)	21.8% (12)	<b>65.3% (41)</b>
Micro	0.5% (0)	0.5% (1)	0.1% (0)	<b>1.1% (1)</b>
<b>Total</b>	<b>11.6% (8)</b>	<b>49.2% (31)</b>	<b>39.3% (20)</b>	<b>100.0% (59)</b>
	<b>26.3% (567)</b>	<b>39.9% (817)</b>	<b>33.8% (585)</b>	<b>100.0% (1969)</b>
	Value	Core	Growth	<b>Total</b>

**Atlanta Capital Historical Cap/Style Exposures**



**Atlanta Capital Historical Style Only Exposures**

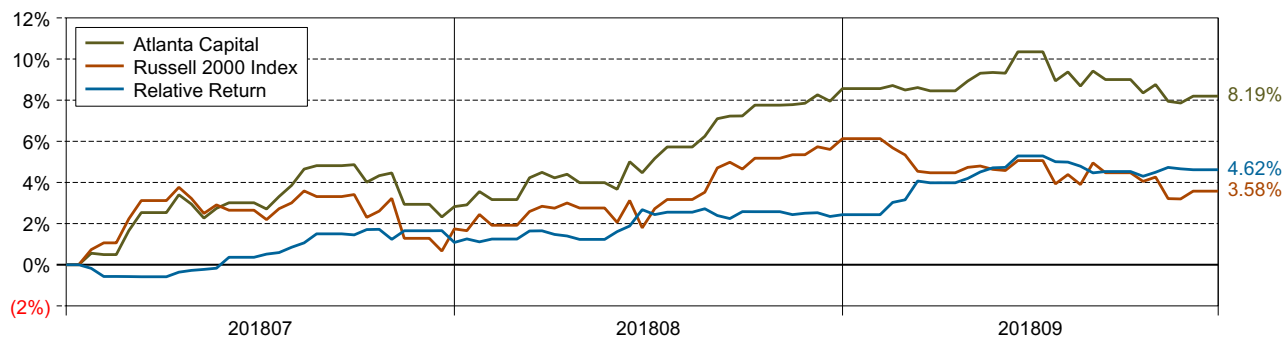


# Atlanta Capital vs Russell 2000 Index Domestic Equity Daily Performance Attribution One Quarter Ended September 30, 2018

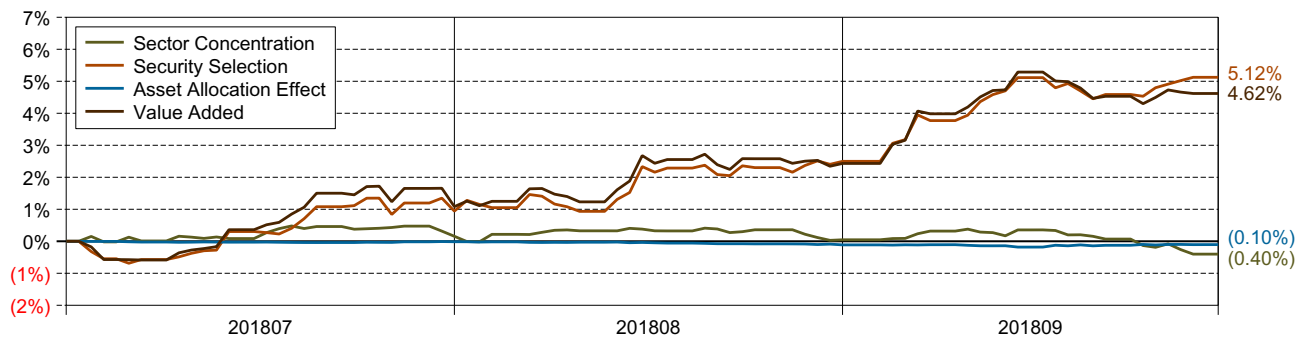
## Return Sources and Timing

The charts below illustrate the timing and cumulative paths of the manager's performance, as well as attributing relative performance to three sources: Sector Concentration, Security Selection, and Asset Allocation. The first chart shows the cumulative absolute return paths for the manager and index. The second chart shows the cumulative relative return path of the manager and the attributed sources of that value-added. The bottom table breaks the annualized attribution factors down to the sector level for more insight into sources of return.

## Cumulative Manager and Benchmark Returns



## Cumulative Attribution Effects vs. Russell 2000 Index



## Attribution Effects by Sector vs. Russell 2000 Index One Quarter Ended September 30, 2018

Sector	Manager Eff Weight	Index Eff Weight	Manager Return	Index Return	Sector Concentration	Security Selection	Asset Allocation
Communication Services	0.00%	1.45%	0.00%	19.04%	(0.28)%	0.00%	-
Consumer Discretionary	16.48%	12.91%	11.96%	3.15%	(0.01)%	1.40%	-
Consumer Staples	8.22%	2.72%	14.46%	(1.82)%	(0.30)%	1.33%	-
Energy	1.12%	4.88%	1.65%	(2.82)%	0.24%	0.05%	-
Financials	18.68%	17.86%	3.97%	0.93%	(0.03)%	0.56%	-
Health Care	6.53%	15.84%	14.74%	7.72%	(0.37)%	0.44%	-
Industrials	20.70%	15.16%	7.09%	4.30%	0.01%	0.61%	-
Information Technology	20.91%	14.68%	4.80%	5.94%	0.13%	(0.23)%	-
Materials	6.30%	4.30%	13.40%	1.10%	(0.05)%	0.76%	-
Real Estate	1.05%	7.11%	17.33%	(0.42)%	0.25%	0.18%	-
Utilities	0.00%	3.10%	0.00%	3.54%	(0.00)%	0.00%	-
Non Equity	2.15%	0.00%	-	-	-	-	(0.10)%
<b>Total</b>	-	-	<b>8.19%</b>	<b>3.58%</b>	<b>(0.40)%</b>	<b>5.12%</b>	<b>(0.10)%</b>

<b>Manager Return</b>	=	<b>Index Return</b>	+	<b>Sector Concentration</b>	+	<b>Security Selection</b>	+	<b>Asset Allocation</b>
8.19%		3.58%		(0.40)%		5.12%		(0.10)%

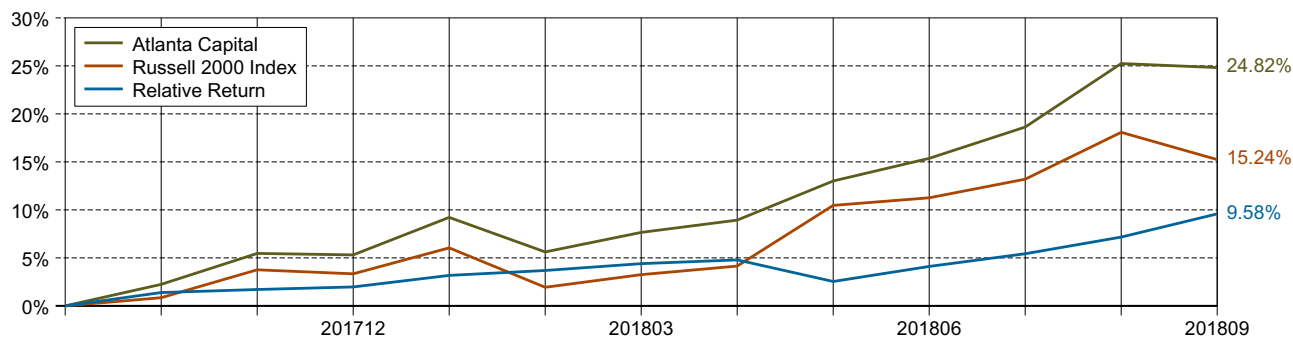


# Atlanta Capital vs Russell 2000 Index Domestic Equity Daily Performance Attribution One Year Ended September 30, 2018

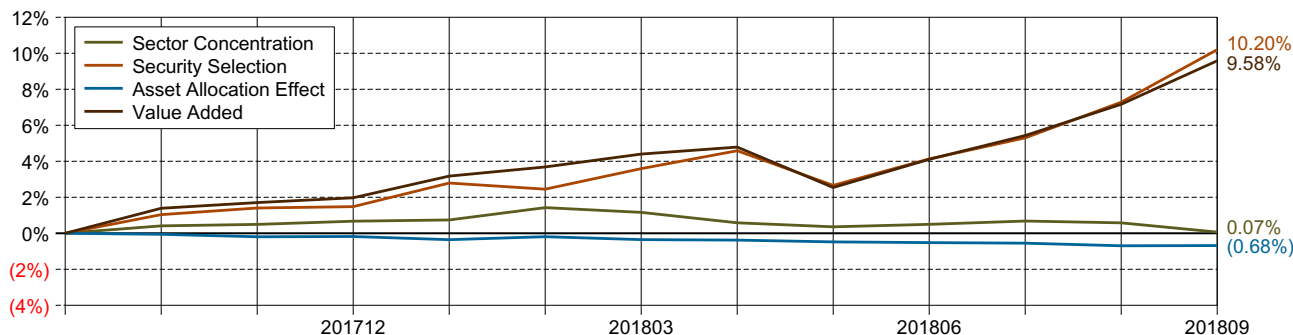
## Return Sources and Timing

The charts below illustrate the timing and cumulative paths of the manager's performance, as well as attributing relative performance to three sources: Sector Concentration, Security Selection, and Asset Allocation. The first chart shows the cumulative absolute return paths for the manager and index. The second chart shows the cumulative relative return path of the manager and the attributed sources of that value-added. The bottom table breaks the annualized attribution factors down to the sector level for more insight into sources of return.

## Cumulative Manager and Benchmark Returns



## Cumulative Attribution Effects vs. Russell 2000 Index



## Attribution Effects by Sector vs. Russell 2000 Index One Year Ended September 30, 2018

Sector	Manager Eff Weight	Index Eff Weight	Manager Return	Index Return	Sector Concentration	Security Selection	Asset Allocation
Communication Services	0.00%	0.91%	0.00%	21.41%	(0.21)%	0.00%	-
Consumer Discretionary	16.19%	12.37%	34.38%	18.44%	0.15%	2.43%	-
Consumer Staples	7.78%	2.60%	31.97%	11.74%	(0.13)%	1.61%	-
Energy	1.02%	4.13%	18.35%	9.92%	0.20%	0.09%	-
Financials	18.49%	18.01%	16.39%	7.81%	(0.06)%	1.69%	-
Health Care	6.68%	15.88%	40.73%	29.29%	(1.27)%	0.67%	-
Industrials	20.01%	15.13%	20.23%	12.38%	(0.07)%	1.59%	-
Information Technology	22.76%	16.51%	27.72%	22.41%	0.49%	1.09%	-
Materials	6.05%	4.41%	20.75%	5.58%	(0.14)%	1.00%	-
Real Estate	1.03%	6.71%	2.49%	2.79%	0.76%	0.02%	-
Utilities	0.00%	3.34%	0.00%	6.03%	0.34%	0.00%	-
Non Equity	2.96%	0.00%	-	-	-	-	(0.68)%
Total	-	-	24.82%	15.24%	0.07%	10.20%	(0.68)%

<b>Manager Return</b>	=	<b>Index Return</b>	+	<b>Sector Concentration</b>	+	<b>Security Selection</b>	+	<b>Asset Allocation</b>
24.82%		15.24%		0.07%		10.20%		(0.68)%

## Atlanta Capital vs Russell 2000 Index Domestic Equity Top 10 Contribution Holdings One Quarter Ended September 30, 2018

### Manager Holdings with Largest (+ or -) Contribution to Performance

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Bio-Techne Corp	Health Care	2.34%	92	-	38.23%	-	0.83%	0.73%
Manhattan Associates	Information Technology	3.56%	92	-	16.09%	-	0.60%	0.46%
Fair Isaac Corp	Information Technology	3.05%	92	-	18.23%	-	0.55%	0.42%
Inter Parfums Inc	Consumer Staples	2.36%	92	0.05%	20.94%	20.86%	0.51%	0.39%
Caseys General Stores	Consumer Staples	2.30%	92	-	23.14%	-	0.50%	0.41%
Aptargroup Inc	Materials	3.07%	92	-	15.76%	-	0.46%	0.34%
Forward Air Corp	Industrials	1.90%	92	0.08%	21.64%	21.65%	0.38%	0.29%
Navigators Group Inc	Financials	1.74%	92	0.06%	21.31%	21.35%	0.37%	0.29%
Beacon Roofing Supply Inc	Industrials	2.30%	92	0.12%	(15.14)%	(15.09)%	(0.37)%	(0.43)%
Exponent Inc	Industrials	2.86%	92	0.11%	11.14%	11.24%	0.31%	0.18%

### Index Holdings with Largest (+ or -) Contribution to Performance

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Index Perf	Contrib Excess Return
Integrated Device Tech	Information Technology	-	-	0.21%	-	47.46%	0.09%	(0.08)%
Teladoc Health Inc	Health Care	-	-	0.19%	-	48.75%	0.08%	(0.08)%
The Trade Desk Inc Com Cl A	Information Technology	-	-	0.15%	-	60.88%	0.08%	(0.08)%
Five Below Inc	Consumer Discretionary	-	-	0.25%	-	33.11%	0.08%	(0.07)%
Endo Intl Plc Shs	Health Care	-	-	0.13%	-	78.47%	0.08%	(0.07)%
Axiom Holdings Inc	Information Technology	-	-	0.14%	-	64.97%	0.07%	(0.06)%
Novocure	Health Care	-	-	0.12%	-	67.41%	0.07%	(0.06)%
Ligand Pharmaceuticals Inc	Health Care	-	-	0.21%	-	32.50%	0.06%	(0.06)%
Haemonetics Corp Mass	Health Care	-	-	0.24%	-	27.77%	0.06%	(0.05)%
Roku Inc Com Cl A	Consumer Discretionary	-	-	0.09%	-	71.35%	0.06%	(0.06)%

### Positions with Largest Positive Contribution to Excess Return

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Bio-Techne Corp	Health Care	2.34%	92	-	38.23%	-	0.83%	0.73%
Manhattan Associates	Information Technology	3.56%	92	-	16.09%	-	0.60%	0.46%
Fair Isaac Corp	Information Technology	3.05%	92	-	18.23%	-	0.55%	0.42%
Caseys General Stores	Consumer Staples	2.30%	92	-	23.14%	-	0.50%	0.41%
Inter Parfums Inc	Consumer Staples	2.36%	92	0.05%	20.94%	20.86%	0.51%	0.39%
Aptargroup Inc	Materials	3.07%	92	-	15.76%	-	0.46%	0.34%
Navigators Group Inc	Financials	1.74%	92	0.06%	21.31%	21.35%	0.37%	0.29%
Forward Air Corp	Industrials	1.90%	92	0.08%	21.64%	21.65%	0.38%	0.29%
Sonic Corp	Consumer Discretionary	1.26%	92	0.06%	26.70%	26.52%	0.27%	0.21%
Monro Inc	Consumer Discretionary	1.29%	92	0.09%	19.87%	20.13%	0.27%	0.19%

### Positions with Largest Negative Contribution to Excess Return

Issue	Sector	Manager Eff Wt	Days Held	Index Eff Wt	Manager Return	Index Return	Contrib Manager Perf	Contrib Excess Return
Beacon Roofing Supply Inc	Industrials	2.30%	92	0.12%	(15.14)%	(15.09)%	(0.37)%	(0.43)%
Corelogic Inc	Information Technology	3.24%	92	-	(4.83)%	-	(0.16)%	(0.28)%
State Bk Finl Corp	Financials	1.74%	92	0.05%	(9.09)%	(9.09)%	(0.16)%	(0.22)%
Power Integrations Inc	Information Technology	1.20%	92	0.09%	(13.29)%	(13.29)%	(0.16)%	(0.18)%
Umpqua Hldgs Corp	Financials	1.21%	92	-	(6.85)%	-	(0.09)%	(0.13)%
Kirby Corp	Industrials	2.42%	92	-	(1.66)%	-	(0.04)%	(0.12)%
Blackbaud Inc	Information Technology	3.05%	92	0.22%	(0.81)%	(0.83)%	(0.02)%	(0.12)%
Morningstar Inc	Financials	2.94%	92	-	(1.67)%	-	0.00%	(0.12)%
Icu Med Inc	Health Care	1.58%	92	-	(3.71)%	-	(0.05)%	(0.11)%
South St Corp	Financials	1.52%	92	0.14%	(4.00)%	(4.53)%	(0.07)%	(0.10)%



# International Equity Period Ended September 30, 2018

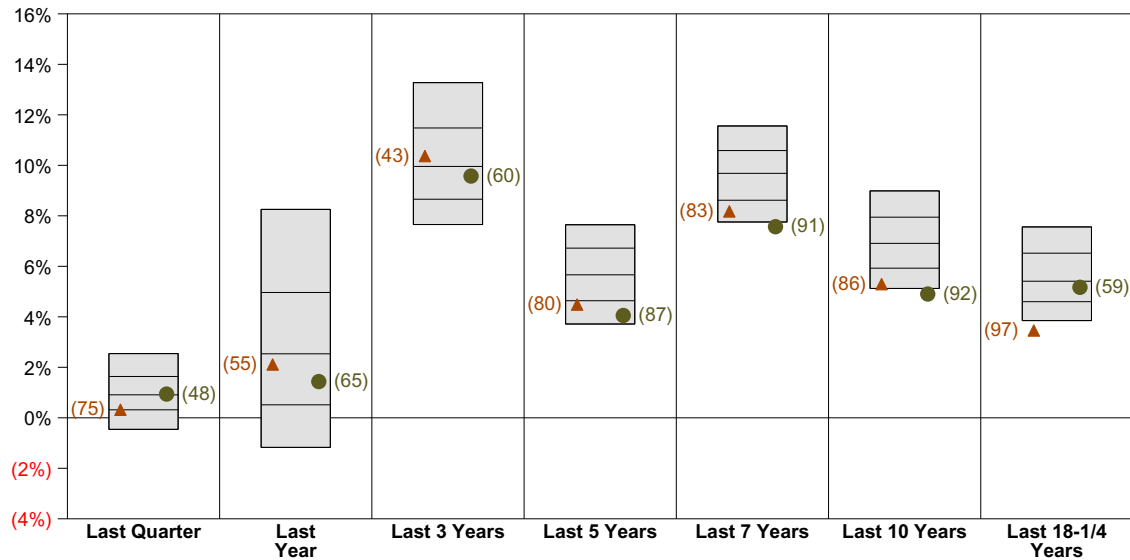
## Investment Philosophy

International Benchmark = MSCI EAFE until 6/30/2013, 78.26% MSCI EAFE + 21.74% MSCI EM until 4/30/2015, 76% MSCI EAFE + 24% MSCI EM until 7/31/2016, and 56% MSCI EAFE + 24% MSCI EM + 20% MSCI EAFE Small Cap thereafter.

## Quarterly Summary and Highlights

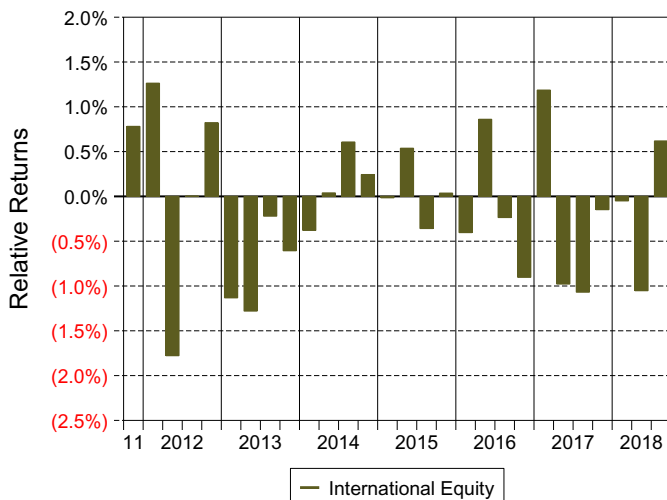
- International Equity's portfolio posted a 0.94% return for the quarter placing it in the 48 percentile of the Callan Non-US Equity group for the quarter and in the 65 percentile for the last year.
- International Equity's portfolio outperformed the International Benchmark by 0.62% for the quarter and underperformed the International Benchmark for the year by 0.68%.

## Performance vs Callan Non-US Equity (Gross)

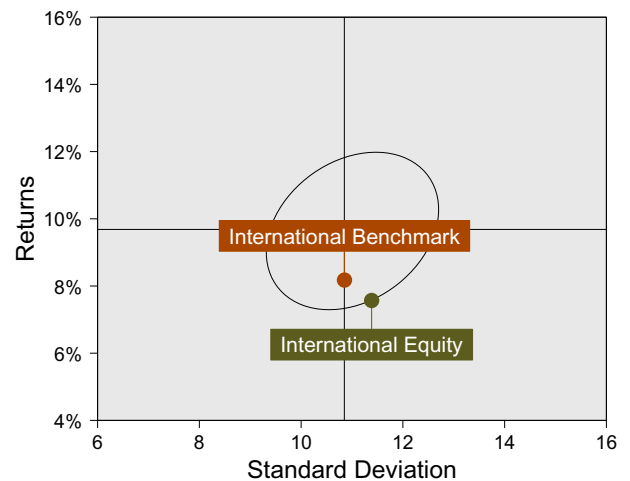


10th Percentile	2.54	8.26	13.27	7.65	11.56	8.99	7.56
25th Percentile	1.64	4.96	11.48	6.72	10.58	7.95	6.52
Median	0.91	2.53	9.96	5.66	9.68	6.91	5.41
75th Percentile	0.32	0.51	8.66	4.64	8.62	5.93	4.60
90th Percentile	(0.46)	(1.17)	7.65	3.71	7.76	5.12	3.85
<b>International Equity</b> ●	0.94	1.44	9.57	4.05	7.57	4.90	5.17
International Benchmark ▲	0.32	2.11	10.37	4.49	8.18	5.29	3.46

Relative Return vs International Benchmark



Callan Non-US Equity (Gross)  
Annualized Seven Year Risk vs Return

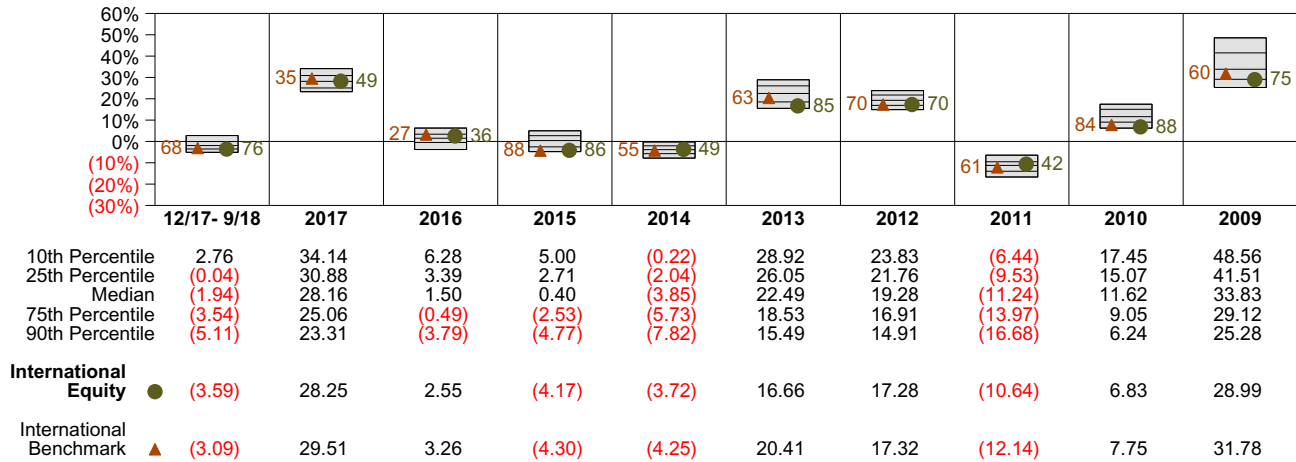


# International Equity Return Analysis Summary

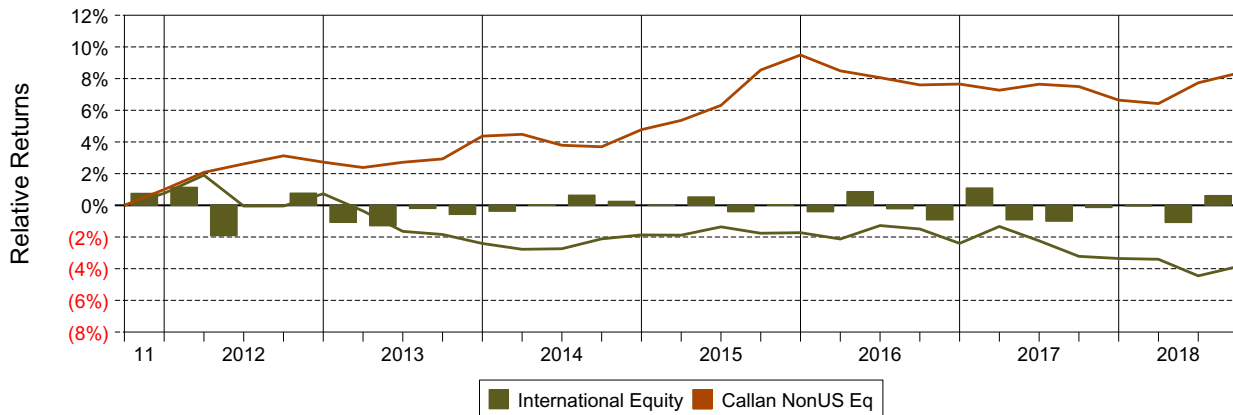
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

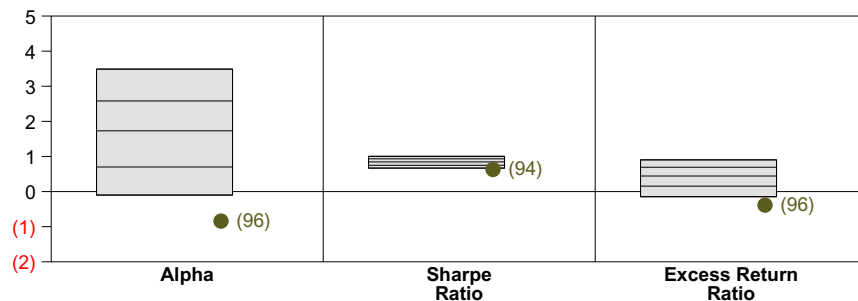
### Performance vs Callan Non-US Equity (Gross)



### Cumulative and Quarterly Relative Return vs International Benchmark



### Risk Adjusted Return Measures vs International Benchmark Rankings Against Callan Non-US Equity (Gross) Seven Years Ended September 30, 2018

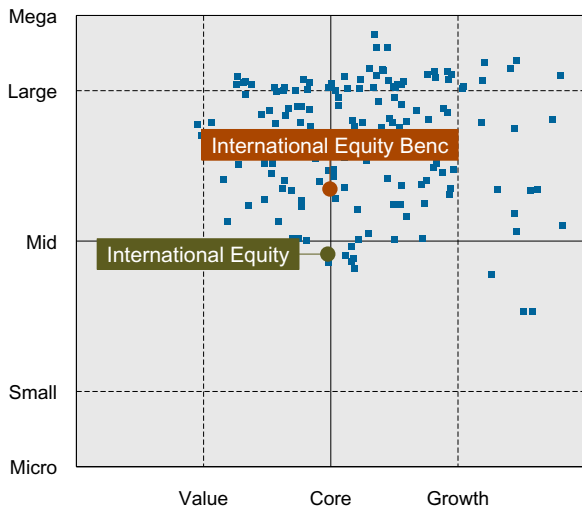


	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	3.49	1.00	0.90
25th Percentile	2.58	0.93	0.69
Median	1.73	0.85	0.44
75th Percentile	0.70	0.75	0.15
90th Percentile	(0.10)	0.67	(0.15)
<b>International Equity</b>	● (0.84)	0.63	(0.39)

# Current Holdings Based Style Analysis International Equity As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

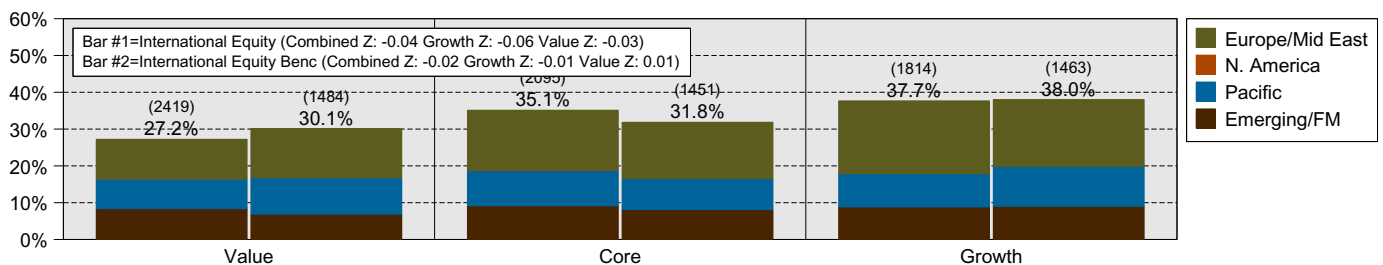
**Style Map vs Callan NonUS Eq Holdings as of September 30, 2018**



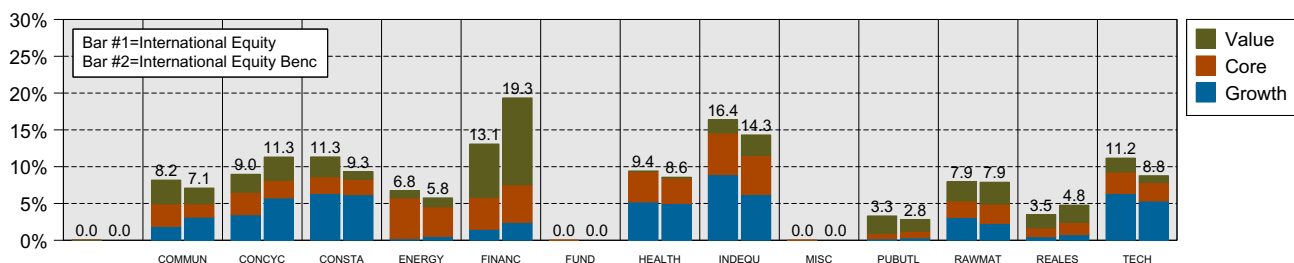
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	10.7% (236)	16.3% (257)	19.8% (265)	46.8% (758)
N. America	0.0% (3)	0.0% (7)	0.0% (0)	0.0% (10)
Pacific	8.1% (310)	9.7% (273)	9.0% (295)	26.8% (878)
Emerging/ FM	8.4% (1870)	9.2% (1558)	8.8% (1254)	26.4% (4682)
<b>Total</b>	<b>27.2% (2419)</b>	<b>35.1% (2095)</b>	<b>37.7% (1814)</b>	<b>100.0% (6328)</b>
	<b>30.1% (1484)</b>	<b>31.8% (1451)</b>	<b>38.0% (1463)</b>	<b>100.0% (4398)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



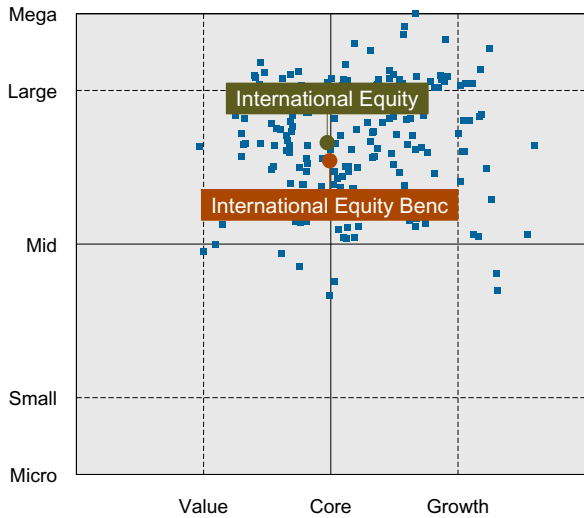
**Sector Weights Distribution Holdings as of September 30, 2018**



# Historical Holdings Based Style Analysis International Equity For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

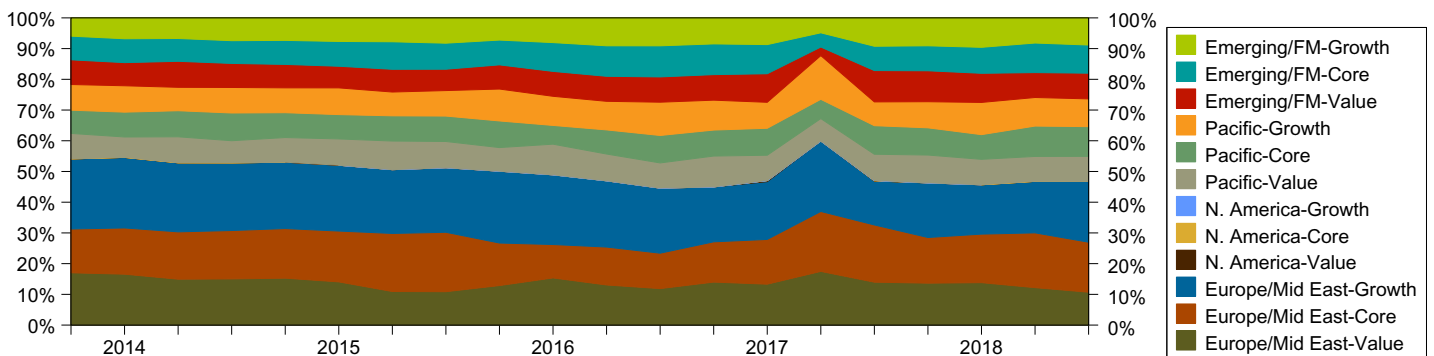
**Average Style Map vs Callan NonUS Eq Holdings for Five Years Ended September 30, 2018**



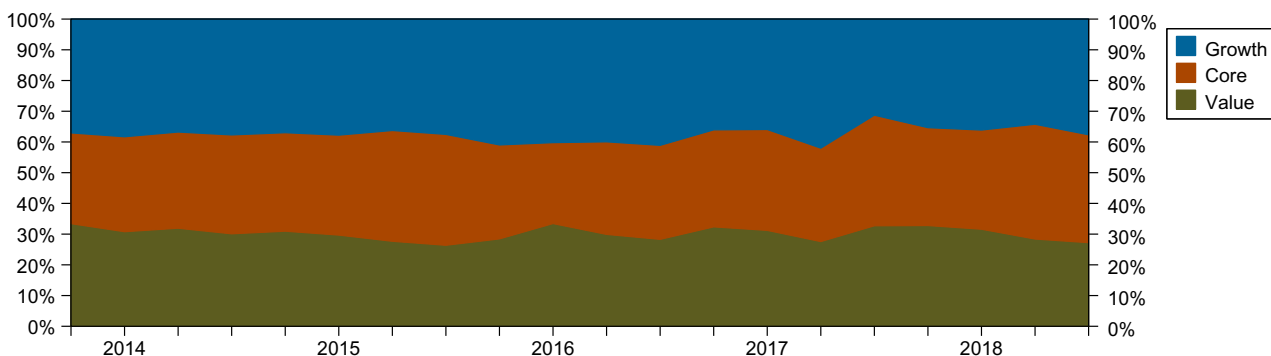
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

Europe/ Mid East	13.8% (174)	15.5% (192)	20.4% (237)	49.8% (603)
	14.8% (263)	15.1% (307)	19.2% (342)	49.2% (912)
N. America	0.0% (2)	0.0% (4)	0.0% (1)	0.0% (7)
	0.0% (1)	0.0% (0)	0.0% (0)	0.0% (1)
Pacific	8.4% (217)	8.3% (222)	9.2% (221)	25.8% (660)
	9.1% (340)	9.0% (338)	9.7% (343)	27.7% (1021)
Emerging/ FM	8.0% (1474)	8.4% (1469)	7.9% (927)	24.3% (3870)
	7.5% (303)	7.3% (266)	8.3% (285)	23.1% (854)
<b>Total</b>	<b>30.2% (1867)</b>	<b>32.3% (1887)</b>	<b>37.5% (1386)</b>	<b>100.0% (5140)</b>
	<b>31.4% (907)</b>	<b>31.4% (911)</b>	<b>37.2% (970)</b>	<b>100.0% (2788)</b>
	Value	Core	Growth	Total

**International Equity Historical Region/Style Exposures**



**International Equity Historical Style Only Exposures**



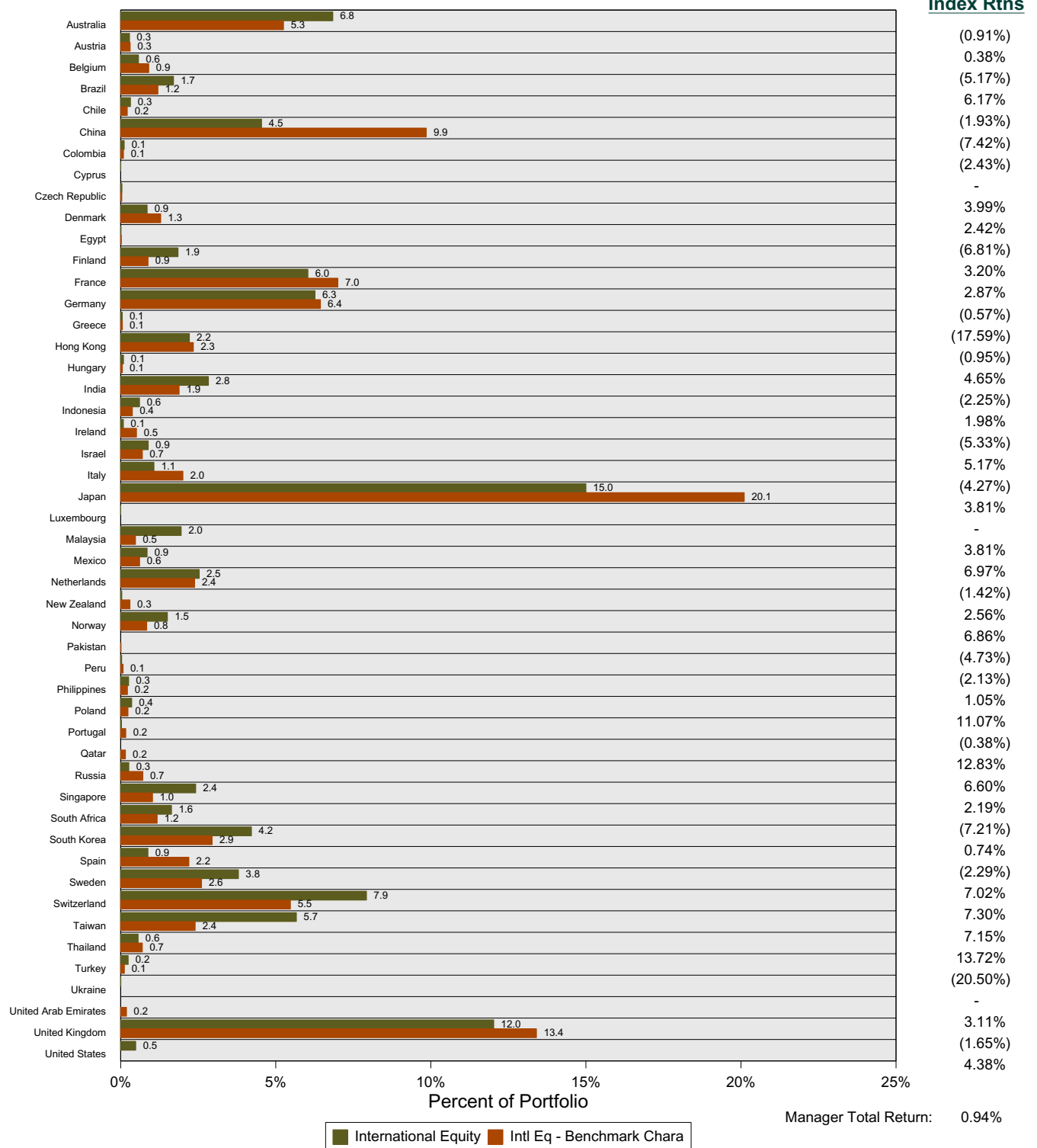
# Country Allocation

## International Equity VS Intl Eq - Benchmark Characteristics

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2018. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2018





# SSgA EAFE

## Period Ended September 30, 2018

### Investment Philosophy

SSGA's objective is to provide the most cost-effective implementation of passive investing with stringent risk control and tracking requirements through a replication method. Returns prior to 6/30/2012 are linked to a composite history.

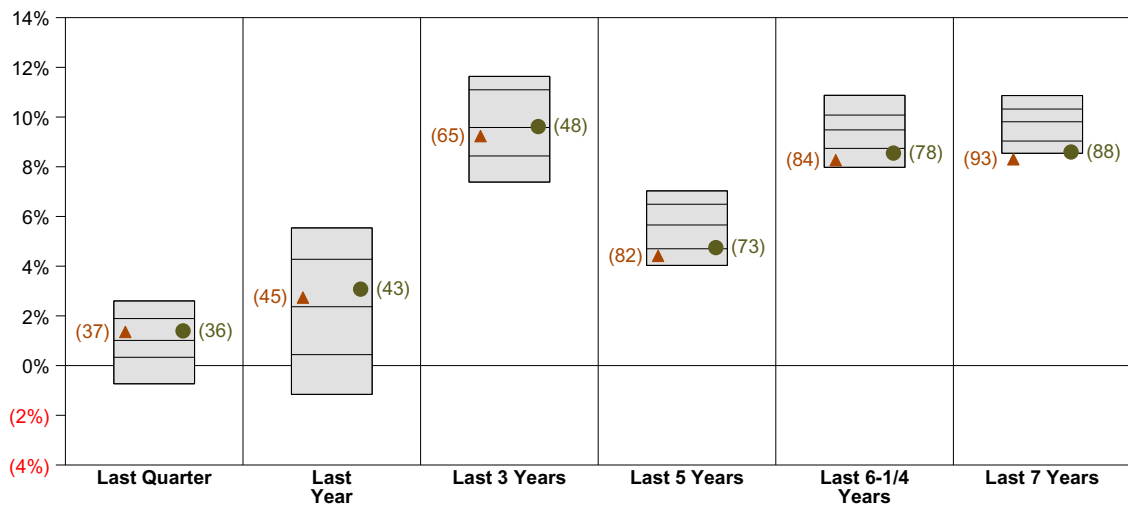
### Quarterly Summary and Highlights

- SSgA EAFE's portfolio posted a 1.40% return for the quarter placing it in the 36 percentile of the Callan Non-US Developed Core Equity group for the quarter and in the 43 percentile for the last year.
- SSgA EAFE's portfolio outperformed the MSCI EAFE Index by 0.04% for the quarter and outperformed the MSCI EAFE Index for the year by 0.34%.

### Quarterly Asset Growth

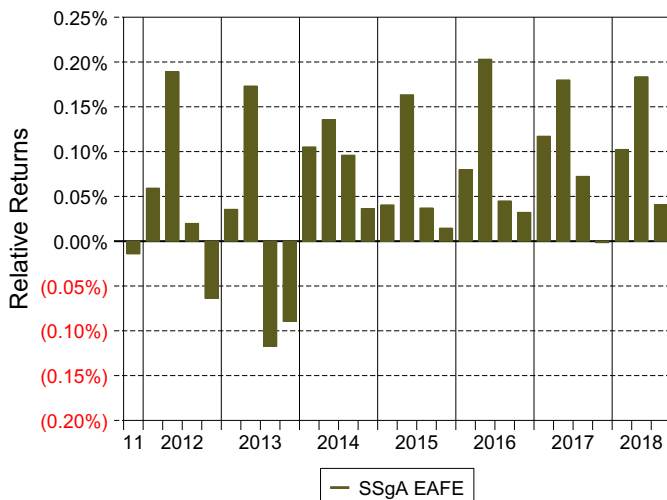
Beginning Market Value	\$11,240,964
Net New Investment	\$0
Investment Gains/(Losses)	\$156,888
Ending Market Value	\$11,397,852

### Performance vs Callan Non-US Developed Core Equity (Gross)

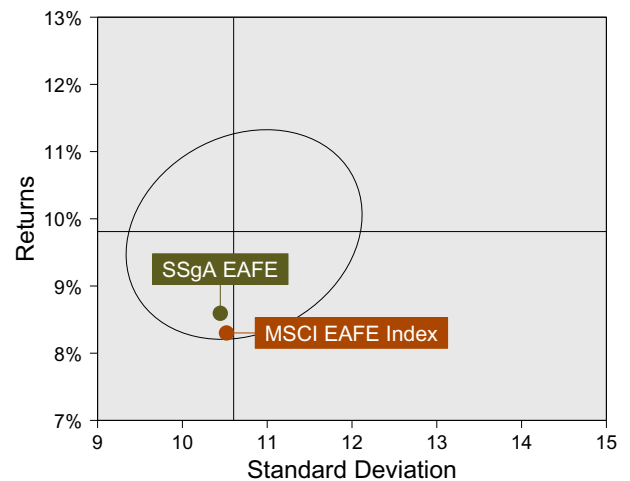


10th Percentile	2.60	5.54	11.64	7.03	10.87	10.86
25th Percentile	1.89	4.28	11.10	6.49	10.08	10.32
Median	1.01	2.37	9.58	5.66	9.48	9.81
75th Percentile	0.33	0.44	8.44	4.70	8.74	9.03
90th Percentile	(0.73)	(1.16)	7.38	4.03	7.98	8.54
<b>SSgA EAFE</b> ●	1.40	3.07	9.62	4.75	8.55	8.59
MSCI EAFE Index ▲	1.35	2.74	9.23	4.42	8.26	8.30

### Relative Return vs MSCI EAFE Index



### Callan Non-US Developed Core Equity (Gross) Annualized Seven Year Risk vs Return

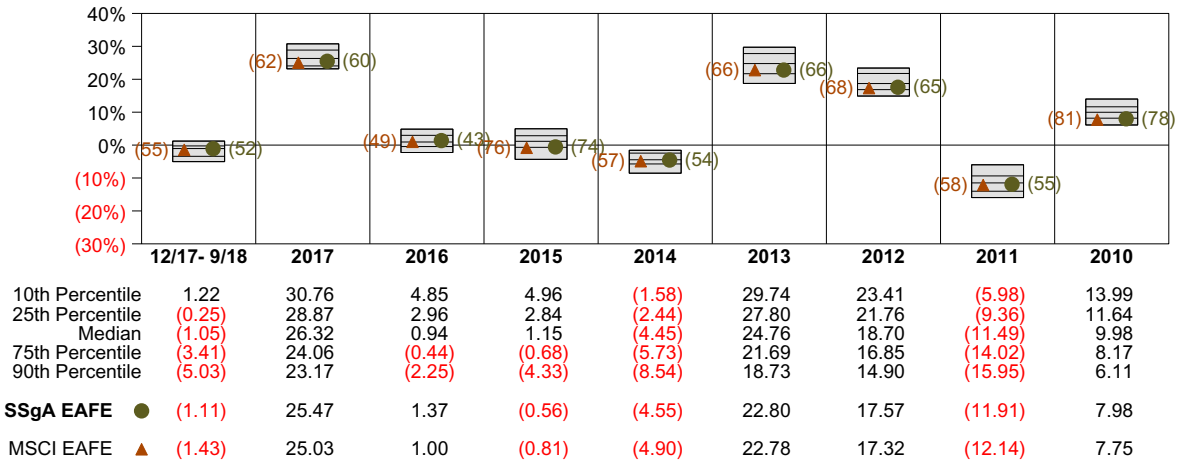


# SSgA EAFE Return Analysis Summary

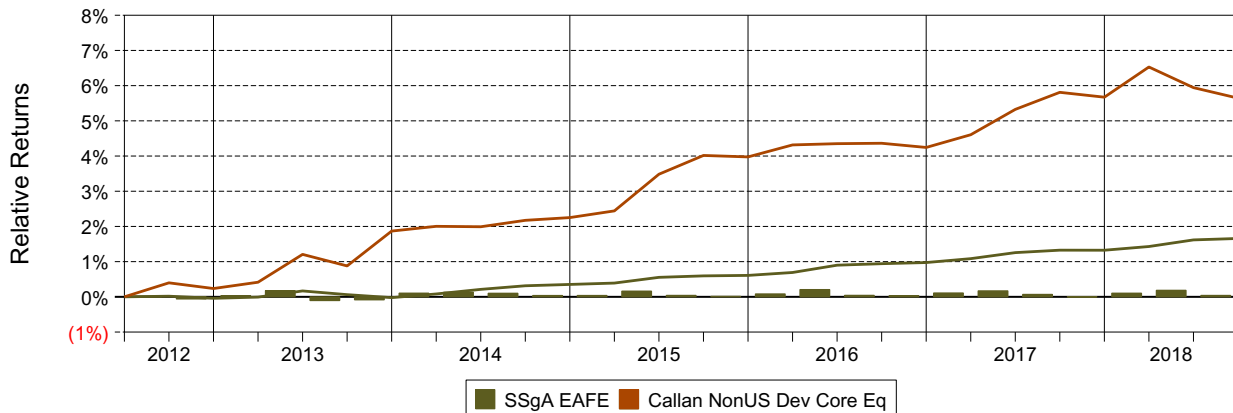
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

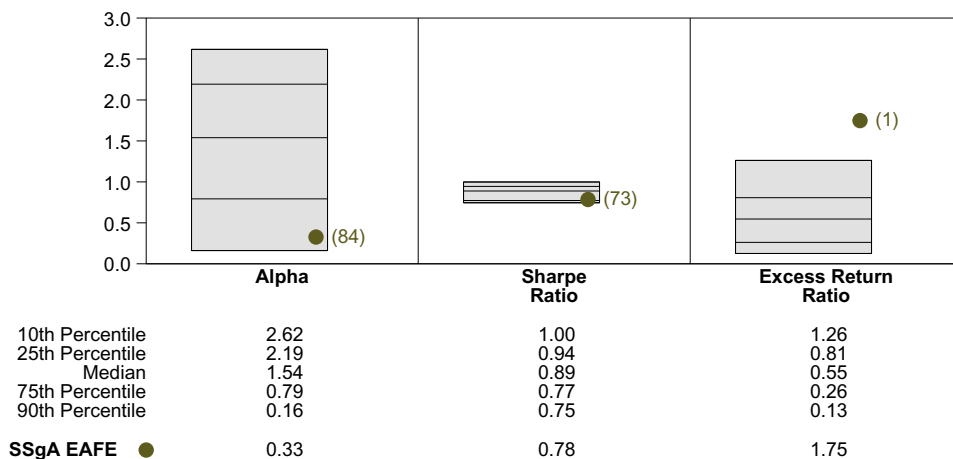
### Performance vs Callan Non-US Developed Core Equity (Gross)



### Cumulative and Quarterly Relative Return vs MSCI EAFE



### Risk Adjusted Return Measures vs MSCI EAFE Rankings Against Callan Non-US Developed Core Equity (Gross) Seven Years Ended September 30, 2018

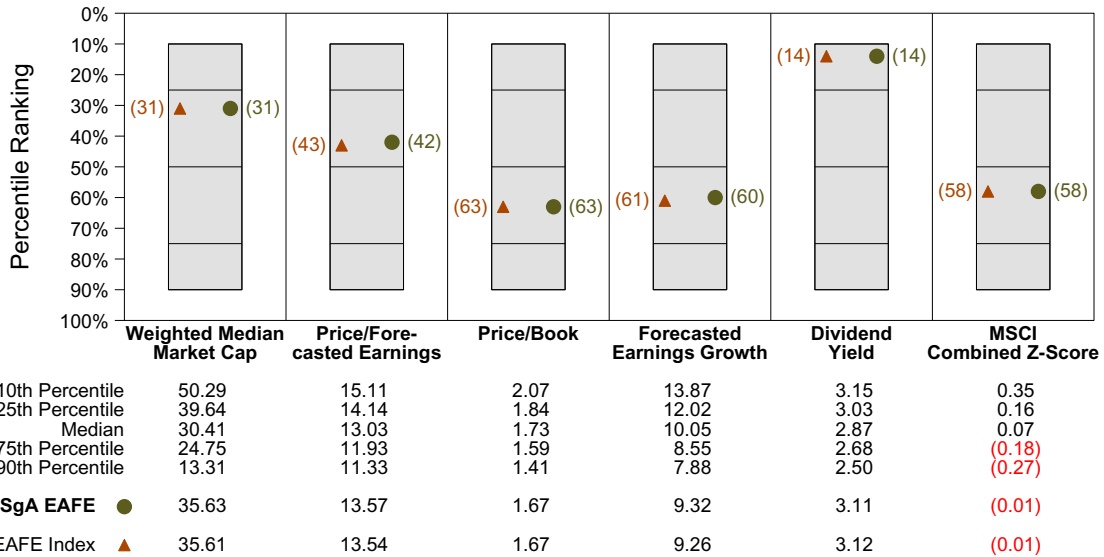


# SSgA EAFE Equity Characteristics Analysis Summary

## Portfolio Characteristics

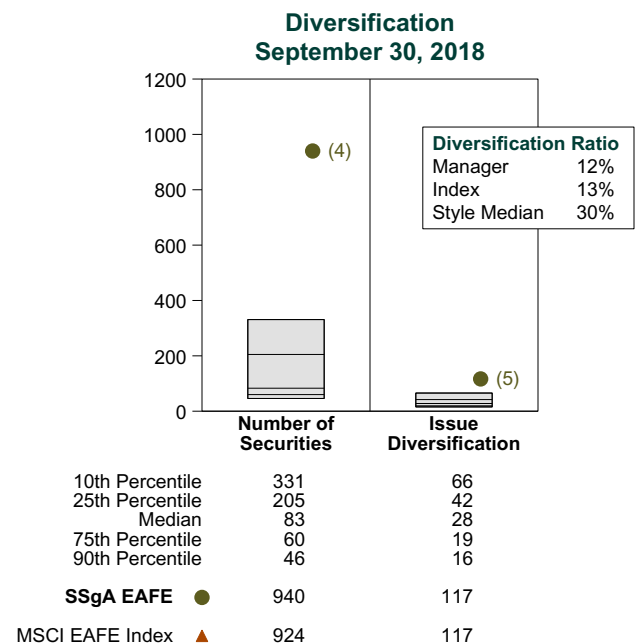
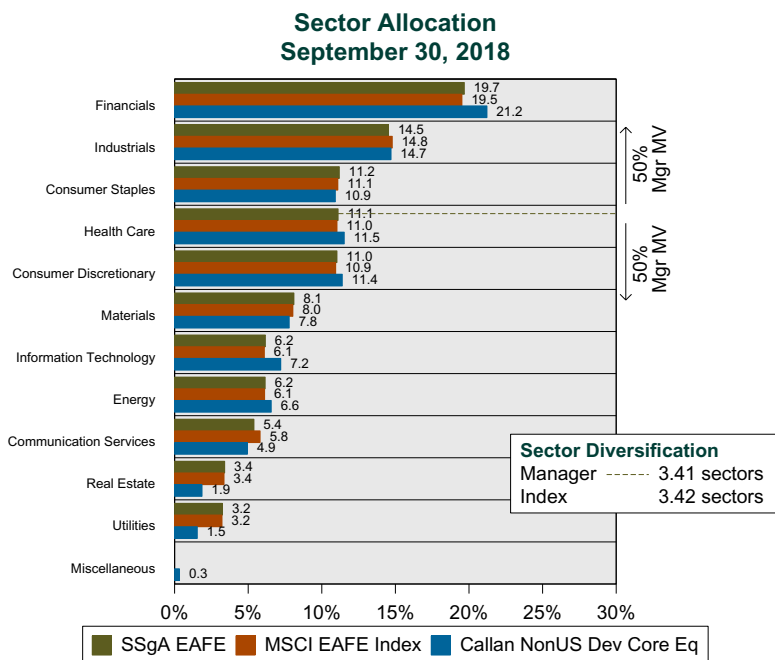
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Core Equity as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



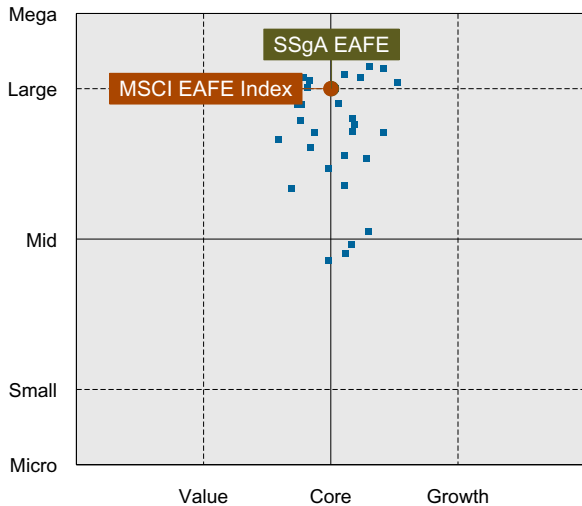
# Current Holdings Based Style Analysis

## SSgA EAFE

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

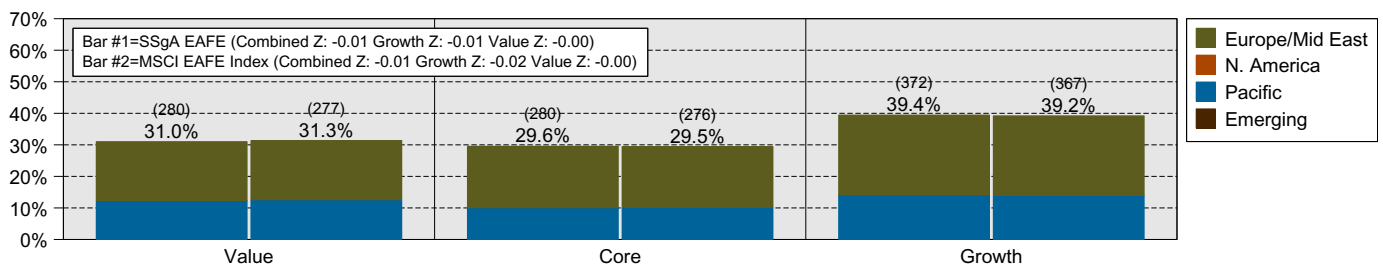
**Style Map vs Callan NonUS Dev Core Eq Holdings as of September 30, 2018**



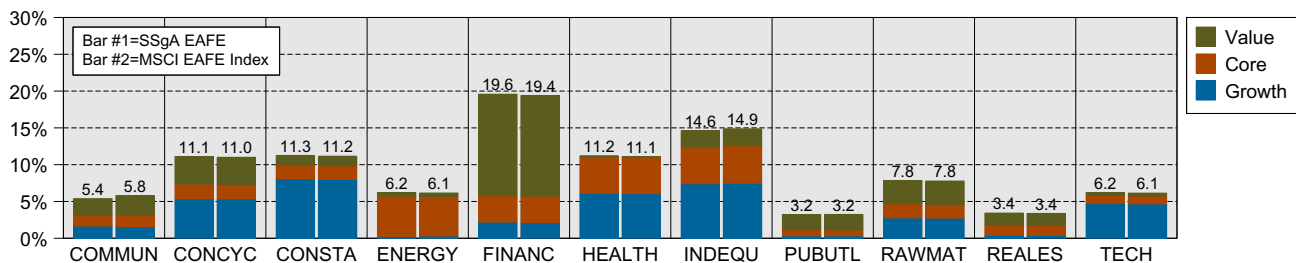
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	18.7% (133)	19.5% (133)	25.2% (192)	63.4% (458)
N. America	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	12.3% (147)	10.1% (147)	14.2% (180)	36.6% (474)
Emerging	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Total</b>	<b>31.0% (280)</b>	<b>29.6% (280)</b>	<b>39.4% (372)</b>	<b>100.0% (932)</b>
	<b>31.3% (277)</b>	<b>29.5% (276)</b>	<b>39.2% (367)</b>	<b>100.0% (920)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**

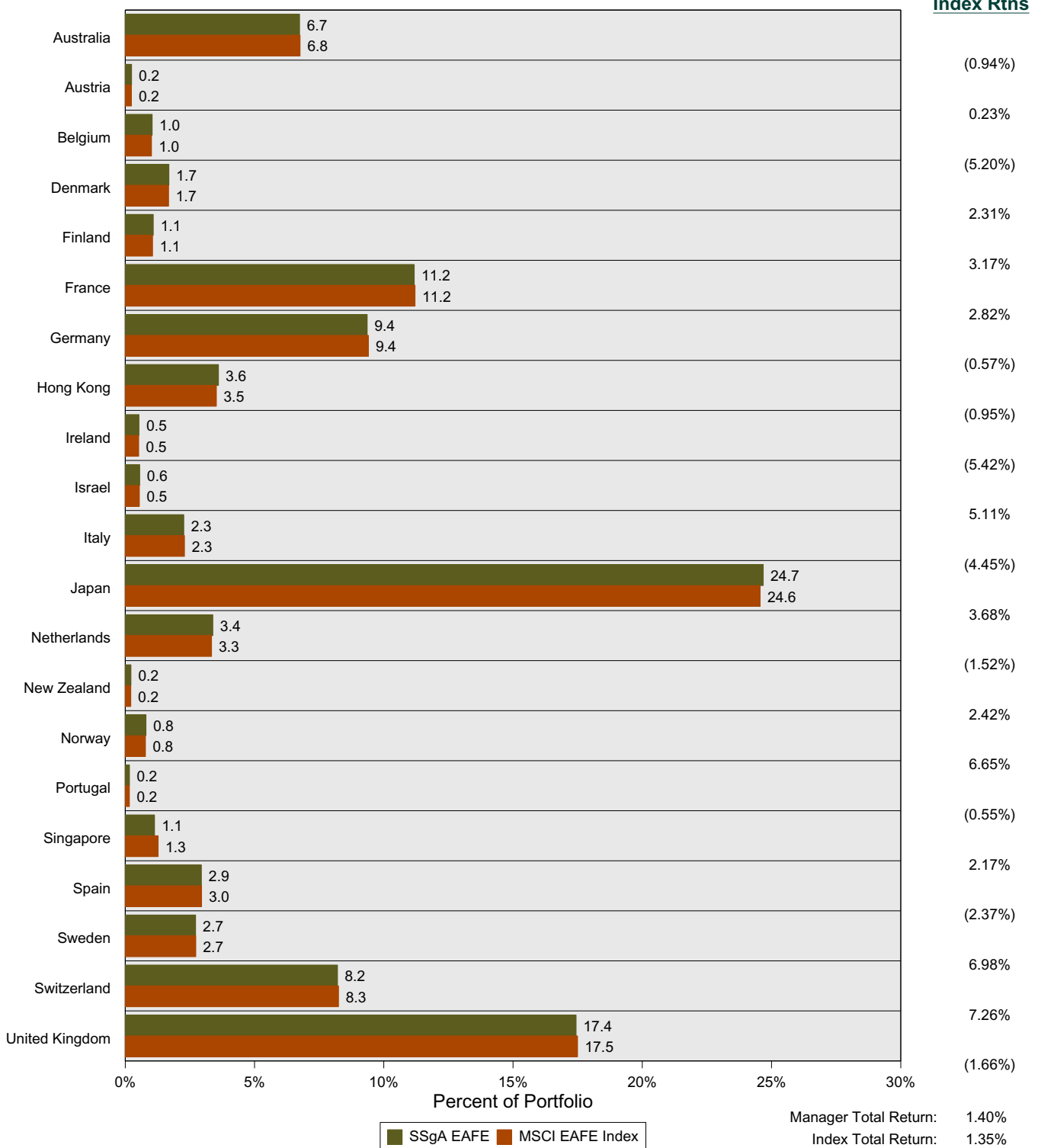


## Country Allocation SSgA EAFE VS MSCI EAFE Index

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2018. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of September 30, 2018



## SSgA EAFE Top 10 Portfolio Holdings Characteristics as of September 30, 2018

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Nestle S A Shs Nom New	Consumer Staples	\$204,742	1.8%	8.16%	256.57	20.07	2.87%	9.51%
Novartis	Health Care	\$147,128	1.3%	13.97%	220.38	15.81	3.32%	8.30%
Hsbc Holdings (Gb)	Financials	\$137,750	1.2%	(5.87)%	174.06	11.55	5.85%	6.90%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$134,305	1.2%	9.59%	171.00	13.63	3.49%	5.21%
Royal Dutch Shell A Shs	Energy	\$124,325	1.1%	0.23%	156.69	11.13	5.36%	15.30%
Total Sa Act	Energy	\$122,112	1.1%	7.62%	172.80	10.94	4.51%	18.99%
Bp Plc Shs	Energy	\$120,592	1.1%	2.07%	154.14	12.49	5.07%	36.36%
Toyota Motor Corp	Consumer Discretionary	\$113,137	1.0%	(3.51)%	203.82	8.82	3.10%	4.52%
Royal Dutch Shell 'b' Shs	Energy	\$103,310	0.9%	(0.75)%	131.34	11.14	5.23%	30.50%
Sap Se Shs	Information Technology	\$94,992	0.8%	6.59%	151.33	22.28	1.32%	7.60%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Sp Telecom.	Communication Services	\$1,794	0.0%	61.76%	5.73	23.86	0.47%	(24.14)%
Idemitsu Kosan Co Ltd Shs	Energy	\$5,681	0.0%	49.12%	11.01	8.75	1.33%	38.59%
Showa Shell Sekiyu Oil Ltd Ord	Energy	\$3,175	0.0%	41.99%	7.99	12.05	1.74%	0.04%
Softbank Corp Ord	Communication Services	\$66,108	0.6%	40.59%	111.15	10.50	0.38%	(9.51)%
Orion Corp New Shs B	Health Care	\$3,191	0.0%	40.53%	3.95	20.59	4.45%	4.00%
Eisai Co	Health Care	\$19,470	0.2%	39.11%	28.88	57.11	1.36%	13.85%
Yangzijiang Shipbu	Industrials	\$1,704	0.0%	36.74%	3.61	9.56	3.63%	(7.69)%
Infogenie Europe Nm	Information Technology	\$19,984	0.2%	35.83%	26.84	50.02	0.10%	34.10%
Israel Chemicals Ltd Shs	Materials	\$3,478	0.0%	34.50%	7.82	14.20	2.98%	(7.50)%
Lonza Group Ag Zuerich Namen Akt	Health Care	\$20,059	0.2%	29.24%	25.54	24.81	0.82%	11.06%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Li & Fung Ltd Ord New	Consumer Discretionary	\$1,070	0.0%	(38.23)%	1.90	9.74	2.86%	(18.99)%
Renesas Electronics Corp Shs	Information Technology	\$4,106	0.0%	(33.33)%	10.43	15.17	0.00%	15.00%
Coca-Cola Bottlers Japan Inc Shs	Consumer Staples	\$2,825	0.0%	(33.06)%	5.52	25.20	1.55%	(2.79)%
Cyberdyne	Health Care	\$697	0.0%	(32.79)%	1.08	(1580.00)	0.00%	-
Mgm China Holdings Ltd	Consumer Discretionary	\$1,215	0.0%	(31.39)%	6.02	14.41	1.30%	22.11%
Zalando	Consumer Discretionary	\$3,410	0.0%	(30.49)%	9.76	67.87	0.00%	28.00%
Shinohara Sy.of Con.	Real Estate	\$1	0.0%	(30.36)%	0.39	3.60	2.18%	15.97%
Atlantia Spa Shs	Industrials	\$8,022	0.1%	(29.79)%	17.14	11.40	6.83%	5.80%
Premium Land Ltd.	Consumer Discretionary	\$1	0.0%	(28.57)%	0.27	(8.56)	0.00%	-
Fresnillo	Materials	\$1,851	0.0%	(28.47)%	7.89	16.71	3.78%	6.70%

# Pyrford

## Period Ended September 30, 2018

### Investment Philosophy

Pyrford's investment strategy is based on a value-driven, absolute return approach, with both top-down and bottom-up elements. At the country level they seek to invest in countries that offer an attractive market valuation relative to their long-term prospects. At the stock level they identify companies that offer excellent value relative to in-house forecasts of long-term (5 years) earnings growth. This approach is characterized by low absolute volatility and downside protection. Returns prior to 6/30/2017 are linked to a composite history.

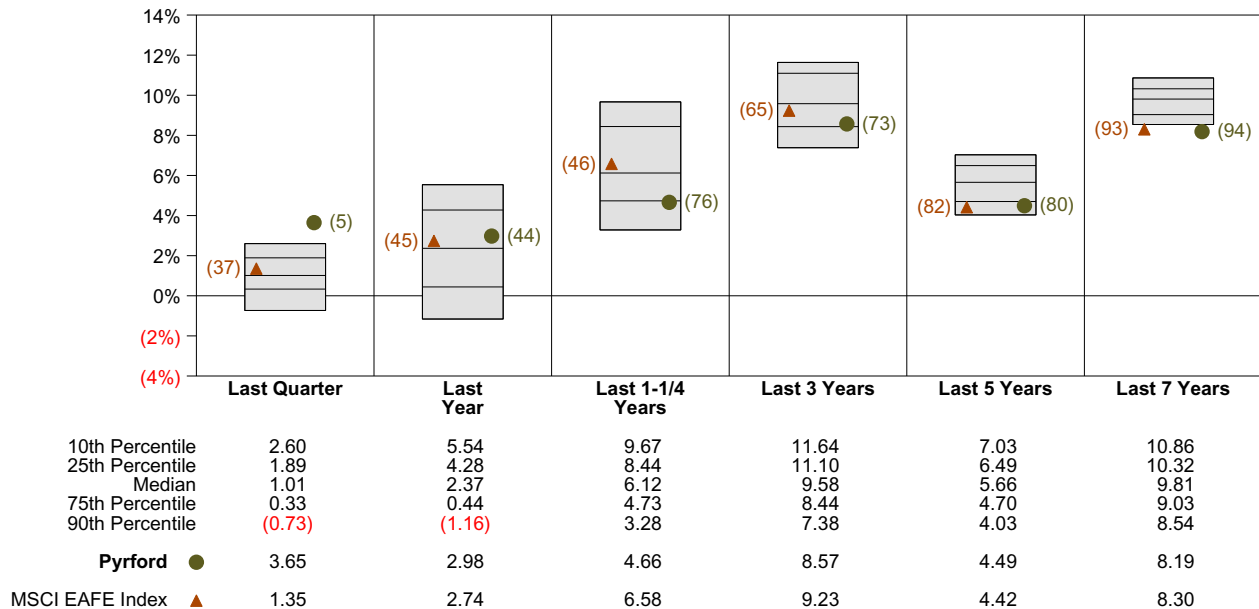
### Quarterly Summary and Highlights

- Pyrford's portfolio posted a 3.65% return for the quarter placing it in the 5 percentile of the Callan Non-US Developed Core Equity group for the quarter and in the 44 percentile for the last year.
- Pyrford's portfolio outperformed the MSCI EAFE Index by 2.29% for the quarter and outperformed the MSCI EAFE Index for the year by 0.24%.

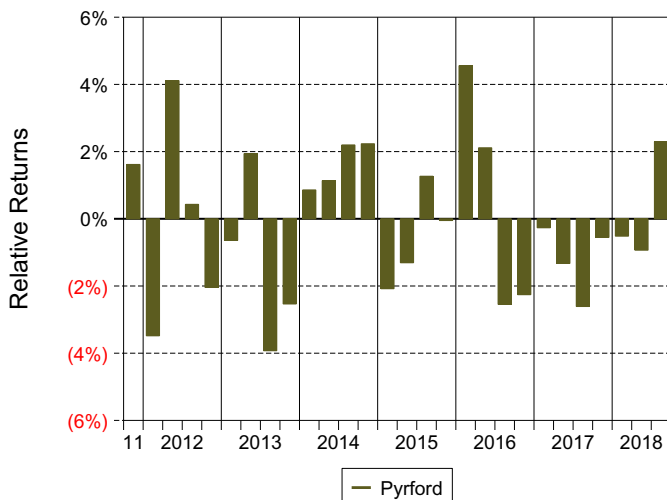
### Quarterly Asset Growth

Beginning Market Value	\$26,142,476
Net New Investment	\$0
Investment Gains/(Losses)	\$953,641
Ending Market Value	\$27,096,117

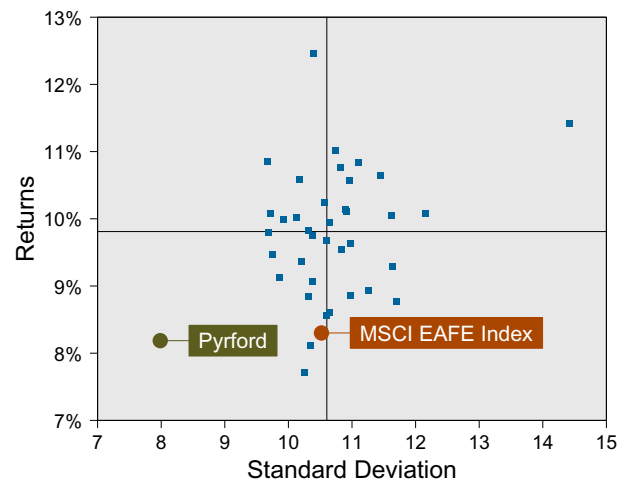
### Performance vs Callan Non-US Developed Core Equity (Gross)



### Relative Return vs MSCI EAFE Index



### Callan Non-US Developed Core Equity (Gross) Annualized Seven Year Risk vs Return

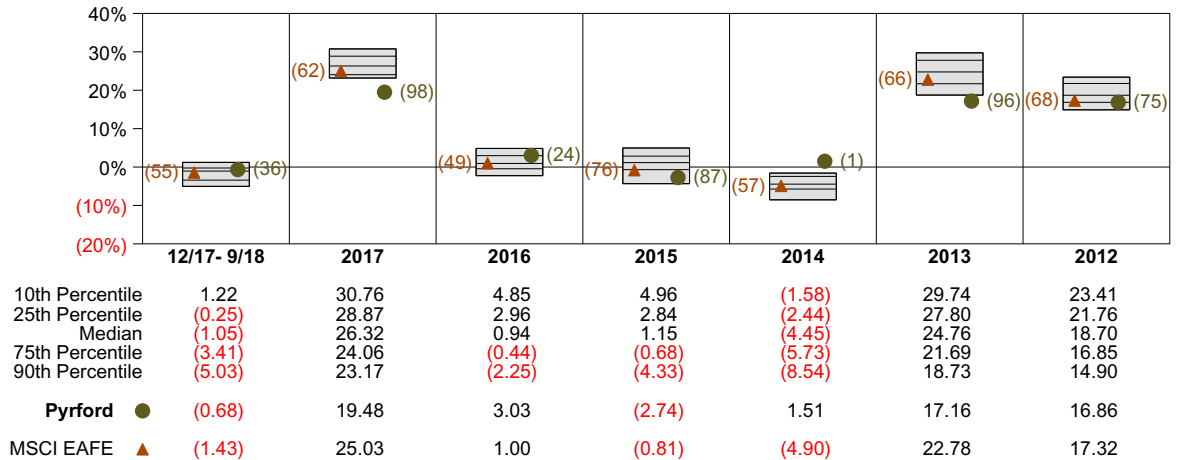


# Pyrford Return Analysis Summary

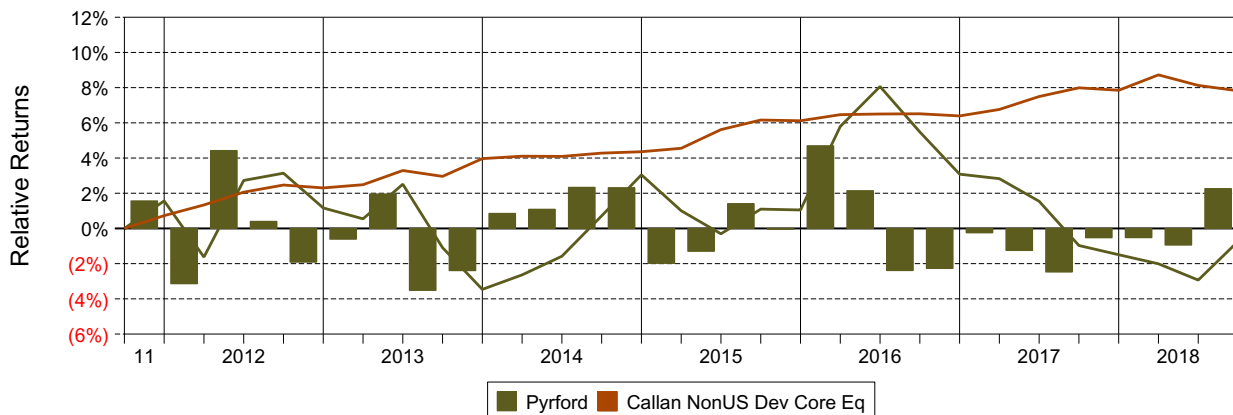
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

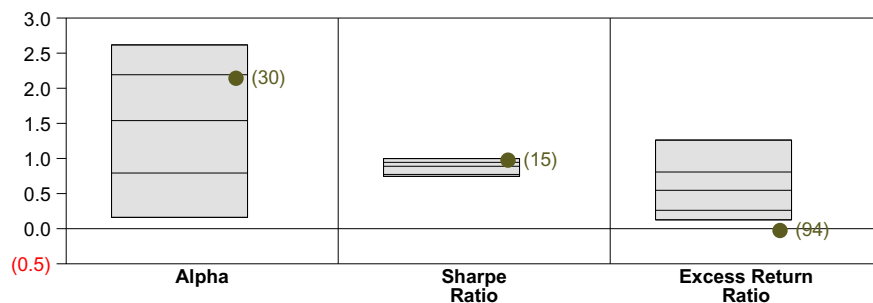
### Performance vs Callan Non-US Developed Core Equity (Gross)



### Cumulative and Quarterly Relative Return vs MSCI EAFE



### Risk Adjusted Return Measures vs MSCI EAFE Rankings Against Callan Non-US Developed Core Equity (Gross) Seven Years Ended September 30, 2018



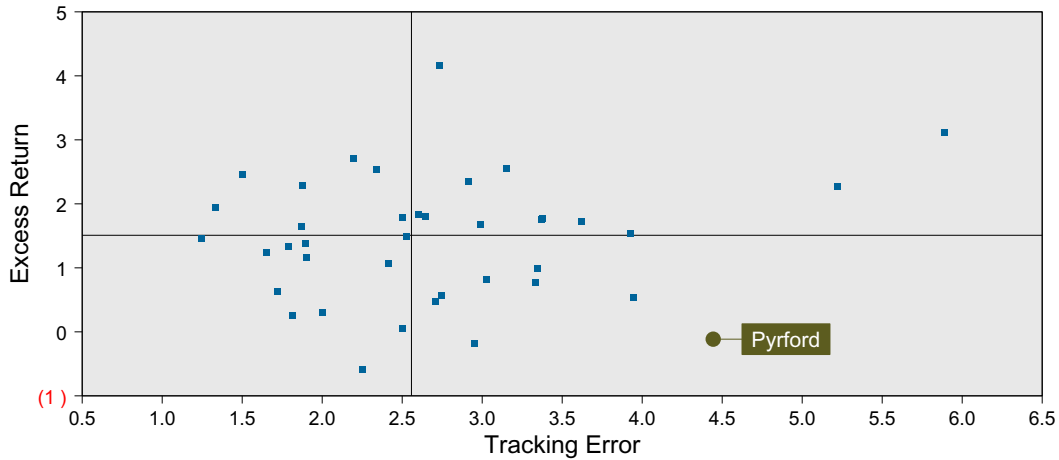


# Pyrford Risk Analysis Summary

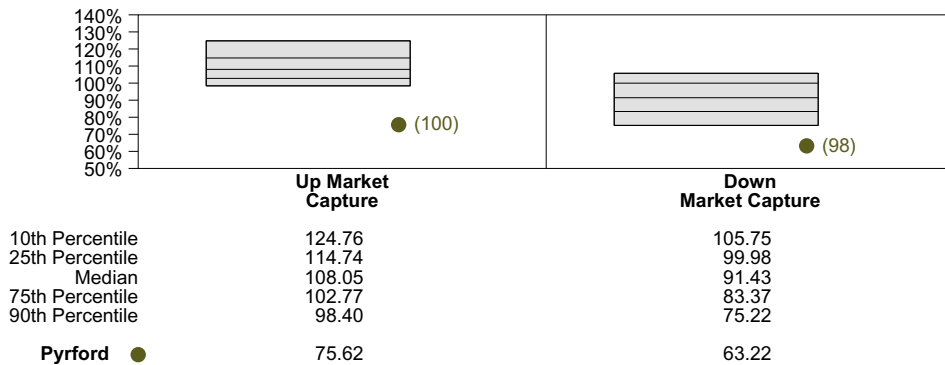
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

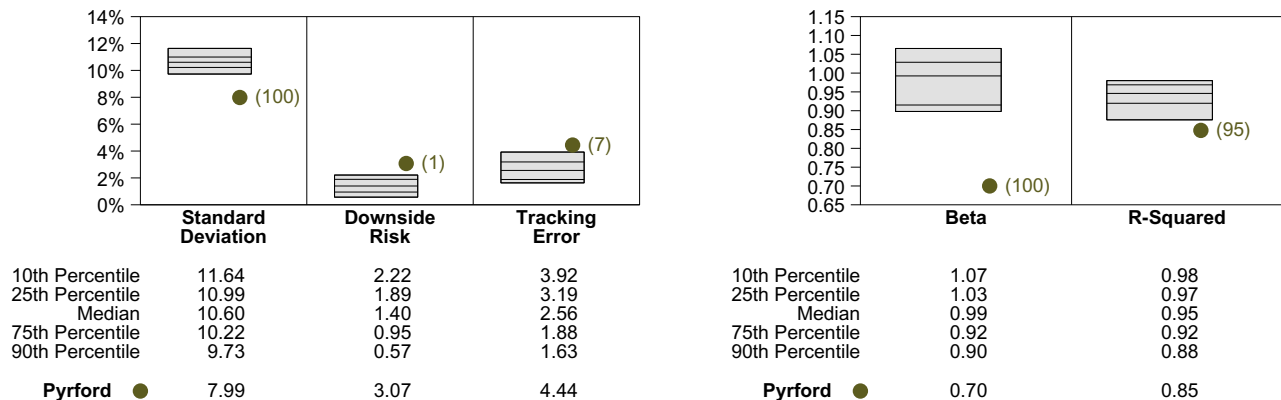
### Risk Analysis vs Callan Non-US Developed Core Equity (Gross) Seven Years Ended September 30, 2018



### Market Capture vs MSCI EAFE Index (USD Net Div) Rankings Against Callan Non-US Developed Core Equity (Gross) Seven Years Ended September 30, 2018



### Risk Statistics Rankings vs MSCI EAFE Index (USD Net Div) Rankings Against Callan Non-US Developed Core Equity (Gross) Seven Years Ended September 30, 2018

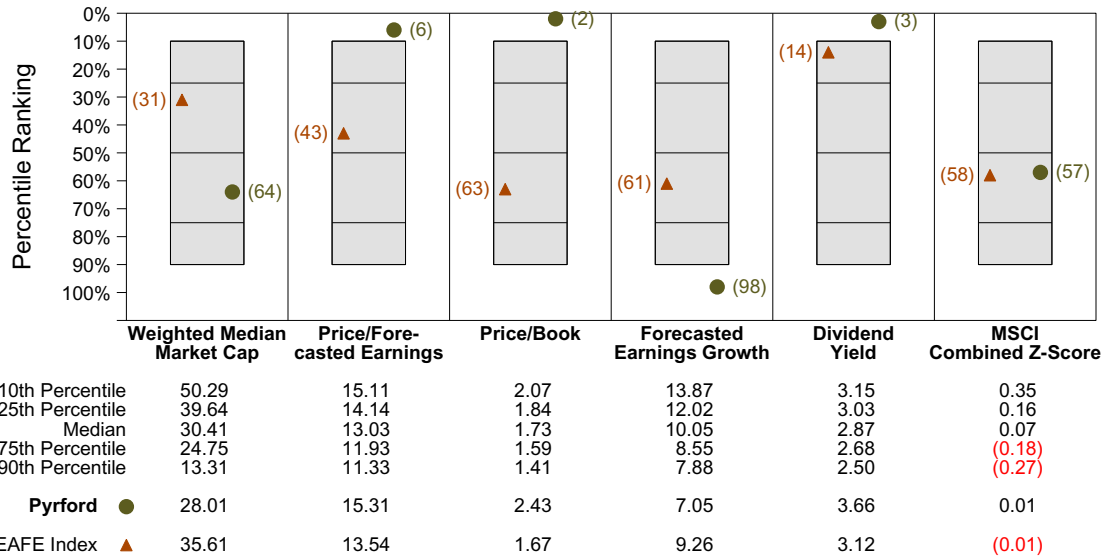


# Pyrford Equity Characteristics Analysis Summary

## Portfolio Characteristics

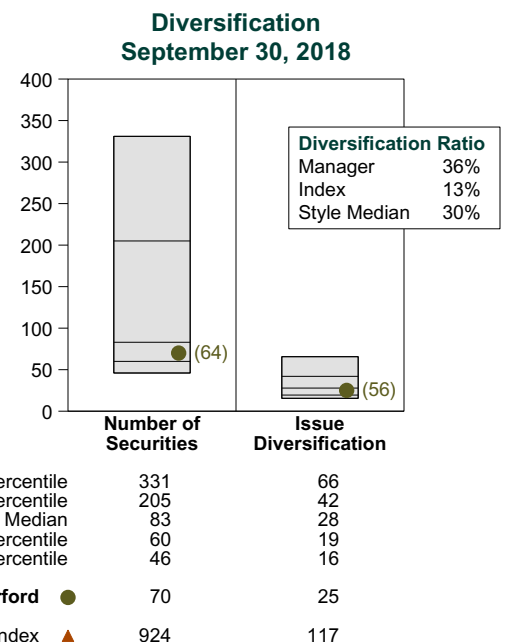
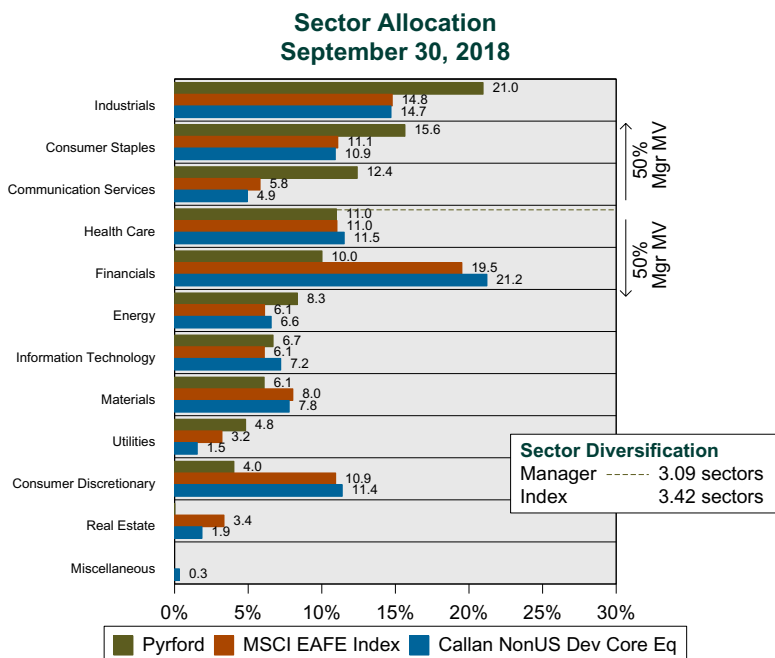
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Core Equity as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



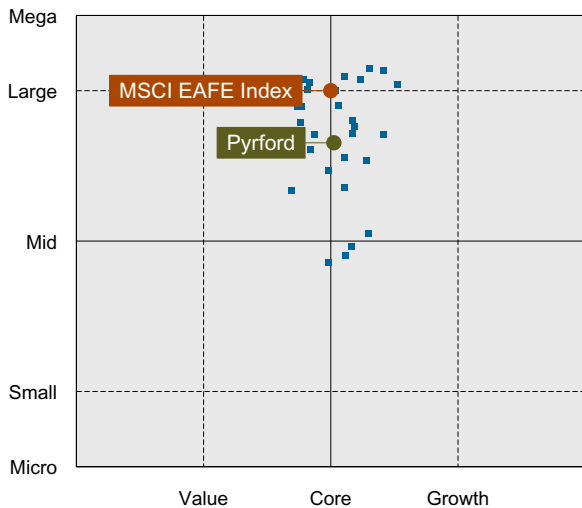
# Current Holdings Based Style Analysis

## Pyrford

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

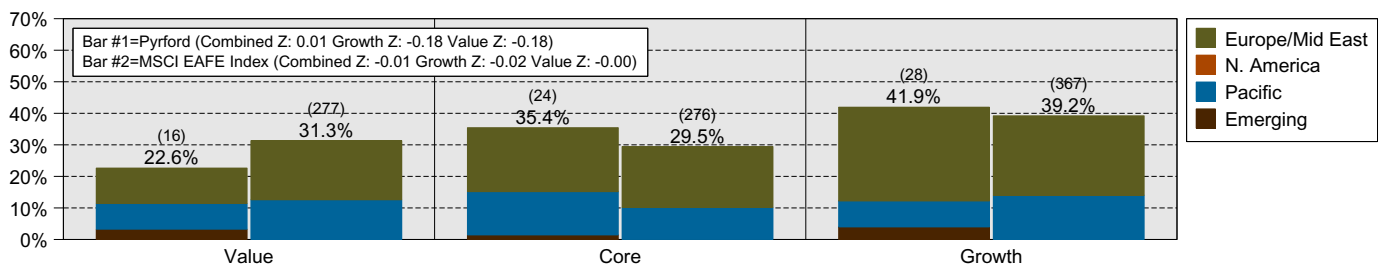
**Style Map vs Callan NonUS Dev Core Eq Holdings as of September 30, 2018**



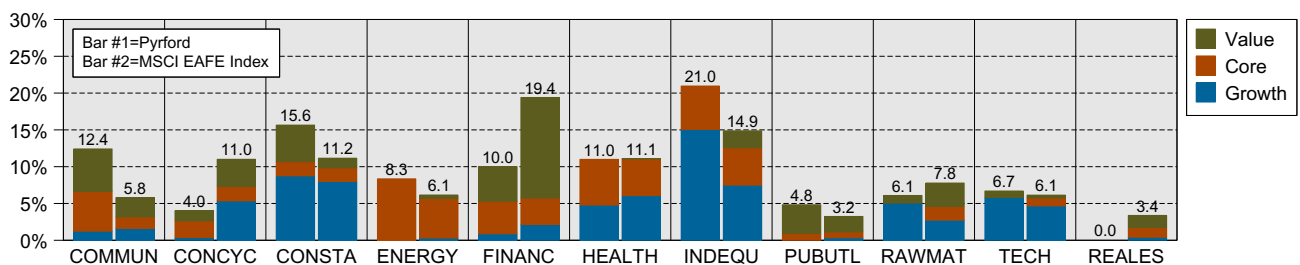
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	11.2% (8)	20.3% (14)	29.7% (18)	61.2% (40)
N. America	18.7% (132)	19.3% (130)	25.2% (190)	63.2% (452)
Pacific	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging	8.1% (6)	13.7% (9)	8.2% (6)	30.1% (21)
<b>Total</b>	<b>22.6% (16)</b>	<b>35.4% (24)</b>	<b>41.9% (28)</b>	<b>100.0% (68)</b>
	<b>31.3% (277)</b>	<b>29.5% (276)</b>	<b>39.2% (367)</b>	<b>100.0% (920)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**



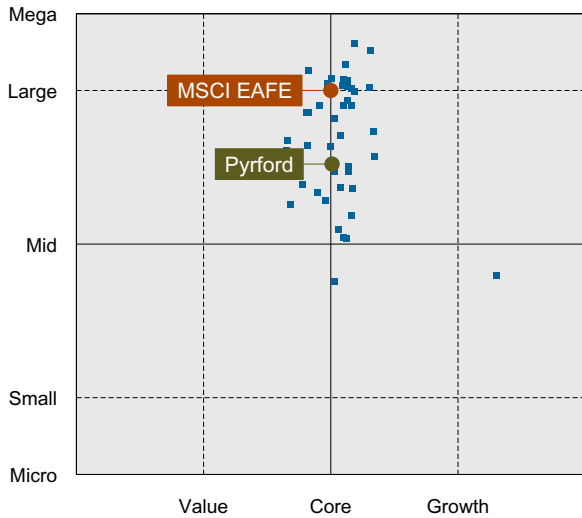
# Historical Holdings Based Style Analysis

## Pyrford

### For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

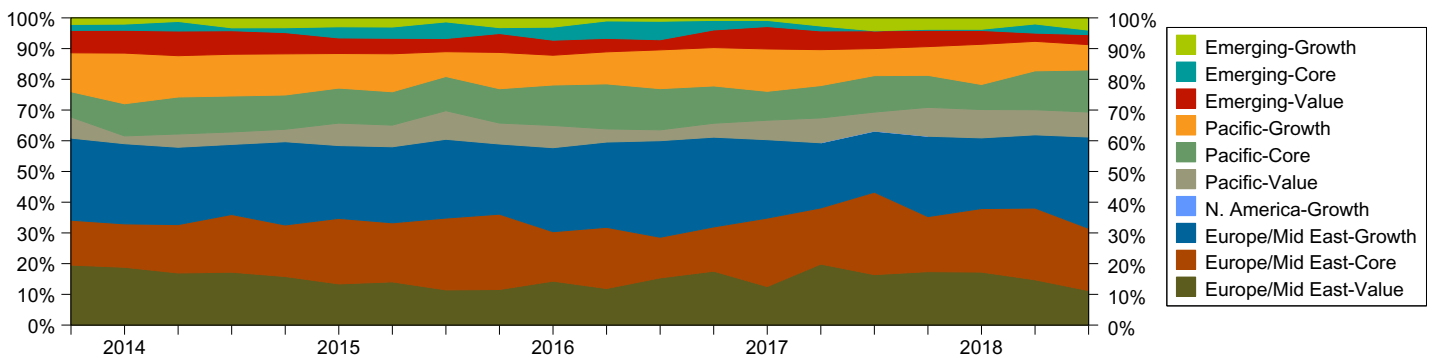
**Average Style Map vs Callan NonUS Dev Core Eq Holdings for Five Years Ended September 30, 2018**



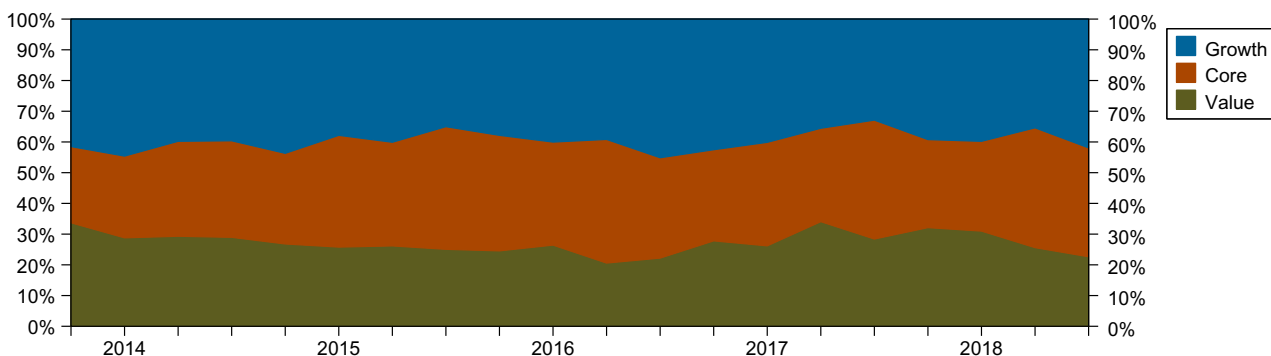
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	15.4% (11)	19.1% (11)	25.5% (18)	60.0% (40)
N. America	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	6.4% (5)	11.4% (9)	11.6% (8)	29.4% (22)
Emerging	5.6% (4)	2.6% (2)	2.5% (2)	10.6% (8)
<b>Total</b>	<b>27.3% (20)</b>	<b>33.1% (22)</b>	<b>39.6% (28)</b>	<b>100.0% (70)</b>
	<b>31.6% (264)</b>	<b>30.5% (280)</b>	<b>37.9% (372)</b>	<b>100.0% (916)</b>

**Pyrford Historical Region/Style Exposures**



**Pyrford Historical Style Only Exposures**

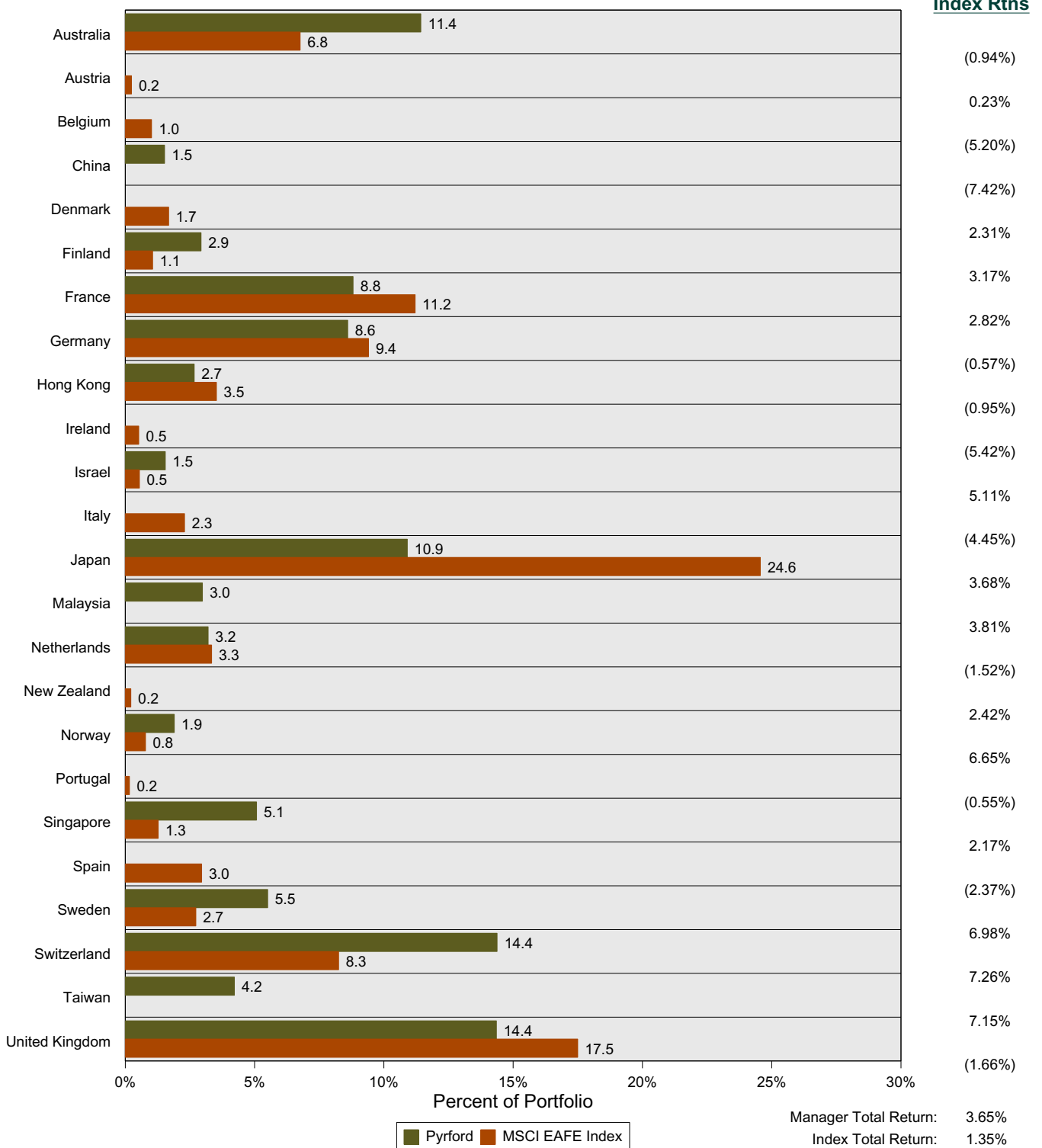


# Country Allocation Pyrford VS MSCI EAFE Index

## Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2018. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2018



## Pyrford Top 10 Portfolio Holdings Characteristics as of September 30, 2018

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Nestle S A Shs Nom New	Consumer Staples	\$944,319	3.5%	8.16%	256.57	20.07	2.87%	9.51%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$882,282	3.3%	9.59%	171.00	13.63	3.49%	5.21%
Novartis	Health Care	\$794,404	2.9%	13.97%	220.38	15.81	3.32%	8.30%
Japan Tobacco Inc Ord	Consumer Staples	\$684,559	2.5%	(6.51)%	52.23	12.85	4.89%	6.50%
Brambles Ltd Npv	Industrials	\$635,764	2.3%	21.07%	12.56	18.56	2.66%	4.96%
Essity Ab	Consumer Staples	\$579,974	2.1%	1.07%	16.03	16.49	2.57%	4.22%
Kddi	Communication Services	\$562,250	2.1%	2.53%	69.97	11.89	2.87%	4.42%
Woodside Petroleum	Energy	\$538,700	2.0%	7.50%	26.13	14.90	3.51%	19.00%
Woolworths Ltd	Consumer Staples	\$525,511	1.9%	(7.93)%	26.68	19.88	3.31%	6.20%
Computershare Limited Cpu Shs	Information Technology	\$513,217	1.9%	6.52%	7.84	19.91	2.01%	11.15%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Brambles Ltd Npv	Industrials	\$635,764	2.3%	21.07%	12.56	18.56	2.66%	4.96%
Taiwan Semicond Manufac Co L Shs	Information Technology	\$406,442	1.5%	21.07%	222.93	17.37	3.05%	12.30%
Axiata Group Bhd Shs	Communication Services	\$333,878	1.2%	17.15%	9.99	29.78	1.86%	18.60%
Advantech Co	Information Technology	\$244,071	0.9%	16.96%	5.20	22.11	2.90%	9.28%
Schindler Part	Industrials	\$219,967	0.8%	16.41%	10.20	25.68	1.64%	8.59%
Nihon Kohden Corp Shs	Health Care	\$413,467	1.5%	14.33%	2.81	27.58	0.97%	(13.82)%
Toyota Tsusho Corp Shs	Industrials	\$260,631	1.0%	14.12%	13.37	9.95	2.19%	20.75%
Novartis	Health Care	\$794,404	2.9%	13.97%	220.38	15.81	3.32%	8.30%
China Mobile Hong Kong Limit Ord	Communication Services	\$411,239	1.5%	13.74%	201.88	11.88	5.08%	3.92%
Fuchs Petrolub Pref.	Materials	\$462,367	1.7%	12.93%	3.89	22.60	1.85%	6.70%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Rubis Ord Shs	Utilities	\$252,646	0.9%	(13.32)%	5.24	14.89	3.22%	15.96%
Newcrest Mng Ltd Ord	Materials	\$215,773	0.8%	(12.59)%	10.78	16.84	1.27%	25.41%
Sse Plc Shs	Utilities	\$300,637	1.1%	(12.07)%	15.34	11.46	8.26%	2.10%
Vodafone Group Plc New Shs New	Communication Services	\$349,733	1.3%	(11.57)%	57.31	16.67	8.10%	8.10%
Fielmann	Consumer Discretionary	\$319,806	1.2%	(10.25)%	5.08	24.94	3.55%	4.45%
Woolworths Ltd	Consumer Staples	\$525,511	1.9%	(7.93)%	26.68	19.88	3.31%	6.20%
British American Tobacco	Consumer Staples	\$403,274	1.5%	(7.56)%	107.22	11.51	5.45%	7.10%
National Grid Ord	Utilities	\$507,206	1.9%	(6.76)%	35.07	13.60	5.80%	1.43%
Japan Tobacco Inc Ord	Consumer Staples	\$684,559	2.5%	(6.51)%	52.23	12.85	4.89%	6.50%
Rio Tinto Ltd Ord	Materials	\$282,010	1.0%	(6.11)%	23.50	12.57	5.07%	1.10%

# AQR

## Period Ended September 30, 2018

### Investment Philosophy

Returns prior to 9/30/2016 are linked to a composite history.

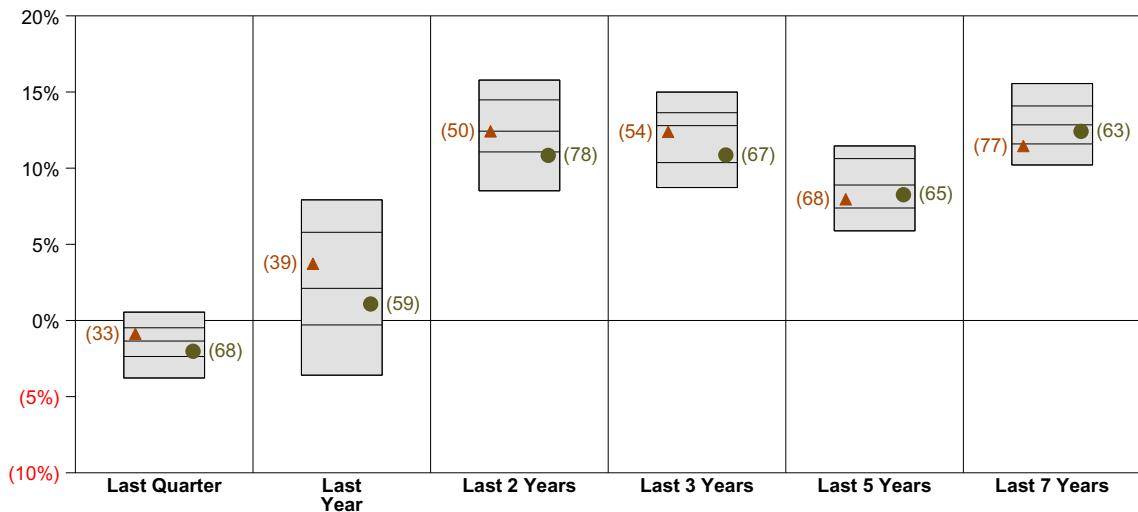
### Quarterly Summary and Highlights

- AQR's portfolio posted a (2.02)% return for the quarter placing it in the 68 percentile of the Callan International Small Cap group for the quarter and in the 59 percentile for the last year.
- AQR's portfolio underperformed the MSCI EAFE Small Cap Index by 1.14% for the quarter and underperformed the MSCI EAFE Small Cap Index for the year by 2.65%.

### Quarterly Asset Growth

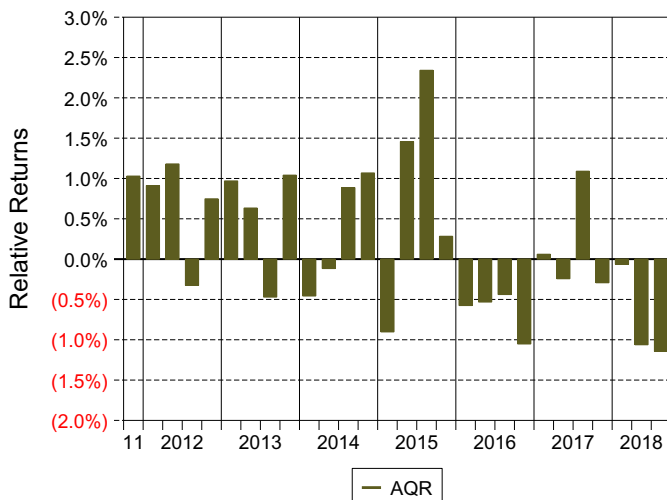
Beginning Market Value	\$14,603,230
Net New Investment	\$0
Investment Gains/(Losses)	\$-329,549
Ending Market Value	\$14,273,681

### Performance vs Callan International Small Cap (Gross)

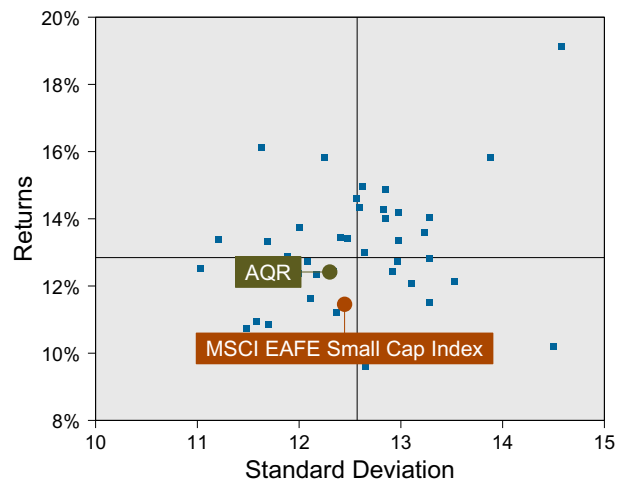


10th Percentile	0.55	7.92	15.78	14.99	11.46	15.55
25th Percentile	(0.48)	5.79	14.48	13.64	10.63	14.08
Median	(1.35)	2.11	12.43	12.79	8.89	12.84
75th Percentile	(2.37)	(0.29)	11.07	10.36	7.38	11.59
90th Percentile	(3.78)	(3.59)	8.51	8.73	5.88	10.21
<b>AQR</b> ●	(2.02)	1.08	10.84	10.86	8.26	12.42
MSCI EAFE Small Cap Index ▲	(0.88)	3.73	12.42	12.39	7.96	11.46

### Relative Returns vs MSCI EAFE Small Cap Index



### Callan International Small Cap (Gross) Annualized Seven Year Risk vs Return

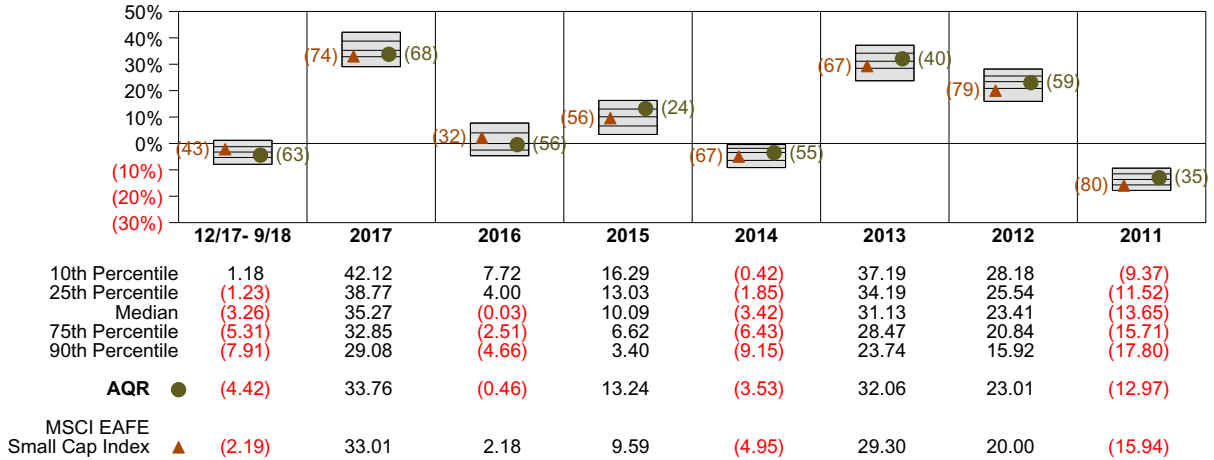


# AQR Return Analysis Summary

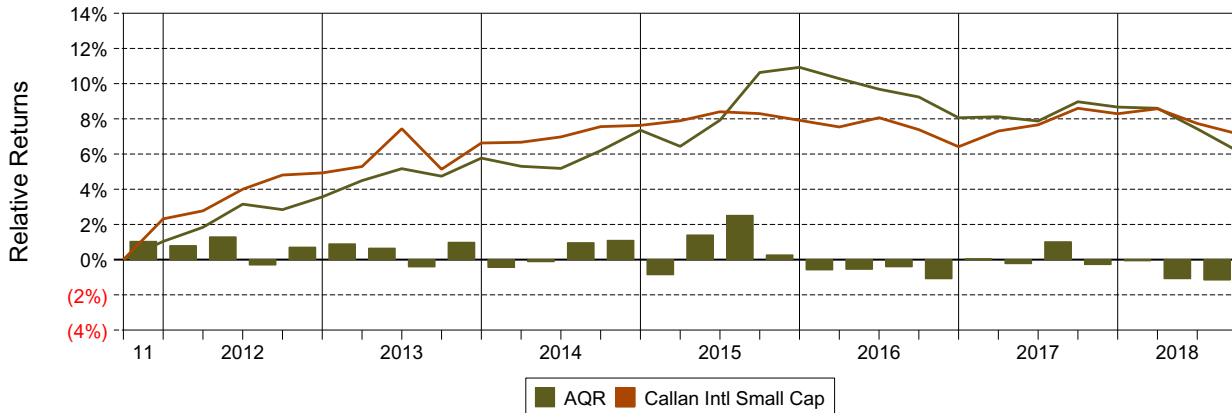
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

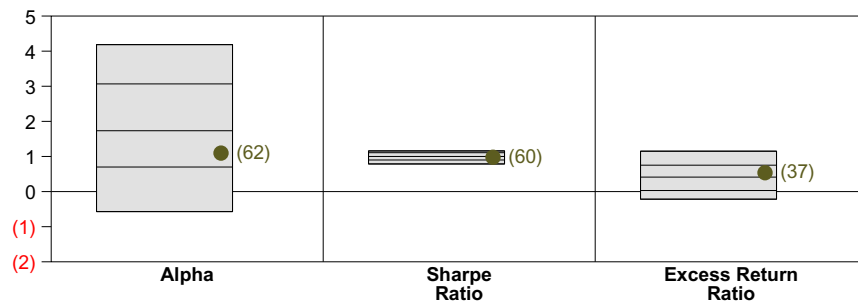
### Performance vs Callan International Small Cap (Gross)



### Cumulative and Quarterly Relative Return vs MSCI EAFE Small Cap Index



### Risk Adjusted Return Measures vs MSCI EAFE Small Cap Index Rankings Against Callan International Small Cap (Gross) Seven Years Ended September 30, 2018



	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	4.19	1.16	1.15
25th Percentile	3.07	1.11	0.75
Median	1.73	1.00	0.41
75th Percentile	0.70	0.90	0.03
90th Percentile	(0.57)	0.79	(0.22)
<b>AQR</b> ●	<b>1.10</b>	<b>0.98</b>	<b>0.54</b>

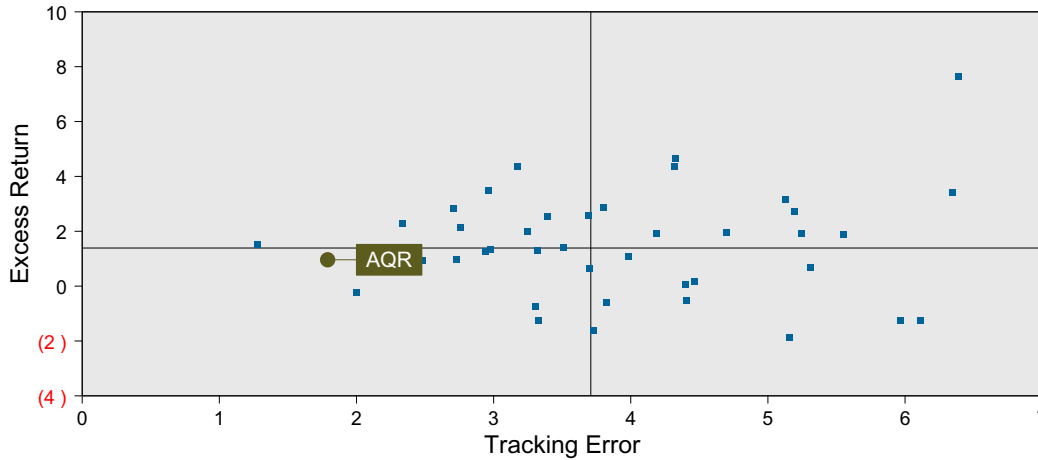


# AQR Risk Analysis Summary

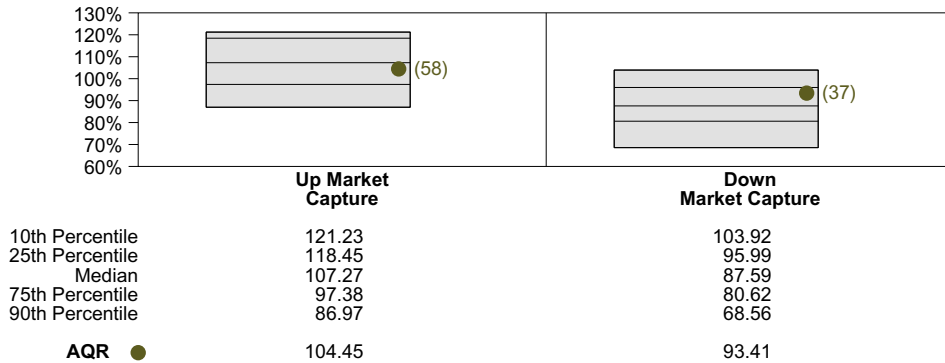
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

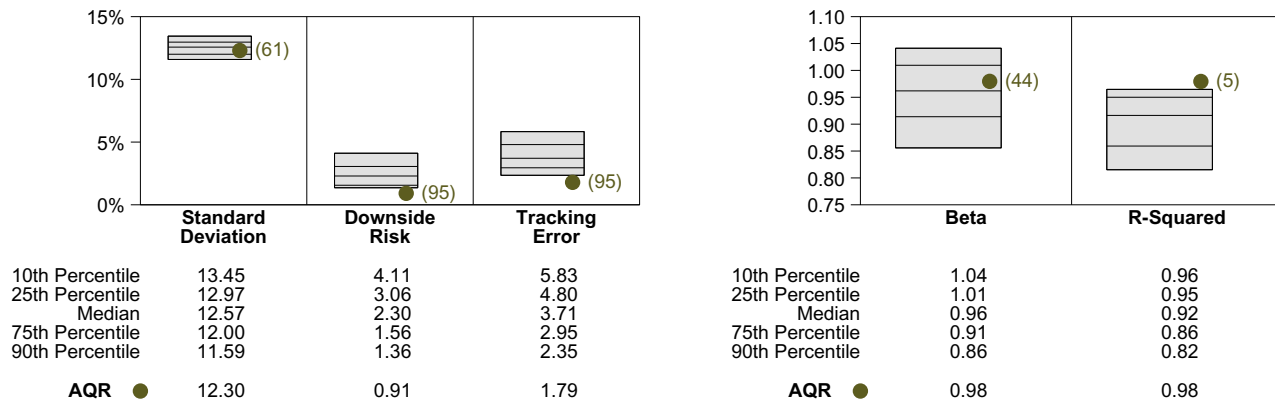
### Risk Analysis vs Callan International Small Cap (Gross) Seven Years Ended September 30, 2018



### Market Capture vs MSCI EAFE Small Cap Index Rankings Against Callan International Small Cap (Gross) Seven Years Ended September 30, 2018



### Risk Statistics Rankings vs MSCI EAFE Small Cap Index Rankings Against Callan International Small Cap (Gross) Seven Years Ended September 30, 2018

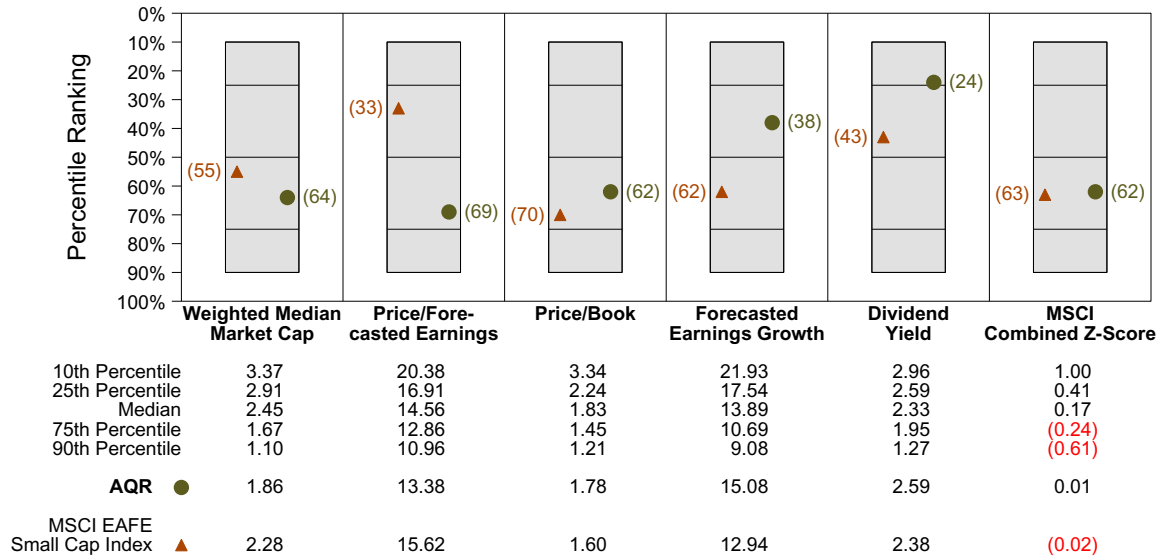


# AQR Equity Characteristics Analysis Summary

## Portfolio Characteristics

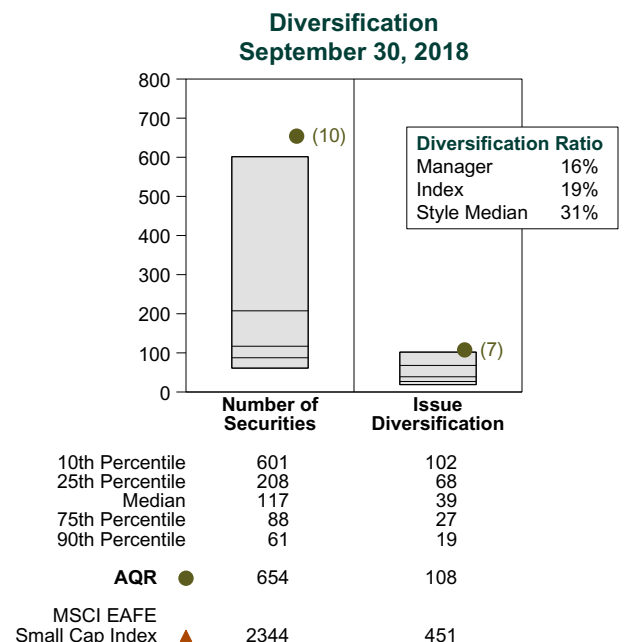
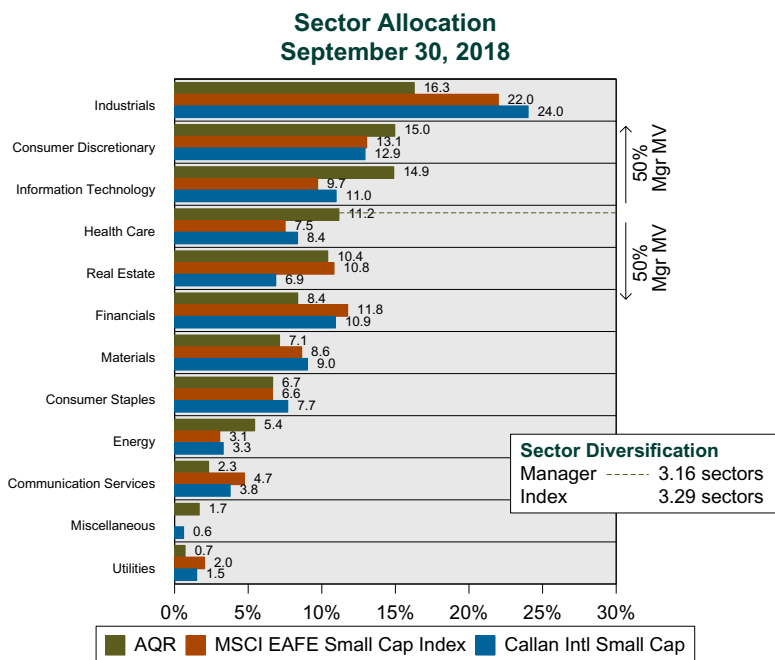
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



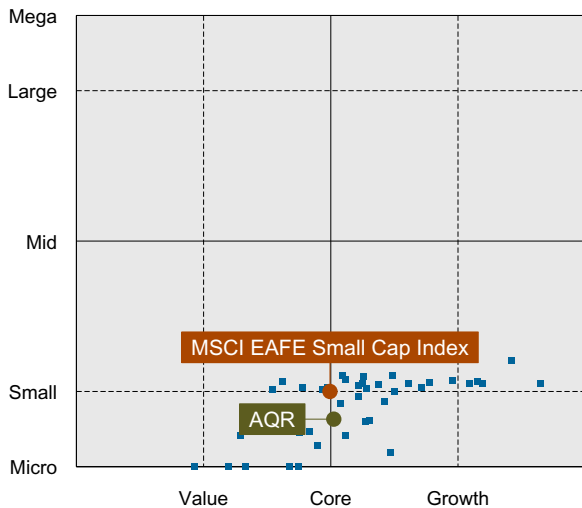
# Current Holdings Based Style Analysis

## AQR

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

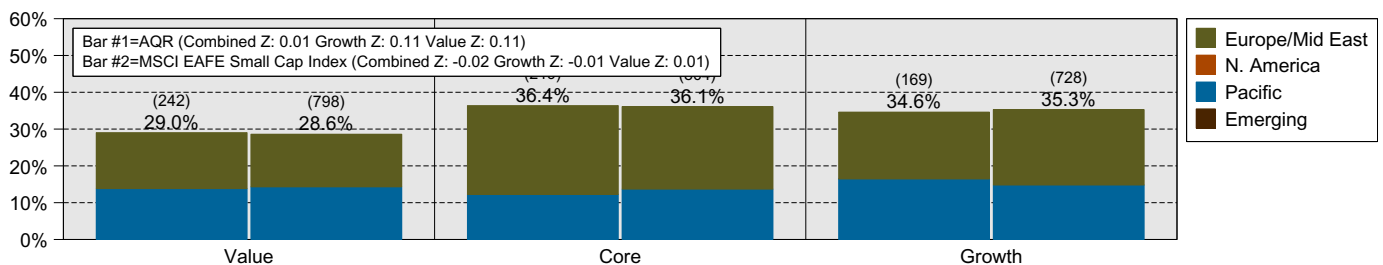
**Style Map vs Callan Intl Small Cap Holdings as of September 30, 2018**



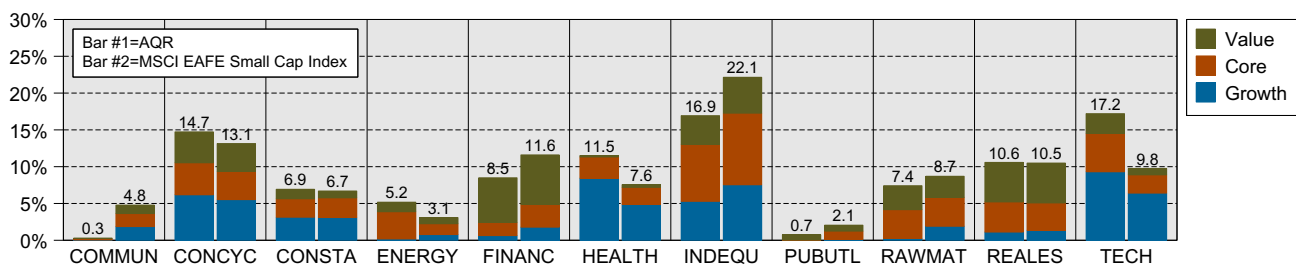
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	15.2% (103)	24.1% (120)	18.1% (72)	57.5% (295)
N. America	14.3% (322)	22.4% (403)	20.5% (327)	57.2% (1052)
Pacific	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging	13.8% (139)	12.2% (99)	16.5% (97)	42.5% (335)
	14.3% (476)	13.7% (401)	14.8% (401)	42.8% (1278)
Emerging	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Total</b>	<b>29.0% (242)</b>	<b>36.4% (219)</b>	<b>34.6% (169)</b>	<b>100.0% (630)</b>
	<b>28.6% (798)</b>	<b>36.1% (804)</b>	<b>35.3% (728)</b>	<b>100.0% (2330)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**



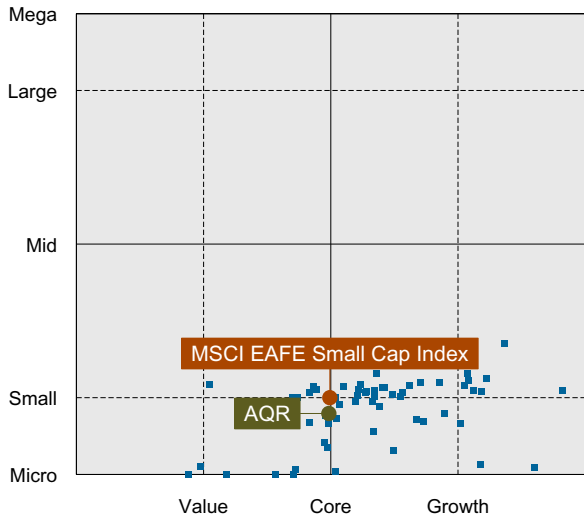
# Historical Holdings Based Style Analysis

## AQR

### For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

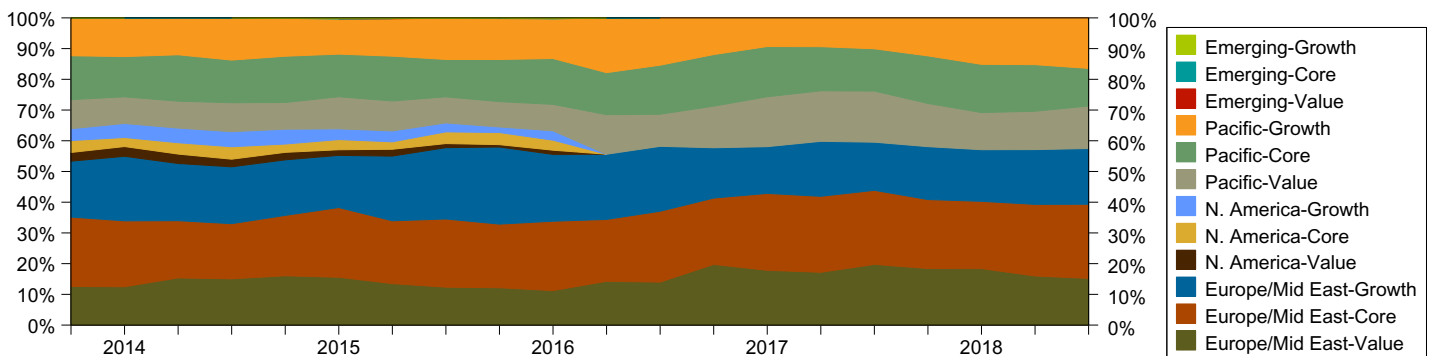
**Average Style Map vs Callan Intl Small Cap Holdings for Five Years Ended September 30, 2018**



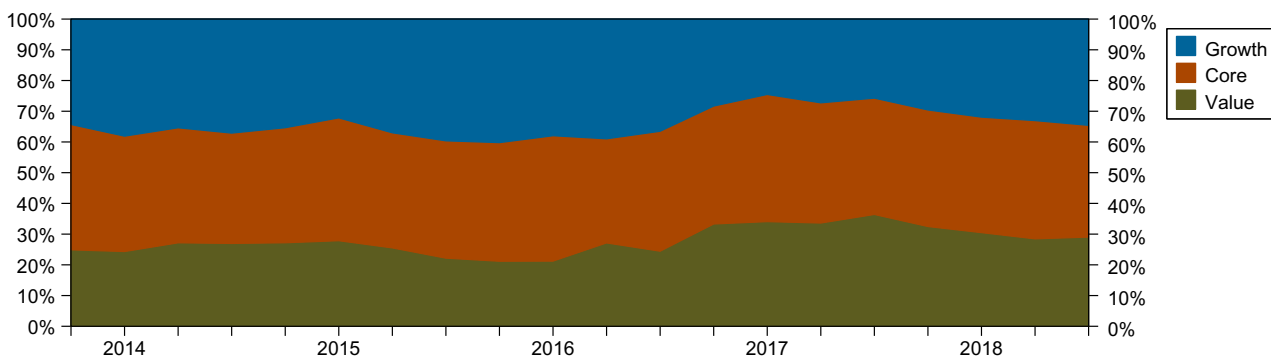
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	15.4% (101)	22.0% (116)	19.0% (87)	56.3% (304)
Europe/ Mid East	15.4% (308)	22.5% (368)	20.2% (309)	58.1% (985)
N. America	1.1% (11)	1.7% (13)	1.9% (11)	4.7% (35)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	11.5% (120)	14.5% (118)	13.0% (89)	38.9% (327)
	13.1% (428)	14.7% (427)	14.0% (368)	41.8% (1223)
Emerging	0.0% (0)	0.0% (1)	0.1% (0)	0.1% (1)
	0.0% (1)	0.0% (1)	0.0% (1)	0.1% (3)
<b>Total</b>	<b>27.9% (232)</b>	<b>38.2% (248)</b>	<b>33.9% (187)</b>	<b>100.0% (667)</b>
	<b>28.5% (737)</b>	<b>37.3% (796)</b>	<b>34.3% (678)</b>	<b>100.0% (2211)</b>
	Value	Core	Growth	Total

### AQR Historical Region/Style Exposures



### AQR Historical Style Only Exposures

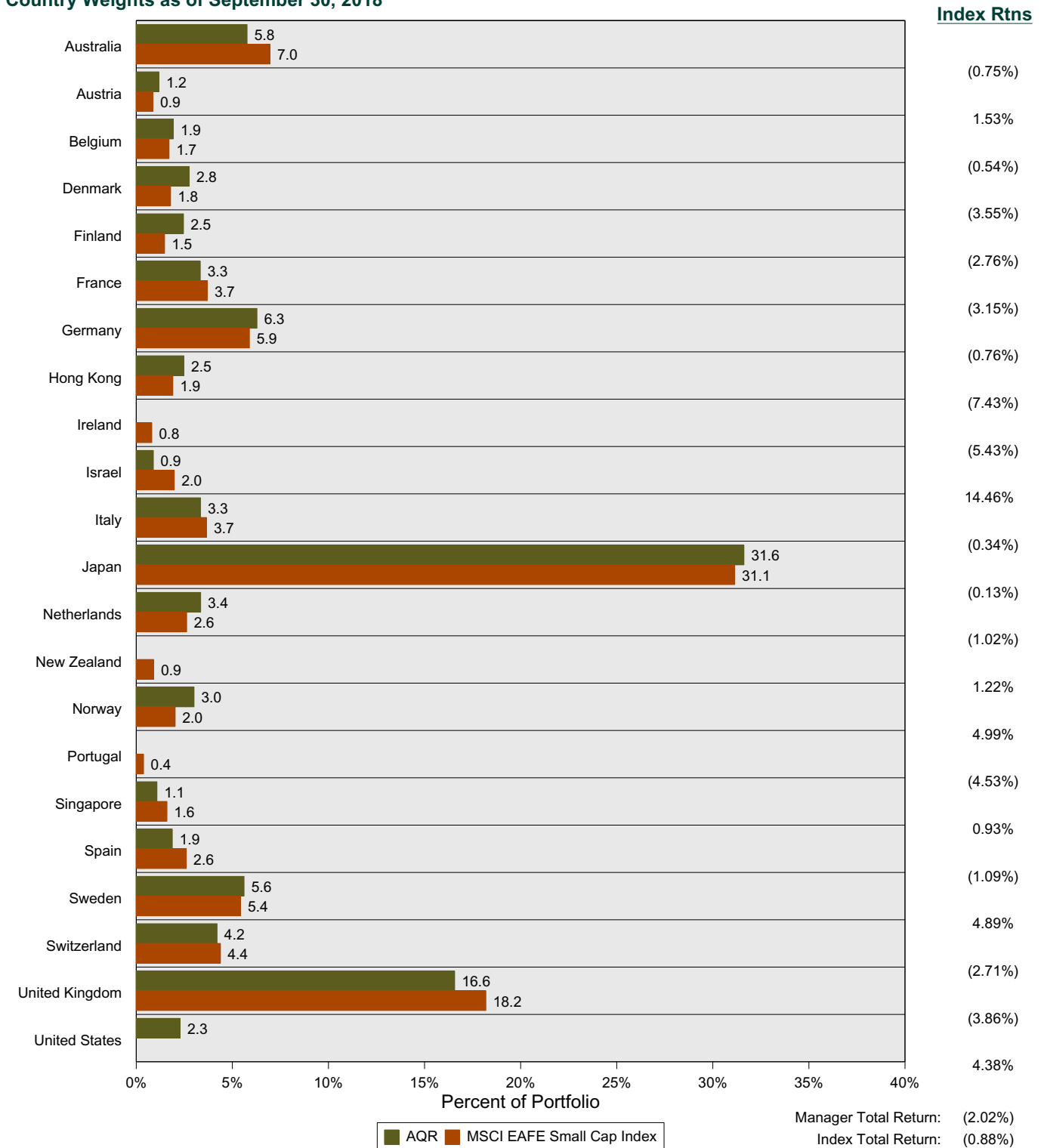


## Country Allocation AQR VS MSCI EAFE Small Cap Index

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2018. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of September 30, 2018



## AQR Top 10 Portfolio Holdings Characteristics as of September 30, 2018

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Dno Asa Shs A	Energy	\$244,191	1.7%	13.20%	2.24	7.45	1.19%	(2.98)%
Gn Great Nordic Ltd Ord	Health Care	\$170,939	1.2%	6.95%	7.10	27.82	0.40%	16.28%
Swedish Orphan Biovitrum Ab Shs	Health Care	\$164,347	1.2%	33.82%	7.99	23.60	0.00%	34.20%
Moneysupermarket Com Group P Shs	Consumer Discretionary	\$143,034	1.0%	(11.69)%	1.95	15.62	3.78%	5.52%
Electrocomponent Plc Ord	Information Technology	\$142,400	1.0%	(6.41)%	4.15	19.56	1.84%	14.32%
Evrax Plc	Materials	\$117,681	0.8%	17.58%	10.66	8.21	7.27%	205.59%
Sandfire Resources NI Shs	Materials	\$116,609	0.8%	(19.96)%	0.86	8.33	3.63%	13.17%
Saras Raffinerie Sarde Spa Shs	Energy	\$113,642	0.8%	(11.69)%	2.04	11.15	6.51%	2.40%
Ferrexpo Plc London Shs	Materials	\$112,352	0.8%	9.73%	1.54	5.59	2.53%	(28.92)%
Siltronic	Information Technology	\$104,603	0.7%	(15.36)%	3.66	7.76	2.38%	31.30%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Comture	Information Technology	\$30,868	0.2%	55.51%	0.62	35.16	0.79%	(4.83)%
Bw Offshore Limited Shs New	Energy	\$8,456	0.1%	54.75%	1.47	9.58	0.00%	(26.49)%
Almirall Sa Shs	Health Care	\$39,985	0.3%	49.99%	3.50	30.98	1.08%	35.02%
Dialog Semicon.Nmbc	Information Technology	\$32,764	0.2%	43.00%	1.66	9.49	0.00%	(12.73)%
Net One Systems Co	Information Technology	\$11,997	0.1%	40.71%	2.07	27.51	1.10%	20.59%
Raito Kogyo Co	Industrials	\$26,608	0.2%	36.79%	0.83	12.37	2.15%	25.20%
Myer Holdings Ltd Npv	Consumer Discretionary	\$4,001	0.0%	34.99%	0.30	13.18	9.80%	(24.18)%
Systempro	Information Technology	\$42,624	0.3%	34.34%	1.54	32.86	0.74%	24.40%
Swedish Orphan Biovitrum Ab Shs	Health Care	\$164,347	1.2%	33.82%	7.99	23.60	0.00%	34.20%
Takara Bio	Health Care	\$57,669	0.4%	32.76%	3.34	97.30	0.14%	30.59%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Rcr Tomlinson	Industrials	\$14,570	0.1%	(52.89)%	0.21	7.48	5.99%	(16.13)%
Indivior Plc Ord Usd2	Health Care	\$11,930	0.1%	(52.53)%	1.75	8.89	0.00%	(4.30)%
Gam Holding	Financials	\$11,041	0.1%	(48.28)%	1.14	9.23	9.33%	2.89%
Mytravel Group Plc Shs	Consumer Discretionary	\$7,634	0.1%	(46.90)%	1.16	5.80	1.04%	4.99%
Trigano	Consumer Discretionary	\$28,841	0.2%	(38.43)%	2.12	9.14	1.38%	29.10%
Gulliver International	Consumer Discretionary	\$4,407	0.0%	(37.74)%	0.36	10.24	1.82%	(2.09)%
Tp Icap Plc Shs	Financials	\$10,169	0.1%	(37.37)%	1.96	8.06	6.31%	(2.70)%
Pinguin	Consumer Staples	\$4,236	0.0%	(36.29)%	0.41	46.05	1.77%	19.53%
Aeon Fantasy Co. Ltd.	Consumer Discretionary	\$26,813	0.2%	(35.78)%	0.74	19.53	0.97%	11.96%
Bellamys Australia	Consumer Staples	\$12,544	0.1%	(35.53)%	0.84	20.56	1.63%	18.89%

# DFA Emerging Markets Period Ended September 30, 2018

## Investment Philosophy

Returns prior to 6/30/2013 are linked to a composite history.

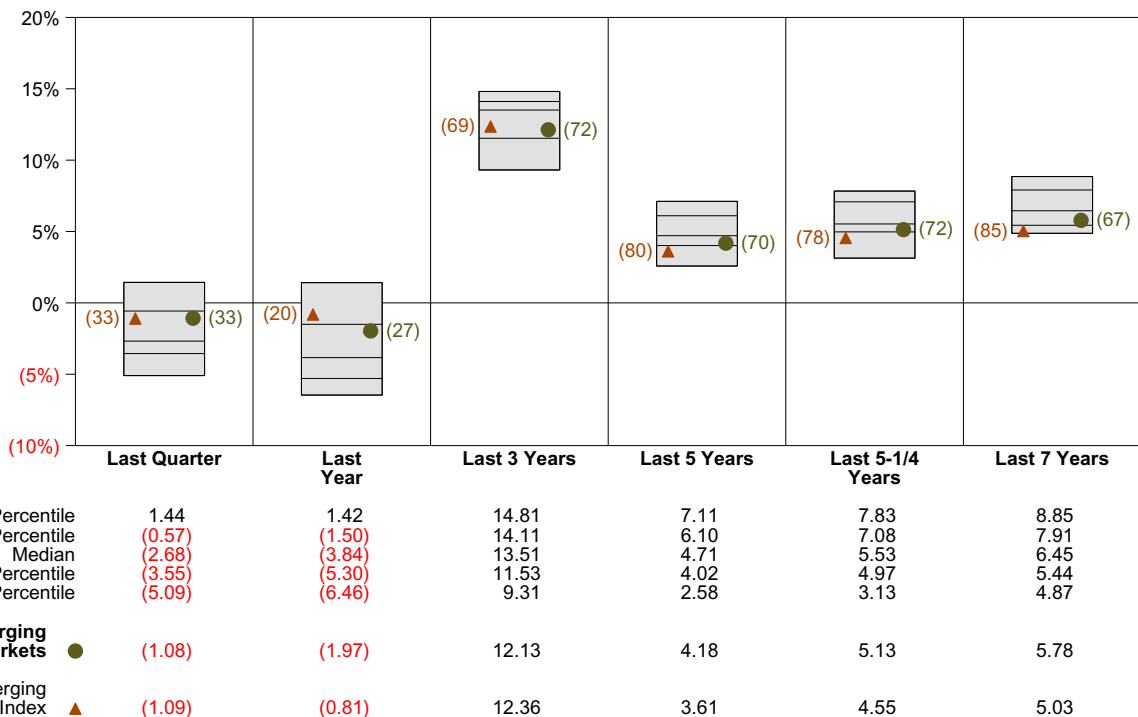
## Quarterly Summary and Highlights

- DFA Emerging Markets's portfolio posted a (1.08)% return for the quarter placing it in the 33 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 27 percentile for the last year.
- DFA Emerging Markets's portfolio outperformed the MSCI Emerging Markets Index by 0.02% for the quarter and underperformed the MSCI Emerging Markets Index for the year by 1.15%.

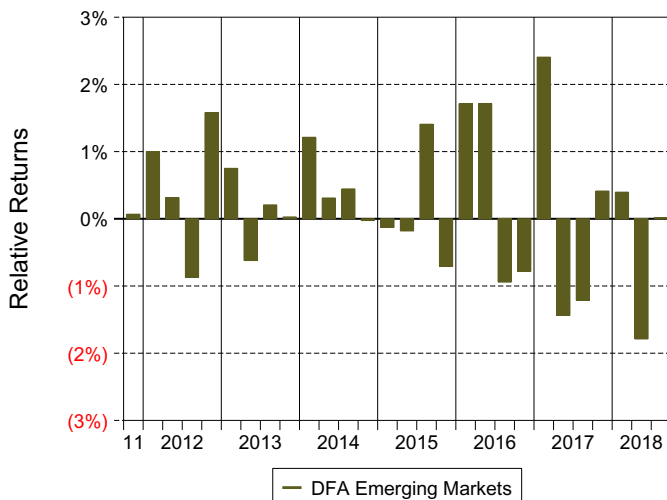
## Quarterly Asset Growth

Beginning Market Value	\$16,246,299
Net New Investment	\$0
Investment Gains/(Losses)	\$-196,346
Ending Market Value	\$16,049,953

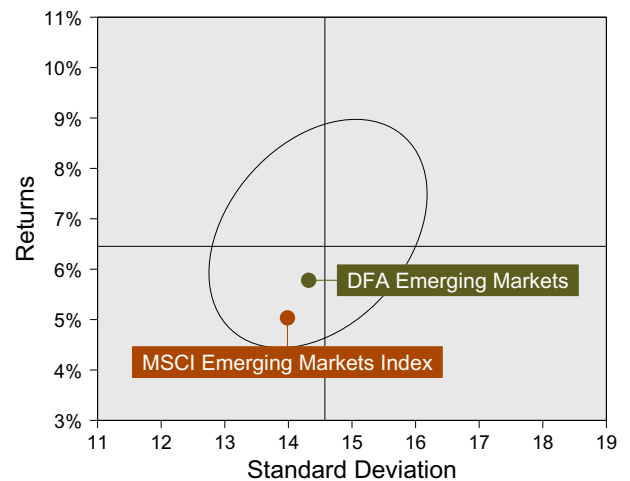
## Performance vs Callan Emerging Markets Equity Mut Funds (Gross)



## Relative Returns vs MSCI Emerging Markets Index



## Callan Emerging Markets Equity Mut Funds (Gross) Annualized Seven Year Risk vs Return

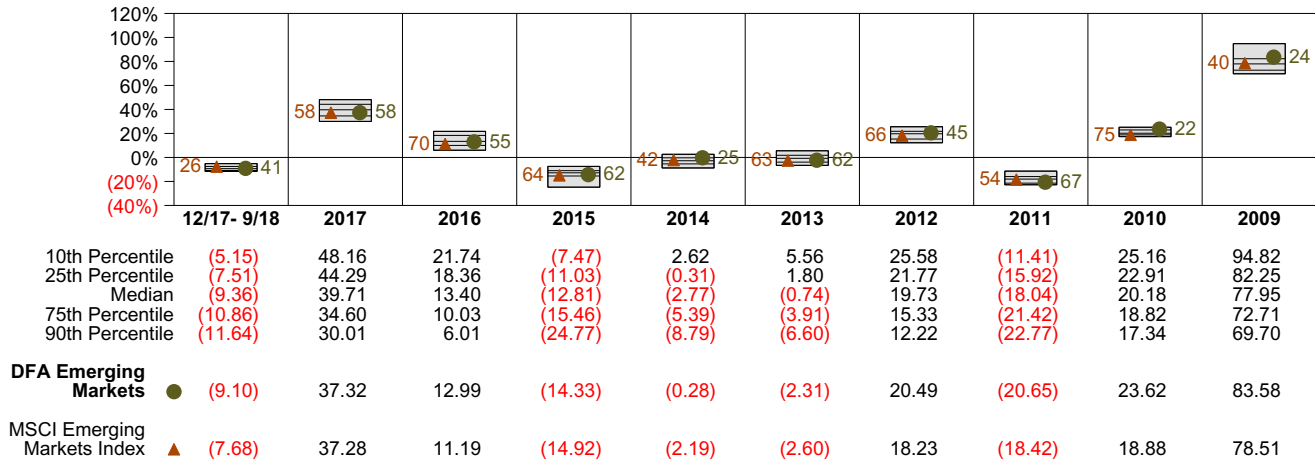


# DFA Emerging Markets Return Analysis Summary

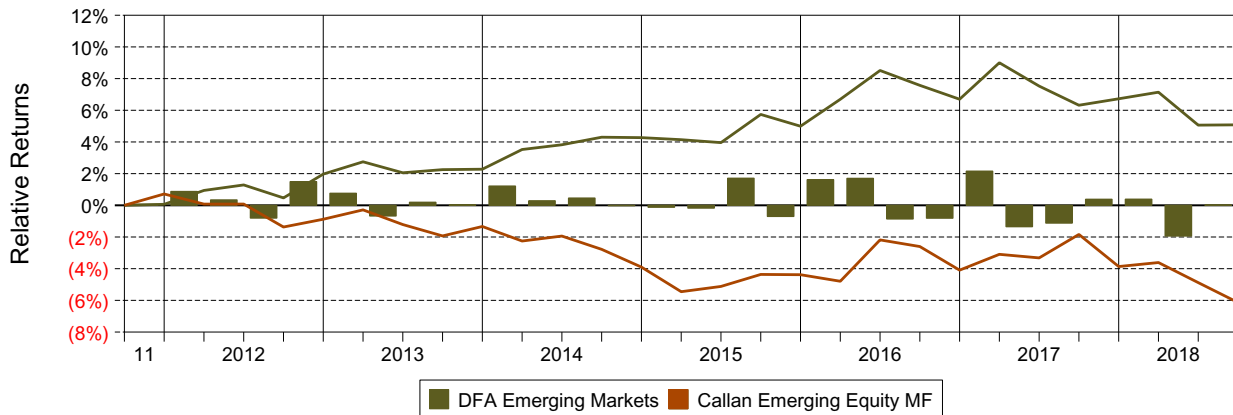
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

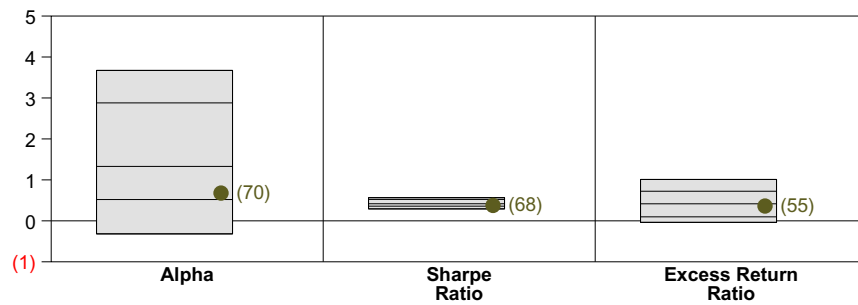
### Performance vs Callan Emerging Markets Equity Mut Funds (Gross)



### Cumulative and Quarterly Relative Return vs MSCI Emerging Markets Index



### Risk Adjusted Return Measures vs MSCI Emerging Markets Index Rankings Against Callan Emerging Markets Equity Mut Funds (Gross) Seven Years Ended September 30, 2018



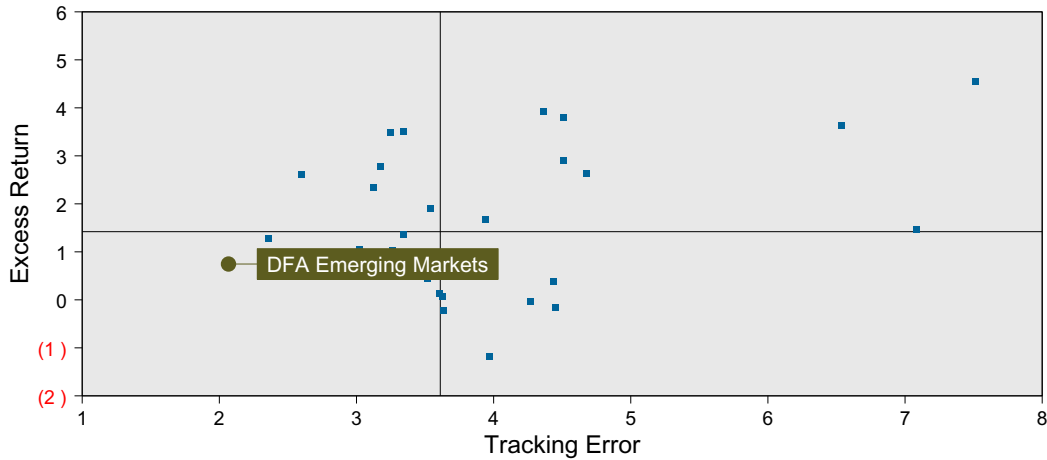


# DFA Emerging Markets Risk Analysis Summary

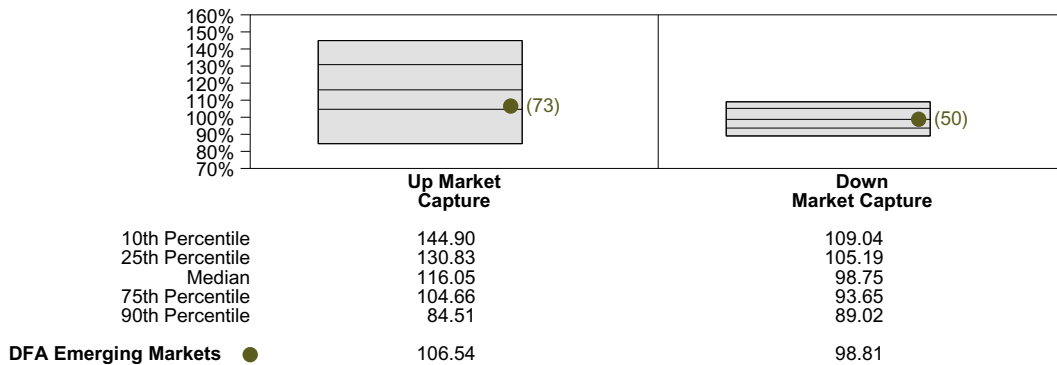
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

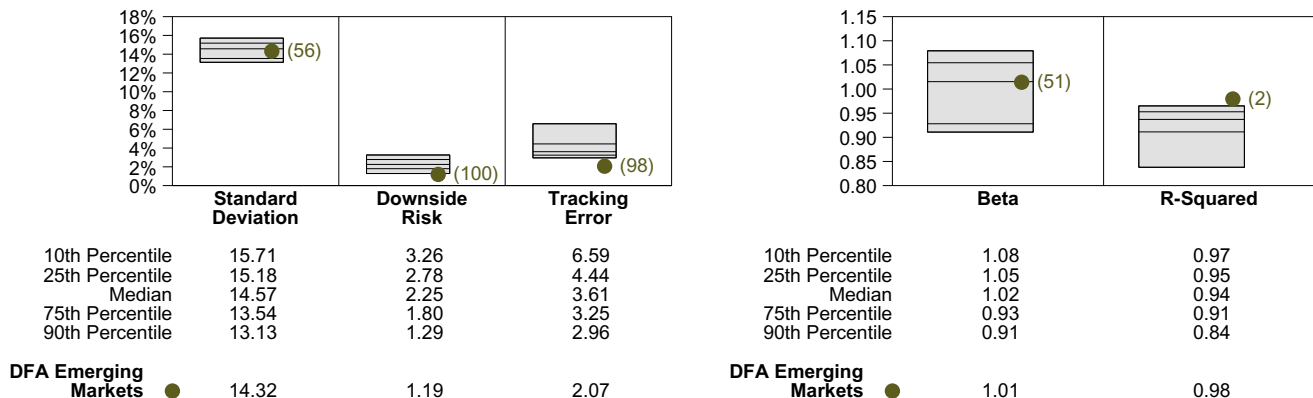
### Risk Analysis vs Callan Emerging Markets Equity Mut Funds (Gross) Seven Years Ended September 30, 2018



### Market Capture vs MSCI Emerging Markets Index Rankings Against Callan Emerging Markets Equity Mut Funds (Gross) Seven Years Ended September 30, 2018



### Risk Statistics Rankings vs MSCI Emerging Markets Index Rankings Against Callan Emerging Markets Equity Mut Funds (Gross) Seven Years Ended September 30, 2018

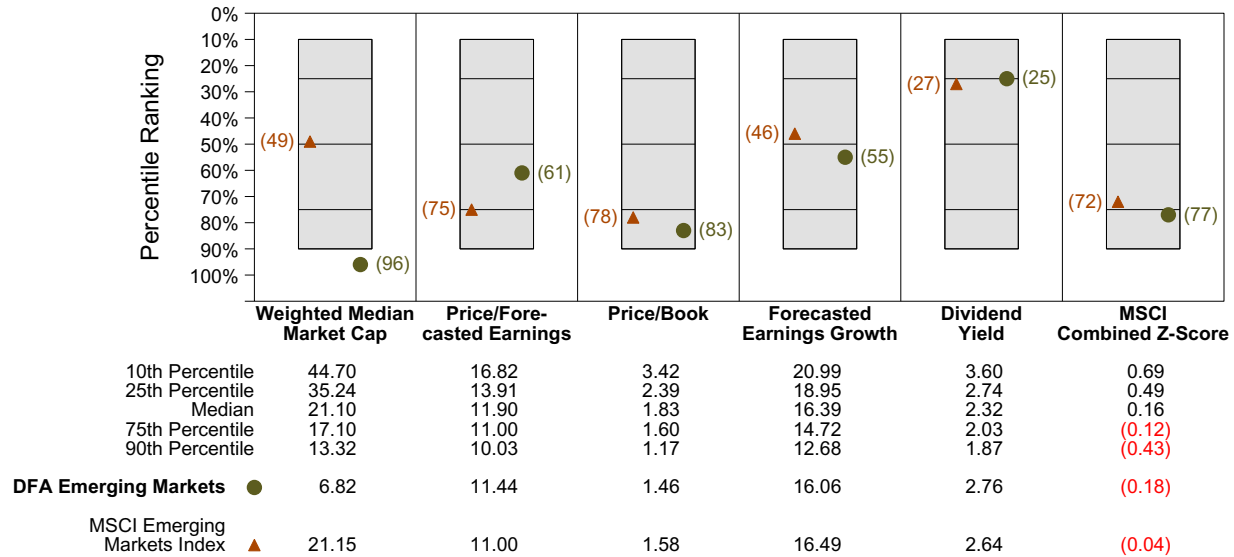


# DFA Emerging Markets Equity Characteristics Analysis Summary

## Portfolio Characteristics

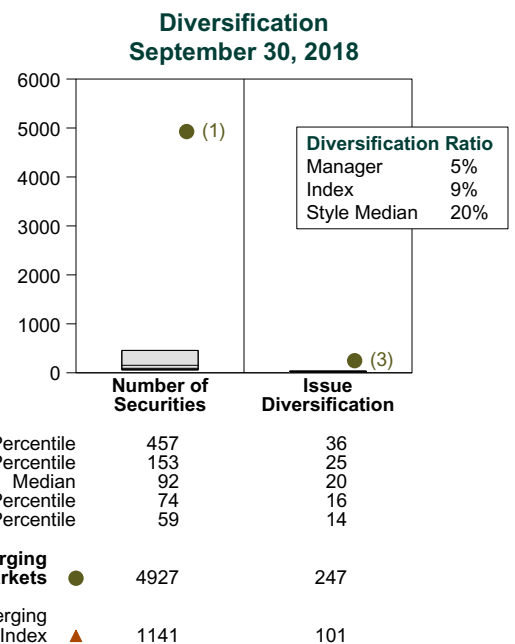
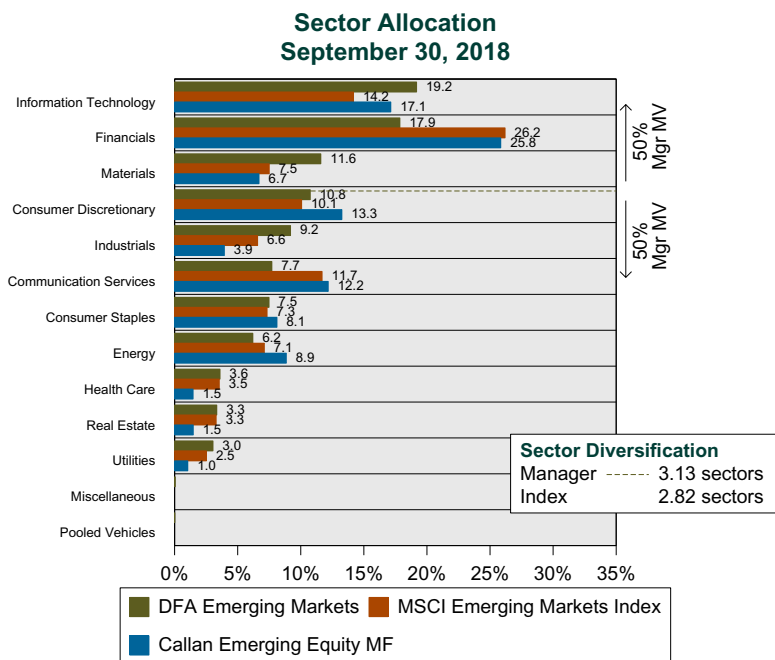
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Markets Equity Mut Funds as of September 30, 2018



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



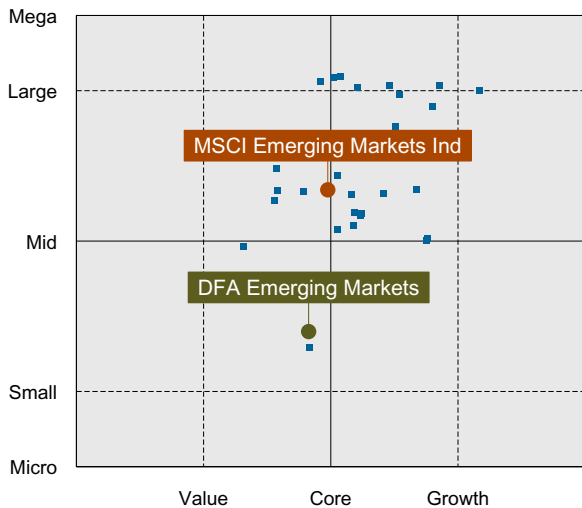
# Current Holdings Based Style Analysis

## DFA Emerging Markets

### As of September 30, 2018

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

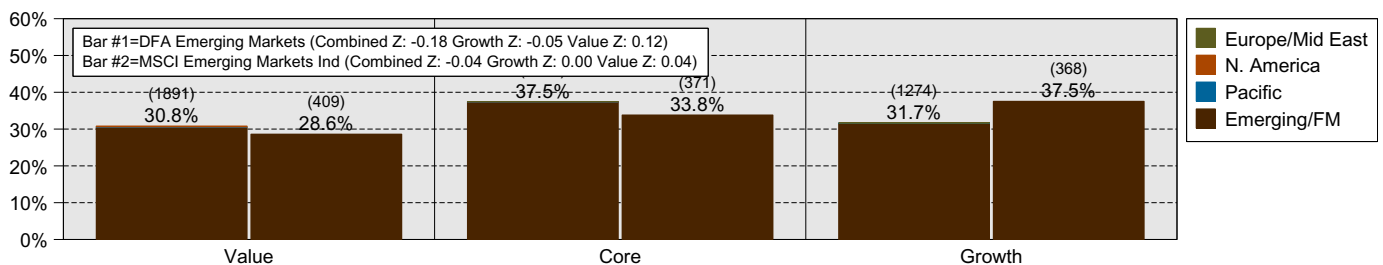
**Style Map vs Callan Emerging Equity MF Holdings as of September 30, 2018**



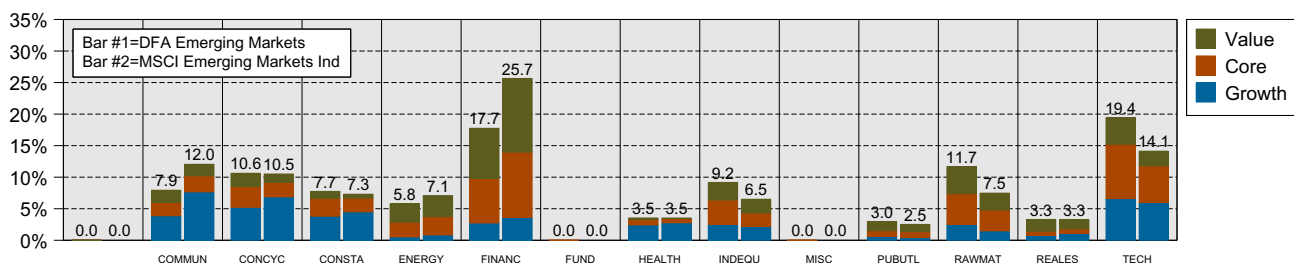
**Style Exposure Matrix Holdings as of September 30, 2018**

	Value	Core	Growth	Total
Europe/ Mid East	0.0% (0) 0.0% (0)	0.0% (1) 0.0% (0)	0.0% (1) 0.0% (0)	0.0% (2) 0.0% (0)
N. America	0.2% (4) 0.0% (0)	0.0% (8) 0.0% (0)	0.0% (0) 0.0% (0)	0.3% (12) 0.0% (0)
Pacific	0.0% (22) 0.0% (0)	0.1% (26) 0.0% (0)	0.1% (19) 0.0% (0)	0.2% (67) 0.0% (0)
Emerging/ FM	30.6% (1865) 28.6% (409)	37.4% (1557) 33.8% (371)	31.5% (1254) 37.5% (368)	99.5% (4676) 100.0% (1148)
<b>Total</b>	<b>30.8% (1891)</b> <b>28.6% (409)</b>	<b>37.5% (1592)</b> <b>33.8% (371)</b>	<b>31.7% (1274)</b> <b>37.5% (368)</b>	<b>100.0% (4757)</b> <b>100.0% (1148)</b>

**Combined Z-Score Style Distribution Holdings as of September 30, 2018**



**Sector Weights Distribution Holdings as of September 30, 2018**



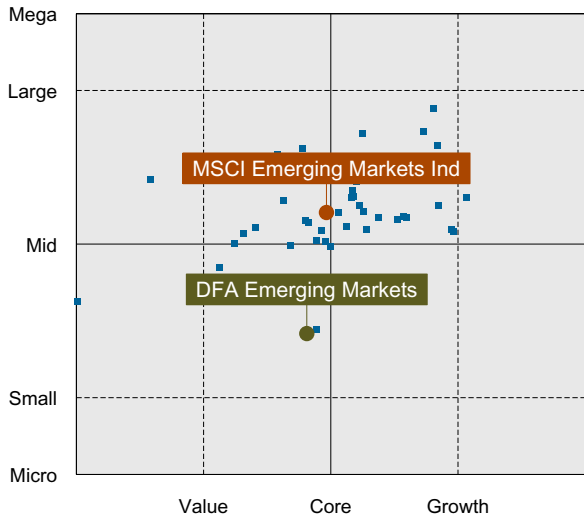
# Historical Holdings Based Style Analysis

## DFA Emerging Markets

### For Five Years Ended September 30, 2018

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

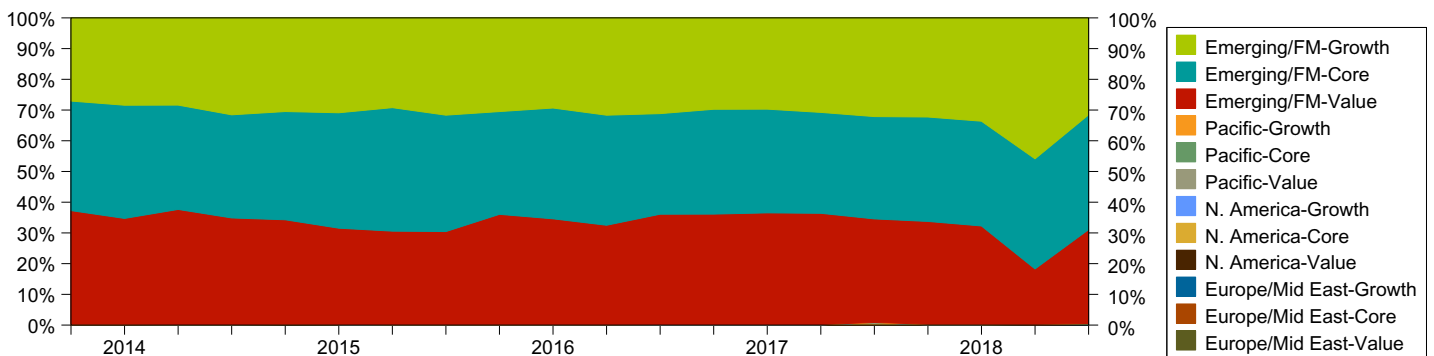
**Average Style Map vs Callan Emerging Equity MF Holdings for Five Years Ended September 30, 2018**



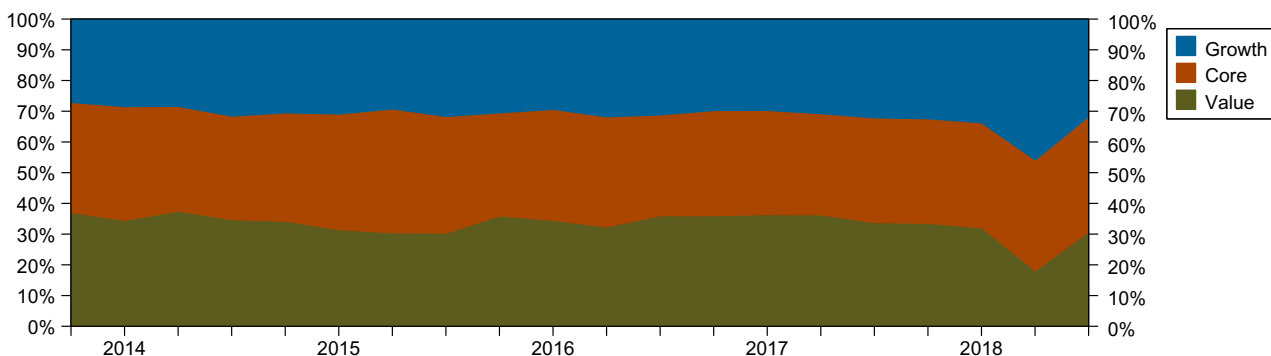
**Average Style Exposure Matrix Holdings for Five Years Ended September 30, 2018**

	0.0% (0)	0.1% (1)	0.0% (0)	0.1% (1)
Europe/ Mid East	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
N. America	0.0% (1)	0.0% (3)	0.0% (1)	0.1% (5)
Pacific	0.0% (13)	0.0% (19)	0.0% (7)	0.1% (39)
Emerging/ FM	33.2% (1382)	35.2% (1391)	31.3% (869)	99.7% (3642)
	32.3% (303)	31.8% (266)	35.9% (284)	100.0% (853)
<b>Total</b>	<b>33.3% (1396)</b>	<b>35.4% (1414)</b>	<b>31.4% (877)</b>	<b>100.0% (3687)</b>
	<b>32.3% (303)</b>	<b>31.8% (266)</b>	<b>35.9% (284)</b>	<b>100.0% (853)</b>
	Value	Core	Growth	Total

### DFA Emerging Markets Historical Region/Style Exposures



### DFA Emerging Markets Historical Style Only Exposures

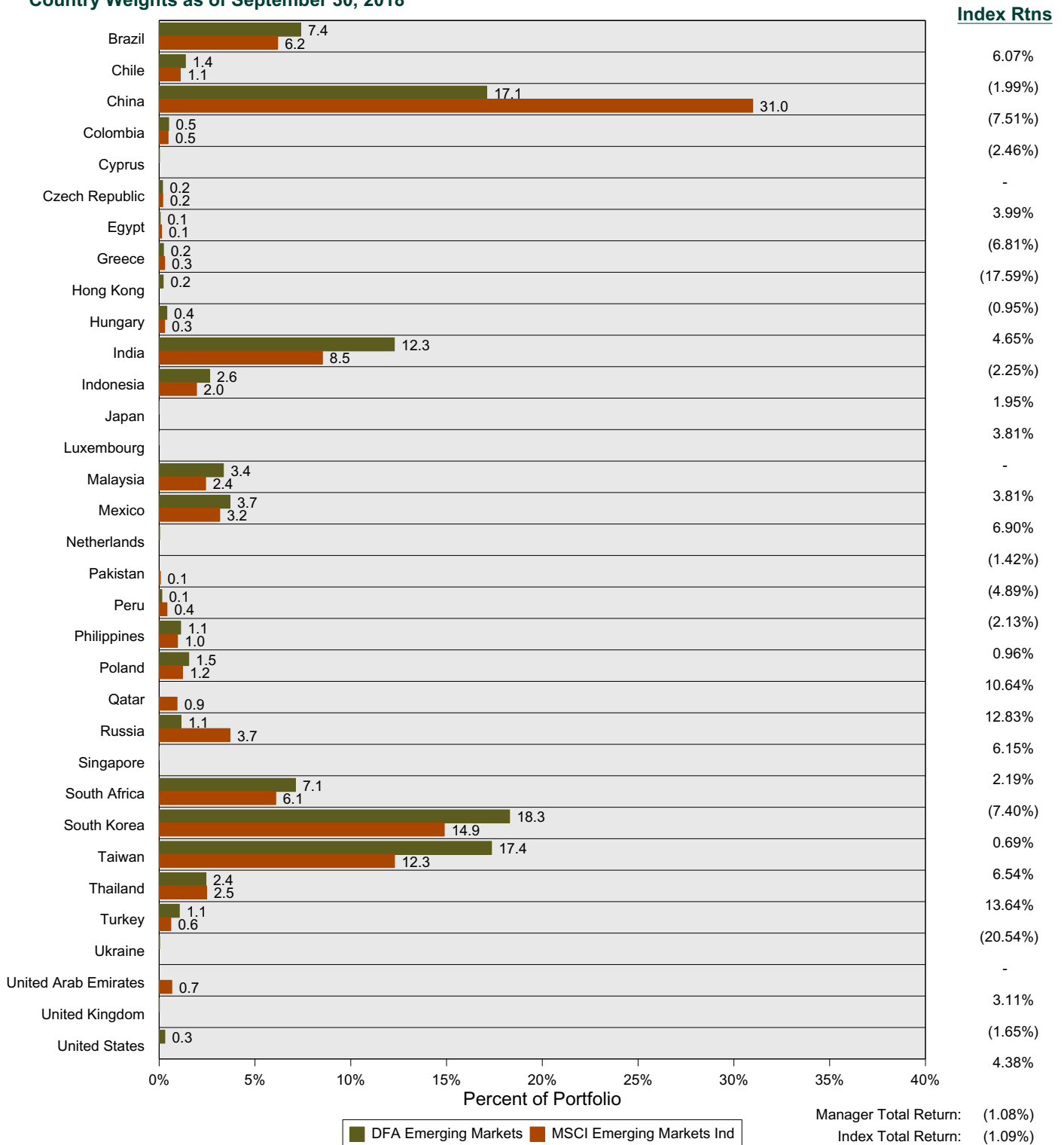


## Country Allocation DFA Emerging Markets VS MSCI Emerging Markets Index

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2018. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of September 30, 2018



## DFA Emerging Markets Top 10 Portfolio Holdings Characteristics as of September 30, 2018

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Samsung Electronics Co Ltd Ord	Information Technology	\$622,864	3.9%	0.80%	268.81	6.47	2.75%	9.26%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$278,888	1.7%	20.79%	222.93	17.37	3.05%	12.30%
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$256,111	1.6%	(17.71)%	393.27	29.01	0.27%	28.58%
Taiwan Semicond Manufac Co L Shs	Information Technology	\$207,282	1.3%	21.07%	222.93	17.37	3.05%	12.30%
Vale Sa Shs	Materials	\$155,218	1.0%	19.49%	79.16	9.41	3.64%	2.40%
Alibaba Group Hldg Ltd Sponsored Ads	Consumer Discretionary	\$145,787	0.9%	(11.19)%	427.09	25.09	0.00%	31.09%
Sk Hynix Inc Shs	Information Technology	\$121,324	0.8%	0.00%	47.98	3.34	1.37%	12.80%
China Construction Bank Shs H	Financials	\$115,786	0.7%	(0.70)%	210.16	5.43	5.32%	6.36%
Ping An Insurance H	Financials	\$105,527	0.7%	11.45%	75.67	10.69	2.34%	15.13%
Hon Hai Precision Inds Ltd Ord	Information Technology	\$85,038	0.5%	(2.65)%	44.95	10.44	2.53%	(3.02)%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Intel.Dig.Integ.Scty.	Information Technology	\$366	0.0%	242.86%	0.24	19.36	0.79%	-
Dong Sung Pharm.	Health Care	\$1,111	0.0%	134.18%	0.79	(1329.58)	0.00%	-
Frontken	Materials	\$1,232	0.0%	108.99%	0.23	20.00	0.00%	(20.02)%
Seoul Auction	Consumer Discretionary	\$409	0.0%	100.00%	0.23	29.22	0.52%	(4.27)%
Seoul Mobile Telecom	Health Care	\$149	0.0%	100.00%	0.79	414.57	0.07%	-
Multistrada Arah Sarana	Consumer Discretionary	\$43	0.0%	100.00%	0.21	-	0.58%	-
Sonokong	Consumer Discretionary	\$238	0.0%	100.00%	0.06	(26.19)	0.00%	-
Kyungchang Ind.	Consumer Discretionary	\$301	0.0%	88.10%	0.08	(3.09)	0.74%	-
Top Engineering	Information Technology	\$945	0.0%	82.61%	0.16	6.05	0.44%	(11.37)%
Cdi Holdings	Consumer Discretionary	\$1,060	0.0%	80.00%	0.19	13.84	2.92%	273.80%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Modacom	Information Technology	\$12	0.0%	(94.74)%	0.01	(0.14)	0.00%	-
Sin Cheon	Industrials	\$49	0.0%	(94.44)%	0.01	(0.46)	0.00%	-
Pati Games	Information Technology	\$16	0.0%	(85.71)%	0.02	(0.86)	0.00%	-
Gayatri Highways Ltd	Industrials	\$2	0.0%	(83.45)%	0.01	-	0.00%	-
Hongguo Intl.Hdg.	Consumer Discretionary	\$127	0.0%	(75.06)%	0.15	(70.00)	0.00%	(7.92)%
Aveng Ltd Shs	Industrials	\$71	0.0%	(73.21)%	0.05	0.00	0.00%	15.00%
Sun Man Tai Hdg.	Materials	\$142	0.0%	(63.93)%	0.10	(5.00)	0.00%	-
8k Miles Software Services	Information Technology	\$126	0.0%	(63.11)%	0.08	2.25	3.66%	138.80%
Rohta India Ltd Shs Dematerial	Information Technology	\$50	0.0%	(61.34)%	0.03	1.23	25.27%	-
Jaiprakash Associates	Industrials	\$1,014	0.0%	(60.95)%	0.22	-	7.58%	(55.06)%



# Metropolitan West Period Ended September 30, 2018

## Investment Philosophy

Metropolitan West Asset Management (MWAM) attempts to add value by limiting duration, managing the yield curve, rotating among bond market sectors and using proprietary quantitative valuation techniques.

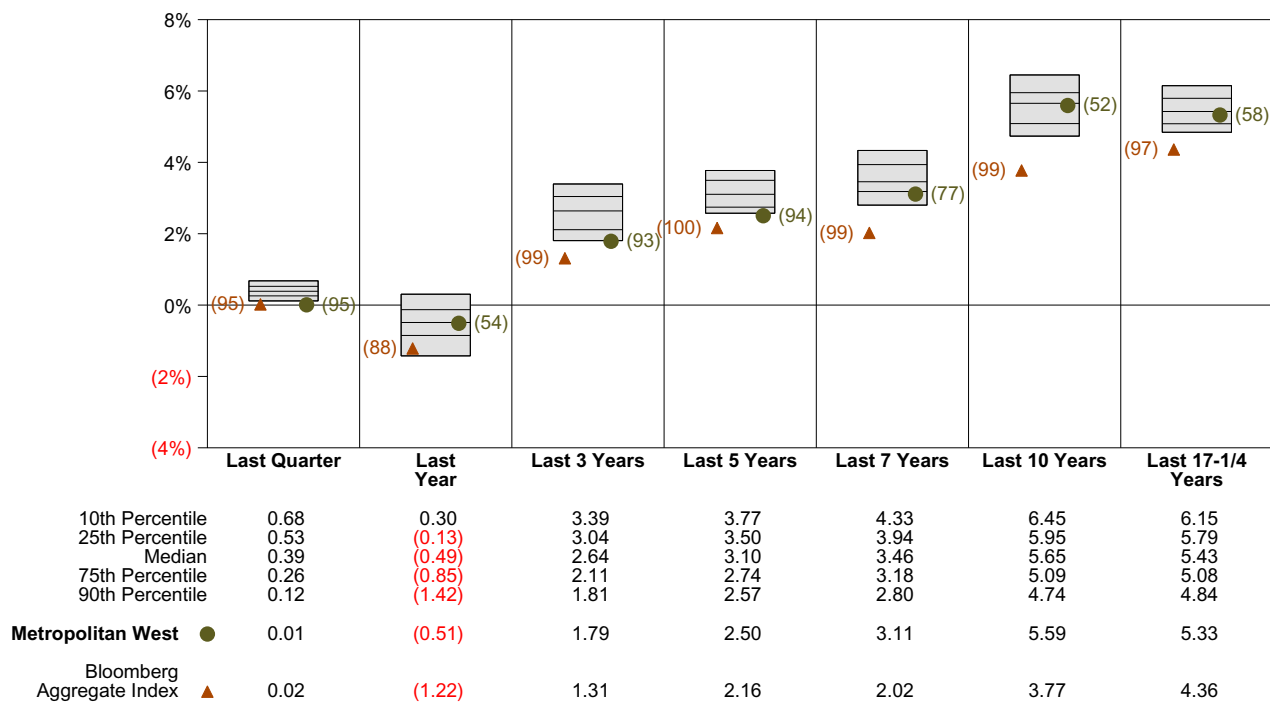
## Quarterly Summary and Highlights

- Metropolitan West's portfolio posted a 0.01% return for the quarter placing it in the 95 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 54 percentile for the last year.
- Metropolitan West's portfolio underperformed the Bloomberg Aggregate Index by 0.01% for the quarter and outperformed the Bloomberg Aggregate Index for the year by 0.71%.

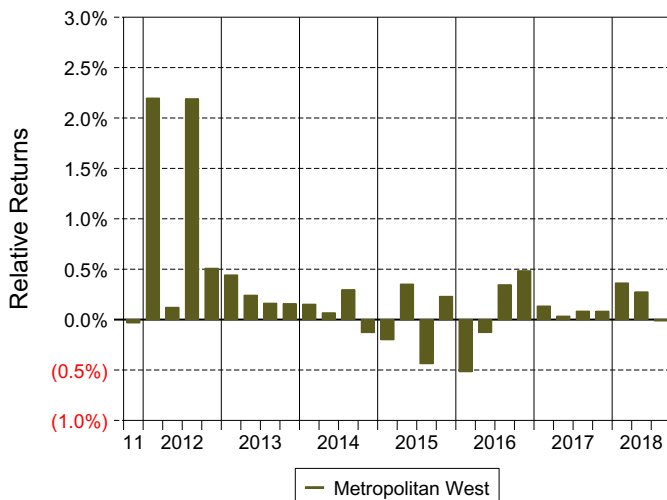
## Quarterly Asset Growth

Beginning Market Value	\$100,938,262
Net New Investment	\$-308,427
Investment Gains/(Losses)	\$6,278
Ending Market Value	\$100,636,113

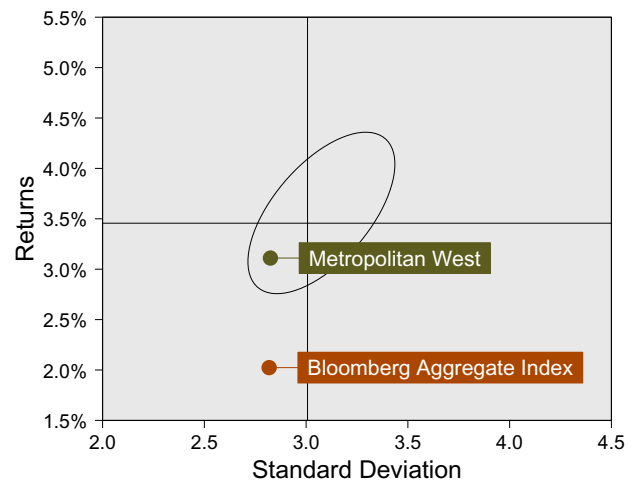
## Performance vs Callan Core Plus Fixed Income (Gross)



## Relative Returns vs Bloomberg Aggregate Index



## Callan Core Plus Fixed Income (Gross) Annualized Seven Year Risk vs Return



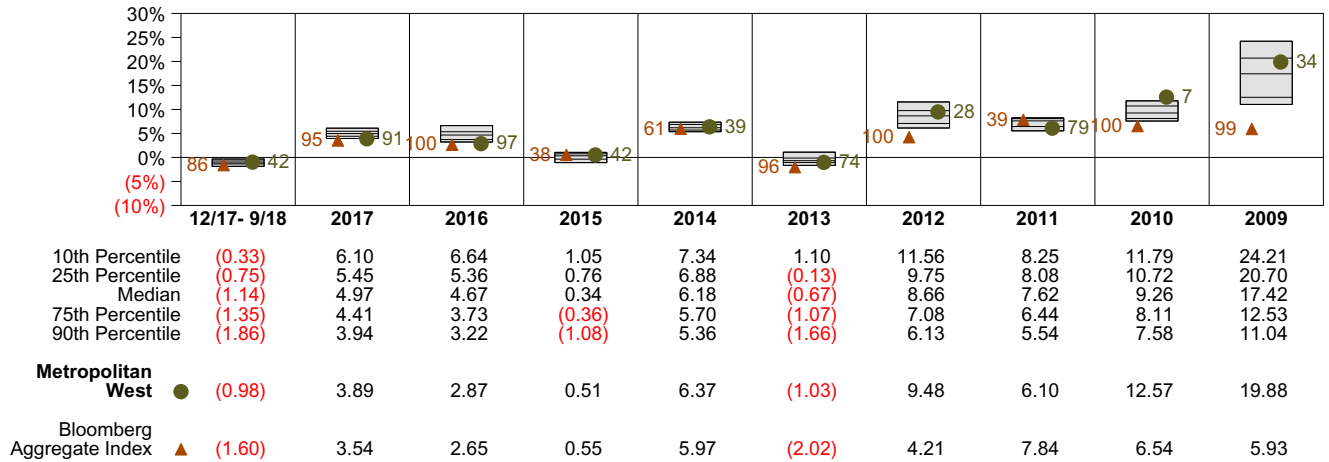


# Metropolitan West Return Analysis Summary

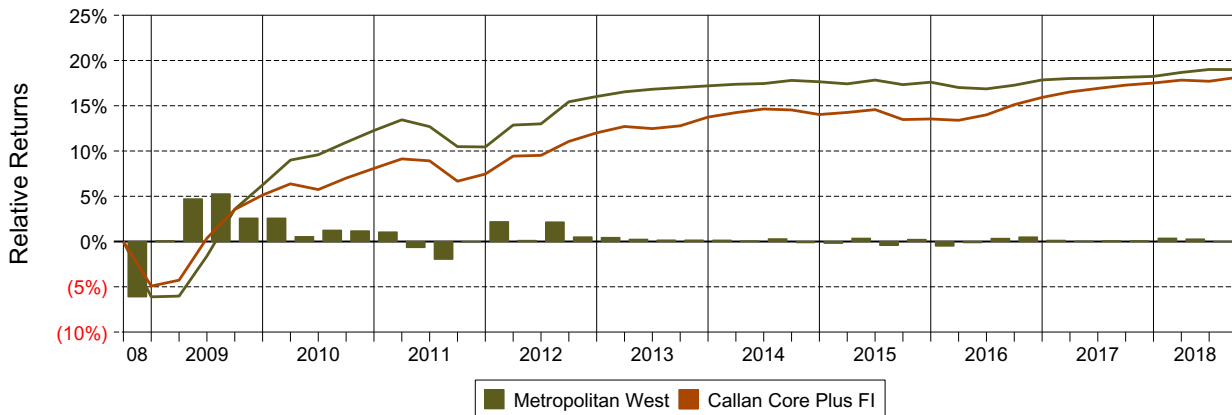
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

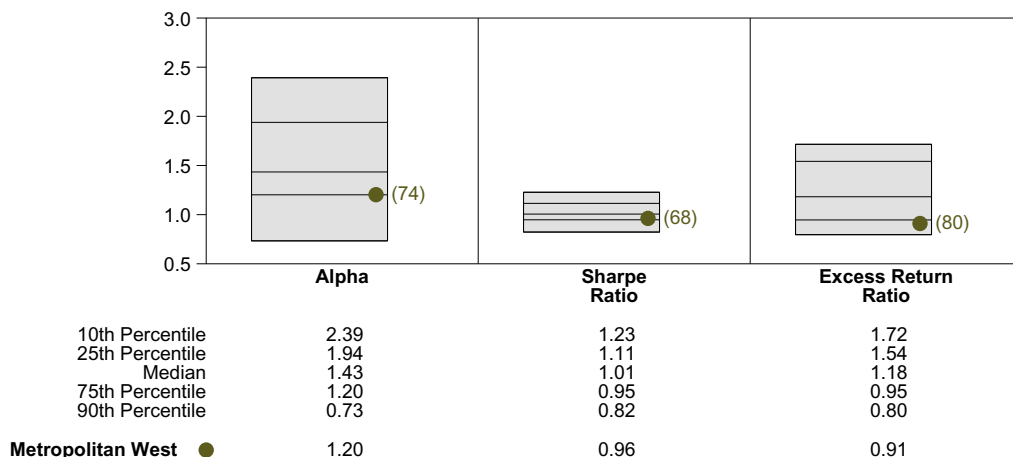
### Performance vs Callan Core Plus Fixed Income (Gross)



### Cumulative and Quarterly Relative Return vs Bloomberg Aggregate Index



### Risk Adjusted Return Measures vs Bloomberg Aggregate Index Rankings Against Callan Core Plus Fixed Income (Gross) Seven Years Ended September 30, 2018

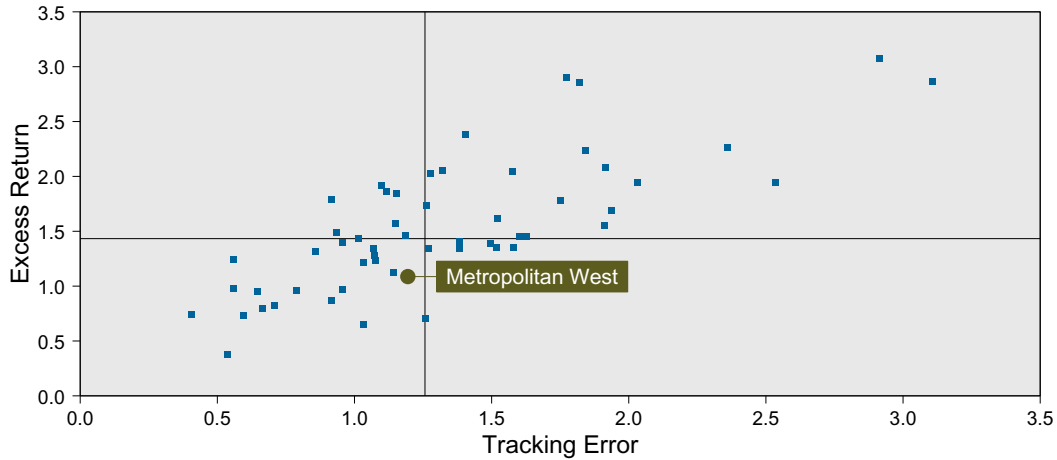


# Metropolitan West Risk Analysis Summary

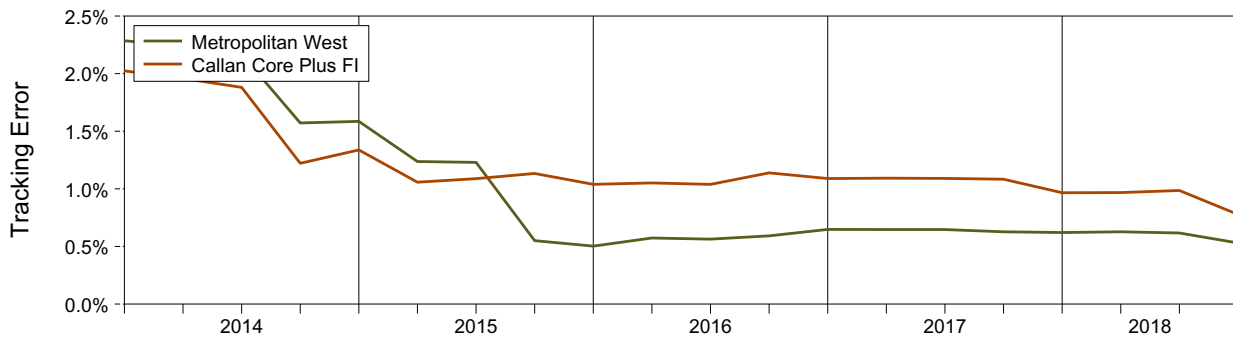
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

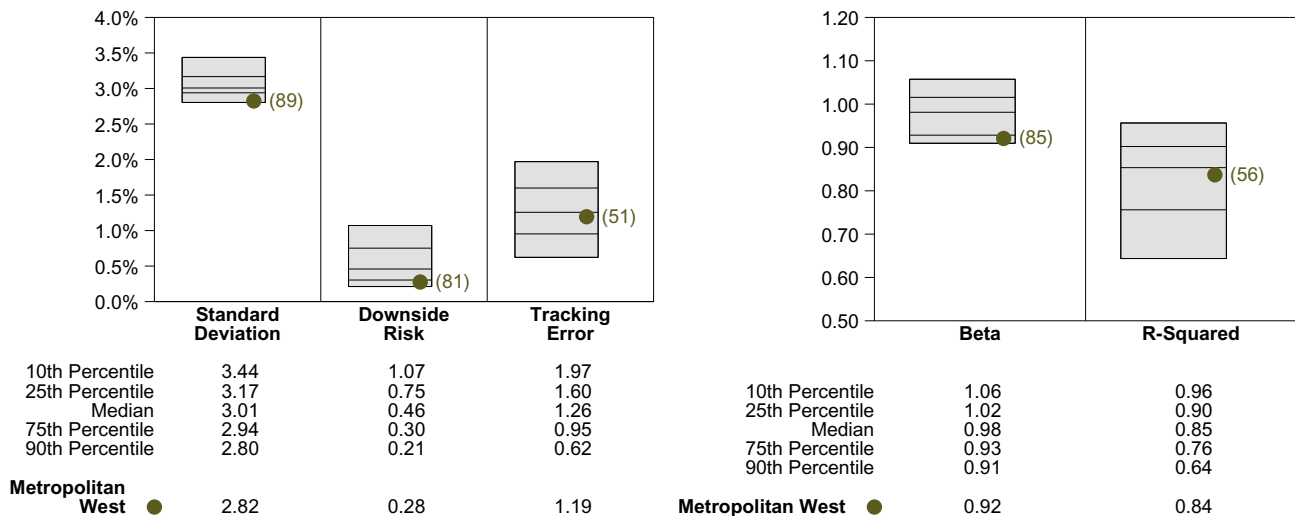
### Risk Analysis vs Callan Core Plus Fixed Income (Gross) Seven Years Ended September 30, 2018



### Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate Index



### Risk Statistics Rankings vs Bloomberg Aggregate Index Rankings Against Callan Core Plus Fixed Income (Gross) Seven Years Ended September 30, 2018

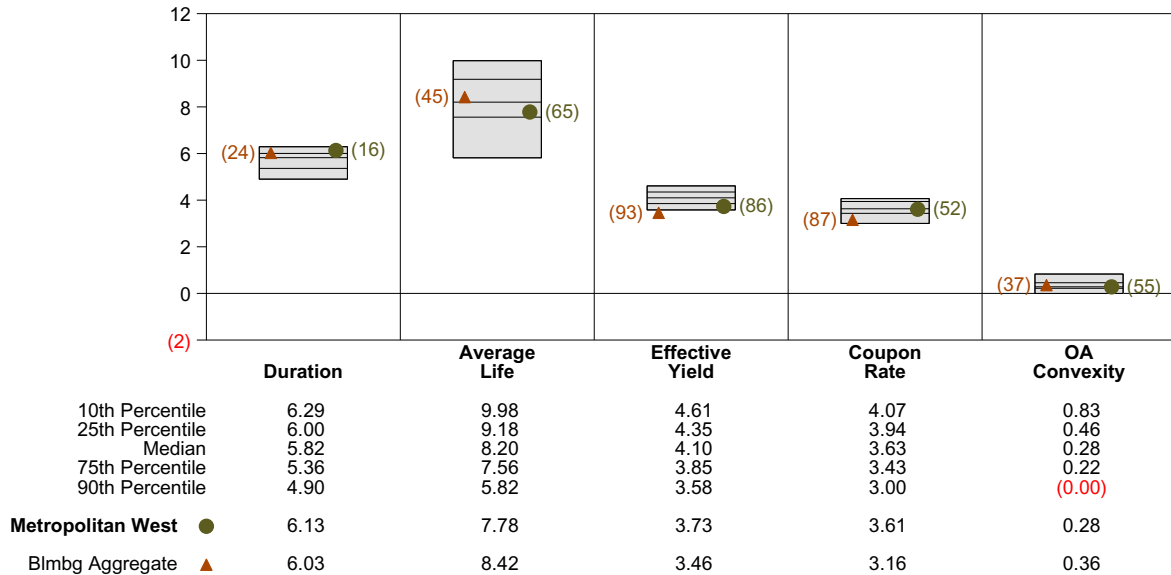


# Metropolitan West Bond Characteristics Analysis Summary

## Portfolio Characteristics

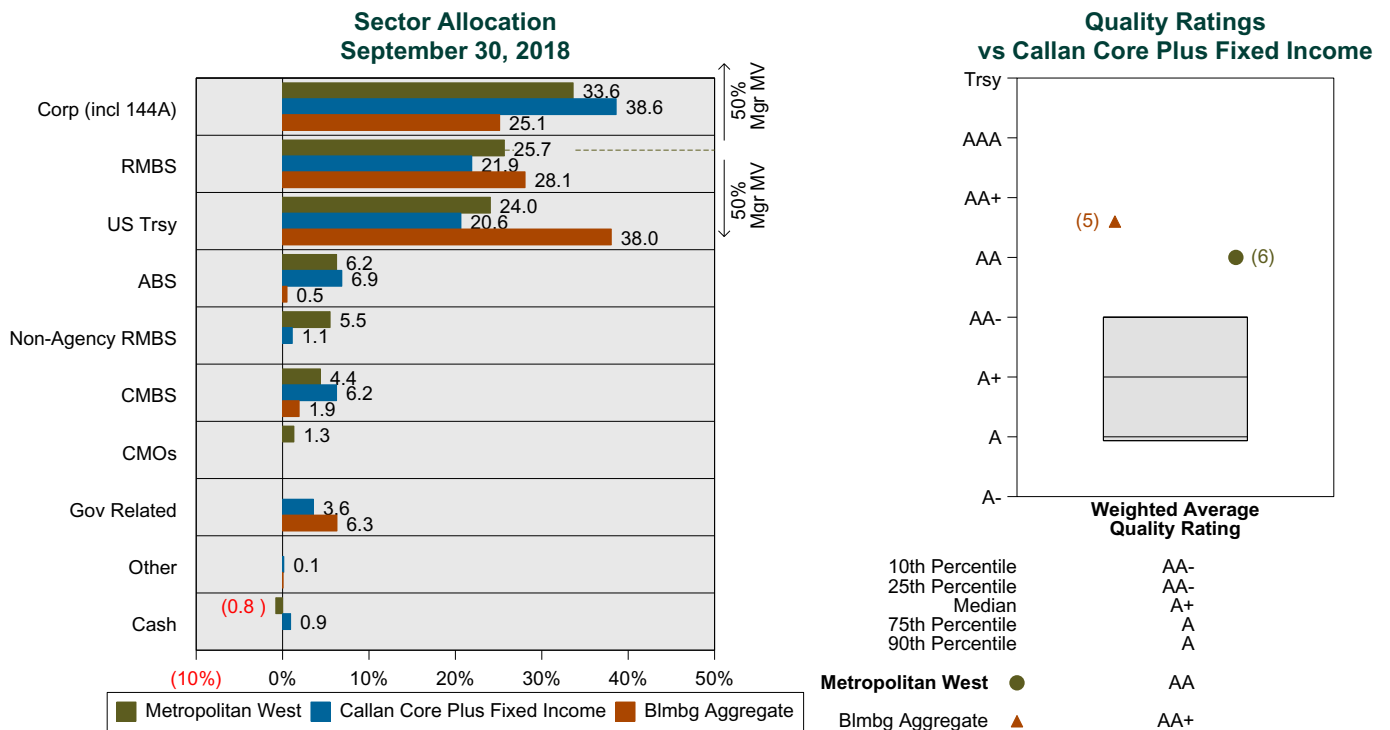
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Plus Fixed Income as of September 30, 2018



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

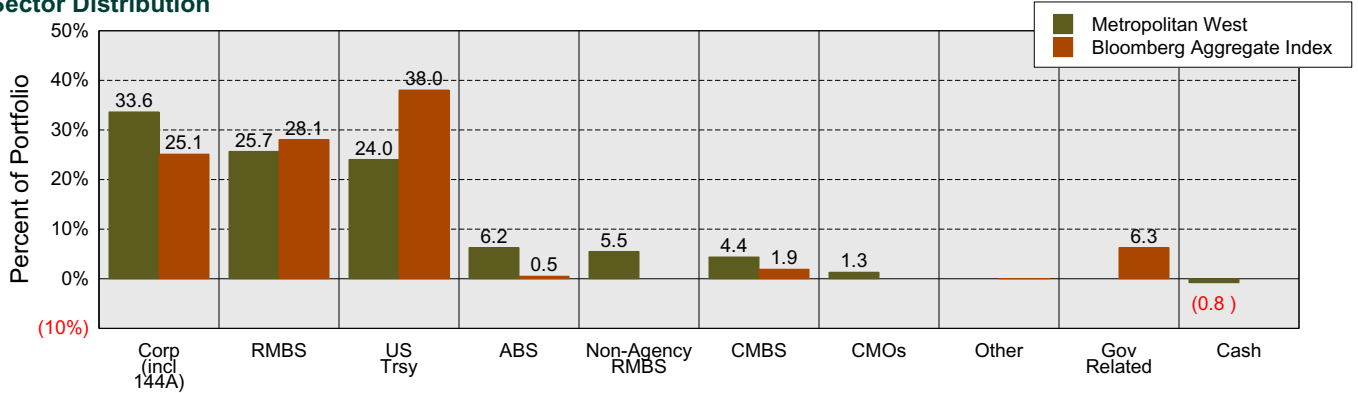


# Metropolitan West Portfolio Characteristics Summary As of September 30, 2018

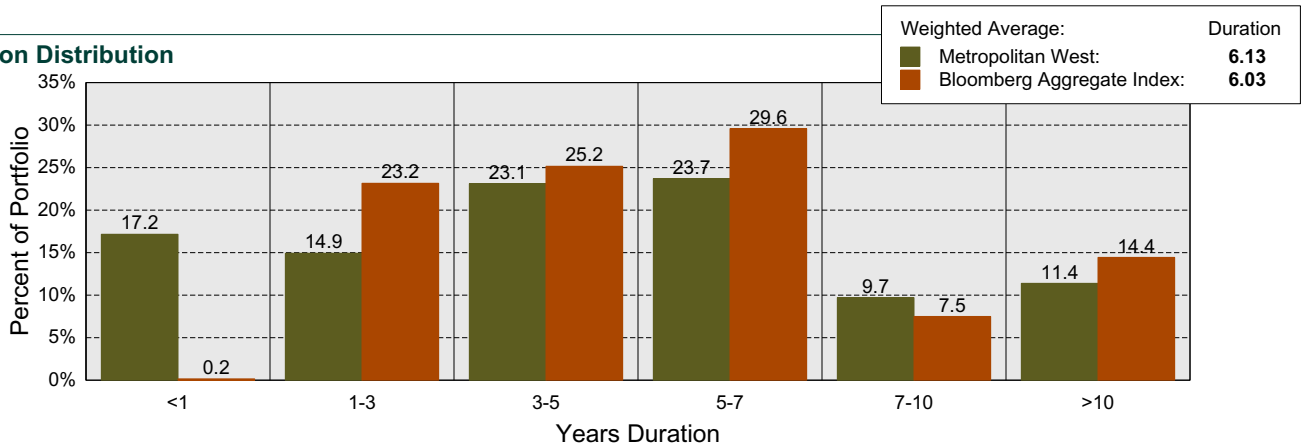
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

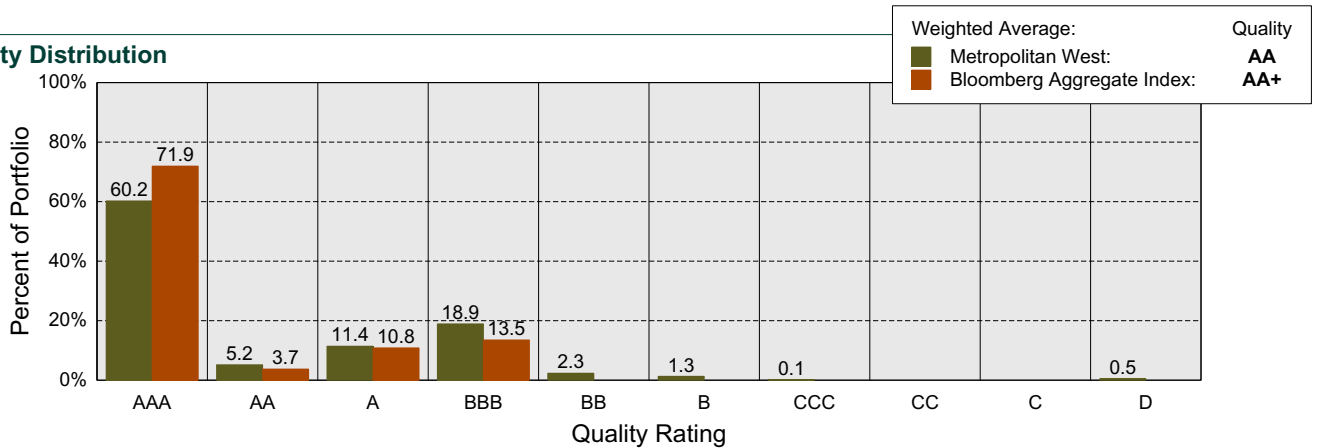
### Sector Distribution



### Duration Distribution



### Quality Distribution





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## Risk/Reward Statistics

The risk statistics used in this report examine performance characteristics of a manager or a portfolio relative to a benchmark (market indicator) which assumes to represent overall movements in the asset class being considered. The main unit of analysis is the excess return, which is the portfolio return minus the return on a risk free asset (3 month T-Bill).

**Alpha** measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

**Beta** measures the sensitivity of rates of portfolio returns to movements in the market index. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If a beta of a portfolio is 1.5, a 1 percent increase in the return on the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

**Downside Risk** stems from the desire to differentiate between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation punishes both upside and downside volatility, downside risk measures only the standard deviation of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

**Excess Return Ratio** is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

**Information Ratio** measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

**R-Squared** indicates the extent to which the variability of the portfolio returns are explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An r-squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An r-squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An r-squared of zero indicates that no relationship exists between the portfolio's return and the market.

**Relative Standard Deviation** is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A ratio of .80 would imply 20% less risk. This ratio is especially useful when analyzing the risk of investment grade fixed-income products where actual historical durations are not available. By using this relative risk measure over rolling time periods one can illustrate the "implied" historical duration patterns of the portfolio versus the benchmark.

**Residual Portfolio Risk** is the unsystematic risk of a fund, the portion of the total risk unique to the fund (manager) itself and not related to the overall market. This reflects the "bets" which the manager places in that particular asset market. These bets may reflect emphasis in particular sectors, maturities (for bonds), or other issue specific factors which the manager considers a good investment opportunity. Diversification of the portfolio will reduce or eliminate the residual risk of that portfolio.

---

## Risk/Reward Statistics

**Rising Declining Periods** refer to the sub-asset class cycles vis-a-vis the broader asset class. This is determined by evaluating the cumulative relative sub-asset class index performance to that of the broader asset class index. For example, to determine the Growth Style cycle, the S&P 500 Growth Index (sub-asset class) performance is compared to that of the S&P 500 Index (broader asset class).

**Sharpe Ratio** is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

**Sortino Ratio** is a downside risk-adjusted measure of value-added. It measures excess return over a benchmark divided by downside risk. The natural appeal is that it identifies value-added per unit of truly bad risk. The danger of interpretation, however, lies in these two areas: (1) the statistical significance of the denominator, and (2) its reliance on the persistence of skewness in return distributions.

**Standard Deviation** is a statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (ie. has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

**Total Portfolio Risk** is a measure of the volatility of the quarterly excess returns of an asset. Total risk is composed of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or unsystematic) risk. The purpose of portfolio diversification is to reduce the residual risk of the portfolio.

**Tracking Error** is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

**Treynor Ratio** represents the portfolio's average excess return over a specified period divided by the beta relative to its benchmark over that same period. This measure reflects the reward over the risk-free rate relative to the systematic risk assumed.

Note: Alpha, Total Risk, and Residual Risk are annualized.





## Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit [www.callan.com/library](http://www.callan.com/library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog “Perspectives.” For more information contact Corry Walsh at 312.346.3536 / [institute@callan.com](mailto:institute@callan.com).

## New Research from Callan’s Experts



**An Investor Framework for Addressing Climate Change** | Callan’s Anna West lays out the top issues for investors about this issue. We also identify solutions and areas of progress for those seeking to address climate-related risks as well as benefit from emerging opportunities.

**Promoting Gender Diversity in the Investment Industry** | Callan Executive Chairman Ron Peyton offers his observations on what has worked for gender inclusion at the firm over the last 45 years and what we have learned in the hope that it will inform others on how to progress toward equality in senior roles industry-wide.



**Helping DC Plan Participants in the “Distribution” Phase** | Callan’s Tom Shingler and James Veneruso discuss our research on the “distribution phase” of defined contribution plans, when participants are drawing down assets, and the issues that plan sponsors should address.

**Picking Through the Alpha Graveyard: Correcting for Survivorship Bias in Investment Product Universes** | In this paper from the *Journal of Investment Management*, Callan’s Greg Allen, Ivan Cliff, and Wally Meerschaert propose a technique to correct for survivorship bias in investment product universes. It uses all available data for survivors and non-survivors, corrects for bias across the full distribution (from 1st to 99th percentile), and can be applied to other return-based statistics such as the Sharpe ratio.

**Infrastructure: No Longer a Niche Option** | Callan’s Jan Mende discusses investing in infrastructure. Institutional investors are increasing allocations, managers are creating more investment options, and benchmarks are being refined.

**The Shape of Risk: Making Cents of the Irrational With Options** | In the third quarter’s *Hedge Fund Monitor*, Jim McKee discusses the use of options as insurance for institutional portfolios.

**2018 ESG Survey** | Callan’s sixth annual survey on the status of environmental, social, and governance (ESG) investing in the U.S. institutional investment market reveals more than 40% of investors are incorporating ESG factors into investment decisions.

**Your Plan Will Face a Cyberattack; Here’s How to Prepare** | The third quarter’s edition of the *DC Observer* is designed to assist plan sponsors with formulating and executing their cybersecurity strategy to protect their information and their assets.

## Quarterly Periodicals

**Private Equity Trends** | This newsletter offers the latest data on private equity fundraising, buyouts, venture capital, and returns.

**Market Pulse Flipbook** | A quarterly market reference guide covering investment and fund sponsor trends in the U.S. economy, U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution.

**Capital Market Review** | This quarterly publication provides analysis and a broad overview of the economy and public and private market activity across a wide range of asset classes.

**Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle?** | Callan’s Real Assets Consulting group identifies seven indicators—based on spreads in real estate and fixed income markets—that, combined with an understanding of prevailing market dynamics, have helped signal when the institutional real estate market is overheated or cooled.

## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: [www.callan.com/library/](http://www.callan.com/library/)

Callan's **2019 National Conference** will be held January 28-30, 2019. Mark your calendars for this upcoming event! And please visit the Events page on our website ([www.callan.com/events/](http://www.callan.com/events/)) for additional information as it becomes available.

**For more information about events, please contact Barb Gerraty: 415.274.3093 / [gerraty@callan.com](mailto:gerraty@callan.com)**

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the "Callan College," provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next sessions are:

### Introduction to Investments

*San Francisco, April 16-17, 2019*

*San Francisco, July 16-17, 2019*

*Chicago, October 22-23, 2019*

This program familiarizes fund sponsor trustees, staff, and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory "Callan College" session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### Customized Sessions

The "Callan College" is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

**Learn more at [www.callan.com/events/callan-college-intro](http://www.callan.com/events/callan-college-intro) or contact Kathleen Cunnie: 415.274.3029 / [cunnie@callan.com](mailto:cunnie@callan.com)**

## Education: By the Numbers

**525** Attendees (on average) of the Institute's annual National Conference

**50+** Unique pieces of research the Institute generates each year

**3,700** Total attendees of the "Callan College" since 1994

**1980** Year the Callan Institute was founded



**"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialog to raise the bar across the industry."**

Greg Allen, Chief Executive Officer and Chief Research Officer



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g. attending and educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
Acadian Asset Management LLC
AEGON USA Investment Management
Aether Investment Partners
AEW Capital Management
Affiliated Managers Group, Inc.
Alcentra
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investments
Amundi Pioneer Asset Management
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Black Creek Investment Management, Inc.
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Breckinridge Capital Advisors, Inc.
BrightSphere Investment Group (FKA Old Mutual Asset)
Brown Brothers Harriman & Company
Cambiar Investors, LLC

Manager Name
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management
CenterSquare Investment Management
Chartwell Investment Partners
Christian Brothers Investment Services
CIM Group
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments
Columbus Circle Investors
Credit Suisse Asset Management
CS McKee, L.P.
DePrince, Race & Zollo, Inc.
D.E. Shaw Investment Management, L.L.C.
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS (Formerly Deutsche Asset Management)
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.

Manager Name
Gerding Edlen
GlobeFlex Capital, L.P.
GMO LLC
Goldman Sachs Asset Management
Green Square Capital LLC
Greenwich Investment Management, Inc.
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Harding Loevner L.P.
Hartford Funds
Hartford Investment Management Co.
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Intech Investment Management, LLC
Invesco
Investec Asset Management
Ivy Investments
J.P. Morgan
Janus
Jennison Associates LLC
Jensen Investment Management
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
LMCG Investments, LLC
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Asset Management
McKinley Capital Management, LLC
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen Investments, Inc.
OFI Global Asset Management
O'Shaughnessy Asset Management, LLC
P/E Investments

Manager Name
Pacific Investment Management Company
Pathway Capital Management
Peregrine Capital Management, Inc.
Perkins Investment Management
PGIM
PGIM Fixed Income
PineBridge Investments
Pictet Asset Management Ltd.
PNC Capital Advisors, LLC
Principal Global Investors
Private Advisors, LLC
Putnam Investments, LLC
QMA
RBC Global Asset Management
Reaves Asset Management
Regions Financial Corporation
Riverbridge Partners LLC
Robeco Institutional Asset Management, US Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Smith Graham & Co. Investment Advisors, L.P.
Smith Group Asset Management
South Texas Money Management, Ltd.
Sprucegrove Investment Management Ltd.
Standard Life Investments Limited
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Sun Life Investment Management
T. Rowe Price Associates, Inc.
The Boston Company Asset Management, LLC
The London Company
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
VanEck
Velanne Asset Management Ltd.
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wedgewood Partners, Inc.
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC



## Account Compliance Summary

Alerts:	0
Warnings:	0
Passes:	14

A5XB SACRT - ATLANTA CAPITAL MGMT

Production Date: 09/28/2018

Securities + Cash	25,929,852.33	Base Currency	USD	Net Assets	25,866,259
Rule Name		Limit Type	Limit Value	Result	Result Status
<b><u>144A and Private Placem</u></b>					
1	Private Placements are prohibited. (143653)	Maximum	0.00%	0.00 %	Pass
<b><u>Asset Measures</u></b>					
2	AssetMeasure: AssetMeasure_Funds_PREFERRED_Denominator (34662)			25,929,852.33 Value	Pass
<b><u>Asset Type</u></b>					
3	International equity securities which trade on U.S.-based exchanges, including American Depository Receipts (ADRs), shall not exceed 5% of the portfolio at cost (143658)	Maximum	5.00%	0.00 %	Pass
4	Investments in commodities are prohibited (143655)	Maximum	0.00%	0.00 %	Pass
5	Margin Securities are prohibited. (143651)	Maximum	0.00%	0.00 %	Pass
6	Ownership of shares/debt issued limit 5% ex null (143652)	Maximum	5.00%	0.03 %	Pass
7	The Fund may not enter into short sales. (143654)	Maximum	0.00%	0.00 %	Pass
8	The Fund may not hold any Options. (143657)	Maximum	0.00%	0.00 %	Pass
9	The Fund may not hold more than 5% of the shares outstanding of any domestic equity security (143659)	Maximum	5.00%	0.03 %	Pass
<b><u>Cash</u></b>					
10	No more than 10% of the Fund in cash and cash equivalents. (143656)	Maximum	10.00%	2.42 %	Pass
<b><u>Exchange</u></b>					
11	Flag any non-US exchange traded futures (143670)	Maximum	0.00%	0.00 %	Pass
<b><u>Industry</u></b>					
12	Industry Sector GICS - Max 25% at cost (143660)	Maximum	25.00%	8.08 %	Pass
13	The Fund shall not invested in any security issued by a company in the Tobacco Sub-Industry as defined by GICS (143650)	Maximum	0.00%	0.00 %	Pass
<b><u>Issuer</u></b>					
14	Investments in a single domestic equity issuer shall not exceed 5% at cost (143661)	Maximum	5.00%	2.41 %	Pass



## Account Compliance Summary

Alerts:	0
Warnings:	0
Passes:	8

A5XD SACRT - METWEST

Production Date: 09/28/2018

Securities + Cash	109,902,515.73	Base Currency	USD	Net Assets	100,631,428
Rule Name		Limit Type	Limit Value	Result	Result Status
<b><u>144A and Private Placem</u></b>					
1	The Fund is not permitted to hold any Private Placements excluding 144a (143666)	Maximum	0.00%	0.00 %	Pass
<b><u>Asset Measures</u></b>					
2	AssetMeasure: AssetMeasure_Funds_Preferred_Denominator (34662)			109,902,515.73 Value	Pass
<b><u>Asset Type</u></b>					
3	A5XD: Flag all prohibited security types (143665)	Maximum	0.00%	0.00 %	Pass
4	Asset-Backed Commercial Paper - Minimum Quality of A2/P2 (157603)	Maximum	0	0 Num Bkts	Pass
<b><u>Credit Quality</u></b>					
5	Minimum Quality must be at least 80% Baa or above (157604)	Minimum	80.00%	89.90 %	Pass
6	No Commercial Paper rated < A2/P2 at time of purchase (143662)	Maximum	0.00%	0.00 %	Pass
7	The Weighted Average Credit Rating of the Fund must be A or better (143663)	Minimum	20	22.32 Rank	Pass
<b><u>Industry</u></b>					
8	The Fund shall not invested in any security issued by a company in the Tobacco Sub-Industry as defined by GICS (143650)	Maximum	0.00%	0.00 %	Pass



## Account Compliance Summary

Alerts:	0
Warnings:	0
Passes:	14

A5Z8 SACRT - ROBECO

Production Date: 09/28/2018

Securities + Cash	47,317,666.00	Base Currency	USD	Net Assets	47,524,699
Rule Name		Limit Type	Limit Value	Result	Result Status
<b><u>144A and Private Placem</u></b>					
1	Private Placements are prohibited. (143653)	Maximum	0.00%	0.00 %	Pass
<b><u>Asset Measures</u></b>					
2	AssetMeasure: AssetMeasure_Funds_Preferred_Denominator (34662)			47,317,666.00 Value	Pass
<b><u>Asset Type</u></b>					
3	International equity securities which trade on U.S.-based exchanges, including American Depository Receipts (ADRs), shall not exceed 5% of the portfolio at cost (143658)	Maximum	5.00%	0.74 %	Pass
4	Investments in commodities are prohibited (143655)	Maximum	0.00%	0.00 %	Pass
5	Margin Securities are prohibited. (143651)	Maximum	0.00%	0.00 %	Pass
6	Ownership of shares/debt issued limit 5% ex null (143652)	Maximum	5.00%	0.01 %	Pass
7	The Fund may not enter into short sales. (143654)	Maximum	0.00%	0.00 %	Pass
8	The Fund may not hold any Options. (143657)	Maximum	0.00%	0.00 %	Pass
9	The Fund may not hold more than 5% of the shares outstanding of any domestic equity security (143659)	Maximum	5.00%	0.01 %	Pass
<b><u>Cash</u></b>					
10	No more than 10% of the Fund in cash and cash equivalents. (143656)	Maximum	10.00%	1.15 %	Pass
<b><u>Exchange</u></b>					
11	Flag any non-US exchange traded futures (143670)	Maximum	0.00%	0.00 %	Pass
<b><u>Industry</u></b>					
12	Industry Sector GICS - Max 25% at cost (143660)	Maximum	25.00%	11.00 %	Pass
13	The Fund shall not invested in any security issued by a company in the Tobacco Sub-Industry as defined by GICS (143650)	Maximum	0.00%	0.00 %	Pass
<b><u>Issuer</u></b>					
14	Investments in a single domestic equity issuer shall not exceed 5% at cost (143661)	Maximum	5.00%	3.27 %	Pass





## Account Compliance Summary

Alerts:	
Warnings:	
Passes:	

A5Z8 SACRT - ROBECO

Production Date: 09/28/2018

Securities + Cash	47,317,666.00	Base Currency	USD	Net Assets	47,524,699
-------------------	---------------	---------------	-----	------------	------------

Rule Name	Limit Type	Limit Value	Result	Result Status
-----------	------------	-------------	--------	---------------

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# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
17	12/12/18	Retirement	Information	11/05/18

Subject: Educational Session on Private Equity Investments Presented by Callan LLC (All). (Adelman)

## ISSUE

Educational Session on Private Equity Investments Presented by Callan LLC (All). (Adelman)

## RECOMMENDED ACTION

Information only.

## FISCAL IMPACT

None.

## DISCUSSION

At the June 20, 2018 Quarterly Retirement Board meeting, Callan LLC (Callan) presented the annual Asset Allocation Review required under the Retirement Plans' Investment Policy. As part of the presentation, Callan discussed asset classes that are not currently part of the Retirement Plans' portfolio, including hedge funds, private equity, and real estate. The Retirement Boards expressed an interest in receiving additional information about those asset classes and requested that Callan provide an educational presentation to the Boards.

Callan is providing three educational sessions. Each session will focus on a specific asset class and will describe the potential risks and returns, liquidity features, and diversification roles in a pension plan's investment portfolio. During the first training, at the September 12, 2018 Quarterly Retirement Board meeting, Callan focused on hedge funds and multi-asset class investments. This second training will focus on Private Equity Investments. A subsequent training will focus on real estate investments.

Attachment 1 is the educational materials, provided by Callan, for Private Equity investments.

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Approved:

Presented:

Final 12/03/18

VP of Finance/CFO

Treasury Controller

M:\Workgroups\Pension Administration\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\HB Edits\ 12-12-18 Educational Session - Private Equity.docx

Callan



December 12, 2018

**Sacramento Regional  
Transit District**

Private Equity Education

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**Anne Heaphy**  
Fund Sponsor Consulting

**Harshal Shah, CFA**  
Private Equity Research

**Uvan Tseng, CFA**  
Fund Sponsor Consulting

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# Agenda

- Introduction
- Commitment Pacing
- Implementation
- Monitoring
- Summary

Callan

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## Introduction

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## Private Equity at Callan

- Callan's Private Equity Research group helps our clients design, implement, and monitor their private equity investment programs. This includes launching new private equity programs and evaluating and adjusting existing programs.
  - While the consulting process is similar to what's used for other asset classes (strategic planning, implementation, monitoring and measurement, and education and improvement), private equity has its own quirks and unique analyses.
- Private equity is popular with the following client types, especially the larger ones:
  - Defined Benefit Plans
  - Endowments & Foundations
  - Insurance Companies
  - Health Care
  - Sovereign Wealth Clients
- About 1/3 of our clients have private equity allocations, who represent about 85% of Callan's assets under advisement.
- Typical targeted exposure to private equity averages about 7% and can reach as high as 34%.

# Private Equity Investment Philosophy

Combine a long-term perspective with proven investments.

Callan Investment Philosophy

Program Design ► The most important decisions are made before the first investment

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Commitment Pacing ► Budget capital to invest in quality, not to chase a private equity target allocation

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Strategy Selection ► Returns are fungible, skew the portfolio towards strong and consistent results

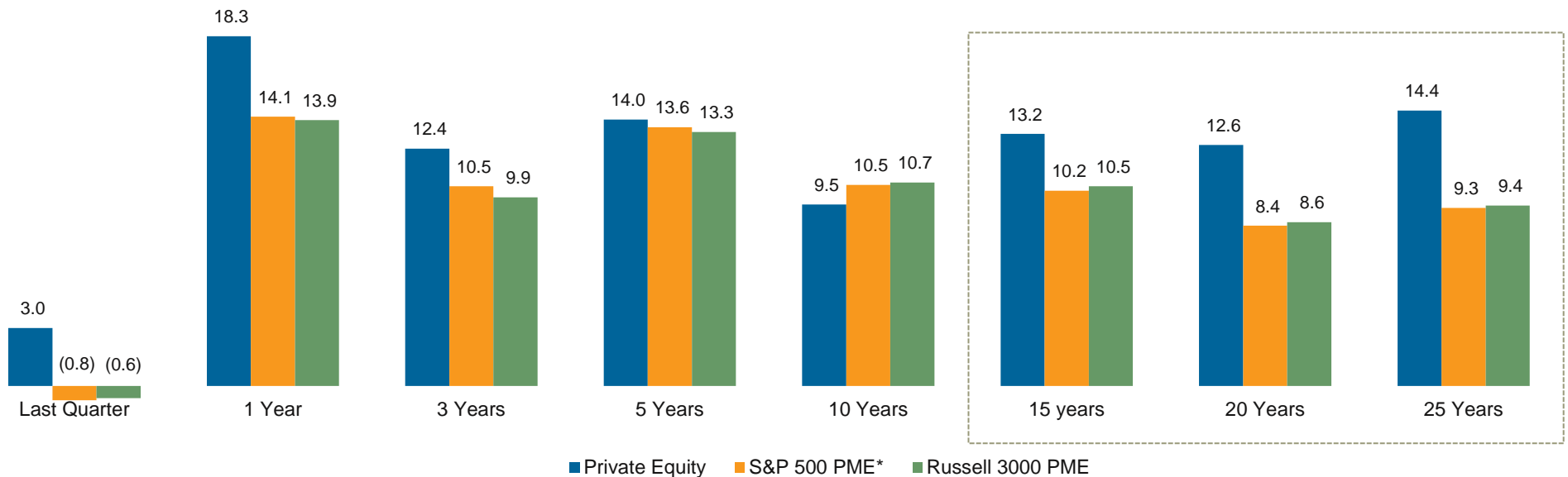
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Manager Selection ► Manager Selection begins before private equity sponsors start fundraising

# Why Invest in Private Equity?

- The key attraction is the potential to **outperform** public equity.
- It also provides some diversification and a **unique equity opportunity set** — private companies.
- Over the last 10-15 years private equity has become mainstream and is a crucial part of the fabric of both Wall Street and Main Street.
- Primary drawbacks are **illiquidity** and program complexity.

Pooled Horizon Net IRRs  
As of March 31, 2018

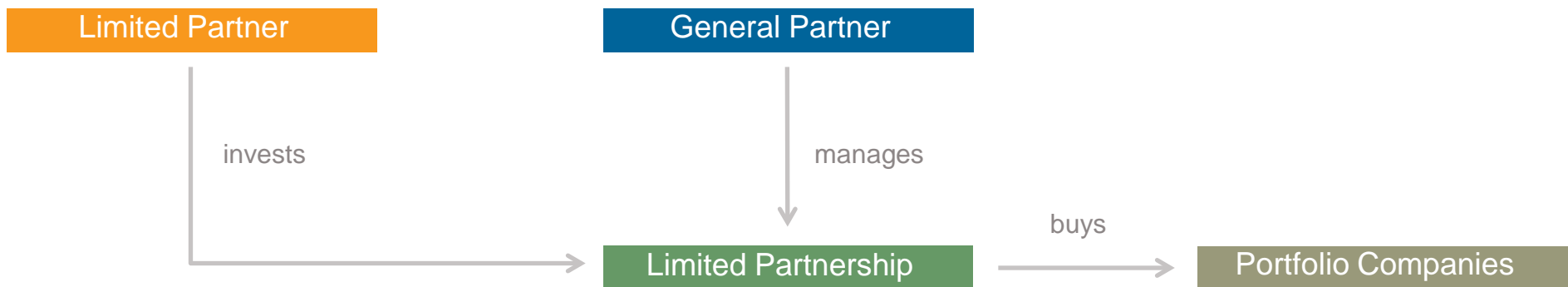


\* PME or Public Market Equivalent: an internal rate of return (IRR) calculated by applying the called capital and distributed capital of the private equity investment as an equivalent purchase and sale of the chosen benchmark. The calculated net asset value (NAV) is then used to calculate the benchmark's IRR.



# How to Invest in Private Equity

- Private equity is accessed through a limited partnership vehicle where the investment manager is the **General Partner (GP)** and the investor is the **Limited Partner (LP)**.
- GPs raise distinct pools of capital every 3-4 years and LPs **commit** capital to those funds.
  - This is why you see private equity funds called Fund I, Fund II, Fund III...
- Over time the GP **draws down** the LP commitment and makes 10-30 investments into **portfolio companies**. The LP receives a **capital call** when the GP has bought a new company.
- The fund adds on some leverage to these companies and works to improve them in some way, either by cutting costs and/or growing revenues.
- After holding the companies for a few years, the GP looks to sell the companies. Once all portfolio companies are sold, the partnership liquidates – therefore, our clients need to continually invest in new partnerships as older ones expire.



# Private Equity Strategy Types

J.CREW



## Buyout

- Acquire equity-like interests in mature businesses, generally in an influencing or outright control position.
- Companies are typically mature with broader operating histories, established end markets, and/or developed product or service offerings.
- The buyout categorization tends to be applied to managers that diversify across several industry sectors. Control-oriented buyout managers that are single industry or sector investors may be classified as being Special Situations due to their more narrow focus.



## Growth Equity

- Acquire minority, equity-like interests in newer, growing businesses, generally in an influencing position.
- Companies are typically in the expansion stage of their lifecycle with limited to moderate operating histories, established end markets, and/or demonstrated product or service offerings.



## Venture Capital

- Acquire equity-like interests in new and emerging businesses, generally in an influencing position.
- Companies are typically in the developing stage of their lifecycle with limited operating histories, potentially undeveloped end markets, and/or new product or service concepts.
- We include venture debt as part of venture capital. Venture debt managers focus on the same types of companies as venture capital managers, however they take a debt position as opposed to an equity position.



## Distressed/Restructuring

- Acquire interests in mature businesses facing operational or market challenges.
- Companies are typically in the mature or declining stages of a company lifecycle with broader operating histories, established end markets, and/or developed product or service offerings.

# Portfolio Company Case Study: Arby's

## Sample Buyout Investment



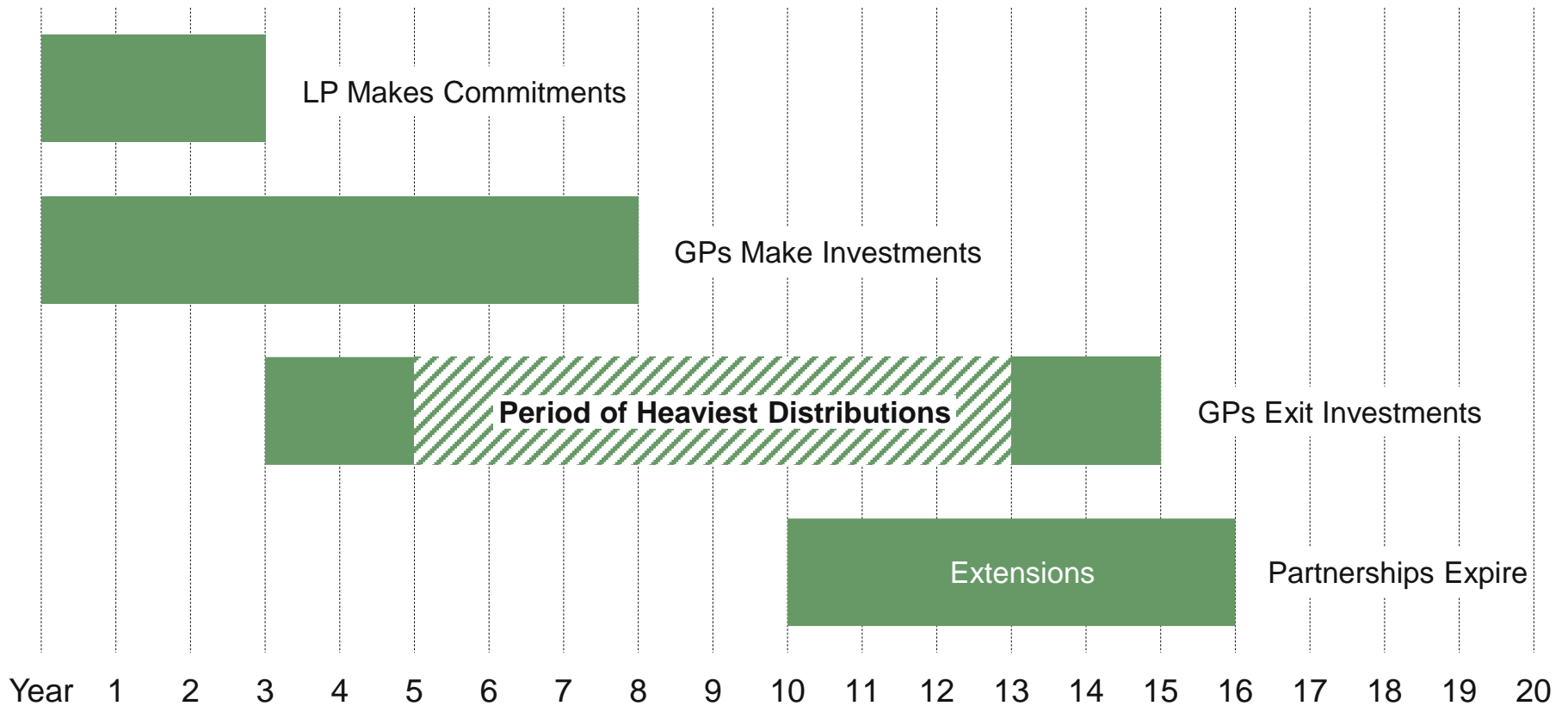
Key Initiative	Rationale	Outcome										
Drive Same Store Sales Growth	<ul style="list-style-type: none"> <li>Leverage successful "We Have the Meats" marketing campaign</li> <li>Grow relevance in social media / public relations</li> <li>Further increase pace of product innovation</li> </ul>	<p><b>U.S. Same Store Sales Growth</b></p> <table border="1"> <tr> <th>Year</th> <th>Growth (%)</th> </tr> <tr> <td>2014</td> <td>5.8%</td> </tr> <tr> <td>2015</td> <td>8.0%</td> </tr> <tr> <td>2016</td> <td>3.8%</td> </tr> <tr> <td>2017</td> <td>0.5%</td> </tr> </table>	Year	Growth (%)	2014	5.8%	2015	8.0%	2016	3.8%	2017	0.5%
Year	Growth (%)											
2014	5.8%											
2015	8.0%											
2016	3.8%											
2017	0.5%											
Expand Remodel Program	<ul style="list-style-type: none"> <li>Revitalize restaurant base</li> <li>Improve customer experience</li> <li>Accelerate same store sales growth</li> </ul>	<p><b>Remodels</b></p> <table border="1"> <tr> <th>Year</th> <th>Remodels</th> </tr> <tr> <td>2014</td> <td>72</td> </tr> <tr> <td>2015</td> <td>179</td> </tr> <tr> <td>2016</td> <td>229</td> </tr> <tr> <td>2017</td> <td>248</td> </tr> </table>	Year	Remodels	2014	72	2015	179	2016	229	2017	248
Year	Remodels											
2014	72											
2015	179											
2016	229											
2017	248											
Accelerate Restaurant Development	<ul style="list-style-type: none"> <li>Continue to build new restaurant pipeline</li> <li>Capitalize on real estate flexibility through "Menu of Venues"</li> <li>Grow systemwide sales</li> </ul>	<p><b>Openings</b></p> <table border="1"> <tr> <th>Year</th> <th>Openings</th> </tr> <tr> <td>2014</td> <td>40</td> </tr> <tr> <td>2015</td> <td>69</td> </tr> <tr> <td>2016</td> <td>60</td> </tr> <tr> <td>2017</td> <td>114</td> </tr> </table>	Year	Openings	2014	40	2015	69	2016	60	2017	114
Year	Openings											
2014	40											
2015	69											
2016	60											
2017	114											
Optimize Restaurant Portfolio	<ul style="list-style-type: none"> <li>Evaluate and identify target markets for accretive franchisee acquisitions</li> <li>Accelerate franchise development through strategic refranchising</li> </ul>	<ul style="list-style-type: none"> <li>Acquired 188 restaurants since 2014 at an average EBITDA multiple of 4.5x</li> <li>Refranchised 34 restaurants since 2015 resulting in 94 additional development commitments</li> </ul>										
Implement Restaurant Technologies	<ul style="list-style-type: none"> <li>Increase operational efficiency</li> <li>Improve customer experience</li> </ul>	<ul style="list-style-type: none"> <li>Completed testing of new POS system and began implementation in company restaurants</li> <li>Integrated mobile app pilot with new POS system</li> <li>Tested new drive-thru order confirmation boards to improve speed of service</li> </ul>										

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**Commitment Pacing**

# Private Equity Investment Timeline

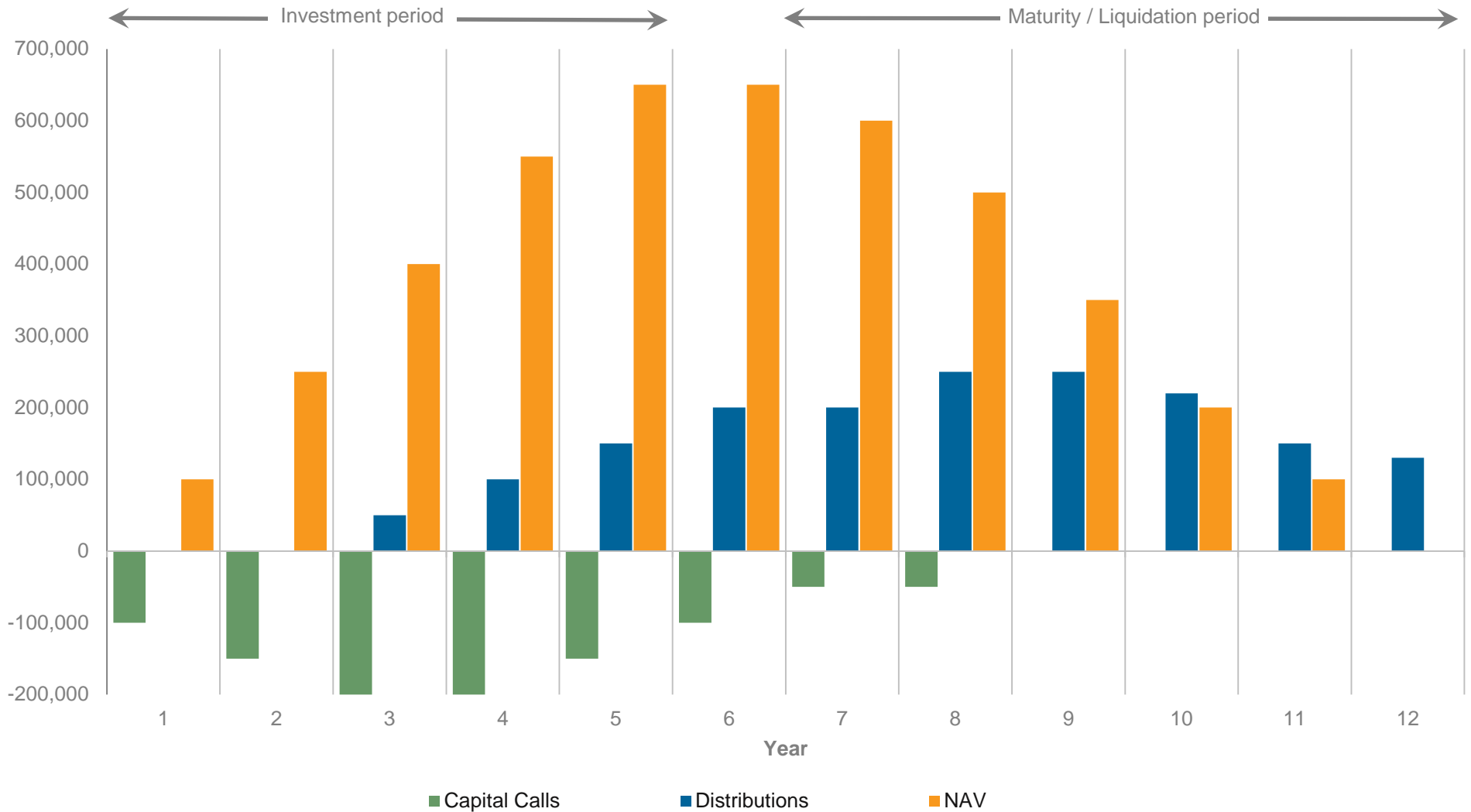


- Private equity is illiquid and requires a long time horizon.
- Decisions made today last 10 to 15 years.

Source: Private Equity Analyst

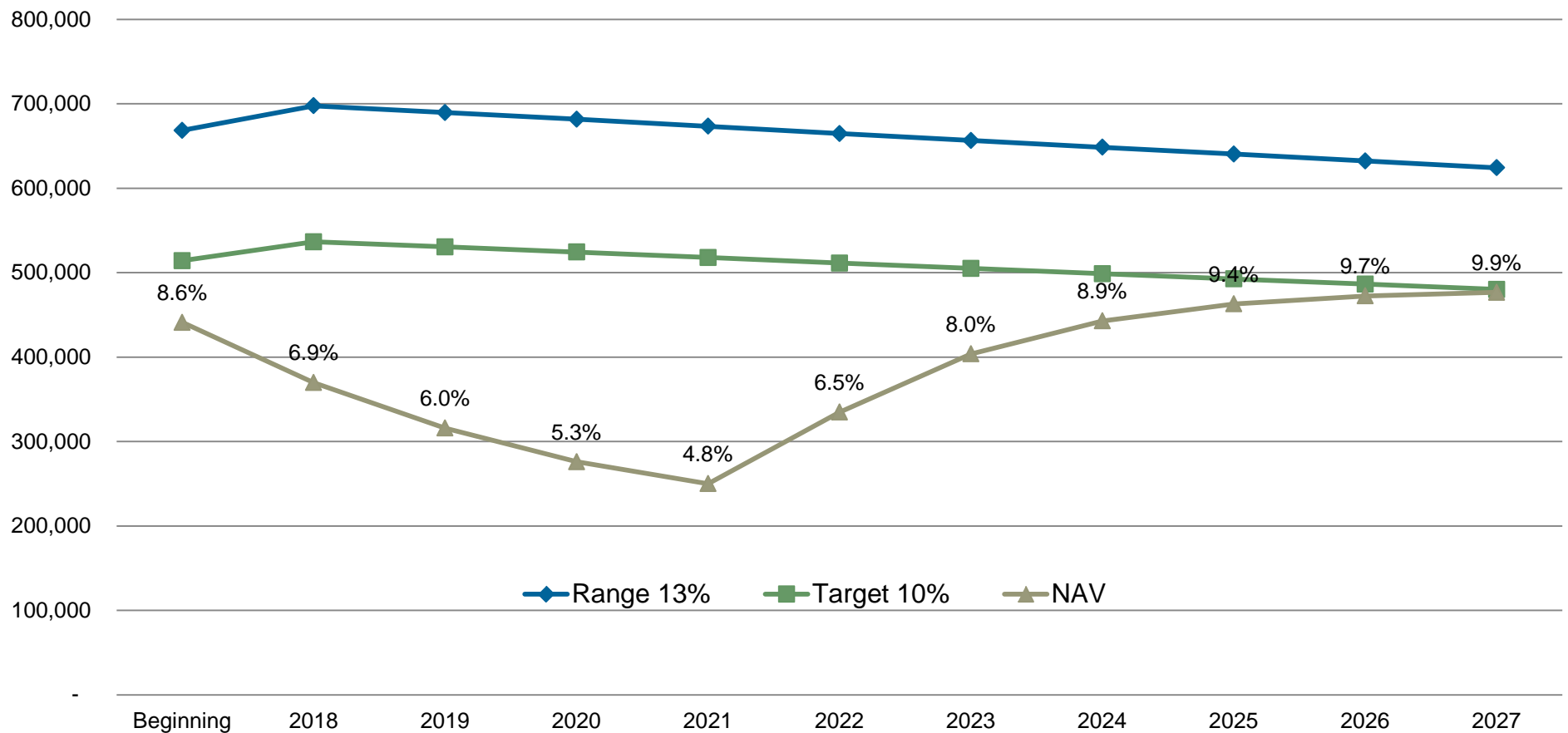
# Private Equity Cash Flows and Net Asset Value

Yearly cash flow and NAV for a \$1 million partnership (or vintage year) commitment



# Commitment Pacing

- Because the portfolios require continual renewal by investing in new partnerships every year, a “capital budget” for future investments needs to be devised and adjusted annually so that the client does not become over- or under-allocated. Since the assets cannot be quickly sold, private equity cannot be “rebalanced” to target like public security portfolios—so the budget process is important.



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**Implementation**



# Implementation Approaches

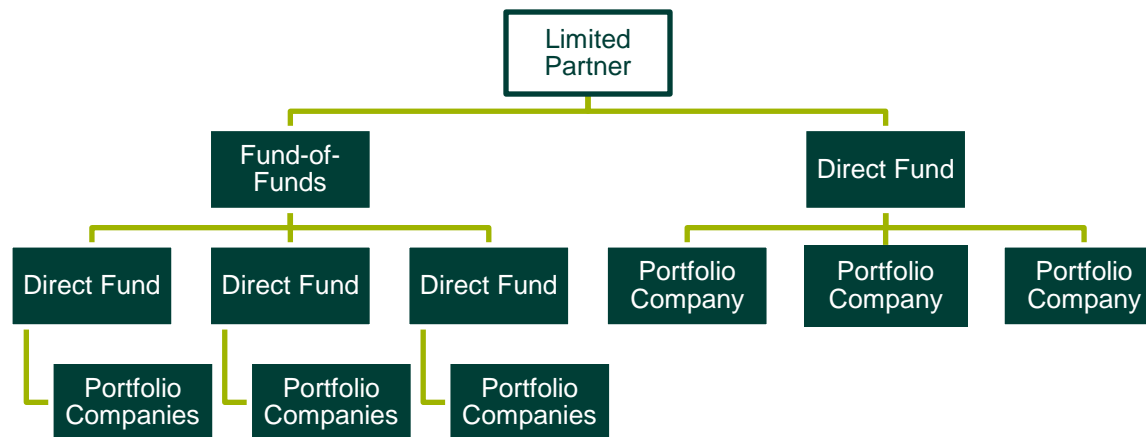
## Methods to implement a private equity program

### 1. Direct Partnership Investments

- Clients need sufficient resources and assets to implement a direct program.
- We help track GP fundraising activity and vet the candidate roster by strategy, performance, and fit within clients' portfolios.
- If a GP passes our screening test, we then conduct in-depth research on how they manage their investment process and how they have generated successful returns. We create an investment evaluation memorandum for the client if the findings are positive.

### 2. Fund-of-Funds

- For clients with limited resources or capital to invest directly in private equity.
- For fund-of-funds searches, we develop search criteria specific to the client, review the manager universe for best-fit firms, assemble materials that help the client understand the differences between the firms, and educate them so they can make a choice that will result in a long and happy relationship.
- Additional fee charged by the fund-of-funds manager to invest and consult on the private equity portfolio.



# Private Equity Implementation

## Menu of available options

	<b>Direct/Primary Fund Commitments</b>	<b>Core Global Fund of Funds</b>	<b>Specialty Fund of Funds</b>	<b>Secondaries Funds</b>	<b>Co-Investment Funds</b>
Summary	Construct a diversified portfolio of private equity funds	Invest in a fund of funds with a broad private equity market mandate	Invest in a fund of funds with a narrow, strategy-type mandate	Invest in a fund that acquires investors' interests in private equity funds	Invest in a fund that makes co-investments alongside private equity funds
Implementation Risk	Greater	Lower	Moderate	Greater	Greater
Program Complexity	Greater	Lower	Lower to Moderate	Moderate	Moderate to Greater
Diversification	Varies	High	Moderate	Moderate	Varies
Fee Structure (Est. Fee Range)	Fund Level (~150 to 300+ bps)	Fund of Fund & Underlying Fund Level (~280 to 600+ bps)	Fund of Fund & Underlying Fund Level (~280 to 600+ bps)	Secondary Fund & Fund Level (~230 to 550+ bps)	Generally Co-Investment Fund Level (~125 to 275+ bps)
Return Dispersion	Greater	Low	Moderate	Moderate	Greater
Key Benefits	<ul style="list-style-type: none"> <li>Higher degree of control over portfolio construction</li> </ul>	<ul style="list-style-type: none"> <li>Low complexity, market exposure to private equity</li> </ul>	<ul style="list-style-type: none"> <li>Useful tool to obtain specific exposures</li> </ul>	<ul style="list-style-type: none"> <li>Potential tool to mitigate J-Curve</li> </ul>	<ul style="list-style-type: none"> <li>Potential lower fee exposure to specific investments</li> </ul>
Key Considerations	<ul style="list-style-type: none"> <li>Resource intensive</li> <li>Requires committed approach</li> </ul>	<ul style="list-style-type: none"> <li>Time to obtain exposure</li> </ul>	<ul style="list-style-type: none"> <li>Limited attractive opportunity set</li> </ul>	<ul style="list-style-type: none"> <li>Lower margin of error</li> <li>Highly mature market</li> </ul>	<ul style="list-style-type: none"> <li>Lower margin of error</li> <li>Requires committed approach</li> </ul>

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**Monitoring**

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## Monitoring

Performance measurement can be challenging

### Benchmarking

- Absolute return (e.g., 15%)
- Public index + premium (e.g., Russell 3000 + 3%)
- PME, Public Market Equivalent
  - Take a fund's cash flows, invest them in the Russell 3000, and calculate an IRR.
  - Essentially, what the return would have been had you invested the same money in the public market.
- Peer group rankings
  - We use the Thomson/Cambridge database to assess private equity funds' performance.

### Data Lag

- Private equity data is reported on a 3-4 month lag.

### Performance

- IRR is the industry standard, we don't use time-weighted returns.
- TVPI Multiple (Total Value/Paid-In Capital): for every dollar that you've paid in, how much have you gained (both realized and unrealized).

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**Summary**

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## Key Takeaways

- Understand the objectives and constraints on the Program and plan accordingly.
- Varied implementation options depending on program size and Plan staffing.
- Actions should reflect the opportunity cost in private equity – today’s decision will have a lasting impact.

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
19	12/12/18	Retirement	Information	11/28/18

Subject: Educational Session on Local Government Ethics (Compliant with AB 1234) by Hanson Bridgett LLP (ALL). (Weekly)

## ISSUE

Educational Session on Local Government Ethics (Compliant with AB 1234) by Hanson Bridgett LLP (ALL). (Weekly)

## RECOMMENDED ACTION

Information Only. (Training Session)

## FISCAL IMPACT

None.

## DISCUSSION

Under AB 1234, most local public officials are required to take a training course to educate them on the ethical standards required of any individual who works in local government. This training is required within one year of an official's appointment and must be repeated at least once every two years. This requirement extends to Retirement Board Members. The Boards last received the training in December, 2016.

Attorneys from Hanson Bridgett, the Retirement Boards' legal counsel will provide this two-hour ethics training. Materials will be distributed at the training.

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Approved:

Presented:

Final 12/03/18

Pension & Retiree Services Administrator

Treasury Controller

# REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
20	12/12/18	Retirement	Information	11/14/18

Subject: Update on Roles and Responsibilities Related to Pension Administration (ALL). (Weekly)

## ISSUE

Presentation regarding the transition of roles and responsibilities of various District Staff members related to administration of the Pension Plans as well as updates on Staff costs and Legal Services (ALL). (Weekly)

## RECOMMENDED ACTION

None associated with this matter.

## FISCAL IMPACT

None associated with this matter.

## DISCUSSION

The attached documents are provided quarterly to keep the Retirement Boards informed about the various duties of RT staff and consultants (including the Retirement Boards' Legal Counsel) relative to administration and management of the pension plans and assets, and associated costs.

Attachment A – Pension Administration Staff Roles and Responsibilities

Attachment B – RT Staff Costs Attributable and Charged to RT Pension Plans

Attachment C – Summary of Legal Services Provided for the Quarter Ending September 30, 2018

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Approved:

Final 12/03/18

Treasury Controller

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Presented:

Pension & Retiree Services Administrator

J:\Retirement Board\2018\IPs\Quarterly Meetings\December 12, 2018\IP Update on Roles and Responsibilities Related to Pension Administration.doc



## Pension Administration Staff Roles and Responsibilities

### Plan Administration

#### Customer Relations:

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Retirement Meetings	Pension and Retirement Services Administrator (PRSA)	Pension Analyst
Research and address benefit discrepancies	PRSA	Pension Analyst
Disability Retirements	PRSA	Pension Analyst
Conduct Educational Sessions	PRSA	Pension Analyst
Respond to all Employee and Retiree inquiries	Pension Analyst	PRSA
Creation of Pension Estimates	Pension Analyst	PRSA
Processing Employee and Retiree Deaths	Pension Analyst	PRSA
Administration of Active and Term Vested (TV) Retirement Process, including: <ul style="list-style-type: none"> <li>• Notifications</li> <li>• Lost Participant Process (TV)</li> <li>• Collection of all required documents</li> <li>• Legal/Compliance Review</li> <li>• Approval by General Manager</li> </ul>	Pension Analyst	PRSA
Converting Employees to Retirees in SAP	Pension Analyst	Sr. HR Analyst - HRIS
Lost participant process for returned checks/stubs	Pension Analyst	PRSA
48-Month Salary Calculations	Pension Analyst	Payroll Supervisor and PRSA
Distribution of employee required contributions (per contract or PEPRA): <ul style="list-style-type: none"> <li>• Send notification</li> <li>• Collect documentation</li> <li>• Lost participant process</li> <li>• Apply interest</li> <li>• Process check</li> </ul>	Pension Analyst	PRSA
Conduct Lost Participant Searches	Pension Analyst	Pension Analyst
Administer Retiree Medical	Sr. HR Analyst	Sr. HR Analyst
Managing Stale Dated and Lost Check Replacement	Payroll Analyst and Accountant II	Payroll Supervisor
Copies of Retiree Pay Stubs and 1099R's	Payroll Analyst	Payroll Supervisor
Printing, Stuffing, and Mailing Pay Stubs	Payroll Analyst	Payroll Supervisor
Verification of Retiree Wages: gross pay, net wages, no pre-tax deductions, taxes	Administrative Technician (HR) and Payroll Analyst	Pension Analyst and/or Payroll Supervisor

**Plan Documents:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Negotiation of Benefits, Provisions	Director, Labor Relations	To be determined
Incorporate Negotiated Benefits/Provisions into Plan Documents	Deputy Chief Counsel, RT	Chief Counsel, RT
Interpretation of Provisions	PRSA and Deputy Chief Counsel, RT	Chief Counsel, RT
Guidance to Staff regarding legal changes that affect Plans	PRSA and Deputy Chief Counsel, RT	Chief Counsel, RT

**Vendor Administration:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Legal Services (Hanson Bridgett) Contract Procurement	PRSA and Treasury Controller	VP Finance/CFO
Actuarial Services (Cheiron) Contract Procurement	PRSA and Treasury Controller	VP Finance/CFO
Retirement Board Policy Development and Administration	PRSA and Treasury Controller Hanson Bridgett and Cheiron	VP Finance/CFO Hanson Bridgett and Cheiron

**Retirement Board Administration:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Creation of Agenda/IPs	Staff Presenting Issue to Board	n/a
Creation and Distribution of Retirement Board Packages	PRSA	Treasury Controller
Management of Retirement Board Meetings	PRSA	Treasury Controller
Training of Staff/Board Members	PRSA and Treasury Controller	Staff/Vendor SME
New Retirement Board Member Training	PRSA and Treasury Controller	Staff/Vendor SME

**Semi-Annual/Annual/Bi-Annual Administration:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Valuation Study	PRSA and Treasury Controller	VP Finance/CFO
Experience Study	PRSA and Treasury Controller	VP Finance/CFO
Fiduciary Liability Insurance	PRSA	Treasury Controller
Responses to Public Records Act Requests	PRSA	Treasury Controller
Statement of Investment Objectives and Policy Guidelines management	Treasury Controller	VP Finance/CFO

**Contract Administration:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Adherence to contract provisions	PRSA and Treasury Controller	VP Finance/CFO
Payment of Invoices	Treasury Controller or PRSA	VP Finance/CFO
Contract Management, including RFP process	PRSA and Treasury Controller	VP Finance/CFO

**Asset Management:**

<b>Task</b>	<b>Primary Responsibility</b>	<b>Back Up Responsibility</b>
Asset Rebalancing	Treasury Controller	Treasury Controller
Account Reconciliations	Treasury Controller	Treasury Controller
Cash Transfers	Treasury Controller	Treasury Controller
Fund Accounting	Treasury Controller	Treasury Controller
Investment Management	Treasury Controller	Treasury Controller
Financial Statement Preparation	Treasury Controller	Treasury Controller
Annual Audit	Treasury Controller	Treasury Controller
State Controller's Office Reporting	Treasury Controller	Treasury Controller
U.S. Census Bureau Reporting	Treasury Controller	Treasury Controller
Work with Contractors (Investment advisors (Callan), Custodian (State Street), Fund Managers, Auditors, and Actuary (Cheiron))	Treasury Controller	Treasury Controller
Review Monthly Asset Rebalancing	Treasury Controller	Treasury Controller

**Pension Administration Costs**  
**For the Time Period: July 1, 2018 to September 30, 2018**

<b>Sum of Value TranCurr</b>			
<b>WBS Element</b>	<b>Source object name</b>	<b>Per</b>	<b>Total</b>
<b>SAXXXX.PENATU</b>	<b>Human Resources / Martinelli, Christin</b>	001	90.72
		002	51.84
		003	829.44
	<b>Human Resources / Montung-Fuller, Mari</b>	001	2,204.95
		002	2,565.76
		003	320.72
	<b>Human Resources / Weekly, Valerie</b>	001	423.70
		002	593.18
		003	847.40
<b>SAXXXX.PENATU Total</b>			<b>7,927.71</b>
<b>SAXXXX.PENIBEW</b>	<b>Human Resources / Martinelli, Christin</b>	001	116.64
		002	51.84
		003	699.84
	<b>Human Resources / Montung-Fuller, Mari</b>	001	761.71
		002	922.07
		003	40.09
	<b>Human Resources / Weekly, Valerie</b>	001	381.33
		002	254.22
		003	508.44
<b>SAXXXX.PENIBEW Total</b>			<b>3,736.18</b>
<b>SAXXXX.PENSALA</b>	<b>Human Resources / Martinelli, Christin</b>	001	90.72
		002	51.84
		003	699.84
	<b>Human Resources / Montung-Fuller, Mari</b>	001	1,082.43
		002	841.89
		003	280.63
	<b>Human Resources / Weekly, Valerie</b>	001	338.96
		002	338.96
		003	635.55
<b>SAXXXX.PENSALA Total</b>			<b>4,360.82</b>
<b>SAXXXX.PENSION</b>	<b>Finance And Treasury / Adelman, Jamie</b>	001	2,449.25
		002	1,794.50
		003	2,134.00
	<b>Finance And Treasury / Gardner, Leona</b>	001	316.73
		003	1,583.60
	<b>Finance And Treasury / Mata, Jennifer</b>	001	1,182.49
		002	1,304.99
		003	1,271.04
	<b>Human Resources / Humphrey, Isis</b>	001	47.70
		003	286.20
	<b>Human Resources / Martinelli, Christin</b>	001	90.72
		002	1,879.20

<b>SAXXXX.PENSION</b>	<b>Human Resources / Martinelli, Christin</b>	003	1,244.16	
	<b>Human Resources / Montung-Fuller, Mari</b>	001	7,737.37	
		002	7,176.11	
		003	5,933.32	
	<b>Human Resources / Weekly, Valerie</b>	001	974.51	
		002	2,669.31	
		003	4,914.92	
	<b>VP, Finance/CFO / Bernegger, Brent</b>	001	152.48	
		002	304.96	
		003	686.16	
	<b>SAXXXX.PENSION Total</b>			<b>46,133.72</b>
	<b>Grand Total</b>			<b>62,158.43</b>

**HANSON BRIDGETT LLP &  
SACRAMENTO REGIONAL TRANSIT DISTRICT RETIREMENT BOARDS**

**LEGAL SERVICES SUMMARY**

Set forth below is a broad summary report of significant legal matters addressed by Hanson Bridgett LLP for the Sacramento Regional Transit District Retirement Boards during the Quarter ended September 30, 2018.

1. Weekly client conference calls and internal conferences on pending matters, upcoming Board meetings and follow-up from prior Board meetings.
2. Preparation for and participation in Quarterly Board Meetings, including review and markup of agenda materials and related Board Chair conference calls.
3. Assist with investment consultant services procurement, contract drafting, negotiation, compliance requirements and oversight.
4. Review and respond to issues related to operations audit.
5. Review and comment on issues related to purchase of service credit for rehired employees.
6. Provide counsel on issues including, but not limited to:
  - a. Pension Plan documents and updates;
  - b. Financial reporting;
  - c. Benefit eligibility determinations;
  - d. Calculation of benefits under various scenarios;
  - e. Fiduciary duties.

Respectfully Submitted,

/s/ Shayna M. van Hoften