

ND STATE INVESTMENT BOARD MEETING

Friday, May 26, 2017, 8:30 a.m. Peace Garden Room, State Capitol 600 E Blvd, Bismarck, ND

AGENDA (REVISED)

I. CALL TO ORDER AND ACCEPTANCE OF AGENDA

II. ACCEPTANCE OF MINUTES (April 28, 2017)

III. INVESTMENTS

- A. Asset and Investment Performance Overview Mr. Hunter (enclosed) (20 min.) Board Action
- B. Fixed Income Update Mr. Schulz (10 min.)
- C. Callan Associates Performance Review Mr. Erlendson, Mr. Browning (enclosed) (1 hour) Board Acceptance
 - 1. Pension Trust Review Quarter Ending 3-31-17
 - 2. Insurance Trust Review Quarter Ending 3-31-17
 - 3. Legacy Trust Review Quarter Ending 3-31-17

- D. Financial Recovery Technologies* Mr. Hunter and Mr. Menard (enclosed) (20 min.) **Board Action** <u>*Possible Executive Session for Attorney Consultation Pursuant to 44-04-19.2 and 44-04-19.1(2) and (5)</u>
- E. Investment Policy Statement Revisions Mr. Hunter (enclosed) (10 min.) Board Acceptance
 - 1. Public Employees Retirement System
 - 2. Job Service North Dakota
 - 3. Park District of the City of Grand Forks
- F. Tobacco Prevention and Control Trust Fund Update Ms. Flanagan (5 min.)

IV. ADMINISTRATION

- A. Audit Committee Report Ms. Miller-Bowley (enclosed) (10 min.) Board Acceptance
- B. Executive Review Committee Update Ms. Smith (to follow) (10 min.) Board Acceptance
- C. RIO Code of Conduct and Ethics Mr. Schulz (enclosed) (5 min.)
- D. Callan College Onsite Mr. Hunter (enclosed) (5 min.)
- E. RIO Lease Update Mr. Hunter

V. OTHER

Next Meetings: SIB meeting - July 28, 2017, 8:00 a.m., BSC Energy Center - Room #335 SIB Audit Committee meeting - September 22, 2017, 1:00 pm, State Capitol, Peace Garden Room

VI. ADJOURNMENT

NORTH DAKOTA STATE INVESTMENT BOARD MINUTES OF THE APRIL 28, 2017, BOARD MEETING

MEMBERS PRESENT:	Rob Lech, Parliamentarian
	Lance Gaebe, Commissioner of Trust Lands
	Mike Gessner, TFFR Board
	Mel Olson, TFFR Board (TLCF)
	Kelly Schmidt, State Treasurer
	Troy Seibel, PERS Board
	Yvonne Smith, PERS Board
	Cindy Ternes, WSI Designee

- MEMBERS ABSENT: Brent Sanford, Lt. Governor, Chair Mike Sandal, Vice Chair Jon Godfread, Insurance Commissioner
- STAFF PRESENT: Eric Chin, Investment Officer Connie Flanagan, Fiscal & Invt Ops Mgr Bonnie Heit, Assist to the SIB David Hunter, ED/CIO Fay Kopp, Dep ED/CRO Terra Miller Bowley, Supvr Audit Services Cody Schmidt, Compliance Officer Darren Schulz, Dep CIO Susan Walcker, Invt Acct
- OTHERS PRESENT: Jan Murtha, Attorney General's Office

CALL TO ORDER:

Mr. Lech, Parliamentarian, called the State Investment Board (SIB) meeting to order at 8:30 a.m. on Friday, April 28, 2017, at Workforce Safety & Insurance, 1600 E Century Ave, Bismarck, ND.

AGENDA:

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. SEIBEL AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE AGENDA FOR THE APRIL 28, 2017, MEETING AS DISTRIBUTED.

AYES: COMMISSIONER GAEBE, TREASURER SCHMIDT, MR. OLSON, MS. TERNES, MR. GESSNER, MR. SEIBEL, MR. LECH, AND MS. SMITH NAYS: NONE MOTION CARRIED ABSENT: MR. SANDAL, COMMISSIONER GODFREAD, LT. GOVERNOR SANFORD

MINUTES:

IT WAS MOVED BY MS. SMITH AND SECONDED BY MR. GESSNER AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE MINUTES OF THE MARCH 24, 2017, MEETING AS DISTRIBUTED.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, MS. TERNES, TREASURER SCHMIDT, MR. LECH, MR. OLSON, AND MR. SEIBEL NAYS: NONE MOTION CARRIED ABSENT: COMMISSIONER GODFREAD, MR. SANDAL, LT. GOVERNOR SANFORD

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INVESTMENTS:

<u>Planning Cycle</u> - Mr. Hunter reviewed the SIB's planning cycle for the 2017-19 biennium.

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE AGENDA AND STRATEGIC INVESTMENT PLAN FOR THE 2017-19 BIENNIUM.

AYES: MR. OLSON, MR. SEIBEL, COMMISSIONER GAEBE, MR. GESSNER, MS. SMITH, TREASURER SCHMIDT, MS. TERNES, AND MR. LECH NAYS: NONE MOTION CARRIED ABSENT: COMMISSIONER GODFREAD, MR. SANDAL, LT. GOVERNOR SANFORD

Legacy/Budget Stabilization Advisory Board - Included in the board member's meeting materials was the April 20, 2017, presentation given to the Legacy and Budget Stabilization Fund Advisory Board by RIO personnel. The presentation included updates on earnings, fees, and asset allocation.

<u>Tobacco Prevention/Control Trust Fund</u> - Senate Bill 2024 eliminates the North Dakota Center for Tobacco Prevention and Control Executive Committee (BreathND). Effective July 1, 2017, the Office of Management and Budget will become the administrator of the Tobacco Prevention and Control Fund. Ms. Flanagan briefed the SIB on the status of the assets. The SIB has been under contract with the Center for Tobacco Prevention and Control since July 24, 2015.

BOARD EDUCATION/GOVERNANCE:

<u>Open Records/Meetings</u> - Ms. Murtha provided an educational segment on North Dakota's open records and meetings laws along with the changes enacted during the 2017 legislative session, particularly those which fall under the emergency clause.

<u>Client Investment Policy Statements and Social Investing</u> - Mr. Hunter provided an update on Social Investing as it relates to the SIB clients. Mr. Hunter also referenced articles published in "Pensions and Investments", which reference statements made by the California Public Employees Retirement System and Norway's Government Pension Fund on the cost of Social Investing. Nearly all of the SIB client's investment policy statements include language prohibiting Social Investing unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

<u>GM Litigation</u> - Mr. Lech stated the SIB will move into Executive Session if the discussion warrants it.

Ms. Murtha included an update on the status of the GM Litigation. The case is currently at a trial stage for the determination of the valuation of assets, which were not released and were securing the term loan.

ADMINISTRATION:

<u>Executive Review Committee</u> - Ms. Smith, Chair, along with Committee members Ms. Ternes and Mr. Sandal, met on April 18, 2017, to review the survey results of the evaluation of the Executive Director/CIO for calendar year 2016 by the SIB. The Committee will be working on the evaluation of the Executive Director/CIO which will be reviewed with Mr. Hunter prior to the SIB's May meeting. The Committee will be giving their final report to the SIB at their May 26, 2017, meeting.

Included in this year's survey was a request to the SIB for feedback on the actual survey itself. Feedback received was positive but also indicated the survey is a work

in progress and that there is always room for improvement. The Committee will be sharing the results with the next appointed Committee.

Legislative Update - Mr. Hunter reviewed legislation which may affect RIO or the SIB: HB1022 - RIO Budget, HB1175 - SIB Membership, HB1023 - PERS Budget, HB1088 - Data Breach Response/Remediation Costs, HB1155 - Transfer/Expenditures from the Budget Stabilization Fund, HB1345 - Open Records/Meetings Laws, and HB 1425 - Protection from Foreign Laws.

<u>Agency Update</u> - Mr. Hunter stated the agency is continuing to look at options for a new office location and will only move forward on relocating if it is in the best interests of the State.

Mr. Hunter also stated RIO has offered the Voluntary Separation Incentive Program to RIO personnel through the timeline of April 13 - May 30, 2017. Any applications received will be reviewed and taken into consideration after the deadline.

QUARTERLY MONITORING:

Per Governance Policy, Board/Staff Relationship/Monitoring Executive Performance C-4, the following monitoring reports for the quarter ending March 31, 2017, were provided to the SIB for their consideration: Budget/Financial Conditions, Executive Limitations/Staff Relations, Investment Program, and Retirement Program.

An updated Watch List for the same period was also included. There are four firms currently on the Watch List - PIMCO (MBS & Unconstrained mandates), JP Morgan (MBS Strategy mandate) UBS (International Fixed Income mandate), and Adams Street Partners.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE MONITORING REPORTS FOR THE QUARTER ENDING MARCH 31, 2017.

AYES: TREASURER SCHMIDT, MR. GESSNER, MS. TERNES, COMMISSIONER GAEBE, MS. SMITH, MR. LECH, MR. SEIBEL, AND MR. OLSON NAYS: NONE MOTION CARRIED ABSENT: COMMISSIONER GODFREAD, MR. SANDAL, LT. GOVERNOR SANFORD

RIO personnel recommended that Adams Street be removed from the Watch List as the firm has restated its willingness to provide full investment transparency in their offices and substantially reinstated detailed reporting in their quarterly reports

IT WAS MOVED BY MS. TERNES AND SECONDED BY TREASURER SCHMIDT AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION TO REMOVE ADAMS STREET PARTNERS FROM THE WATCH LIST.

AYES: MS. SMITH, MR. OLSON, MR. GESSNER, MR. LECH, MR. SEIBEL, MS. TERNES, COMMISSIONER GAEBE, AND TREASURER SCHMIDT NAYS: NONE MOTION CARRIED ABSENT: MR. SANDAL, COMMISSIONER GODFREAD, LT. GOVERNOR SANFORD

OTHER:

Treasurer Schmidt stated she recently attended the State Financial Officers Foundation meeting in Dallas, TX. While in Dallas, Treasurer Schmidt toured some of the SIB's properties in Invesco's real estate portfolio and was pleased to report that the State's pension dollars are being invested wisely.

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The next meeting of the SIB Audit Committee is scheduled for May 25, 2017, at 3:00 p.m. at the State Capitol, Peace Garden Room, Bismarck, ND.

The next meeting of the SIB is scheduled for May 26, 2017, at 8:30 a.m. at the State Capitol, Peace Garden Room, Bismarck, ND.

ADJOURNMENT:

With no further business to come before the SIB, Mr. Lech adjourned the meeting at 9:55 a.m.

Mr. Rob Lech, Parliamentarian State Investment Board

Bonnie Heit Assistant to the Board

AGENDA ITEM III.A.

Asset and Performance Review

For the periods ended March 31, 2017

Dave Hunter, Executive Director / CIO Darren Schulz, Deputy Chief Investment Officer ND Retirement & Investment Office (RIO) State Investment Board (SIB)

Overview of SIB Client Assets Under Management

	Market Values	Market Values	Market Values
Fund Name	as of 3/31/17 ⁽¹⁾	as of 6/30/16 ⁽²⁾	as of 3/31/16 ⁽¹⁾
Pension Trust Fund			
Public Employees Retirement System (PERS)	2,674,985,155	2,459,388,086	2,421,987,130
Teachers' Fund for Retirement (TFFR)	2,233,677,182	2,082,183,640	2,057,394,854
City of Bismarck Employees Pension	88,725,174	82,441,003	81,075,233
City of Grand Forks Employees Pension	59,120,819	57,975,758	54,800,673
City of Bismarck Police Pension	36,752,705	33,983,598	33,434,044
Grand Forks Park District	6,101,375	5,720,245	5,813,061
Subtotal Pension Trust Fund	5,099,362,410	4,721,692,330	4,656,075,053
Insurance Trust Fund			
Workforce Safety & Insurance (WSI)	1,862,876,379	1,832,104,203	1,801,047,070
Budget Stabilization Fund	6,114,884	575,918,381	579,947,916
PERS Group Insurance Account	36,420,972	37,715,356	38,575,386
City of Fargo FargoDome Permanent Fund	39,360,095	38,782,721	38,079,559
State Fire and Tornado Fund	21,909,910	24,091,203	23,599,019
Petroleum Tank Release Compensation Fund	6,608,229	7,149,512	7,034,692
State Risk Management Fund	5,893,871	6,534,801	6,357,621
State Risk Management Workers Comp Fund	5,894,479	5,516,177	5,853,318
ND Association of Counties (NDACo) Fund	4,270,549	4,048,863	3,967,813
State Bonding Fund	3,326,741	3,296,372	3,238,892
ND Board of Medicine	2,291,639	2,208,667	2,183,569
nsurance Regulatory Trust Fund	1,981,524	1,085,836	1,071,344
Bismarck Deferred Sick Leave Account	678,719	642,265	628,166
Cultural Endowment Fund	419,582	386,452	378,831
Subtotal Insurance Trust Fund	1,998,047,573	2,539,480,809	2,511,963,196
egacy Trust Fund			
Legacy Fund	4,430,195,818	3,809,485,177	3,673,717,322
PERS Retiree Insurance Credit Fund	112,184,277	101,623,224	98,401,571
ob Service of North Dakota Pension	97,008,805	96,588,333	95,573,693
ND Tobacco Prevention and Control Trust Fund	48,910,227	54,366,538	44,805,976
Total Assets Under SIB Management	11,785,709,110	11,323,236,410	10,984,963,118

⁽¹⁾ 3/31/17 and 3/31/16 market values are unaudited and subject to change.

⁽²⁾ 6/30/16 market values as stated in the Comprehensive Annual Financial Report.

- SIB client assets grew by approximately \$800 million (or 7.3%) in the last year due to a combination of net investment earnings across client funds and Legacy Fund deposits.
- The Pension Trust posted a net return of 10.27% in the last year. During the last 5years, the Pension Trust generated a net annualized return of 7.82%, exceeding the performance benchmark of 7.17%.
- The Insurance Trust generated a net return of 6.67% in the last year. During the last 5-years, the Insurance Trust posted a net annualized return of 4.91%, exceeding the performance benchmark of 3.54%.
- The Legacy Fund generated a net investment gain of 10.13% for the year ended March 31, 2017, exceeding its performance benchmark. Since inception, the Legacy Fund has generated a net annualized return of 3.91% (over the last 5 1/2 years) exceeding the performance benchmark of 3.02%.
 - SIB client assets totaled approximately \$11.8 billion as of March 31, 2017, based on unaudited valuations.

Legacy Fund – Actual Performance vs Policy Benchmark Net Returns Exceed Policy Benchmark – Periods Ended 3/31/17

The SIB Governance Manual states "SIB clients should receive investment returns consistent with their written investment policies and market variables. This "End" is evaluated based on comparison of each client's (a) <u>actual net investment return</u>, (b) <u>standard deviation</u> and (c) <u>risk adjusted excess return</u>, to the client's policy benchmark over <u>5 years</u>."

						Risk Adj
					Risk	Excess
	Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return
LEGACY FUND	FYTD	Ended	Ended	Ended	Ended	5 Yrs
	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017
Total Fund Return - Net	8.4%	10.1%	5.1%	4.2%	3.8%	0.58%
Policy Benchmark Return	7.0%	8.7%	4.3%	3.3%	3.5%	ОК
Excess Return	1.4%	1.4%	0.8%	0.9%	109%	
Estimated Incremental I	ncome:	\$50 million	\$80 million	\$100 million		

- For the 1-Year Ended 3/31/17, the Legacy Fund earned a Net Return of 10.1% exceeding the Policy Benchmark (of 8.7%) and creating Excess Return of 1.4%. Actual net returns exceed the Policy Benchmark by over <u>\$50 million</u> for the year ended 3/31/17 (\$4 billion x 1.4% = \$56 million).
- For the 5-Years Ended 3/31/17, the Fund earned a Net Return of 4.2% exceeding the Policy Benchmark (of 3.3%) and creating Excess Return of 0.9%. Actual returns exceed the Policy Benchmark Return by \$100 million for the 5 years ended 3/31/17 (e.g. \$2.25 billion x 0.9% x 5 years).
- 3. Returns achieved while adhering to stated investment guidelines for Risk (of no more than 115%) and generating <u>0.58%</u> of Risk Adjusted Excess Return over the last 5-years.

Note: Current Fiscal Year To Date and all returns as of March 31, 2017, are unaudited and subject to change.

The Policy Benchmark is 50% Equity, 35% Bonds and 15% Real Assets (including Real Estate and Infrastructure).

Pension Trust Return & Risk Summary – March 31, 2017

<u>Returns</u>: Every Pension client generated positive "Excess Return" for the 5-years ended 3/31/17 including 0.70% for PERS and 0.73% for TFFR.

<u>Risk</u>: Excess Return was achieved while adhering to prescribed risk metrics (e.g. within 115% of the Policy Benchmark the last 5-years) and with positive Risk Adjusted Excess Returns.

						Risk Adj
					Risk	Excess
	Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return
	FYTD	Ended	Ended	Ended	Ended	5 Yrs
	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017
PERS - \$2.675 billion						
Total Fund Return - Net	8.77%	10.37%	5.39%	7.90%	5.1%	0.30%
Policy Benchmark Return	8.28%	10.10%	4.75%	7.21%	4.8%	
Excess Return	0.50%	0.27%	0.64%	0.70%	105%	
TFFR - \$2.234 billion						
Total Fund Return - Net	8.65%	10.18%	5.35%	7.95%	5.1%	0.35%
Policy Benchmark Return	8.09%	9.94%	4.70%	7.22%	4.8%	
Excess Return	0.56%	0.24%	0.65%	0.73%	105%	

- 1. PERS & TFFR Returns exceeded 10.1% for 1-year and 7.9% for the 5-years ended 3/31/17.
- 2. Active management enhanced PERS and TFFR income by over <u>\$100 million</u> for the 5-years ended 3/31/2017. This is based on average invested assets of \$4 billion x 0.70% of annual excess return = \$28 million/year x 5 years = \$140 million.

Pension Trust Return & Risk Summary – March 31, 2017

BISMARCK EMPLOYEES -	Current FYTD <u>3/31/2017</u> \$89 million	1 Yr Ended 3/31/2017	3 Yrs Ended 3/31/2017	5 Yrs Ended 3/31/2017	Risk 5 Yrs Ended 3/31/2017	Risk Adj Excess Return 5 Yrs 3/31/2017	Risk Adjusted Excess Return for the 5-year
Total Fund Return - Net	7.64%	9.47%	5.20%	7.42%	4.4%	0.41%	ended March
Policy Benchmark Return	6.93%	8.94%	4.55%	6.54%	4.1%		2017, were
Excess Return	0.71%	0.54%	0.65%	0.88%	107%		positive for all
BISMARCK POLICE - \$37 n	nillion						Pension Trust clients and
Total Fund Return - Net	8.17%	9.97%	5.17%	7.60%	4.8%	0.38%	generally
Policy Benchmark Return	7.71%	9.69%	4.59%	6.80%	4.5%		exceeded 0.30
Excess Return	0.46%	0.28%	0.58%	0.80%	106%		
JOB SERVICE - \$97 million Total Fund Return - Net	4.05%	6.41%	5.36%	7.44%	4.1%	0.87%	Risk Adjusted
	4.05% 6.09%	6.41% 7.89%	5.36% 4.34%	5.96%	4.1% 3.7%	0.87%	Excess Return
Policy Benchmark Return Excess Return	6.09% -2.04%	7.69%	4.34%	1.49%	3.7% 109%		measures actual
	-2.04%	-1.4770	1.02 %	1.49%	109%		portfolio results
GRAND FORKS - \$59 millio	n						versus a benchmar adjusted by its risk
Total Fund Return - Net	8.81%	10.54%	5.30%	8.02%	5.2%	0.36%	relative to a
Policy Benchmark Return	8.69%	10.74%	4.91%	7.40%	5.0%		benchmark portfo
Excess Return	0.12%	-0.21%	0.39%	0.63%	104%		This metric is posi
GRAND FORKS PARK DIS	FRICT - \$6 n	nillion					if excess returns and due to "smart"
Total Fund Return - Net	8.76%	10.11%	5.55%	8.28%	5.2%	0.52%	investment decisio
Policy Benchmark Return	8.50%	10.26%	5.11%	7.56%	5.1%		or negative if drive
Excess Return	0.26%	-0.14%	0.44%	0.73%	103%		excess risk.

Non-Pension Return & Risk Summary – March 31, 2017

	Note: Current year		Risk Adj				
		Risk	Excess				
		Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return
		FYTD	Ended	Ended	Ended	Ended	5 Yrs
		3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017
W	SI - \$1.86 billion						
To	tal Fund Return - Net	5.04%	7.45%	5.04%	6.43%	3.3%	1.31%
Po	licy Benchmark Return	3.10%	5.00%	4.03%	4.63%	3.0%	
Exe	cess Return	1.94%	2.45%	1.00%	1.80%	ОК	
	Estimated Incremental li	ncome:	\$40 million	\$50 million	\$135 million		

BUDGET STABILIZATION - \$6.1 million

То	tal Fund Return - Net	0.50%	1.33%	1.58%	1.72%	0.7%	0.61%
Ро	licy Benchmark Return	0.10%	0.64%	0.86%	0.68%	0.5%	
Ex	cess Return	0.40%	0.69%	0.72%	1.03%	OK	
	Estimated Incremental I	ncome:	\$2 million	\$10 million	\$20 million		

<u>Returns and Risk</u>: Every Non-Pension Trust client generated positive "Excess Return" and positive "Risk Adjusted Excess Return" for the 5-years ended 3/31/2017 (if applicable) with two exceptions for PERS Retiree Health and Group Insurance. These returns were achieved while adhering to reasonable risk levels which were within 1% of policy levels. Risk Adjusted Excess Return measures a portfolio's excess return adjusted by its risk relative to a benchmark portfolio. This metric is positive if returns are due to "smart" investment decisions or negative if driven by excess risk.

Non-Pension Return & Risk Summary – March. 31, 2017

					Risk	Risk Adj Excess	
	Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return	
	FYTD	Ended	Ended	Ended	Ended	5 Yrs	
	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	
FIRE & TORNADO - \$22 mi	llion						
Total Fund Return - Net	6.38%	8.58%	5.05%	6.99%	3.8%	0.72%	
Policy Benchmark Return	4.27%	6.15%	4.01%	5.25%	3.3%		
Excess Return	2.11%	2.43%	1.04%	1.74%	ОК		_
STATE BONDING - \$3.3 mi	llion						
Total Fund Return - Net	0.92%	2.72%	2.41%	2.81%	2.0%	1.11%	
Policy Benchmark Return	-0.82%	0.43%	1.56%	1.35%	1.7%]
Excess Return	1.75%	2.30%	0.85%	1.46%	ок		
INSUR. REG. TRUST - \$2 n	nillion						
Total Fund Return - Net	5.19%	6.59%	3.60%	5.24%	3.2%	0.37%	
Policy Benchmark Return	3.91%	5.19%	3.02%	4.14%	2.7%		
Excess Return	1.28%	1.41%	0.58%	1.10%	ОК		
PETROL.TANK COMP \$7	7 million						,
Total Fund Return - Net	0.87%	2.50%	2.20%	2.52%	1.8%	1.02%	
Policy Benchmark Return	-0.72%	0.41%	1.43%	1.24%	1.6%		I
Excess Return	1.59%	2.09%	0.77%	1.28%	ок		
STATE RISK MGMT \$6 m	nillion						•
Total Fund Return - Net	5.76%	8.69%	5.82%	7.45%	3.5%	0.97%	
Policy Benchmark Return	3.58%	5.96%	4.67%	5.51%	3.0%		
Excess Return	2.19%	2.74%	1.15%	1.94%	ОК		

SIB Client Commentary:

he State Fire & rnado Fund, ate **Bonding** ind, Insurance egulatory Trust ind, Petroleum nk Release ompensation ind, and State sk Management ind have all sted positive sk Adjusted cess Returns r the 5-years ded 3/31/17, cluding Excess turns of 1.1% more.

Note: Current year returns are unaudited and subject to change.

Non-Pension Return & Risk Summary – March 31, 2017

						Risk Adj	
					Risk	Excess	
	Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return	SIB Client
	FYTD	Ended	Ended	Ended	Ended	5 Yrs	
	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	<u>Commentary</u>
STATE RISK MGMT WORK							The State Ris
Total Fund Return - Net	6.85%	9.81%	6.31%	8.19%	3.9%	0.97%	
Policy Benchmark Return	4.77%	7.28%	5.21%	6.32%	3.4%		Management
Excess Return	2.07%	2.53%	1.10%	1.87%	OK		Workers
							Compensatio
ND Association - \$4.3 millio							North Dakot
Fotal Fund Return - Net	5.50%	7.62%	4.60%	6.35%	3.5%	0.68%	Association,
Policy Benchmark Return	3.44%	5.21%	3.59%	4.64%	2.9%		Bismarck De
Excess Return	2.05%	2.41%	1.01%	1.71%	OK		
							Sick Leave A
BISMARCK DEFERRED SI							Fargo Dome
Total Fund Return - Net	5.79%	8.19%	5.02%	6.81%	3.7%	0.83%	Cultural End
Policy Benchmark Return	3.28%	5.23%	3.80%	4.83%	3.1%		Fund have all
Excess Return	2.52%	2.96%	1.22%	1.98%	OK		positive Risk
FARGODOME - \$39 million							Adjusted Exc
Total Fund Return - Net	8.74%	10.74%	5.51%	8.15%	5.2%	0.79%	Returns for t
Policy Benchmark Return	7.01%	8.94%	4.61%	6.65%	4.7%		years ended
Excess Return	1.73%	1.80%	0.91%	1.51%	ОК		including Exc
							Returns of I.
CULTURAL ENDOWMENT	· •	·					
Total Fund Return - Net	9.59%	11.94%	6.78%	9.51%	5.2%	0.75%	more.
Policy Benchmark Return	8.08%	10.31%	5.92%	7.99%	4.7%		
Excess Return	1.51%	1.63%	0.86%	1.52%	ОК		

State Risk agement **kers** pensation Fund, th Dakota ociation, City of narck Deferred Leave Account, o Dome and ural Endowment d have all posted tive Risk sted Excess rns for the 5s ended 3/31/17, iding Excess rns of 1.5% or

Note: Current year returns are unaudited and subject to change.

Non-Pension Return & Risk Summary – March 31, 2017

					Risk Adj
				Risk	Excess
Current	1 Yr	3 Yrs	5 Yrs	5 Yrs	Return
FYTD	Ended	Ended	Ended	Ended	5 Yrs
3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017
.3 million					
3.83%	5.03%				N/A
2.82%	3.78%				
1.01%	1.25%				
	FYTD 3/31/2017 .3 million 3.83% 2.82%	FYTD Ended 3/31/2017 3/31/2017 .3 million 3.83% 3.83% 5.03% 2.82% 3.78%	FYTD Ended Ended 3/31/2017 3/31/2017 3/31/2017 .3 million 3.83% 5.03% 2.82% 3.78%	FYTD Ended Ended Ended Ended 3/31/2017 3/31/2017 3/31/2017 3/31/2017 3/31/2017 .3 million 3.83% 5.03% 3.78%	Current 1 Yr 3 Yrs 5 Yrs 5 Yrs FYTD Ended Ended Ended Ended 3/31/2017

PERS RETIREE HEALTH - \$112 million

Total Fund Return - Net	8.84%	11.20%	5.42%	7.80%	5.6%	-0.65%
Policy Benchmark Return	8.30%	10.44%	5.65%	7.89%	5.2%	
Excess Return	0.54%	0.77%	-0.24%	-0.09%	OK	

PERS GROUP INSURANCE - \$36 million

Total Fund Return - Net	-0.23%	0.39%	0.42%	0.33%	0.6%	-0.05%
Policy Benchmark Return	0.07%	0.67%	0.55%	0.37%	0.5%	
Excess Return	-0.30%	-0.28%	-0.13%	-0.04%	ОК	

TOBACCO CONTROL - \$49 million

Total Fund Return - Net	1.17%	1.84%
Policy Benchmark Return	1.19%	1.83%
Excess Return	-0.02%	0.00%

SIB Client Specific Commentary:

The **Board of Medical Examiners** became an SIB client less than two years ago noting they were previously investing in Certificates of Deposit.

Absolute returns for the **PERS Retiree Health Insurance Credit Fund** have been reasonable the last 5-years (at 7.8%) but disappointing on a risk adjusted basis (-0.65%). Returns have improved sharply to over 11% for the 1-year ended 3/31/2017.

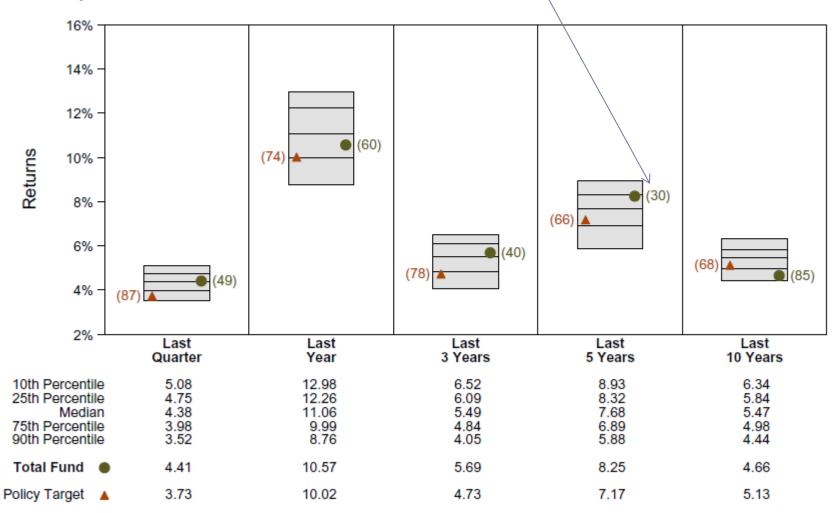
RIO implemented a new asset allocation policy for PERS Group Insurance in late-2015 in attempt to enhance returns and lower fees. Current year returns were negatively impacted by large outflows from the Budget Stabilization Fund noting JPM's Short-Term Bond Fund trailed the index 0.30% the past 9-months.

The **Tobacco Prevention and Control Trust Fund** became an SIB client on 9/30/15. Actual returns far exceed returns (of 0.10% per annum) prior to becoming an SIB client.

Note: Current year returns are unaudited and subject to change.

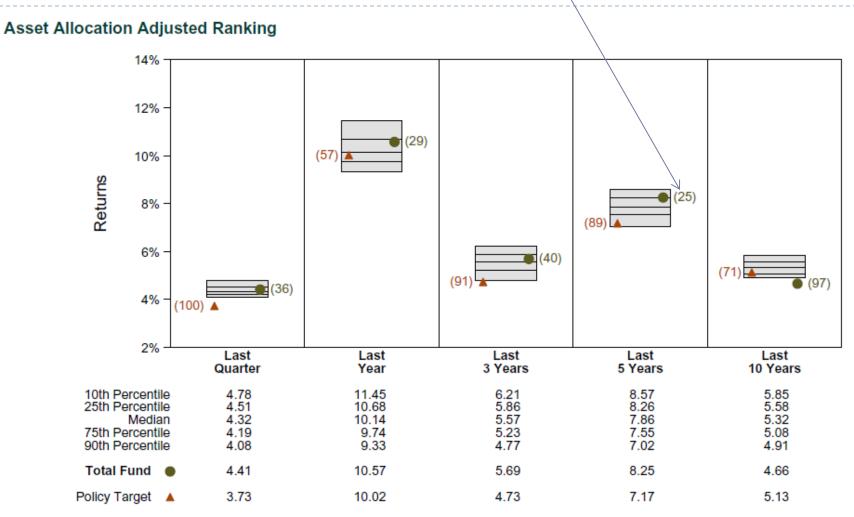
Pension Trust gross returns were ranked in the 30th percentile for the 5-years ended March 31, 2017, based on Callan's "Public Fund Sponsor Database".

CAI Public Fund Sponsor Database



* Current Quarter Target = 16.1% Russell 1000 Index, 16.0% MSCI World, 13.2% Blmbg Aggregate Idx, 11.2% MSCI World ex US, 10.5% NCREIF Total
 Index, 6.5% NDSIB PEN - Private Equity, 5.4% Blmbg GI Agg ex US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Blmbg US HY Cor 2%C, 3.1% MSCI EM, 3.0% NCREIF Timberland Index and 0.5% 3-month Treasury Bill.

Pension Trust gross returns were ranked in the 25th percentile for the 5-years ended March 31, 2017, on an "Asset Allocation Adjusted Basis".



* Current Quarter Target = 16.1% Russell 1000 Index, 16.0% MSCI World, 13.2% Blmbg Aggregate Idx, 11.2% MSCI World ex US, 10.5% NCREIF Total
 Index, 6.5% NDSIB PEN - Private Equity, 5.4% Blmbg GI Agg ex US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Blmbg US HY Cor 2%C, 3.1% MSCI EM, 3.0% NCREIF Timberland Index and 0.5% 3-month Treasury Bill.

Board Approval Requested Callan Investment Contact Renewal

RIO recommends the SIB renew Callan's investment consulting contract for the 2017-19 biennium. Callan provides the SIB and RIO with excellent client service noting that their consistent reporting format reduces staff review time, shortens the reporting production cycle and allows RIO more time for an in-depth review. RIO also notes the City of Bismarck Pension Plans and Workforce Safety and Insurance have expressed interest in engaging Callan to conduct asset liability studies in the upcoming fiscal year. Our existing Callan contract allows us to engage Callan to complete two "projects" every fiscal year (including the Callan College Onsite in the 2016-17 fiscal year). One of the two projects for fiscal year 2017-18 could include an asset liability study for the Legacy Fund which was last completed by R.V. Kuhns in April of 2013. Although RIO recommends that Callan serve as our consultant for the upcoming biennium, we acknowledge that an investment consultant search should be conducted in the next biennium.

RIO recommends the SIB approve the Callan contract renewal for the 2017-19 biennium and request RIO to commence an investment consultant search in June of 2018 for the 2019-21 biennium.

Legacy Fund

Summary of Deposits, Net Earnings and Balances – March 31, 2017

<u>Key Point</u>: Legacy Fund Net Earnings exceed \$593 million since inception including \$328 million for the 9 months ended March 31, 2017.

Column	Α	В	C	D	E	
					Earnings as	
			Net Increase/	Ending Net	defined in	
	Deposits	Net Earnings	(Decrease)	Position	NDCC 21-10-12	
FY2012	396,585,658	2,300,225	398,885,883	398,885,883	2,571,475	
FY2013	791,126,479	4,216,026	795,342,505	1,194,228,388	15,949,089	
FY2014	907,214,971	113,153,662	1,020,368,633	2,214,597,021	50,033,655	
FY2015	1,011,343,040	99,895,650	1,111,238,690	3,325,835,711	95,143,905	
FY2016	434,853,950	45,851,680	480,705,630	3,806,541,341	65,326,673	
FY2017*	292,410,579	328,346,227	620,756,806	4,427,298,147	161,780,005	
Totals	3,833,534,677	593,763,470		4,427,298,147	390,804,802	
	Total Deposits	Net Earnings		Ending Balance		
* EV2017 amounto are proliminant, and unaudited						

* FY2017 amounts are preliminary and unaudited.

Column A - Deposits into the Legacy Fund total \$3.833 billion since incepetion including \$292,410,579 in Fiscal 2017.

Column B - Net Earnings for the Legacy Fund total \$594 million since inception including \$328,346,227 in Fiscal 2017.

Column C - Represents the sum of Deposits (Column A) and Net Earnings (Column B) totalling \$620,756,806 in Fiscal 2017.

Column D - Represents the "Ending Net Position" of the Legacy Fund and approximates \$4.427 billion at March 31, 2017.

Column E - Earnings (per NDCC 21-10-02) approximates \$391 million since inception including \$162 million in Fiscal 2017.

International
Monetary Fund
– Country GDP
Rankings
<u>(2016)</u> :
The U.S. is # 1

followed by China, Japan, Germany, U.K., France and India.

	GDP - US \$				
<u>Rank</u>	<u>Country</u>	<u>(trillions)</u>	<u>%</u>		
1	United States	18.6	25%		
	European Union	16.4	22%		
2	China	11.2	15%		
3	Japan	4.9	7%		
4	Germany	3.5	5%		
5	United Kingdom	2.6	3%		
6	France	2.5	3%		
7	India	2.3	3%		
8	Italy	1.9	3%		
9	Brazil	1.8	2%		
10	Canada	1.5	2%		
11	South Korea	1.4	2%		
12	Russia	1.3	2%		
13	Australia	1.3	2%		
14	Spain	1.2	2%		
15	Mexico	1.0	1%		
	Rest of World	<u>18.3</u>	<u>24%</u>		
		75.3	100%		

May 2017

3



Performance Evaluation

as of March 31, 2017

Paul Erlendson Senior Vice President

Alex Browning Vice President

Agenda

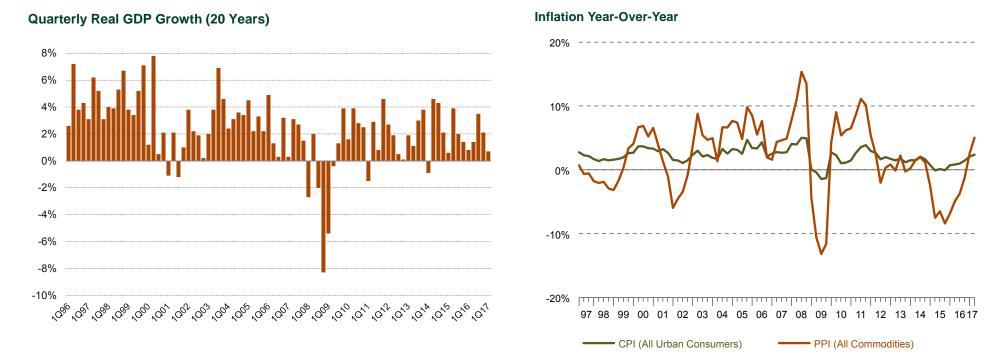
- Review economic and market environment for periods ended March 31, 2017
- Pension Trust Quarterly Review
 - Results and Observations
- Insurance Trust Quarterly Review
 - Results and Observations
- Attribution Review
 - Manager Effect
 - Asset Allocation Effect

Review of Economic and Market Environment

• As of March 31, 2017

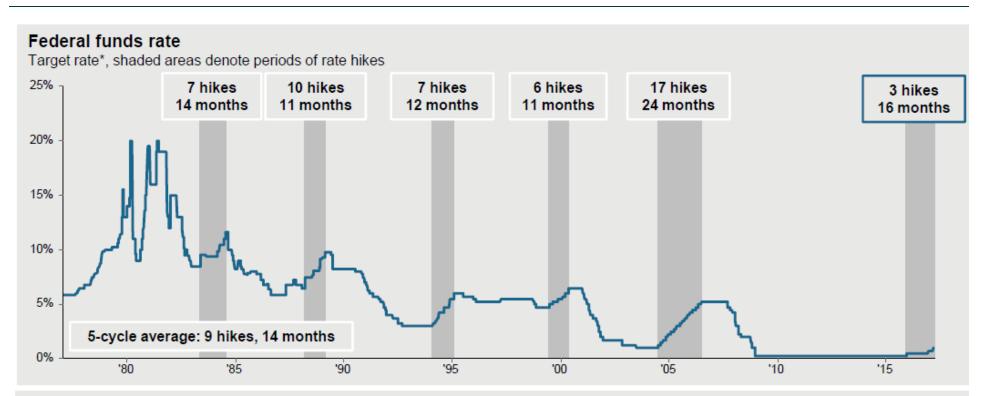
U.S. Economy

Periods Ending March 31, 2017



- The initial estimate of 1st quarter GDP came out at 0.7%, lagging the 4th quarter, up 2.1%.
- March headline inflation rose 2.4% over the trailing twelve months. Core CPI increased 2.0%.
- March unemployment was 4.5% (down 0.2% from December) and the labor force participation rate rose to 63.0% (up 0.4%).
- The Fed increased the target overnight rate to 0.75% 1.00% on March 15.

Historical Impact of Rising Fed Rate Environments

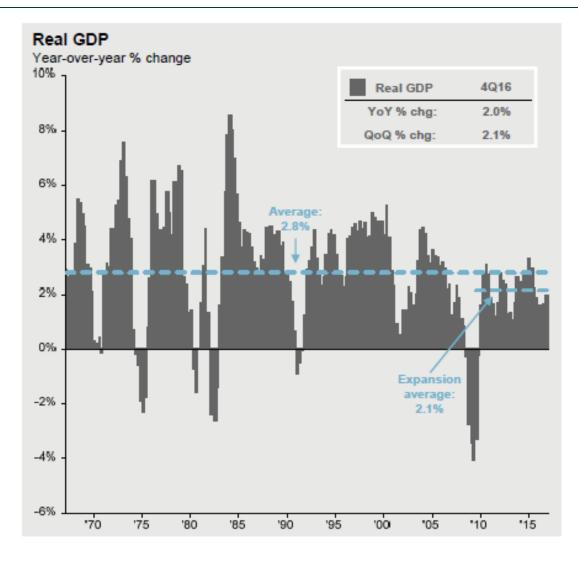


Market reaction during previous rate hiking cycles

	May 1983 – July 1984	March 1988 – February 1989	February 1994 – February 1995	June 1999 – May 2000	June 2004 – June 2006	Average of past five rate hiking cycles	Cycle beginning December 2015
Yield change (bps)							
Federal funds rate	313	325	300	175	425	308	75
2-year Treasury	311	227	305	121	238	240	25
10-year Treasury	274	91	185	50	52	130	10
S&P 500 return	-9.6%	6.8%	-2.1%	8.5%	12.0%	3.1%	14.0%
U.S. dollar	10.4%	1.7%	-4.7%	3.4%	-5.8%	1.0%	-0.3%

Source: FactSet, Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management.

Historical Real GDP



Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Quarter-over-quarter percent changes are at an annualized rate. Average represents the annualized growth rate for the full period. Expansion average refers to the period starting in the second quarter of 2009. *Guide to the Markets – U.S.* Data are as of March 31, 2017.

Asset Class Performance

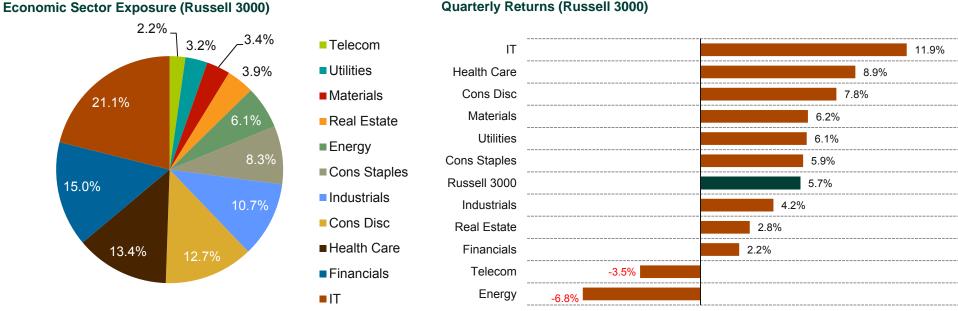
Periodic Table of Investment Returns for Periods Ended March 31, 2017

Best	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
	MSCI:EM Gross	Russell:2000	S&P:500	S&P:500	S&P:500	Russell:2000
		Index				Index
	11.5%	26.2%	10.4%	13.3%	7.5%	8.7%
	MSCI:EAFE	MSCI:EM Gross	Russell:2000	Russell:2000	Russell:2000	S&P:500
			Index	Index	Index	
	7.2%	17.7%	7.2%	12.4%	7.1%	7.9%
	S&P:500	S&P:500	Blmbg:Aggregate	MSCI:EAFE	Blmbg:Aggregate	MSCI:EM Gross
	6.1%	17.2%	2.7%	5.8%	4.3%	5.9%
	Russell:2000	MSCI:EAFE	MSCI:EM Gross	Blmbg:Aggregate	MSCI:EM Gross	Blmbg:Aggregate
	Index					
	2.5%	11.7%	1.5%	2.3%	3.0%	5.4%
	BImbg:Aggregate	BImbg:Commodity	MSCI:EAFE	MSCI:EM Gross	MSCI:EAFE	MSCI:EAFE
		Price Idx				
	0.8%	8.3%	0.5%	1.2%	1.1%	4.6%
	3 Month T-Bill	Blmbg:Aggregate	3 Month T-Bill	3 Month T-Bill	3 Month T-Bill	3 Month T-Bill
	0.1%	0.4%	0.2%	0.1%	0.7%	2.2%
	Blmbg:Commodity	3 Month T-Bill	Blmbg:Commodity	Blmbg:Commodity	Blmbg:Commodity	Blmbg:Commodity
•	Price Idx		Price Idx	Price Idx	Price Idx	Price Idx
Marat	(2.5%)	0.4%	(14.1%)	(9.7%)	(6.8%)	(1.9%)
Worst						



U.S. Equity Returns

Periods Ending March 31, 2017



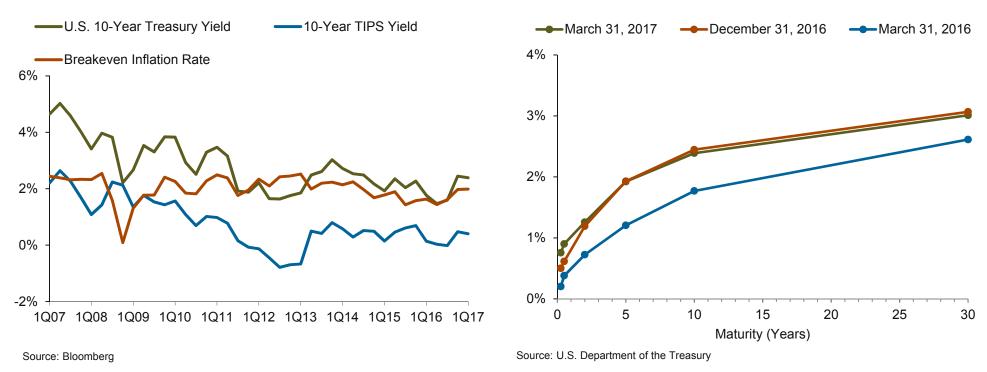
Quarterly Returns (Russell 3000)

- The RU 1000 was up 6.0% Information Technology (+12.3%) and Health Care (+8.6%) were the best performing sectors.
- The RU 2000 was up 2.5% Health Care (+12.5%) and Information Technology (+6.0%) were the best performing sectors.
- Some lagging sectors through December regained traction in the first guarter Utilities (+6.1%) and Consumer Staples (+5.9%) were strong performers.

U.S. Equity Returns

Periods Ending March 31, 2017

Historical 10-Year Yields



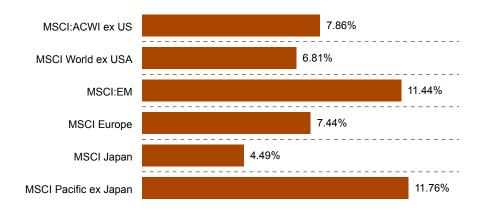
U.S. Treasury Yield Curves

- Treasury yields rose at the short end of the curve and dipped slightly at the long end. The yield on the 10-year decreased 5 bps and the 30-year decreased 4 bps. The 1-month increased 30 bps.
- Breakeven inflation rate was flat on soft March inflation figures.
- Worldwide, rates remain low.

U.S. Equity Returns

Periods Ending March 31, 2017

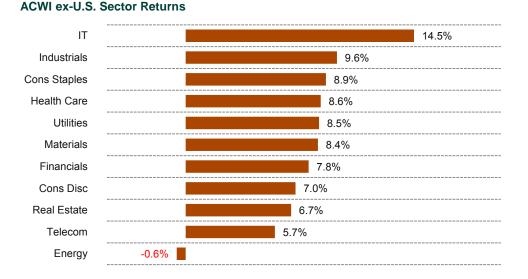
Regional Quarterly Performance (U.S. Dollar)



Major Currencies' Cumulative Returns (vs. U.S. Dollar) 40% 20% 0% -20%

-40% [11] -40% [11] -40% [11] -40% [12] -40% [

U.K. sterling



Source: Barrow Hanley Quarterly Benchmark Review

allar

Knowledge. Experience. Integrity.

*Euro returns from 1Q99. German mark prior to 1Q99. Source: MSCI

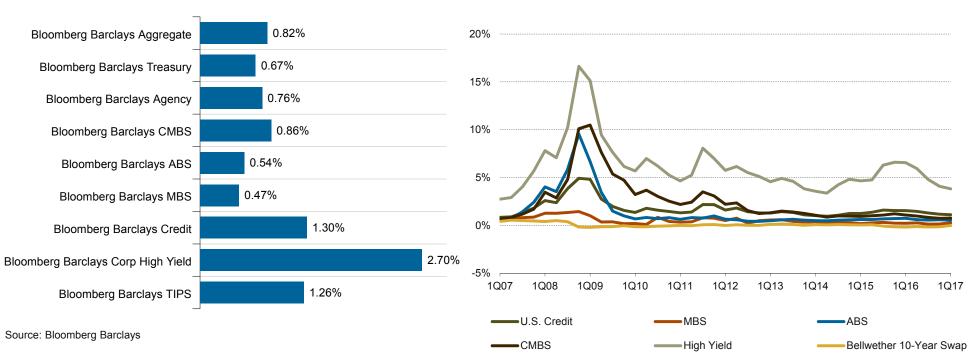
Japanese yen

- Best performing region was Pacific ex Japan (+11.8%).
- The yen (+4.7%), pound (1.2%), and euro (+1.4%) strengthened versus the dollar.
- Information Technology and Industrials were the top and Telecom and Energy the worst performing sectors.

Euro

Total Rates of Return by Bond Sector

Periods Ending March 31, 2017



Effective Yield Over Treasuries

Total Returns

- All sectors experienced positive returns. The best performing sector was high yield (+2.7%).
- Worst performing sector of the Aggregate was mortgage-backed securities (+0.5%).
- Treasury Inflation Protected Securities (TIPS) outperformed Treasuries.
- Spreads contracted across investment grade credit, high yield, and asset-backed security sectors.

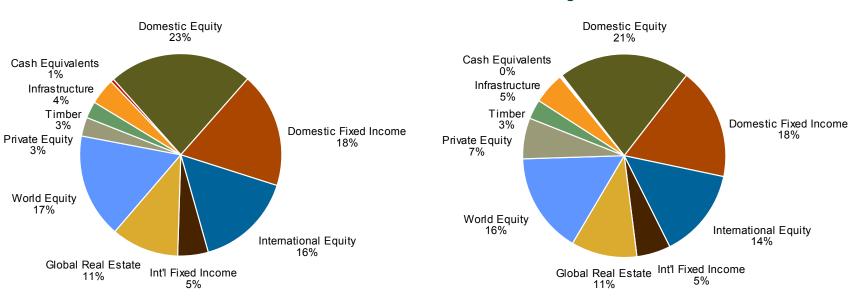
Consolidated Pension Trusts Quarterly Review

- Public Employees Retirement System
- Teachers' Fund for Retirement

Consolidated Pension Trust Allocation

Actual Asset Allocation

As of March 31, 2017



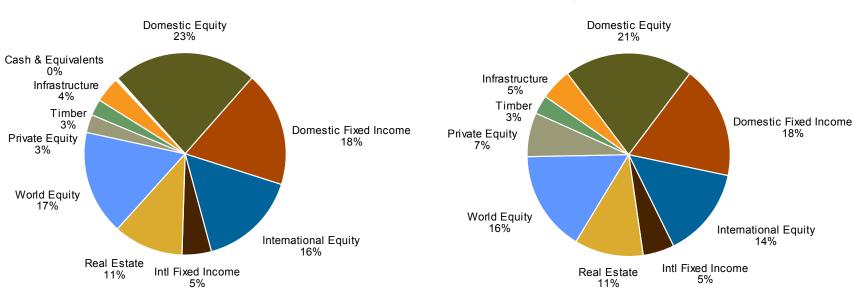
	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equity	1,175,451	23.1%	21.0%	2.1%	104,585
Domestic Fixed Income	937,338	18.4%	17.8%	0.6%	29,651
International Equity	801,493	15.7%	14.3%	1.4%	72,284
Int'l Fixed Income	249,821	4.9%	5.4%	(0.5%)	(25,545)
Global Real Estate	548,322	10.8%	10.5%	0.3%	12,889
World Equity	849,243	16.7%	16.0%	0.7%	33,345
Private Equity	155,216	3.0%	6.5%	(3.5%)	(176,242)
Timber	139,660	2.7%	3.1%	(0.4%)	(18,421)
Infrastructure	215,493	4.2%	5.0%	(0.8%)	(39,475)
Cash Equivalents	27,325	0.5%	0.4%	0.1%	6,928
Total	5,099,362	100.0%	100.0%		

Target Asset Allocation

PERS Allocation

Actual Asset Allocation

As of March 31, 2017

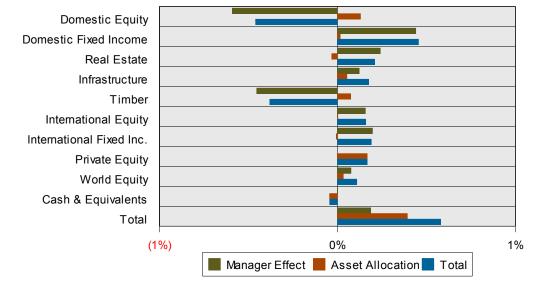


	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equity	619,104	23.1%	20.6%	2.5%	68,057
Domestic Fixed Income	492,079	18.4%	18.0%	0.4%	10,581
International Equity	425,043	15.9%	14.4%	1.5%	39,845
Intl Fixed Income	125,236	4.7%	5.0%	(0.3%)	(8,514)
Real Estate	299,704	11.2%	11.0%	0.2%	5,455
World Equity	447,105	16.7%	16.0%	0.7%	19,107
Private Equity	77,870	2.9%	7.0%	(4.1%)	(109,379)
Timber	70,545	2.6%	3.0%	(0.4%)	(9,705)
Infrastructure	110,505	4.1%	5.0%	(0.9%)	(23,244)
Cash & Equivalents	7,797	0.3%	0.0%	0.3%	7,797
Total	2,674,985	100.0%	100.0%		

PERS Performance and Attribution

As of March 31, 2017

One Year Relative Attribution Effects



1 Year Ended	3/31/2017
Gross:	10.67%
Net of fees:	10.37%
Target:	<u>10.09%</u>
Net Added:	0.28%

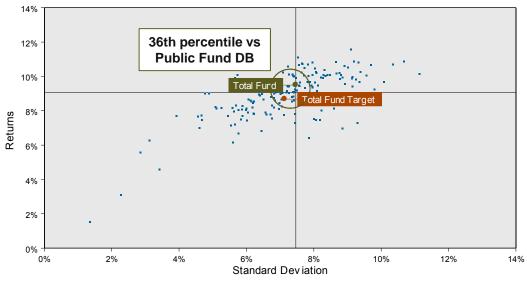
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Retum	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Return</u>
Domestic Equity	23%	21%	16.67%	19.44%	(0.59%)	0.13%	(0.46%)
Domestic Fixed Income	18%	18%	7.21%	4.80%	0.44%	0.02%	0.46%
Real Estate	11%	11%	9.32%	7.27%	0.24%	(0.03%)	0.21%
Infrastructure	4%	5%	4.96%	2.35%	0.12%	0.05%	0.18%
Timber	3%	4%	(9.81%)	3.64%	(0.45%)	0.07%	(0.38%)
International Equity	15%	14%	13.93%	12.92%	0.16%	0.00%	0.16%
International Fixed Inc.	5%	5%	(0.30%)	(3.93%)	0.20%	(0.01%)	0.19%
Private Equity	3%	6%	3.30%	3.30%	0.00%	0.17%	0.17%
World Equity	17%	16%	15.20%	14.77%	0.08%	0.03%	0.11%
Cash & Equivalents	1%	0%	0.61%	0.52%	0.00%	(0.04%)	(0.04%)
Total			10.67% =	10.09% +	0.19% +	0.39%	0.58%

PERS Performance and Attribution

As of March 31, 2017

Six and Three-Quarter Year Annualized Risk vs Return



6 ³ / ₄ Years Ended	3/31/2017
Gross:	9.50%
Net of fees:	9.15%
Target:	<u>8.68%</u>
Net Added:	0.47%

Squares represent membership of the CAI Public Fund Sponsor Database

Six and Three-Quarter Year Annualized Relative Attribution Effects

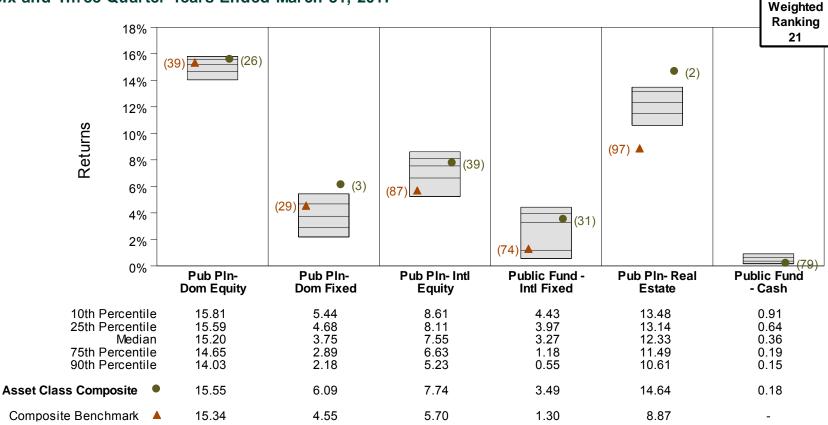
Asset Class	Effective Actual Weight	Effecti <i>v</i> e Target Weight	Actual Retum	Target Return	Manager Effect	Asset Allocation	Total Relative Retum
Domestic Equity	27%	26%	15.55%	15.34%	0.00%	0.11%	0.11%
Domestic Fixed Income	20%	19%	6.09%	4.55%	0.26%	(0.04%)	0.22%
Real Estate	9%	9%	14.64%	11.75%	0.23%	0.01%	0.24%
Timber	4%	4%	-	-	(0.27%)	(0.04%)	(0.30%)
Infrastructure	3%	4%	-	-	0.15%	0.08%	0.23%
Interntional Equity	16%	16%	7.74%	5.70%	0.31%	(0.06%)	0.25%
International Fixed Inc.	5%	5%	3.49%	1.30%	0.12%	(0.01%)	0.11%
Private Equity	4%	5%	2.92%	2.92%	0.00%	(0.00%)	(0.00%)
World Equity	11%	11%	-	-	0.02%	(0.03%)	(0.02%)
Cash & Equivalents	1%	1%	0.18%	0.16%	0.00%	(0.02%)	<u>(0.02%)</u>
Total			9.50% =	8.68%	+ 0.82% +	0.00%	0.82%

Asset Class Composite Results

PERS' results vs other Public Funds

Total Asset Class Performance

Six and Three-Quarter Years Ended March 31, 2017

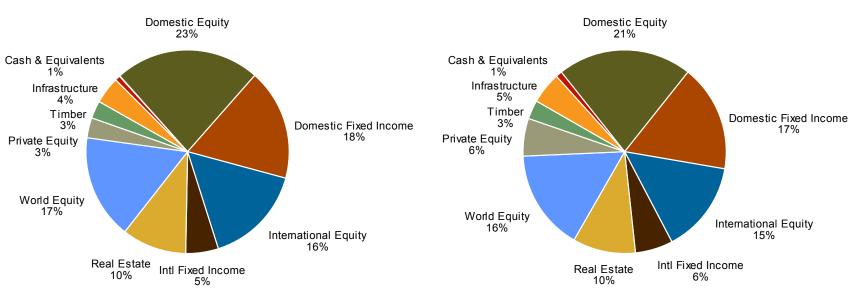


• Public market asset classes are above median except cash.

- Many "cash" funds have exposure to higher return and risk strategies (i.e. credit and longer duration) than NDSIB does.
- Domestic fixed income and real estate returns in top decile.

TFFR Allocation

As of March 31, 2017



Target Asset Allocation

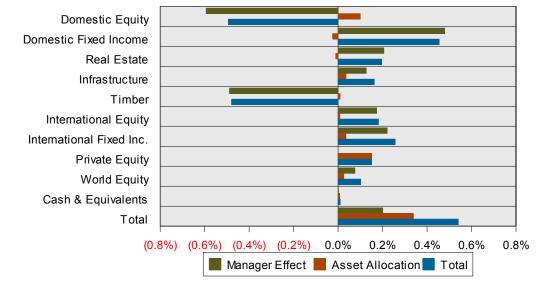
Actual Asset Allocation

	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equity	516,998	23.1%	21.4%	1.7%	38,991
Domestic Fixed Income	396,452	17.7%	17.0%	0.7%	16,727
International Equity	354,113	15.9%	14.6%	1.3%	27,996
Intl Fixed Income	116,575	5.2%	6.0%	(0.8%)	(17,446)
Real Estate	229,197	10.3%	10.0%	0.3%	5,829
World Equity	371,124	16.6%	16.0%	0.6%	13,736
Private Equity	71,475	3.2%	6.0%	(2.8%)	(62,545)
Timber	63,041	2.8%	3.0%	(0.2%)	(3,969)
Infrastructure	96,277	4.3%	5.0%	(0.7%)	(15,406)
Cash & Equivalents	18,425	0.8%	1.0%	(0.2%)	(3,912)
Total	2,233,677	100.0%	100.0%		

TFFR Performance and Attribution

As of March 31, 2017

One Year Relative Attribution Effects



1 Year Ended	3/31/2017
Gross:	10.48%
Net of fees:	10.18%
Target:	<u>9.94%</u>
Net Added:	0.24%

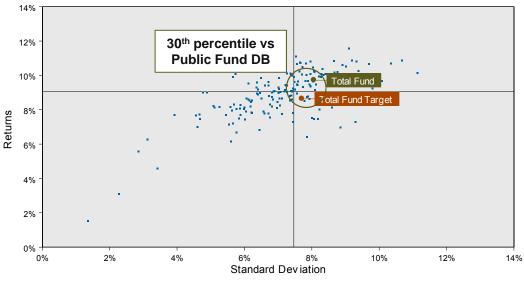
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Retum	Target Retum	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	16.64%	19.42%	(0.59%)	0.10%	(0.49%)
Domestic Fixed Income	17%	17%	6.93%	4.26%	0.48%	(0.02%)	0.45%
Real Estate	10%	10%	9.32%	7.27%	0.21%	(0.01%)	0.20%
Infrastructure	5%	5%	4.96%	2.35%	0.13%	0.04%	0.16%
Timber	3%	3%	(9.81%)	3.64%	(0.49%)	0.01%	(0.48%)
International Equity	16%	15%	13.72%	12.64%	0.17%	0.01%	0.18%
International Fixed Inc.	6%	6%	(0.30%)	(3.93%)	0.22%	0.04%	0.26%
Private Equity	3%	6%	3.30%	3.30%	0.00%	0.15%	0.15%
World Equity	16%	16%	15.20%	14.77%	0.08%	0.03%	0.10%
Cash & Equivalents	1%	1%	0.60%	0.36%	0.00%	0.01%	0.01%
Total			10.48% =	9.94% +	0.20% +	0.34%	0.54%

TFFR Performance and Attribution

As of March 31, 2017

Six and Three-Quarter Year Annualized Risk vs Return



Squares represent	membership of	the CAL	Public Fund	Sponsor Database
	membership or			

Six and Three-Quarter Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effecti <i>v</i> e Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative <u>Retum</u>
Domestic Equity	27%	26%	15.55%	15.32%	0.01%	0.09%	0.11%
Domestic Fixed Income	18%	17%	6.07%	4.50%	0.27%	(0.02%)	0.25%
Real Estate	10%	10%	14.64%	11.75%	0.27%	0.02%	0.30%
Timber	4%	4%	-	-	(0.26%)	(0.00%)	(0.27%)
Infrastructure	3%	4%	-	-	0.15%	0.10%	0.25%
International Equity	17%	17%	7.88%	5.85%	0.37%	(0.02%)	0.35%
International Fixed Inc.	5%	5%	3.49%	1.30%	0.12%	(0.01%)	0.12%
Private Equity	5%	5%	2.94%	2.94%	0.00%	(0.00%)	(0.00%)
World Equity	11%	11%	-	-	0.02%	(0.03%)	(0.02%)
Cash & Equivalents	1%	1%	0.18%	0.13%	0.00%	(0.00%)	<u>(0.00%)</u>
Total			9.72% =	8.64% -	+ 0.96% +	0.12%	1.08%

6³/₄ Years Ended 3/31/2017

9.72%

9.37%

<u>8.64%</u>

0.73%

Gross:

Target:

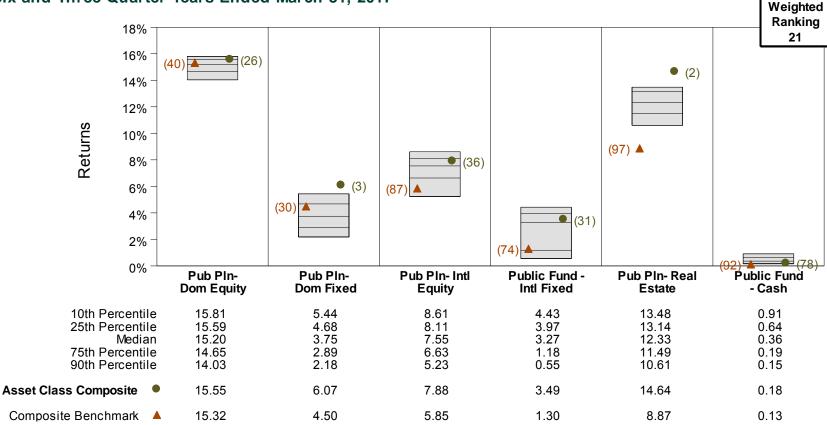
Net of fees:

Net Added:

TFFR's asset class results vs other Public Pension Funds

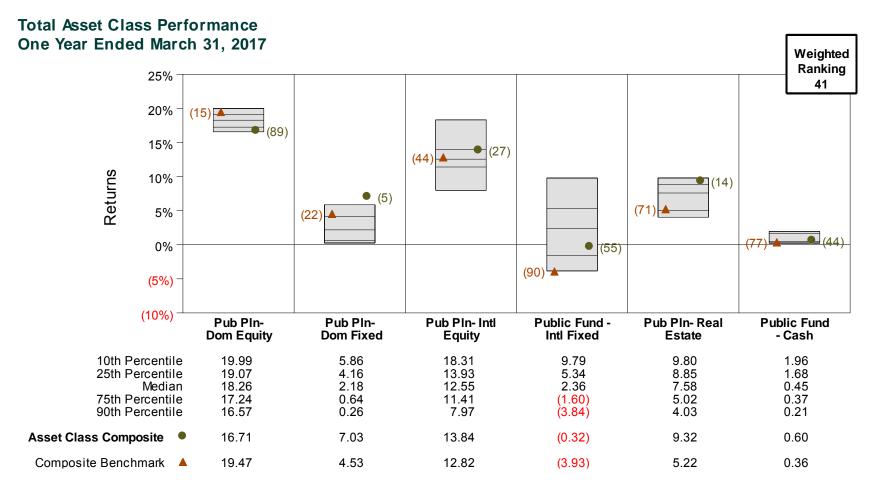
Total Asset Class Performance

Six and Three-Quarter Years Ended March 31, 2017



- Public market asset classes are all above their respective benchmark.
- Public market asset classes are all above median with the exception of cash.

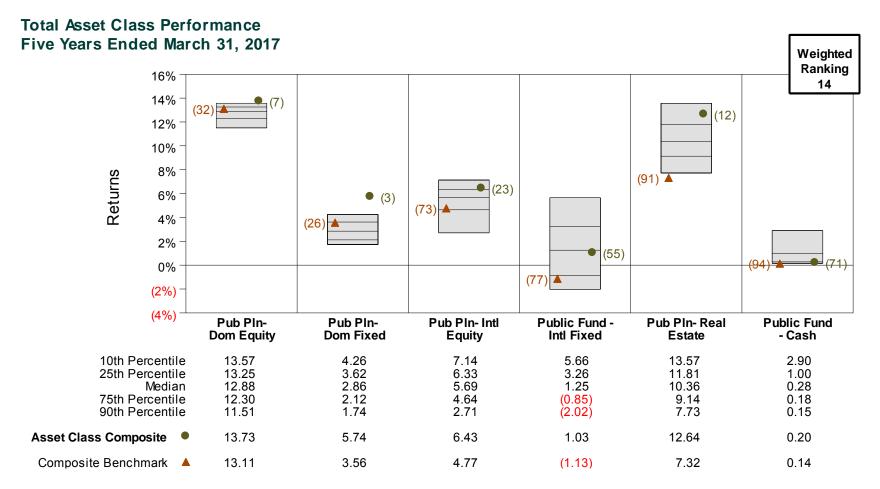
Consolidated Pension Trust asset class results vs other Public Pension Funds



- Public market asset classes are all above median with the exception of domestic equity and international fixed income.
- Domestic fixed income and real estate returns in top quartile.

Callan

Consolidated Pension Trust asset class results vs other Public Pension Funds



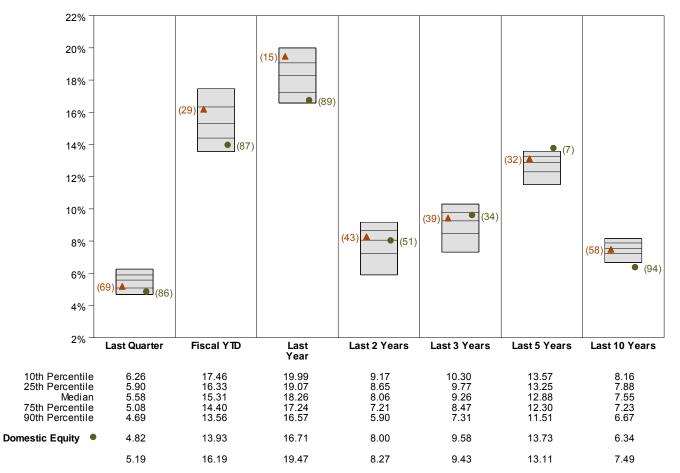
- Public market asset classes are all above median with the exception of international fixed income and cash.
- Domestic equity and fixed income returns in top decile.

Callan

Consolidated Pension Trust: U.S. Equity

As of March 31, 2017

Performance vs Pub PIn- Domestic Equity (Gross)



 Domestic equity returns are above median and the benchmark over the last 3 and 5 years ended March 31, 2017.

Domestic Equity

Quarter Ended March 31, 2017

Index	Return
Russell 3000 Index	5.7%
Russell 1000 Index	6.0%
Russell 2000 Index	2.5%

Style Exposure Matrix Holdings as of March 31, 2017

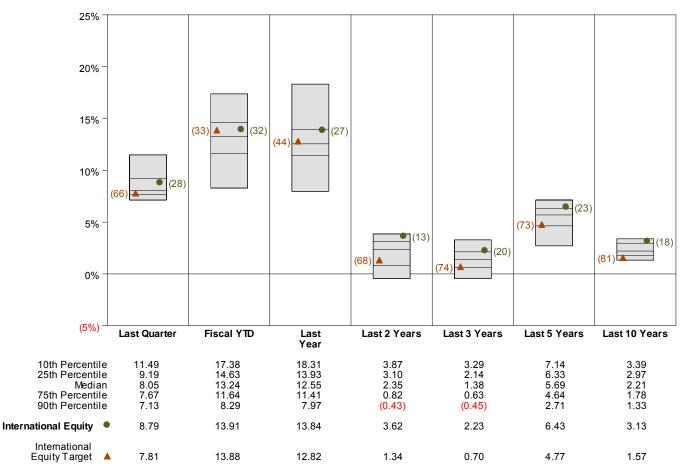
	Value	Core	Growth	Total
	36.8% (886)	30.6% (1153)	32.6% (885)	100.0% (2924)
Total	31.1% (800)	36.5% (1033)	32.4% (751)	100.0% (2584)
	0.4% (269)	0.4% (382)	0.3% (225)	1.0% (876)
Micro				
	0.7% (268)	0.7% (380)	0.5% (223)	1.9% (871)
oman	2.3% (344)	3.0% (461)	2.2% (366)	7.4% (1171)
Small	4.9% (300)	10.5% (423)	6.5% (333)	22.0% (1056)
	4.9% (168)	6.7% (221)	5.7% (196)	17.3% (585)
Mid	4.0% (400)	6 7% (004)	5 7% (400)	17.29/ (505)
	8.1% (126)	9.9% (143)	5.9% (103)	24.0% (372)
	29.3% (105)	20.5% (89)	24.5% (98)	74.3% (292)
Large	17.4% (106)	15.4% (87)	19.4% (92)	52.1% (285)
	17 40/ (400)	1 = 40/(07)	10 49/ (00)	E2 49/ (005)

- The Consolidated Pension Trust's relative overweight to small cap assets in domestic equity served as a headwind during the first quarter of 2017.
- As noted in the table to the left, small cap stocks trailed large cap stocks by 3.5% during the quarter.
- As of March 31, 2017, the Consolidated Pension Trust's domestic equity program was considerably underweight small cap equities (Consolidated Pension Trust: 22.0% vs. Russell 3000: 7.4%)

Consolidated Pension Trust: International Equity

As of March 31, 2017

Performance vs Pub PIn- International Equity (Gross)

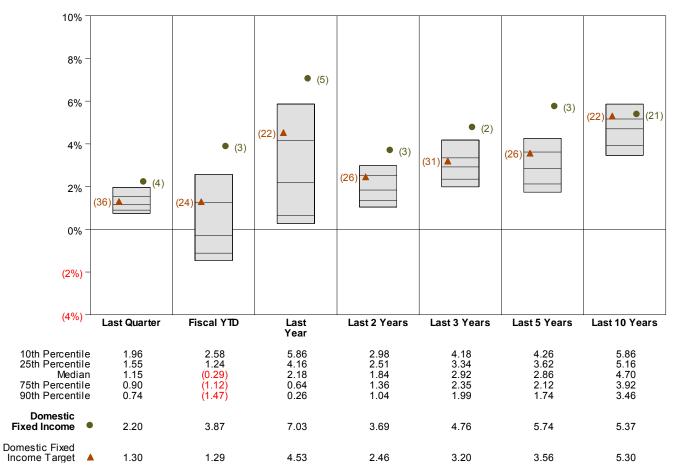


 International equity returns are above the benchmark and median for all time periods represented above.

Consolidated Pension Trust: U.S. Fixed Income

As of March 31, 2017

Performance vs Pub PIn- Domestic Fixed (Gross)

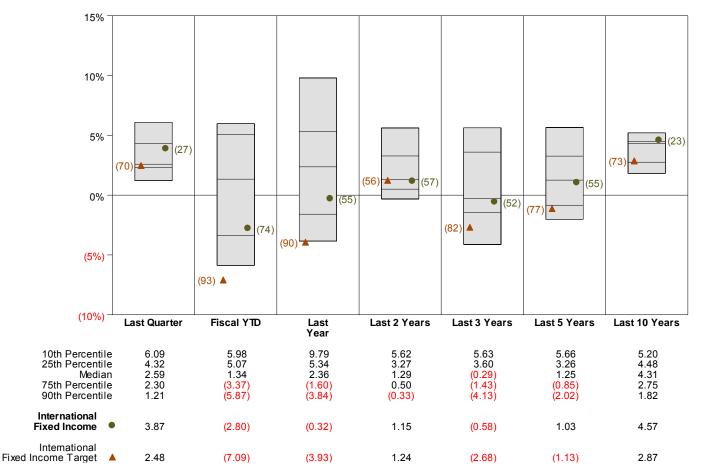


 The domestic fixed income program has placed in the top decile consistently over the last 5 years.

Consolidated Pension Trust: International Fixed Income

As of March 31, 2017

Performance vs Public Fund - International Fixed (Gross)



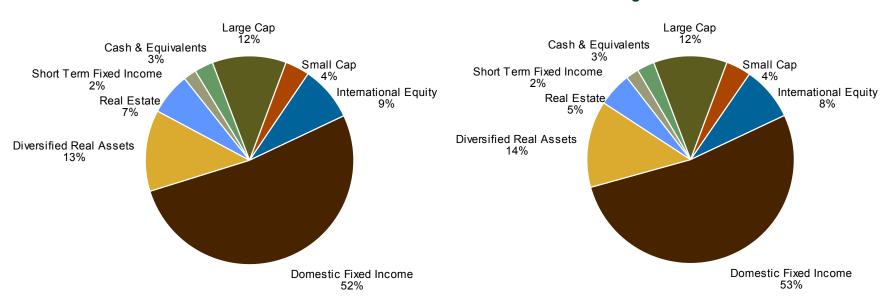
• The international fixed income program outperformed the benchmark during the last quarter, fiscal year to date and last year.

Consolidated Insurance Trust **Quarterly Review**

- Workforce Safety & Insurance Legacy Fund Budget Stabilization Fund
- ٠

Consolidated Insurance Trust Allocation

As of March 31, 2017



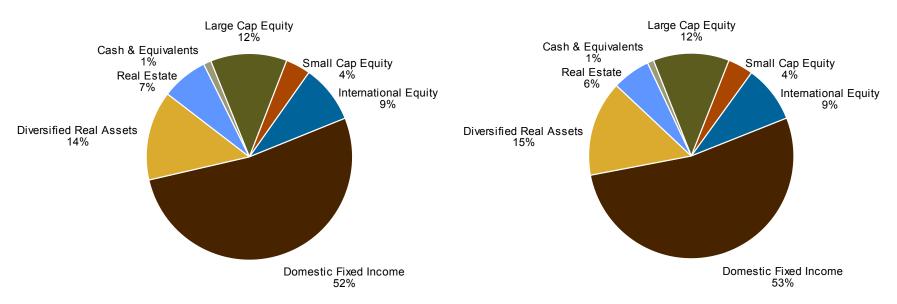
Target Asset Allocation

Actual Asset Allocation

Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
			<u> </u>		
Large Cap	241,086	11.5%	11.5%	0.0%	134
Small Cap	80,065	3.8%	3.9%	(0.1%)	(1,649)
International Equity	178,846	8.5%	8.4%	0.1%	2,847
Domestic Fixed Income	1,093,616	52.2%	52.7%	(0.5%)	(10,572)
Diversified Real Assets	263,869	12.6%	13.5%	(0.9%)	(18,987)
Real Estate	136,762	6.5%	5.3%	1.2%	25,715
Short Term Fixed Income	41,012	2.0%	2.0%	0.0%	<mark>(892)</mark> 3,405
Cash & Equivalents	59,976	2.9%	2.7%	0.2%	3,405
Total	2,095,234	100.0%	100.0%		

WSI Allocation

As of March 31, 2017



Actual Asset Allocation

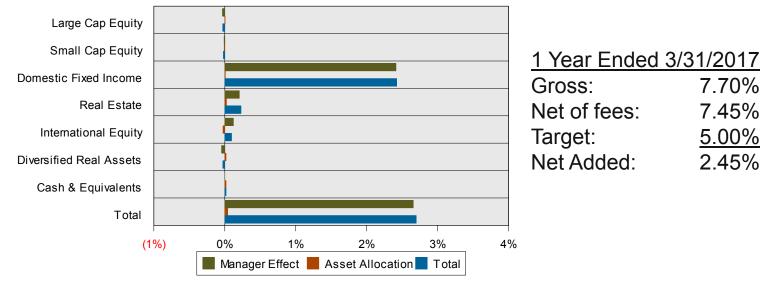
Target Asset Allocation

	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Large Cap Equity	223,639	12.0%	12.0%	0.0%	94
Small Cap Equity	72,593	3.9%	4.0%	(0.1%)	(1,922)
International Equity	169,734	9.1%	9.0%	0.1%	2,075
Domestic Fixed Income	977,624	52.5%	53.0%	(0.5%)	(9,701)
Diversified Real Assets	259,947	14.0%	15.0%	(1.0%)	(19,484)
Real Estate	136,695	7.3%	6.0%	1.3%	24,922
Cash & Equivalents	22,645	1.2%	1.0%	0.2%	4,016
Total	1,862,876	100.0%	100.0%		

WSI Performance and Attribution

As of March 31, 2017

One Year Relative Attribution Effects



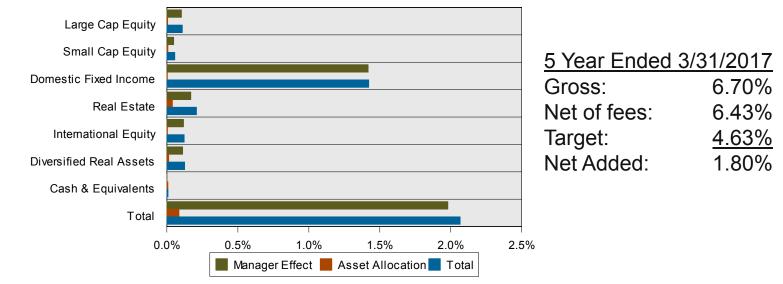
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
Large Cap Equity	12%	12%	17.09%	17.43%	(0.03%)	0.01%	(0.03%)
Small Cap Equity	4%	4%	25.89%	26.22%	(0.01%)	(0.01%)	(0.02%)
Domestic Fixed Inco	me 53%	53%	4.89%	0.44%	2.41%	0.01%	2.42%
Real Estate	7%	6%	10.18%	7.27%	0.20%	0.02%	0.23%
International Equity	9%	9%	12.82%	11.46%	0.12%	(0.03%)	0.10%
Diversified Real Ass		15%	1.56%	1.89%	(0.05%)	0.02%	(0.03%)
Cash & Equivalents	1%	1%	0.32%	0.36%	(0.00%)	0.02%	0.02%
Total			7.70% =	5.00%	+ 2.66% +	0.04%	2.70%

WSI Performance and Attribution

As of March 31, 2017

Five Year Annualized Relative Attribution Effects

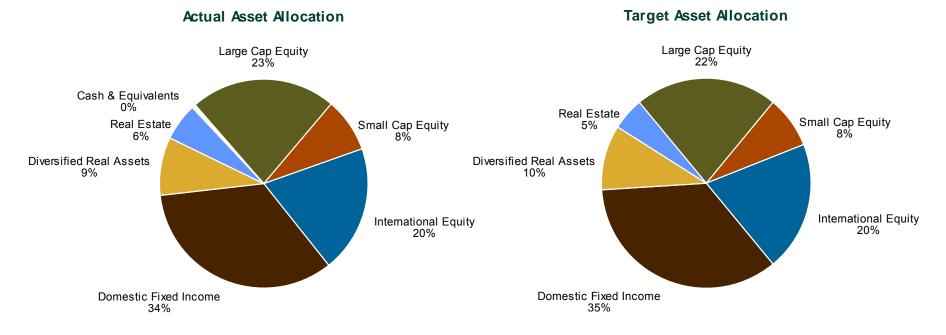


Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
	v	~ ~					
Large Cap Equity	11%	11%	14.30%	13.26%	0.10%	0.01%	0.11%
Small Cap Equity	4%	4%	13.81%	12.35%	0.05%	0.01%	0.06%
Domestic Fixed Inco	me 52%	52%	5.06%	2.34%	1.42%	0.00%	1.42%
Real Estate	7%	6%	13.34%	10.69%	0.17%	0.04%	0.21%
International Equity	8%	8%	7.22%	5.79%	0.12%	0.00%	0.12%
Diversified Real Ass	ets 18%	18%	2.81%	2.28%	0.11%	0.01%	0.13%
Cash & Equivalents	1%	1%	0.15%	0.14%	0.00%	0.01%	0.01%
Total			6.70% =	4.63%	+ 1.98% +	0.09%	2.07%

Legacy Fund Allocation

As of March 31, 2017

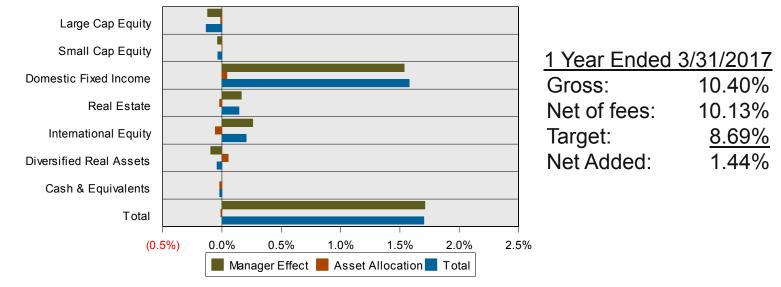


	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Large Cap Equity	1,003,268	22.6%	22.0%	0.6%	28,625
Small Cap Equity	373,687	8.4%	8.0%	0.4%	19,272
International Equity	874,864	19.7%	20.0%	(0.3%)	(11,175)
Domestic Fixed Income	1,503,998	33.9%	35.0%	(1.1%)	(46,571)
Diversified Real Assets	397,940	9.0%	10.0%	(1.0%)	(45,080)
Real Estate	258,430	5.8%	5.0%	0.8%	36,920
Cash & Equivalents	18,010	0.4%	0.0%	0.4%	18,010
Total	4,430,196	100.0%	100.0%		

Legacy Fund Performance and Attribution

As of March 31, 2017

One Year Relative Attribution Effects



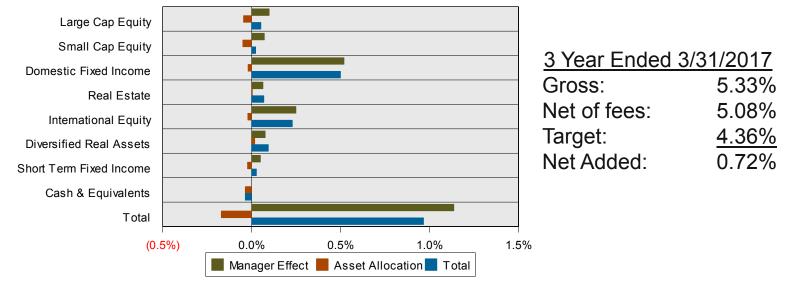
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
Large Cap Equity	22%	22%	16.87%	17.43%	(0.12%)	(0.01%)	(0.13%)
Small Cap Equity	8%	8%	25.73%	26.22%	(0.04%)	0.00%	(0.04%)
Domestic Fixed Inco	me 34%	35%	4.64%	0.44%	1.54%	0.04%	1.58%
Real Estate	6%	5%	10.17%	7.27%	0.16%	(0.02%)	0.14%
International Equity	19%	20%	12.74%	11.46%	0.26%	(0.06%)	0.20%
Diversified Real Ass	ets 9%	10%	0.10%	1.01%	(0.09%)	0.05%	(0.04%)
Cash & Equivalents	0%	0%	0.32%	0.32%	0.00%	(0.02%)	(0.02%)
Total			10.40% =	8.69%	+ 1.71% +	(0.01%)	1.70%

Legacy Fund Performance and Attribution

As of March 31, 2017

Three Year Annualized 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 Relativ e Return
	21%	22%	10.48%	<u> </u>	0.10%	(0.05%)	0.05%
Large Cap Equity Small Cap Equity	8%	8%	8.27%	9.99% 7.22%	0.07%	(0.05%)	0.02%
Domestic Fixed Inco	ome 33%	33%	4.28%	2.68%	0.52%	(0.02%)	0.50%
Real Estate	6%	5%	11.91%	10.58%	0.06%	0.00%	0.07%
International Equity	19%	20%	1.54%	0.43%	0.25%	(0.02%)	0.23%
Diversified Real Ass	sets 8%	8%	1.29%	0.44%	0.08%	0.02%	0.09%
Short Term Fixed Inc	come 5%	8% 4%	-	-	0.05%	(0.02%)	0.03%
Cash & Equivalents	0%	0%	0.13%	0.13%	0.00%	(0.04%)	(0.04%)
Total			5.33% =	4.36%	+ 1.14% +	(0.17%)	0.97%

Callan

Budget Stabilization Fund Allocation

As of March 31, 2017

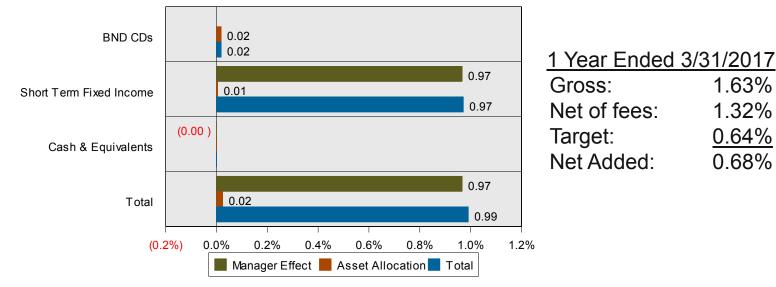


	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Short Term Fixed Income	4,931	80.6%	93.8%	(13.2%)	(805)
Cash & Equivalents	1,184	19.4%	6.2%	13.2%	805
Total	6,115	100.0%	100.0%		

Budget Stabilization Fund Overview

As of March 31, 2017

One Year Relative Attribution Effects



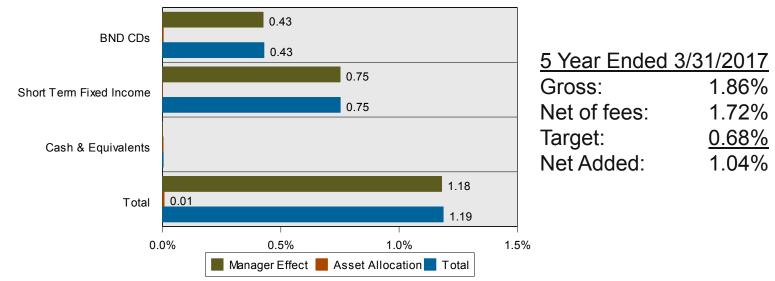
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
BND CDs Short Term Fixed Inc	15% come82%	15% 82%	2.21% 1.43%	2.21% 0.25%	0.00% 0.97%	0.02% 0.01%	0.02%
Cash & Equivalents	3%	3%	0.31%	0.36%	(0.00%)	0.00%	0.00%
Total			1.63% =	0.64%	+ 0.97% +	0.02%	0.99%

Budget Stabilization Fund Overview

As of March 31, 2017

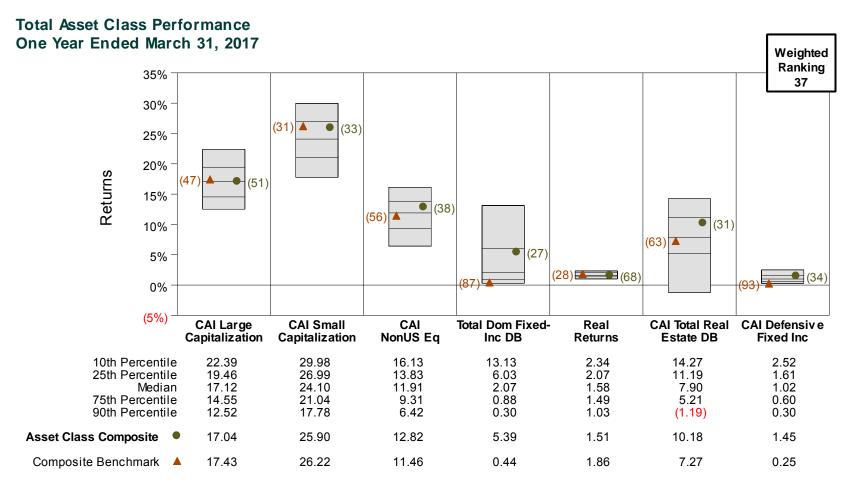
Five Year Annualized Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

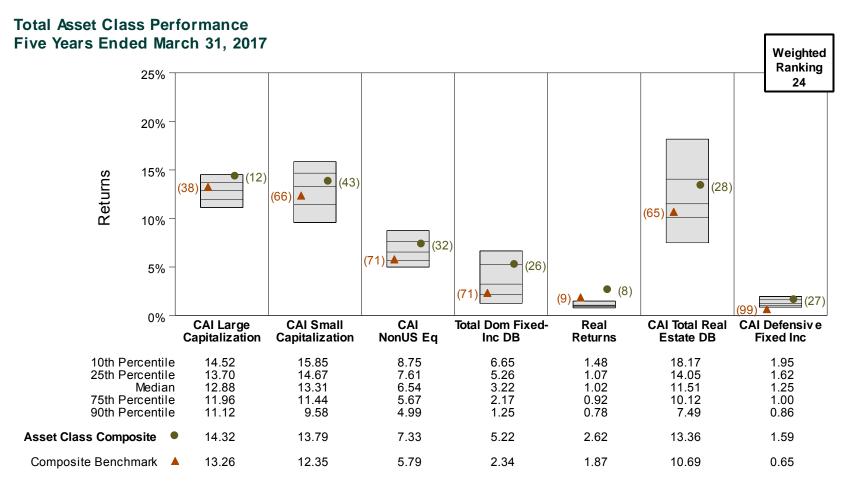
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
BND CDs	19%	19%	2.88%	0.87%	0.43%	0.00%	0.43%
Short Term Fixed Ir	ncome79%	79%	1.61%	0.65%	0.75%	0.00%	0.75%
Cash & Equivalents	s 2%	2%	0.15%	0.14%	0.00%	0.00%	0.00%
Total			1.86% =	0.68%	+ 1.18% +	0.01%	1.19%

Consolidated Insurance Trust asset class results vs Callan Style Groups



 With the exception of large cap and real return, all asset classes were above median for the year ended March 31, 2017.

Consolidated Insurance Trust asset class results vs Callan Style Groups

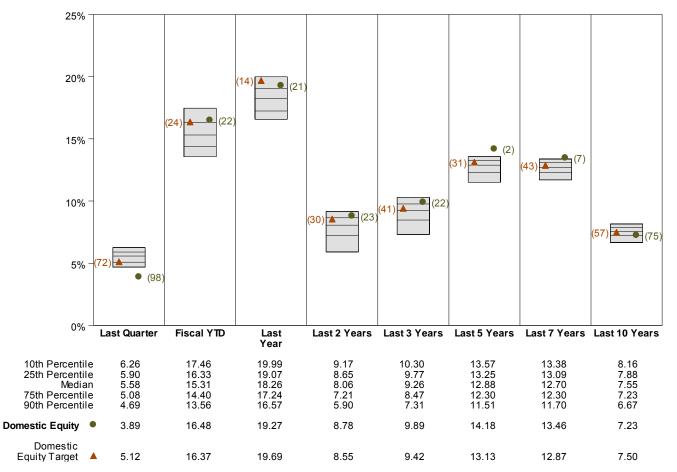


- Large cap and real return placed in the top quartile over the last five years ended March 31, 2017
- All asset classes outperformed their respective benchmarks over the last five years.

Consolidated Insurance Trust: Domestic Equity

As of March 31, 2017

Performance vs Pub PIn- Domestic Equity (Gross)

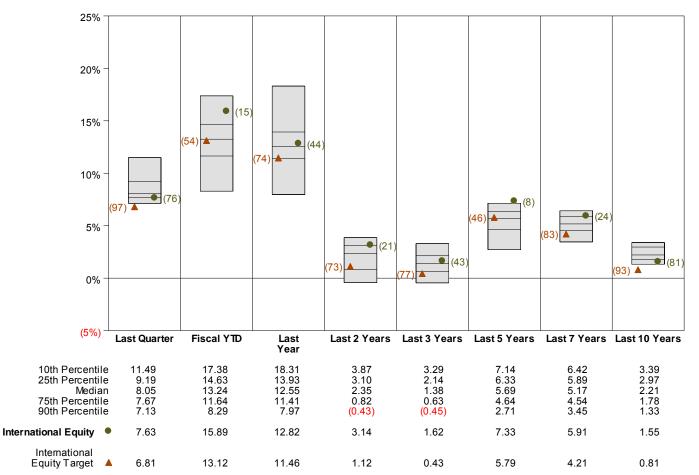


The domestic equity program has consistently placed about the median manager, but placed 98th percentile for the last quarter.

Consolidated Insurance Trust: International Equity

As of March 31, 2017

Performance vs Pub PIn- International Equity (Gross)

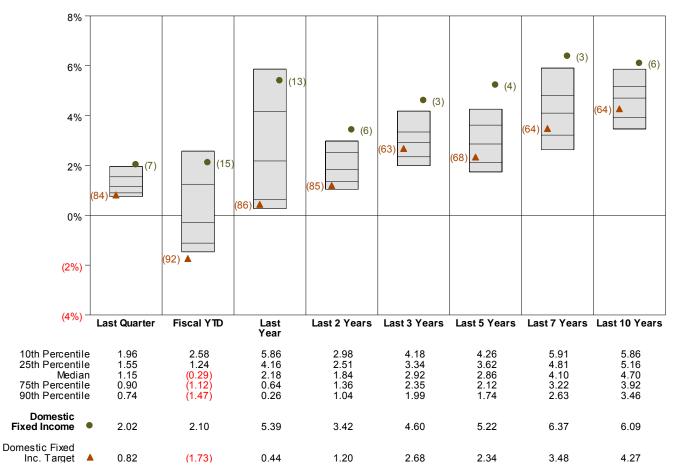


• The international equity program has placed above median for all periods except the last quarter, and 10 year time frames.

Consolidated Insurance Trust: Domestic Fixed Income

As of March 31, 2017

Performance vs Pub PIn- Domestic Fixed (Gross)



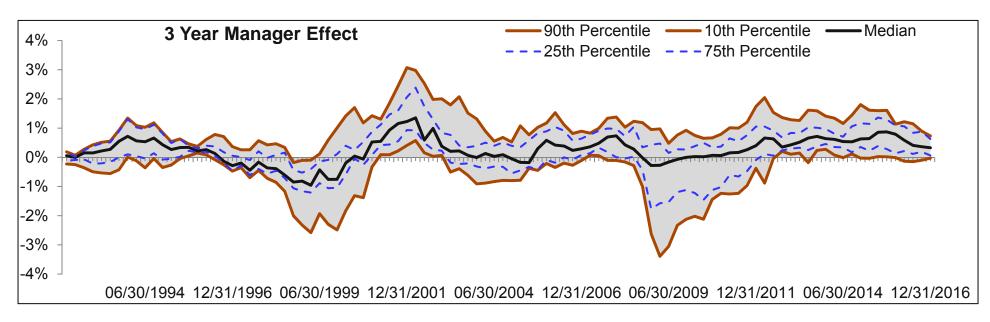
• Fixed income has been an exceptionally well-performing asset in the Insurance Trust, placing in the top decile over all time periods except fiscal YTD and last year.

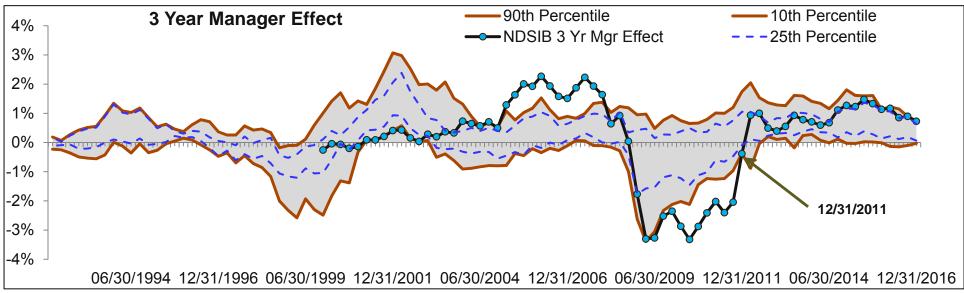
Watchlist Managers

As of March 31, 2017

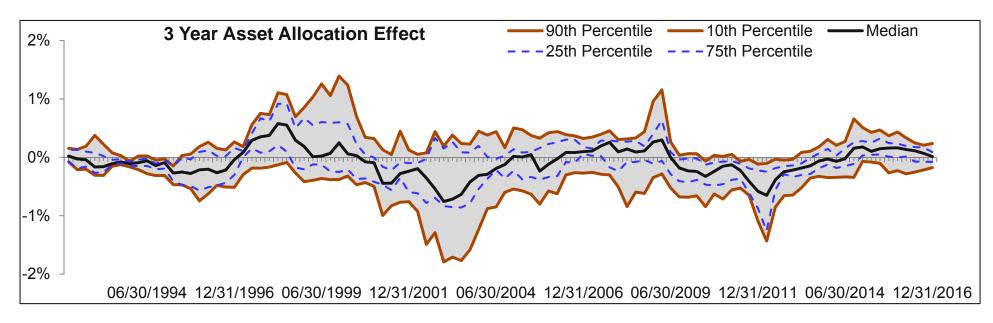
- PIMCO MBS
- PIMCO Unconstrained
- UBS Global Fixed Income
- JP Morgan MBS

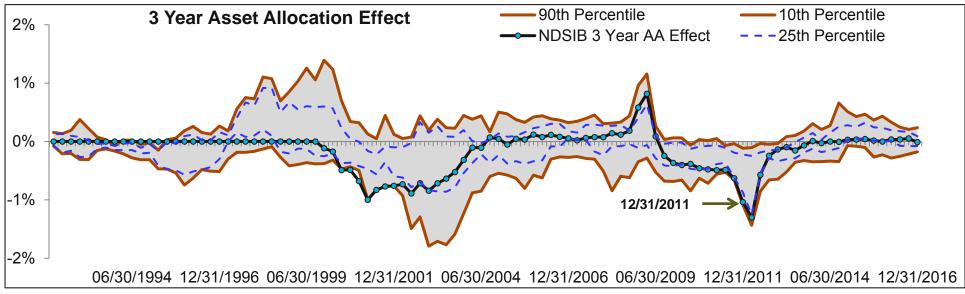
3-Year Rolling Manager Effect Attribution (4% Y-Axis)





3-Year Rolling Asset Allocation Effect Attribution (2% Y-Axis)





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March 31, 2017 North Dakota State Investment Board Pension Funds

Investment Measurement Service Quarterly Review

The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information provider sexternal to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2017 by Callan Associates Inc.

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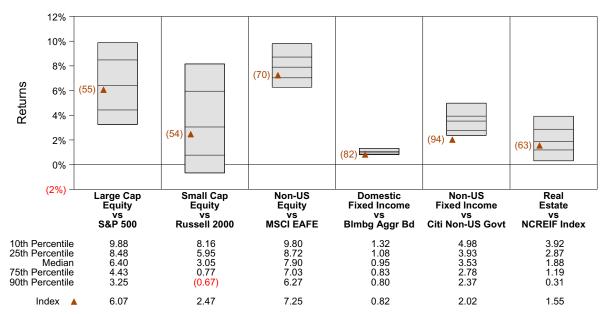
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Market Overview Active Management vs Index Returns

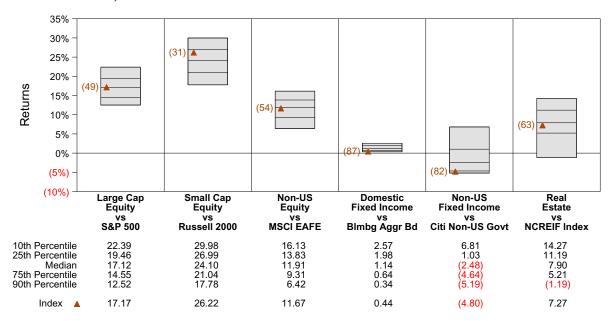
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2017



Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2017



Callan

Callan



First Quarter 2017

'Hitch in Our Git-Along'?

ECONOMY

2 PAGE GDP growth disappointed in the first quarter for the fourth straight year. But other measures such as consumer confidence held up during the quarter. The question is whether this is a hitch—or a problem with the GDP metric.

Steady as She Goes

U.S. EQUITY

The S&P 500 Index hit a high during the first quarter and ended with a 6.07% jump, continuing last year's gains. But in a reversal from the previous quarter, small cap stocks fell behind large cap and growth overtook value.

New Year, New Lows

REAL ESTATE

14 PAGE The NCREIF Property Index turned in its worst performance (+1.55%) since 2010, while the NCREIF Open End Diversified Core Equity Index also set a new seven-year low (+1.77%). U.S. REITs underperformed global REITs, but still managed to generate positive returns.

No Homefield Advantage

FUND SPONSOR

A G E Strong equity results helped boost institutional funds. The median return for all fund types was +4.31%; endowments and foundations did best, jumping 4.58%. Taft-Hartley plans had the lowest return at +3.93%. The key difference was exposure to non-U.S. equities.

Profits Trump Populism

NON-U.S. EQUITY

B P A G E **Despite** political turmoil in Europe and choppy growth in Asia, non-U.S. markets advanced in the first quarter. The dollar's weakness bolstered returns for U.S. investors. Emerging markets outpaced their developed peers, and non-U.S. growth stocks bested their value counterparts.

On a Roll

PRIVATE EQUITY

16 PAGE Private equity stayed healthy in the first quarter. Buyout M&A exits dropped significantly, while venture capital-backed M&A exits were mixed. Both buyout and VC-backed IPOs raised more money than in the previous quarter.

Broad Market Quarterly Returns



Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

Up, Up, and Away

U.S. FIXED INCOME

10 PAGE Strong economic data and upbeat investors drove U.S. bond returns higher. High yield securities performed the best, but returns were up for all fixed income sectors. The Treasury yield curve flattened as short-term Treasuries rose while longer-term issues fell.

Dollops of Alpha with Beta

HEDGE FUNDS

Most hedge fund strategies reported positive returns in the first quarter, amid a broad rally in global markets. The **Credit Suisse Hedge Fund Index** advanced 2.07% and the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Separation Anxiety

NON-U.S. FIXED INCOME

12 PAGE Sovereign debt performed strongly amid policy uncertainty in the European Union, and emerging market debt outperformed developed market debt for the third straight quarter. Returns were bolstered by the U.S. dollar's broad-based decline against most currencies.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION

18 PAGE The Callan DC Index[™] increased 7.99% during 2016, its best year since 2013. But it trailed the Age 45 Target Date Fund, which gained 8.59% in 2016. For the year, DC plan balances increased 8.31%, mostly attributable to market performance.

'Hitch in Our Git-Along'?

ECONOMY | Jay Kloepfer

For the fourth year in a row, reported GDP growth disappointed in the first quarter, coming in at just 0.7%, down from a 2.1% rate in the fourth quarter. This paltry gain was the weakest in three years and was concentrated in consumer spending on autos and utilities (reflecting unseasonably warm weather in states with typically cold winters), a drop in defense spending, and a sharp slowdown in the accumulation of inventories. "Softer" measures of economic activity like consumer confidence and the ISM Report on Business, which records the forward-looking purchasing intentions of industry, held up through the first quarter, countering the weakening of GDP as the quarter unfolded. Business and consumer confidence rose after the U.S. presidential election, likely in anticipation of changes to policy and taxes, and without any reference to the strength of the underlying economy.

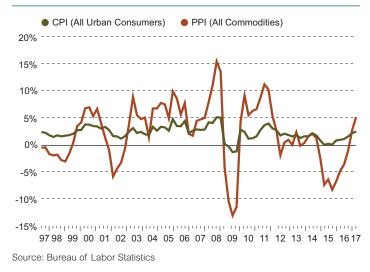
The question is whether we really have an annual "hitch in our git-along" each January, or is something else going on? Four years in a row with an unexpected drop in growth during the first quarter, which is then typically made up with an offsetting increase in the second quarter—although the GDP numbers are supposed to be seasonally adjusted—suggests perhaps a problem with this metric of evaluating the volume of our economic activity. GDP has come under increasing scrutiny as an outdated measure of the modern U.S. (and global) economy, predicated more on the flow of traditional goods and services, particularly agriculture and manufacturing. It may be very challenged to measure the output and economic impact of industries such as software, social media, and electronic commerce.

Inventory buildup usually signals confidence in the prospects for the economy. For several years prior to 2016, inventory "decumulation" was a clear drag on growth, as firms were reluctant to maintain output in the face of soft demand. The U.S. economy shifted toward inventory accumulation in the third and fourth quarters of 2016, only to reverse in the first quarter. That reversal subtracted almost 1% from GDP growth. Total personal



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



consumption expenditures led broad economic growth in 2016, averaging gains of well over 3% during each of the last three quarters of the year, only to drop to just 0.3% growth during the first quarter.

The U.S. job market enjoyed a robust 2016, adding 2.2 million new jobs. The economy entered 2017 with two strong months in January and February, adding more than 200,000 net new jobs each month, before the rate of job creation halved in March to 98,000. Retail jobs took a serious hit in both February and March (seasonally adjusted), with the continuing advance of e-commerce challenging retail establishments, particularly shopping malls. Signs now point to further softness in the job market as the second quarter begins.

In spite of this potential softening, the unemployment rate dipped to 4.5% in March, the lowest in the current cycle, and many urban regions report very tight job markets, with unemployment rates as low as 2% to 3%. In response, the growth in average hourly earnings, which had been stuck in a narrow range below a 2% annual rate for five years following the Global Financial Crisis, rose above 2.5% annual growth during 2016 and continued at this rate through the first quarter.

The minutes of the past several Federal Reserve Open Market Committee meetings show a continuing split among members about whether or not an acceleration of inflation is a looming concern. The data suggest inflation remains low, and futures markets indicate expectations are still anchored at or below the Fed's long-term target of 2% for core inflation. While the Fed uses the consumption deflator in its targeting, the CPI is still a useful measure of price activity. The headline CPI All-Urban index rose 2.4% year-over-year through March, although the measure actually declined between February and March. The energy portion of the Index rose 10.9% over the last 12 months, even after a 3.2% drop in March, reflecting a return toward normal in energy prices after the sharp drop in 2015. The core measure of CPI-which excludes food and energy-rose 2.0% over the 12 months ended in March, the smallest 12-month increase since the end of 2015.

The Long-Term View

	2017	Periods	ended	Dec. 3	1, 2016
Index	1st Qtr	Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	5.74	12.74	14.67	7.07	9.29
S&P 500	6.07	11.96	14.66	6.95	9.15
Russell 2000	2.47	21.31	14.46	7.07	9.69
Non-U.S. Equity					
MSCI EAFE	7.25	1.00	6.53	0.75	4.95
MSCI Emerging Markets	11.44	11.19	1.28	1.84	
MSCI ACWI ex USA Small Cap	8.78	3.91	7.74	2.89	_
Fixed Income					
Bloomberg Barclays Agg	0.82	2.65	2.23	4.34	5.63
90-Day T-Bill	0.10	0.33	0.12	0.80	2.71
Bloomberg Barclays Long G/C	1.58	6.67	4.07	6.85	7.58
Bloomberg Barclays GI Agg ex US	2.48	1.49	-1.39	2.44	4.73
Real Estate					
NCREIF Property	1.55	7.97	10.91	6.93	8.63
FTSE NAREIT Equity	1.16	8.52	12.01	5.08	11.13
Alternatives					
CS Hedge Fund	2.07	1.25	4.34	3.75	
Cambridge PE*	-	9.17	13.05	10.59	15.53
Bloomberg Commodity	-2.33	11.77	-8.95	-5.57	2.55
Gold Spot Price	8.64	8.63	-5.97	6.08	4.82
Inflation – CPI-U	0.98	2.07	1.36	1.81	2.26

*Private equity returns show pooled horizon IRRs for periods ended September 30, 2016. Most recent quarterly data not available.

Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15
Employment Cost–Total Compensation Growth	2.4%	2.2%	2.3%	2.3%	1.9%	2.0%	2.0%	2.0%
Nonfarm Business–Productivity Growth	-0.6%*	1.3%	3.3%	-0.1%	-0.6%	-2.0%	1.8%	1.0%
GDP Growth	0.7%	2.1%	3.5%	1.4%	0.8%	0.9%	2.0%	2.6%
Manufacturing Capacity Utilization	75.4%	75.1%	74.9%	75.1%	75.4%	75.4%	75.7%	75.5%
Consumer Sentiment Index (1966=100)	97.2	93.2	90.3	92.4	91.5	91.3	90.8	94.2

*Estimate.

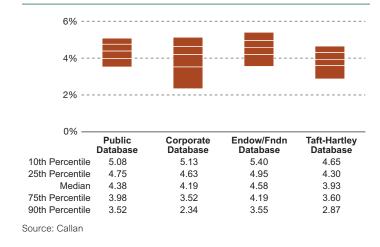
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

No Homefield Advantage

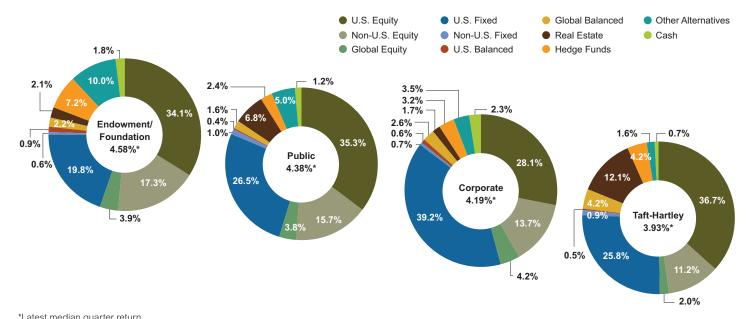
FUND SPONSOR | Kitty Lin

A post-election rally, higher interest rates, and political uncertainty in Europe and Asia left global markets unfazed as stocks and bonds rallied. Both U.S. and non-U.S. stocks delivered stellar returns in the first three months of 2017. That put some juice into the performance of institutional funds tracked by Callan, which did far better than they had in the last quarter of 2016.

The median return for all fund types for the first quarter clocked in at +4.31%, compared to only +0.65% in the fourth quarter. Endowment and foundation funds bested all other fund types and jumped 4.58%, while Taft-Hartley plans slipped in the ranks and had the lowest median return, up only 3.93%.



Callan Fund Sponsor Returns for the Quarter



Callan Fund Sponsor Average Asset Allocation

*Latest median quarter return. Note: charts may not sum to 100% due to rounding. Source: Callan

FUND SPONSOR (Continued)

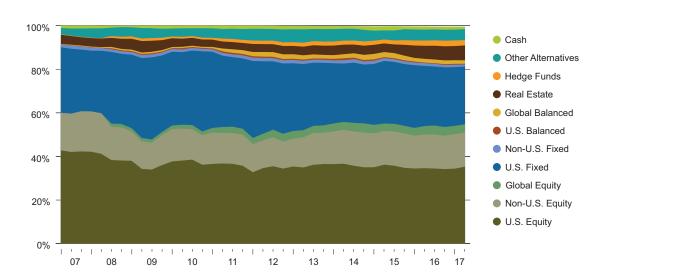
(10 Years)

How funds did depended in large part on where they had their money. Endowment and foundation plans have the highest exposure to non-U.S. equity, which performed quite well despite an ousted South Korean president and an unpredictable French election. The **MSCI ACWI ex USA Index** rose 7.86%, the **MSCI EAFE Index** gained 7.25%, and the **MSCI Emerging Markets Index** jumped 11.44%.

On the other end of the spectrum, Taft-Hartley plans had the most exposure to U.S. equity and the lowest to non-U.S. and global equity. While U.S. equities delivered strong returns, they

lagged their overseas counterparts; the **S&P 500 Index** surged 6.07% and the **Russell 1000 Index** rose 6.02%. Taft-Hartley plans had an average allocation of 11.2% to non-U.S. equity, which was the lowest of all fund types.

Although Taft-Hartley plans had the worst performance in the first quarter, they had the best returns over the last three (+5.99%) and five years (+8.22%) due to their home country bias in equities and the dominance of U.S. versus non-U.S. stocks. Endowment and foundation funds had the best performance in the first quarter (+4.58%) and last year (+11.32%).



Callan Public Fund Database Average Asset Allocation

Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Steady as She Goes

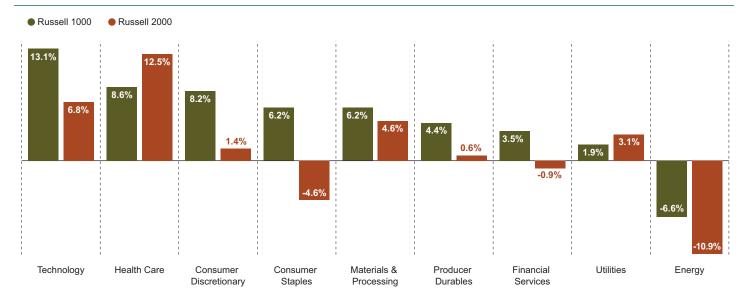
U.S. EQUITY | Lauren Mathias, CFA

Despite concerns over the Trump administration's ability to follow through on promises of lower taxes and decreased regulation, the market accelerated higher in the first quarter. The **S&P 500 Index** hit a peak (2,396) in March and notched a 6.07% gain over the full three-month period. But the quarter was marked by reversals from the previous one—small cap fell behind large cap (**Russell 2000 Index**: +2.47% vs. **Russell 1000 Index**: +6.03%) and growth overtook value (**Russell 1000 Growth Index**: +8.91% vs. **Russell 1000 Value Index**: +3.27%).

The broader U.S. economy reflected the market's optimism, and to no one's surprise the Fed raised rates a quarter-point in mid-March. Wages continued to grow, consumer confidence was up, inflation moved closer to the Fed's 2% target, and unemployment fell to 4.7%. Yet some headwinds persisted in the U.S., with slowing GDP growth (the fourth quarter trailed the third, 2.1% vs. 3.5%), and significant issues abroad: elections

and Brexit in Europe, the Syrian war in the Middle East, and South Korea's presidential impeachment in Asia. Valuations in the U.S. remain high by various measures, but investors appear unfazed—for now.

Technology shares were especially strong; the FANG stocks— Facebook, Amazon, Netflix, and Google—hit record highs during the quarter. (Technically it should be the FANA stocks because Google is officially Alphabet—but FANG sounds better!) Micro and small cap companies ran out of steam after a strong 2016, while mid and large cap stocks charged ahead (**Russell Microcap Index**: +0.38%, Russell 2000 Index: +2.47%, **Russell Midcap Index**: +5.15%, and Russell 1000 Index: +6.03%). Value lost its lead over growth in all capitalizations (**Russell 2000 Value Index**: -0.13% vs. **Russell 2000 Growth Index**: +5.35%). The dispersion in style returns was broad across market capitalizations.



Economic Sector Quarterly Performance

Source: Russell Investment Group

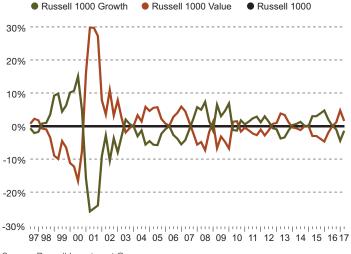
Note: As of the fourth quarter of 2015, the Capital Market Review reports sector-specific returns using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing 11 sectors.

U.S. EQUITY (Continued)

Reflecting the reversal in investor preference, the best-performing sectors in the S&P 500 Index during the quarter were growth-oriented; Technology (+12.57%) was No. 1, followed by Consumer Discretionary (+8.45%) and Health Care (+8.37%). After leading in the fourth quarter, Financials (+2.53%) and Energy (-6.68%) trailed the broad market in the first. Both Health Care and Financials traded on President Donald Trump's failure to amend the Affordable Care Act—Health Care stocks gained on the certainty of the status quo and Financials dropped on fear the administration may fall short on deregulation and tax reform as well. Energy was the worst-performing sector during the quarter as last year's agreement by the Organization of the

Rolling One-Year Relative Returns

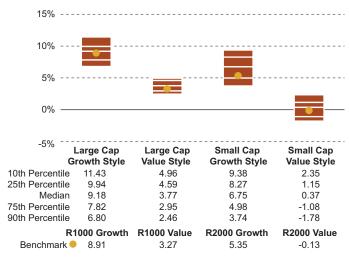
(vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns

geopolitical uncertainty.



Petroleum Exporting Countries (OPEC) has not reduced fears

As the U.S. equity market powered on, valuations across indi-

ces traded at historically high levels-the S&P 500 Index NTM

(next 12 months) P/E was 17.5x versus the 25-year average of

14x as of March 31, 2017. Correlation among stocks (measured

by S&P 500 stocks) ended the quarter below average and at levels not seen in 10 years, a positive for active management.

Volatility (as measured by the CBOE Market Volatility Index,

or VIX) also tracked below its average, seemingly unfazed by

of oversupply or meaningfully increased the price of oil.

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of March 31, 2017

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	507	2,941	995	792	2,438	1,946
Wtd Avg Mkt Cap (\$bn)	151.6	127.6	137.9	13.7	4.6	2.2
Price/Book Ratio	2.9	2.8	2.9	2.6	2.3	2.1
Forward P/E Ratio	17.7	18.2	18	19.3	20.4	21.1
Dividend Yield	2.0%	1.9%	2.0%	1.7%	1.5%	1.4%
5-Yr Earnings (forecasted)	12.6%	12.5%	12.5%	11.8%	11.8%	12.4%

Sources: Russell Investment Group, Standard & Poor's.

Knowledge. Experience. Integrity. 7

Profits Trump Populism

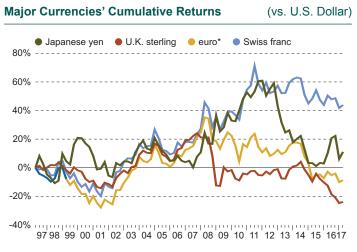
NON-U.S. EQUITY | Irina Sushch

A flurry of political skirmishes and uneven growth in Asia failed to deter non-U.S. equity investors, and the "risk-on" theme of last year continued into 2017. The weak U.S. dollar also bolstered overseas returns for U.S. investors.

The **MSCI ACWI ex USA Index** jumped 7.86% during the quarter. All of its sectors were in the black, with the exception of Energy (-0.91%), which was hurt by falling oil prices. Economically sensitive sectors led the pack: Information Technology contributed 14.59% and Industrials added 9.48%. Defensive and cyclical sectors such as Telecommunications (+5.98%) and Real Estate (+6.72%) lagged.

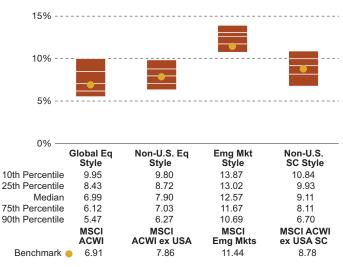
Helped by a weaker dollar, emerging markets (MSCI Emerging Markets Index: +11.44%) outperformed their developed peers (MSCI World ex USA Index: +6.81% and MSCI EAFE Index: +7.25%). The MSCI ACWI ex USA Growth Index (+9.13%) resumed dominance over the MSCI ACWI ex USA Value Index (+6.68%). Small cap stocks also performed well (MSCI ACWI ex USA Small Cap Index: +8.78%).

Politics continued to roil Europe. Most notably, British Prime Minister Theresa May triggered Article 50 of the Lisbon Treaty on March 29, giving the U.K. two years to negotiate an exit from the European Union. The negotiations are likely to be arduous, particularly concerning trade and immigration. And France's presidential elections weighed on investors during the guarter. (A runoff is slated for May. Marine Le Pen, the far right contender and opponent of the EU, finished second in the first round of voting but is widely expected to lose to Emmanuel Macron, a more centrist leader and supporter of the EU.) On the other hand, the economic outlook brightened in the euro zone. Inflation hit a four-year high (2%) in February. Fourth quarter GDP was 1.7% (year-over-year) and positive in each country except Greece (-1.2%). The MSCI Europe Index jumped 7.44% in the first quarter; all of the countries posted positive returns. Spain (+14.76%) and the Netherlands (+11.33%) contributed most, while Ireland (+3.75%) and Norway (+1.43%) lagged.



* German mark returns before 1Q99 Source: MSCI

Callan Style Group Quarterly Returns



Sources: Callan, MSCI

Information Technology (+12.89%) and Industrials (+10.39%) rallied, while Energy stocks (-3.10%) brought up the rear.

In Southeast Asia and the Pacific, Japan's economy grew at a meager (yet notably positive) annualized 1.2% in the fourth quarter. Industrial output and inflation rose and unemployment fell. But the stronger yen (+5%) dampened exporters' returns, and Japan ended the quarter up just 4.49%; only New Zealand

NON-U.S. EQUITY (Continued)

posted worse returns (+1.95%) in the region, owing to a faltering Materials sector (-19.33%). Singapore (+13.46%) and Hong Kong (+13.41%) fared best, thanks to thriving real estate markets. Australia advanced 10.98%, propped up by currency strength. The **MSCI Pacific Index** was up 6.92% and the **MSCI Pacific ex Japan Index** jumped 11.76%.

Emerging market returns were boosted by a weaker U.S. dollar, economic growth in China, and rising industrial metal prices. Poland (+17.75%) and India (+17.12%) were the top performers. The party of India's prime minister, Narendra Modi, won a key regional election despite an abrupt currency recall last year, and the central bank predicted strong economic growth for the next 12 months. Gains in IT stocks bolstered Korean returns. China, which makes up more than a quarter of the MSCI Emerging Markets Index, also experienced growth in its IT sector, as well as in Manufacturing and Real Estate. Its fourth

Quarterly Returns for Non-U.S. Developed Countries

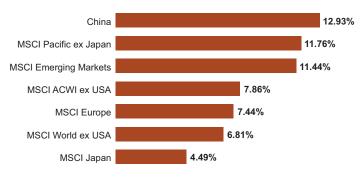
Equity Index							
Country	(US\$)	(Local Currency)	Currency Return	Weight*			
Australia	10.98%	5.34%	5.35%	5.30%			
Austria	8.96%	7.45%	1.40%	0.14%			
Belgium	5.13%	3.68%	1.40%	0.81%			
Canada	2.51%	1.94%	0.55%	6.85%			
Denmark	6.11%	4.65%	1.39%	1.14%			
Finland	7.31%	5.83%	1.40%	0.67%			
France	7.28%	5.80%	1.40%	7.10%			
Germany	8.36%	6.87%	1.40%	6.62%			
Hong Kong	13.41%	13.65%	-0.24%	2.44%			
Ireland	3.75%	2.32%	1.40%	0.32%			
Israel	5.53%	3.28%	6.01%	0.47%			
Italy	6.17%	4.70%	1.40%	1.51%			
Japan	4.49%	-0.17%	4.67%	16.29%			
Netherlands	11.33%	9.92%	1.40%	2.41%			
New Zealand	1.95%	1.69%	0.25%	0.12%			
Norway	1.43%	1.21%	0.22%	0.44%			
Portugal	8.25%	6.75%	1.40%	0.11%			
Singapore	13.46%	9.79%	3.39%	0.92%			
Spain	14.76%	13.18%	1.40%	2.34%			
Sweden	9.46%	7.58%	1.75%	2.01%			
Switzerland	8.34%	6.70%	1.54%	6.08%			
U.K.	5.04%	3.80%	1.20%	12.44%			

*Weight in the MSCI ACWI ex USA Index

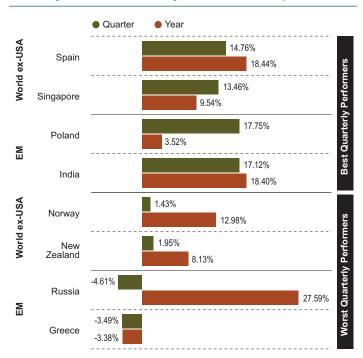
Sources: MSCI, Russell Investment Group, Standard & Poor's.

quarter GDP came in at 6.8%, and China ended the quarter up 12.93%. Mexico was among the top performers (+16.03%) as the peso rebounded 9%. Russia (-4.61%) and Greece (-3.49%) were the region's poorest performers. Russia was hurt by falling oil prices, and Greece by negative GDP growth.

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI



Quarterly and Annual Country Performance Snapshot

Source: MSCI

Up, Up, and Away

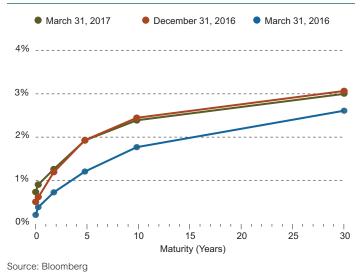
U.S. FIXED INCOME | Rufash Lama

During the first quarter, the U.S. bond market generated positive returns across the board due in part to strong economic data and upbeat investors compressing spreads. U.S. fourth quarter GDP grew at an annualized rate of 2.1%, consumer spending rose 3.5%, and the unemployment rate fell to 4.7%. High yield bonds performed best; the **Bloomberg Barclays High Yield Index** climbed 2.70% for the quarter.

The Fed increased rates by 25 basis points in March, to a range of 0.75% – 1.00%, as U.S. economic indicators continued to signal growth; two additional hikes are expected over the rest of the year. The Treasury yield curve flattened during the quarter as short-term Treasury yields rose while longer-term Treasury yields fell. Despite hitting an intra-quarter high of 2.62%, the benchmark 10-year Treasury note ended the quarter at 2.39%, 5 bps lower than the yield at the end of 2016. For the quarter, U.S. Treasuries returned 0.67%; long Treasuries (+1.40%) outperformed intermediate ones (+0.54%). TIPS were up 1.26% as expectations for future inflation rose. At the end of the quarter, the 10-year breakeven inflation rate, a market-based gauge of investors' expectations for future inflation, stood at 1.97%.

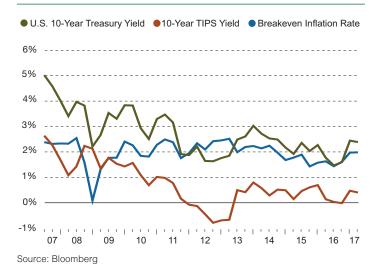
U.S. Treasury Yield Curves

10 Callan

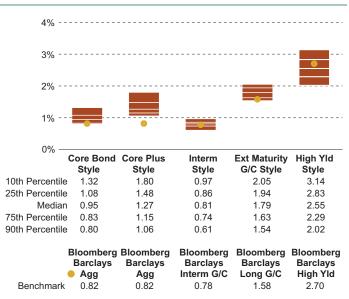


All fixed income sectors reported returns in the black as both the corporate credit market and the structured-debt market benefited from strong investor demand; the **Bloomberg Barclays U.S. Aggregate Bond Index** rose 0.82%. Issuance in the investment-grade primary market totaled \$390 billion, easily surpassing the prior record of \$357 billion in the second quarter

Historical 10-Year Yields



Callan Style Group Quarterly Returns



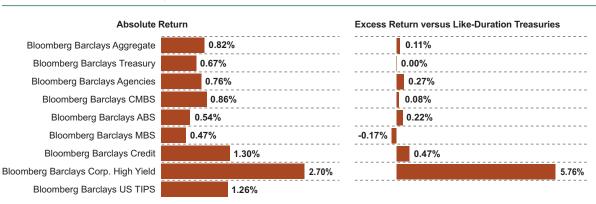
Source: Bloomberg Barclays, Callan

U.S. FIXED INCOME (Continued)

of 2015. Overall, spreads tightened and investor appetite for bonds remained strong despite the headwind of higher rates. High yield spreads over comparable Treasuries tightened by 26 bps and delivered the strongest return. Lower-rated bonds outperformed higher-rated issues; BBB-rated securities generated an excess return of 85 bps and outperformed AAA securities by 70 bps. ABS and investment-grade corporate spreads tightened by 5 bps and rose 1.22% and 0.54%, respectively. Mortgage-backed securities (MBS) (+0.47%) underperformed duration-matched Treasuries by 17 bps. Commercial mort-gage-backed securities (CMBS) rose 0.86% for the quarter and benefited from strong demand.

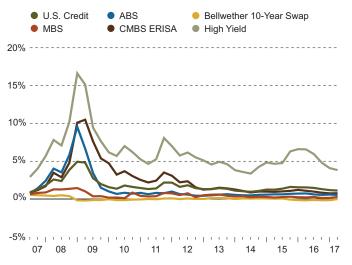
Municipal bonds also delivered a strong quarter as expectations for U.S. tax reform fell and new issuance remained light. The **Bloomberg Barclays Municipal Bond Index** jumped 1.58%.

Fixed Income Index Quarterly Returns



Source: Bloomberg Barclays

Effective Yield Over Treasuries



Source: Bloomberg Barclays

U.S. Fixed Income Index Characteristics as of March 31, 2017

Bloomberg Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Bloomberg Barclays Aggregate	2.61	6.00	8.22
Bloomberg Barclays Universal	2.95	5.78	7.99
Bloomberg Barclays Gov/Credit	2.49	6.47	8.70
1-3 Year	1.50	1.94	2.00
Intermediate	2.10	4.06	4.41
Long-Term	3.88	15.15	24.19
Bloomberg Barclays Long Credit	4.51	13.71	23.76
Bloomberg Barclays Corp High Yield	5.84	4.03	6.24
Bloomberg Barclays TIPS	2.27	5.72	8.31
Bloomberg Barclays Municipal	2.46	6.40	12.85
1-5 Year	1.46	2.65	3.13
1-10 Year	1.86	4.03	5.77

Source: Bloomberg Barclays

Separation Anxiety

NON-U.S. FIXED INCOME | Kyle Fekete

Sovereign debt performed well in the first quarter amid political uncertainty about the future of the European Union (EU). Emerging market debt outperformed developed market debt for the third straight quarter as the **JPM GBI-EM Global Diversified Index** advanced 6.50% versus the **Bloomberg Barclays Global Aggregate ex-US Index**'s 2.48% gain. Returns were bolstered by the U.S. dollar's drop against most currencies.

European sovereign bond yields rose in the midst of critical elections and debate over the future of the EU. The safehaven German 10-year bond yield climbed 12 basis points to

Country	Country Debt*	Country Debt**	Currency Return	Weight***
Australia	6.66%	1.24%	5.35%	2.64%
Austria	0.60%	-0.80%	1.40%	1.75%
Belgium	-0.31%	-1.69%	1.40%	2.99%
Canada	1.05%	0.50%	0.55%	2.54%
Denmark	0.79%	-0.59%	1.39%	0.71%
Finland	0.65%	-0.75%	1.40%	0.74%
France	-0.92%	-2.29%	1.40%	11.85%
Germany	0.64%	-0.75%	1.40%	8.62%
Ireland	0.05%	-1.34%	1.40%	0.96%
Italy	-0.60%	-1.98%	1.40%	11.24%
Japan	4.15%	-0.50%	4.67%	33.21%
Malaysia	2.94%	1.56%	1.37%	0.50%
Mexico	13.62%	3.88%	9.38%	1.11%
Netherlands	0.50%	-0.90%	1.40%	2.75%
Norway	1.44%	1.22%	0.22%	0.33%
Poland	7.16%	1.71%	5.36%	0.81%
Singapore	5.69%	2.22%	3.39%	0.50%
South Africa	4.42%	2.38%	1.99%	0.66%
Spain	0.60%	-0.79%	1.40%	6.70%
Sweden	1.31%	-0.43%	1.75%	0.55%
Switzerland	1.07%	-0.46%	1.54%	0.23%
U.K.	2.85%	1.63%	1.20%	8.63%

Quarterly Returns for Non-U.S. Government Indices

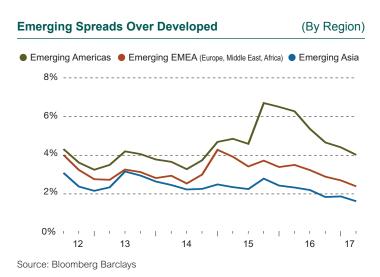
*U.S. dollar-denominated.

**Local currency-denominated.

***Weight in the Citi Non-U.S. World Government Bond Index. Source: Citigroup 0.33%, steepening the yield curve to its highest since 2014. France's 10-year bonds sold off in the middle of the quarter as the markets priced in the risk of a potential victory by presidential candidate Marine Le Pen, who wants the French to vote on whether to leave the EU. The Italian 10-year yield jumped 50 bps to 2.32% as an air of political risk also loomed over Europe's third-largest economy.

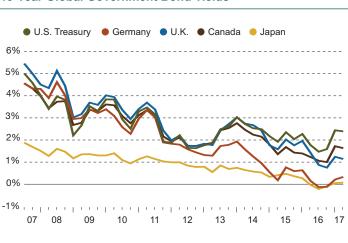
The European Central Bank continued its stimulus efforts, extending its bond-buying program until December 2017 and maintaining interest rates near record lows. Yet there was renewed confidence in the region's economic health as a result of solid manufacturing data, strength in the region's labor market, and encouraging inflation news. The euro strength-ened against the U.S. dollar, providing some headwind to the hedged Bloomberg Barclays Global Aggregate ex-US Index, which increased only slightly (+0.06%).

In the Asia-Pacific region, Japan's 10-year yield edged up 2 bps to 0.07%, in line with the Bank of Japan's goal of maintaining its yield at approximately zero. The Reserve Bank of Australia left rates unchanged despite rapid growth in household debt. The Australian 10-year yield declined 6 bps to 2.70%. Both countries' currencies advanced roughly 5% against the U.S. dollar.

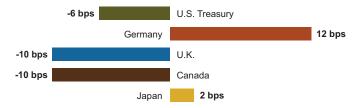


NON-U.S. FIXED INCOME (Continued)

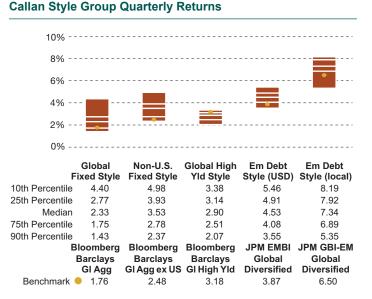
Emerging markets performed quite well. The U.S. dollardenominated **JPM EMBI Global Diversified Index** rose 3.87%, and only three countries out of 65 posted negative returns for the quarter. Mexico, the most heavily weighted in the Index, was the strongest performer (+5.46%). Venezuela was the worst, falling 1.29%. Emerging market currencies also generally appreciated versus the U.S. dollar, accounting for the JPM GBI-EM Global Diversified Index's 6.50% rise. Argentina reentered the Index in February, and its debt posted the strongest return (+15.60%). Mexico (+13.60%) and Brazil (+9.69%) were also top performers, while Turkey (-0.68%) was the only country in the index to deliver a negative return.



Change in 10-Year Yields from 4Q16 to 1Q17



10-Year Global Government Bond Yields Ca



Sources: Bloomberg Barclays, Callan, JPMorgan Chase

Source: Bloomberg

New Year, New Lows

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** advanced 1.55% during the first quarter (1.15% from income and 0.40% from appreciation). This was the lowest return since 2010, eclipsing the fourth quarter's mark of 1.73%. Appreciation fell for the eighth consecutive quarter and made up less than a third of total return.

Industrial (+2.83%) was the best-performing sector for the fourth consecutive quarter with Retail (+1.56%) and Apartments (+1.30%) also posting positive returns; Hotels (-0.16%) fared the worst and the was only property sector to fall during the quarter. All property sectors posted lower results than the previous quarter.

The West surpassed all other regions for the second quarter in a row, rising 1.96%; the East was the weakest, up only 0.95%. Transaction volume fell steeply to \$6.6 billion, a 53% decline from last quarter's all-time high. This also represented a drop of 13% from the first quarter of 2016. Appraisal capitalization rates stayed mostly flat, increasing to 4.44%, 1 basis point above last quarter's all-time low of 4.43%. Transaction capitalization rates recovered from the precipitous decline of the fourth quarter and rose from 5.7% to 6.3%. The spread between appraisal and transactional rates increased to 183 bps.

Occupancy rates dropped slightly from the 15-year high in the fourth quarter to 92.96%. Apartment occupancy rates increased slightly while Industrial, Office, and Retail rates decreased.

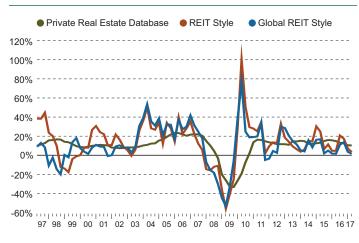
The **NCREIF Open End Diversified Core Equity Index** rose 1.54%. This marked a 34 basis point decrease from the fourth quarter return of 1.88%, and was the lowest for the index since 2010. Income accounted for 0.84% of the return, moderating slightly; appreciation (+0.71%, with rounding accounting for the slight discrepancy) fell to a new seven-year low.

Global real estate investment trusts (REITs), tracked by the **FTSE EPRA/NAREIT Developed REIT Index** (USD), outperformed their U.S. counterparts and rose 2.29%. U.S. REITs, as measured by the **FTSE NAREIT Equity REITs Index**, gained 1.16% for the quarter.

In the U.S., REITs enjoyed two months of positive returns to start the quarter before giving some of the gains back with a poor showing in March. Retail (-4.75%) fared the worst, hurt by weak earnings results from large retailers and the fear of store closings because of the emergence of e-commerce. Hotel (-1.90%) and Self Storage (-1.42%) also did poorly. Health Care (+6.92%) recovered from a sharp decline in the fourth quarter on the back of the failure of the new administration to fulfill its promise to repeal the Affordable Care Act. Specialty (+13.23%), Timber (+12.85%), Infrastructure (+12.25%), and Data Centers (+11.45%) all experienced double-digit gains.

Europe, as represented by the **FTSE EPRA/NAREIT Europe Index**, bested the U.S. in both local currency and U.S. dollar terms, buoyed by a weakening greenback and improving

Rolling One-Year Returns



Source: Callan

*Index subreturns are calculated separately from index return and may not total.

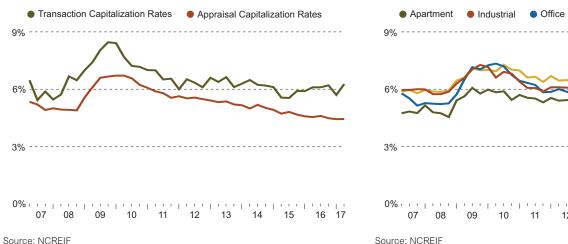
REAL ESTATE (Continued)

economic data. Markets also reacted positively to the failure of populist politicians to gain power in the Netherlands. As in the U.S., Retail lagged the broader index as e-commerce continued to take market share from traditional retailers.

The Asia-Pacific region beat all others with the FTSE EPRA/ NAREIT Asia Index jumping 5.94% during the first quarter in U.S. dollar terms. Singapore and Hong Kong were the major winners, up 17.4% and 16.2%, respectively. In both countries this was mainly attributed to strong performance by their residential sectors.

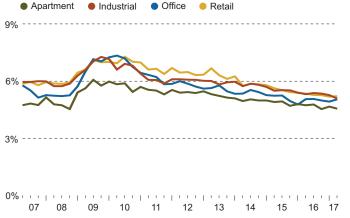
Commercial mortgage-backed securities (CMBS) issuance for the quarter was down sharply, by 58%, to \$11.3 billion from the \$26.9 billion in the fourth quarter of 2016. This represents a 42% decrease from the first guarter of 2016 (\$19.4 billion).

NCREIF Transaction and Appraisal Capitalization Rates



Note: Transaction capitalization rate is equal weighted.

NCREIF Capitalization Rates by Property Type



Source: NCREIF Note: Capitalization rates are appraisal-based.

On a Roll

PRIVATE EQUITY | Gary Robertson

New private equity partnership commitments totaled \$80.0 billion in the first quarter, with 310 new partnerships formed, according to preliminary data from *Private Equity Analyst*. The number of partnerships jumped 75% from 177 in the first quarter of 2016, and the dollar volume rose 51% from \$53.1 billion. KKR Americas Fund XII raised the most money in the quarter, \$3.1 billion, and its final close of \$13.9 billion exceeded its \$12 billion target.

Investments by funds into companies totaled 379 deals, up 18% from 322 in the prior quarter, according to *Buyouts* newsletter. The announced total volume was \$35.0 billion, up 24% from \$28.3 billion in the fourth quarter. The \$6.0 billion takeprivate of hospital staffing firm Team Health Holdings was the quarter's largest buyout. Nine deals with announced values of \$1 billion or more closed in the quarter.

According to the National Venture Capital Association, new investments in VC companies totaled 1,808 rounds with \$16.5 billion of announced value. The number of rounds fell by 5% from 1,898 in the fourth quarter, but disclosed value increased 15% from \$14.3 billion.

Buyout M&A exits fell steeply; there were just 117 in the first quarter, down 25% from the prior quarter's 157, according to

Funds Closed January 1 to March 31, 2017

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	145	7,505	9%
Buyouts	108	54,622	68%
Subordinated Debt	13	3,038	4%
Distressed Debt	7	4,526	6%
Secondary and Other	7	5,162	6%
Fund-of-funds	30	5,178	6%
Totals	310	80,031	100%

Source: Private Equity Analyst Figures may not total due to rounding.

Buyouts. Announced deal value also dropped: 30 deals totaling \$14.4 billion, off 47% from \$27.0 billion in the fourth. Three buyout-backed IPOs in the first quarter raised an aggregate \$2.4 billion. The number of IPOs was the same as the prior quarter, but the proceeds increased from \$2.0 billion.

Venture-backed M&A exits totaled 132 and disclosed value hit \$10.4 billion. The number of exits declined 19% but the dollar volume increased 53% from the fourth quarter, which had 162 sales totaling \$6.8 billion. There were seven VC-backed IPOs in the first quarter with a combined float of \$4 billion. The fourth quarter also had seven but they only raised \$684 million.

Please see our upcoming issue of *Private Markets Trends* for more in-depth coverage.

Private Equity Performance	Database (%) (Pooled Horizon IRF	Rs through September 30, 20	16*)

			•	•	,		
Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	3.33	3.35	17.77	14.78	10.51	6.72	20.92
Growth Equity	3.82	8.77	11.95	12.28	11.20	10.92	13.62
All Buyouts	3.91	11.48	11.97	13.68	10.41	12.96	12.60
Mezzanine	2.92	9.19	8.75	10.32	9.38	8.96	9.17
Distressed	4.22	7.72	7.30	11.93	9.42	10.71	10.67
All Private Equity	3.80	9.08	12.24	13.41	10.37	11.06	13.23
S&P 500	3.85	15.43	11.16	16.37	7.24	7.15	7.91
Russell 3000	4.40	14.96	10.44	16.36	7.37	7.61	8.03

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson Reuters/Cambridge

*Most recent data available at time of publication.

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of *Capital Market Review* and other Callan publications.



Dollops of Alpha with Beta

HEDGE FUNDS | Jim McKee

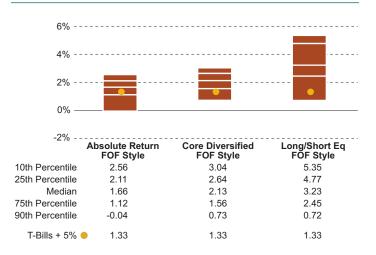
The U.S. economy moved steadily forward with revived animal spirits in the first quarter. Tangible evidence of growth and inflation emerged in the euro zone, soothing market worries globally. Amid geopolitical anxieties testing the Trump administration, the **S&P 500 Index** cleared 6.07% with very little market volatility. With more upbeat expectations abroad, **MSCI EAFE** climbed 7.25% while **MSCI Emerging Markets** soared 11.44%. After being beaten down in the prior quarter, the Citi **10-Year Treasury** (+0.79%) held steady.

With global risk appetites encouraged by improving fundamentals, most hedge fund strategies generated positive returns. The **Credit Suisse Hedge Fund Index (CS HFI)**, a proxy of unmanaged hedge fund interests gross of fees, advanced 2.07%. Representing live hedge fund portfolios net of all fees, the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Within CS HFI, *Long-Short Equity* (+3.46%) was particularly strong in the first quarter compared to 2016, even after adjusting for equity beta. Lack of market volatility and distinct trends left *Managed Futures* (-1.02%) and *Global Macro* (+0.24%) struggling.

Within the **Callan Hedge Fund-of-Funds Database**, market exposures differentiated performance. Supported by the stock market rallies around the globe, the median *Callan Long/Short Equity FOF* (+3.23%) outpaced the *Callan Absolute Return FOF* (+1.66%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 2.13%.

Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Callan Database Median and Index Returns* for Periods ended March 31, 2017

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	2.29	2.29	8.04	2.00	4.66	3.24	4.83
CS Hedge Fund Index	2.07	2.07	5.67	1.92	3.95	3.62	5.83
CS Equity Market Neutral	2.13	2.13	-2.19	-0.62	1.26	-2.99	0.55
CS Convertible Arbitrage	2.25	2.25	9.43	1.78	3.33	3.61	4.74
CS Fixed Income Arbitrage	2.32	2.32	8.02	3.15	4.64	3.43	4.23
CS Multi-Strategy	2.76	2.76	7.92	5.05	6.9	5.09	6.98
CS Distressed	2.23	2.23	10.91	0.82	5.28	3.75	6.94
CS Risk Arbitrage	1.21	1.21	4.94	1.78	2.33	3.18	3.74
CS Event-Driven Multi-Strategy	2.88	2.88	10.33	-1.48	3.53	3.4	6.11
CS Long/Short Equity	3.46	3.46	3.91	2.44	5.35	3.99	6.29
CS Global Macro	0.24	0.24	6.2	2.57	2.87	5.53	7.88
CS Managed Futures	-1.02	-1.02	-11.63	4.15	0.59	3.06	5.02
CS Emerging Markets	4.27	4.27	10.28	4.04	4.55	3.79	7.59

*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index[™] increased 7.99% during the wild year that was 2016, its best year since 2013. And the Index did not suffer a single negative quarter, ending with a fourth quarter return of 1.59%. But the Index trailed the average Age 45 Target Date Fund, which gained 8.59% in 2016.

For the year, DC plan balances increased 8.31%. Almost all of the growth is attributable to market performance. Inflows (participant and plan sponsor contributions) added only 32 basis points to total growth.

Turnover (i.e., net transfer activity levels within DC plans) in 2016 reached 2.31%, the highest since 2012.

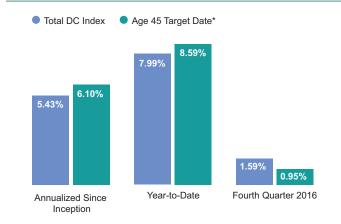
Last year, flows retreated from equities into stable value, money market, and domestic fixed income funds. As usual, TDFs dominated net inflows for the quarter and the year. For the year, roughly 61 cents of every dollar flowed to TDFs. The fourth quarter of 2016 saw a significant spike in TDF assets, increasing 1.3% from the third quarter to make up 29.0% of the average DC plan.

The Callan DC Index's equity allocation ended the quarter at 69%, below the equity allocation of the average Age 45 Target Date Fund (74%) but above the Index's historical average (67%).

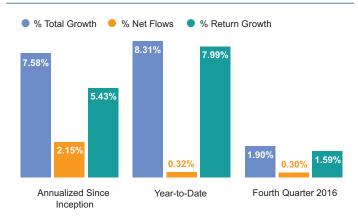
TDFs' dominance of the typical DC plan continues to grow. When TDFs are held within a DC plan, they now account for 35% of plan assets, up from 30% a year ago. The next largest plan holding, U.S. large cap equity funds, now account for 22.7% of plan assets. The fourth quarter of 2016 marks the highest level of TDF prevalence (91%) since the inception of the Callan DC IndexTM.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.

Investment Performance



Growth Sources



Net Cash Flow Analysis (Fourth Quarter 2016) (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	68.47%
Stable Value	22.76%
U.S. Large Cap	-30.44%
Company Stock	-40.41%
Total Turnover**	0.50%

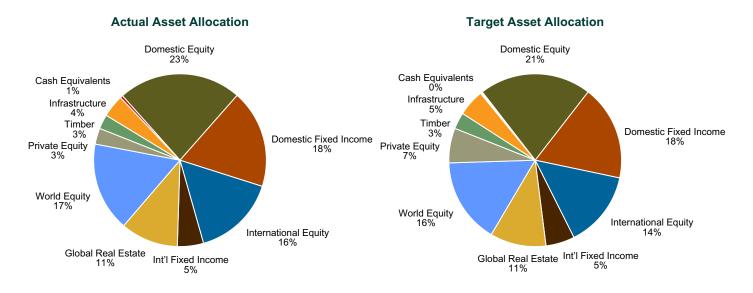
Data provided here is the most recent available at time of publication. Source: Callan DC Index

Note: DC Index inception date is January 2006.

- * The Age 45 Fund transitioned from the average 2030 TDF to the 2035 TDF in June 2013.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

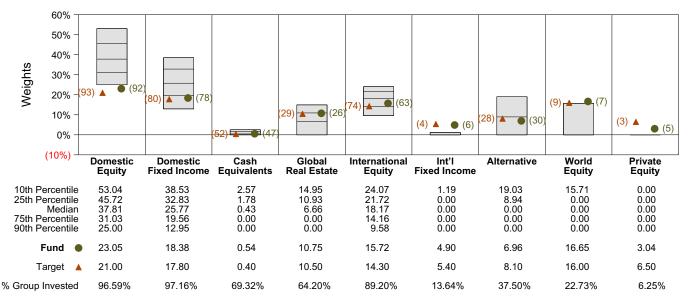
Actual vs Target Asset Allocation As of March 31, 2017

The top left chart shows the Fund's asset allocation as of March 31, 2017. 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 CAI Public Fund Sponsor Database.



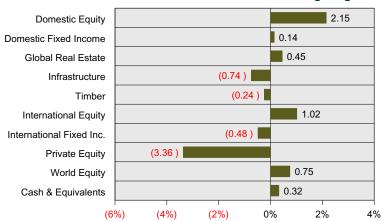
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	1,175,451	23.1%	21.0%	2.1%	104,585
Domestic Fixed Income	937,338	18.4%	17.8%	0.6%	29,651
International Equity	801,493	15.7%	14.3%	1.4%	72,284
Int'l Fixed Income	249,821	4.9%	5.4%	(0.5%)	(25,545)
Global Real Estate	548,322	10.8%	10.5%	0.3%	12,889
World Equity	849,243	16.7%	16.0%	0.7%	33,345
Private Equity	155,216	3.0%	6.5%	(3.5%)	(176,242)
Timber	139,660	2.7%	3.1%	(0.4%)	`(18,421)
Infrastructure	215,493	4.2%	5.0%	(0.8%)	(39,475)
Cash Equivalents	27,325	0.5%	0.4%	0.1%	6,928
Total	5,099,362	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



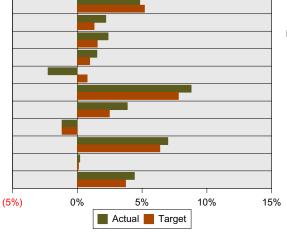
Quarterly Total Fund Relative Attribution - March 31, 2017

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.



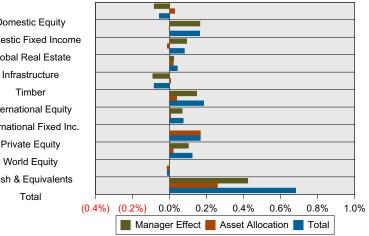
Asset Class Under or Overweighting

Actual vs Target Returns





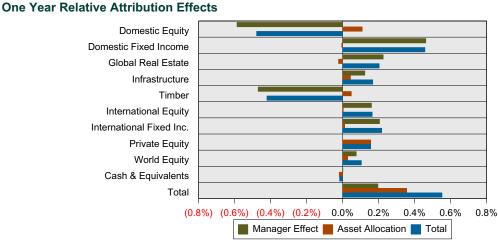
Relative Attribution by Asset Class



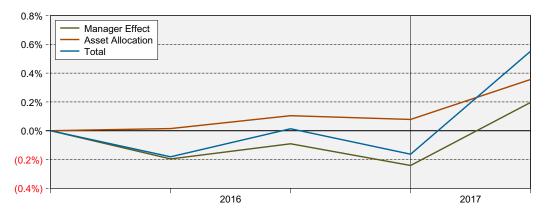
Relative Attribution Effects for Quarter ended March 31, 2017

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	4.82%	5.19%	(0.08%)	0.03%	(0.06%)
Domestic Fixed Income	18%	18%	2.20%	1.30%	0.16%	(0.00%)	0.16%
Global Real Estate	11%	10%	2.38%	1.55%	0.09%	(0.01%)	0.08%
Infrastructure	4%	5%	1.52%	0.96%	0.02%	0.02%	0.04%
Timber	3%	3%	(2.26%)	0.76%	(0.09%)	0.01%	(0.08%)
International Equity	15%	14%	8.79%	7.81%	0.15%	0.04%	0.18%
International Fixed Inc.	5%	5%	3.87%	2.48%	0.07%	0.01%	0.07%
Private Equity	3%	6%	(1.19%)	(1.19%)	0.00%	0.17%	0.17%
World Equity	17%	16%	6.99%	6.38%	0.10%	0.02%	0.12%
Cash & Equivalents	1%	0%	0.20%	0.10%	0.00%	(0.01%)	(0.01%)
Total			4.41% =	3.73% +	0.42% +	0.26%	0.68%

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.



Cumulative Relative Attribution Effects



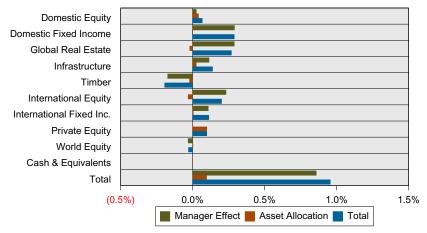
One Year Relative Attribution Effects

Asset Class	Effective Actual	Effective Target	Actual Return	Target	Manager Effect	Asset Allocation	Total Relative Return
	Weight	Weight		Return			
Domestic Equity	23%	21%	16.71%	19.47%	(0.59%)	0.11%	(0.48%)
Domestic Fixed Income	18%	18%	7.03%	4.53%	0.46%	(0.00%)	0.46%
Global Real Estate	11%	10%	9.32%	7.27%	0.23%	(0.02%)	0.20%
Infrastructure	4%	5%	4.96%	2.35%	0.12%	0.04%	0.17%
Timber	3%	4%	(9.81%)	3.64%	(0.47%)	0.05%	(0.42%)
International Equity	15%	14%	13.84%	12.82%	0.16%	0.00%	0.16%
International Fixed Inc.	5%	5%	(0.32%)	(3.93%)	0.21%	0.01%	0.22%
Private Equity	3%	6%	3.30%	3.30%	0.00%	0.16%	0.16%
World Equity	17%	16%	15.20%	14.77%	0.08%	0.03%	0.10%
Cash & Equivalents	1%	1%	0.60%	0.36%	0.00%	(0.02%)	(0.02%)
Total			10.57% =	10.02% +	• 0.20% +	0.36%	0.55%

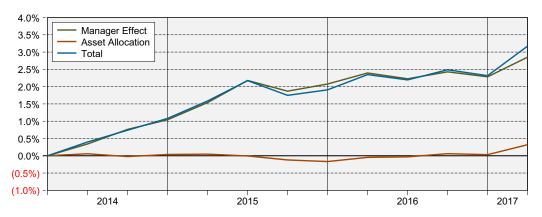


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset 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

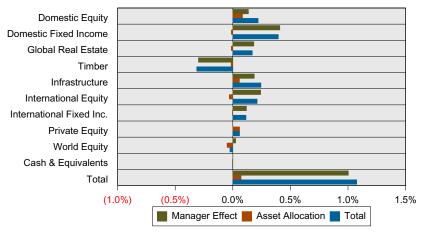


Three Year Annualized Relative Attribution Effects

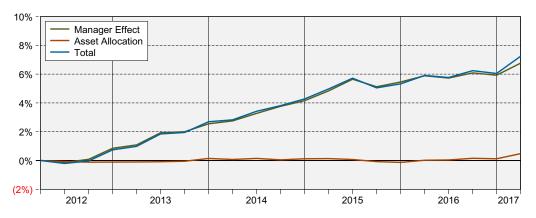
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	9.58%	9.43%	0.03%	0.04%	0.07%
Domestic Equity Domestic Fixed Income Global Real Estate	23% 19% 10%	18% 10%	4.76% 13.71%	3.20% 10.58%	0.29%	(0.00%) (0.02%)	0.29%
Infrastructure	4%	5%	3.42%	0.73%	0.23%	0.02%	0.14%
Timber	4%	4%	0.50%	5.67%	(0.17%)	(0.02%)	(0.19%)
International Equity	15%	14%	2.23%	0.70%	0.23%	(0.03%)	0.20%
International Fixed Inc.	5%	5%	(0.58%)	(2.68%)	0.11%	0.00%	0.11%
Private Equity	4%	5%	(3.05%)	(3.05%)	0.00%	0.10%	0.10%
World Equity	16%	16%	5.33%	5.52%	(0.03%)	0.00%	(0.03%)
Cash & Equivalents	1%	1%	0.28%	0.17%	0.00%	(0.00%)	0.00%
Total			5.69% =	4.73% +	0.86% +	0.10%	0.96%

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.





Cumulative Relative Attribution Effects



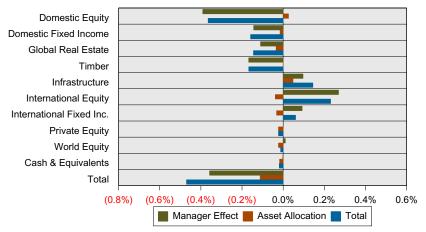
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
		Weight					
Domestic Equity	23%	22%	13.73%	13.11%	0.14%	0.08%	0.22%
Domestic Fixed Income	19%	18%	5.74%	3.56%	0.41%	(0.01%)	0.40%
Global Real Estate	10%	10%	12.64%	10.69%	0.18%	(0.01%)	0.17%
Timber	4%	5%	0.24%	7.14%	(0.30%)	(0.01%)	(0.31%)
Infrastructure	4%	5%	5.68%	0.98%	0.19%	0.06%	0.24%
International Equity	15%	15%	6.43%	4.77%	0.24%	(0.03%)	0.21%
International Fixed Inc.	5%	5%	1.03%	(1.13%)	0.12%	(0.00%)	0.11%
Private Equity	4%	5%	1.40%	1.40%	0.00%	0.06%	0.06%
World Equity	14%	15%	9.18%	9.37%	0.03%	(0.05%)	(0.02%)
Cash & Equivalents	1%	1%	0.20%	0.14%	0.00%	(0.00%)	(0.00%)
Total			8.25% =	7.17% +	1.00% +	0.07%	1.08%

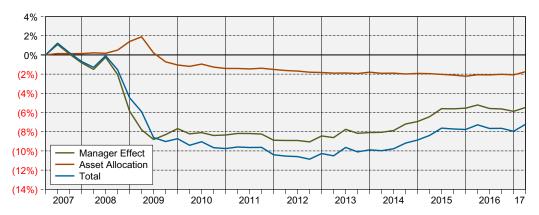


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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





Cumulative Relative Attribution Effects

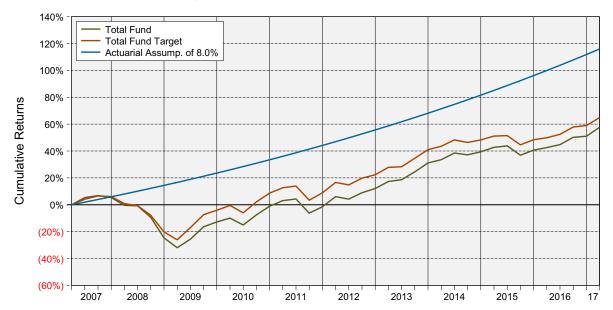


Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	30%	30%	6.34%	7.49%	(0.39%)	0.03%	(0.36%)
Domestic Fixed Income	22%	21%	5.37%	5.30%	(0.14%)	(0.02%)	(0.16%)
Global Real Estate	9%	8%	5.36%	6.72%	(0.11%)	(0.03%)	(0.14%)
Timber	2%	3%	-	-	(0.17%)	0.00%	(0.17%)
Infrastructure	2%	3%	-	-	0.10%	0.05%	0.14%
International Equity	16%	17%	3.13%	1.57%	0.27%	(0.04%)	0.23%
International Fixed Inc.	5%	5%	4.57%	2.87%	0.09%	(0.03%)	0.06%
Private Equity	4%	5%	(0.47%)	(0.47%)	0.00%	(0.02%)	(0.02%)
World Equity	7%	7%	- 1	- 1	0.01%	(0.02%)	(0.01%)
Cash & Equivalents	1%	1%	0.45%	0.68%	(0.00%)	(0.02%)	(0.02%)
Total			4.66% =	5.13% +	(0.36%) +	(0.11%)	(0.47%)

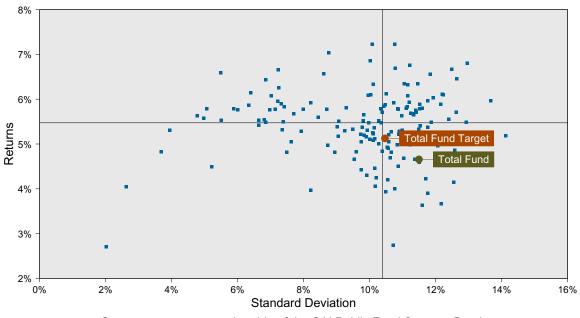
Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the CAI Public Fund Sponsor Database.



Cumulative Returns Actual vs Target

Ten Year Annualized Risk vs Return

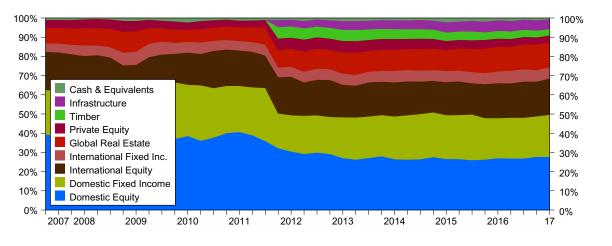


Squares represent membership of the CAI Public Fund Sponsor Database



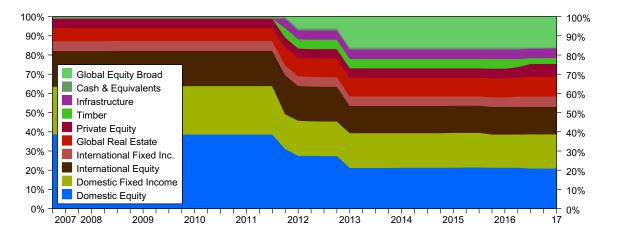
Actual vs Target Historical Asset Allocation

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, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the CAI Public Fund Sponsor Database.

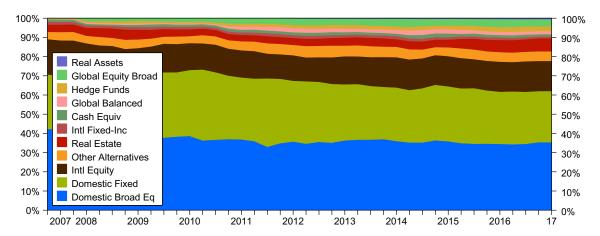


Actual Historical Asset Allocation

Target Historical Asset Allocation





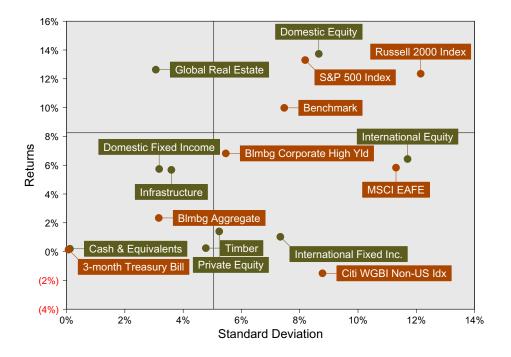




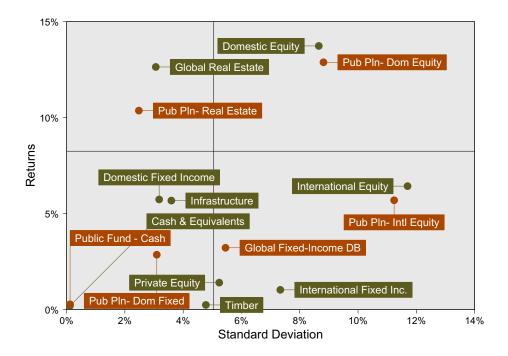
Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



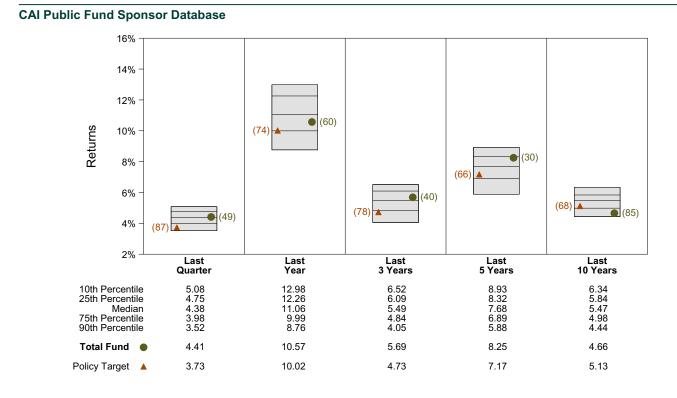
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



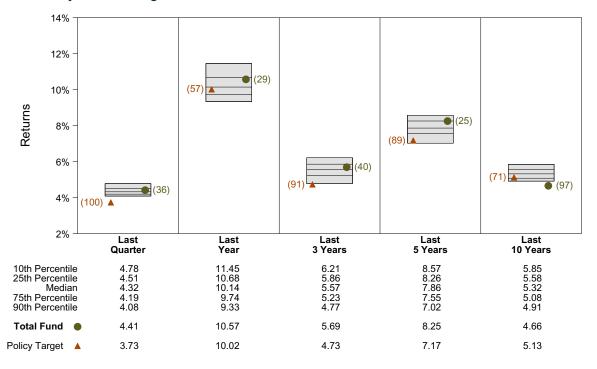
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Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended March 31, 2017. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



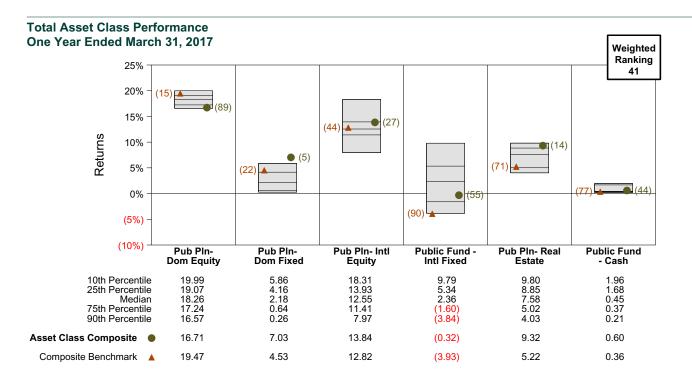
Asset Allocation Adjusted Ranking

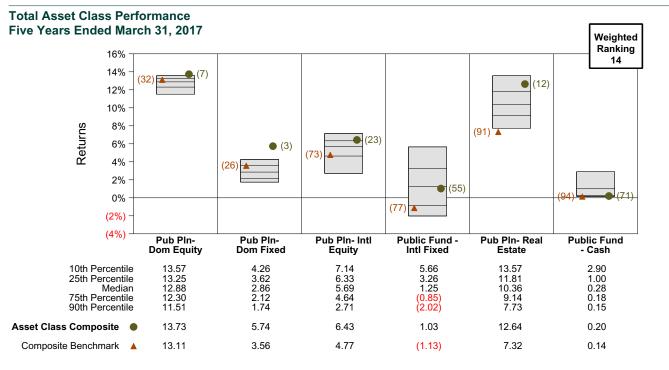




Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.







Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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.

	March 31,	2017			December 3	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	\$2,981,403,922	58.47%	\$(38,644,698)	\$174,344,752	\$2,845,703,868	58.13%
Domestic Equity	\$1,175,451,410	23.05%	\$(9,439,516)	\$54,512,709	\$1,130,378,217	23.09%
Large Cap Domestic Equity	\$894,977,576	17.55%	\$(9,216,025)	\$48,712,667	\$855,480,934	17.48%
L.A. Capital	344,266,846	6.75%	(164,875)	21,376,399	323,055,323	6.60%
LACM Enhanced Index	195,695,452	3.84%	(9,051,150)	8,873,633	195,872,968	4.00%
Northern Trust AM Enh S&P 500	163,853,565	3.21%	Ó	7,712,510	156,141,055	3.19%
Parametric Clifton Enh S&P 500	191,161,713	3.75%	0	10,750,125	180,411,587	3.69%
Small Cap Domestic Equity	\$280,473,834	5.50%	\$(223,491)	\$5,800,042	\$274,897,283	5.62%
Atlanta Capital	125,881,599	2.47%	(223,491)	2,110,841	123,994,249	2.53%
Parametric Clifton Enh Small Cap	154,592,235	3.03%	0	3,689,201	150,903,033	3.08%
International Equity	\$801,493,046	15.72%	\$(317,184)	\$64,765,958	\$737,044,271	15.06%
Developed Int'l Equity	\$602,141,373	11.81%	\$(317,184)	\$42,735,714	\$559,722,843	11.43%
DFA Int'l Small Cap	87,118,785	1.71%	0	6,250,103	80,868,682	1.65%
Northern Trust AM World Ex US	289,224,921	5.67%	(22,853)	18,777,983	270,469,791	5.53%
Wellington Management Co.	90,245,871	1.77%	(172,441)	8,074,375	82,343,938	1.68%
William Blair	135,551,796	2.66%	(121,890)	9,633,253	126,040,433	2.57%
Emerging Markets Equity	\$199,351,673	3.91%	\$0	\$22,030,244	\$177,321,428	3.62%
Axiom	145,467,301	2.85%	0	15,073,342	130,393,959	2.66%
DFA	53,884,372	1.06%	0	6,956,902	46,927,469	0.96%
World Equity	\$849,243,368	16.65%	\$(33,672,760)	\$56,946,016	\$825,970,113	16.87%
EPOCH Investment Partners	372,990,266	7.31%	(551,836)	29,869,318	343,672,784	7.02%
LSV Asset Management	476,253,103	9.34%	(33,120,924)	27,076,697	482,297,329	9.85%

Asset Distribution Across Investment Managers

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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.

	March 31,	2017			December 3	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Private Equity	\$155,216,098	3.04%	\$4,784,762	\$(1,879,931)	\$152,311,267	3.11%
Adams Street Direct Co-Invest Fd	3,303,266	0.06%	(434,865)	(412,532)	4,150,663	0.08%
Adams Street Direct Fund 2010	938,253	0.02%	(192,986)	(30,030)	1,161,269	0.02%
Adams Street 1998 Partnership	124,632	0.00%	Ó	(552)	125,184	0.00%
Adams Street 1999 Partnership	325,595	0.01%	0	(7,140)	332,735	0.01%
Adams Street 2000 Partnership	939,314	0.02%	0	(4,722)	944,036	0.02%
Adams Street 2001 Partnership	1,273,948	0.02%	0	(46,603)	1,320,551	0.03%
Adams Street 2002 Partnership	330,776	0.01%	0	117	330,659	0.01%
Adams Street 2003 Partnership	318,536	0.01%	0	(3,533)	322,069	0.01%
Adams Street 2010 Partnership	6,118,947	0.12%	75,000	102,151	5,941,796	0.12%
Adams Street 2008 Fund	7,547,063	0.15%	0	1,003	7,546,060	0.15%
Adams Street 1999 Non-US	67,135	0.00%	0	(1,583)	68,718	0.00%
Adams Street 2000 Non-US	506,920	0.01%	(248,644)	20,657	734,907	0.02%
Adams Street 2001 Non-US	147,479	0.00%	Ó	(1,315)	148,794	0.00%
Adams Street 2002 Non-US	684,841	0.01%	0	(32,163)	717,004	0.01%
Adams Street 2003 Non-US	308,454	0.01%	0	31,717	276,737	0.01%
Adams Street 2004 Non-US	299,548	0.01%	0	(15,381)	314,929	0.01%
Adams Street 2010 Non-US	2,870,497	0.06%	(106,898)	44,527	2,932,868	0.06%
Adams Street 2010 Non-US Emg	1,381,548	0.03%	0	8,264	1,373,284	0.03%
Adams Street 2015 Global Fd	6,324,760	0.12%	2,355,000	635,419	3,334,341	0.07%
Adams Street 2016 Global Fd	1,059,493	0.02%	0	309,493	750,000	0.02%
Adams Street BVCF IV Fund	3,310,064	0.06%	(575,878)	(322)	3,886,264	0.08%
BlackRock	4,728,677	0.09%	4,728,677	Ó	-	-
Capital International V	5,173,642	0.10%	28,729	(506,562)	5,651,475	0.12%
Capital International VI	21,404,154	0.42%	2,172,919	(165,935)	19,397,170	0.40%
CorsAir III	13,934,738	0.27%	77,285	(374,048)	14,231,501	0.29%
CorsAir IV	21,347,542	0.42%	(203,515)	609,718	20,941,339	0.43%
ND Investors	-	-	Ó	(1)	1	0.00%
EIG Energy Fund XIV	5,121,952	0.10%	0	564,712	4,557,240	0.09%
Hearthstone Advisors MS II	3,355	0.00%	0	(7,387)	10,742	0.00%
Hearthstone Advisors MS III	2,198,582	0.04%	0	(2,255,313)	4,453,895	0.09%
Lewis & Clark, LP	1,329,909	0.03%	0	Ó	1,329,909	0.03%
Lewis & Clark II	8,726,535	0.17%	(445,016)	235,617	8,935,935	0.18%
Matlin Patterson II	1,293,112	0.03%	Ó	(324,820)	1,617,932	0.03%
Matlin Patterson III	26,593,366	0.52%	(506,206)	(253,383)	27,352,955	0.56%
Quantum Energy Partners	5,139,842	0.10%	(1,938,840)	Ó	7,078,682	0.14%
Quantum Resources	39,623	0.00%	Ó	Ő	39,623	0.00%

Asset Distribution Across Investment Managers

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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.

	March 31,	2017			December 3	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL FIXED INCOME	\$1,187,158,313	23.28%	\$60,492,183	\$28,565,719	\$1,098,100,411	22.43%
Domestic Fixed Income	\$937,337,798	18.38%	\$60,716,020	\$19,264,347	\$857,357,432	17.51%
Inv. Grade Fixed Income	\$683,122,475	13.40%	\$57,217,570	\$10,294,686	\$615,610,220	12.58%
Declaration Total Return	89.114.855	1.75%	(63.941)	1.226.833	87.951.963	1.80%
J. P. Morgan MBS	129,628,371	2.54%	7,436,243	944,064	121,248,064	2.48%
PIMCO DISCO II	102,736,042	2.01%	0	4,271,673	98,464,369	2.01%
PIMCO MBS	181,843,474	3.57%	(75,511)	1,163,083	180,755,902	3.69%
PIMCO Unconstrained		1.30%	(72,333)			
	66,110,009			1,515,489	64,666,853	1.32%
SSgA Long US Treas Index	113,689,725	2.23%	49,993,112	1,173,544	62,523,069	1.28%
Below Inv. Grade Fixed Income	\$254,215,323	4.99%	\$3,498,451	\$8,969,661	\$241,747,212	4.94%
Goldman Sachs 2006 Offshore	342,555	0.01%	(14,136)	68,672	288,019	0.01%
Goldman Sachs Offshore V	2,744,146	0.05%	0	80,391	2.663.755	0.05%
Loomis Sayles	196,359,304	3.85%	(237,413)	6,672,271	189,924,447	3.88%
PIMCO Bravo II Fund	54,769,318	1.07%	3,750,000	2,148,327	48,870,991	1.00%
				AA AA AA	A0 40 - 10 - 11 -	
Internationall Fixed Income	\$249,820,515	4.90%	\$(223,837)	\$9,301,372	\$240,742,980	4.92%
Brandywine	147,764,749	2.90%	(134,946)	6,934,687	140,965,008	2.88%
UBS Global Asset Mgmt.	102,055,766	2.00%	(88,892)	2,366,686	99,777,972	2.04%
GLOBAL REAL ASSETS	\$903,474,824	17.72%	\$(18,046,448)	\$12,811,480	\$908,709,793	18.56%
Global Real Estate	\$548,322,227	10.75%	\$(9,689,404)	\$12,835,168	\$545,176,463	11.14%
Invesco Core Real Estate	254,847,158	5.00%	(2,054,012)	6,315,937	250,585,232	5.12%
Invesco Fund II	182,209	0.00%	Ó	33,068	149,141	0.00%
Invesco Fund III	32,199,552	0.63%	0	2,322,748	29,876,804	0.61%
Invesco Asia RE Feeder	727,901	0.01%	0	645,803	82,099	0.00%
Invesco Asia RE Fund III	17,246,354	0.34%	(1,602,652)	(583,710)	19,432,715	0.40%
Invesco Value Added Fd IV	26.021.563	0.51%	(3,965,119)	311,565	29.675.117	0.61%
JP Morgan	195,974,565	3.84%	(2,058,607)	3,779,071	194,254,102	3.97%
JP Morgan Alternative Fd	286.429	0.01%	(2,000,007)	9.283	277.146	0.01%
	11,697,616	0.23%	(3,782)	.,	, -	
JP Morgan China Property Fd	, ,			(131,466)	11,832,864	0.24%
JP Morgan Greater European Opp Fd	9,138,881	0.18%	(5,231)	132,870	9,011,242	0.18%
Timber	\$139,659,517	2.74%	\$0	\$(3,231,957)	\$142,891,474	2.92%
TIR Teredo	32,004,093	0.63%	0	(1,977,123)	33,981,216	0.69%
TIR Springbank	107,655,424	2.11%	0	(1,254,834)	108,910,258	2.22%
Infra atmusture	¢245 402 000	4 339/	¢/0.257.045)	£2 200 260	¢000 644 856	4 540/
Infrastructure	\$215,493,080	4.23%	\$(8,357,045)	\$3,208,268	\$220,641,856	4.51%
JP Morgan Asian Infrastructure	23,333,530	0.46%	(11,402,272)	5,506,339	29,229,463	0.60%
JP Morgan IIF	149,352,050	2.93%	(296,355)	(2,140,416)	151,788,821	3.10%
Grosvenor Cust. Infrastructure	34,699,804	0.68%	786,933	(56,136)	33,969,006	0.69%
Grosvenor Cust. Infrastructure II	8,107,696	0.16%	2,554,649	(101,519)	5,654,566	0.12%
	••• • • • • •		····		• • • • • •	
CASH & CASH EQUIVALENTS	\$27,325,348	0.54%	\$(15,613,671)	\$81,860	\$42,857,158	0.88%
Northern Trust Cash Account	17,293,707	0.34%	(15,613,671)	65,097	32,842,281	0.67%
Bank of ND	10,031,640	0.20%	0	16,763	10,014,877	0.20%
Securities Lending Income	\$0	0.00%	\$(70,841)	\$70,841	-	
Total Fund	\$5,099,362,407	100.0%	\$(11,883,476)	\$215,874,652	\$4,895,371,231	100.0%

Asset Distribution Across Investment Managers

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

Retu	Irns for Peri	ods Ended Marc	ch 31, 2017		
			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Global Equity					
Gross	6.14%	14.73%	5.62%	9.78%	-
Net	6.09%	14.46%	5.30%	9.41%	-
Wtd Avg Global Equity Benchmark	5.44%	14.85%	5.01%	8.97%	-
Domestic Equity					
Gross	4.82%	16.71%	9.58%	13.73%	6.34%
Net	4.78%	16.45%	9.37%	13.47%	6.03%
Wtd Avg Domestic Equity Benchmark		19.47%	9.43%	13.11%	7.49%
Large Cap Equity					
Gross	5.69%	15.16%	10.76%	14.17%	5.78%
Net	5.67%	14.99%	10.59%	13.98%	5.54%
Large Cap Benchmark (1)	6.03%	17.43%	9.99%	13.26%	7.52%
L.A. Capital - Gross	6.62%	13.49%	11.63%	14.14%	9.02%
L.A. Capital - Net	6.57%	13.26%	11.40%	13.90%	8.81%
Russell 1000 Growth Index	8.91%	15.76%	11.27%	13.32%	9.13%
LACM Enhanced Index - Goss	4.52%	15.91%	10.76%	14.10%	8.34%
LACM Enhanced Index - Net	4.50%	15.79%	10.63%	13.97%	8.18%
Russell 1000 Index	6.03%	17.43%	9.99%	13.26%	7.58%
Northern Tr AM Enh S&P500 - Gross	4.94%	15.25%	8.81%	13.36%	7.42%
Northern Tr AM Enh S&P500 - Net	4.94%	15.25%	8.60%	13.05%	7.24%
S&P 500 Index	6.07%	17.17%	10.37%	13.30%	7.51%
Parametric Clifton Enh S&P500 - Gross	5.96%	17.18%	10.67%	13.55%	-
Parametric Clifton Enh S&P500 - Net	5.96%	16.93%	10.59%	13.44%	-
S&P 500 Index	6.07%	17.17%	10.37%	13.30%	7.51%
Small Cap Equity					
Gross	2.11%	21.99%	5.52%	12.01%	7.58%
Net	2.03%	21.39%	5.19%	11.53%	7.06%
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	7.12%
Atlanta Capital - Gross	1.71%	-	-	-	-
Atlanta Capital - Net	1.52%	-	-	-	-
S&P 600 Small Cap Index	1.06%	24.59%	9.45%	14.25%	8.80%
Parametric Clifton Enh SmCap - Gross	2.44%	26.85%	8.25%	13.52%	-
Parametric Clifton Enh SmCap - Net	2.44%	26.31%	7.82%	13.03%	-
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	7.12%

(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

			Last	Last	Last
	Last	Last	Last 3	5	Lasi 10
		Year		•	Years
	Quarter	rear	Years	Years	Tears
nternational Equity				a	
Gross	8.79%	13.84%	2.23%	6.43%	3.13%
	8.74%	13.66%	2.03%	6.11%	2.78%
Wtd Avg Int'l Equity Benchmark	7.81%	12.82%	0.70%	4.77%	1.57%
eveloped Intl Equity					
Gross	7.64%	12.40%	1.76%	7.45%	2.24%
Net	7.58%	12.16%	1.50%	7.13%	1.92%
Benchmark(1)	6.81%	11.46%	0.43%	5.79%	0.81%
DFA Int'l Small Cap Value - Net	7.73%	17.30%	2.71%	9.78%	_
World ex US SC Value	6.80%	13.86%	1.77%	7.76%	2.79%
	0.0070	10.0070	1.11/0	1.1070	2.19/
Northern Tr AM World ex US - Gross	6.94%	12.42%	0.72%	-	-
Northern Tr AM World ex US - Net	6.93%	12.38%	0.69%	_	_
MSCI World ex US	6.81%	11.93%	0.35%	5.38%	1.13%
	0.0170	11.0070	0.0070	0.0070	1.107
Wellington Management - Gross	9.82%	10.43%	5.71%	11.93%	6.00%
Wellington Management - Net	9.60%	9.51%	4.82%	10.99%	5.10%
BMI, EPAC, <\$2 B	7.79%	11.92%	4.48%	8.46%	2.76%
	7.05%				
William Blair - Gross	7.65%	-	-	-	-
William Blair - Net	7.55%	-	-	-	-
MSCI ACWI ex US	7.86%	13.13%	0.56%	4.36%	1.35%
merging Markets Equity					
Gross	12.42%	18.17%	3.33%	2.23%	4.39%
Net	12.42%	18.17%	3.29%	1.91%	3.95%
Emerging Mkts - Net	11.44%	17.21%	1.18%	0.81%	2.72%
Axiom - Net	11.56%	17.11%			
Emerging Mkts - Net	11.44%	17.21%	- 1.18%	- 0.81%	- 2.72%
	11.44 %	17.2170	1.10%	0.01%	2.127
DFA - Net	14.82%	21.12%	5.03%	4.63%	5.65%
Emerging Mkts - Net	11.44%	17.21%	1.18%	0.81%	2.72%
Vorld Equity					
Gross	6.99%	15.20%	5.33%	9.18%	-
Net	6.91%	14.77%	4.65%	8.48%	-
MSCI World Index	6.38%	14.77%	5.52%	9.37%	4.21%
	0.0070		0.0270	0.0770	7.21/
EPOCH Investment - Gross(2)	8.70%	10.61%	4.52%	9.06%	-
EPOCH Investment - Net	8.53%	9.91%	3.84%	8.32%	-
MSCI World Index	6.38%	14.77%	5.52%	9.37%	4.21%
LSV Asset Management - Gross(3)	5.73%	18.77%	5.87%	_	_
LSV Asset Management - Gross(3)	5.73%	18.57%	5.20%	-	-
MSCI ACWI Idx	5.71% 7.05%	18.57% 15.69%	5.20%	- 8.97%	- 4.56%
	1.05%	13.09%	5.05%	0.97 %	4.00%

(1) MSCI EAFE through 12/31/1996; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US thereafter.

(2) EPOCH Investment was removed from the Domestic Equity Composite to the World Equity Composite as of 1/1/2012.
 (3) LSV Asset Management was removed from the Domestic Equity and International Equity Composites to the World Equity Composite as of February 1, 2013.

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The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Private Equity*					
Net	(1.19%)	3.29%	(3.06%)	1.37%	(0.65%)
Adams Street Direct Co-Invest Fd	(9.94%)	(1.66%)	12.38%	12.32%	5.44%
Adams Street Direct Fund 2010	(2.88%)	(3.48%)	10.21%	10.64%	-
Adams Street 1998 Partnership	(0.44%)	(0.83%)	1.22%	4.03%	(1.18%)
Adams Street 1999 Partnership	(2.15%)	(2.01%)	(3.13%)	2.68%	2.26%
Adams Street 2000 Partnership	(0.50%)	(3.39%)	(3.45%)	0.61%	3.16%
Adams Street 2001 Partnership	(3.53%)	(3.95%)	(0.13%)	5.32%	3.38%
Adams Street 2002 Partnership	0.04%	22.33%	2.62%	6.79%	3.71%
Adams Street 2003 Partnership	(1.10%)	1.34%	8.31%	10.64%	5.27%
Adams Street 2010 Partnership	1.70%	10.44%	13.45%	12.93%	-
Adams Street 2008 Fund	0.01%	6.32%	10.00%	10.67%	-
Adams Street 1999 Non-US	(2.30%)	(0.89%)	(1.17%)	3.12%	4.28%
Adams Street 2000 Non-US	4.25%	6.05%	(0.90%)	(0.74%)	1.91%
Adams Street 2001 Non-US	(0.88%)	(17.88%)	9.49%	14.00%	2.77%
Adams Street 2002 Non-US	(4.49%)	(6.83%)	5.42%	4.13%	1.80%
Adams Street 2003 Non-US	11.46%	25.79%	13.46%	17.68%	11.04%
Adams Street 2004 Non-US	(4.88%)	(2.88%)	2.39%	4.76%	3.49%
Adams Street 2010 Non-US	1.53%	11.10%	7.00%	8.08%	-
Adams Street 2010 Non-US Emg	0.60%	4.81%	12.72%	5.08%	-
Adams Street 2015 Global Fd	12.14%	36.84%	-	-	-
Adams Street 2016 Global Fd	41.27%	-	-	-	-
Adams Street BVCF IV Fund	(0.01%)	2.89%	16.30%	22.81%	30.23%
Capital International V	(8.92%)	(18.28%)	(20.20%)	(12.38%)	-
Capital International VI	(0.82%)	14.23%	(7.55%)	(8.40%)	-
CorsAir III	(2.61%)	2.69%	6.72%	2.66%	(4.34%)
CorsAir IV	2.94%	16.61%	16.18%	13.53%	-
EIG Energy Fund XIV	12.39%	(32.10%)	(37.98%)	(25.91%)	-
Lewis & Clark, LP	0.00%	(51.19%)	(35.55%)	(19.69%)	(7.95%)
Lewis & Clark II	2.64%	4.56%	(5.96%)	(5.07%)	-
Matlin Patterson II	(20.08%)	(25.86%)	0.23%	(11.14%)	(27.45%)
Matlin Patterson III	(0.93%)	5.02%	(3.81%)	10.15%	-
Quantum Energy Partners	0.00%	(5.58%)	(8.36%)	3.61%	3.20%

* Corsair III was taken out from the Private Equity Composite on July 1, 2009. It was then added back into the Private Equity Composite on October 1, 2011. At this time Corsair IV, Capital Intl and EIG were also added to this composite.

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The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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 Peri	ous Ended Marc	31 31, 2017		
			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Blobal Fixed Income					
Gross	2.56%	5.31%	3.65%	4.74%	-
Net	2.50%	5.05%	3.40%	4.50%	-
Wtd Avg Global FI Benchmark	1.61%	2.63%	1.94%	2.56%	-
omestic Fixed Income					
Gross	2.20%	7.03%	4.76%	5.74%	5.37%
Net	2.15%	6.81%	4.53%	5.52%	5.10%
Wtd Avg Domestic FI Benchmark	1.30%	4.53%	3.20%	3.56%	5.30%
nv. Grade Fixed Income					
Gross	1.61%	3.75%	4.27%	4.67%	4.82%
Net	1.58%	3.61%	4.14%	4.54%	4.60%
Blmbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	4.27%
				2.0170	
Declaration Total Return - Net	1.40%	5.16%	4.13%	-	-
Libor-3 Month	0.26%	0.84%	0.49%	0.42%	1.10%
J.P. Morgan MBS - Gross	0.77%	1.12%	-	-	-
J.P. Morgan MBS - Net	0.72%	0.91%	-	-	-
Blmbg Mortgage	0.47%	0.17%	2.69%	2.04%	4.16%
PIMCO Unconstrained - Gross(1)	2.34%	9.38%	3.08%	3.11%	
PIMCO Unconstrained - Net	2.23%	8.89%	2.71%	2.84%	-
Blended Benchmark(2)	0.26%	0.84%	0.49%	0.47%	-
blended benchmark(z)	0.20%	0.04 %	0.49%	0.47 %	-
PIMCO DiSCO II - Net	4.34%	14.64%	7.67%	13.46%	-
Blmbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	4.27%
PIMCO MBS - Gross	0.64%	0.70%	2.76%	2.12%	-
PIMCO MBS - Net	0.60%	0.54%	2.58%	1.96%	-
BImbg Mortgage	0.47%	0.17%	2.69%	2.04%	4.16%
SSgA Long US Treas ldx - Gross	1.39%	(5.02%)	5.81%	_	_
SSgA Long US Treas Idx - Gross	1.39%	(5.06%)	5.77%	-	-
Blmbg Long Treas	1.38%	(5.06%)	5.77%	- 4.04%	- 6.71%
Dimby Long Treas	1.40 /0	(0.0170)	0.00 /0	4.04 /0	0.7170
elow Inv. Grade Fixed Income	0.740/	45 700/	5.05%	0.50%	0.400
Gross	3.71%	15.78%	5.85%	8.53%	6.42%
Net	3.61%	15.33%	5.41%	8.07%	6.04%
Blmbg HY Corp 2% Issue	2.70%	16.39%	4.58%	6.82%	7.54%
Goldman Sachs 2006 Offshore - Net	24.37%	41.67%	26.88%	22.32%	9.91%
Goldman Sachs Offshore V - Net	3.02%	0.84%	7.19%	10.48%	-
PIMCO Bravo II Fund - Net	4.40%	10.62%	11.74%	-	-
BImbg HY Corp 2% Issue	2.70%	16.39%	4.58%	6.82%	7.54%
Loomis Sayles - Gross	3.52%	17.27%	5.13%	7.50%	7.51%
Loomis Sayles - Net	3.39%	16.69%	4.61%	6.97%	7.15%
Bimbg HY Corp 2% Issue	2.70%	16.39%	4.58%	6.82%	7.54%

(1) The product changed from Commingled Fund to Separate Account in March 2014.
 (2) Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month thereafter.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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 March 31, 2017				
	Last	Last	Last 3	Last 5 Vooro	Last 10
	Quarter	Year	Years	Years	Years
nternational Fixed Income Gross	3.87%	(0.32%)	(0.58%)	1.03%	4.57%
Net	3.77%	(0.67%)	(0.94%)	0.69%	4.33%
Wtd Avg Int'l FI Benchmark	2.48%	(3.93%)	(2.68%)	(1.13%)	2.87%
Brandywine - Gross	4.92%	2.25%	1.36%	3.16%	6.27%
Brandywine - Net	4.82%	1.87%	0.97%	2.80%	6.09%
Blmbg Global Aggregate	1.76%	(1.90%)	(0.39%)	0.38%	3.34%
UBS Global Asset Mgmt Gross	2.37%	(3.93%)	(2.81%)	(1.29%)	2.53%
UBS Global Asset Mgmt Net	2.28%	(4.23%)	(3.12%)	(1.60%)	2.22%
Blended Benchmark(1)	2.48%	(3.93%)	(2.69%)	(1.13%)	2.87%
lobal Real Assets					
Gross	1.44%	4.86%	8.53%	8.11%	-
Net	1.34%	4.42%	8.09%	7.56%	-
Wtd Avg Global Real Assets Benchmark	1.24%	5.13%	6.82%	7.30%	-
ilobal Real Estate					
Gross	2.38%	9.32%	13.71%	12.64%	5.36%
Net NCREIF Total Index	2.26% 1.55%	8.78% 7.27%	13.15% 10.58%	11.84% 10.69%	3.75% 6.72%
	1.00%	1.2170		10.09%	0.72%
Invesco Core Real Estate - Gross	2.54%	10.38%	12.38%	11.96%	5.73%
Invesco Core Real Estate - Net	2.45%	10.00%	11.99%	11.55%	5.28%
Invesco Fund II - Net Invesco Fund III - Net	22.17% 7.77%	20.95% 18.67%	12.81% 18.36%	15.14%	-
Invesco Fund III - Net Invesco Asia RE Feeder - Net	786.62%	812.57%	158.60%	- 76.73%	-
Invesco Asia RE Fund III - Net	(3.05%)	1.23%	-	-	
Invesco Value Added Fd IV - Net	1.05%	2.78%	-	-	-
JP Morgan - Gross	1.97%	8.67%	12.26%	13.05%	6.04%
JP Morgan - Net	1.74%	7.68%	11.14%	11.96%	4.90%
JP Morgan Alternative Fd - Net JP Morgan China Property Fd - Net	3.35% (1.11%)	3.89% 20.73%	<mark>(8.33%)</mark> 22.94%	<mark>(2.07%)</mark> 15.64%	(5.27%
JPM Greater European Opp Fd - Net	1.47%	(5.25%)	26.59%	(20.00%)	-
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	6.72%
imber					
Net	(2.26%)	(9.81%)	0.50%	0.24%	-
TIR Teredo	(5.82%)	(10.19%)	8.23%	5.33%	9.68%
TIR Springbank	(1.15%)	(9.71%)	(2.97%)	(2.15%)	(1.83%)
NCREIF Timberland Index	0.76%	3.64%	5.67%	7.14%	5.71%
nfrastructure					
Gross	1.52%	4.96%	3.42%	5.68%	-
Net	1.40%	4.38%	2.86%	5.07%	-
JP Morgan Asian Infrastructure - Net	29.84%	30.35%	7.18%	9.03%	-
JP Morgan IIF - Gross	(1.41%)	2.26%	1.62%	4.95%	-
JP Morgan IIF - Net	(1.57%)	1.42%	0.77%	4.02%	-
Grosvenor Cust. Infrastructure - Net	(0.16%)	4.94%	8.50%	7.11%	-
Grosvenor Cust. Infrastructure II - Net CPI-W	<mark>(1.35%)</mark> 0.96%	(4.74%) 2.35%	- 0.73%	- 0.98%	- 1.71%
-					
ash & Cash Equivalents - Net	0.20%	0.60%	0.28%	0.20%	0.45%
Cash Account - Net	0.21%	0.63%	0.29%	0.20%	0.45%
Bank of ND - Net 3-month Treasury Bill	0.17% 0.10%	0.36%	- 0.17%	0.14%	- 0.68%
	0.1070	0.0070	0.1770	0.1770	0.00 /0
otal Fund Gross	1 1 1 0/	10 570/	F 600/	0 050/	4 660/
Gross Net	4.41% 4.35%	10.57% 10.27%	5.69% 5.36%	8.25% 7.82%	4.66% 4.18%
	7.0070	10.02%	4.73%	7.17%	5.13%

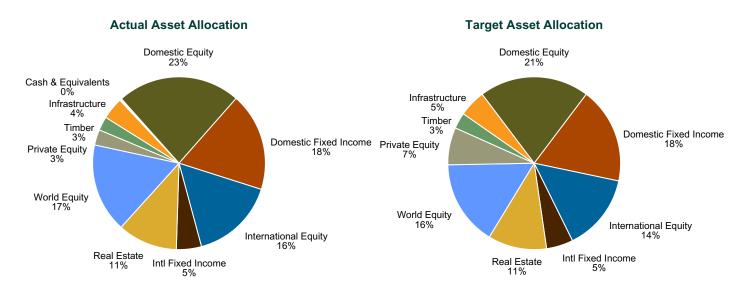
* Current Quarter Target = 16.1% Russell 1000 Index, 16.0% MSCI World, 13.2% Bimbg Aggregate, 11.2% MSCI World ex US, 10.5% NCREIF Total Index, 6.5% NDSIB PEN - Private Equity, 5.4% Bimbg Glob Agg ex USD, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Bimbg HY 2% Iss Cap, 3.1% MSCI EM, 3.1% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

(1) Citigroup Non-US Govt through 12/31/2009 and the Bloomberg Global Aggregate Index ex US thereafter.

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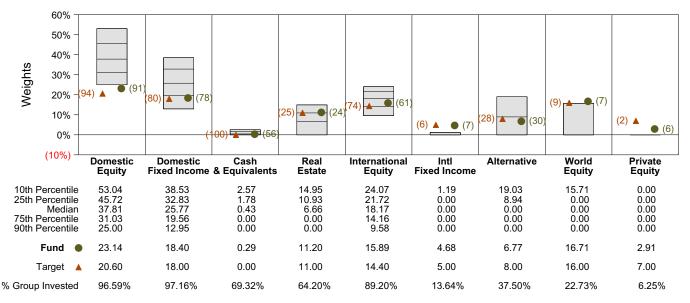
Actual vs Target Asset Allocation As of March 31, 2017

The top left chart shows the Fund's asset allocation as of March 31, 2017. 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 CAI Public Fund Sponsor Database.



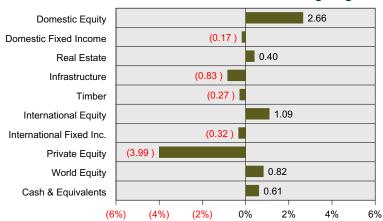
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	619.104	23.1%	20.6%	2.5%	68,057
Domestic Fixed Income	492,079	18.4%	18.0%	0.4%	10,581
International Equity	425,043	15.9%	14.4%	1.5%	39,845
Intl Fixed Income	125,236	4.7%	5.0%	(0.3%)	(8,514)
Real Estate	299,704	11.2%	11.0%	0.2%	5,455
World Equity	447,105	16.7%	16.0%	0.7%	19,107
Private Equity	77,870	2.9%	7.0%	(4.1%)	(109,379)
Timber	70,545	2.6%	3.0%	(0.4%)	(9,705)
Infrastructure	110,505	4.1%	5.0%	(0.9%)	(23,244)
Cash & Equivalents	7,797	0.3%	0.0%	0.3%	7,797
Total	2,674,985	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



Quarterly Total Fund Relative Attribution - March 31, 2017

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.



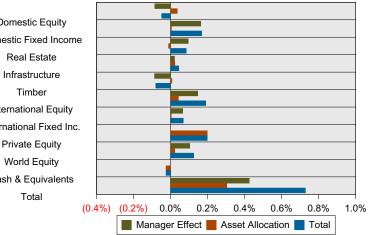
Asset Class Under or Overweighting

Actual vs Target Returns





Relative Attribution by Asset Class



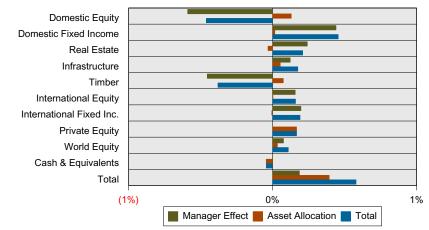
Relative Attribution Effects for Quarter ended March 31, 2017

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	4.82%	5.19%	(0.08%)	0.04%	(0.05%)
Domestic Fixed Income	18%	18%	2.24%	1.34%	0.16%	0.01%	0.17%
Real Estate	11%	11%	2.38%	1.55%	0.10%	(0.01%)	0.08%
Infrastructure	4%	5%	1.52%	0.96%	0.02%	0.02%	0.04%
Timber	3%	3%	(2.26%)	0.76%	(0.09%)	0.01%	(0.08%)
International Equity	15%	14%	8.87%	7.89%	0.15%	0.04%	0.19%
International Fixed Inc.	5%	5%	3.87%	2.48%	0.06%	0.00%	0.07%
Private Equity	3%	7%	(1.19%)	(1.19%)	0.00%	0.20%	0.20%
World Equity	17%	16%	6.99%	6.38%	0.10%	0.02%	0.13%
Cash & Equivalents	1%	0%	0.20%	0.20%	0.00%	(0.02%)	(0.02%)
Total			4.46% =	3.73% +	0.42% +	0.30%	0.73%

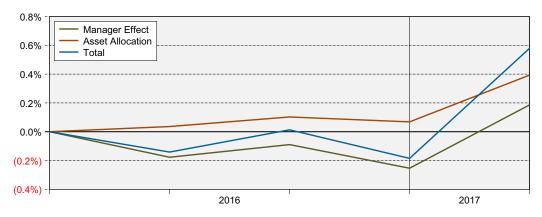


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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





Cumulative Relative Attribution Effects

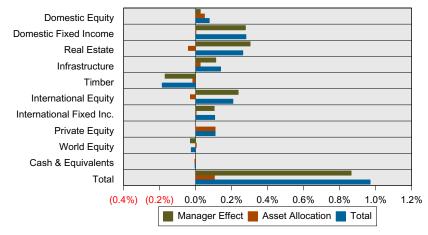


One Year Relative Attribution Effects

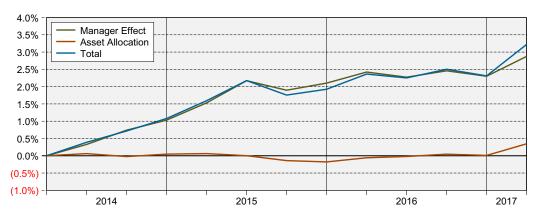
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
		0					
Domestic Equity	23%	21%	16.67%	19.44%	(0.59%)	0.13%	(0.46%)
Domestic Fixed Income	18%	18%	7.21%	4.80%	0.44%	0.02%	0.46%
Real Estate	11%	11%	9.32%	7.27%	0.24%	(0.03%)	0.21%
Infrastructure	4%	5%	4.96%	2.35%	0.12%	0.05%	0.18%
Timber	3%	4%	(9.81%)	3.64%	(0.45%)	0.07%	(0.38%)
International Equity	15%	14%	13.93%	12.92%	0.16%	0.00%	0.16%
International Fixed Inc.	5%	5%	(0.30%)	(3.93%)	0.20%	(0.01%)	0.19%
Private Equity	3%	6%	3.30%	3.30%	0.00%	0.17%	0.17%
World Equity	17%	16%	15.20%	14.77%	0.08%	0.03%	0.11%
Cash & Equivalents	1%	0%	0.61%	0.52%	0.00%	(0.04%)	(0.04%)
Total			10.67% =	10.09% +	- 0.19% +	0.39%	0.58%

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



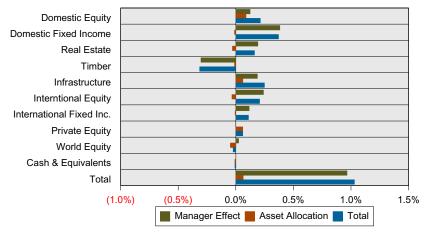
Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	9.59%	9.45%	0.03%	0.05%	0.08%
Domestic Fixed Income	18%	17%	4.78%	3.24%	0.28%	0.00%	0.28%
Real Estate	10%	10%	13.79%	10.58%	0.30%	(0.04%)	0.26%
Infrastructure	4%	5%	3.42%	0.73%	0.11%	0.03%	0.14%
Timber	4%	5%	0.50%	5.67%	(0.17%)	(0.02%)	(0.19%)
International Equity	15%	15%	2.25%	0.71%	0.24%	(0.03%)	0.21%
International Fixed Inc.	5%	5%	(0.58%)	(2.68%)	0.10%	0.00%	0.11%
Private Equity	4%	5%	(3.05%)	(3.05%)	0.00%	0.11%	0.11%
World Equity	16%	16%	5.34%	5.52%	(0.03%)	0.00%	(0.02%)
Cash & Equivalents	1%	1%	0.29%	0.22%	0.00%	(0.00%)	(0.00%)
Total			5.71% =	4.74% +	0.86% +	0.11%	0.97%



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.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



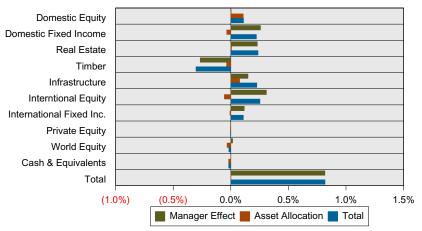
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
	U						
Domestic Equity	24%	22%	13.68%	13.12%	0.12%	0.09%	0.21%
Domestic Fixed Income	18%	17%	5.78%	3.64%	0.38%	(0.01%)	0.37%
Real Estate	10%	10%	12.67%	10.69%	0.19%	(0.03%)	0.16%
Timber	4%	5%	0.24%	7.14%	(0.30%)	(0.01%)	(0.31%)
Infrastructure	4%	5%	5.70%	0.98%	0.19%	0.06%	0.25%
Interntional Equity	15%	15%	6.28%	4.66%	0.24%	(0.03%)	0.21%
International Fixed Inc.	5%	5%	1.03%	(1.13%)	0.12%	(0.01%)	0.11%
Private Equity	4%	5%	1.36%	1.36%	0.00%	0.06%	0.06%
World Equity	14%	15%	9.18%	9.37%	0.02%	(0.05%)	(0.02%)
Cash & Equivalents	1%	1%	0.20%	0.17%	0.00%	(0.01%)	<u>(0.01%)</u>
Total			8.23% =	7.20% +	• 0.97% +	0.06%	1.03%

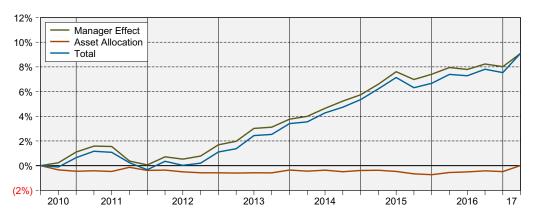


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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





Cumulative Relative Attribution Effects

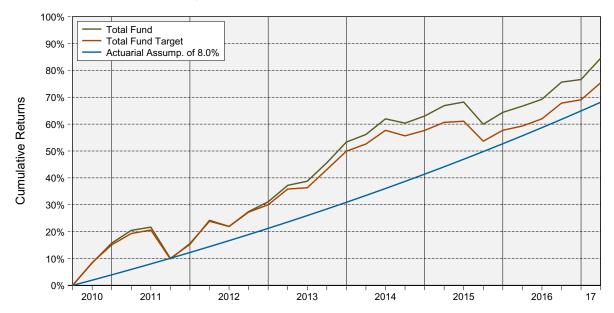


Six and Three-Quarter Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	15.55%	15.34%	0.00%	0.11%	0.11%
Domestic Fixed Income	20%	19%	6.09%	4.55%	0.26%	(0.04%)	0.22%
Real Estate	9%	9%	14.64%	11.75%	0.23%	0.01%	0.24%
Timber	4%	4%	-	-	(0.27%)	(0.04%)	(0.30%)
Infrastructure	3%	4%	-	-	0.15%	0.08%	0.23%
Interntional Equity	16%	16%	7.74%	5.70%	0.31%	(0.06%)	0.25%
International Fixed Inc.	5%	5%	3.49%	1.30%	0.12%	(0.01%)	0.11%
Private Equity	4%	5%	2.92%	2.92%	0.00%	(0.00%)	(0.00%)
World Equity	11%	11%	-	-	0.02%	(0.03%)	(0.02%)
Cash & Equivalents	1%	1%	0.18%	0.16%	0.00%	(0.02%)	(0.02%)
Total			9.50% =	8.68%	+ 0.82% +	0.00%	0.82%

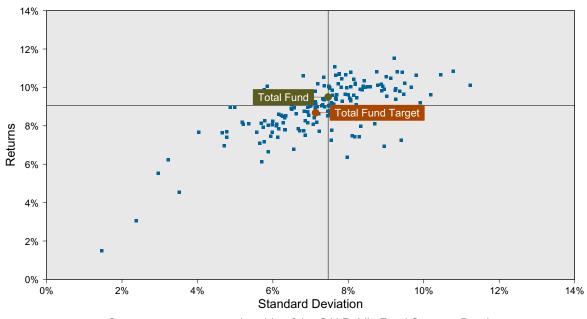
Cumulative Performance Relative to Target

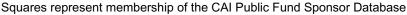
The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the CAI Public Fund Sponsor Database.



Cumulative Returns Actual vs Target

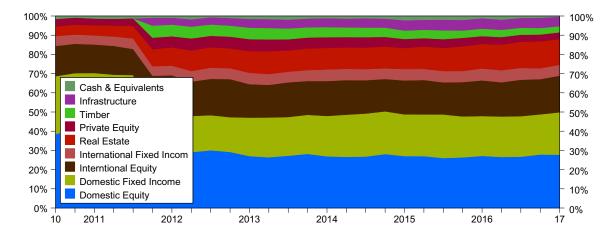
Six and Three-Quarter Year Annualized Risk vs Return





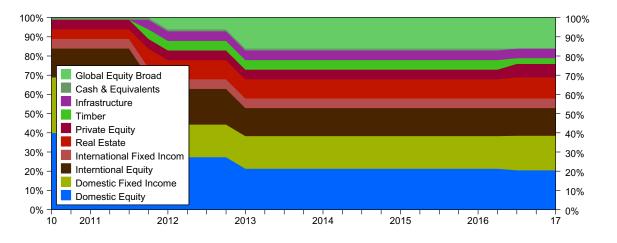
Actual vs Target Historical Asset Allocation

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, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the CAI Public Fund Sponsor Database.

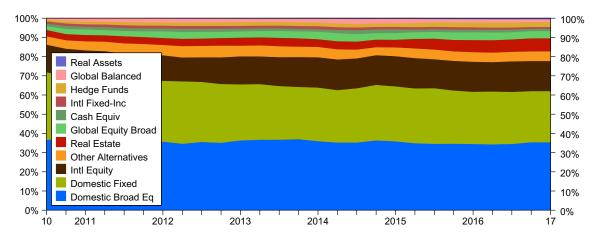


Actual Historical Asset Allocation

Target Historical Asset Allocation





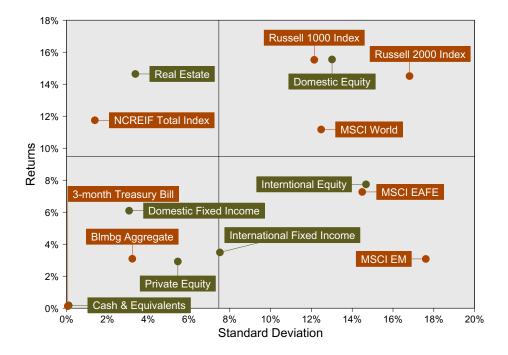


* Current Quarter Target = 16.0% MSCI World, 15.8% Russell 1000 Index, 13.0% Blmbg Aggregate, 11.0% MSCI World ex US, 11.0% NCREIF Total Index, 7.0% NDSIB PERS - Private Equity, 5.0% CPI-W, 5.0% Blmbg HY 2% Iss Cap, 5.0% Blmbg Glob Agg ex USD, 4.8% Russell 2000 Index, 3.4% MSCI EM and 3.0% NCREIF Timberland Index.

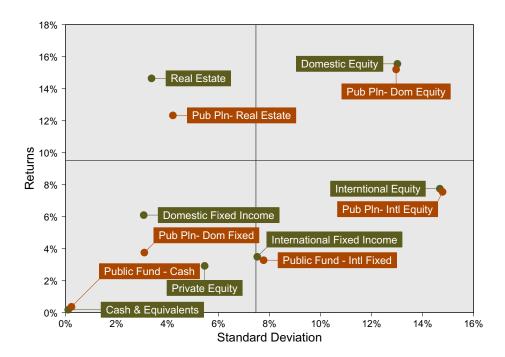
Asset Class Risk and Return

The charts below show the six and three-quarter year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Six and Three-Quarter Year Annualized Risk vs Return Asset Classes vs Benchmark Indices

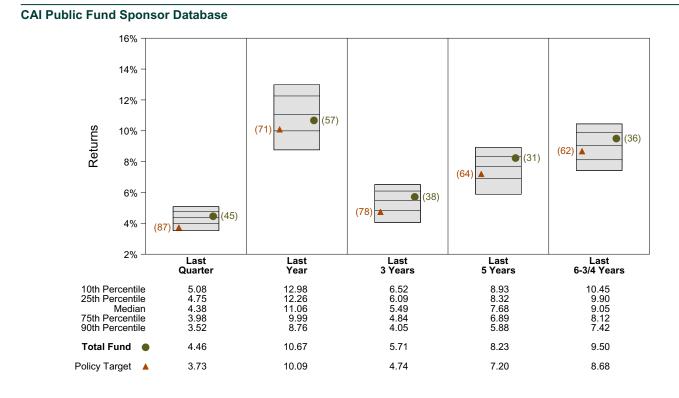


Six and Three-Quarter Year Annualized Risk vs Return Asset Classes vs Asset Class Median

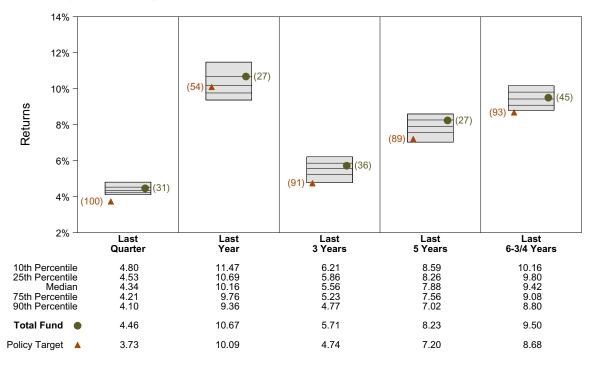


Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended March 31, 2017. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



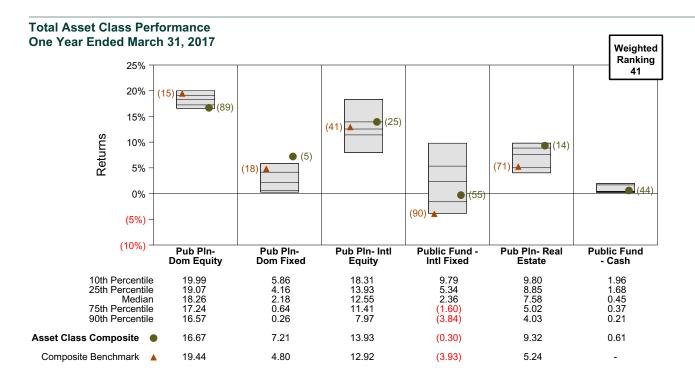
Asset Allocation Adjusted Ranking

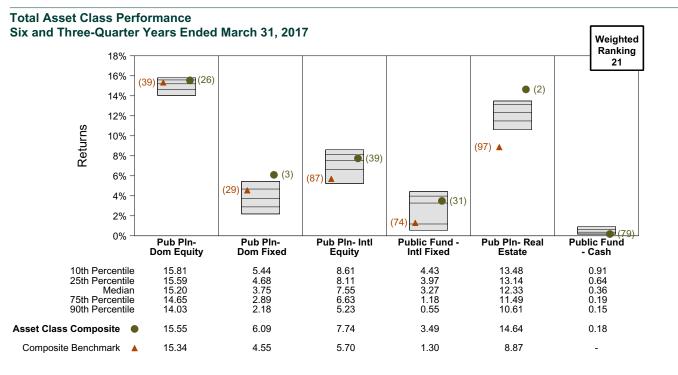




Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.







Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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 Class Allocation

	March 31,	2017			December 3 ⁻	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	\$1,569,121,178	58.66%	\$(17,929,233)	\$92,347,235	\$1,494,703,175	58.32%
Domestic Equity	\$619,104,093	23.14%	\$(3,161,654)	\$28,700,210	\$593,565,537	23.16%
Large Cap	471,190,931	17.61%	(3,543,792)	25,640,664	449,094,059	17.52%
Small Cap	147,913,162	5.53%	382,138	3,059,546	144,471,478	5.64%
International Equity	\$425,042,789	15.89%	\$(169,380)	\$34,644,835	\$390,567,334	15.24%
Developed Intl Equity	311,901,027	11.66%	(169,380)	22,141,600	289,928,807	11.31%
Emerging Markets	113,141,762	4.23%	0	12,503,234	100,638,527	3.93%
World Equity	\$447,104,711	16.71%	\$(16,998,642)	\$29,945,324	\$434,158,030	16.94%
Private Equity	\$77,869,585	2.91%	\$2,400,443	\$(943,133)	\$76,412,275	2.98%
GLOBAL FIXED INCOME	\$617,314,180	23.08%	\$36,857,849	\$14,821,618	\$565,634,712	22.07%
Domestic Fixed Income	\$492,078,570	18.40%	\$36,494,498	\$10,181,601	\$445,402,470	17.38%
Inv. Grade Fixed Income	352,291,332	13.17%	34,620,827	5,248,382	312,422,123	12.19%
Below Inv. Grade Fixed Income	139,787,238	5.23%	1,873,672	4,933,219	132,980,347	5.19%
International Fixed Income	\$125,235,610	4.68%	\$363,351	\$4,640,017	\$120,232,242	4.69%
GLOBAL REAL ASSETS	\$480,753,087	17.97%	\$(9,581,552)	\$7,028,159	\$483,306,480	18.86%
Real Estate	299,703,599	11.20%	(5,296,063)	7,015,484	297,984,177	11.63%
Timber	70,544,724	2.64%	0	(1,632,524)	72,177,248	2.82%
Infrastructure	110,504,763	4.13%	(4,285,489)	1,645,199	113,145,054	4.41%
Cash & Equivalents	\$7,796,709	0.29%	\$(11,611,428)	\$33,554	\$19,374,583	0.76%
Securities Lending Income	\$0	0.00%	\$(37,551)	\$37,551	-	
Total Fund	\$2,674,985,154	100.0%	\$(2,301,914)	\$114,268,118	\$2,563,018,950	100.0%

PLEASE REFER TO PAGES 33-35 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

	Last Quarter	Last Year	Last 3	Last	Last
			3	-	
	Quarter	Vacr		5	6-3/4
		rear	Years	Years	Years
Global Equity					
Gross	6.19%	14.76%	5.63%	9.69%	-
Net	6.14%	14.49%	5.32%	9.35%	-
Wtd Avg Global Equity Benchmark	5.44%	14.85%	4.89%	8.80%	-
Domestic Equity					
Gross	4.82%	16.67%	9.59%	13.68%	15.55%
Net	4.78%	16.41%	9.39%	13.46%	15.29%
Wtd Avg Domestci Equity Benchmark	5.19%	19.44%	9.45%	13.12%	15.34%
Large Cap Equity					
Gross	5.70%	15.13%	10.75%	14.15%	15.86%
Net	5.67%	14.97%	10.58%	13.96%	15.62%
Benchmark(1)	6.03%	17.43%	9.99%	13.26%	15.52%
Small Cap Equity					
Gross	2.11%	21.95%	5.48%	11.93%	14.37%
Net	2.03%	21.37%	5.18%	11.62%	14.08%
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	14.51%
International Equity					
Gross	8.87%	13.93%	2.25%	6.28%	7.74%
Net	8.83%	13.75%	2.06%	6.01%	7.43%
Wtd Avg Intl Equity Benchmark	7.89%	12.92%	0.71%	4.66%	5.70%
Developed Intl Equity					
Gross	7.64%	12.41%	1.76%	7.39%	8.36%
Net	7.58%	12.17%	1.52%	7.11%	8.05%
Benchmark(2)	6.81%	11.46%	0.43%	5.79%	6.39%
Emerging Markets					
Gross	12.42%	18.17%	3.25%	2.14%	5.25%
Net	12.42%	18.17%	3.23%	1.92%	4.95%
Benchmark(3)	11.44%	17.21%	1.18%	0.81%	3.12%
Norld Equity					
Gross	6.99%	15.20%	5.34%	9.18%	-
Net	6.91%	14.77%	4.65%	8.47%	-
MSCI World Index	6.38%	14.77%	5.52%	9.37%	11.17%
Private Equity					
Net	(1.19%)	3.29%	(3.06%)	1.33%	2.84%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011, MSCI EAFE through 6/30/2016; MSCI World ex-US thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 36-40 FOR INVESTMENT MANAGER LEVEL RETURNS.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

			Last	Last	Last
	Last	Last	3	5	6-3/4
			-	-	
	Quarter	Year	Years	Years	Years
Blobal Fixed Income					
Gross	2.58%	5.48%	3.65%	4.75%	-
Net	2.52%	5.22%	3.40%	4.49%	-
Wtd Avg Global Fixed Income Benchmark	1.62%	2.89%	1.93%	2.59%	-
omestic Fixed Income					
Gross	2.24%	7.21%	4.78%	5.78%	6.09%
Net	2.19%	6.98%	4.55%	5.56%	5.85%
Wtd Avg Domestic FI Benchmark	1.34%	4.80%	3.24%	3.64%	4.55%
nv. Grade Fixed Income					
Gross	1.62%	3.76%	4.28%	4.67%	4.95%
Net	1.58%	3.62%	4.14%	4.55%	4.78%
Blmbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	3.09%
elow Inv. Grade Fixed Income					
Gross	3.71%	15.73%	5.83%	8.52%	9.13%
Net	3.61%	15.28%	5.39%	8.06%	8.69%
Blmbg HY Corp 2% Issue	2.70%	16.39%	4.58%	6.82%	8.10%
nternational Fixed Income					
Gross	3.87%	(0.30%)	(0.58%)	1.03%	3.49%
Net	3.77%	(0.66%)	(0.93%)	0.68%	3.12%
Wtd Avg Intl Fixed Income Benchmark	2.48%	(3.93%)	(2.68%)	(1.13%)	1.30%
-					
Global Real Assets Gross	1.48%	5.09%	8.67%	8.19%	
					-
Net	1.38%	4.64%	8.22%	7.76%	-
Wtd Avg Global Real Assets Benchmark	1.20%	5.11%	6.82%	7.31%	-
leal Estate					
Gross	2.38%	9.32%	13.79%	12.67%	14.64%
Net	2.26%	8.79%	13.22%	12.14%	14.07%
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	11.75%
ïmber					
Net	(2.26%)	(9.81%)	0.50%	0.24%	-
NCREIF Timberland Index	0.76%	3.64%	5.67%	7.14%	- 5.40%
nfrastructure Gross	1.52%	4.96%	3.42%	5.70%	-
Net	1.40%	4.38%	2.86%		-
				5.07%	-
CPI-W	0.96%	2.35%	0.73%	0.98%	1.58%
ash & Equivalents - Net	0.20%	0.61%	0.29%	0.20%	0.18%
3-month Treasury Bill	0.10%	0.36%	0.17%	0.14%	0.13%
otal Fund					
Gross	4.46%	10.67%	5.71%	8.23%	9.50%
Net	4.40%	10.37%	5.39%	7.90%	9.15%

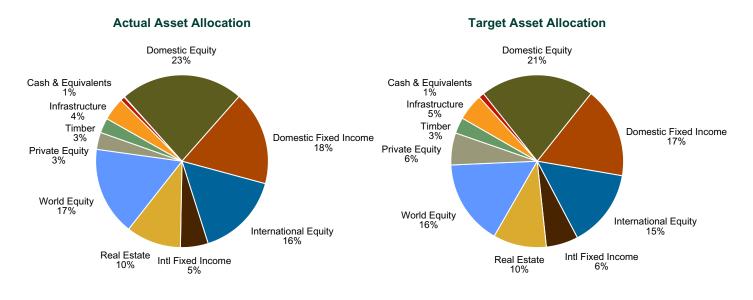
* Current Quarter Target = 16.0% MSCI World, 15.8% Russell 1000 Index, 13.0% Blmbg Aggregate, 11.0% MSCI World ex US, 11.0% NCREIF Total Index, 7.0% NDSIB PERS - Private Equity, 5.0% CPI-W, 5.0% Blmbg HY 2% Iss Cap, 5.0% Blmbg Glob Agg ex USD, 4.8% Russell 2000 Index, 3.4% MSCI EM and 3.0% NCREIF Timberland Index.

PLEASE REFER TO PAGES 36-40 FOR INVESTMENT MANAGER LEVEL RETURNS.



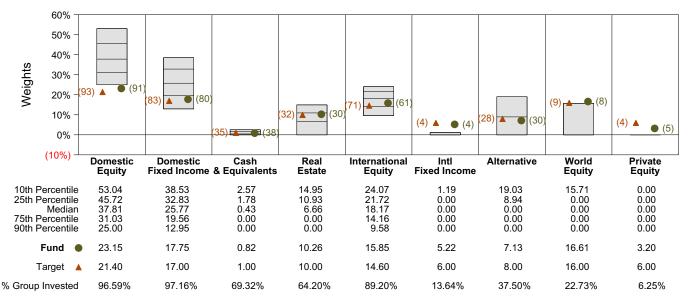
Actual vs Target Asset Allocation As of March 31, 2017

The top left chart shows the Fund's asset allocation as of March 31, 2017. 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 CAI Public Fund Sponsor Database.



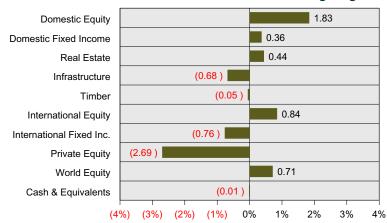
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	516,998	23.1%	21.4%	1.7%	38,991
Domestic Fixed Income	396,452	17.7%	17.0%	0.7%	16,727
International Equity	354,113	15.9%	14.6%	1.3%	27,996
Intl Fixed Income	116,575	5.2%	6.0%	(0.8%)	(17,446)
Real Estate	229,197	10.3%	10.0%	0.3%	5,829
World Equity	371,124	16.6%	16.0%	0.6%	13,736
Private Equity	71,475	3.2%	6.0%	(2.8%)	(62,545)
Timber	63,041	2.8%	3.0%	(0.2%)	`(3,969)
Infrastructure	96,277	4.3%	5.0%	(0.7%)	(15,406)
Cash & Equivalents	18,425	0.8%	1.0%	(0.2%)	`(3,912)
Total	2,233,677	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



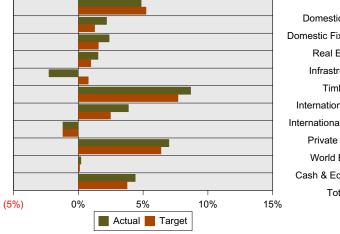
Quarterly Total Fund Relative Attribution - March 31, 2017

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.

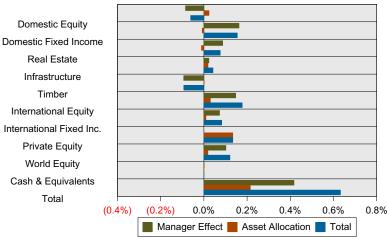


Asset Class Under or Overweighting

Actual vs Target Returns



Relative Attribution by Asset Class

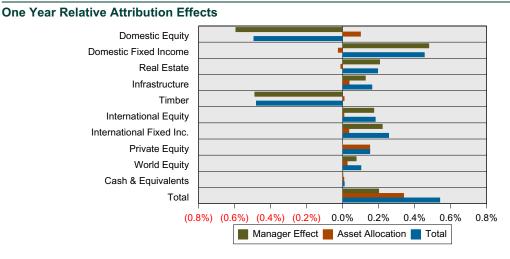


Relative Attribution Effects for Quarter ended March 31, 2017

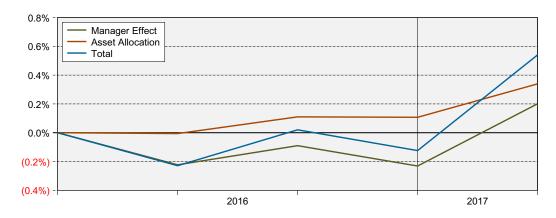
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	4.85%	5.22%	(0.09%)	0.02%	(0.06%)
Domestic Fixed Income	17%	17%	2.18%	1.26%	0.16%	(0.01%)	0.15%
Real Estate	10%	10%	2.38%	1.55%	0.09%	(0.01%)	0.08%
Infrastructure	4%	5%	1.52%	0.96%	0.02%	0.02%	0.04%
Timber	3%	3%	(2.26%)	0.76%	(0.09%)	0.00%	(0.09%)
International Equity	15%	15%	8.67%	7.69%	0.15%	0.03%	0.18%
International Fixed Inc.	5%	6%	3.87%	2.48%	0.07%	0.01%	0.08%
Private Equity	3%	6%	(1.19%)	(1.19%)	0.00%	0.13%	0.13%
World Equity	17%	16%	6.99%	6.38%	0.10%	0.02%	0.12%
Cash & Equivalents	1%	1%	0.20%	0.10%	0.00%	(0.00%)	(0.00%)
Total			4.39% =	3.76% +	0.42% +	0.22%	0.63%



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.



Cumulative Relative Attribution Effects



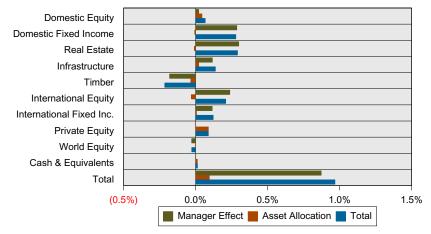
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	16.64%	19.42%	(0.59%)	0.10%	(0.49%)
Domestic Fixed Income	17%	17%	6.93%	4.26%	0.48%	(0.02%)	0.45%
Real Estate	10%	10%	9.32%	7.27%	0.21%	(0.01%)	0.20%
Infrastructure	5%	5%	4.96%	2.35%	0.13%	0.04%	0.16%
Timber	3%	3%	(9.81%)	3.64%	(0.49%)	0.01%	(0.48%)
International Equity	16%	15%	13.72%	12.64%	0.17%	0.01%	0.18%
International Fixed Inc.	6%	6%	(0.30%)	(3.93%)	0.22%	0.04%	0.26%
Private Equity	3%	6%	3.30%	3.30%	0.00%	0.15%	0.15%
World Equity	16%	16%	15.20%	14.77%	0.08%	0.03%	0.10%
Cash & Equivalents	1%	1%	0.60%	0.36%	0.00%	0.01%	0.01%
Total			10.48% =	9.94% +	• 0.20% +	0.34%	0.54%

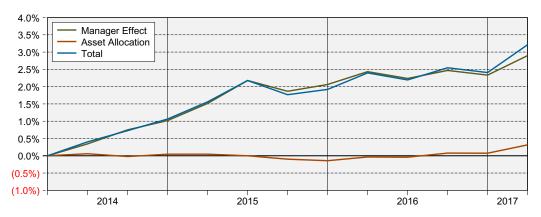


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset 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



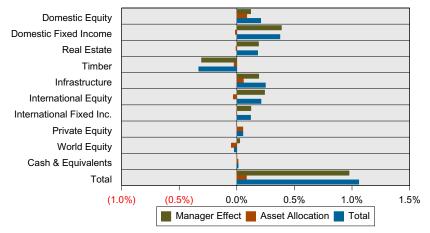
Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	9.58%	9.44%	0.02%	0.04%	0.07%
Domestic Fixed Income	18%	17%	4.68%	3.06%	0.29%	(0.01%)	0.28%
Real Estate Infrastructure	10% 4%	10% 5%	13.79% 3.42%	10.58% 0.73%	0.30% 0.12%	(0.01%) 0.02%	0.29% 0.14%
Timber	4%	4%	0.50%	5.67%	(0.18%)	(0.03%)	(0.21%)
International Equity	15%	15%	2.18%	0.66%	0.24%	(0.03%)	0.21%
International Fixed Inc.	5%	5%	(0.58%)	(2.68%)	0.12%	0.01%	0.12%
Private Equity	4%	5%	(3.05%)	(3.05%)	0.00%	0.09%	0.09%
World Equity Cash & Equivalents	16% 1%	16% 1%	5.34% 0.29%	5.52% 0.17%	<mark>(0.03%)</mark> 0.00%	0.00% 0.01%	<mark>(0.03%)</mark> 0.01%
Total			5.67% =	4.70% +	0.87% +	0.10%	0.97%

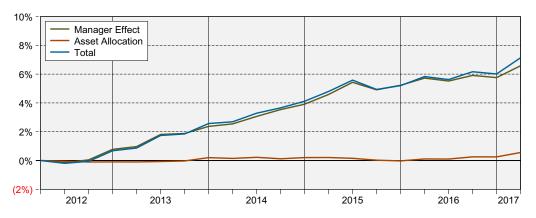


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



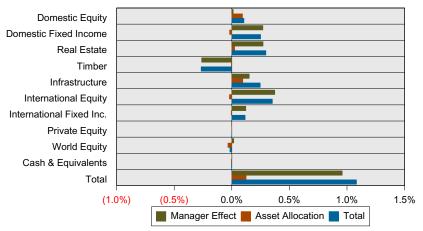
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	22%	13.67%	13.11%	0.12%	0.09%	0.21%
Domestic Fixed Income	18%	17%	5.73%	3.54%	0.39%	(0.01%)	0.37%
Real Estate	10%	10%	12.67%	10.69%	0.19%	(0.01%)	0.18%
Timber	4%	5%	0.25%	7.14%	(0.31%)	(0.02%)	(0.33%)
Infrastructure	4%	5%	5.70%	0.98%	0.19%	0.06%	0.25%
International Equity	15%	15%	6.51%	4.89%	0.24%	(0.03%)	0.21%
International Fixed Inc.	5%	5%	1.04%	(1.13%)	0.12%	(0.00%)	0.12%
Private Equity	5%	5%	1.37%	1.37%	0.00%	0.05%	0.05%
World Equity	14%	15%	9.18%	9.37%	0.03%	(0.05%)	(0.02%)
Cash & Equivalents	1%	1%	0.20%	0.14%	0.00%	0.01%	0.01%
Total			8.27% =	7.21% +	0.98% +	0.08%	1.06%

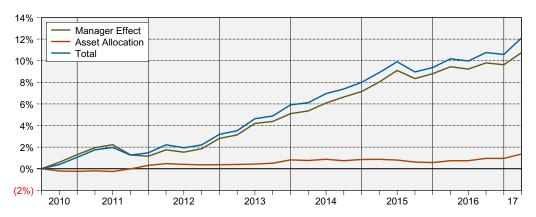


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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





Cumulative Relative Attribution Effects



Six and Three-Quarter Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	15.55%	15.32%	0.01%	0.09%	0.11%
Domestic Fixed Income	18%	17%	6.07%	4.50%	0.27%	(0.02%)	0.25%
Real Estate	10%	10%	14.64%	11.75%	0.27%	0.02%	0.30%
Timber	4%	4%	-	-	(0.26%)	(0.00%)	(0.27%)
Infrastructure	3%	4%	-	-	0.15%	0.10%	0.25%
International Equity	17%	17%	7.88%	5.85%	0.37%	(0.02%)	0.35%
International Fixed Inc.	5%	5%	3.49%	1.30%	0.12%	(0.01%)	0.12%
Private Equity	5%	5%	2.94%	2.94%	0.00%	(0.00%)	(0.00%)
World Equity	11%	11%	-	-	0.02%	(0.03%)	(0.02%)
Cash & Equivalents	1%	1%	0.18%	0.13%	0.00%	(0.00%)	(0.00%)
Total			9.72% =	8.64%	+ 0.96% +	0.12%	1.08%

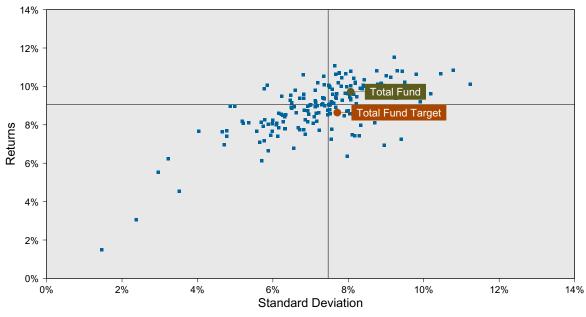
Cumulative Performance Relative to Target

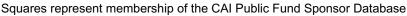
The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the CAI Public Fund Sponsor Database.



Cumulative Returns Actual vs Target

Six and Three-Quarter Year Annualized Risk vs Return

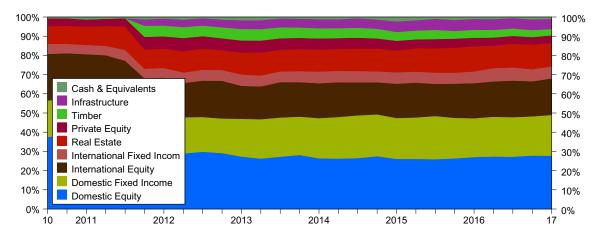






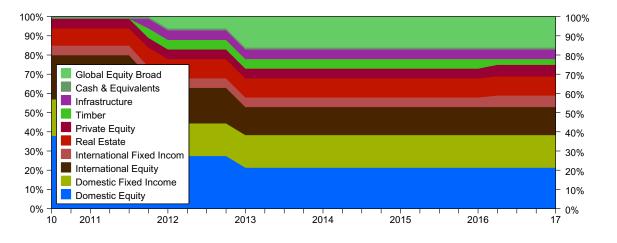
Actual vs Target Historical Asset Allocation

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, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the CAI Public Fund Sponsor Database.

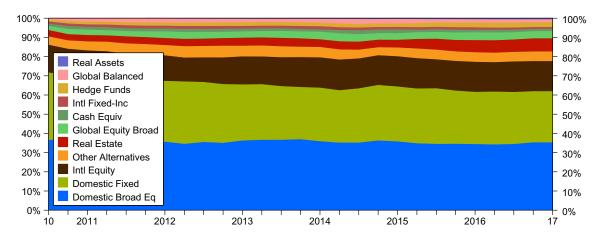


Actual Historical Asset Allocation

Target Historical Asset Allocation





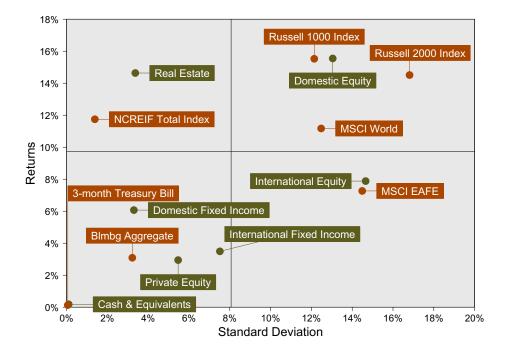




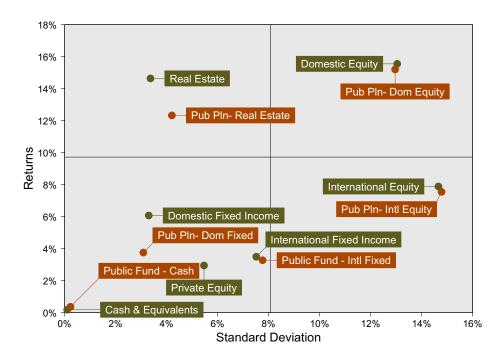
Asset Class Risk and Return

The charts below show the six and three-quarter year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Six and Three-Quarter Year Annualized Risk vs Return Asset Classes vs Benchmark Indices

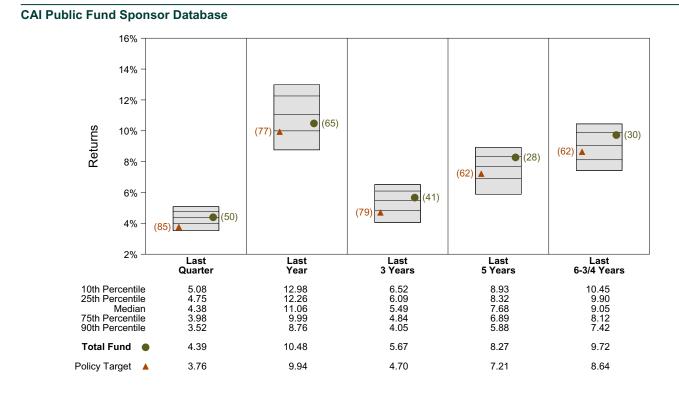


Six and Three-Quarter Year Annualized Risk vs Return Asset Classes vs Asset Class Median

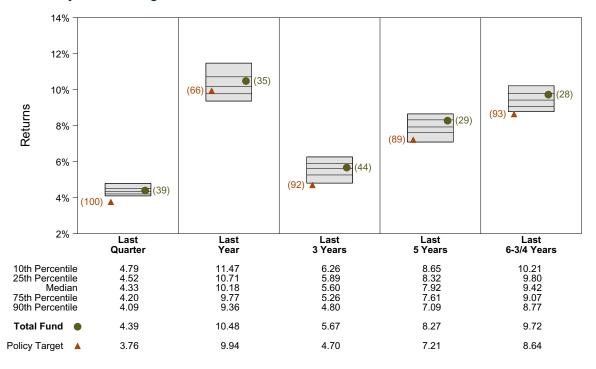


Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended March 31, 2017. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



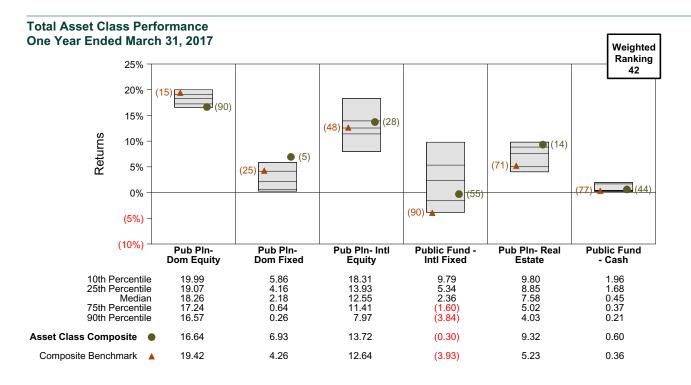
Asset Allocation Adjusted Ranking

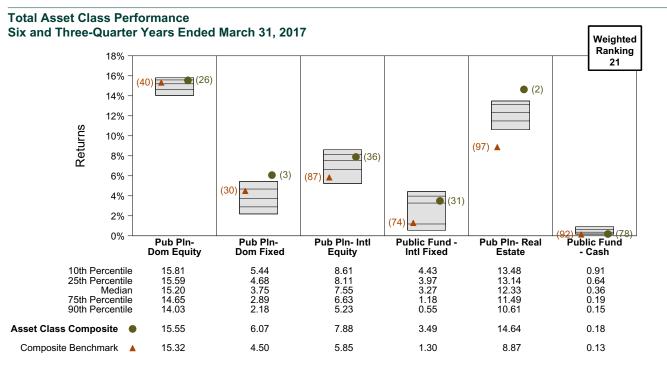




Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.







Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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 Class Allocation

	March 31, 2017				1, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	\$1,313,710,084	58.81%	\$(17,931,992)	\$76,432,711	\$1,255,209,365	58.45%
Domestic Equity	\$516,997,751	23.15%	\$(4,691,464)	\$24,127,775	\$497,561,440	23.17%
Large Cap	397,181,411	17.78%	(4,595,990)	21,650,040	380,127,361	17.70%
Small Cap	119,816,340	5.36%	(95,474)	2,477,735	117,434,079	5.47%
International Equity	\$354,113,057	15.85%	\$(149,409)	\$28,259,705	\$326,002,762	15.18%
Developed Intl Equity	275,128,088	12.32%	(149,409)	19,531,119	255,746,378	11.91%
Emerging Markets	78,984,969	3.54%	0	8,728,586	70,256,384	3.27%
World Equity	\$371,123,886	16.61%	\$(15,294,451)	\$24,910,920	\$361,507,417	16.83%
Private Equity	\$71,475,390	3.20%	\$2,203,333	\$(865,688)	\$70,137,746	3.27%
GLOBAL FIXED INCOME	\$513,027,083	22.97%	\$22,906,859	\$12,442,536	\$477,677,688	22.24%
Fixed Income Comp	\$396,452,428	17.75%	\$23,411,531	\$8,094,317	\$364,946,580	16.99%
Investment Grade Fixed	292,683,077	13.10%	22,033,529	4,431,943	266,217,605	12.40%
Below Inv. Grade Fixed Income	103,769,351	4.65%	1,378,002	3,662,375	98,728,975	4.60%
International Fixed Income	\$116,574,655	5.22%	\$(504,672)	\$4,348,218	\$112,731,109	5.25%
GLOBAL REAL ASSETS	\$388,515,364	17.39%	\$(9,331,832)	\$5,322,678	\$392,524,518	18.28%
Real Estate	229,196,503	10.26%	(4,653,094)	5,370,051	228,479,546	10.64%
Timber	63,041,448	2.82%	(945,000)	(1,480,754)	65,467,202	3.05%
Infrastructure	96,277,413	4.31%	(3,733,738)	1,433,381	98,577,769	4.59%
Cash & Equivalents	\$18,424,650	0.82%	\$(3,783,885)	\$45,657	\$22,162,877	1.03%
Securities Lending Income	\$0	0.00%	\$(30,670)	\$30,670	-	-
Total Fund	\$2,233,677,181	100.0%	\$(8,171,520)	\$94,274,253	\$2,147,574,448	100.0%

PLEASE REFER TO PAGES 33-35 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

Retu	Returns for Periods Ended March 31, 2017				
			Last	Last	Last
	Last	Last	3	5	6-3/4
	Quarter	Year	Years	Years	Years
Global Equity					
Gross	6.11%	14.66%	5.57%	9.73%	-
Net	6.06%	14.40%	5.25%	9.40%	-
Wtd Avg Global Equity Benchmark	5.49%	14.79%	4.88%	8.89%	-
Domestic Equity					
Gross	4.85%	16.64%	9.58%	13.67%	15.55%
Net	4.81%	16.39%	9.39%	13.46%	15.29%
Wtd Avg Domestic Equity Benchmark		19.42%	9.44%	13.11%	15.32%
Large Cap Equity					
Gross	5.70%	15.13%	10.75%	14.13%	15.85%
Net	5.67%	14.97%	10.58%	13.94%	15.60%
Benchmark(1)	6.03%	17.43%	9.99%	13.26%	15.52%
	/•				
Small Cap Equity					
Gross	2.11%	21.95%	5.48%	11.93%	14.39%
Net	2.03%	21.37%	5.18%	11.62%	14.11%
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	14.51%
International Equity					
Gross	8.67%	13.72%	2.18%	6.51%	7.88%
Net	8.62%	13.53%	1.99%	6.23%	7.57%
Wtd Avg Intl Equity Benchmark	7.69%	12.64%	0.66%	4.89%	5.85%
Developed Intl Equity					
Gross	7.64%	12.41%	1.76%	7.40%	8.41%
Net	7.58%	12.17%	1.52%	7.11%	8.10%
Benchmark(2)	6.81%	11.46%	0.43%	5.79%	6.39%
Emerging Markets					
Gross	12.42%	18.17%	3.26%	2.15%	5.22%
Net	12.42%	18.17%	3.23%	1.92%	4.92%
Benchmark(3)	11.44%	17.21%	1.18%	0.81%	3.12%
World Equity					
Gross	6.99%	15.20%	5.34%	9.18%	-
Net	6.91%	14.77%	4.66%	8.47%	-
MSCI World Index	6.38%	14.77%	5.52%	9.37%	11.17%
Private Equity					
Net	(1.19%)	3.29%	(3.06%)	1.34%	2.87%
	(0.2070	(0.0070)	1.0170	2.07 /0

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

(2) 50% Hedged EAFE through 3/31/2011; MSCI EAFE through 6/3016; MSCI World ex-US thereafter.

(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 36-40 FOR INVESTMENT MANAGER LEVEL RETURNS.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

Last Quarter Global Fixed Income Gross 2.57% Net 2.51% Wtd Avg Global Fixed Inc. Benchmark 1.58% Domestic Fixed Income Gross 2.18% Net 2.13% Wtd Avg Domestic FI Benchmark 1.26% Inv. Grade Fixed Income Income Gross 1.62% Blmbg Aggregate Index 0.82% Below Inv. Grade Fixed Income Gross Gross 3.71% Net 3.61% Blmbg Aggregate Index 0.82% Below Inv. Grade Fixed Income Gross Gross 3.71% Net 3.61% Blmbg HY Corp 2% Issue 2.70% International Fixed Income Gross Gross 3.87% Net 3.77% Wtd Avg Intl Fixed Income Benchmark 2.48% Global Real Assets Enchmark 1.29% Wtd Avg Global Real Assets Benchmark 1.25% Real Estate Cross 2.38% 2.26% NCREIF Tota	Last Year 5.12% 4.86% 2.18% 6.93% 6.71% 4.26% 3.76% 3.62% 0.44% 15.73% 15.28% 16.39% (0.30%)	Last 3 Years 3.50% 3.24% 1.69% 4.68% 4.68% 4.45% 3.06% 4.27% 4.14% 2.68% 5.83% 5.39% 4.58% (0.58%)	Last 5 Years 4.66% 4.40% 2.44% 5.73% 5.51% 3.54% 4.67% 4.54% 2.34% 8.52% 8.06% 6.82%	Last 6-3/4 Years - - - 6.07% 5.92% 4.50% 4.50% 4.95% 4.78% 3.09% 9.12% 8.68% 8.10%
Quarter Global Fixed Income Gross 2.57% Net 2.51% Wtd Avg Global Fixed Inc. Benchmark 1.58% Domestic Fixed Income Gross 2.18% Net 2.13% Wtd Avg Domestic FI Benchmark 1.26% Inv. Grade Fixed Income 6 Gross 1.62% Net 1.58% Blmbg Aggregate Index 0.82% Below Inv. Grade Fixed Income 6 Gross 3.71% Net 3.61% Blmbg HY Corp 2% Issue 2.70% International Fixed Income 6 Gross 3.87% Net 3.61% Blmbg HY Corp 2% Issue 2.70% International Fixed Income 1.29% Wtd Avg Intl Fixed Income Benchmark 2.48% Global Real Assets 3.77% Wtd Avg Global Real Assets Benchmark 1.25% Real Estate 2.38% Gross 2.38% Net 2.26% NCREIF Total Index 1.55%	Year 5.12% 4.86% 2.18% 6.93% 6.71% 4.26% 3.76% 3.62% 0.44% 15.73% 15.28% 16.39% (0.30%)	Years 3.50% 3.24% 1.69% 4.68% 4.45% 3.06% 4.27% 4.14% 2.68% 5.83% 5.83% 5.39% 4.58%	Years 4.66% 4.40% 2.44% 5.73% 5.51% 3.54% 4.67% 4.67% 4.54% 2.34% 8.52% 8.06% 6.82%	Years - - - - 6.07% 5.92% 4.50% 4.50% 4.95% 4.78% 3.09% 9.12% 8.68%
Global Fixed Income 2.57% Net 2.51% Wtd Avg Global Fixed Inc. Benchmark 1.58% Domestic Fixed Income 2.13% Gross 2.18% Net 2.13% Wtd Avg Domestic FI Benchmark 1.26% nv. Grade Fixed Income 6 Gross 1.62% Net 1.58% Blmbg Aggregate Index 0.82% Below Inv. Grade Fixed Income 3.71% Gross 3.71% Net 3.61% Blmbg HY Corp 2% Issue 2.70% nternational Fixed Income 3.87% Gross 3.87% Net 3.77% Wtd Avg Intl Fixed Income Benchmark 2.48% Global Real Assets 3.87% Gross 1.38% Net 1.29% Wtd Avg Global Real Assets 2.26% Net 2.26% NcREIF Total Index 1.55% Fimber (2.26%) NCREIF Total Index 1.55% Fimber (2.26%) NcREIF Timberland Index 0.76%	5.12% 4.86% 2.18% 6.93% 6.71% 4.26% 3.76% 3.62% 0.44% 15.73% 15.28% 16.39% (0.30%)	3.50% 3.24% 1.69% 4.68% 4.45% 3.06% 4.27% 4.14% 2.68% 5.83% 5.83% 5.83% 4.58%	4.66% 4.40% 2.44% 5.73% 5.51% 3.54% 4.67% 4.54% 2.34% 8.52% 8.06% 6.82%	- - - 5.92% 4.50% 4.95% 4.78% 3.09% 9.12% 8.68%
Gross2.57%Net2.51%Wtd Avg Global Fixed Inc. Benchmark1.58%Domestic Fixed Income2.13%Met2.13%Wtd Avg Domestic FI Benchmark1.26%nv. Grade Fixed Income67058Gross1.62%Net1.58%Blmbg Aggregate Index0.82%Below Inv. Grade Fixed Income3.71%Gross3.71%Net3.61%Blmbg HY Corp 2% Issue2.70%nternational Fixed Income3.87%Gross3.87%Net3.77%Wtd Avg Intl Fixed Income Benchmark2.48%Gross1.38%Net3.77%Wtd Avg Global Real Assets3.87%Gross1.38%Net1.29%Wtd Avg Global Real Assets Benchmark1.25%Real Estate2.26%Gross2.38%Net1.55%Fimber2.26%NCREIF Total Index1.55%Fimber1.52%Net1.55%Fimber1.52%Net1.40%	4.86% 2.18% 6.93% 6.71% 4.26% 3.76% 3.62% 0.44% 15.73% 15.28% 16.39% (0.30%)	3.24% 1.69% 4.68% 4.45% 3.06% 4.27% 4.14% 2.68% 5.83% 5.83% 5.89% 4.58%	4.40% 2.44% 5.73% 5.51% 3.54% 4.67% 4.54% 2.34% 8.52% 8.06% 6.82%	- 6.07% 5.92% 4.50% 4.95% 4.78% 3.09% 9.12% 8.68%
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Gross1.62%Net1.58%Blmbg Aggregate Index0.82%Below Inv. Grade Fixed Income	3.62% 0.44% 15.73% 15.28% 16.39% (0.30%)	4.14% 2.68% 5.83% 5.39% 4.58%	4.54% 2.34% 8.52% 8.06% 6.82%	4.78% 3.09% 9.12% 8.68%
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Gross3.71%Net3.61%Bimbg HY Corp 2% Issue2.70%International Fixed Income2.70%Gross3.87%Net3.77%Wtd Avg Intl Fixed Income Benchmark2.48%Global Real Assets1.38%Gross1.38%Net1.29%Wtd Avg Global Real Assets Benchmark1.25%Real Estate2.38%Gross2.38%Net2.26%NCREIF Total Index1.55%Timber(2.26%)NCREIF Timberland Index0.76%nfrastructureGrossGross1.52%Net1.40%	15.28% 16.39% (0.30%)	5.39% 4.58%	8.06% 6.82%	8.68%
Net3.61% 2.70%Bimbg HY Corp 2% Issue2.70%International Fixed Income2.70%Gross3.87% 3.77%Wtd Avg Intl Fixed Income Benchmark2.48%Biobal Real Assets1.38% 1.29%Gross1.38% 1.29%Wtd Avg Global Real Assets Benchmark1.25%Real Estate2.6% NCREIF Total IndexMore F Net1.55%Imber NCREIF Timberland Index0.76%Infrastructure Gross1.52% 1.40%	15.28% 16.39% (0.30%)	5.39% 4.58%	8.06% 6.82%	8.68%
Bimbg HY Corp 2% Issue2.70%International Fixed Income3.87%Gross3.87%Net3.77%Wtd Avg Intl Fixed Income Benchmark2.48%Stobal Real Assets1.38%Gross1.38%Net1.29%Wtd Avg Global Real Assets Benchmark1.25%teal Estate2.38%Gross2.38%Net2.26%NCREIF Total Index1.55%Timber(2.26%)NCREIF Timberland Index0.76%InfrastructureGrossGross1.52%Net1.40%	16.39% (0.30%)	4.58%	6.82%	
nternational Fixed Income Gross 3.87% Net 3.77% Wtd Avg Intl Fixed Income Benchmark 2.48% Slobal Real Assets Gross 1.38% Net 1.29% Wtd Avg Global Real Assets Benchmark 1.25% Real Estate Gross 2.38% Net 2.26% NCREIF Total Index 1.55% Timber Net (2.26%) NCREIF Timberland Index 0.76% Infrastructure Gross 1.52% Net 1.52%	(0.30%)			8.10%
Gross3.87%Net3.77%Wtd Avg Intl Fixed Income Benchmark2.48%Gross1.38%Met1.29%Wtd Avg Global Real Assets Benchmark1.25%Real Estate2.38%Gross2.38%Net2.26%NCREIF Total Index1.55%Timber(2.26%)NCREIF Timberland Index0.76%nfrastructureGrossGross1.52%		(0.58%)		
Net3.77% Wtd Avg Intl Fixed Income Benchmark3.77% 2.48%Global Real Assets1.48%Gross1.38% 1.29% Wtd Avg Global Real Assets Benchmark1.29%Wtd Avg Global Real Assets Benchmark1.25%Real Estate Gross2.38% 2.26% NCREIF Total Index2.26%Net2.26% 0.76%Net(2.26%) 0.76%Met(2.26%) 0.76%Imper Gross1.52%Net0.76%Net1.52% 0.76%		(0.58%)		
Wtd Avg Intl Fixed Income Benchmark2.48%Gross1.38%Met1.29%Wtd Avg Global Real Assets Benchmark1.25%teal Estate2.38%Gross2.38%Net2.26%NCREIF Total Index1.55%Timber(2.26%)NCREIF Timberland Index0.76%nfrastructureGrossGross1.52%			1.04%	3.49%
Silobal Real Assets Gross 1.38% Net 1.29% Wtd Avg Global Real Assets Benchmark 1.25% Real Estate Gross 2.38% Net 2.26% NCREIF Total Index 1.55% Simber Net (2.26%) NCREIF Timberland Index 0.76% Infrastructure Gross 1.52% Net 1.40%	(0.66%)	(0.93%)	0.68%	3.12%
Gross 1.38% Net 1.29% Wtd Avg Global Real Assets Benchmark 1.25% teal Estate	(3.93%)	(2.68%)	(1.13%)	1.30%
Net 1.29% Wtd Avg Global Real Assets Benchmark 1.25% Real Estate 2.38% Gross 2.38% Net 2.26% NCREIF Total Index 1.55% "imber (2.26%) NCREIF Timberland Index 0.76% nfrastructure Gross 1.52% Net 0.76%				
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Real Estate 2.38% Gross 2.26% Net 2.26% NCREIF Total Index 1.55% "imber (2.26%) NCREIF Timberland Index 0.76% nfrastructure Gross 1.52% Net 1.40%	4.15%	8.06%	7.68%	-
Gross 2.38% Net 2.26% NCREIF Total Index 1.55% Timber Net (2.26%) NCREIF Timberland Index 0.76% hfrastructure Gross 1.52% Net 1.40%	5.23%	6.86%	7.34%	-
Net2.26%NCREIF Total Index1.55%imber(2.26%)Net(2.26%)NCREIF Timberland Index0.76%offrastructure1.52%Gross1.52%Net1.40%				
NCREIF Total Index 1.55% imber Net (2.26%) NCREIF Timberland Index 0.76% nfrastructure Gross 1.52% Net 1.40%	9.32%	13.79%	12.67%	14.64%
Timber (2.26%) NCREIF Timberland Index 0.76% nfrastructure Gross 1.52% Net 1.40%	8.79%	13.22%	12.14%	14.07%
Net(2.26%)NCREIF Timberland Index0.76%nfrastructureGrossGross1.52%Net1.40%	7.27%	10.58%	10.69%	11.75%
Net(2.26%)NCREIF Timberland Index0.76%nfrastructureGrossGross1.52%Net1.40%				
NCREIF Timberland Index 0.76% nfrastructure Gross 1.52% Net 1.40%	(9.81%)	0.50%	0.25%	-
Gross 1.52% Net 1.40%	3.64%	5.67%	7.14%	5.40%
Gross 1.52% Net 1.40%				
Net 1.40%	4.96%	3.42%	5.70%	-
	T.00/0	2.86%	5.07%	-
	4.38%	0.73%	0.98%	1.58%
ash & Equivalents - Net 0.20%		0.29%	0.20%	0.18%
3-month Treasury Bill 0.10%	4.38%	0.17%	0.14%	0.13%
Fotal Fund	4.38% 2.35%			
Gross 4.39%	4.38% 2.35% 0.60%			9.72%
Net 4.33%	4.38% 2.35% 0.60% 0.36%	5 67%	8 27%	9.37%
Target* 3.76%	4.38% 2.35% 0.60%	5.67% 5.34%	8.27% 7.95%	9.37%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 13.0% Bimbg Aggregate, 11.8% MSCI World ex US, 10.0% NCREIF Total Index, 6.0% NDSIB TFFR - Private Equity, 6.0% Bimbg Glob Agg ex USD, 5.0% CPI-W, 4.8% Russell 2000 Index, 4.0% Bimbg HY 2% Iss Cap, 3.0% NCREIF Timberland Index, 2.8% MSCI EM and 1.0% 3-month Treasury Bill.

PLEASE REFER TO PAGES 36-40 FOR INVESTMENT MANAGER LEVEL RETURNS.



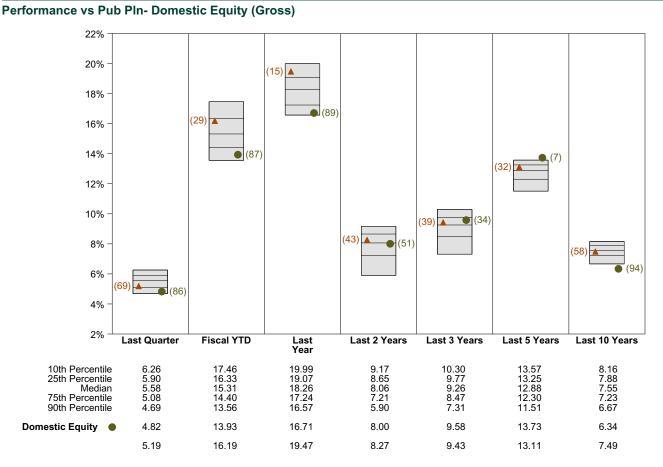
Domestic Equity Period Ended March 31, 2017

Quarterly Summary and Highlights

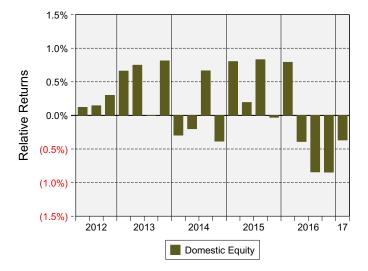
 Domestic Equity's portfolio posted a 4.82% return for the quarter placing it in the 86 percentile of the Pub Pln-Domestic Equity group for the quarter and in the 89 percentile for the last year.

Beginning Market Value	\$1,130,378,217
Net New Investment	\$-9,439,516
Investment Gains/(Losses)	\$54,512,709
).35%ding Market Value	\$1,175,451,410

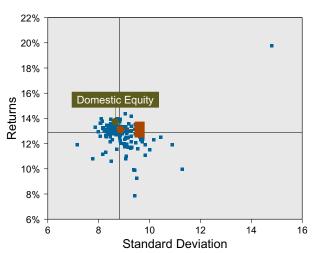
 Domestic Equity's portfolio underperformed the by 0.37% ing Market for the quarter and underperformed the for the year by 2.76%.







Pub Pln- Domestic Equity (Gross) Annualized Five Year Risk vs Return



L.A. Capital Period Ended March 31, 2017

Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

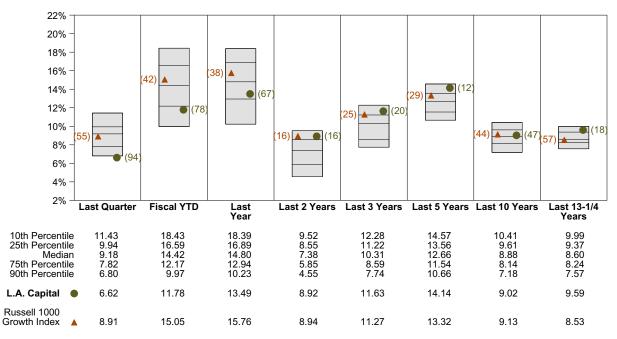
Quarterly Summary and Highlights

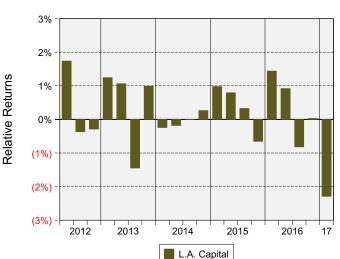
- L.A. Capital's portfolio posted a 6.62% return for the quarter placing it in the 94 percentile of the CAI Large Cap Growth group for the quarter and in the 67 percentile for the last year.
- L.A. Capital's portfolio underperformed the Russell 1000 Growth Index by 2.29% for the quarter and underperformed the Russell 1000 Growth Index for the year by 2.26%.

Quarterly Asset Growth

Beginning Market Value	\$323,055,323
Net New Investment	\$-164,875
Investment Gains/(Losses)	\$21,376,399
Ending Market Value	\$344,266,846

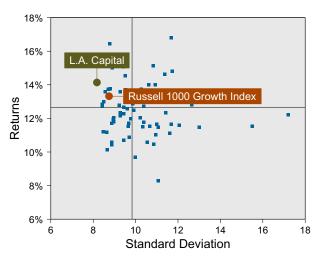






Relative Return vs Russell 1000 Growth Index

CAI Large Cap Growth (Gross) Annualized Five Year Risk vs Return



L.A. Capital Management Enhanced Index Period Ended March 31, 2017

Investment Philosophy

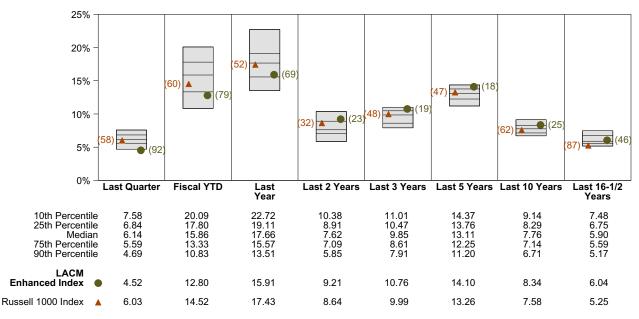
The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

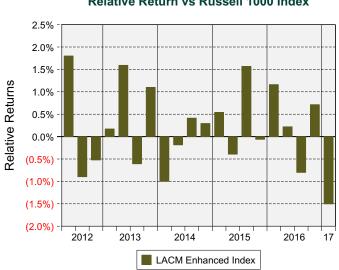
Quarterly Summary and Highlights

- LACM Enhanced Index's portfolio posted a 4.52% return for the quarter placing it in the 92 percentile of the CAI Large Cap Core group for the quarter and in the 69 percentile for the last year.
- LACM Enhanced Index's portfolio underperformed the ٠ Russell 1000 Index by 1.50% for the guarter and underperformed the Russell 1000 Index for the year by 1.52%.

Performance vs CAI Large Cap Core (Gross)

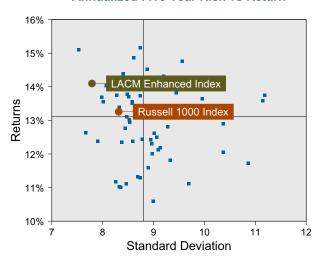
Quarterly Asset Growth					
Beginning Market Value	\$195,872,968				
Net New Investment	\$-9,051,150				
Investment Gains/(Losses)	\$8,873,633				
Ending Market Value	\$195,695,452				





Relative Return vs Russell 1000 Index

CAI Large Cap Core (Gross) **Annualized Five Year Risk vs Return**



Northern Trust AM Enh S&P500 Period Ended March 31, 2017

Investment Philosophy

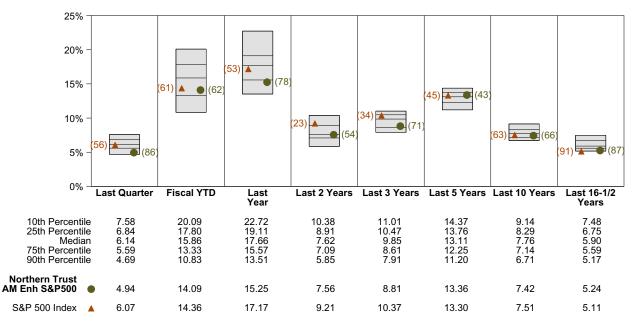
Northern Trust AM Enhanced S&P 500 employs a quantitative investment approach, focusing on the stock selection process as the principal source of value added. The account invests primarily in a broadly diversified portfolio of equity securities that include securities convertible into equity securities (including common stock), warrants, rights and units or shares in trusts, exchange traded funds and investment companies. The Investment Manager intends to use futures and options to manage market risk associated with the account's investments.

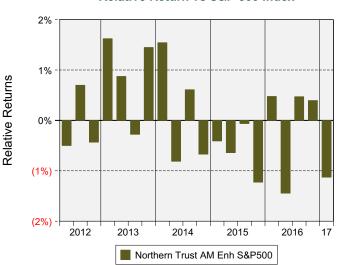
Quarterly Summary and Highlights

- Northern Trust AM Enh S&P500's portfolio posted a 4.94% return for the quarter placing it in the 86 percentile of the CAI Large Cap Core group for the quarter and in the 78 percentile for the last year.
- Northern Trust AM Enh S&P500's portfolio underperformed the S&P 500 Index by 1.13% for the quarter and underperformed the S&P 500 Index for the year by 1.92%.

Quarterly Asset Growth					
Beginning Market Value	\$156,141,055				
Net New Investment	\$0				
Investment Gains/(Losses)	\$7,712,510				
Ending Market Value	\$163,853,565				

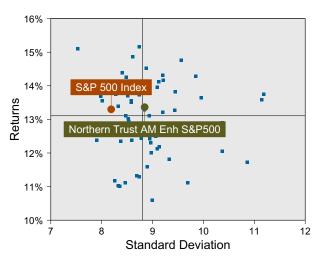






Relative Return vs S&P 500 Index

CAI Large Cap Core (Gross) Annualized Five Year Risk vs Return



Parametric Clifton Enh S&P Period Ended March 31, 2017

Investment Philosophy

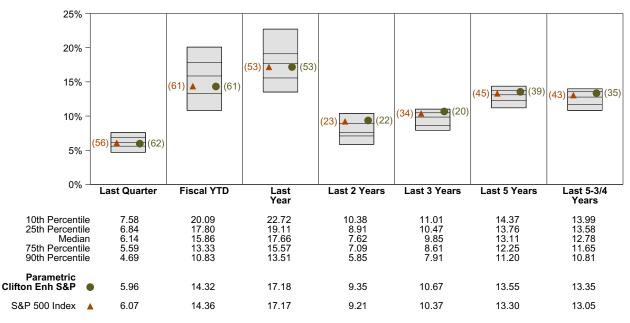
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

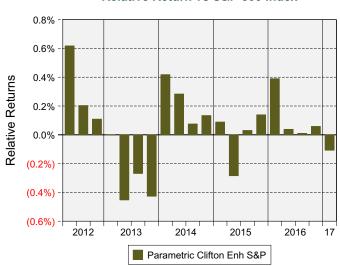
Quarterly Summary and Highlights

- Parametric Clifton Enh S&P's portfolio posted a 5.96% return for the quarter placing it in the 62 percentile of the CAI Large Cap Core group for the quarter and in the 53 percentile for the last year.
- Parametric Clifton Enh S&P's portfolio underperformed the S&P 500 Index by 0.11% for the quarter and outperformed the S&P 500 Index for the year by 0.00%.

Quarterly Asset Growth					
Beginning Market Value	\$180,411,587				
Net New Investment	\$0				
Investment Gains/(Losses)	\$10,750,125				
Ending Market Value	\$191,161,713				

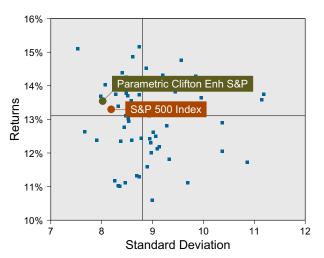






Relative Return vs S&P 500 Index

CAI Large Cap Core (Gross) Annualized Five Year Risk vs Return



Atlanta Capital Period Ended March 31, 2017

Investment Philosophy

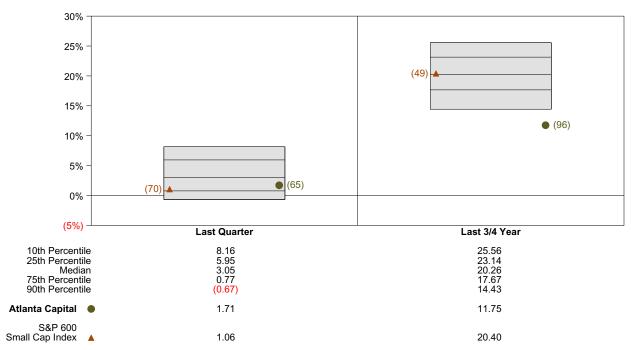
Atlanta believes that high quality companies produce consistently increasing earnings and dividends, thereby providing attractive returns with moderate risk over the long-term.

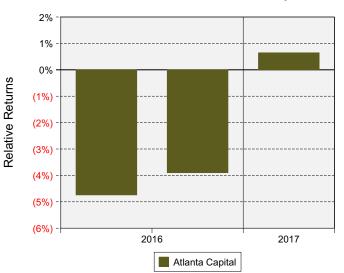
Quarterly Summary and Highlights

- Atlanta Capital's portfolio posted a 1.71% return for the quarter placing it in the 65 percentile of the CAI Small Capitalization group for the quarter and in the 96 percentile for the last three-quarter year.
- Atlanta Capital's portfolio outperformed the S&P 600 Small Cap Index by 0.64% for the quarter and underperformed the S&P 600 Small Cap Index for the three-quarter year by 8.65%.

Quarterly Asset Growth		
Beginning Market Value	\$123,994,249	
Net New Investment	\$-223,491	
Investment Gains/(Losses)	\$2,110,841	
Ending Market Value	\$125.881.599	

Performance vs CAI Small Capitalization (Gross)





Relative Return vs S&P 600 Small Cap Index

Cumulative Returns vs S&P 600 Small Cap Index



Parametric Clifton Enh SmCap Period Ended March 31, 2017

Investment Philosophy

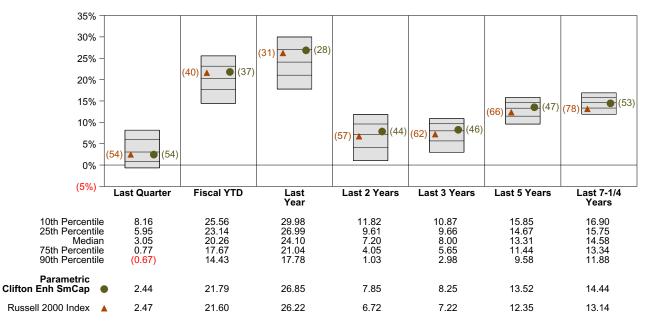
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

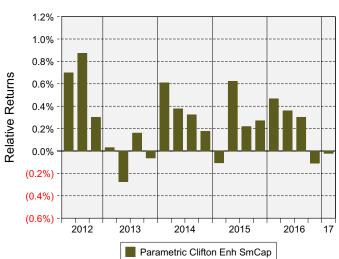
Quarterly Summary and Highlights

- Parametric Clifton Enh SmCap's portfolio posted a 2.44% return for the quarter placing it in the 54 percentile of the CAI Small Capitalization group for the quarter and in the 28 percentile for the last year.
- Parametric Clifton Enh SmCap's portfolio underperformed the Russell 2000 Index by 0.02% for the quarter and outperformed the Russell 2000 Index for the year by 0.63%.

Quarterly Asset Growth		
Beginning Market Value	\$150,903,033	
Net New Investment	\$0	
Investment Gains/(Losses)	\$3,689,201	
Ending Market Value	\$154,592,235	

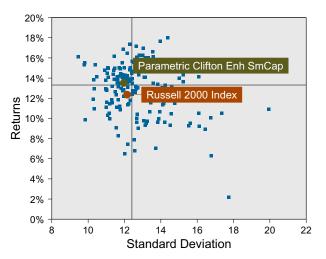






Relative Return vs Russell 2000 Index

CAI Small Capitalization (Gross) Annualized Five Year Risk vs Return



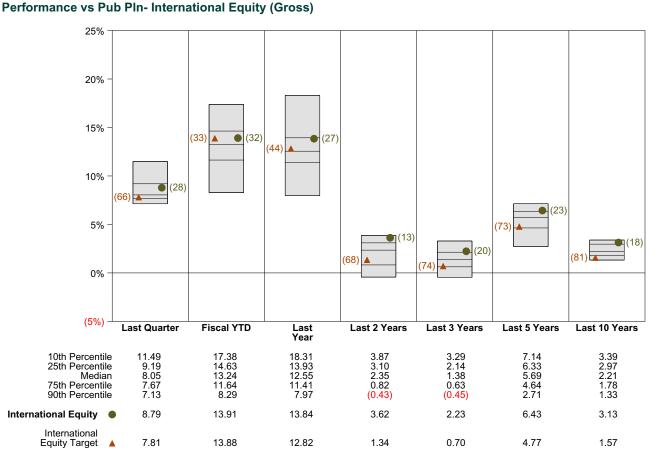
International Equity Period Ended March 31, 2017

Quarterly Summary and Highlights

- International Equity's portfolio posted a 8.79% return for the quarter placing it in the 28 percentile of the Pub Pln-International Equity group for the quarter and in the 27 percentile for the last year.
- International Equity's portfolio outperformed the International Equity Target by 0.98% for the quarter and outperformed the International Equity Target for the year by 1.02%.

Quarterly Asset Growth

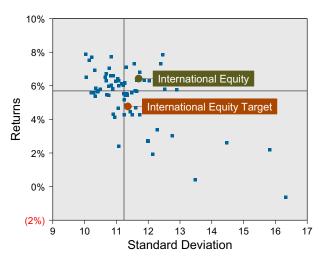
Beginning Market Value	\$737,044,271
Net New Investment	\$-317,184
Investment Gains/(Losses)	\$64,765,958
Ending Market Value	\$801,493,046





Relative Return vs International Equity Target

Pub PIn- International Equity (Gross) Annualized Five Year Risk vs Return



DFA International Small Cap Value Fund Period Ended March 31, 2017

Investment Philosophy

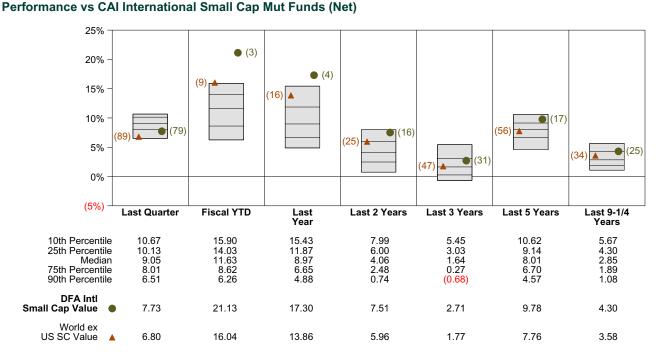
The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

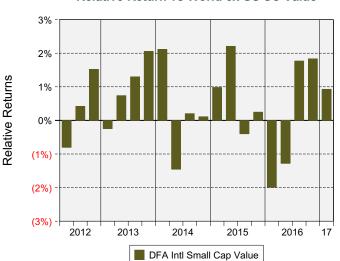
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a 7.73% return for the quarter placing it in the 79 percentile of the CAI International Small Cap Mut Funds group for the quarter and in the 4 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 0.93% for the quarter and outperformed the World ex US SC Value for the year by 3.44%.

Quarterly Asset Growth

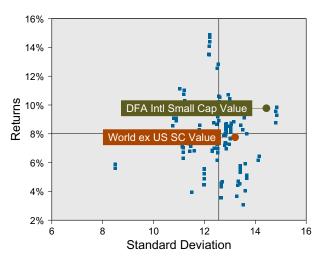
Beginning Market Value	\$80,868,682
Net New Investment	\$0
Investment Gains/(Losses)	\$6,250,103
Ending Market Value	\$87,118,785





Relative Return vs World ex US SC Value

CAI International Small Cap Mut Funds (Net) Annualized Five Year Risk vs Return



Northern Tr AM Wrld ex US Period Ended March 31, 2017

Investment Philosophy

The Fund's objective is to provide investment results that approximate the overall performance of the MSCI World ex-US Equity Index.

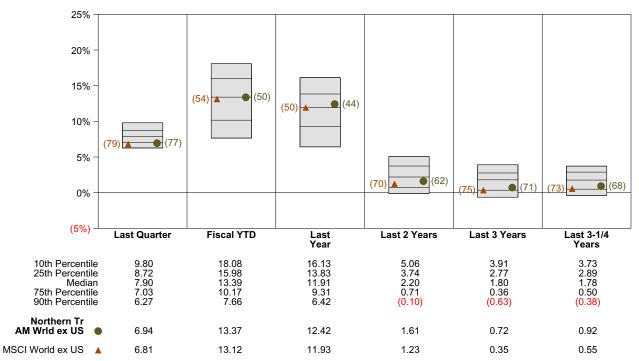
Quarterly Summary and Highlights

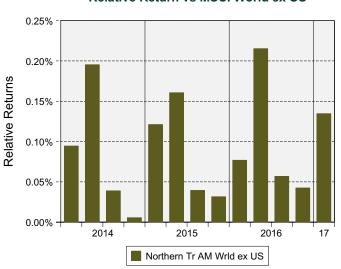
• Northern Tr AM Wrld ex US's portfolio posted a 6.94% return for the quarter placing it in the 77 percentile of the CAI Non-US Equity group for the quarter and in the 44 percentile for the last year.

Quarterly Asset Growth				
Beginning Market Value	\$270,469,791			
Net New Investment	\$-22,853			
Investment Gains/(Losses)	\$18,777,983			
Ending Market Value	\$289,224,921			

 Northern Tr AM Wrld ex US's portfolio outperformed the MSCI World ex US by 0.13% for the quarter and outperformed the MSCI World ex US for the year by 0.49%.

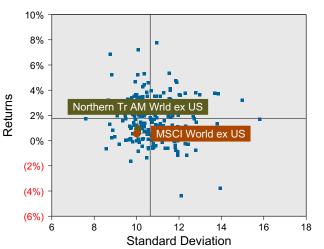






Relative Return vs MSCI World ex US

CAI Non-US Equity (Gross) Annualized Three and One-Quarter Year Risk vs Return



Wellington Management Period Ended March 31, 2017

Investment Philosophy

The International Small Cap Opportunities investment approach is bottom-up focused, and leverages the global research resources at Wellington Management. In implementing purchase decisions, consideration is given to the size, liquidity, and volatility of these prospects. Sell decisions are based on changing fundamentals or valuations, or on finding better opportunities elsewhere. The assets are not hedged.

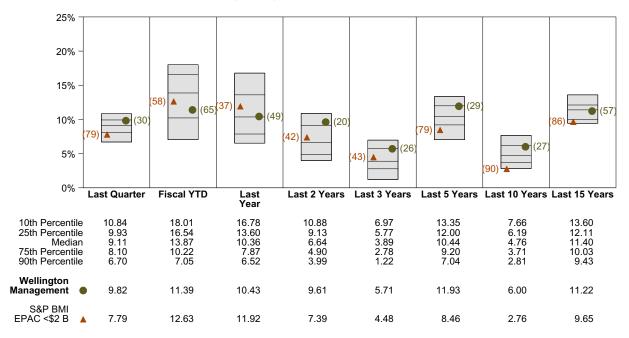
Quarterly Summary and Highlights

- Wellington Management's portfolio posted a 9.82% return for the quarter placing it in the 30 percentile of the CAI International Small Cap group for the quarter and in the 49 percentile for the last year.
- Wellington Management's portfolio outperformed the S&P BMI EPAC <\$2 B by 2.03% for the quarter and underperformed the S&P BMI EPAC <\$2 B for the year by 1.50%.

Quarterly Asset Growth Beginning Market Value \$82,343,938

Net New Investment	\$-172,441
Investment Gains/(Losses)	\$8,074,375
Ending Market Value	\$90,245,871

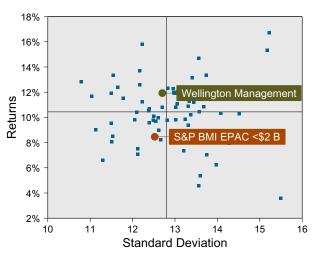






Relative Return vs S&P BMI EPAC <\$2 B

CAI International Small Cap (Gross) Annualized Five Year Risk vs Return



William Blair Period Ended March 31, 2017

Investment Philosophy

One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates the durability and rate of growth in companies that have the following characteristics: strong management with a unique vision, competitive advantages that prolong the duration and size of earnings growth, and conservative financing. Internationally, they believe that this philosophy can be combined with strategic flexibility in managing geographic exposure, capitalization, sector emphasis, and relative growth and valuation at the portfolio level in order to provide an appropriate degree of adaptability to cyclical conditions.

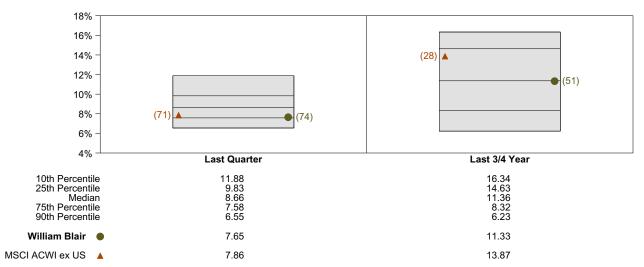
Quarterly Summary and Highlights

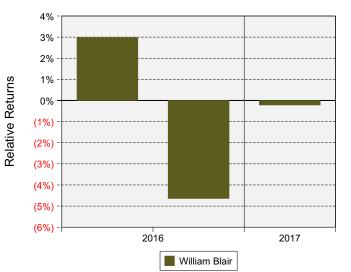
- William Blair's portfolio posted a 7.65% return for the quarter placing it in the 74 percentile of the CAI Non-US All Country Growth Equity group for the quarter and in the 51 percentile for the last three-quarter year.
- William Blair's portfolio underperformed the MSCI ACWI ex US by 0.21% for the quarter and underperformed the MSCI ACWI ex US for the three-quarter year by 2.54%.

Quarte	rly /	Asset	Growth
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Beginning Market Value	\$126,040,433
Net New Investment	\$-121,890
Investment Gains/(Losses)	\$9,633,253
Ending Market Value	\$135,551,796

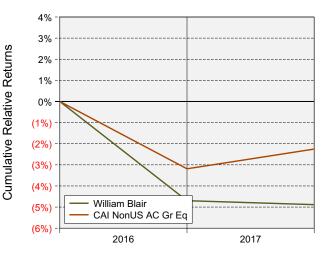
Performance vs CAI Non-US All Country Growth Equity (Gross)





Relative Return vs MSCI ACWI ex US

Cumulative Returns vs MSCI ACWI ex US



Axiom Emerging Markets Period Ended March 31, 2017

Investment Philosophy

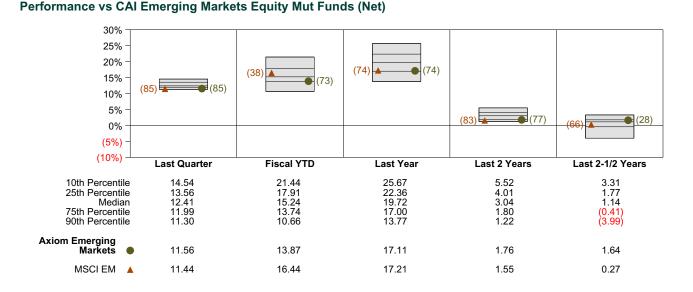
The Emerging Markets Equity strategy seeks to invest in emerging market securities issued by companies whose key business drivers are both improving and exceeding expectations, as determined by Axiom's stock selection techniques focused on fundamental company analysis. The strategy considers companies either (i) located in countries that are not included in the MSCI Developed Markets Index series or (ii) that derive a majority of their revenues or assets from a country or countries not included in the MSCI Developed Markets Index series or (ii) that derive series, in each case at the time of investment. Although the Manager generally expects the strategy's investment portfolio to be geographically diverse, there are no prescribed limits on geographic distribution of the strategy's investments and the strategy has the authority to invest in securities traded in securities markets or any country in the world.

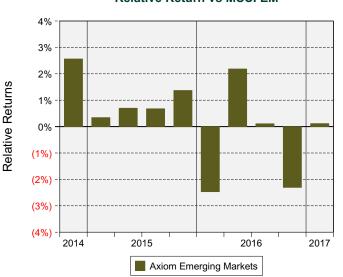
Quarterly Summary and Highlights

- Axiom Emerging Markets's portfolio posted a 11.56% return for the quarter placing it in the 85 percentile of the CAI Emerging Markets Equity Mut Funds group for the quarter and in the 74 percentile for the last year.
- Axiom Emerging Markets's portfolio outperformed the MSCI EM by 0.11% for the quarter and underperformed the MSCI EM for the year by 0.10%.

Quarterly	Asset (Growth
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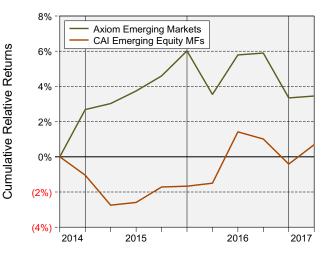
Beginning Market Value	\$130,393,959
Net New Investment	\$0
Investment Gains/(Losses)	\$15,073,342
Ending Market Value	\$145,467,301





Relative Return vs MSCI EM

Cumulative Returns vs MSCI EM



DFA Emerging Markets Period Ended March 31, 2017

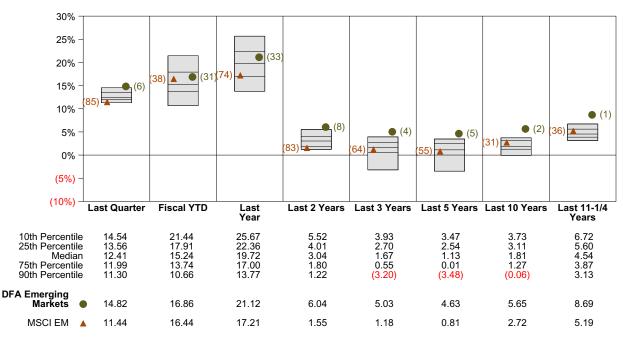
Investment Philosophy

The Emerging Markets Small Cap Portfolio invests in small cap emerging markets companies. Presently, this means investment in companies whose market capitalization is less than \$2.3 billion at the time of purchase. Dimensional considers, among other things, information disseminated by the International Finance Corporation in determining and approving emerging market countries.

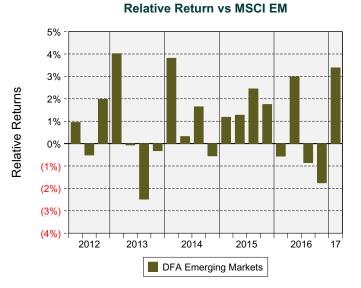
Quarterly Summary and Highlights

- DFA Emerging Markets's portfolio posted a 14.82% return for the quarter placing it in the 6 percentile of the CAI Emerging Markets Equity Mut Funds group for the quarter and in the 33 percentile for the last year.
- DFA Emerging Markets's portfolio outperformed the MSCI EM by 3.38% for the quarter and outperformed the MSCI EM for the year by 3.91%.

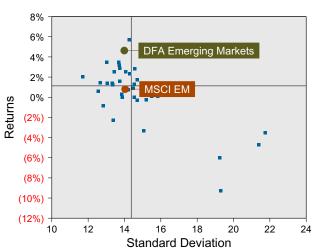
Quarterly Asset Growth			
Beginning Market Value	\$46,927,469		
Net New Investment	\$0		
Investment Gains/(Losses)	\$6,956,902		
Ending Market Value	\$53,884,372		



Performance vs CAI Emerging Markets Equity Mut Funds (Net)



CAI Emerging Markets Equity Mut Funds (Net) Annualized Five Year Risk vs Return



EPOCH Investment Period Ended March 31, 2017

Investment Philosophy

Epoch seeks to produce superior risk adjusted returns by building portfolios of businesses with outstanding risk/reward profiles without running a high degree of capital risk. They analyze businesses in the same manner private investors would in looking to purchase the entire company. The strategy only invests in businesses that are understood and where they have confidence in the financial statements. They seek businesses that generate "free cash flow" and securities that have unrecognized potential yet possess a combination of above average yield, above average free cash flow growth, and/or below average valuation. Global Choice is a "best ideas" portfolio at Epoch with every stock held in other strategies managed by the firm. The EPOCH Blended Benchmark consists of the S&P 500 Index through 12/31/2011 and the MSCI World Index thereafter.

Quarterly Summary and Highlights

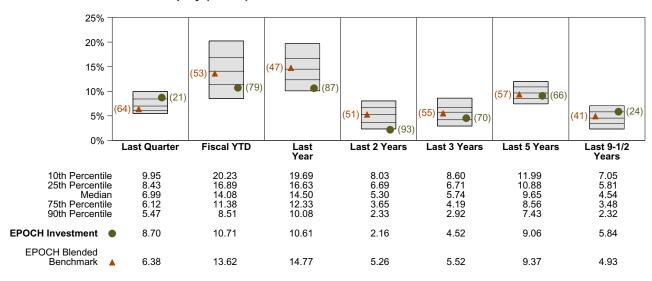
Performance vs CAI Global Equity (Gross)

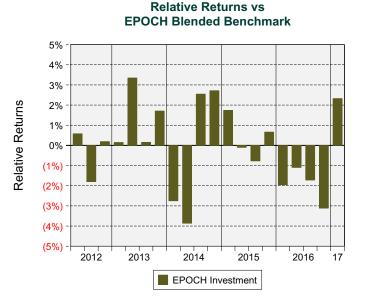
- EPOCH Investment's portfolio posted a 8.70% return for the quarter placing it in the 21 percentile of the CAI Global Equity group for the quarter and in the 87 percentile for the last year.
- EPOCH Investment's portfolio outperformed the EPOCH Blended Benchmark by 2.33% for the quarter and underperformed the EPOCH Blended Benchmark for the year by 4.15%.

Quarterly Asset Growth			
Beginning Market Value	\$343,672,784		
Net New Investment	\$-551,836		
Investment Gains/(Losses)	\$29,869,318		

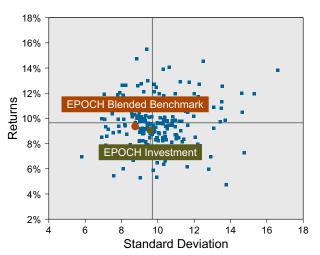
\$372,990,266

Ending Market Value





CAI Global Equity (Gross) Annualized Five Year Risk vs Return



LSV Asset Management Period Ended March 31, 2017

Investment Philosophy

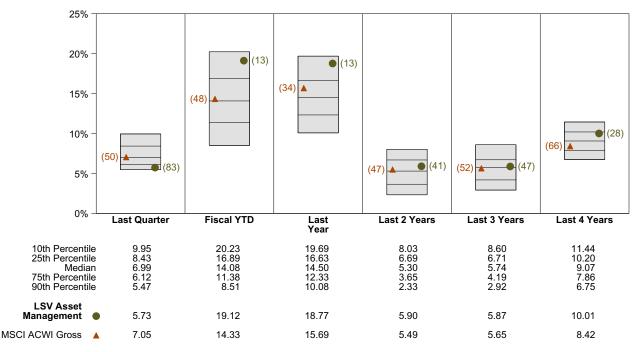
The Global Value (ACWI) Equity strategy is managed using quantitative techniques to select individual securities in a risk-controlled, bottom-up approach. Value factors and security selection dominate sector/industry factors as explanators of performance.

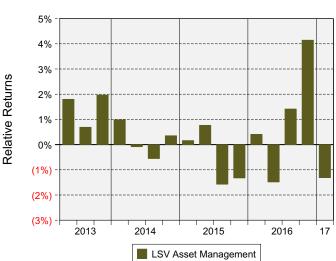
Quarterly Summary and Highlights

- LSV Asset Management's portfolio posted a 5.73% return for the quarter placing it in the 83 percentile of the CAI Global Equity group for the quarter and in the 13 percentile for the last year.
- LSV Asset Management's portfolio underperformed the MSCI ACWI Gross by 1.31% for the quarter and outperformed the MSCI ACWI Gross for the year by 3.08%.

Quarterly Asset Growth			
Beginning Market Value	\$482,297,329		
Net New Investment	\$-33,120,924		
Investment Gains/(Losses)	\$27,076,697		
Ending Market Value	\$476,253,103		

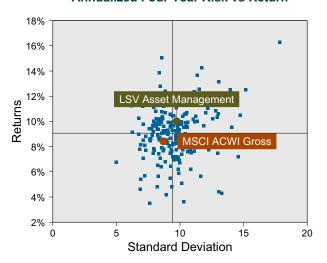
Performance vs CAI Global Equity (Gross)





Relative Return vs MSCI ACWI Gross

CAI Global Equity (Gross) Annualized Four Year Risk vs Return



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

			Last	Last	Last
	Last	Last	3	5	16-1/4
	Quarter	Year	Years	Years	Years
Private Equity	(1.19%)	3.29%	(3.06%)	1.37%	1.94%
Adams Street Direct Co-Invest Fd	(9.94%)	(1.66%)	12.38%	12.32%	-
Adams Street Direct Fd 2010	(2.88%)	(3.48%)	10.21%	10.64%	-
Adams Street 1998 Partnership	(0.44%)	(0.83%)	1.22%	4.03%	1.64%
Adams Street 1999 Partnership	(2.15%)	(2.01%)	(3.13%)	2.68%	2.56%
Adams Street 2000 Partnership	(0.50%)	(3.39%)	(3.45%)	0.61%	3.08%
Adams Street 2001 Partnership	(3.53%)	(3.95%)	(0.13%)	5.32%	3.49%
Adams Street 2002 Partnership	0.04%	22.33%	2.62%	6.79%	-
Adams Street 2003 Partnership	(1.10%)	1.34%	8.31%	10.64%	-
Adams Street 2010 Partnership	1.70%	10.44%	13.45%	12.93%	-
Adams Street 2008 Fund	0.01%	6.32%	10.00%	10.67%	-
Adams Street 1999 Non-US	(2.30%)	(0.89%)	(1.17%)	3.12%	6.08%
Adams Street 2000 Non-US	4.25%	6.05%	(0.90%)	(0.74%)	2.90%
Adams Street 2001 Non-US	(0.88%)	(17.88%)	9.49%	14.00%	-
Adams Street 2002 Non-US	(4.49%)	(6.83%)	5.42%	4.13%	-
Adams Street 2003 Non-US	11.46%	25.79%	13.46%	17.68%	-
Adams Street 2004 Non-US	(4.88%)	(2.88%)	2.39%	4.76%	-
Adams Street 2010 Non-US	1.53%	11.10%	7.00%	8.08%	-
Adams Street 2010 NonUS Emg	0.60%	4.81%	12.72%	5.08%	-
Adams Street 2015 Global Fd	12.14%	36.84%	-	-	-
Adams Street 2016 Global Fd	41.27%	-	-	-	-
Adams Street BVCF IV Fund	(0.01%)	2.89%	16.30%	22.81%	17.90%
Capital International V	(8.92%)	(18.28%)	(20.20%)	(12.38%)	-
Capital International VI	(0.82%)	14.23%	(7.55%)	(8.40%)	-
CorsAir III	(2.61%)	2.69%	6.72%	2.66%	-
CorsAir IV	2.94%	16.61%	16.18%	13.53%	-
EIG Energy Fund XIV	12.39%	(32.10%)	(37.98%)	(25.91%)	-
Lewis & Clark	0.00%	(51.19%)	(35.55%)	(19.69%)	-
Lewis & Clark II	2.64%	4.56%	(5.96%)	(5.07%)	-
Matlin Patterson II	(20.08%)	(25.86%)	0.23%	(11.14%)	-
Matlin Patterson III	(0.93%)	5.02%	(3.81%)	10.15%	-
Quantum Energy Partners	0.00%	(5.58%)	(8.36%)	3.61%	-
Russell 1000 Index	6.03%	17.43%	9.99%	13.26%	5.95%
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	8.13%

Domestic Fixed Income Period Ended March 31, 2017

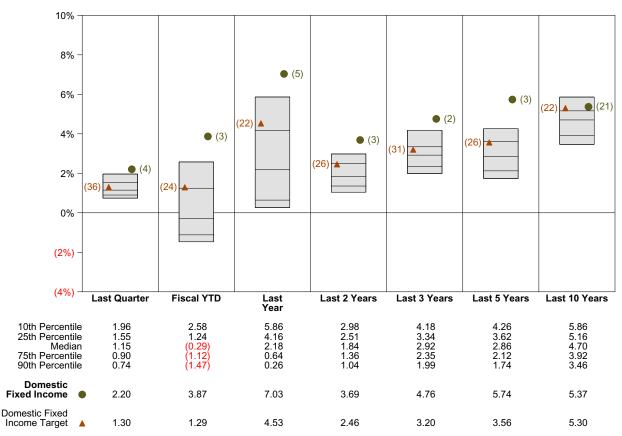
Quarterly Summary and Highlights

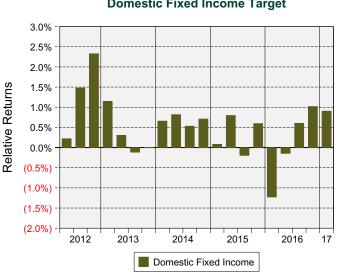
- Domestic Fixed Income's portfolio posted a 2.20% return for the quarter placing it in the 4 percentile of the Pub Pln-Domestic Fixed group for the quarter and in the 5 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Income Target by 0.90% for the quarter and outperformed the Domestic Fixed Income Target for the year by 2.50%.

Performance vs Pub Pln- Domestic Fixed (Gross)

Quarterly Asset Growth

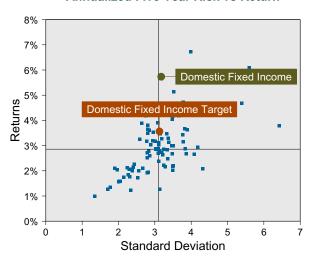
Beginning Market Value	\$857,357,432
Net New Investment	\$60,716,020
Investment Gains/(Losses)	\$19,264,347
Ending Market Value	\$937,337,798





Relative Returns vs Domestic Fixed Income Target

Pub Pln- Domestic Fixed (Gross) Annualized Five Year Risk vs Return



Declaration Total Return Period Ended March 31, 2017

Investment Philosophy

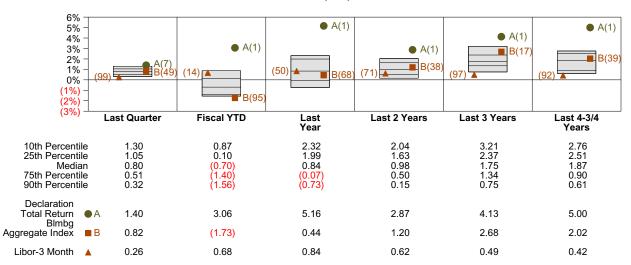
The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 1.40% return for the quarter placing it in the 7 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.14% for the quarter and outperformed the Libor-3 Month for the year by 4.32%.

Beginning Market Value	\$87,951,963
Net New Investment	\$-63,941
Investment Gains/(Losses)	\$1,226,833
Ending Market Value	\$89,114,855

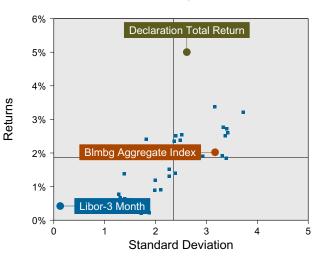






Relative Return vs Libor-3 Month

CAI Intermediate Fixed Income Mut Funds (Net) Annualized Four and Three-Quarter Year Risk vs Return



J.P. Morgan MBS Period Ended March 31, 2017

Investment Philosophy

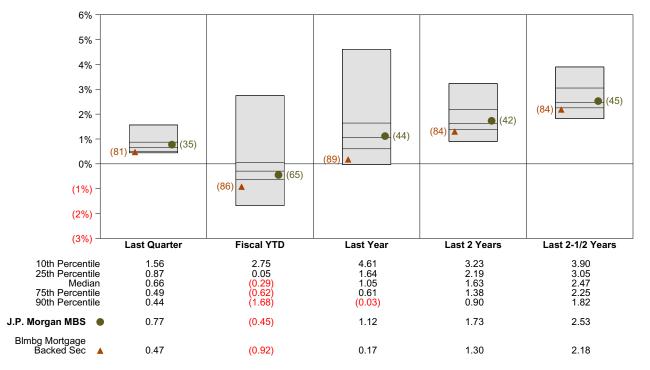
JP Morgan seeks to outperform the benchmark over longer horizons regardless of the market environment.

Quarterly Summary and Highlights

- J.P. Morgan MBS's portfolio posted a 0.77% return for the quarter placing it in the 35 percentile of the CAI Mortgage Backed Fixed Income group for the quarter and in the 44 percentile for the last year.
- J.P. Morgan MBS's portfolio outperformed the BImbg Mortgage Backed Sec by 0.30% for the quarter and outperformed the BImbg Mortgage Backed Sec for the year by 0.94%.

Quarterly Asset Growth		
Beginning Market Value	\$121,248,064	
Net New Investment	\$7,436,243	
Investment Gains/(Losses)	\$944,064	
Ending Market Value	\$129,628,371	

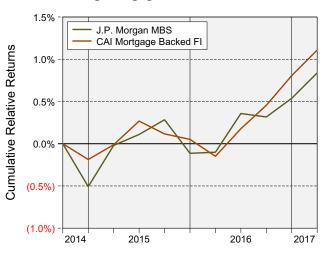
Performance vs CAI Mortgage Backed Fixed Income (Gross)





Relative Returns vs Blmbg Mortgage Backed Sec

Cumulative Returns vs Blmbg Mortgage Backed Sec



PIMCO DiSCO II Period Ended March 31, 2017

Investment Philosophy

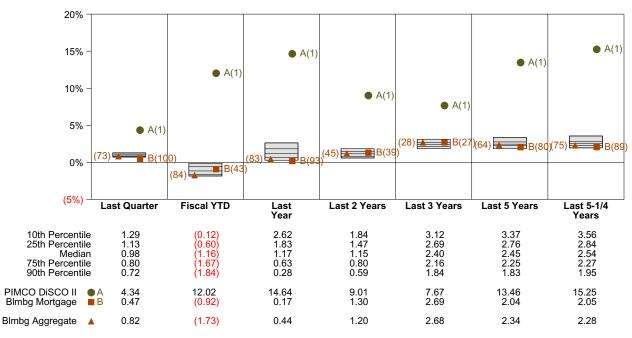
The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

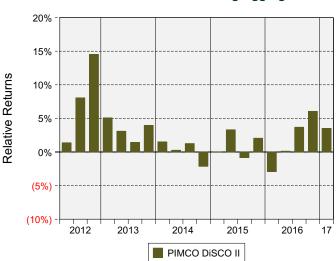
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 4.34% return for the quarter placing it in the 1 percentile of the CAI Core Bond Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Blmbg Aggregate by 3.52% for the quarter and outperformed the Blmbg Aggregate for the year by 14.20%.

Quarterly Asset Growth		
Beginning Market Value	\$98,464,369	
Net New Investment	\$0	
Investment Gains/(Losses)	\$4,271,673	
Ending Market Value	\$102,736,042	

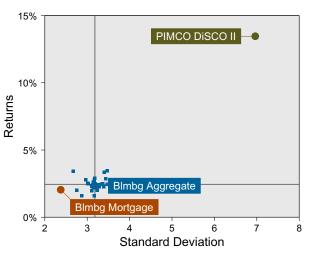






Relative Return vs Blmbg Aggregate

CAI Core Bond Mutual Funds (Net) Annualized Five Year Risk vs Return



PIMCO MBS Period Ended March 31, 2017

Investment Philosophy

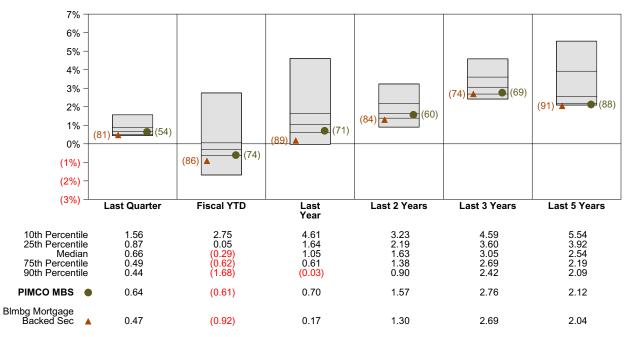
The PIMCO Mortgage-Backed Securities Strategy is an actively managed bond portfolio that invests in high quality, short to intermediate duration mortgage-backed securities. The fund invests primarily in securities that are highly rated, such as US Government guaranteed Ginnie Mae securities and Agency-guaranteed Fannie Mae and Freddie Mac mortgage-backed securities.

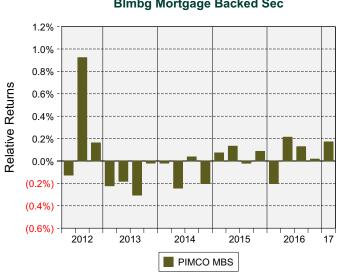
Quarterly Summary and Highlights

- PIMCO MBS's portfolio posted a 0.64% return for the quarter placing it in the 54 percentile of the CAI Mortgage Backed Fixed Income group for the quarter and in the 71 percentile for the last year.
- PIMCO MBS's portfolio outperformed the BImbg Mortgage Backed Sec by 0.17% for the quarter and outperformed the BImbg Mortgage Backed Sec for the year by 0.53%.

Quarterly Asset Growth		
Beginning Market Value	\$180,755,902	
Net New Investment	\$-75,511	
Investment Gains/(Losses)	\$1,163,083	
Ending Market Value	\$181,843,474	

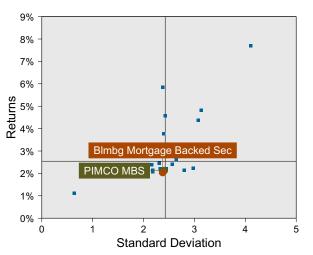






Relative Returns vs Blmbg Mortgage Backed Sec





PIMCO Unconstrained Period Ended March 31, 2017

Investment Philosophy

The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that leverages PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy focuses on long-term economic, social and political trends. Over shorter cyclical time frames, the unconstrained nature of the strategy allows PIMCO to take on more risk when tactical opportunities are identified, and it allows for reduction and diversification of risk at times when the outlook may be more challenging for traditional fixed income benchmarks. The product changed from Commingled Fund to Separate Account in March 2014. *Libor-3 month through February 28, 2014; Fund's performance through March 31, 2014; Libor-3 month thereafter.

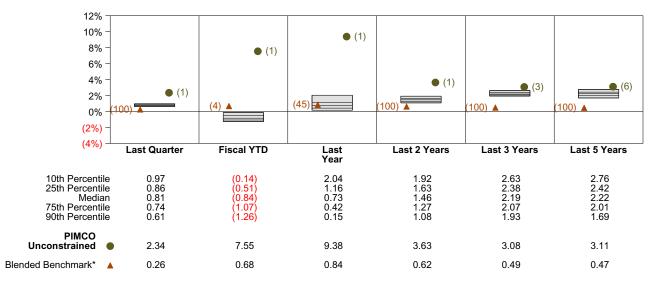
Quarterly Summary and Highlights

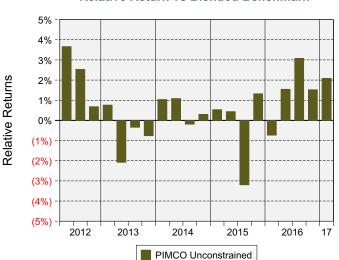
- PIMCO Unconstrained's portfolio posted a 2.34% return for the quarter placing it in the 1 percentile of the CAI Intermediate Fixed Income group for the quarter and in the 1 percentile for the last year.
- PIMCO Unconstrained's portfolio outperformed the Blended Benchmark* by 2.09% for the quarter and outperformed the Blended Benchmark* for the year by 8.54%.

Quarterly Asset Growth

Beginning Market Value	\$64,666,853
Net New Investment	\$-72,333
Investment Gains/(Losses)	\$1,515,489
Ending Market Value	\$66,110,009

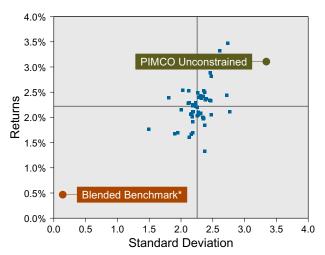
Performance vs CAI Intermediate Fixed Income (Gross)





Relative Return vs Blended Benchmark*

CAI Intermediate Fixed Income (Gross) Annualized Five Year Risk vs Return



SSgA Long US Treas Index Period Ended March 31, 2017

Investment Philosophy

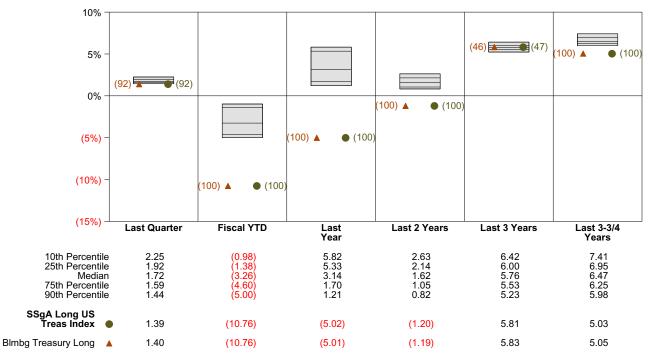
The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Long Treasury Bond Index over the long term.

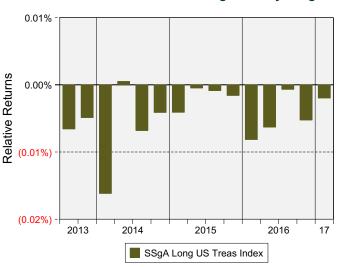
Quarterly Summary and Highlights

- SSgA Long US Treas Index's portfolio posted a 1.39% return for the quarter placing it in the 92 percentile of the CAI Extended Maturity Fixed Income group for the quarter and in the 100 percentile for the last year.
- SSgA Long US Treas Index's portfolio underperformed the Blmbg Treasury Long by 0.00% for the quarter and underperformed the Blmbg Treasury Long for the year by 0.01%.

Quarterly Asset Growth		
Beginning Market Value	\$62,523,069	
Net New Investment	\$49,993,112	
Investment Gains/(Losses)	\$1,173,544	
Ending Market Value	\$113,689,725	

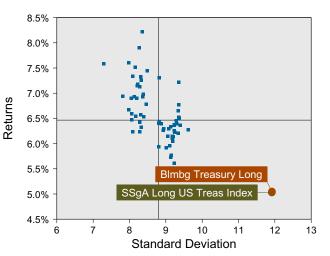
Performance vs CAI Extended Maturity Fixed Income (Gross)





Relative Return vs Blmbg Treasury Long

CAI Extended Maturity Fixed Income (Gross) Annualized Three and Three-Quarter Year Risk vs Return



Goldman Sachs 2006 Offshore Period Ended March 31, 2017

Investment Philosophy

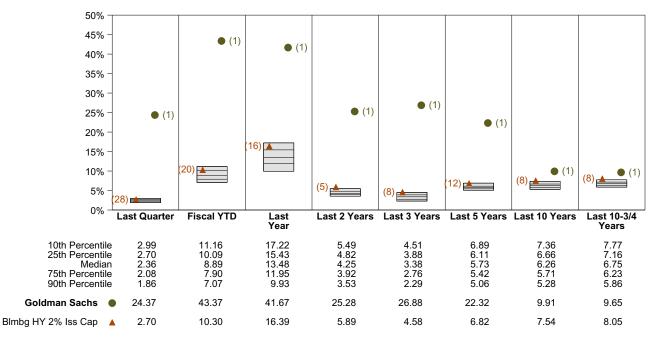
GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers.

Quarterly Summary and Highlights

- Goldman Sachs's portfolio posted a 24.37% return for the quarter placing it in the 1 percentile of the CAI High Yield Mutual Funds group for the quarter and in the 1 percentile for the last year.
- Goldman Sachs's portfolio outperformed the Blmbg HY 2% Iss Cap by 21.67% for the quarter and outperformed the Blmbg HY 2% Iss Cap for the year by 25.29%.

Quarterly Asset Growth		
Beginning Market Value	\$288,019	
Net New Investment	\$-14,136	
Investment Gains/(Losses)	\$68,672	
Ending Market Value	\$342,555	

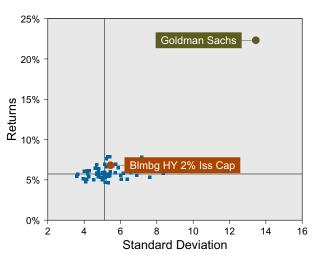






Relative Return vs Blmbg HY 2% lss Cap

CAI High Yield Mutual Funds (Net) Annualized Five Year Risk vs Return



Goldman Sachs Offshore Fund V Period Ended March 31, 2017

Investment Philosophy

GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers.

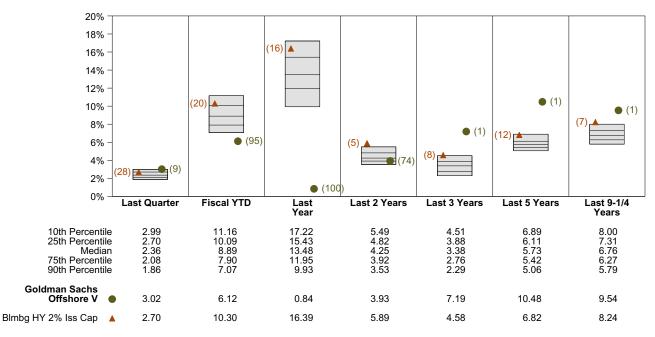
Quarterly Summary and Highlights

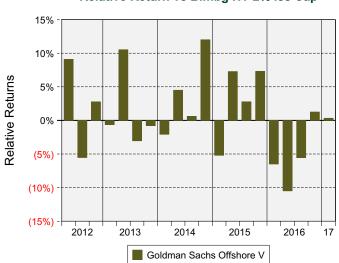
- Goldman Sachs Offshore V's portfolio posted a 3.02% return for the quarter placing it in the 9 percentile of the CAI High Yield Mutual Funds group for the quarter and in the 100 percentile for the last year.
- Goldman Sachs Offshore V's portfolio outperformed the Blmbg HY 2% Iss Cap by 0.32% for the quarter and underperformed the Blmbg HY 2% Iss Cap for the year by 15.54%.

Quarterly Asset Growth

Beginning Market Value	\$2,663,755
Net New Investment	\$0
Investment Gains/(Losses)	\$80,391
Ending Market Value	\$2,744,146

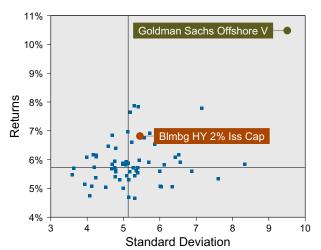






Relative Return vs Blmbg HY 2% lss Cap

CAI High Yield Mutual Funds (Net) Annualized Five Year Risk vs Return



Loomis Sayles Period Ended March 31, 2017

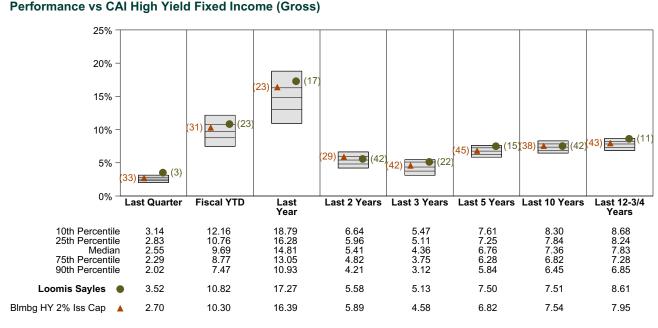
Investment Philosophy

The High Yield Full Discretion Strategy seeks to identify attractive sectors and specific investment opportunities primarily within the global fixed income market through a global economic and interest rate framework. Portfolio managers incorporate a long-term macroeconomic view along with a stringent bottom-up investment evaluation process that drives security selection and resulting sector allocations. Opportunistic investments in non-benchmark sectors including investment grade corporate, emerging market, and non-US dollar debt and convertible bonds help to manage overall portfolio risk and enhance total return potential.

Quarterly Summary and Highlights

- Loomis Sayles's portfolio posted a 3.52% return for the quarter placing it in the 3 percentile of the CAI High Yield Fixed Income group for the quarter and in the 17 percentile for the last year.
- Loomis Sayles's portfolio outperformed the Blmbg HY 2% Iss Cap by 0.82% for the quarter and outperformed the Blmbg HY 2% Iss Cap for the year by 0.89%.

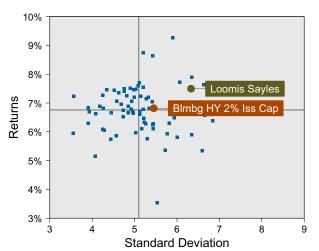
Beginning Market Value	\$189,924,447
Net New Investment	\$-237,413
Investment Gains/(Losses)	\$6,672,271
Ending Market Value	\$196,359,304



2.5% 2.0% 1.5% **Relative Returns** 1.0% 0.5% 0.0% (0.5%) (1.0%) (1.5%) (2.0%)2012 2013 2014 2015 2016 17 Loomis Sayles

Relative Return vs Blmbg HY 2% lss Cap

CAI High Yield Fixed Income (Gross) Annualized Five Year Risk vs Return



PIMCO Bravo II Fund Period Ended March 31, 2017

Investment Philosophy

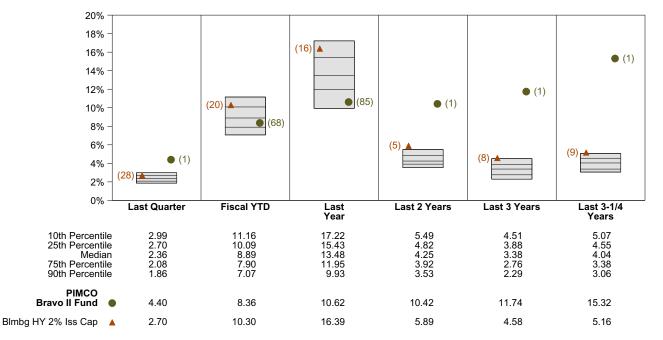
The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 4.40% return for the quarter placing it in the 1 percentile of the CAI High Yield Mutual Funds group for the quarter and in the 85 percentile for the last year.
- PIMCO Bravo II Fund's portfolio outperformed the Blmbg HY 2% Iss Cap by 1.70% for the quarter and underperformed the Blmbg HY 2% Iss Cap for the year by 5.77%.

Quarterly Asset Growth		
Beginning Market Value	\$48,870,991	
Net New Investment	\$3,750,000	
Investment Gains/(Losses)	\$2,148,327	
Ending Market Value	\$54,769,318	

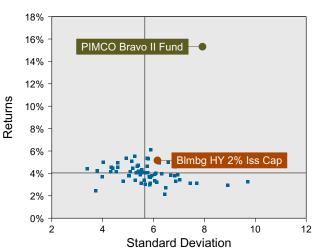






Relative Return vs Blmbg HY 2% lss Cap

CAI High Yield Mutual Funds (Net) Annualized Three and One-Quarter Year Risk vs Return



International Fixed Income Period Ended March 31, 2017

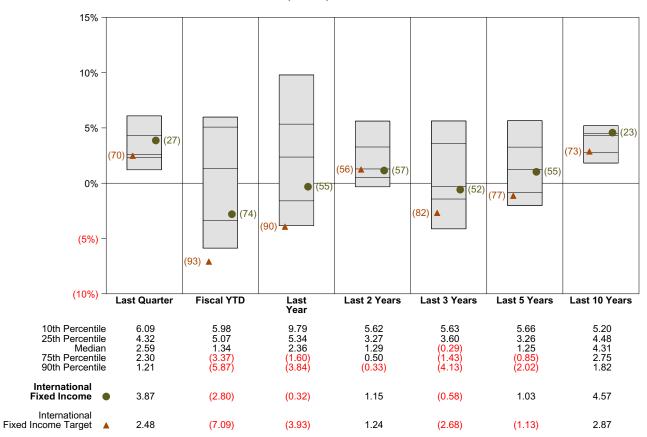
Quarterly Summary and Highlights

- International Fixed Income's portfolio posted a 3.87% return for the guarter placing it in the 27 percentile of the Public Fund - International Fixed group for the quarter and in the 55 percentile for the last year.
- International Fixed Income's portfolio outperformed the ۰ International Fixed Income Target by 1.38% for the quarter and outperformed the International Fixed Income Target for the year by 3.61%.

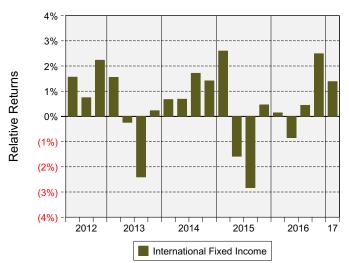
Performance vs Public Fund - International Fixed (Gross)

Quarterly Asset Growth

Beginning Market Value	\$240,742,980
Net New Investment	\$-223,837
Investment Gains/(Losses)	\$9,301,372
Ending Market Value	\$249,820,515

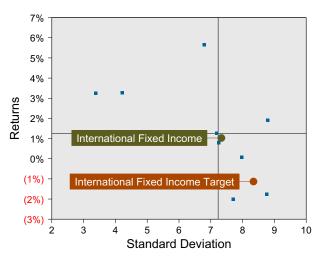






Relative Returns vs

Public Fund - International Fixed (Gross) Annualized Five Year Risk vs Return



Brandywine Asset Management Period Ended March 31, 2017

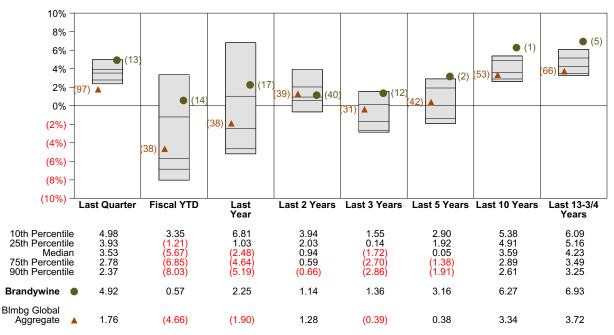
Investment Philosophy

Brandywine engages in a disciplined, active, value-driven, strategic approach. Their investment strategy concentrates on top-down analysis of macro-economic conditions in order to determine where the most attractive valuations exist. Specifically, they invest in bonds with the highest real yields globally. They manage currency to protect principal and increase returns, patiently rotated among countries and attempt to control risk by purchasing undervalued securities.

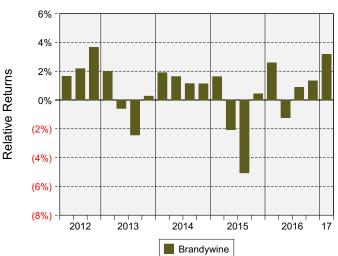
Quarterly Summary and Highlights

- Brandywine's portfolio posted a 4.92% return for the quarter placing it in the 13 percentile of the CAI Non US Fixed Income (Unhedged) group for the quarter and in the 17 percentile for the last year.
- Brandywine's portfolio outperformed the Blmbg Global Aggregate by 3.16% for the quarter and outperformed the Blmbg Global Aggregate for the year by 4.16%.

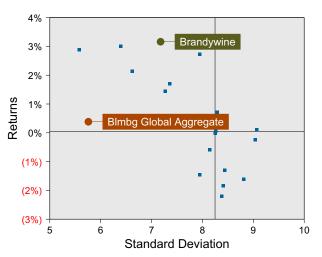
Quarterly Asset Growth				
Beginning Market Value \$140,965,008				
Net New Investment	\$-134,946			
Investment Gains/(Losses)	\$6,934,687			
Ending Market Value \$147,764,749				







CAI Non US Fixed Income (Unhedged) (Gross) Annualized Five Year Risk vs Return



Performance vs CAI Non US Fixed Income (Unhedged) (Gross)

UBS Global Asset Management Period Ended March 31, 2017

Investment Philosophy

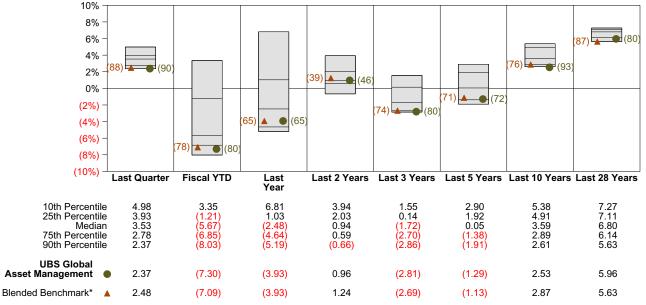
UBS Global Asset Management's non-US fixed income portfolio's assets are invested in emerging markets debt on an opportunistic basis up to the stated maximum allocation of 5%. The account's non-US fixed income assets will be fully-invested at all times, but such assets may be invested in the UBS US Cash Management Prime Collective Fund for operational and risk management purposes. *Citigroup Non-US Govt Index through 12/31/2009; Bloomberg Aggregate ex-US Index thereafter.

Quarterly Summary and Highlights

- UBS Global Asset Management's portfolio posted a 2.37% return for the quarter placing it in the 90 percentile of the CAI Non US Fixed Income (Unhedged) group for the quarter and in the 65 percentile for the last year.
- UBS Global Asset Management's portfolio underperformed ٠ the Blended Benchmark* by 0.11% for the guarter and outperformed the Blended Benchmark* for the year by 0.00%.

Quarterly Asset Growth				
Beginning Market Value \$99,777,972				
Net New Investment \$-88,892				
Investment Gains/(Losses) \$2,366,686				
Ending Market Value \$102,055,766				

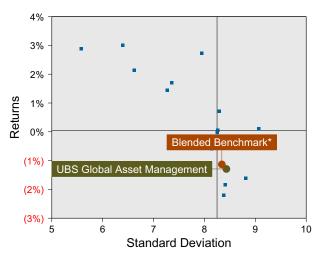






Relative Return vs Blended Benchmark*

CAI Non US Fixed Income (Unhedged) (Gross) Annualized Five Year Risk vs Return



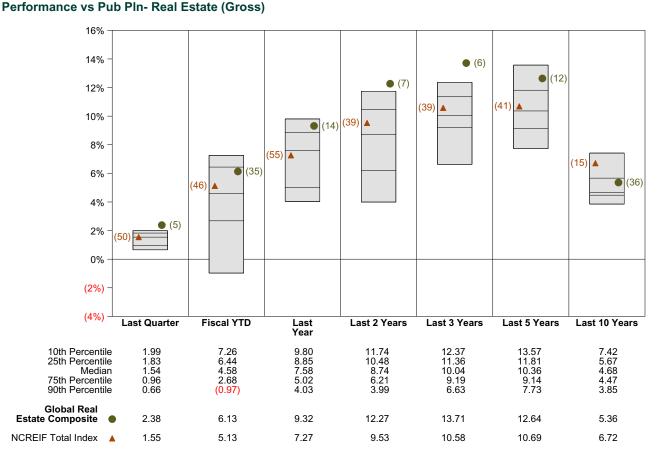
Global Real Estate Composite Period Ended March 31, 2017

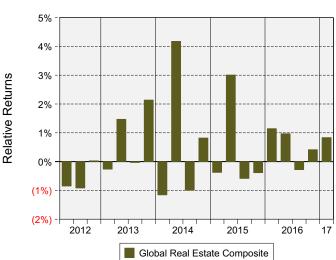
Quarterly Summary and Highlights

- Global Real Estate Composite's portfolio posted a 2.38% return for the quarter placing it in the 5 percentile of the Pub Pln- Real Estate group for the quarter and in the 14 percentile for the last year.
- Global Real Estate Composite's portfolio outperformed the NCREIF Total Index by 0.83% for the quarter and outperformed the NCREIF Total Index for the year by 2.05%.

Quarterly Asset Growth

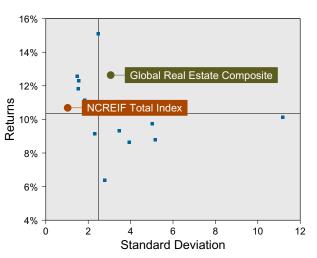
Beginning Market Value	\$545,176,463
Net New Investment	\$-9,689,404
Investment Gains/(Losses)	\$12,835,168
Ending Market Value	\$548,322,227





Relative Return vs NCREIF Total Index

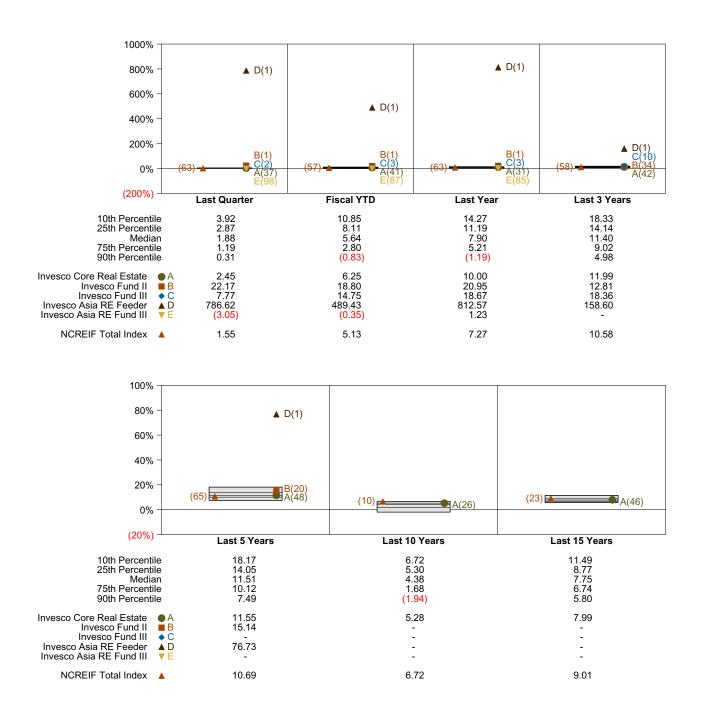
Pub PIn- Real Estate (Gross) Annualized Five Year Risk vs Return



North Dakota State Investment Board Pension Funds Performance vs CAI Total Real Estate Database Periods Ended March 31, 2017

Return Ranking

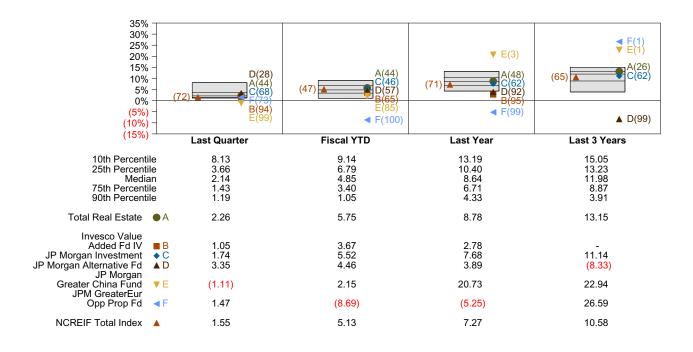
The chart below illustrates fund rankings over various periods versus the CAI Total Real Estate Database. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Total Real Estate Database. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



North Dakota State Investment Board Pension Funds Performance vs CAI Total Real Estate Database Periods Ended March 31, 2017

Return Ranking

The chart below illustrates fund rankings over various periods versus the CAI Total Real Estate Database. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the CAI Total Real Estate Database. The numbers to the right of the bar represent the percentile rankings of the funds being analyzed. The table below the chart details the rates of return plotted in the graph above.



25% 20% 15% 10% (5%) (10%) (15%) (20%)		(74)	(17) ▲ C(65) A(73) ▲ D(98)	(15) ▲ C(85) ● A(96)
(25%)		Last 5 Years	Last 10 Years	Last 15 Years
10th Percenti 25th Percenti Media 75th Percenti 90th Percenti	le an le	16.85 13.97 12.12 10.52 6.27	7.04 5.86 5.56 3.68 3.06	9.66 8.79 8.48 8.16 6.49
Total Real Estate	ΦA	11.84	3.75	4.35
Invesco Value Added Fd IV JP Morgan Investment JP Morgan Alternative Fd JP Morgan Greater China Fund JPM GreaterEur Opp Prop Fd	■ B ● C ▲ D ▼ E ■ F	11.96 (2.07) 15.64 (20.00)	4.90 (5.27)	7.91 - - -
NCREIF Total Index	•	10.69	6.72	9.01



TIR Teredo Period Ended March 31, 2017

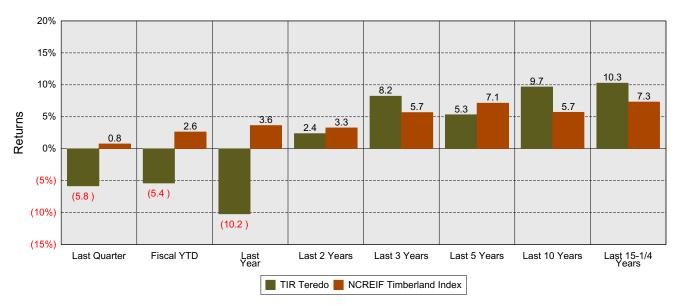
Investment Philosophy

Teredo Timber LLC - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate growth through the diameter class distribution. Periodic cash flows are produced from thinning and final harvests of the individual timber stands.

Quarterly Summary and Highlights

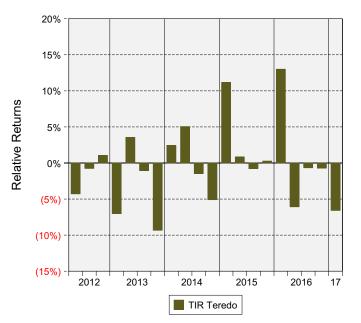
 TIR Teredo's portfolio underperformed the NCREIF Timberland Index by 6.58% for the quarter and underperformed the NCREIF Timberland Index for the year by 13.84%.

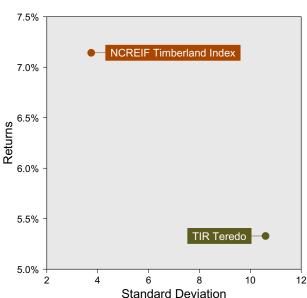
Quarterly Asset Growth				
Beginning Market Value \$33,981,216				
Net New Investment	\$0			
Investment Gains/(Losses)	\$-1,977,123			
Ending Market Value \$32,004,093				



Relative Return vs NCREIF Timberland Index







TIR Springbank Period Ended March 31, 2017

Investment Philosophy

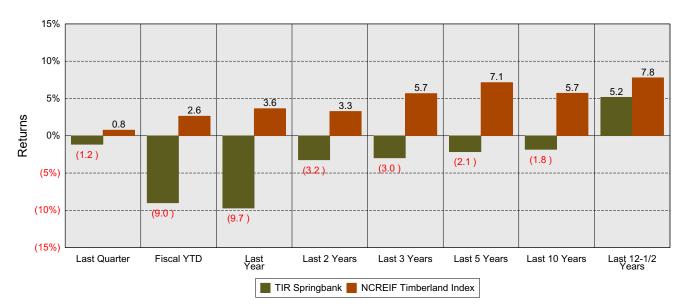
Springbank LLC - The investment objective of Springbank is to maximize long-term investment potential by means of the formation of a dedicated land management group, intensive timber management to increase timber production, the coordination of timber harvesting with land management activities and direct marketing and selective real estate partnerships.

Quarterly Summary and Highlights

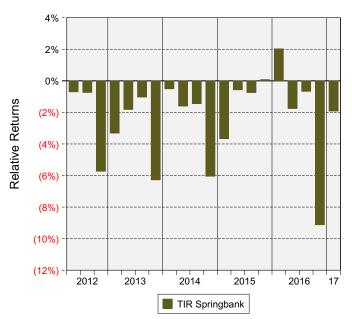
 TIR Springbank's portfolio underperformed the NCREIF Timberland Index by 1.92% for the quarter and underperformed the NCREIF Timberland Index for the year by 13.35%.

Quarterly Asset Growth

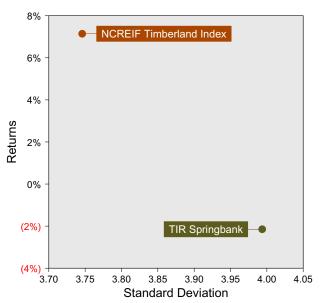
Beginning Market Value	\$108,910,258
Net New Investment	\$0
Investment Gains/(Losses)	\$-1,254,834
Ending Market Value	\$107,655,424



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



JP Morgan Asian Infrastructure Period Ended March 31, 2017

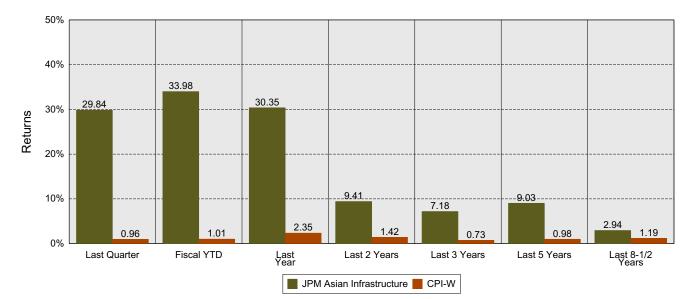
Investment Philosophy

The JPMorgan Asian Infrastructure & Related Resources Opportunity ("AIRRO") Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional and renewable sources, communications, water and waste-water, public works, urban development and other "social" infrastructure assets and related resources.

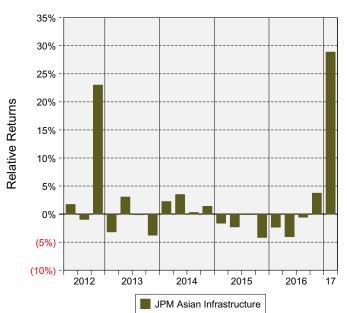
Quarterly Summary and Highlights

 JPM Asian Infrastructure's portfolio outperformed the CPI-W by 28.87% for the quarter and outperformed the CPI-W for the year by 28.00%.

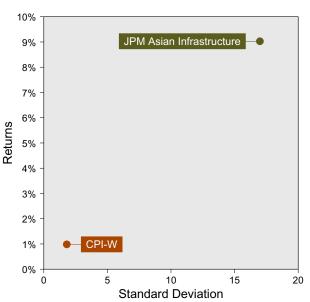
Quarterly Asset Growth				
Beginning Market Value \$29,229,463				
Net New Investment	\$-11,402,272			
Investment Gains/(Losses)	\$5,506,339			
Ending Market Value \$23,333,530				



Relative Return vs CPI-W



Annualized Five Year Risk vs Return



JPM Infrastructure Fund Period Ended March 31, 2017

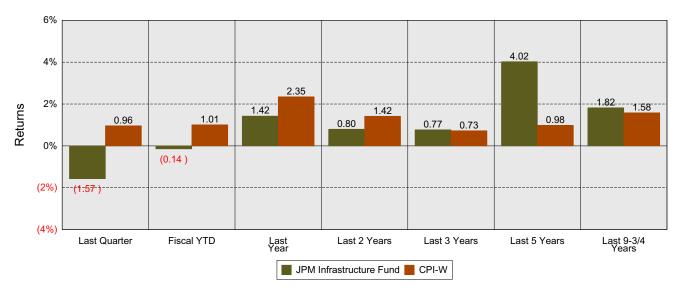
Investment Philosophy

The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

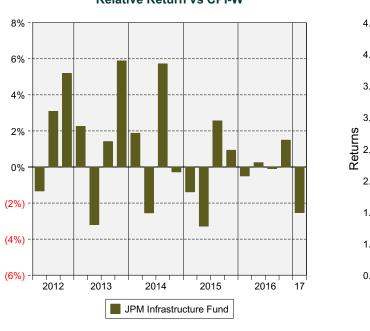
Quarterly Summary and Highlights

 JPM Infrastructure Fund's portfolio underperformed the CPI-W by 2.53% for the quarter and underperformed the CPI-W for the year by 0.92%.

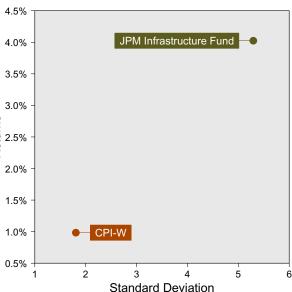
Quarterly Asset Growth				
Beginning Market Value \$151,788,821				
Net New Investment	\$-54,650			
Investment Gains/(Losses)	\$-2,382,121			
Ending Market Value \$149,352,050				











Callan

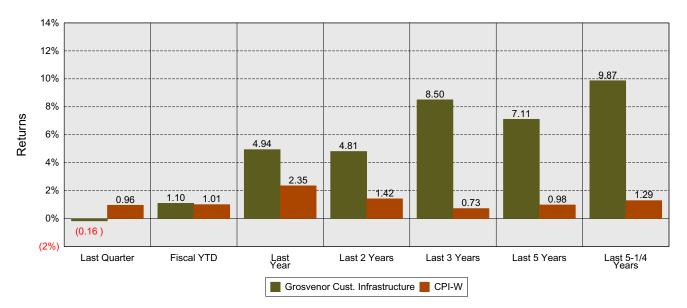
Relative Returns

Grosvenor Cust. Infrastructure Period Ended March 31, 2017

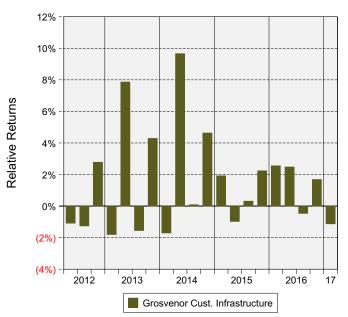
Investment Philosophy

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

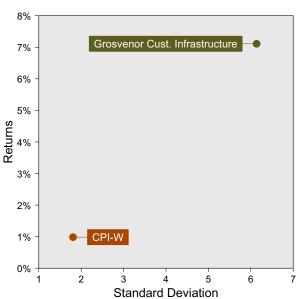
Quarterly Summary and Highlights	Quarterly Asset Growth	
 Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 1.12% for the quarter and outperformed the CPI-W for the year by 2.60%. 	Beginning Market Value Net New Investment Investment Gains/(Losses)	\$33,969,006 \$786,933 \$-56,136
	Ending Market Value	\$34,699,804



Relative Return vs CPI-W







Grosvenor Cust. Infrastructure II Period Ended March 31, 2017

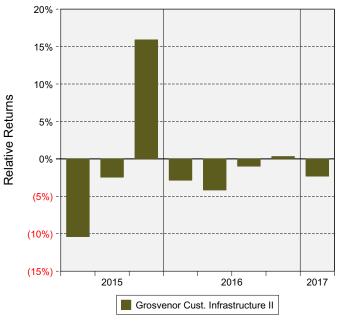
Investment Philosophy

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

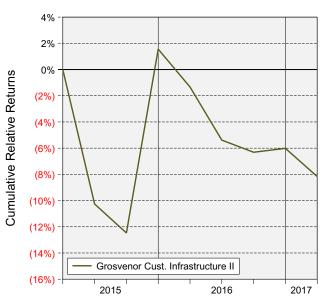
Quarterly Summary and Highlights	Quarterly Asset Growth	
 Grosvenor Cust. Infrastructure II's portfolio underperformed the CPI-W by 2.31% for the quarter and underperformed the CPI-W for the year by 7.09%. 	Beginning Market Value Net New Investment Investment Gains/(Losses)	\$5,654,566 \$2,554,649 \$-101,519
	Ending Market Value	\$8,107,696







Cumulative Returns vs CPI-W



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CALLAN INSTITUTE

1st Quarter 2017

Education

Research and Educational Programs

The Callan Institute provides both 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 to see all of our publications, and www.callan.com/blog to view our blog "Perspectives." For more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

Smart Beta Is the Gateway Drug to Factor Investing | In this paper, a reprint from the *Journal of Portfolio Management*'s special issue on Factor Investing, author Eugene Podkaminer, CFA, of Callan's Capital Markets Research group describes the connection between alternative indices and more sophisticated risk premia strategies.

2017 National Conference: 'It's Private' | A summary of "It's Private: Real Estate Debt and Middle Market Direct Lending," a presentation from Callan experts Kristin Bradbury, Alex Browning, and Jay Nayak.

Capital Market Projections for 2017-2026 | Callan prepares capital market projections annually to help guide clients with their long-term strategic planning. We publish three pieces authored by the team that creates them: Jay Kloepfer, John Pirone, CFA, CAIA, and Jim Van Heuit. A **white paper** delves into the process and thinking behind the 2017 figures; a **Manifesto** outlines the reasons that Callan produces its annual capital market projections and the rigorous process behind it; and a "**charticle**" (chart+article) summarizes key figures from Callan's 2017 capital market projections.

It's a (Fiduciary) Trap! But You Don't Have to Fall In | Defined contribution (DC) plan sponsors often worry about landing in hot water for doing the wrong thing. However, many fiduciary issues crop up because plan sponsors have failed to take action. Author Lori Lucas, CFA, Callan's Defined Contribution Practice Leader, lists eight potential fiduciary traps and ways for plan sponsors to avoid falling into them in 2017.

The Callan Periodic Table of Investment Returns (Key Indices: 1997-2016) and Collection | The Periodic Table of Investment Returns depicts annual returns for 10 asset classes, ranked from

best to worst performance for each calendar year. The Collection includes 10 additional versions, such as the indices relative to inflation, real estate, and hedge fund sub-strategies.

Periodicals

Real Assets Reporter, Winter/Spring 2017 | Avery Robinson, CAIA, explores how we developed our Real Estate Indicators. We also cover the latest on the real estate market, and share charts and tables on the long-term performance of various real assets.

Private Markets Trends, Winter 2017 | Gary Robertson provides an overview of the environment for private equity in 2016 and a look ahead at 2017. He sees continued liquidity in the private equity market, and writes that distributions will continue to benefit investors.

Hedge Fund Monitor, 4th Quarter 2016 | Jim McKee provides a view of the hedge fund industry and detailed quarterly performance. This quarter's cover story: "Alternative Facts and the Evolving Role of Hedge Funds."

DC Observer, 1st Quarter 2017 | Lori Lucas discusses the best approach to crafting, implementing, and maintaining an investment policy statement for defined contribution plans.

Market Pulse Flipbook, Fourth Quarter 2016 | 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, 4th Quarter 2016 | A quarterly macroeconomic newsletter providing thoughtful insights on the economy and recent performance in equity, fixed income, alternatives, international, real estate, and other capital markets.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: https://www.callan.com/education/CII/

'Why Diversify'

Our **June Regional Workshops**, June 27 in Atlanta and June 29 in San Francisco, will focus on diversification, which has turned out to be very expensive for U.S.-based investors, especially since the Global Financial Crisis. In this workshop, Callan experts Mark Andersen, Jay Kloepfer, and Brian Smith analyze diversification from multiple angles, answering the questions of whether investors erred in adopting diversified portfolios over the last 30 years, and what investors should do now.

Also mark your calendars for our **October Regional Workshops**, October 24 in New York and October 26 in Chicago.

For more information about events, please contact Barb Gerraty: 415.274.3093 / 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, July 25-26, 2017 Chicago, October 24-25, 2017

This program familiarizes fund sponsor trustees, staff, and asset management advisors 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 assetmanagement 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 https://www.callan.com/education/college/ or contact Kathleen Cunnie: 415.274.3029 / cunnie@callan.com

Education: By the Numbers

500	Attendees (on average) of the Institute's annual National Conference	50+	Unique pieces of research the Institute generates each year
3,500	Total attendees of the "Callan College" since 1994	1980	Year the Callan Institute was founded



"We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years."

Ron Peyton, Chairman and CEO

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 guarterly 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 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	Manager Name
1607 Capital Partners, LLC	Campbell Global, LLC
Aberdeen Asset Management PLC	Capital Group
Acadian Asset Management LLC	CastleArk Management, LLC
AEGON USA Investment Management	Causeway Capital Management
Affiliated Managers Group, Inc.	Cavanal Hill Investment Management, Inc.
Alcentra	Chartwell Investment Partners
AllianceBernstein	ClearBridge Investments, LLC
Allianz Global Investors	Cohen & Steers Capital Management, Inc.
Allianz Life Insurance Company of North America	Columbia Management Investment Advisers, LLC
American Century Investments	Columbus Circle Investors
Amundi Smith Breeden LLC	Cornerstone Capital Management
Angelo, Gordon & Co.	Cove Street Capital, LLC
Apollo Global Management	Cramer Rosenthal McGlynn, LLC
AQR Capital Management	Credit Suisse Asset Management
Ares Management LLC	Crestline Investors, Inc.
Ariel Investments, LLC	DDJ Capital Management, LLC
Aristotle Capital Management, LLC	D.E. Shaw Investment Management, L.L.C.
Artisan Holdings	DePrince, Race & Zollo, Inc.
Atlanta Capital Management Co., LLC	Deutsche Asset Management
Aviva Investors Americas	Diamond Hill Capital Management, Inc.
AXA Investment Managers	Dimensional Fund Advisors LP
Baillie Gifford Overseas Limited	Doubleline
Baird Advisors	Duff & Phelps Investment Mgmt. Co.
Bank of America	Eagle Asset Management, Inc.
Barings LLC	EARNEST Partners, LLC
Baron Capital Management, Inc.	Eaton Vance Management
Barrow, Hanley, Mewhinney & Strauss, LLC	Epoch Investment Partners, Inc.
BlackRock	Fayez Sarofim & Company
BMO Global Asset Management	Federated Investors
BNP Paribas Investment Partners	Fidelity Institutional Asset Management
BNY Mellon Asset Management	Fidelity Management & Research
Boston Partners	Fiera Capital Corporation
Brandes Investment Partners, L.P.	First Eagle Investment Management, LLC
Brandywine Global Investment Management, LLC	First Hawaiian Bank Wealth Management Division
Brown Brothers Harriman & Company	Fisher Investments
BTG Pactual	Franklin Templeton
Cambiar Investors, LLC	Franklin Templeton Institutional

Callan Knowledge. Experience. Integrity.

Manager Name
Fred Alger Management, Inc.
Frost Investment Advisors, LLC
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GlobeFlex Capital, L.P.
GMO
Goldman Sachs Asset Management
Great Lakes Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Heitman LLC
Henderson Global Investors
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
Janus Capital Management, LLC
Jensen Investment Management
Jobs Peak Advisors
J.P. Morgan Asset Management
Kayne Anderson Capital Advisors LP
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
Man Investments Inc.
Manulife Asset Management
Macquarie Investment Management (formerly Delaware Investments)
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.
Neuberger Berman
Newton Investment Management (fka Newton Capital
Management)
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management

Manager Name	
Nuveen Investments, Inc.	
OFI Global Asset Management	
Old Mutual Asset Management	
Opus Capital Management Inc.	
O'Shaughnessy Asset Management, LLC	
Pacific Investment Management Company	
Peregrine Capital Management, Inc.	
PGIM	
PGIM Fixed Income	
PineBridge Investments	
Pioneer Investments	
PNC Capital Advisors, LLC	
•	
Principal Global Investors	
Private Advisors, LLC	
Putnam Investments, LLC	
QMA (Quantitative Management Associates)	
RBC Global Asset Management	
Regions Financial Corporation	
Reinhart Partners, Inc.	
RidgeWorth Capital Management, Inc.	
Rockefeller & Co., Inc.	
Rothschild Asset Management, Inc.	
Russell Investments	
Santa Barbara Asset Management	
Santander Global Facilities	
Schroder Investment Management North America Inc.	
Smith, Graham & Co. Investment Advisors, L.P.	
Smith Group Asset Management	
Standard Life Investments Limited	
Standish	
State Street Global Advisors	
Stone Harbor Investment Partners, L.P.	
T. Rowe Price Associates, Inc.	
Taplin, Canida & Habacht	
The Boston Company Asset Management, LLC	
The Hartford	
The London Company	
The TCW Group, Inc.	
Thompson, Siegel & Walmsley LLC	
Thornburg Investment Management, Inc.	
Tri-Star Trust Bank	
UBS Asset Management	
Van Eck Global	
Versus Capital Group	
Victory Capital Management Inc.	
Vontobel Asset Management, Inc.	
Voya Financial	
•	
Voya Investment Management (fka ING)	
Waterton Associates L.L.C.	
WCM Investment Management	
WEDGE Capital Management	
Wellington Management Company, LLP	
Wells Capital Management	
Western Asset Management Company	

Callan

March 31, 2017 North Dakota State Investment Board Insurance Trust

Investment Measurement Service Quarterly Review

The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information provider sexternal to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2017 by Callan Associates Inc.

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Callan Research/Education

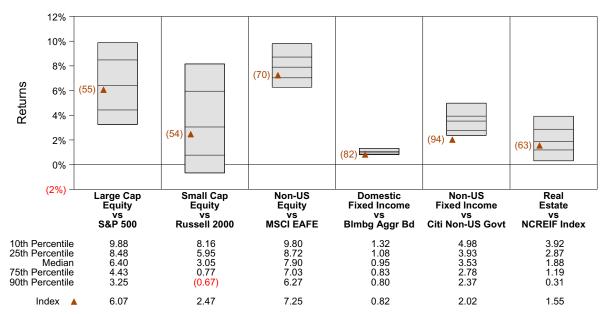
Disclosures

Market Overview Active Management vs Index Returns

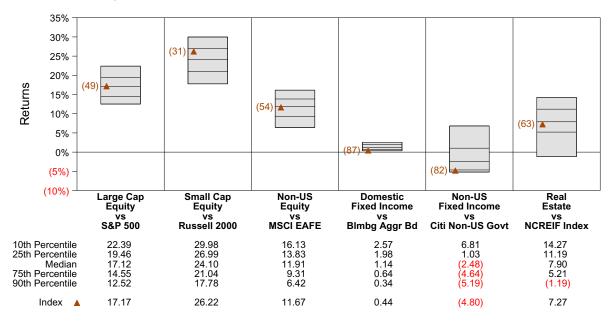
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2017



Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2017





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First Quarter 2017

'Hitch in Our Git-Along'?

ECONOMY

2 PAGE GDP growth disappointed in the first quarter for the fourth straight year. But other measures such as consumer confidence held up during the quarter. The question is whether this is a hitch—or a problem with the GDP metric.

Steady as She Goes

U.S. EQUITY

The S&P 500 Index hit a high during the first quarter and ended with a 6.07% jump, continuing last year's gains. But in a reversal from the previous quarter, small cap stocks fell behind large cap and growth overtook value.

New Year, New Lows

REAL ESTATE

14 PAGE The NCREIF Property Index turned in its worst performance (+1.55%) since 2010, while the NCREIF Open End Diversified Core Equity Index also set a new seven-year low (+1.77%). U.S. REITs underperformed global REITs, but still managed to generate positive returns.

No Homefield Advantage

FUND SPONSOR

A G E Strong equity results helped boost institutional funds. The median return for all fund types was +4.31%; endowments and foundations did best, jumping 4.58%. Taft-Hartley plans had the lowest return at +3.93%. The key difference was exposure to non-U.S. equities.

Profits Trump Populism

NON-U.S. EQUITY

B P A G E **Despite** political turmoil in Europe and choppy growth in Asia, non-U.S. markets advanced in the first quarter. The dollar's weakness bolstered returns for U.S. investors. Emerging markets outpaced their developed peers, and non-U.S. growth stocks bested their value counterparts.

On a Roll

PRIVATE EQUITY

16 PAGE Private equity stayed healthy in the first quarter. Buyout M&A exits dropped significantly, while venture capital-backed M&A exits were mixed. Both buyout and VC-backed IPOs raised more money than in the previous quarter.

Broad Market Quarterly Returns



Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

Up, Up, and Away

U.S. FIXED INCOME

10 PAGE Strong economic data and upbeat investors drove U.S. bond returns higher. High yield securities performed the best, but returns were up for all fixed income sectors. The Treasury yield curve flattened as short-term Treasuries rose while longer-term issues fell.

Dollops of Alpha with Beta

HEDGE FUNDS

Most hedge fund strategies reported positive returns in the first quarter, amid a broad rally in global markets. The **Credit Suisse Hedge Fund Index** advanced 2.07% and the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Separation Anxiety

NON-U.S. FIXED INCOME

12 PAGE Sovereign debt performed strongly amid policy uncertainty in the European Union, and emerging market debt outperformed developed market debt for the third straight quarter. Returns were bolstered by the U.S. dollar's broad-based decline against most currencies.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION

18 PAGE The Callan DC Index[™] increased 7.99% during 2016, its best year since 2013. But it trailed the Age 45 Target Date Fund, which gained 8.59% in 2016. For the year, DC plan balances increased 8.31%, mostly attributable to market performance.

'Hitch in Our Git-Along'?

ECONOMY | Jay Kloepfer

For the fourth year in a row, reported GDP growth disappointed in the first quarter, coming in at just 0.7%, down from a 2.1% rate in the fourth quarter. This paltry gain was the weakest in three years and was concentrated in consumer spending on autos and utilities (reflecting unseasonably warm weather in states with typically cold winters), a drop in defense spending, and a sharp slowdown in the accumulation of inventories. "Softer" measures of economic activity like consumer confidence and the ISM Report on Business, which records the forward-looking purchasing intentions of industry, held up through the first quarter, countering the weakening of GDP as the quarter unfolded. Business and consumer confidence rose after the U.S. presidential election, likely in anticipation of changes to policy and taxes, and without any reference to the strength of the underlying economy.

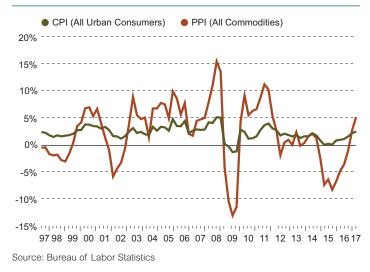
The question is whether we really have an annual "hitch in our git-along" each January, or is something else going on? Four years in a row with an unexpected drop in growth during the first quarter, which is then typically made up with an offsetting increase in the second quarter—although the GDP numbers are supposed to be seasonally adjusted—suggests perhaps a problem with this metric of evaluating the volume of our economic activity. GDP has come under increasing scrutiny as an outdated measure of the modern U.S. (and global) economy, predicated more on the flow of traditional goods and services, particularly agriculture and manufacturing. It may be very challenged to measure the output and economic impact of industries such as software, social media, and electronic commerce.

Inventory buildup usually signals confidence in the prospects for the economy. For several years prior to 2016, inventory "decumulation" was a clear drag on growth, as firms were reluctant to maintain output in the face of soft demand. The U.S. economy shifted toward inventory accumulation in the third and fourth quarters of 2016, only to reverse in the first quarter. That reversal subtracted almost 1% from GDP growth. Total personal



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



consumption expenditures led broad economic growth in 2016, averaging gains of well over 3% during each of the last three quarters of the year, only to drop to just 0.3% growth during the first quarter.

The U.S. job market enjoyed a robust 2016, adding 2.2 million new jobs. The economy entered 2017 with two strong months in January and February, adding more than 200,000 net new jobs each month, before the rate of job creation halved in March to 98,000. Retail jobs took a serious hit in both February and March (seasonally adjusted), with the continuing advance of e-commerce challenging retail establishments, particularly shopping malls. Signs now point to further softness in the job market as the second quarter begins.

In spite of this potential softening, the unemployment rate dipped to 4.5% in March, the lowest in the current cycle, and many urban regions report very tight job markets, with unemployment rates as low as 2% to 3%. In response, the growth in average hourly earnings, which had been stuck in a narrow range below a 2% annual rate for five years following the Global Financial Crisis, rose above 2.5% annual growth during 2016 and continued at this rate through the first quarter.

The minutes of the past several Federal Reserve Open Market Committee meetings show a continuing split among members about whether or not an acceleration of inflation is a looming concern. The data suggest inflation remains low, and futures markets indicate expectations are still anchored at or below the Fed's long-term target of 2% for core inflation. While the Fed uses the consumption deflator in its targeting, the CPI is still a useful measure of price activity. The headline CPI All-Urban index rose 2.4% year-over-year through March, although the measure actually declined between February and March. The energy portion of the Index rose 10.9% over the last 12 months, even after a 3.2% drop in March, reflecting a return toward normal in energy prices after the sharp drop in 2015. The core measure of CPI-which excludes food and energy-rose 2.0% over the 12 months ended in March, the smallest 12-month increase since the end of 2015.

The Long-Term View

	2017	Periods	ended	Dec. 3	1, 2016
Index	1st Qtr	Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	5.74	12.74	14.67	7.07	9.29
S&P 500	6.07	11.96	14.66	6.95	9.15
Russell 2000	2.47	21.31	14.46	7.07	9.69
Non-U.S. Equity					
MSCI EAFE	7.25	1.00	6.53	0.75	4.95
MSCI Emerging Markets	11.44	11.19	1.28	1.84	
MSCI ACWI ex USA Small Cap	8.78	3.91	7.74	2.89	_
Fixed Income					
Bloomberg Barclays Agg	0.82	2.65	2.23	4.34	5.63
90-Day T-Bill	0.10	0.33	0.12	0.80	2.71
Bloomberg Barclays Long G/C	1.58	6.67	4.07	6.85	7.58
Bloomberg Barclays GI Agg ex US	2.48	1.49	-1.39	2.44	4.73
Real Estate					
NCREIF Property	1.55	7.97	10.91	6.93	8.63
FTSE NAREIT Equity	1.16	8.52	12.01	5.08	11.13
Alternatives					
CS Hedge Fund	2.07	1.25	4.34	3.75	
Cambridge PE*	-	9.17	13.05	10.59	15.53
Bloomberg Commodity	-2.33	11.77	-8.95	-5.57	2.55
Gold Spot Price	8.64	8.63	-5.97	6.08	4.82
Inflation – CPI-U	0.98	2.07	1.36	1.81	2.26

*Private equity returns show pooled horizon IRRs for periods ended September 30, 2016. Most recent quarterly data not available.

Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15
Employment Cost–Total Compensation Growth	2.4%	2.2%	2.3%	2.3%	1.9%	2.0%	2.0%	2.0%
Nonfarm Business–Productivity Growth	-0.6%*	1.3%	3.3%	-0.1%	-0.6%	-2.0%	1.8%	1.0%
GDP Growth	0.7%	2.1%	3.5%	1.4%	0.8%	0.9%	2.0%	2.6%
Manufacturing Capacity Utilization	75.4%	75.1%	74.9%	75.1%	75.4%	75.4%	75.7%	75.5%
Consumer Sentiment Index (1966=100)	97.2	93.2	90.3	92.4	91.5	91.3	90.8	94.2

*Estimate.

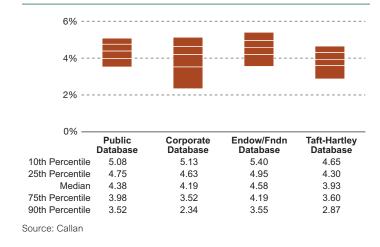
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

No Homefield Advantage

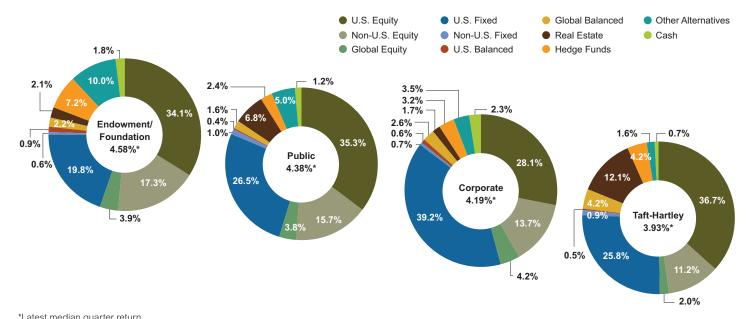
FUND SPONSOR | Kitty Lin

A post-election rally, higher interest rates, and political uncertainty in Europe and Asia left global markets unfazed as stocks and bonds rallied. Both U.S. and non-U.S. stocks delivered stellar returns in the first three months of 2017. That put some juice into the performance of institutional funds tracked by Callan, which did far better than they had in the last quarter of 2016.

The median return for all fund types for the first quarter clocked in at +4.31%, compared to only +0.65% in the fourth quarter. Endowment and foundation funds bested all other fund types and jumped 4.58%, while Taft-Hartley plans slipped in the ranks and had the lowest median return, up only 3.93%.



Callan Fund Sponsor Returns for the Quarter



Callan Fund Sponsor Average Asset Allocation

*Latest median quarter return. Note: charts may not sum to 100% due to rounding. Source: Callan

FUND SPONSOR (Continued)

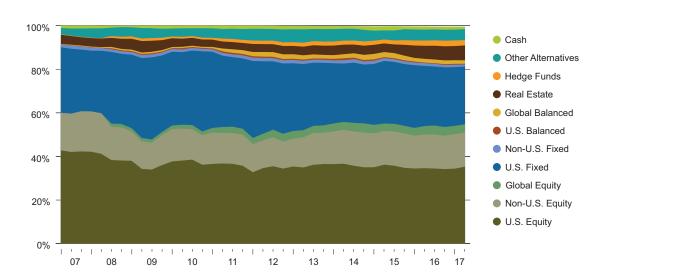
(10 Years)

How funds did depended in large part on where they had their money. Endowment and foundation plans have the highest exposure to non-U.S. equity, which performed quite well despite an ousted South Korean president and an unpredictable French election. The **MSCI ACWI ex USA Index** rose 7.86%, the **MSCI EAFE Index** gained 7.25%, and the **MSCI Emerging Markets Index** jumped 11.44%.

On the other end of the spectrum, Taft-Hartley plans had the most exposure to U.S. equity and the lowest to non-U.S. and global equity. While U.S. equities delivered strong returns, they

lagged their overseas counterparts; the **S&P 500 Index** surged 6.07% and the **Russell 1000 Index** rose 6.02%. Taft-Hartley plans had an average allocation of 11.2% to non-U.S. equity, which was the lowest of all fund types.

Although Taft-Hartley plans had the worst performance in the first quarter, they had the best returns over the last three (+5.99%) and five years (+8.22%) due to their home country bias in equities and the dominance of U.S. versus non-U.S. stocks. Endowment and foundation funds had the best performance in the first quarter (+4.58%) and last year (+11.32%).



Callan Public Fund Database Average Asset Allocation

Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Steady as She Goes

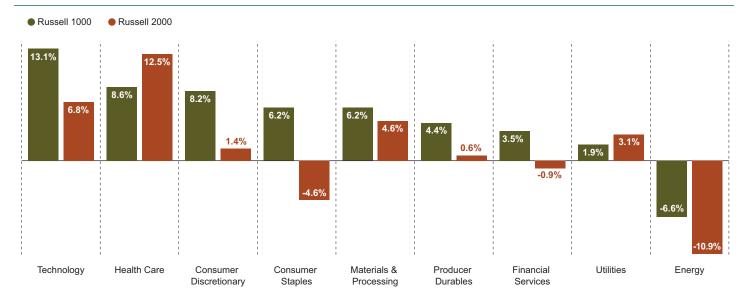
U.S. EQUITY | Lauren Mathias, CFA

Despite concerns over the Trump administration's ability to follow through on promises of lower taxes and decreased regulation, the market accelerated higher in the first quarter. The **S&P 500 Index** hit a peak (2,396) in March and notched a 6.07% gain over the full three-month period. But the quarter was marked by reversals from the previous one—small cap fell behind large cap (**Russell 2000 Index**: +2.47% vs. **Russell 1000 Index**: +6.03%) and growth overtook value (**Russell 1000 Growth Index**: +8.91% vs. **Russell 1000 Value Index**: +3.27%).

The broader U.S. economy reflected the market's optimism, and to no one's surprise the Fed raised rates a quarter-point in mid-March. Wages continued to grow, consumer confidence was up, inflation moved closer to the Fed's 2% target, and unemployment fell to 4.7%. Yet some headwinds persisted in the U.S., with slowing GDP growth (the fourth quarter trailed the third, 2.1% vs. 3.5%), and significant issues abroad: elections

and Brexit in Europe, the Syrian war in the Middle East, and South Korea's presidential impeachment in Asia. Valuations in the U.S. remain high by various measures, but investors appear unfazed—for now.

Technology shares were especially strong; the FANG stocks— Facebook, Amazon, Netflix, and Google—hit record highs during the quarter. (Technically it should be the FANA stocks because Google is officially Alphabet—but FANG sounds better!) Micro and small cap companies ran out of steam after a strong 2016, while mid and large cap stocks charged ahead (**Russell Microcap Index**: +0.38%, Russell 2000 Index: +2.47%, **Russell Midcap Index**: +5.15%, and Russell 1000 Index: +6.03%). Value lost its lead over growth in all capitalizations (**Russell 2000 Value Index**: -0.13% vs. **Russell 2000 Growth Index**: +5.35%). The dispersion in style returns was broad across market capitalizations.



Economic Sector Quarterly Performance

Source: Russell Investment Group

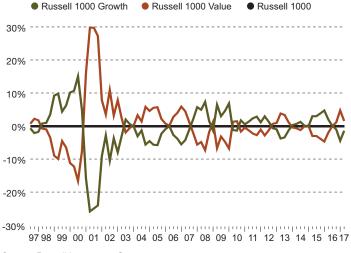
Note: As of the fourth quarter of 2015, the Capital Market Review reports sector-specific returns using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing 11 sectors.

U.S. EQUITY (Continued)

Reflecting the reversal in investor preference, the best-performing sectors in the S&P 500 Index during the quarter were growth-oriented; Technology (+12.57%) was No. 1, followed by Consumer Discretionary (+8.45%) and Health Care (+8.37%). After leading in the fourth quarter, Financials (+2.53%) and Energy (-6.68%) trailed the broad market in the first. Both Health Care and Financials traded on President Donald Trump's failure to amend the Affordable Care Act—Health Care stocks gained on the certainty of the status quo and Financials dropped on fear the administration may fall short on deregulation and tax reform as well. Energy was the worst-performing sector during the quarter as last year's agreement by the Organization of the

Rolling One-Year Relative Returns

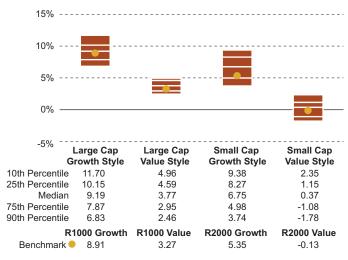
(vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns

geopolitical uncertainty.



Petroleum Exporting Countries (OPEC) has not reduced fears

As the U.S. equity market powered on, valuations across indi-

ces traded at historically high levels-the S&P 500 Index NTM

(next 12 months) P/E was 17.5x versus the 25-year average of

14x as of March 31, 2017. Correlation among stocks (measured

by S&P 500 stocks) ended the guarter below average and at

levels not seen in 10 years, a positive for active management.

Volatility (as measured by the CBOE Market Volatility Index,

or VIX) also tracked below its average, seemingly unfazed by

of oversupply or meaningfully increased the price of oil.

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of March 31, 2017

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	507	2,941	995	792	2,438	1,946
Wtd Avg Mkt Cap (\$bn)	151.6	127.6	137.9	13.7	4.6	2.2
Price/Book Ratio	2.9	2.8	2.9	2.6	2.3	2.1
Forward P/E Ratio	17.7	18.2	18	19.3	20.4	21.1
Dividend Yield	2.0%	1.9%	2.0%	1.7%	1.5%	1.4%
5-Yr Earnings (forecasted)	12.6%	12.5%	12.5%	11.8%	11.8%	12.4%

Sources: Russell Investment Group, Standard & Poor's.

Profits Trump Populism

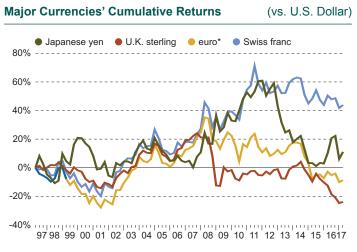
NON-U.S. EQUITY | Irina Sushch

A flurry of political skirmishes and uneven growth in Asia failed to deter non-U.S. equity investors, and the "risk-on" theme of last year continued into 2017. The weak U.S. dollar also bolstered overseas returns for U.S. investors.

The **MSCI ACWI ex USA Index** jumped 7.86% during the quarter. All of its sectors were in the black, with the exception of Energy (-0.91%), which was hurt by falling oil prices. Economically sensitive sectors led the pack: Information Technology contributed 14.59% and Industrials added 9.48%. Defensive and cyclical sectors such as Telecommunications (+5.98%) and Real Estate (+6.72%) lagged.

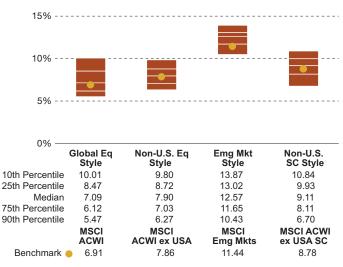
Helped by a weaker dollar, emerging markets (MSCI Emerging Markets Index: +11.44%) outperformed their developed peers (MSCI World ex USA Index: +6.81% and MSCI EAFE Index: +7.25%). The MSCI ACWI ex USA Growth Index (+9.13%) resumed dominance over the MSCI ACWI ex USA Value Index (+6.68%). Small cap stocks also performed well (MSCI ACWI ex USA Small Cap Index: +8.78%).

Politics continued to roil Europe. Most notably, British Prime Minister Theresa May triggered Article 50 of the Lisbon Treaty on March 29, giving the U.K. two years to negotiate an exit from the European Union. The negotiations are likely to be arduous, particularly concerning trade and immigration. And France's presidential elections weighed on investors during the guarter. (A runoff is slated for May. Marine Le Pen, the far right contender and opponent of the EU, finished second in the first round of voting but is widely expected to lose to Emmanuel Macron, a more centrist leader and supporter of the EU.) On the other hand, the economic outlook brightened in the euro zone. Inflation hit a four-year high (2%) in February. Fourth quarter GDP was 1.7% (year-over-year) and positive in each country except Greece (-1.2%). The MSCI Europe Index jumped 7.44% in the first quarter; all of the countries posted positive returns. Spain (+14.76%) and the Netherlands (+11.33%) contributed most, while Ireland (+3.75%) and Norway (+1.43%) lagged.



* German mark returns before 1Q99 Source: MSCI

Callan Style Group Quarterly Returns



Sources: Callan, MSCI

Information Technology (+12.89%) and Industrials (+10.39%) rallied, while Energy stocks (-3.10%) brought up the rear.

In Southeast Asia and the Pacific, Japan's economy grew at a meager (yet notably positive) annualized 1.2% in the fourth quarter. Industrial output and inflation rose and unemployment fell. But the stronger yen (+5%) dampened exporters' returns, and Japan ended the quarter up just 4.49%; only New Zealand

NON-U.S. EQUITY (Continued)

posted worse returns (+1.95%) in the region, owing to a faltering Materials sector (-19.33%). Singapore (+13.46%) and Hong Kong (+13.41%) fared best, thanks to thriving real estate markets. Australia advanced 10.98%, propped up by currency strength. The **MSCI Pacific Index** was up 6.92% and the **MSCI Pacific ex Japan Index** jumped 11.76%.

Emerging market returns were boosted by a weaker U.S. dollar, economic growth in China, and rising industrial metal prices. Poland (+17.75%) and India (+17.12%) were the top performers. The party of India's prime minister, Narendra Modi, won a key regional election despite an abrupt currency recall last year, and the central bank predicted strong economic growth for the next 12 months. Gains in IT stocks bolstered Korean returns. China, which makes up more than a quarter of the MSCI Emerging Markets Index, also experienced growth in its IT sector, as well as in Manufacturing and Real Estate. Its fourth

Quarterly Returns for Non-U.S. Developed Countries

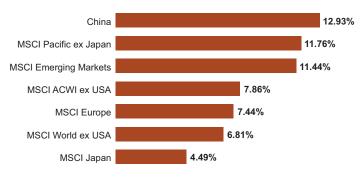
Equity Index									
Country	(US\$)	(Local Currency)	Currency Return	Weight*					
Australia	10.98%	5.34%	5.35%	5.30%					
Austria	8.96%	7.45%	1.40%	0.14%					
Belgium	5.13%	3.68%	1.40%	0.81%					
Canada	2.51%	1.94%	0.55%	6.85%					
Denmark	6.11%	4.65%	1.39%	1.14%					
Finland	7.31%	5.83%	1.40%	0.67%					
France	7.28%	5.80%	1.40%	7.10%					
Germany	8.36%	6.87%	1.40%	6.62%					
Hong Kong	13.41%	13.65%	-0.24%	2.44%					
Ireland	3.75%	2.32%	1.40%	0.32%					
Israel	5.53%	3.28%	6.01%	0.47%					
Italy	6.17%	4.70%	1.40%	1.51%					
Japan	4.49%	-0.17%	4.67%	16.29%					
Netherlands	11.33%	9.92%	1.40%	2.41%					
New Zealand	1.95%	1.69%	0.25%	0.12%					
Norway	1.43%	1.21%	0.22%	0.44%					
Portugal	8.25%	6.75%	1.40%	0.11%					
Singapore	13.46%	9.79%	3.39%	0.92%					
Spain	14.76%	13.18%	1.40%	2.34%					
Sweden	9.46%	7.58%	1.75%	2.01%					
Switzerland	8.34%	6.70%	1.54%	6.08%					
U.K.	5.04%	3.80%	1.20%	12.44%					

*Weight in the MSCI ACWI ex USA Index

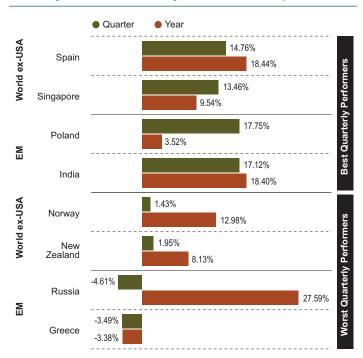
Sources: MSCI, Russell Investment Group, Standard & Poor's.

quarter GDP came in at 6.8%, and China ended the quarter up 12.93%. Mexico was among the top performers (+16.03%) as the peso rebounded 9%. Russia (-4.61%) and Greece (-3.49%) were the region's poorest performers. Russia was hurt by falling oil prices, and Greece by negative GDP growth.

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI



Quarterly and Annual Country Performance Snapshot

Source: MSCI

Up, Up, and Away

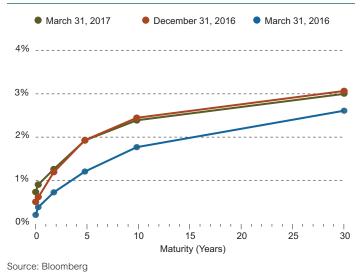
U.S. FIXED INCOME | Rufash Lama

During the first quarter, the U.S. bond market generated positive returns across the board due in part to strong economic data and upbeat investors compressing spreads. U.S. fourth quarter GDP grew at an annualized rate of 2.1%, consumer spending rose 3.5%, and the unemployment rate fell to 4.7%. High yield bonds performed best; the **Bloomberg Barclays High Yield Index** climbed 2.70% for the quarter.

The Fed increased rates by 25 basis points in March, to a range of 0.75% – 1.00%, as U.S. economic indicators continued to signal growth; two additional hikes are expected over the rest of the year. The Treasury yield curve flattened during the quarter as short-term Treasury yields rose while longer-term Treasury yields fell. Despite hitting an intra-quarter high of 2.62%, the benchmark 10-year Treasury note ended the quarter at 2.39%, 5 bps lower than the yield at the end of 2016. For the quarter, U.S. Treasuries returned 0.67%; long Treasuries (+1.40%) outperformed intermediate ones (+0.54%). TIPS were up 1.26% as expectations for future inflation rose. At the end of the quarter, the 10-year breakeven inflation rate, a market-based gauge of investors' expectations for future inflation, stood at 1.97%.

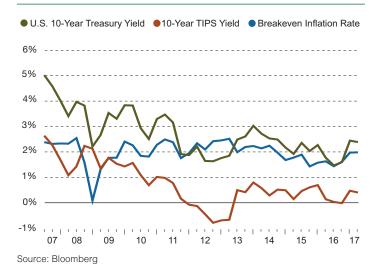
U.S. Treasury Yield Curves

10 Callan

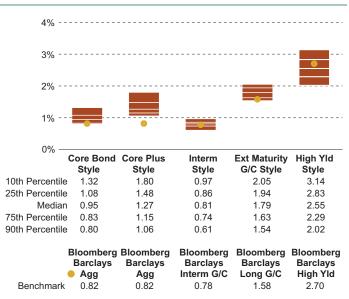


All fixed income sectors reported returns in the black as both the corporate credit market and the structured-debt market benefited from strong investor demand; the **Bloomberg Barclays U.S. Aggregate Bond Index** rose 0.82%. Issuance in the investment-grade primary market totaled \$390 billion, easily surpassing the prior record of \$357 billion in the second quarter

Historical 10-Year Yields



Callan Style Group Quarterly Returns



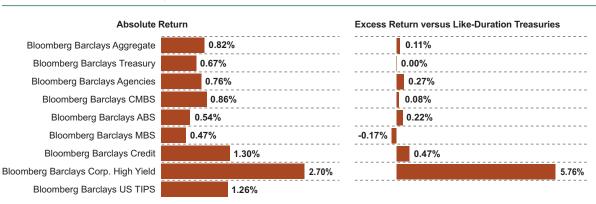
Source: Bloomberg Barclays, Callan

U.S. FIXED INCOME (Continued)

of 2015. Overall, spreads tightened and investor appetite for bonds remained strong despite the headwind of higher rates. High yield spreads over comparable Treasuries tightened by 26 bps and delivered the strongest return. Lower-rated bonds outperformed higher-rated issues; BBB-rated securities generated an excess return of 85 bps and outperformed AAA securities by 70 bps. ABS and investment-grade corporate spreads tightened by 5 bps and rose 1.22% and 0.54%, respectively. Mortgage-backed securities (MBS) (+0.47%) underperformed duration-matched Treasuries by 17 bps. Commercial mort-gage-backed securities (CMBS) rose 0.86% for the quarter and benefited from strong demand.

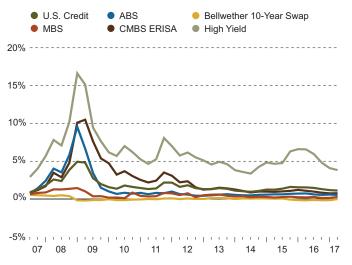
Municipal bonds also delivered a strong quarter as expectations for U.S. tax reform fell and new issuance remained light. The **Bloomberg Barclays Municipal Bond Index** jumped 1.58%.

Fixed Income Index Quarterly Returns



Source: Bloomberg Barclays

Effective Yield Over Treasuries



Source: Bloomberg Barclays

U.S. Fixed Income Index Characteristics as of March 31, 2017

Bloomberg Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Bloomberg Barclays Aggregate	2.61	6.00	8.22
Bloomberg Barclays Universal	2.95	5.78	7.99
Bloomberg Barclays Gov/Credit	2.49	6.47	8.70
1-3 Year	1.50	1.94	2.00
Intermediate	2.10	4.06	4.41
Long-Term	3.88	15.15	24.19
Bloomberg Barclays Long Credit	4.51	13.71	23.76
Bloomberg Barclays Corp High Yield	5.84	4.03	6.24
Bloomberg Barclays TIPS	2.27	5.72	8.31
Bloomberg Barclays Municipal	2.46	6.40	12.85
1-5 Year	1.46	2.65	3.13
1-10 Year	1.86	4.03	5.77

Source: Bloomberg Barclays

Separation Anxiety

NON-U.S. FIXED INCOME | Kyle Fekete

Sovereign debt performed well in the first quarter amid political uncertainty about the future of the European Union (EU). Emerging market debt outperformed developed market debt for the third straight quarter as the **JPM GBI-EM Global Diversified Index** advanced 6.50% versus the **Bloomberg Barclays Global Aggregate ex-US Index**'s 2.48% gain. Returns were bolstered by the U.S. dollar's drop against most currencies.

European sovereign bond yields rose in the midst of critical elections and debate over the future of the EU. The safehaven German 10-year bond yield climbed 12 basis points to

Country	Country Debt*	Country Debt**	Currency Return	Weight***
Australia	6.66%	1.24%	5.35%	2.64%
Austria	0.60%	-0.80%	1.40%	1.75%
Belgium	-0.31%	-1.69%	1.40%	2.99%
Canada	1.05%	0.50%	0.55%	2.54%
Denmark	0.79%	-0.59%	1.39%	0.71%
Finland	0.65%	-0.75%	1.40%	0.74%
France	-0.92%	-2.29%	1.40%	11.85%
Germany	0.64%	-0.75%	1.40%	8.62%
Ireland	0.05%	-1.34%	1.40%	0.96%
Italy	-0.60%	-1.98%	1.40%	11.24%
Japan	4.15%	-0.50%	4.67%	33.21%
Malaysia	2.94%	1.56%	1.37%	0.50%
Mexico	13.62%	3.88%	9.38%	1.11%
Netherlands	0.50%	-0.90%	1.40%	2.75%
Norway	1.44%	1.22%	0.22%	0.33%
Poland	7.16%	1.71%	5.36%	0.81%
Singapore	5.69%	2.22%	3.39%	0.50%
South Africa	4.42%	2.38%	1.99%	0.66%
Spain	0.60%	-0.79%	1.40%	6.70%
Sweden	1.31%	-0.43%	1.75%	0.55%
Switzerland	1.07%	-0.46%	1.54%	0.23%
U.K.	2.85%	1.63%	1.20%	8.63%

Quarterly Returns for Non-U.S. Government Indices

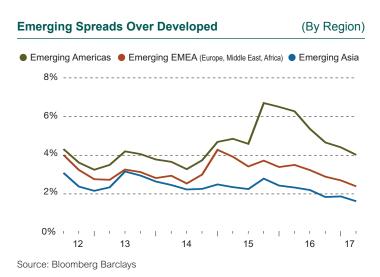
*U.S. dollar-denominated.

**Local currency-denominated.

***Weight in the Citi Non-U.S. World Government Bond Index. Source: Citigroup 0.33%, steepening the yield curve to its highest since 2014. France's 10-year bonds sold off in the middle of the quarter as the markets priced in the risk of a potential victory by presidential candidate Marine Le Pen, who wants the French to vote on whether to leave the EU. The Italian 10-year yield jumped 50 bps to 2.32% as an air of political risk also loomed over Europe's third-largest economy.

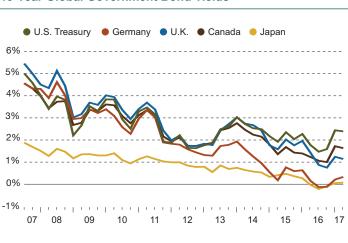
The European Central Bank continued its stimulus efforts, extending its bond-buying program until December 2017 and maintaining interest rates near record lows. Yet there was renewed confidence in the region's economic health as a result of solid manufacturing data, strength in the region's labor market, and encouraging inflation news. The euro strength-ened against the U.S. dollar, providing some headwind to the hedged Bloomberg Barclays Global Aggregate ex-US Index, which increased only slightly (+0.06%).

In the Asia-Pacific region, Japan's 10-year yield edged up 2 bps to 0.07%, in line with the Bank of Japan's goal of maintaining its yield at approximately zero. The Reserve Bank of Australia left rates unchanged despite rapid growth in household debt. The Australian 10-year yield declined 6 bps to 2.70%. Both countries' currencies advanced roughly 5% against the U.S. dollar.

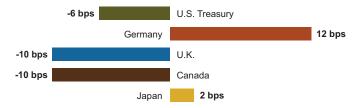


NON-U.S. FIXED INCOME (Continued)

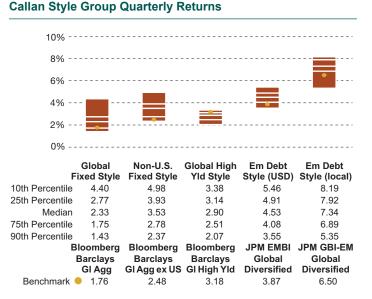
Emerging markets performed quite well. The U.S. dollardenominated **JPM EMBI Global Diversified Index** rose 3.87%, and only three countries out of 65 posted negative returns for the quarter. Mexico, the most heavily weighted in the Index, was the strongest performer (+5.46%). Venezuela was the worst, falling 1.29%. Emerging market currencies also generally appreciated versus the U.S. dollar, accounting for the JPM GBI-EM Global Diversified Index's 6.50% rise. Argentina reentered the Index in February, and its debt posted the strongest return (+15.60%). Mexico (+13.60%) and Brazil (+9.69%) were also top performers, while Turkey (-0.68%) was the only country in the index to deliver a negative return.



Change in 10-Year Yields from 4Q16 to 1Q17



10-Year Global Government Bond Yields Ca



Sources: Bloomberg Barclays, Callan, JPMorgan Chase

Source: Bloomberg

New Year, New Lows

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** advanced 1.55% during the first quarter (1.15% from income and 0.40% from appreciation). This was the lowest return since 2010, eclipsing the fourth quarter's mark of 1.73%. Appreciation fell for the eighth consecutive quarter and made up less than a third of total return.

Industrial (+2.83%) was the best-performing sector for the fourth consecutive quarter with Retail (+1.56%) and Apartments (+1.30%) also posting positive returns; Hotels (-0.16%) fared the worst and the was only property sector to fall during the quarter. All property sectors posted lower results than the previous quarter.

The West surpassed all other regions for the second quarter in a row, rising 1.96%; the East was the weakest, up only 0.95%. Transaction volume fell steeply to \$6.6 billion, a 53% decline from last quarter's all-time high. This also represented a drop of 13% from the first quarter of 2016. Appraisal capitalization rates stayed mostly flat, increasing to 4.44%, 1 basis point above last quarter's all-time low of 4.43%. Transaction capitalization rates recovered from the precipitous decline of the fourth quarter and rose from 5.7% to 6.3%. The spread between appraisal and transactional rates increased to 183 bps.

Occupancy rates dropped slightly from the 15-year high in the fourth quarter to 92.96%. Apartment occupancy rates increased slightly while Industrial, Office, and Retail rates decreased.

The **NCREIF Open End Diversified Core Equity Index** rose 1.77%. This marked a 34 basis point decrease from the fourth quarter return of 2.11%, and was the lowest for the index since 2010. Income accounted for 1.06% of the return, moderating slightly; appreciation (+0.70%, with rounding accounting for the slight discrepancy) fell to a new seven-year low.

Global real estate investment trusts (REITs), tracked by the

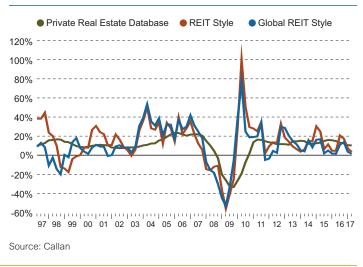
*Index subreturns are calculated separately from index return and may not total.

FTSE EPRA/NAREIT Developed REIT Index (USD), outperformed their U.S. counterparts and rose 2.29%. U.S. REITs, as measured by the **FTSE NAREIT Equity REITs Index**, gained 1.16% for the quarter.

In the U.S., REITs enjoyed two months of positive returns to start the quarter before giving some of the gains back with a poor showing in March. Retail (-4.75%) fared the worst, hurt by weak earnings results from large retailers and the fear of store closings because of the emergence of e-commerce. Hotel (-1.90%) and Self Storage (-1.42%) also did poorly. Health Care (+6.92%) recovered from a sharp decline in the fourth quarter on the back of the failure of the new administration to fulfill its promise to repeal the Affordable Care Act. Specialty (+13.23%), Timber (+12.85%), Infrastructure (+12.25%), and Data Centers (+11.45%) all experienced double-digit gains.

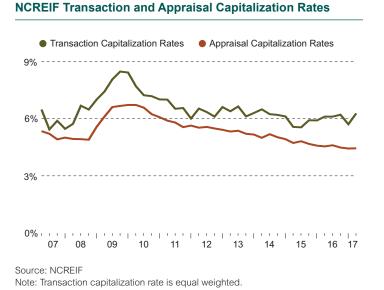
Europe, as represented by the **FTSE EPRA/NAREIT Europe Index**, bested the U.S. in both local currency and U.S. dollar terms, buoyed by a weakening greenback and improving economic data. Markets also reacted positively to the failure of populist politicians to gain power in the Netherlands. As in the U.S., Retail lagged the broader index as e-commerce continued to take market share from traditional retailers.

Rolling One-Year Returns



REAL ESTATE (Continued)

The Asia-Pacific region beat all others with the **FTSE EPRA**/ **NAREIT Asia Index** jumping 5.94% during the first quarter in U.S. dollar terms. Singapore and Hong Kong were the major winners, up 17.4% and 16.2%, respectively. In both countries this was mainly attributed to strong performance by their residential sectors. Commercial mortgage-backed securities (CMBS) issuance for the quarter was down sharply, by 58%, to \$11.3 billion from the \$26.9 billion in the fourth quarter of 2016. This represents a 42% decrease from the first quarter of 2016 (\$19.4 billion).



NCREIF Capitalization Rates by Property Type



Source: NCREIF

Note: Capitalization rates are appraisal-based.

On a Roll

PRIVATE EQUITY | Gary Robertson

New private equity partnership commitments totaled \$80.0 billion in the first quarter, with 310 new partnerships formed, according to preliminary data from *Private Equity Analyst*. The number of partnerships jumped 75% from 177 in the first quarter of 2016, and the dollar volume rose 51% from \$53.1 billion. KKR Americas Fund XII raised the most money in the quarter, \$3.1 billion, and its final close of \$13.9 billion exceeded its \$12 billion target.

Investments by funds into companies totaled 379 deals, up 18% from 322 in the prior quarter, according to *Buyouts* newsletter. The announced total volume was \$35.0 billion, up 24% from \$28.3 billion in the fourth quarter. The \$6.0 billion takeprivate of hospital staffing firm Team Health Holdings was the quarter's largest buyout. Nine deals with announced values of \$1 billion or more closed in the quarter.

According to the National Venture Capital Association, new investments in VC companies totaled 1,808 rounds with \$16.5 billion of announced value. The number of rounds fell by 5% from 1,898 in the fourth quarter, but disclosed value increased 15% from \$14.3 billion.

Buyout M&A exits fell steeply; there were just 117 in the first quarter, down 25% from the prior quarter's 157, according to

Funds Closed January 1 to March 31, 2017

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	145	7,505	9%
Buyouts	108	54,622	68%
Subordinated Debt	13	3,038	4%
Distressed Debt	7	4,526	6%
Secondary and Other	7	5,162	6%
Fund-of-funds	30	5,178	6%
Totals	310	80,031	100%

Source: Private Equity Analyst Figures may not total due to rounding.

Buyouts. Announced deal value also dropped: 30 deals totaling \$14.4 billion, off 47% from \$27.0 billion in the fourth. Three buyout-backed IPOs in the first quarter raised an aggregate \$2.4 billion. The number of IPOs was the same as the prior quarter, but the proceeds increased from \$2.0 billion.

Venture-backed M&A exits totaled 132 and disclosed value hit \$10.4 billion. The number of exits declined 19% but the dollar volume increased 53% from the fourth quarter, which had 162 sales totaling \$6.8 billion. There were seven VC-backed IPOs in the first quarter with a combined float of \$4 billion. The fourth quarter also had seven but they only raised \$684 million.

Please see our upcoming issue of *Private Markets Trends* for more in-depth coverage.

Private Equity Performance	Database (%) (Pooled Horizon IRF	Rs through September 30, 20	16*)

			•	,	,			
Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years	
All Venture	3.33	3.35	17.77	14.78	10.51	6.72	20.92	
Growth Equity	3.82	8.77	11.95	12.28	11.20	10.92	13.62	
All Buyouts	3.91	11.48	11.97	13.68	10.41	12.96	12.60	
Mezzanine	2.92	9.19	8.75	10.32	9.38	8.96	9.17	
Distressed	4.22	7.72	7.30	11.93	9.42	10.71	10.67	
All Private Equity	3.80	9.08	12.24	13.41	10.37	11.06	13.23	
S&P 500	3.85	15.43	11.16	16.37	7.24	7.15	7.91	
Russell 3000	4.40	14.96	10.44	16.36	7.37	7.61	8.03	

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson Reuters/Cambridge

*Most recent data available at time of publication.

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of *Capital Market Review* and other Callan publications.



Dollops of Alpha with Beta

HEDGE FUNDS | Jim McKee

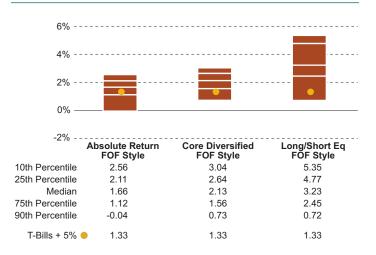
The U.S. economy moved steadily forward with revived animal spirits in the first quarter. Tangible evidence of growth and inflation emerged in the euro zone, soothing market worries globally. Amid geopolitical anxieties testing the Trump administration, the **S&P 500 Index** cleared 6.07% with very little market volatility. With more upbeat expectations abroad, **MSCI EAFE** climbed 7.25% while **MSCI Emerging Markets** soared 11.44%. After being beaten down in the prior quarter, the Citi **10-Year Treasury** (+0.79%) held steady.

With global risk appetites encouraged by improving fundamentals, most hedge fund strategies generated positive returns. The **Credit Suisse Hedge Fund Index (CS HFI)**, a proxy of unmanaged hedge fund interests gross of fees, advanced 2.07%. Representing live hedge fund portfolios net of all fees, the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Within CS HFI, *Long-Short Equity* (+3.46%) was particularly strong in the first quarter compared to 2016, even after adjusting for equity beta. Lack of market volatility and distinct trends left *Managed Futures* (-1.02%) and *Global Macro* (+0.24%) struggling.

Within the **Callan Hedge Fund-of-Funds Database**, market exposures differentiated performance. Supported by the stock market rallies around the globe, the median *Callan Long/Short Equity FOF* (+3.23%) outpaced the *Callan Absolute Return FOF* (+1.66%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 2.13%.

Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Callan Database Median and Index Returns* for Periods ended March 31, 2017

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	2.29	2.29	8.04	2.00	4.66	3.24	4.83
CS Hedge Fund Index	2.07	2.07	5.67	1.92	3.95	3.62	5.83
CS Equity Market Neutral	2.13	2.13	-2.19	-0.62	1.26	-2.99	0.55
CS Convertible Arbitrage	2.25	2.25	9.43	1.78	3.33	3.61	4.74
CS Fixed Income Arbitrage	2.32	2.32	8.02	3.15	4.64	3.43	4.23
CS Multi-Strategy	2.76	2.76	7.92	5.05	6.9	5.09	6.98
CS Distressed	2.23	2.23	10.91	0.82	5.28	3.75	6.94
CS Risk Arbitrage	1.21	1.21	4.94	1.78	2.33	3.18	3.74
CS Event-Driven Multi-Strategy	2.88	2.88	10.33	-1.48	3.53	3.4	6.11
CS Long/Short Equity	3.46	3.46	3.91	2.44	5.35	3.99	6.29
CS Global Macro	0.24	0.24	6.2	2.57	2.87	5.53	7.88
CS Managed Futures	-1.02	-1.02	-11.63	4.15	0.59	3.06	5.02
CS Emerging Markets	4.27	4.27	10.28	4.04	4.55	3.79	7.59

*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index[™] increased 7.99% during the wild year that was 2016, its best year since 2013. And the Index did not suffer a single negative quarter, ending with a fourth quarter return of 1.59%. But the Index trailed the average Age 45 Target Date Fund, which gained 8.59% in 2016.

For the year, DC plan balances increased 8.31%. Almost all of the growth is attributable to market performance. Inflows (participant and plan sponsor contributions) added only 32 basis points to total growth.

Turnover (i.e., net transfer activity levels within DC plans) in 2016 reached 2.31%, the highest since 2012.

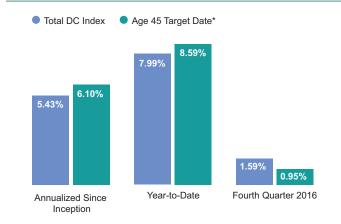
Last year, flows retreated from equities into stable value, money market, and domestic fixed income funds. As usual, TDFs dominated net inflows for the quarter and the year. For the year, roughly 61 cents of every dollar flowed to TDFs. The fourth quarter of 2016 saw a significant spike in TDF assets, increasing 1.3% from the third quarter to make up 29.0% of the average DC plan.

The Callan DC Index's equity allocation ended the quarter at 69%, below the equity allocation of the average Age 45 Target Date Fund (74%) but above the Index's historical average (67%).

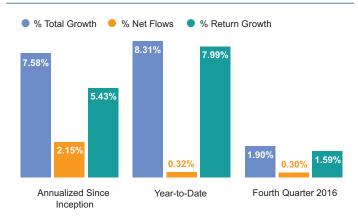
TDFs' dominance of the typical DC plan continues to grow. When TDFs are held within a DC plan, they now account for 35% of plan assets, up from 30% a year ago. The next largest plan holding, U.S. large cap equity funds, now account for 22.7% of plan assets. The fourth quarter of 2016 marks the highest level of TDF prevalence (91%) since the inception of the Callan DC IndexTM.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.

Investment Performance



Growth Sources



Net Cash Flow Analysis (Fourth Quarter 2016) (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	68.47%
Stable Value	22.76%
U.S. Large Cap	-30.44%
Company Stock	-40.41%
Total Turnover**	0.50%

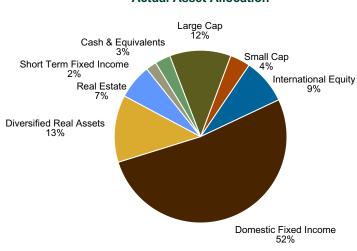
Data provided here is the most recent available at time of publication. Source: Callan DC Index

Note: DC Index inception date is January 2006.

- * The Age 45 Fund transitioned from the average 2030 TDF to the 2035 TDF in June 2013.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

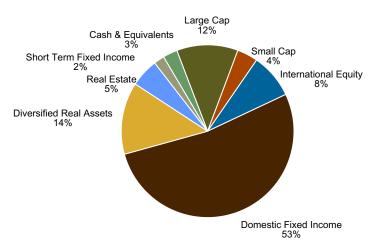
Actual vs Target Asset Allocation As of March 31, 2017

The first chart below shows the Fund's asset allocation as of March 31, 2017. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



Actual Asset Allocation

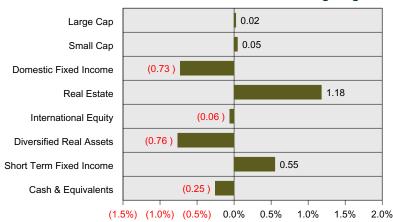
Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	241,086	11.5%	11.5%	0.0%	134
Small Cap	80,065	3.8%	3.9%	(0.1%)	(1,649)
International Equity	178,846	8.5%	8.4%	0.1%	2,847
Domestic Fixed Income	1,093,616	52.2%	52.7%	(0.5%)	(10,572)
Diversified Real Assets	263,869	12.6%	13.5%	(0.9%)	(18,987)
Real Estate	136,762	6.5%	5.3%	1.2%	25,715
Short Term Fixed Income	41,012	2.0%	2.0%	0.0%	(892)
Cash & Equivalents	59,976	2.9%	2.7%	0.2%	3,405
Total	2,095,234	100.0%	100.0%		

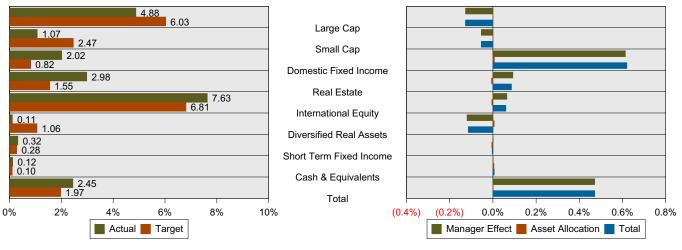
Quarterly Total Fund Relative Attribution - March 31, 2017

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



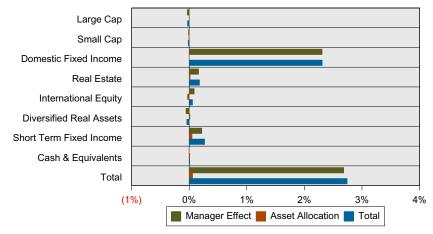
Relative Attribution Effects for Quarter ended March 31, 2017

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	4.88%	6.03%	(0.13%)	(0.00%)	(0.13%)
Small Cap	4%	4%	1.07%	2.47%	(0.05%)	(0.00%)	(0.05%)
Domestic Fixed Incor	ne 51%	52%	2.02%	0.82%	`0.61%´	0.01%	0.62%
Real Estate	6%	5%	2.98%	1.55%	0.09%	(0.01%)	0.09%
International Equity	8%	8%	7.63%	6.81%	0.06%	(0.01%)	0.06%
Diversified Real Asse		13%	0.11%	1.06%	(0.12%)	0.01%	(0.11%)
Short Term Fixed Inc	ome 5%	4%	0.32%	0.28%	0.00%	(0.01%)	(0.00%)
Cash & Equivalents	2%	2%	0.12%	0.10%	0.00%	0.00%	0.01%
Total			2.45% =	· 1.97%	+ 0.47% +	0.00%	0.47%

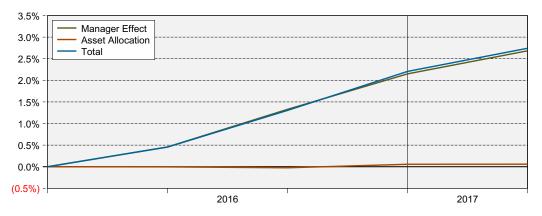
Relative Attribution by Asset Class

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

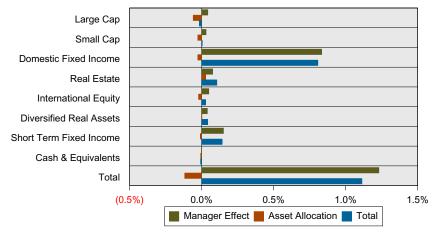


One Year Relative Attribution Effects

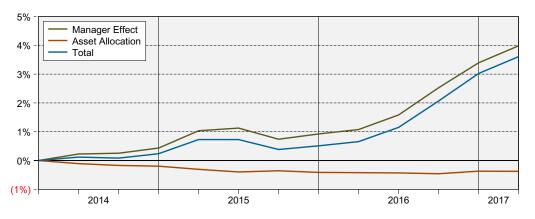
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	17.04%	17.43%	(0.03%)	0.00%	(0.03%)
Small Cap	3%	3%	25.90%	26.22%	(0.01%)	(0.00%)	(0.02%)
Domestic Fixed Inco		47%	5.39%	0.44%	2.31%	0.00%	2.31%
Real Estate	6%	5%	10.18%	7.27%	0.16%	0.02%	0.18%
International Equity	7%	7%	12.82%	11.46%	0.09%	(0.03%)	0.06%
Diversified Real Asse		12%	1.51%	1.86%	(0.06%)	`0.01%´	(0.04%)
Short Term Fixed Inc	come14%	13%	1.45%	0.25%	0.22%	0.05%	0.27%
Cash & Equivalents	2%	2%	0.32%	0.36%	(0.00%)	0.01%	0.01%
Total			6.89% =	4.15%	+ 2.68% +	0.06%	2.74%

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

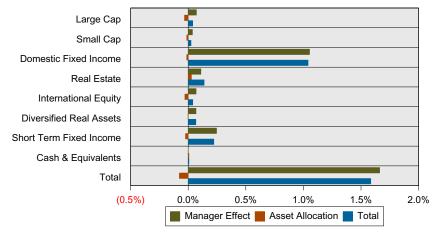


Three Year Annualized Relative Attribution Effects

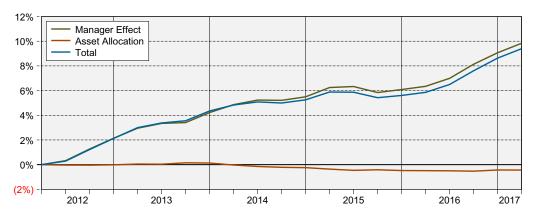
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	12%	12%	10.50%	9.99%	0.04%	(0.06%)	(0.02%)
Small Cap	4%	4%	8.23%	7.22%	0.03%	(0.03%)	0.00%
Domestic Fixed Incon	ne 41%	41%	4.60%	2.68%	0.83%	(0.03%)	0.81%
Real Estate	5%	5%	11.91%	10.58%	0.08%	0.03%	0.11%
International Equity	8%	9%	1.62%	0.43%	0.05%	(0.02%)	0.03%
Diversified Real Asse	ts 10%	10%	2.05%	1.56%	0.04%	0.00%	0.04%
Short Term Fixed Inco	ome17%	16%	1.59%	0.74%	0.15%	(0.01%)	0.14%
Cash & Equivalents	3%	2%	0.13%	0.17%	(0.00%)	(0.01%)	(0.01%)
Total			4.46% =	: 3.35%	+ 1.23% +	(0.12%)	1.11%

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.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

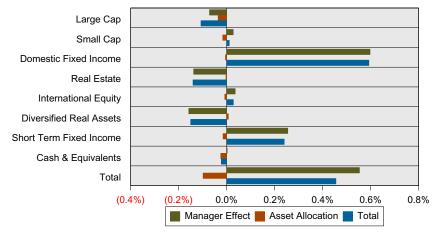


Five Year Annualized Relative Attribution Effects

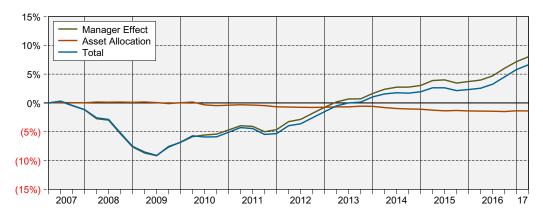
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	14.32%	13.26%	0.07%	(0.03%)	0.04%
Small Cap	3%	3%	13.79%	12.35%	0.04%	(0.01%)	0.02%
Domestic Fixed Incor		37%	5.22%	2.34%	1.05%	(0.01%)	1.04%
Real Estate	5%	4%	13.36%	10.69%	0.11%	0.03%	0.14%
International Equity	7%	7%	7.33%	5.79%	0.07%	(0.03%)	0.04%
Diversified Real Asse		11%	2.62%	1.87%	0.07%	(0.00%)	0.07%
Short Term Fixed Inc	ome25%	25%	1.59%	0.65%	0.25%	(0.02%)	0.22%
Cash & Equivalents	3%	3%	0.15%	0.14%	0.00%	0.01%	0.01%
Total			5.13% =	3.54%	+ 1.66% +	(0.08%)	1.59%

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.

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten 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	10%	10%	6.98%	7.52%	(0.07%)	(0.04%)	(0.11%)
Small Cap	3%	3%	7.94%	7.12%	0.03%	(0.02%)	`0.01%´
Domestic Fixed Incon		41%	6.09%	4.27%	0.60%	(0.00%)	0.59%
Real Estate	5%	5%	3.25%	6.72%	(0.14%)	(0.00%)	(0.14%)
International Equity	7%	7%	1.55%	0.81%	0.04%	(0.01%)	0.03%
Diversified Real Asse	ts 15%	15%	3.68%	4.24%	(0.16%)	`0.01%´	(0.15%)
Short Term Fixed Inc	ome16%	16%	-	-	0.26%	(0.01%)	0.24%
Cash & Equivalents	3%	3%	0.73%	0.68%	0.00%	(0.02%)	(0.02%)
Total			4.49% =	4.03%	+ 0.55% +	(0.10%)	0.46%

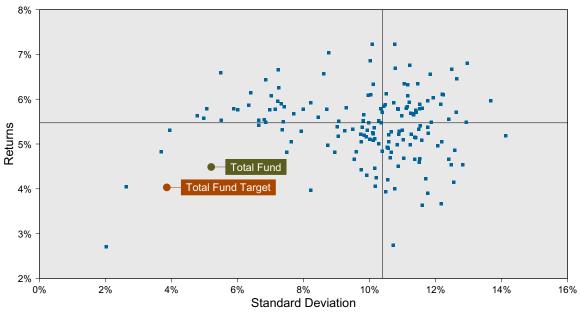
Cumulative Performance Relative to Target

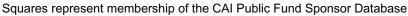
The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the CAI Public Fund Sponsor Database.



Cumulative Returns Actual vs Target

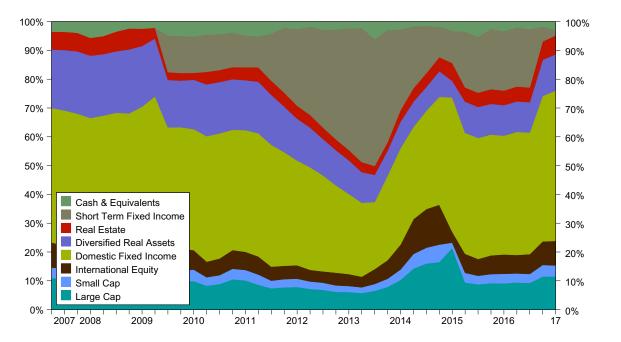
Ten Year Annualized Risk vs Return





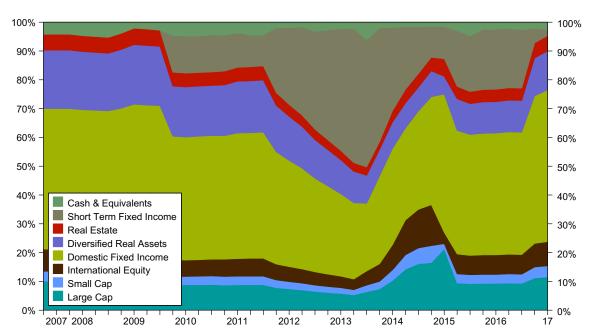
Actual vs Target Historical Asset Allocation

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.





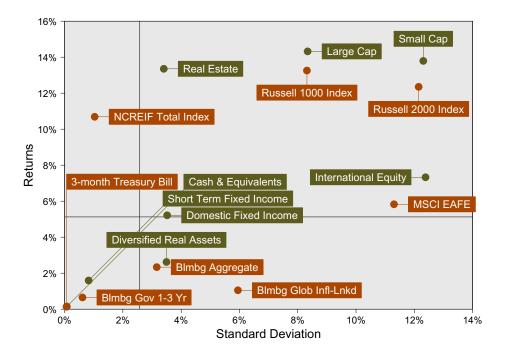
Target Historical Asset Allocation



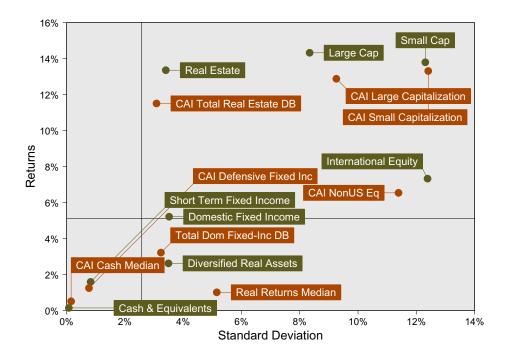
Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



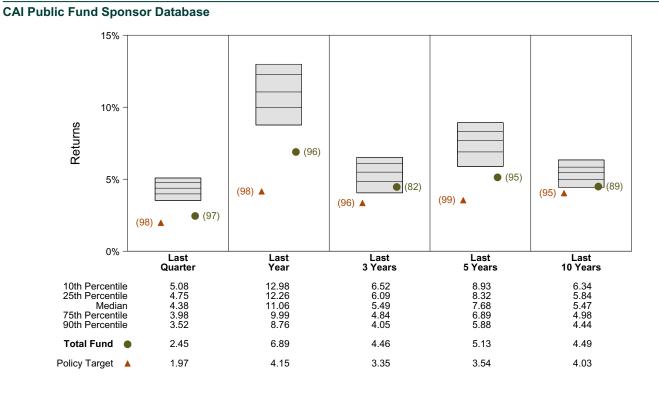
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



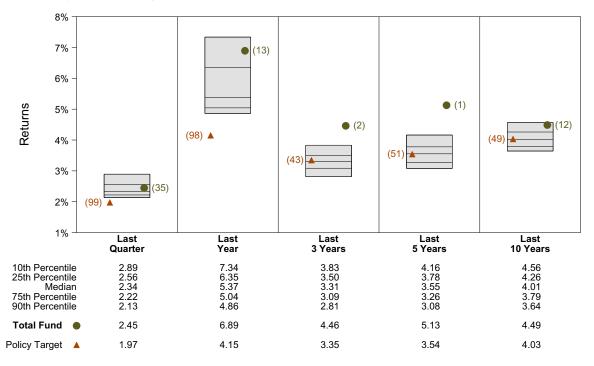
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Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended March 31, 2017. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



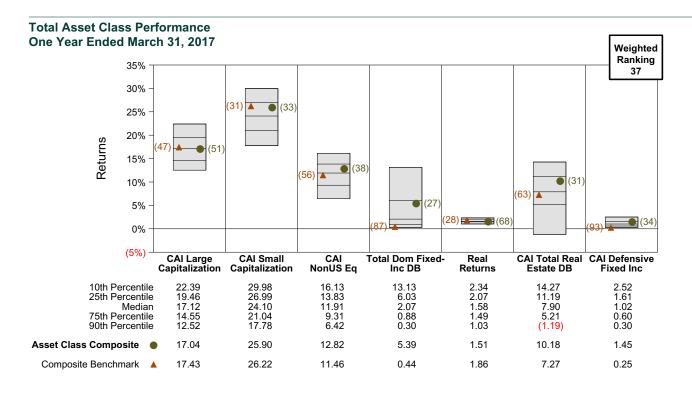
Asset Allocation Adjusted Ranking



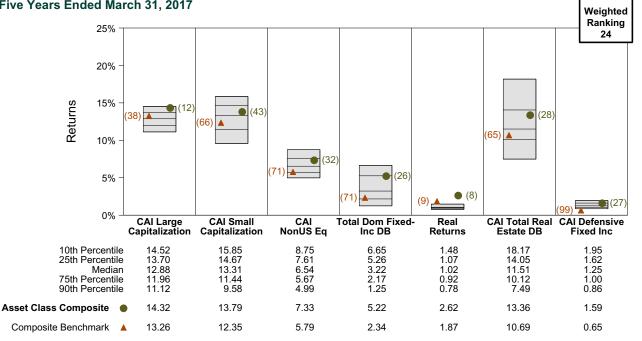


Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.



Total Asset Class Performance Five Years Ended March 31, 2017



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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.

	March 31,	March 31, 2017			December 3	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weiaht
Domestic Equity	\$321,151,259	15.33%	\$(17,136,474)	\$12,375,606	\$325,912,127	15.52%
Large Cap	\$241,086,220	11.51%	\$(12,112,114)	\$11,517,481	\$241,680,853	11.51%
Parametric Clifton Large Cap	47,453,033	2.26%	(3,000,000)	2,715,072	47,737,961	2.27%
L.A. Capital Large Cap Growth	73,649,648	3.52%	(3,036,808)	4,653,427	72,033,028	3.43%
L.A. Capital Enhanced	47,251,677	2.26%	(3,016,104)	2,217,177	48,050,604	2.29%
LSV Large Cap Value	72,731,862	3.47%	(3,059,202)	1,931,804	73,859,259	3.52%
Small Cap	\$80,065,040	3.82%	\$(5,024,359)	\$858,125	\$84,231,274	4.01%
Parametric Clifton Small Cap	39,914,976	1.91%	(5,000,000)	984,029	43,930,947	2.09%
PIMCO RAE	40,150,063	1.92%	(24,359)	(125,904)	40,300,326	1.92%
International Equity	\$178,846,457	8.54%	\$(6,140,106)	\$12,931,126	\$172,055,437	8.19%
Capital Group	0	0.00%	(3,565)	3,450	115	0.00%
DFA Int'l Small Cap Value	18,396,616	0.88%	(2,000,000)	1,424,449	18,972,166	0.90%
LSV Intl Value	74,933,832	3.58%	(4,073,173)	4,998,111	74,008,894	3.52%
Vanguard Intl Explorer Fund	19,909,369	0.95%	Ó	1,857,176	18,052,193	0.86%
William Blair	65,606,640	3.13%	(63,368)	4,647,940	61,022,068	2.91%
Domestic Fixed Income	\$1,093,616,324	52.20%	\$11,731,688	\$21,447,012	\$1,060,437,623	50.48%
Declaration Total Return	82,398,045	3.93%	(59,121)	1,134,363	81,322,803	3.87%
PIMCO DiSCO II	92,360,066	4.41%	Ó	3,840,249	88,519,817	4.21%
PIMCO Bravo II Fund	54,769,318	2.61%	3,750,000	2,148,327	48,870,991	2.33%
Prudential	112,574,944	5.37%	2,927,635	2,026,628	107,620,681	5.12%
SSgA US Govt Credit Bd Idx	141,933,546	6.77%	4,488,274	1,336,085	136,109,187	6.48%
Wells Capital	304,986,490	14.56%	(273,702)	6,301,369	298,958,824	14.23%
Western Asset Management	304,593,914	14.54%	898,603	4,659,991	299,035,320	14.24%
Diversified Real Assets	\$263,869,133	12.59%	\$25,092	\$297,224	\$263,546,817	12.55%
Western Asset Management	111,255,799	5.31%	(37,361)	1,113,667	110,179,493	5.25%
JP Morgan Infrastructure	80,127,112	3.82%	(158,993)	(1,148,276)	81,434,382	3.88%
Eastern Timber Opportunities	55,136,330	2.63%	(172,068)	359,902	54,948,496	2.62%
Grosvenor Cust. Infrastructure	17,349,892	0.83%	393,514	(28,068)	16,984,446	0.81%
Real Estate	\$136,762,074	6.53%	\$(1,584,211)	\$3,989,819	\$134,356,465	6.40%
Invesco Core Real Estate	64,801,064	3.09%	(522,290)	1,605,988	63,717,366	3.03%
JP Morgan RE	71,961,010	3.43%	(1,061,921)	2,383,832	70,639,099	3.36%
Short Term Fixed Income	\$41,012,258	1.96%	\$(66,189,838)	\$274,852	\$106,927,244	5.09%
JP Morgan Short Term Bonds	41,010,924	1.96%	(30,123,170)	281,697	70,852,396	3.37%
Barings Short Term Bonds	1,334	0.00%	(36,066,668)	(6,845)	36,074,847	1.72%
Cash & Equivalents	\$59,976,385	2.86%	\$22,569,215	\$66,225	\$37,340,945	1.78%
Northern Trust Cash Account	34,890,458	1.67%	22,569,215	24,305	12,296,937	0.59%
Bank of ND	25,085,927	1.20%	0	41,919	25,044,008	1.19%
Securities Lending Income	\$0	0.00%	\$(31,008)	\$31,008	-	<u> </u>
Total Fund	\$2,095,233,890	100.0%	\$(56,755,641)	\$51,412,873	\$2,100,576,658	100.0%

Asset Distribution Across Investment Managers

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

		ods Ended Mar			
			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Domestic Equity					
Gross Net	3.89% 3.85%	19.27% 18.95%	9.89% 9.63%	14.18% 13.90%	7.23% 6.86%
net	3.05%	10.95%	9.03%	13.90%	0.00%
arge Cap Equity					
Gross Net	4.88% 4.83%	17.04% 16.79%	10.50% 10.29%	14.32% 14.10%	6.98% 6.65%
Benchmark(1)	6.03%	17.43%	9.99%	13.26%	7.52%
Parametric Clifton Large Cap - Gross	6.00%	17.13%	10.80%	13.66%	-
Parametric Clifton Large Cap - Net S&P 500 Index	6.00% 6.07%	16.91%	10.68% 10.37%	13.53%	- 7.51%
SAP 500 muex	0.07%	17.17%	10.37 %	13.30%	7.51%
L.A. Capital - Gross	6.61%	14.04%	11.62%	14.11%	9.17%
L.A. Capital - Net	6.56%	13.81%	11.40%	13.89%	8.97%
Russell 1000 Growth Index	8.91%	15.76%	11.27%	13.32%	9.13%
L.A. Capital Enhanced - Gross	4.61%	16.53%	10.92%	14.18%	8.73%
L.A. Capital Enhanced - Net	4.57%	16.37%	10.77%	14.03%	8.57%
Russell 1000 Index	6.03%	17.43%	9.99%	13.26%	7.58%
LSV Asset Management - Gross	2.67%	20.26%	8.85%	14.96%	7.12%
LSV Asset Management - Net	2.59%	19.90%	8.53%	14.64%	6.81%
Russell 1000 Value Index	3.27%	19.22%	8.67%	13.13%	5.93%
Small Cap Equity					
Gross	1.07%	25.90%	8.23%	13.79%	7.94%
Net	1.04%	25.38%	7.84%	13.36%	7.43%
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	7.12%
Parametric Clifton Small Cap - Gross	2.38%	27.14%	8.56%	13.61%	-
Parametric Clifton SmallCap - Net	2.38%	26.47%	8.12%	13.15%	-
Russell 2000 Index	2.47%	26.22%	7.22%	12.35%	7.12%
PIMCO RAE - Gross	(0.31%)	24.47%	7.67%	13.79%	-
PIMCO RAE - Net	(0.37%)	24.16%	7.37%	13.41%	-
Russell 2000	2.47%	26.22%	7.22%	12.35%	7.12%
nternational Equity					
Gross	7.63%	12.82%	1.62%	7.33%	1.55%
Net	7.55%	12.49%	1.29%	6.96%	1.27%
Benchmark(2)	6.81%	11.46%	0.43%	5.79%	0.81%
DFA Intl Small Cap Value - Net	7.73%	17.30%	2.71%	9.78%	-
World ex US SC Va	6.80%	13.86%	1.77%	7.76%	2.79%
LSV Asset Management - Gross	6.99%	14.60%	2.19%	7.69%	0.59%
LSV Asset Management - Net	6.88%	14.16%	1.78%	7.24%	0.28%
Benchmark(3)	7.25%	11.67%	0.50%	5.83%	0.83%
Vanguard Intl Explorer Fund - Net	10.29%	10.56%	3.08%	8.75%	2.95%
BMI, EPAC, <\$2 B	7.79%	11.92%	4.48%	8.46%	2.95%
, , , .				0.1070	
William Blair - Gross	7.62%	-	-	-	-
William Blair - Net MSCI ACWI ex US	7.51% 7.86%	- 13.13%	- 0.56%	4.36%	- 1.35%
	7.0070	13.1370	0.00%	4.50 /0	1.5570

(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter. (2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US thereafter.

(3) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again thereafter.



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

	. .	.	Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
omestic Fixed Income					
Gross	2.02%	5.39%	4.60%	5.22%	6.09%
Net	1.97%	5.26%	4.47%	5.07%	5.91%
BImbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	4.27%
Declaration Total Return - Net	1.40%	5.16%	4.09%	-	-
Libor-3 Month	0.26%	0.84%	0.49%	0.42%	1.10%
PIMCO DiSCO II - Net	4.34%	14.64%	7.67%	13.47%	-
PIMCO Bravo II Fund - Net	4.40%	10.62%	11.74%	-	-
Blmbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	4.27%
Prudential - Gross	1.88%	3.69%	4.00%	4.19%	6.15%
Prudential - Net	1.82%	3.41%	3.72%	3.94%	6.02%
Blmbg Aggregate Index	0.82%	0.44%	2.68%	2.34%	4.27%
Wells Capital - Gross	2.11%	6.77%	4.62%	5.22%	7.08%
Wells Capital - Net	2.02%	6.58%	4.43%	5.01%	6.86%
Blmbg Baa Credit 3%	1.72%	5.24%	3.72%	4.24%	6.14%
Western Asset - Gross	1.56%	3.56%	4.27%	4.13%	5.31%
Western Asset - Net	1.52%	3.42%	4.13%	3.98%	5.13%
	0.82%	0.44%	2.68%	2.34%	4.27%
BImbg Aggregate	0.02 %	0.44 %	2.00 %	2.34%	4.217
SSgA US Govt Cr Bd Idx - Gross	0.96%	0.53%	2.70%	-	-
SSgA US Govt Cr Bd Idx - Net	0.95%	0.50%	2.66%	-	-
Blmbg Govt/Credit Bd	0.96%	0.54%	2.69%	2.46%	4.34%
iversified Real Assets					
Gross	0.11%	1.51%	2.05%	2.62%	3.68%
Net	0.05%	1.21%	1.77%	2.33%	3.38%
Weighted Benchmark	1.06%	1.86%	1.56%	1.87%	4.24%
Western TIPS - Gross	1.01%	(0.43%)	0.65%	0.90%	3.23%
Western TIPS - Net	0.98%	(0.56%)	0.51%	0.75%	3.06%
Blmbg Glbl Inftn-Linked(1)	1.30%	0.53%	0.21%	1.05%	3.82%
JP Morgan Infrastructure - Gross	(1.41%)	2.24%	1.24%	4.74%	-
JP Morgan Infrastructure - Net	(1.57%)	1.40%	0.36%	3.77%	-
CPI-W	0.96%	2.35%	0.73%	0.98%	1.71%
Eastern Timber Opportunities - Net	0.66%	3.37%	4.56%	3.99%	-
NCREIF Timberland Index	0.76%	3.64%	5.67%	7.14%	5.71%
Grosvenor Cust. Infrastructure - Net	(0.16%)	4.94%	8.50%	7.11%	-
CPI-W	0.96%	2.35%	0.73%	0.98%	1.71%

(1) Blmbg US TIPS through 12/31/2009 and Blmbg Global Inflation-Linked thereafter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

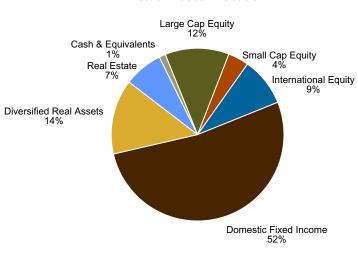
Returns for Periods Ended March 31, 2017										
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years					
Real Estate										
Gross	2.98%	10.18%	11.91%	13.36%	3.25%					
Net	2.85%	9.42%	11.11%	12.42%	2.17%					
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	6.72%					
Invesco Core Real Estate - Gross	2.54%	10.38%	12.38%	-	-					
Invesco Core Real Estate - Net	2.45%	10.00%	11.99%	-	-					
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	6.72%					
JP Morgan - Gross	3.38%	9.99%	11.64%	13.96%	3.52%					
JP Morgan - Net	3.20%	8.90%	10.51%	12.71%	2.30%					
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	6.72%					
Short Term Fixed Income										
Gross	0.32%	1.45%	1.59%	1.59%	-					
Net	0.14%	1.13%	1.38%	1.42%	-					
Blmbg Gov 1-3 Yr	0.28%	0.25%	0.74%	0.65%	2.07%					
JP Morgan Short Term Bds - Gross	0.45%	0.66%	1.11%	1.07%	-					
JP Morgan Short Term Bds - Net	0.27%	0.43%	0.96%	0.94%	-					
Blmbg Gov/Credit 1-3 Y	0.41%	0.71%	0.96%	0.93%	2.34%					
Cash & Equivalents - Net	0.12%	0.32%	0.13%	0.15%	0.73%					
Cash Account- Net	0.08%	0.23%	0.10%	0.13%	0.73%					
Bank of ND - Net	0.17%	-	-	-	-					
90 Day Treasury Bills	0.10%	0.36%	0.17%	0.14%	0.68%					
Total Fund										
Gross	2.45%	6.89%	4.46%	5.13%	4.49%					
Net	2.39%	6.67%	4.24%	4.91%	4.24%					
Target*	1.97%	4.15%	3.35%	3.54%	4.03%					

* Current Quarter Target = 52.7% Blmbg Aggregate, 13.5% NDSIB INS DRA Weighted Benchmark, 11.5% Russell 1000 Index, 8.4% MSCI World ex US, 5.3% NCREIF Total Index, 3.9% Russell 2000 Index, 2.7% 3-month Treasury Bill and 2.0% Blmbg Gov 1-3 Yr.



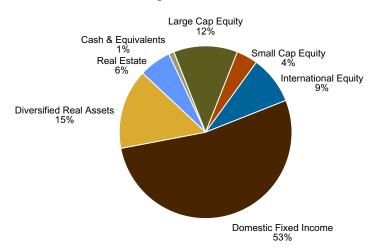
Actual vs Target Asset Allocation As of March 31, 2017

The first chart below shows the Fund's asset allocation as of March 31, 2017. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



Actual Asset Allocation

Target Asset Allocation

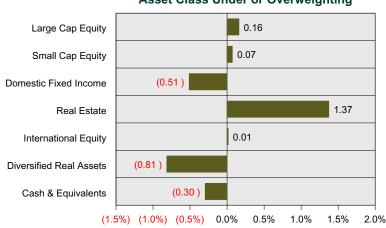


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	223,639	12.0%	12.0%	0.0%	94
Small Cap Equity	72,593	3.9%	4.0%	(0.1%)	<mark>(1,922)</mark> 2,075
International Equity	169,734	9.1%	9.0%	0.1%	2,075
Domestic Fixed Income	977,624	52.5%	53.0%	(0.5%)	(9,701)
Diversified Real Assets	259,947	14.0%	15.0%	(1.0%)	(19,484)
Real Estate	136,695	7.3%	6.0%	1.3%	24,922
Cash & Equivalents	22,645	1.2%	1.0%	0.2%	4,016
Total	1,862,876	100.0%	100.0%		



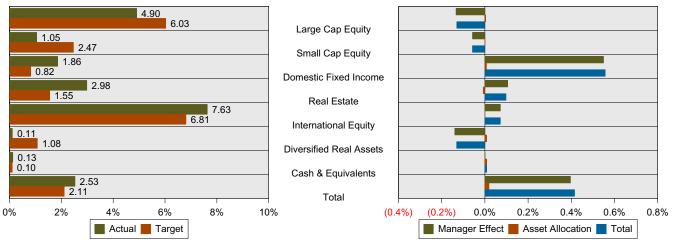
Quarterly Total Fund Relative Attribution - March 31, 2017

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 Effects for Quarter ended March 31, 2017

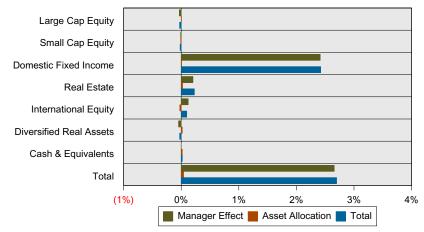
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	4.90%	6.03%	(0.13%)	0.00%	(0.13%)
Small Cap Equity	4%	4%	1.05%	2.47%	(0.06%)	(0.00%)	(0.06%)
Domestic Fixed Incom	e 52%	53%	1.86%	0.82%	0.55%	0.01%	0.56%
Real Estate	7%	6%	2.98%	1.55%	0.11%	(0.01%)	0.10%
International Equity	9%	9%	7.63%	6.81%	0.07%	(0.00%)	0.07%
Diversified Real Assets		15%	0.11%	1.08%	(0.14%)	0.01%	(0.13%)
Cash & Equivalents	1%	1%	0.13%	0.10%	0.00%	0.01%	0.01%
Total			2.53% =	÷ 2.11%	+ 0.40% +	0.02%	0.42%

* Current Quarter Target = 53.0% Blmbg Aggregate, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI World ex US, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

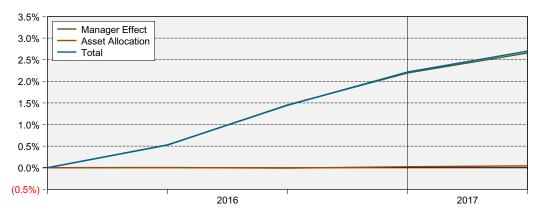
Relative Attribution by Asset Class

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

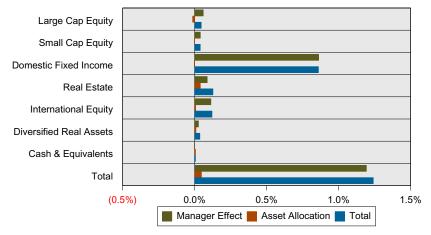


One Year Relative Attribution Effects

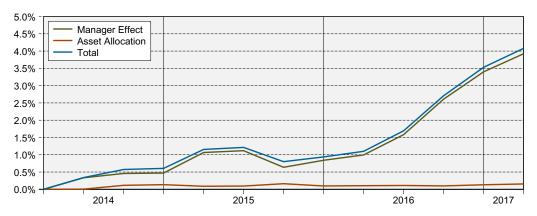
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	17.09%	17.43%	(0.03%)	0.01%	(0.03%)
Small Cap Equity	4%	4%	25.89%	26.22%	(0.01%)	(0.01%)	(0.02%)
Domestic Fixed Incom	e 53%	53%	4.89%	0.44%	2.41%	0.01%	2.42%
Real Estate	7%	6%	10.18%	7.27%	0.20%	0.02%	0.23%
International Equity	9%	9%	12.82%	11.46%	0.12%	(0.03%)	0.10%
Diversified Real Assets	s 14%	15%	1.56%	1.89%	(0.05%)	0.02%	(0.03%)
Cash & Equivalents	1%	1%	0.32%	0.36%	(0.00%)	0.02%	0.02%
Total			7.70% =	5.00%	+ 2.66% +	0.04%	2.70%

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

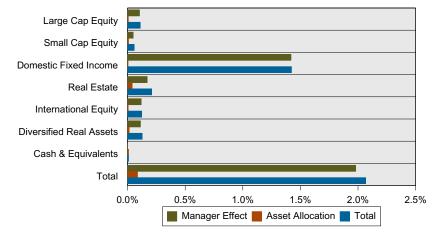


Three Year Annualized Relative Attribution Effects

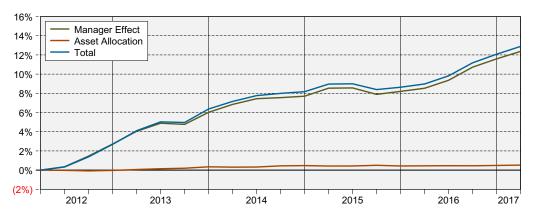
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	10.53%	9.99%	0.06%	(0.01%)	0.05%
Small Cap Equity	4%	4%	8.29%	7.22%	0.04%	(0.00%)	0.04%
Domestic Fixed Incom	e 53%	53%	4.34%	2.68%	0.86%	(0.00%)	0.86%
Real Estate	7%	6%	11.91%	10.58%	0.09%	0.04%	0.13%
International Equity	9%	9%	1.62%	0.43%	0.11%	0.01%	0.12%
Diversified Real Assets	s 15%	16%	2.35%	2.24%	0.03%	0.01%	0.04%
Cash & Equivalents	1%	1%	0.13%	0.17%	(0.00%)	0.01%	0.01%
Total			5.27% =	4.03%	+ 1.19% +	0.05%	1.24%

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.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

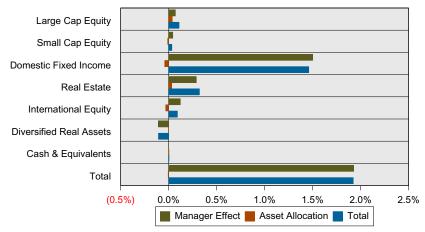


Five Year Annualized Relative Attribution Effects

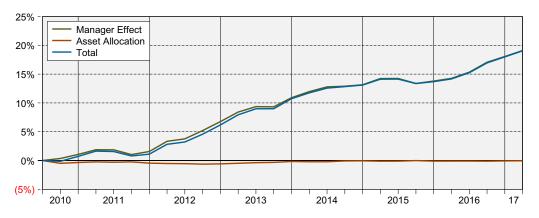
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	11%	11%	14.30%	13.26%	0.10%	0.01%	0.11%
Small Cap Equity	4%	4%	13.81%	12.35%	0.05%	0.01%	0.06%
Domestic Fixed Incom		52%	5.06%	2.34%	1.42%	0.00%	1.42%
Real Estate	7%	6%	13.34%	10.69%	0.17%	0.04%	0.21%
International Equity	8%	8%	7.22%	5.79%	0.12%	0.00%	0.12%
Diversified Real Assets		18%	2.81%	2.28%	0.11%	0.01%	0.13%
Cash & Equivalents	1%	1%	0.15%	0.14%	0.00%	0.01%	0.01%
Total			6.70% =	4.63%	+ 1.98% +	0.09%	2.07%

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.

Six and Three-Quarter Year Annualized Relative Attribution Effects



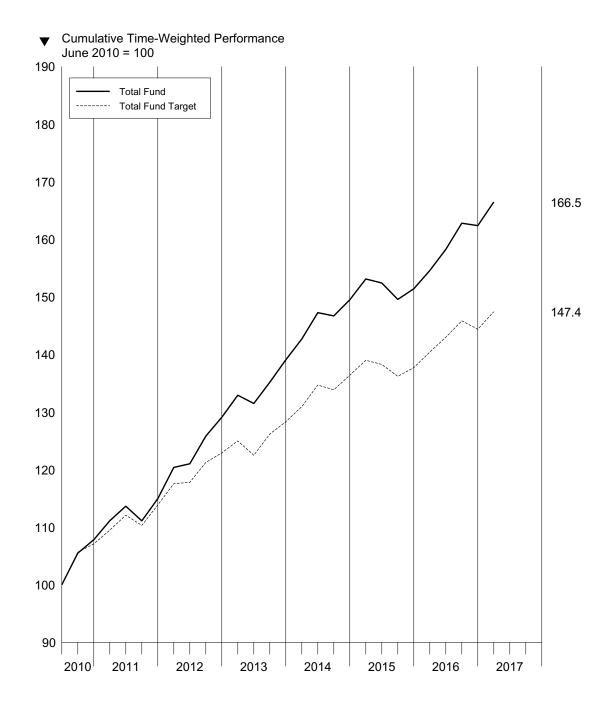
Cumulative Relative Attribution Effects



Six and Three-Quarter Year Annualized Relative Attribution Effects

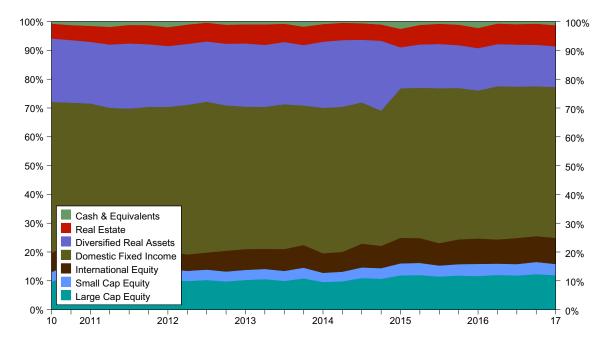
Asset Class Large Cap Equity Small Cap Equity Domestic Fixed Income Real Estate International Equity Diversified Real Assets	6% 8% 19%	Effective Target Weight 11% 4% 52% 6% 8% 19%	Actual Return 16.21% 15.83% 5.95% 16.63% 7.96% 4.00%	Target Return 15.52% 14.51% 3.09% 11.75% 6.39% 4.57%	Manager Effect 0.07% 0.04% 1.50% 0.29% 0.12% (0.11%)	Asset Allocation 0.04% (0.01%) (0.04%) 0.03% (0.03%) 0.00%	Total Relative <u>Return</u> 0.11% 0.03% 1.46% 0.32% 0.09% (0.11%)
Cash & Equivalents	1%	1%	0.18%	0.13%	0.00%	0.00%	0.00%
Total			7.84% =	5.92%	+ 1.93% +	(0.00%)	1.92%

NDSIB - Workforce Safety & Insurance Cumulative Results



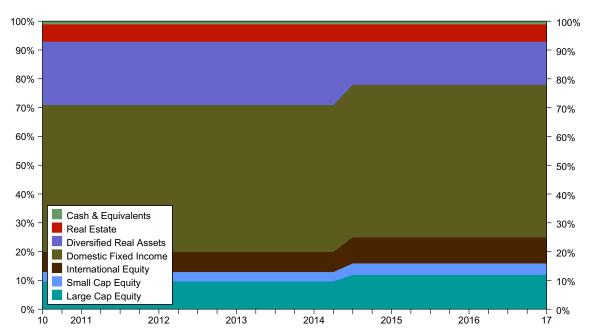
Actual vs Target Historical Asset Allocation

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

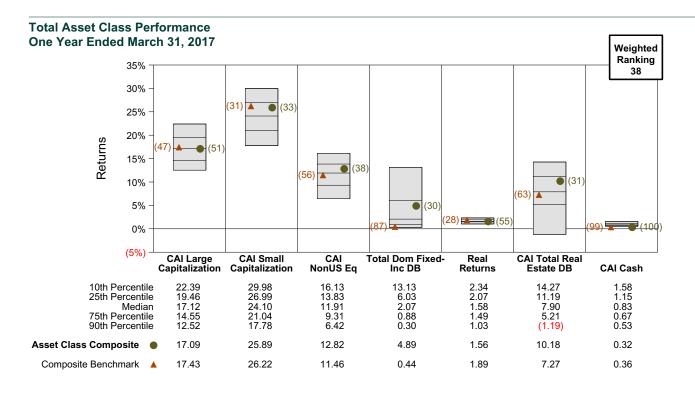
Target Historical Asset Allocation



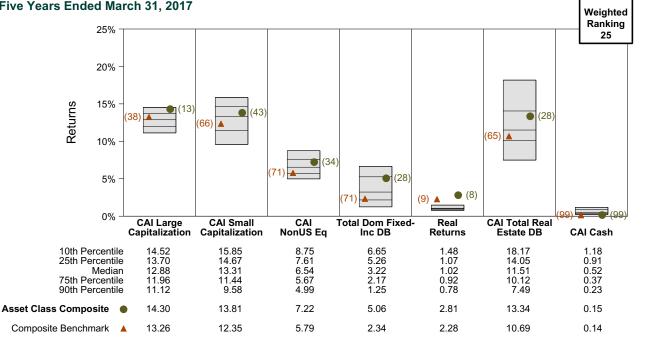


Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.



Total Asset Class Performance Five Years Ended March 31, 2017



Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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 Class Allocation

	March 31,	2017			December 31, 2016		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Large Cap Equity	\$223,639,212	12.01%	\$(12,553,750)	\$10,728,015	\$225,464,947	12.35%	
Small Cap Equity	\$72,593,231	3.90%	\$(5,566,798)	\$788,428	\$77,371,601	4.24%	
International Equity	\$169,733,569	9.11%	\$(6,614,169)	\$12,309,665	\$164,038,073	8.99%	
Domestic Fixed Income	\$977,623,644	52.48%	\$8,587,671	\$17,732,092	\$951,303,882	52.12%	
Diversified Real Assets	\$259,947,247	13.95%	\$(565,938)	\$286,722	\$260,226,463	14.26%	
Real Estate	\$136,694,690	7.34%	\$(1,583,430)	\$3,987,854	\$134,290,267	7.36%	
Cash & Equivalents	\$22,644,781	1.22%	\$10,212,028	\$17,474	\$12,415,279	0.68%	
Securities Lending Income	\$0	0.00%	\$(28,601)	\$28,601	-		
Total Fund	\$1,862,876,374	100.0%	\$(8,112,987)	\$45,878,850	\$1,825,110,511	100.0%	

PLEASE REFER TO PAGE 33 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

Detump for Deviade Ended March 24, 2017

	Returns for Peri	ods Ended Marc	ch 31, 2017		
	Last	Last	Last 3	Last 5	Last 6-3/4
	Quarter	Year	Years	Years	Years
Large Cap Equity					
Gross	4.90%	17.09%	10.53%	14.30%	16.21%
Net	4.85%	16.84%	10.32%	14.08%	15.94%
Benchmark(1)	6.03%	17.43%	9.99%	13.26%	15.52%
Small Cap Equity					
Gross	1.05%	25.89%	8.29%	13.81%	15.83%
Net	1.02%	25.38%	7.90%	13.38%	15.23%
Russell 2000	2.47%	26.22%	7.22%	12.35%	14.51%
International Equity					
Gross	7.63%	12.82%	1.62%	7.22%	7.96%
Net	7.55%	12.49%	1.29%	6.86%	7.57%
Benchmark(2)	6.81%	11.46%	0.43%	5.79%	6.39%
Domestic Fixed Income					
Gross	1.86%	4.89%	4.34%	5.06%	5.95%
Net	1.81%	4.75%	4.20%	4.91%	5.78%
BImbg Aggregate	0.82%	0.44%	2.68%	2.34%	3.09%
Diversified Real Assets					
Gross	0.11%	1.56%	2.35%	2.81%	4.00%
Net	0.05%	1.26%	2.04%	2.49%	3.65%
Weighted Benchmark	1.08%	1.89%	2.24%	2.28%	4.57%
Real Estate					
Gross	2.98%	10.18%	11.91%	13.34%	16.63%
Net	2.85%	9.42%	11.12%	12.42%	15.62%
NCREIF Total Index	1.55%	7.27%	10.58%	10.69%	11.75%
Cash & Equivalents - Net	0.13%	0.32%	0.13%	0.15%	0.18%
90 Day Treasury Bills	0.10%	0.36%	0.17%	0.14%	0.13%
Total Fund					
Gross	2.53%	7.70%	5.27%	6.70%	7.84%
Net	2.47%	7.45%	5.04%	6.43%	7.55%
Target*	2.11%	5.00%	4.03%	4.63%	5.92%
laigot	2.11/0	0.0070	4.0070	7.0070	0.0270

* Current Quarter Target = 53.0% Blmbg Aggregate, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI World ex US, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

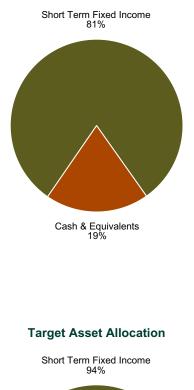
(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US thereafter.

PLEASE REFER TO PAGE 34-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

Actual vs Target Asset Allocation As of March 31, 2017

The first chart below shows the Fund's asset allocation as of March 31, 2017. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



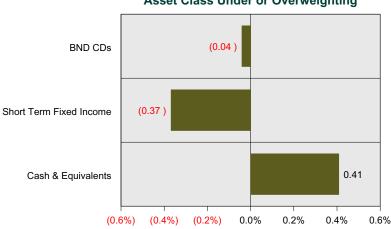
Actual Asset Allocation

Stark & Equivalents 6%

\$000s \$000s Weight Percent Difference Asset Class Actual Actual Target Difference 4,931 1,184 93.8% 6.2% (13.2%) 13.2% Short Term Fixed Income 80.6% (805) Cash & Equivalents 19.4% 805 Total 6,115 100.0% 100.0%

Quarterly Total Fund Relative Attribution - March 31, 2017

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



0.00% 0.05% 0.10% 0.15% 0.20% 0.25% 0.30% 0.35%

Actual Target

0.12 0.10

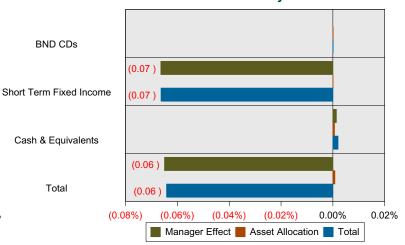
0.18 0.18

0.20

0.22

0.28

0.29



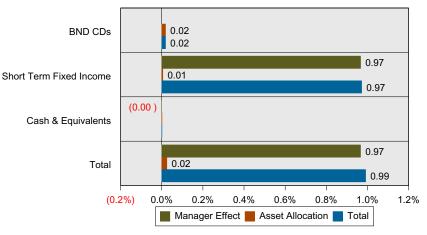
Relative Attribution by Asset Class

Relative Attribution Effects for Quarter ended March 31, 2017

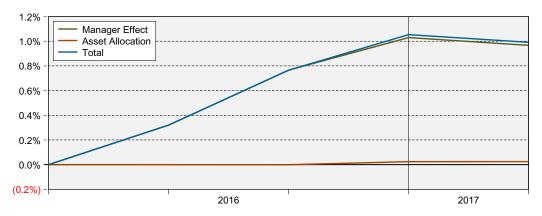
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs Short Term Fixed Inc		10% 85%	0.18% 0.20%	0.18% 0.28%	0.00% (0.07%)	0.00%	0.00% (0.07%) 0.00%
Cash & Equivalents	5%	5%	0.12%	0.10%	0.00% + (0.06%)	0.00% + 0.00%	<u> </u>

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

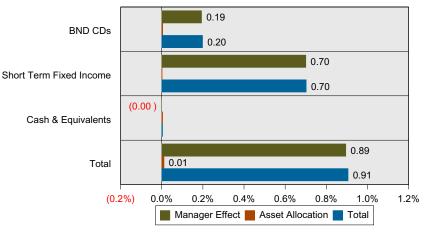


One Year Relative Attribution Effects

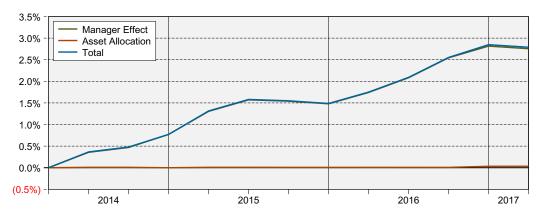
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	15%	15%	2.21%	2.21%	0.00%	0.02%	0.02%
Short Term Fixed Inc Cash & Equivalents	ome82% 3%	82% 3%	1.43% 0.31%	0.25% 0.36%	0.97% (0.00%)	0.01% 0.00%	0.97% 0.00%
Total			1.63% =	0.64%	+ 0.97% +	0.02%	0.99%

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

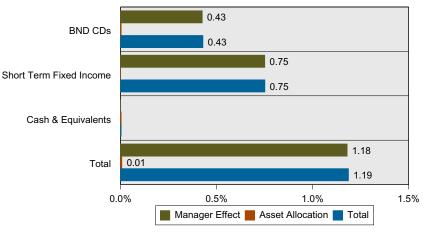


Three Year Annualized Relative Attribution Effects

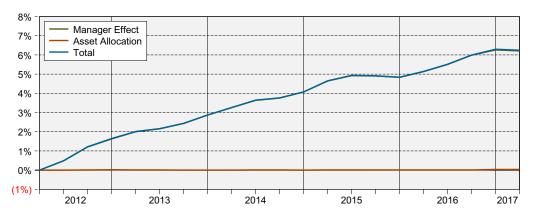
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	16%	16%	2.51%	1.40%	0.19%	0.00%	0.20%
Short Term Fixed Inc		82%	1.60%	0.74%	0.70%	0.00%	0.70%
Cash & Equivalents	2%	2%	0.13%	0.17%	(0.00%)	0.00%	0.00%
			4 3 5 4 4	0.05%		0.040/	0.040/
Total			1.75% =	0.85%	+ 0.89% +	0.01%	0.91%

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.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

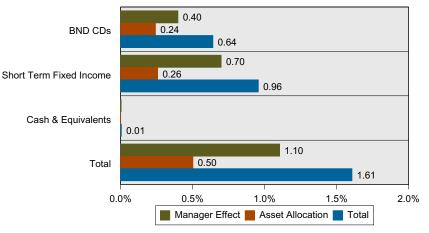


Five Year Annualized Relative Attribution Effects

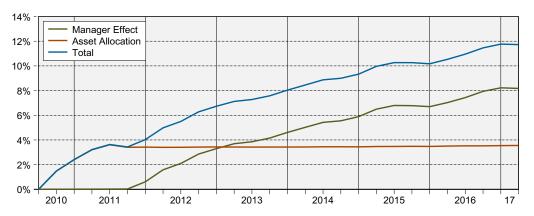
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	19%	19%	2.88%	0.87%	0.43%	0.00%	0.43%
Short Term Fixed Inc		79%	1.61%	0.65%	0.75%	0.00%	0.75%
Cash & Equivalents	2%	2%	0.15%	0.14%	0.00%	0.00%	0.00%
Tatal			4.000/ -	0.000/		0.040/	4 400/
Total			1.86% =	0.68%	+ 1.18% +	· 0.01%	1.19%

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.

Six and Three-Quarter Year Annualized Relative Attribution Effects



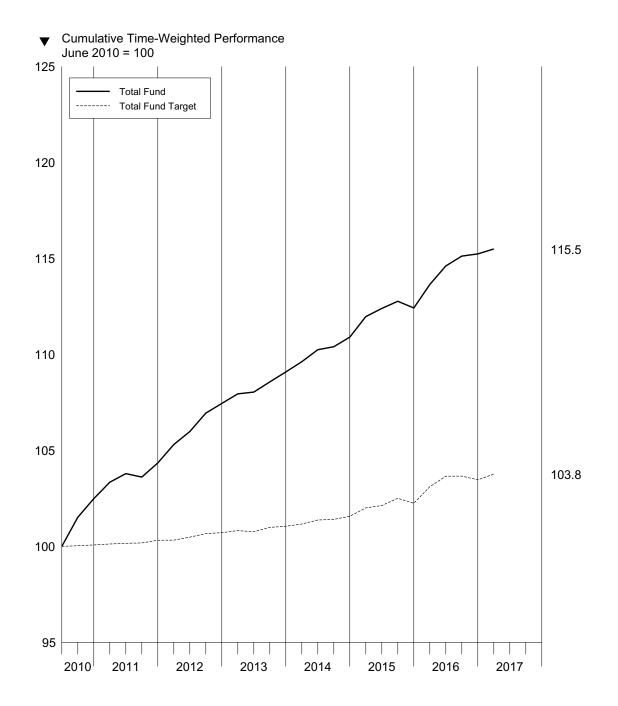
Cumulative Relative Attribution Effects



Six and Three-Quarter Year Annualized Relative Attribution Effects

Asset Class BND CDs Short Term Fixed Inc Cash & Equivalents	Effective Actual Weight 22% come74% 4%	Effective Target Weight 16% 64% 20%	Actual Return 3.28% 1.87% 0.18%	Target Return 1.46% 0.97% 0.13%		Manager Effect 0.40% 0.70% 0.00%	Asset Allocation 0.24% 0.26% 0.00%	Total Relative <u>Return</u> 0.64% 0.96% 0.01%
Total			2.16% =	0.55%	+	1.10% +	0.50%	1.61%

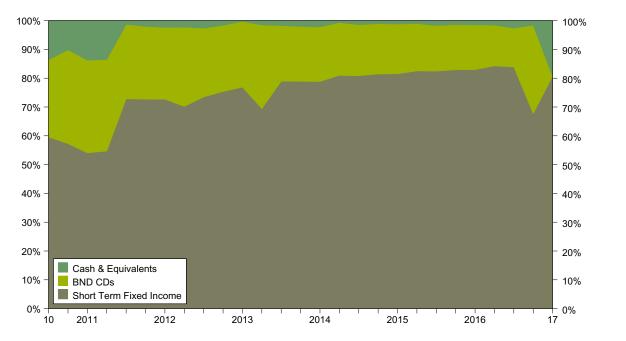
NDSIB - Budget Stabilization Fund Cumulative Results

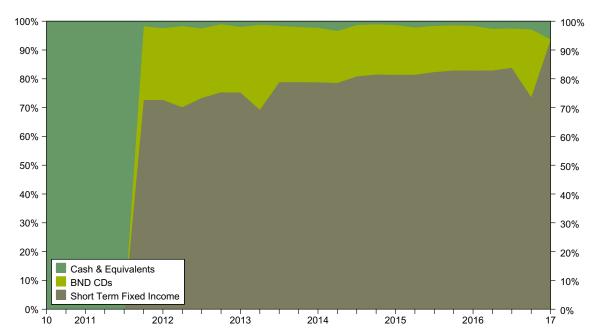


Actual vs Target Historical Asset Allocation

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.







Target Historical Asset Allocation

* Current Quarter Target = 93.8% Blmbg Gov 1-3 Yr and 6.2% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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 Class Allocation

	March 31,	2017			December 31, 2016		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Short Term Fixed Income	\$4,930,889	80.64%	\$(65,243,366)	\$129,091	\$70,045,163	67.65%	
BND CDs	\$0	0.00%	\$(31,915,044)	\$57,855	\$31,857,189	30.77%	
Cash & Equivalents	\$1,183,995	19.36%	\$(455,537)	\$3,948	\$1,635,585	1.58%	
Securities Lending Income	\$0	0.00%	\$(232)	\$232	-	<u> </u>	
Total Fund	\$6,114,884	100.0%	\$(97,614,179)	\$191,126	\$103,537,937	100.0%	

PLEASE REFER TO PAGE 33 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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 March 31, 2017					
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6-3/4 Years
Short Term Fixed Income					
Gross	0.20%	1.43%	1.60%	1.61%	1.87%
Net	(0.02%)	1.07%	1.39%	1.43%	1.71%
Blmbg Gov 1-3 Yr	0.28%	0.25%	0.74%	0.65%	0.78%
Cash & Equivalents - Net	0.12%	0.31%	0.13%	0.15%	0.18%
3-month Treasury Bill	0.10%	0.36%	0.17%	0.14%	0.13%
Total Fund					
Gross	0.22%	1.63%	1.75%	1.86%	2.16%
Net	0.03%	1.32%	1.58%	1.72%	2.04%
Target*	0.29%	0.64%	0.85%	0.68%	0.55%

* Current Quarter Target = 93.8% Blmbg Gov 1-3 Yr and 6.2% 3-month Treasury Bill.

PLEASE REFER TO PAGES 34-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

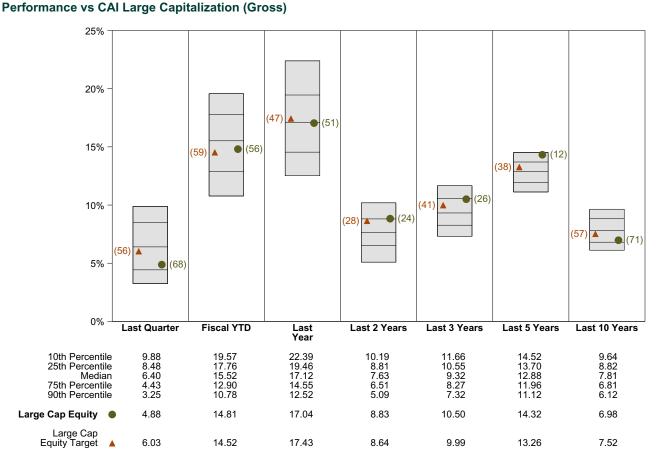
Large Cap Equity Period Ended March 31, 2017

Quarterly Summary and Highlights

- Large Cap Equity's portfolio posted a 4.88% return for the quarter placing it in the 68 percentile of the CAI Large Capitalization group for the quarter and in the 51 percentile for the last year.
- Large Cap Equity's portfolio underperformed the Large Cap ۰ Equity Target by 1.15% for the quarter and underperformed the Large Cap Equity Target for the year by 0.38%.

Quarterly Asset Growth

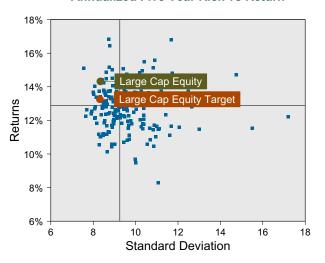
Beginning Market Value	\$241,680,853
Net New Investment	\$-12,112,114
Investment Gains/(Losses)	\$11,517,481
Ending Market Value	\$241,086,220





Relative Return vs Large Cap Equity Target

CAI Large Capitalization (Gross) Annualized Five Year Risk vs Return



Parametric Clifton Large Cap Period Ended March 31, 2017

Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a 6.00% return for the quarter placing it in the 56 percentile of the CAI Large Capitalization group for the quarter and in the 49 percentile for the last year.
- Parametric Clifton Large Cap's portfolio underperformed the S&P 500 Index by 0.07% for the quarter and underperformed the S&P 500 Index for the year by 0.04%.

Quarterly Asset Growth			
Beginning Market Value	\$47,737,961		
Net New Investment	\$-3,000,000		
Investment Gains/(Losses)	\$2,715,072		
Ending Market Value	\$47,453,033		

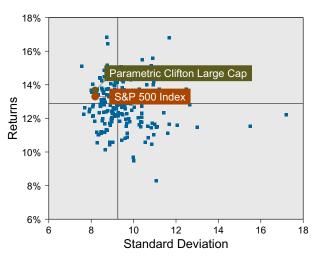






Relative Return vs S&P 500 Index

CAI Large Capitalization (Gross) Annualized Five Year Risk vs Return



L.A. Capital Period Ended March 31, 2017

Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

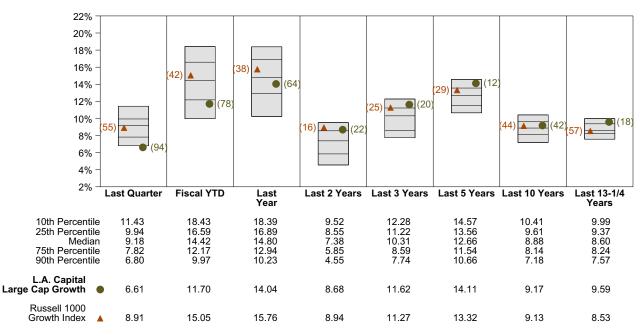
Quarterly Summary and Highlights

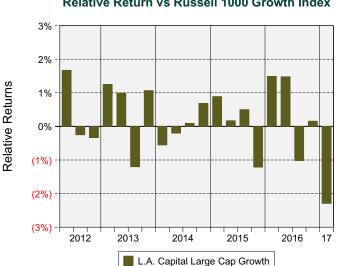
- L.A. Capital Large Cap Growth's portfolio posted a 6.61% return for the quarter placing it in the 94 percentile of the CAI Large Cap Growth group for the quarter and in the 64 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio underperformed ٠ the Russell 1000 Growth Index by 2.29% for the guarter and underperformed the Russell 1000 Growth Index for the year by 1.72%.

Quarterly Asset Growth

Beginning Market Value	\$72,033,028
Net New Investment	\$-3,036,808
Investment Gains/(Losses)	\$4,653,427
Ending Market Value	\$73,649,648

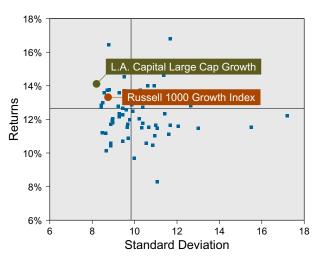






Relative Return vs Russell 1000 Growth Index





L.A. Capital Enhanced Period Ended March 31, 2017

Investment Philosophy

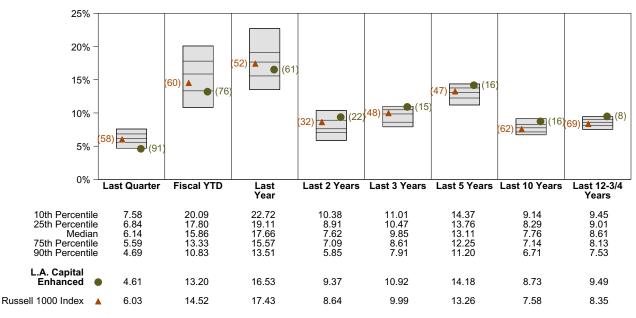
The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 4.61% return for the quarter placing it in the 91 percentile of the CAI Large Cap Core group for the quarter and in the 61 percentile for the last year.
- L.A. Capital Enhanced's portfolio underperformed the Russell 1000 Index by 1.42% for the quarter and underperformed the Russell 1000 Index for the year by 0.90%.



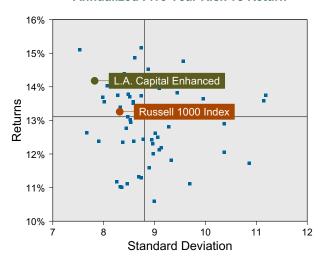
Quarterly Asset Growth			
Beginning Market Value	\$48,050,604		
Net New Investment	\$-3,016,104		
Investment Gains/(Losses)	\$2,217,177		
Ending Market Value	\$47,251,677		





Relative Return vs Russell 1000 Index

CAI Large Cap Core (Gross) Annualized Five Year Risk vs Return



LSV Asset Management Period Ended March 31, 2017

Investment Philosophy

The objective of LSV Asset Management's Large Cap Value Equity (U.S.) strategy is to outperform the Russell 1000 Value by at least 200 basis points (gross of fees) per annum over a 3-5 year period with a tracking error of approximately 4%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 100 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested.

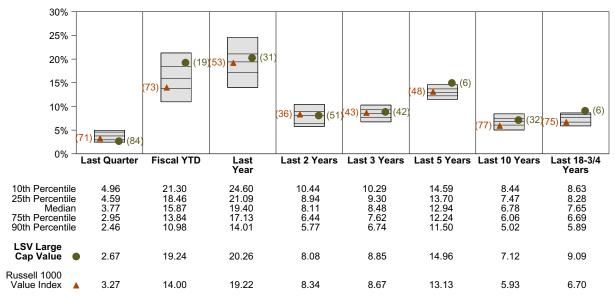
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 2.67% return for the quarter placing it in the 84 percentile of the CAI Large Cap Value group for the quarter and in the 31 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 0.60% for the quarter and outperformed the Russell 1000 Value Index for the year by 1.03%.

Performance vs CAI Large Cap Value (Gross)

Quarterly	Asset	Growth	
an Markat Valu		¢70	05

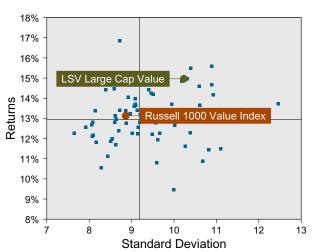
Beginning Market Value	\$73,859,259
Net New Investment	\$-3,059,202
Investment Gains/(Losses)	\$1,931,804
Ending Market Value	\$72,731,862





Relative Return vs Russell 1000 Value Index

CAI Large Cap Value (Gross) Annualized Five Year Risk vs Return



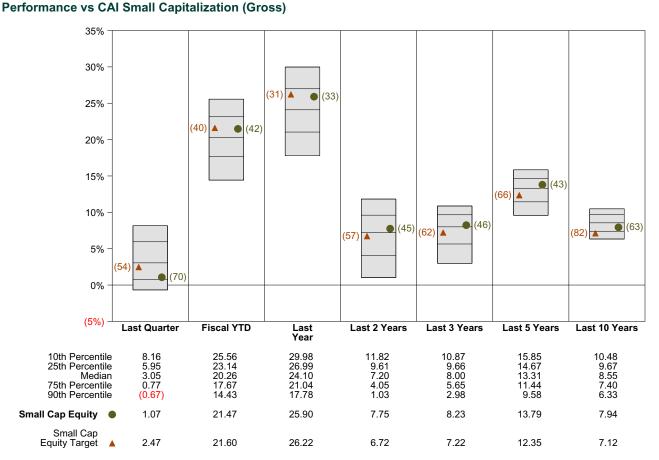
Small Cap Equity Period Ended March 31, 2017

Quarterly Summary and Highlights

- Small Cap Equity's portfolio posted a 1.07% return for the quarter placing it in the 70 percentile of the CAI Small Capitalization group for the quarter and in the 33 percentile for the last year.
- Small Cap Equity's portfolio underperformed the Small Cap Equity Target by 1.40% for the quarter and underperformed the Small Cap Equity Target for the year by 0.32%.

Quarterly Asset Growth

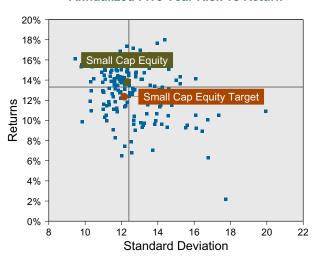
Beginning Market Value	\$84,231,274
Net New Investment	\$-5,024,359
Investment Gains/(Losses)	\$858,125
Ending Market Value	\$80,065,040





Relative Return vs Small Cap Equity Target

CAI Small Capitalization (Gross) Annualized Five Year Risk vs Return



Parametric Clifton SmallCap Period Ended March 31, 2017

Investment Philosophy

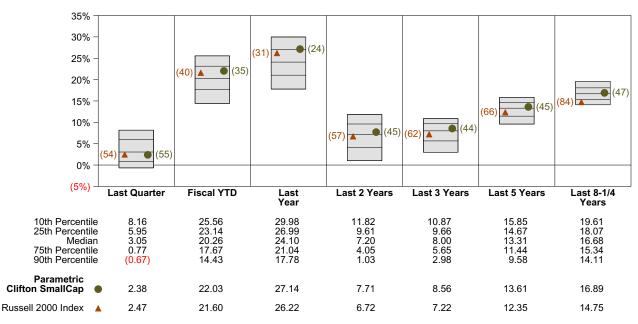
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

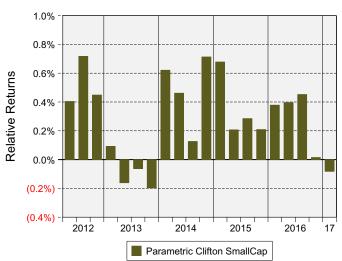
Quarterly Summary and Highlights

- Parametric Clifton SmallCap's portfolio posted a 2.38% return for the quarter placing it in the 55 percentile of the CAI Small Capitalization group for the quarter and in the 24 percentile for the last year.
- Parametric Clifton SmallCap's portfolio underperformed the Russell 2000 Index by 0.08% for the quarter and outperformed the Russell 2000 Index for the year by 0.92%.

Quarterly Asset Growth			
Beginning Market Value	\$43,930,947		
Net New Investment	\$-5,000,000		
Investment Gains/(Losses)	\$984,029		
Ending Market Value	\$39,914,976		

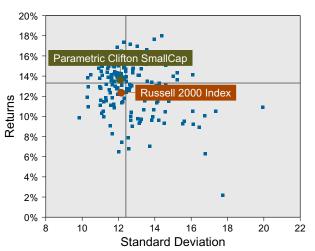






Relative Return vs Russell 2000 Index

CAI Small Capitalization (Gross) Annualized Five Year Risk vs Return



PIMCO RAE Period Ended March 31, 2017

Investment Philosophy

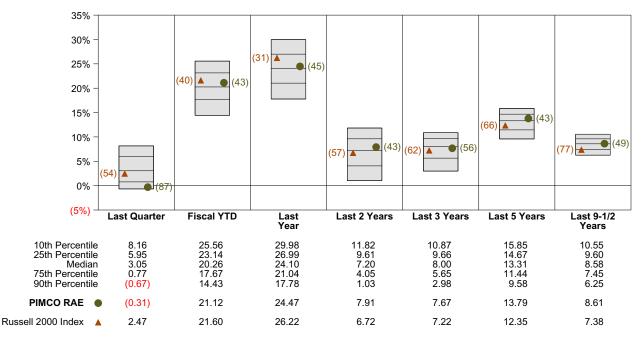
Small company value equity portfolio utilizing the index strategy and philosophy described as the Enhanced RAFI US Small strategy which relies on portfolio weights derived from firm fundamentals (free cash flow, book equity value, total sales and gross dividend), instead of market capitalization. Additionally, the enhanced portfolio strategy uses a quality of earnings screening and a financial distress screening to augment portfolio returns and reduce portfolio volatility.

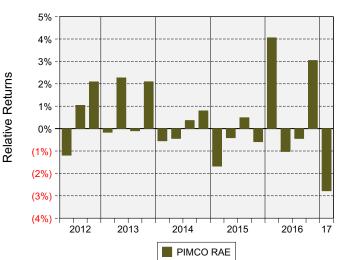
Quarterly Summary and Highlights

- PIMCO RAE's portfolio posted a (0.31)% return for the quarter placing it in the 87 percentile of the CAI Small Capitalization group for the quarter and in the 45 percentile for the last year.
- PIMCO RAE's portfolio underperformed the Russell 2000 Index by 2.78% for the quarter and underperformed the Russell 2000 Index for the year by 1.75%.

Quarterly Asset Growth		
Beginning Market Value	\$40,300,326	
Net New Investment	\$-24,359	
Investment Gains/(Losses)	\$-125,904	
Ending Market Value	\$40,150,063	

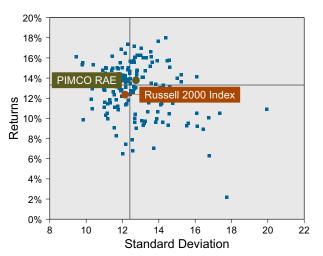






Relative Return vs Russell 2000 Index

CAI Small Capitalization (Gross) Annualized Five Year Risk vs Return



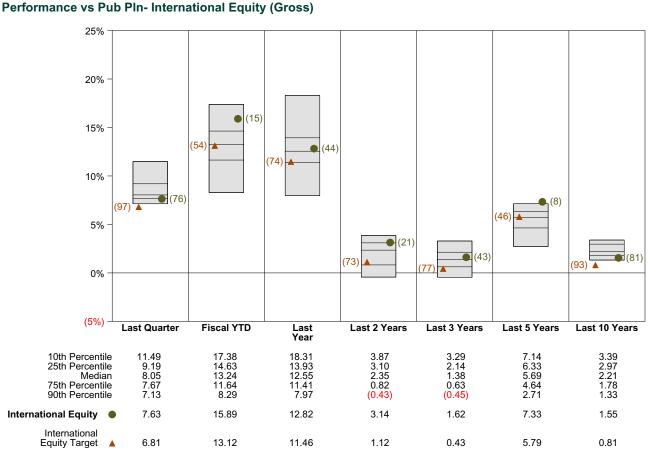
International Equity Period Ended March 31, 2017

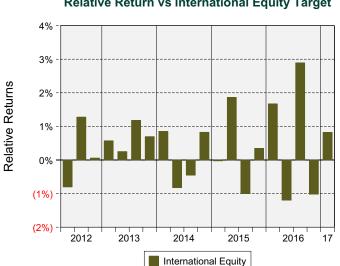
Quarterly Summary and Highlights

- International Equity's portfolio posted a 7.63% return for the quarter placing it in the 76 percentile of the Pub Pln-International Equity group for the quarter and in the 44 percentile for the last year.
- International Equity's portfolio outperformed the International ۰ Equity Target by 0.82% for the quarter and outperformed the International Equity Target for the year by 1.35%.

Quarterly Asset Growth

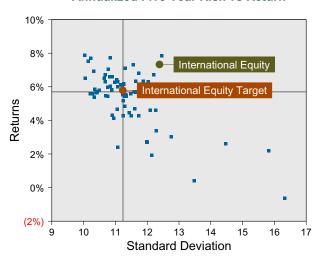
Beginning Market Value	\$172,055,437
Net New Investment	\$-6,140,106
Investment Gains/(Losses)	\$12,931,126
Ending Market Value	\$178,846,457





Relative Return vs International Equity Target

Pub Pln- International Equity (Gross) Annualized Five Year Risk vs Return



DFA Intl Small Cap Value Period Ended March 31, 2017

Investment Philosophy

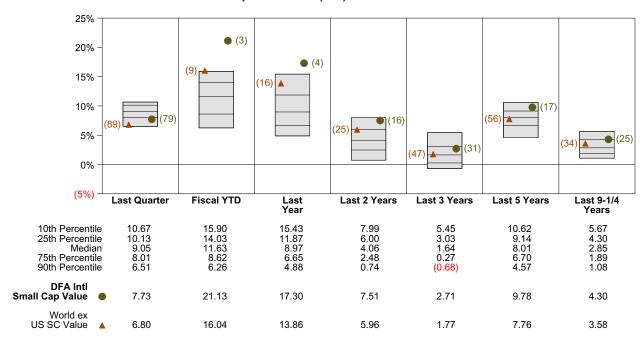
The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

Quarterly Summary and Highlights

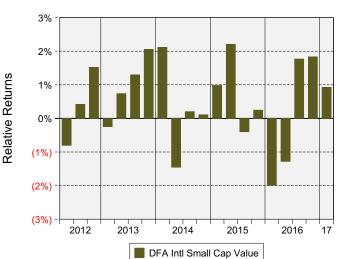
- DFA Intl Small Cap Value's portfolio posted a 7.73% return for the quarter placing it in the 79 percentile of the CAI International Small Cap Mut Funds group for the quarter and in the 4 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 0.93% for the quarter and outperformed the World ex US SC Value for the year by 3.44%.

Quarterly Asset Growth Beginning Market Value \$18,972,166 Net New Investment \$-2,000,000 Investment \$-2,000,000

Investment Gains/(Losses)	\$1,424,449
Ending Market Value	\$18,396,616

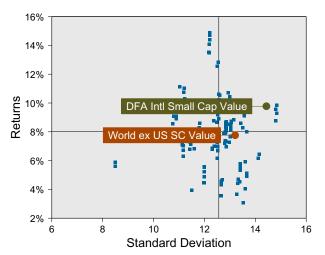






Relative Return vs World ex US SC Value

CAI International Small Cap Mut Funds (Net) Annualized Five Year Risk vs Return



LSV Intl Value Period Ended March 31, 2017

Investment Philosophy

The objective of LSV Asset Management's International Large Cap Value strategy is to outperform the MSCI EAFE Index by at least 250 basis points (gross of fees) per annum over an annualized 3-5 year period with a tracking error of approximately 5-6%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 150 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested. LSV weights countries at a neutral weight relative to the benchmark country weights. 50% of the portfolio is US dollar hedged. ***MSCI EAFE through 9/30/2000, 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.**

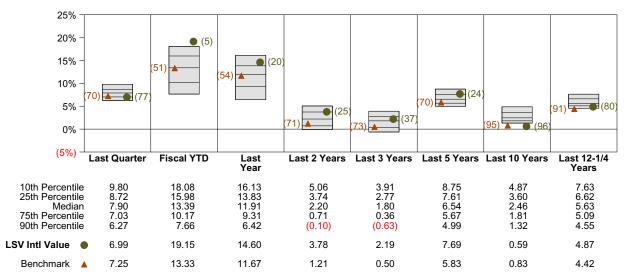
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a 6.99% return for the quarter placing it in the 77 percentile of the CAI Non-US Equity group for the quarter and in the 20 percentile for the last year.
- LSV Intl Value's portfolio underperformed the Benchmark by 0.26% for the quarter and outperformed the Benchmark for the year by 2.92%.

Quarterly Asset Growth

Beginning Market Value	\$74,008,894
Net New Investment	\$-4,073,173
Investment Gains/(Losses)	\$4,998,111
Ending Market Value	\$74,933,832

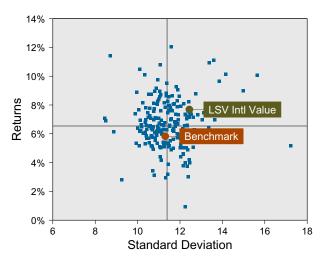
Performance vs CAI Non-US Equity (Gross)





Relative Return vs Benchmark

CAI Non-US Equity (Gross) Annualized Five Year Risk vs Return



Vanguard Intl Explorer Fund Period Ended March 31, 2017

Investment Philosophy

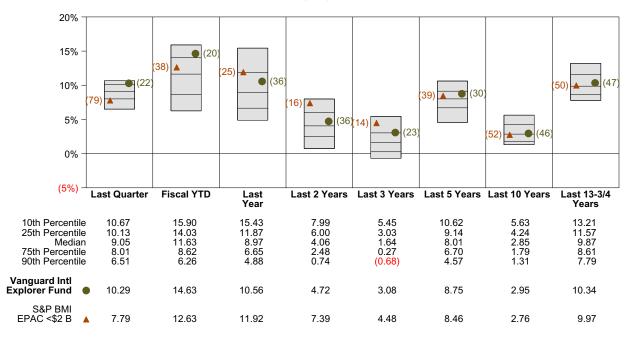
Vanguard International Explorer Fund invests primarily in the equity securities of small-capitalization companies located outside the United States that the advisor believes offer the potential for long-term capital appreciation. The advisor considers, among other things, whether a company is likely to have above-average earnings growth, whether the company's securities are attractively valued, and whether the company has any proprietary advantages.

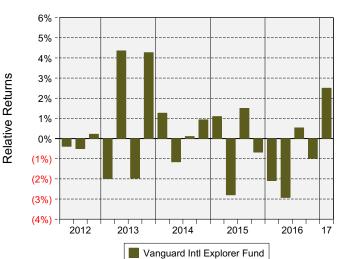
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a 10.29% return for the quarter placing it in the 22 percentile of the CAI International Small Cap Mut Funds group for the quarter and in the 36 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <\$2 B by 2.50% for the quarter and underperformed the S&P BMI EPAC <\$2 B for the year by 1.37%.

Quarterly Asset Growth		
Beginning Market Value	\$18,052,193	
Net New Investment	\$0	
Investment Gains/(Losses)	\$1,857,176	
Ending Market Value	\$19,909,369	

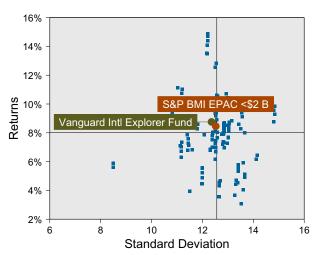






Relative Return vs S&P BMI EPAC <\$2 B





William Blair Period Ended March 31, 2017

Investment Philosophy

One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates the durability and rate of growth in companies that have the following characteristics: strong management with a unique vision, competitive advantages that prolong the duration and size of earnings growth, and conservative financing. Internationally, they believe that this philosophy can be combined with strategic flexibility in managing geographic exposure, capitalization, sector emphasis, and relative growth and valuation at the portfolio level in order to provide an appropriate degree of adaptability to cyclical conditions.

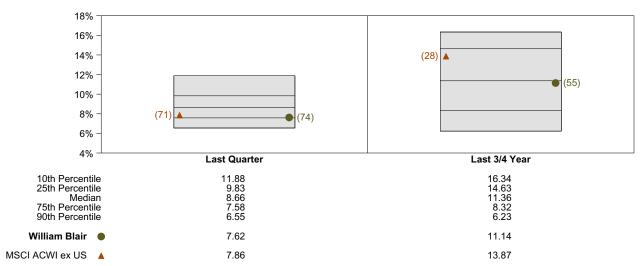
Quarterly Summary and Highlights

- William Blair's portfolio posted a 7.62% return for the quarter placing it in the 74 percentile of the CAI Non-US All Country Growth Equity group for the quarter and in the 55 percentile for the last three-quarter year.
- William Blair's portfolio underperformed the MSCI ACWI ex US by 0.24% for the quarter and underperformed the MSCI ACWI ex US for the three-quarter year by 2.73%.

Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$61,022,068
Net New Investment	\$-63,368
Investment Gains/(Losses)	\$4,647,940
Ending Market Value	\$65,606,640

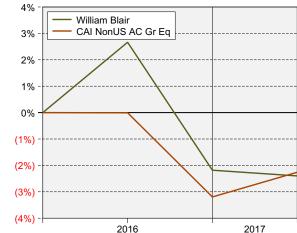
Performance vs CAI Non-US All Country Growth Equity (Gross)



4% 4% 3% 3% Cumulative Relative Returns 2% 2% 1% **Relative Returns** 1% 0% 0% (1%) (2%) (1%) (3%) (2% (4%) (3%) (5%) (6%) (4%) 2016 2017 William Blair

Relative Return vs MSCI ACWI ex US

Cumulative Returns vs MSCI ACWI ex US



Domestic Fixed Income Period Ended March 31, 2017

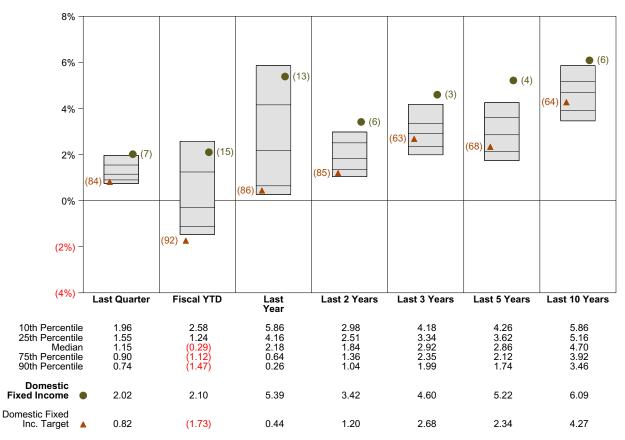
Quarterly Summary and Highlights

- Domestic Fixed Income's portfolio posted a 2.02% return for the quarter placing it in the 7 percentile of the Pub Pln-Domestic Fixed group for the quarter and in the 13 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Inc. Target by 1.20% for the quarter and outperformed the Domestic Fixed Inc. Target for the year by 4.95%.

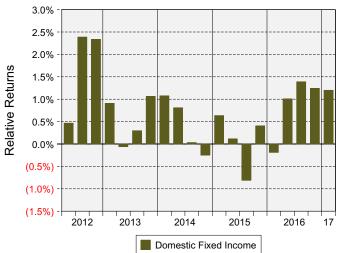
Performance vs Pub Pln- Domestic Fixed (Gross)

Quarterly Asset Growth

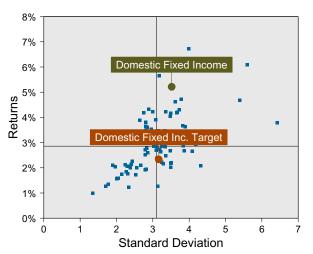
Beginning Market Value	\$1,060,437,623
Net New Investment	\$11,731,688
Investment Gains/(Losses)	\$21,447,012
Ending Market Value	\$1,093,616,324







Pub Pln- Domestic Fixed (Gross) Annualized Five Year Risk vs Return



Declaration Total Return Period Ended March 31, 2017

Investment Philosophy

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

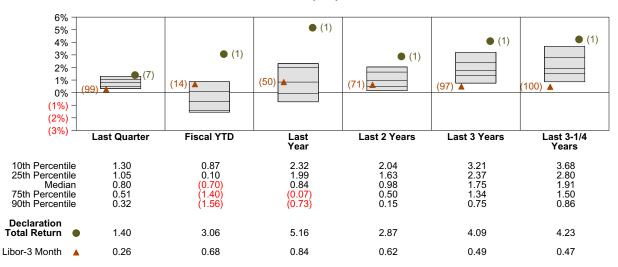
Quarterly Summary and Highlights

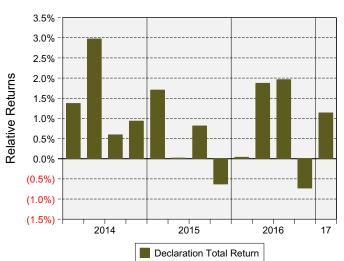
- Declaration Total Return's portfolio posted a 1.40% return for the quarter placing it in the 7 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.14% for the quarter and outperformed the Libor-3 Month for the year by 4.32%.

Quarterly	Asset	Growth	

Beginning Market Value	\$81,322,803
Net New Investment	\$-59,121
Investment Gains/(Losses)	\$1,134,363
Ending Market Value	\$82,398,045

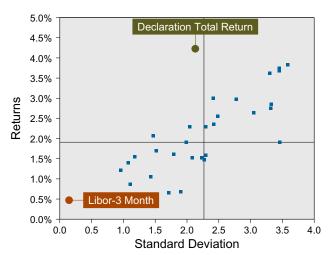






Relative Return vs Libor-3 Month

CAI Intermediate Fixed Income Mut Funds (Net) Annualized Three and One-Quarter Year Risk vs Return



PIMCO DiSCO II Period Ended March 31, 2017

Investment Philosophy

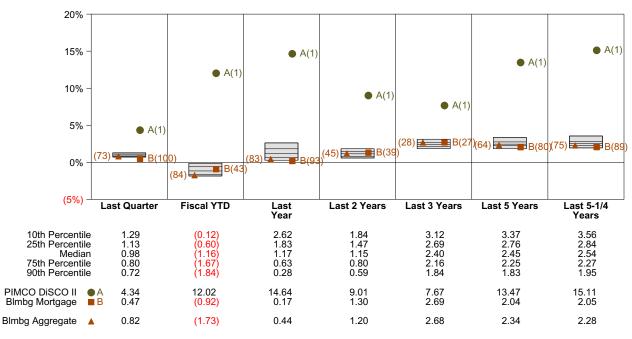
The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

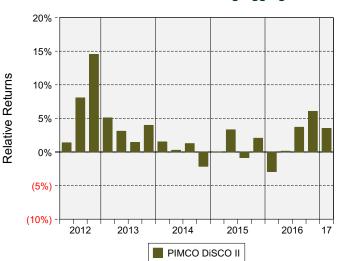
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 4.34% return for the quarter placing it in the 1 percentile of the CAI Core Bond Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the BImbg Aggregate by 3.52% for the quarter and outperformed the BImbg Aggregate for the year by 14.20%.

Quarterly Asset Growth	
Beginning Market Value	\$88,519,817
Net New Investment	\$0
Investment Gains/(Losses)	\$3,840,249
Ending Market Value	\$92,360,066

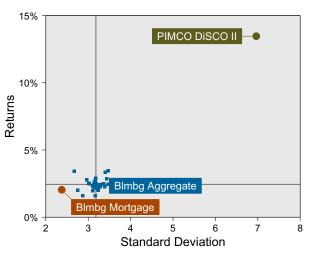






Relative Return vs Blmbg Aggregate

CAI Core Bond Mutual Funds (Net) Annualized Five Year Risk vs Return



PIMCO Bravo II Fund Period Ended March 31, 2017

Investment Philosophy

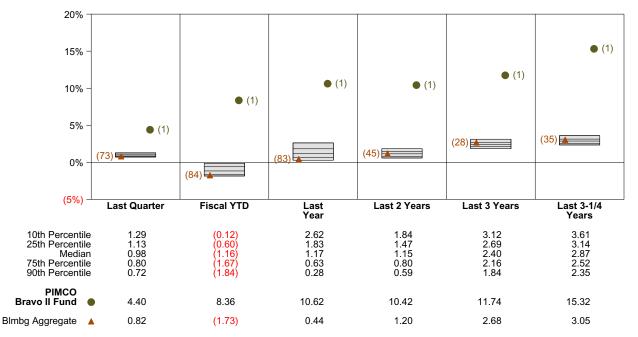
The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

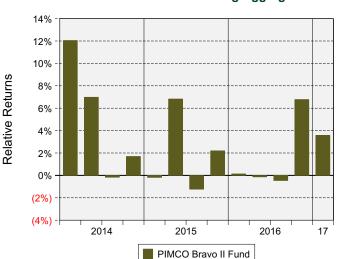
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 4.40% return for the quarter placing it in the 1 percentile of the CAI Core Bond Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO Bravo II Fund's portfolio outperformed the Blmbg Aggregate by 3.58% for the quarter and outperformed the Blmbg Aggregate for the year by 10.18%.

Quarterly Asset Growth	
Beginning Market Value	\$48,870,991
Net New Investment	\$3,750,000
Investment Gains/(Losses)	\$2,148,327
Ending Market Value	\$54,769,318

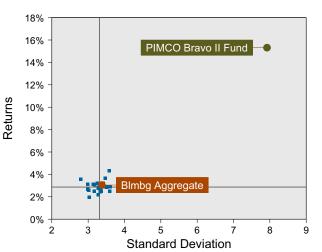






Relative Return vs Blmbg Aggregate

CAI Core Bond Mutual Funds (Net) Annualized Three and One-Quarter Year Risk vs Return



Prudential Period Ended March 31, 2017

Investment Philosophy

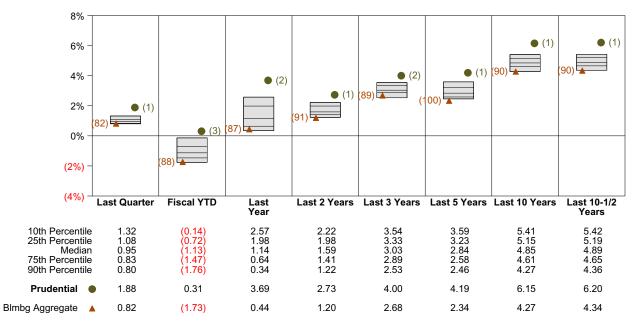
The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.

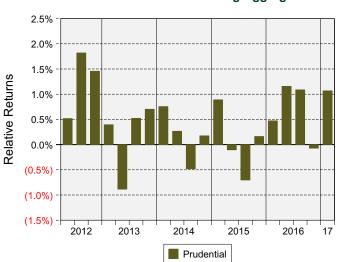
Quarterly Summary and Highlights

- Prudential's portfolio posted a 1.88% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 2 percentile for the last year.
- Prudential's portfolio outperformed the Blmbg Aggregate by 1.07% for the quarter and outperformed the Blmbg Aggregate for the year by 3.25%.

Performance vs CAI Core Bond Fixed Income (Gross)

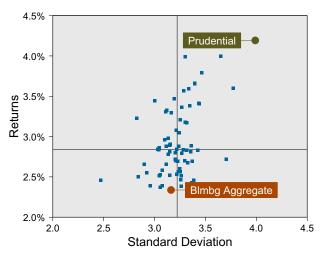
Quarterly Asset Growth	
Beginning Market Value	\$107,620,681
Net New Investment	\$2,927,635
Investment Gains/(Losses)	\$2,026,628
Ending Market Value	\$112,574,944





Relative Return vs Blmbg Aggregate

CAI Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return



SSgA US Govt Cr Bd Index Period Ended March 31, 2017

Investment Philosophy

The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Government/Credit Bond Index over the long term.

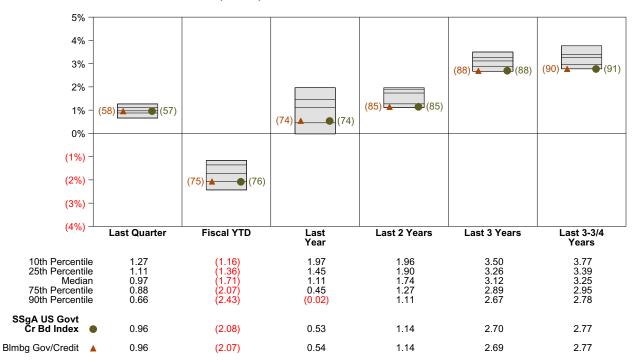
Quarterly Summary and Highlights

• SSgA US Govt Cr Bd Index's portfolio posted a 0.96% return for the quarter placing it in the 57 percentile of the CAI Government/Credit group for the quarter and in the 74 percentile for the last year.

٠	SSgA US Govt Cr Bd Index's portfolio outperformed the	
	Blmbg Gov/Credit by 0.00% for the quarter and	
	underperformed the Blmbg Gov/Credit for the year by 0.01%.	



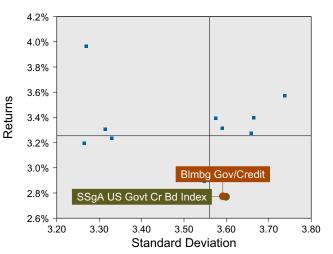
Performance vs CAI Government/Credit (Gross)





Relative Return vs Blmbg Gov/Credit

CAI Government/Credit (Gross) Annualized Three and Three-Quarter Year Risk vs Return



Wells Capital Period Ended March 31, 2017

Investment Philosophy

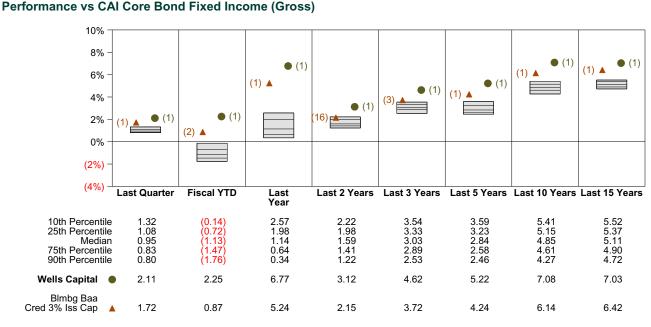
The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. The investment process for this fund starts with a "top-down" strategy. Security selection is determined by in-depth credit research, holding that in-depth knowledge of industries, companies, and their management teams can help identify credit trends that can lead to investment opportunities. Furthermore, a disciplined relative value framework is applied to help determine the optimal position to invest within an industry and within an individual issuer's capital structure.

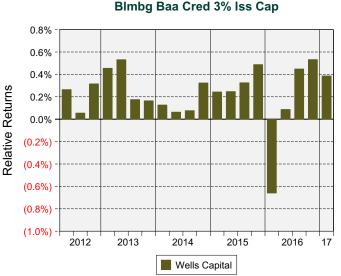
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 2.11% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 1 percentile for the last year.
- Wells Capital's portfolio outperformed the Blmbg Baa Cred 3% Iss Cap by 0.39% for the quarter and outperformed the Blmbg Baa Cred 3% Iss Cap for the year by 1.53%.

Quarterly Asset Growth		
Beginning Market Value	\$298,958,824	
Net New Investment	\$-273,702	
Investment Gains/(Losses)	\$6,301,369	

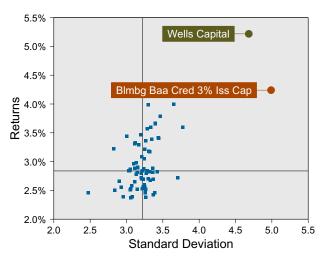
Investment Gains/(Losses)\$6,301,369Ending Market Value\$304,986,490





Relative Returns vs Imbg Baa Cred 3% Iss Cap

CAI Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return



Western Asset Management Company Period Ended March 31, 2017

Investment Philosophy

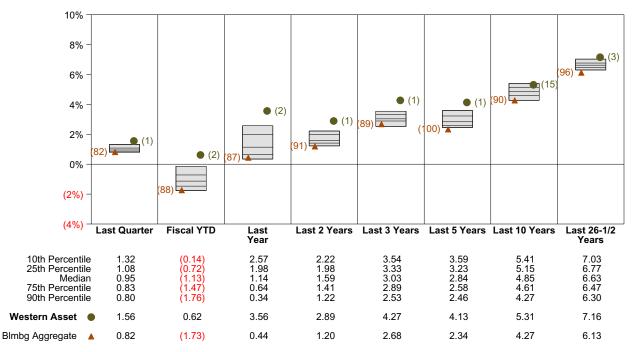
Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

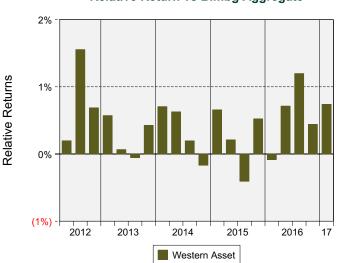
Quarterly Summary and Highlights

- Western Asset's portfolio posted a 1.56% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 2 percentile for the last year.
- Western Asset's portfolio outperformed the Blmbg Aggregate by 0.74% for the quarter and outperformed the Blmbg Aggregate for the year by 3.12%.

Quarterly Asset Growth	
Beginning Market Value	\$299,035,320
Net New Investment	\$898,603
Investment Gains/(Losses)	\$4,659,991
Ending Market Value	\$304,593,914

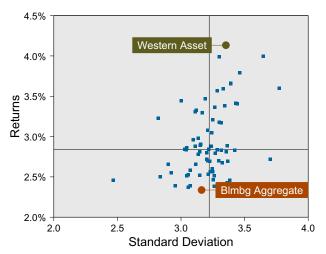
Performance vs CAI Core Bond Fixed Income (Gross)





Relative Return vs Blmbg Aggregate

CAI Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return



Western TIPS Period Ended March 31, 2017

Investment Philosophy

Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add value while minimizing risk. Value can be added through country selection, term structure, issue selection, duration management and currency management. Bloomberg US TIPS through 12/31/2009 and Bloomberg Global Inflation-Linked thereafter.

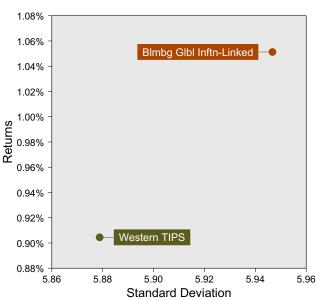
Quarterly Summary and Highlights

• Western TIPS's portfolio underperformed the BImbg Glbl Inftn-Linked by 0.29% for the quarter and underperformed the BImbg Glbl Inftn-Linked for the year by 0.96%.

Quarterly Asset Growth		
Beginning Market Value	\$110,179,493	
Net New Investment	\$-37,361	
Investment Gains/(Losses)	\$1,113,667	
Ending Market Value	\$111,255,799	



Relative Return vs Blmbg Glbl Inftn-Linked



2.5% 2.0% 1.5% **Relative Returns** 1.0% 0.5% 0.0% (0.5%) (1.0%) (1.5%) 2012 2013 2014 2015 2016 17 Western TIPS

Annualized Five Year Risk vs Return

Eastern Timber Opportunities Period Ended March 31, 2017

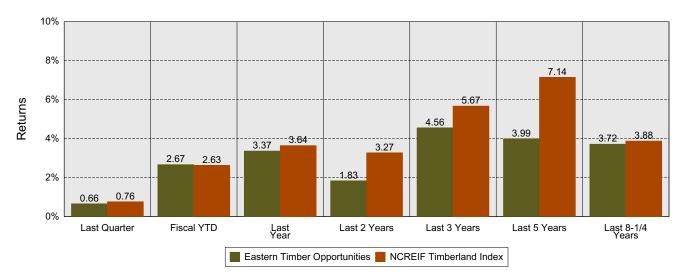
Investment Philosophy

The investment objective of the Eastern Timberland Opportunities fund is to provide competitive timberland investment returns from Eastern US timberland investments by pursuing management strategies to increase timber production and land values through the investment term. TIR will maximize timber values within the portfolio with the application of intensive forest management techniques to accelerate the growth in timber volume and movement into higher value product categories. Additional value will be captured by realizing higher and better use opportunities for select timberland properties throughout the portfolio.

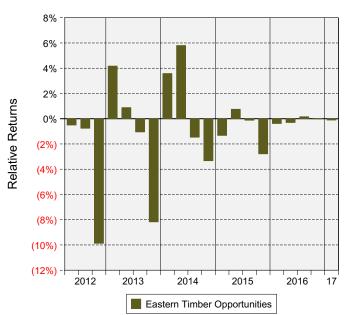
Quarterly Summary and Highlights

 Eastern Timber Opportunities's portfolio underperformed the NCREIF Timberland Index by 0.11% for the quarter and underperformed the NCREIF Timberland Index for the year by 0.28%.

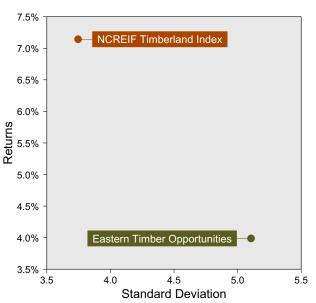
Quarterly Asset Growth	
Beginning Market Value	\$54,948,496
Net New Investment	\$-172,068
Investment Gains/(Losses)	\$359,902
Ending Market Value	\$55,136,330



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



JP Morgan Infrastructure Period Ended March 31, 2017

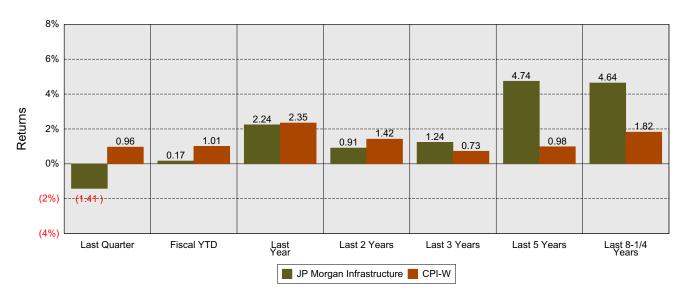
Investment Philosophy

The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

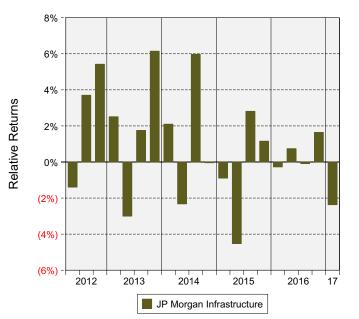
Quarterly Summary and Highlights

 JP Morgan Infrastructure's portfolio underperformed the CPI-W by 2.37% for the quarter and underperformed the CPI-W for the year by 0.11%.

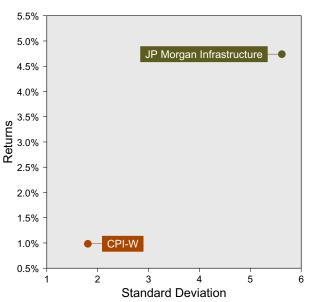
Quarterly Asset Growth		
Beginning Market Value	\$81,434,382	
Net New Investment	\$-158,993	
Investment Gains/(Losses)	\$-1,148,276	
Ending Market Value	\$80,127,112	



Relative Return vs CPI-W





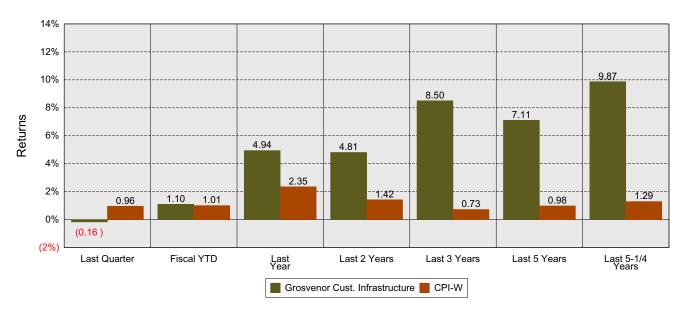


Grosvenor Cust. Infrastructure Period Ended March 31, 2017

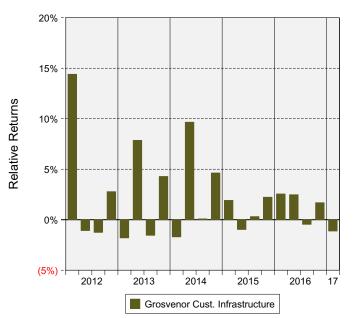
Investment Philosophy

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

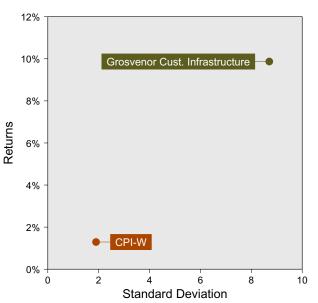
Quarterly Summary and Highlights	Quarterly Asset Growth	
 Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 1.12% for the quarter and outperformed the CPI-W for the year by 2.59%. 	Beginning Market Value Net New Investment Investment Gains/(Losses)	\$16,984,446 \$393,514 \$-28,068
	Ending Market Value	\$17,349,892



Relative Return vs CPI-W



Annualized Five and One-Quarter Year Risk vs Return



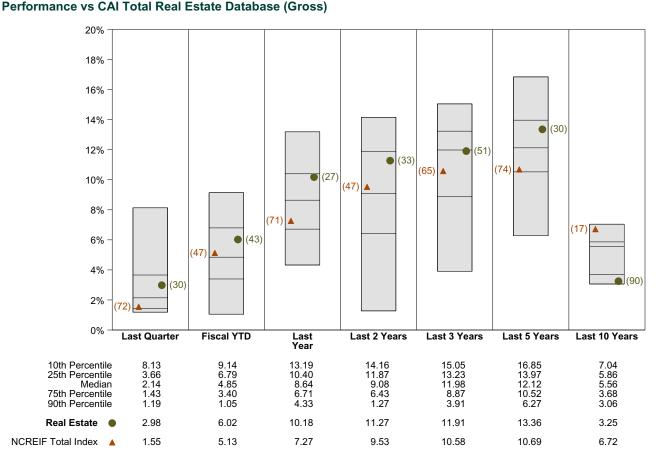
Real Estate Period Ended March 31, 2017

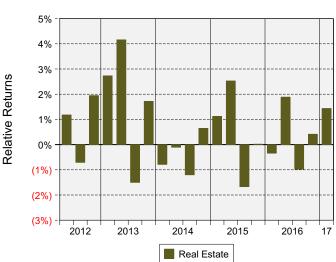
Quarterly Summary and Highlights

- Real Estate's portfolio posted a 2.98% return for the quarter placing it in the 30 percentile of the CAI Total Real Estate Database group for the quarter and in the 27 percentile for the last year.
- Real Estate's portfolio outperformed the NCREIF Total Index by 1.44% for the quarter and outperformed the NCREIF Total Index for the year by 2.91%.

Quarterly Asset Growth

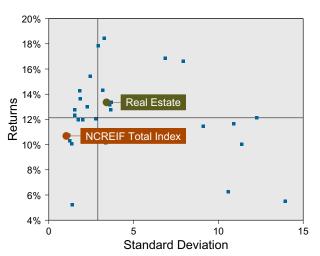
Beginning Market Value	\$134,356,465
Net New Investment	\$-1,584,211
Investment Gains/(Losses)	\$3,989,819
Ending Market Value	\$136,762,074





Relative Return vs NCREIF Total Index

CAI Total Real Estate Database (Gross) Annualized Five Year Risk vs Return



Invesco Core Real Estate Period Ended March 31, 2017

Investment Philosophy

IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

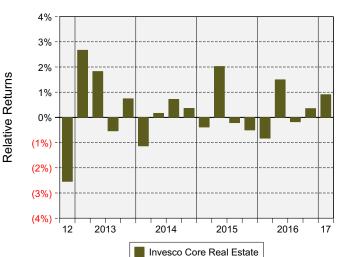
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 2.45% return for the quarter placing it in the 37 percentile of the CAI Total Real Estate Database group for the quarter and in the 31 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF Total Index by 0.91% for the quarter and outperformed the NCREIF Total Index for the year by 2.73%.

Quarterly Asset Growth			
Beginning Market Value	\$63,717,366		
Net New Investment	\$-467,292		
Investment Gains/(Losses)	\$1,550,990		
Ending Market Value	\$64,801,064		

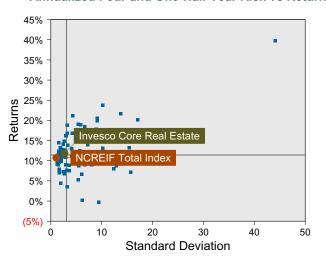
Performance vs CAI Total Real Estate Database (Net)





Relative Return vs NCREIF Total Index

CAI Total Real Estate Database (Net) Annualized Four and One-Half Year Risk vs Return



JP Morgan Real Estate Period Ended March 31, 2017

Investment Philosophy

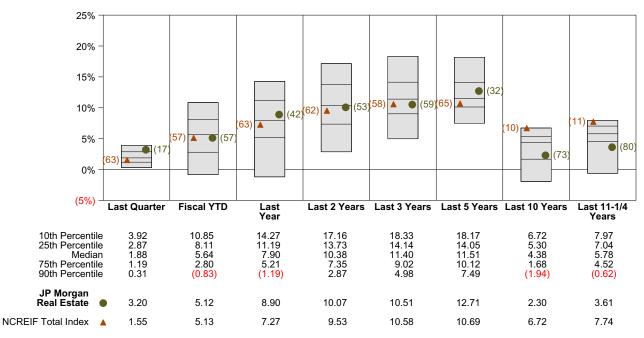
The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

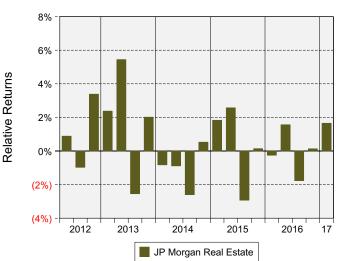
Quarterly Summary and Highlights

- JP Morgan Real Estate's portfolio posted a 3.20% return for the quarter placing it in the 17 percentile of the CAI Total Real Estate Database group for the quarter and in the 42 percentile for the last year.
- JP Morgan Real Estate's portfolio outperformed the NCREIF Total Index by 1.65% for the quarter and outperformed the NCREIF Total Index for the year by 1.63%.

Quarterly Asset Growth		
Beginning Market Value	\$70,639,099	
Net New Investment	\$-937,548	
Investment Gains/(Losses)	\$2,259,459	
Ending Market Value	\$71,961,010	

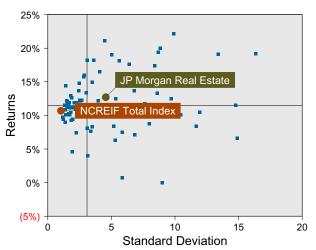






Relative Return vs NCREIF Total Index

CAI Total Real Estate Database (Net) Annualized Five Year Risk vs Return



Short Term Fixed Income Period Ended March 31, 2017

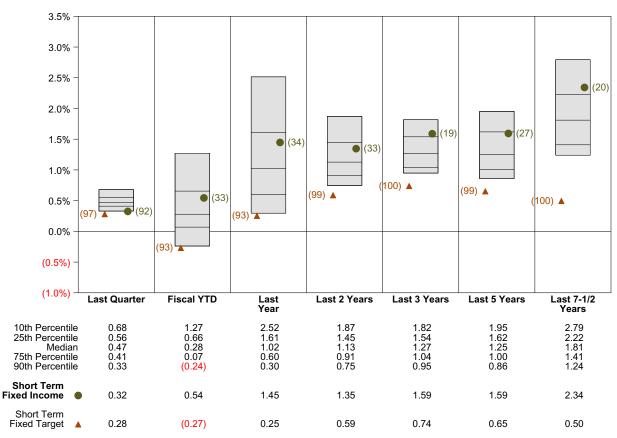
Quarterly Summary and Highlights

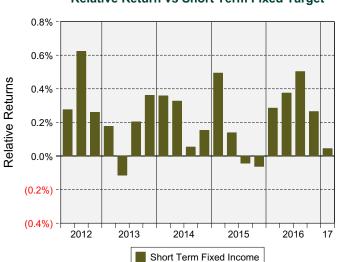
- Short Term Fixed Income's portfolio posted a 0.32% return for the quarter placing it in the 92 percentile of the CAI Defensive Fixed Income group for the quarter and in the 34 percentile for the last year.
- Short Term Fixed Income's portfolio outperformed the Short Term Fixed Target by 0.04% for the quarter and outperformed the Short Term Fixed Target for the year by 1.19%.

Performance vs CAI Defensive Fixed Income (Gross)

Quarterly Asset Growth

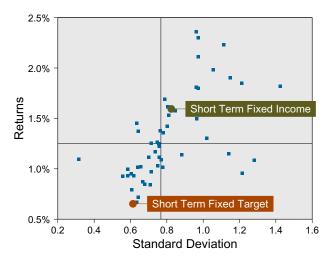
Beginning Market Value	\$106,927,244
Net New Investment	\$-66,189,838
Investment Gains/(Losses)	\$274,852
Ending Market Value	\$41,012,258





Relative Return vs Short Term Fixed Target

CAI Defensive Fixed Income (Gross) Annualized Five Year Risk vs Return



JP Morgan Short Term Bonds Period Ended March 31, 2017

Investment Philosophy

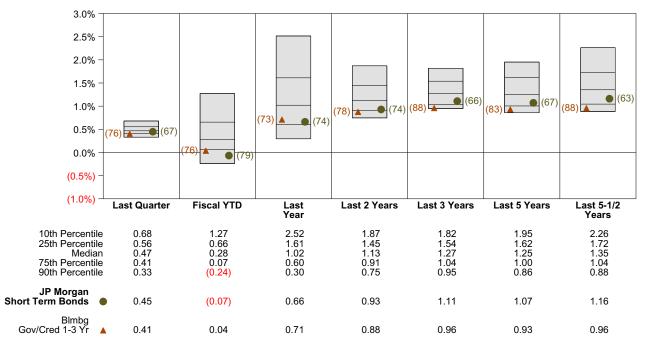
The investment objective of this account is to outperform the Barclays Capital 1-3 year Government/Credit Index while maintaining total return risk similar to that of the benchmark as measured over a market cycle. The weighted average effective duration of the portfolio will typically remain within +/- 30% of the benchmark.

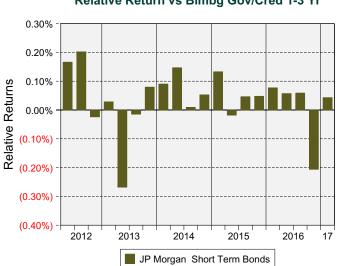
Quarterly Summary and Highlights

- JP Morgan Short Term Bonds's portfolio posted a 0.45% return for the quarter placing it in the 67 percentile of the CAI Defensive Fixed Income group for the guarter and in the 74 percentile for the last year.
- JP Morgan Short Term Bonds's portfolio outperformed the Blmbg Gov/Cred 1-3 Yr by 0.04% for the guarter and underperformed the Blmbg Gov/Cred 1-3 Yr for the year by 0.05%.

Quarterly Asset Growth			
Beginning Market Value	\$70,852,396		
Net New Investment	\$-30,123,170		
Investment Gains/(Losses)	\$281,697		
Ending Market Value	\$41,010,924		

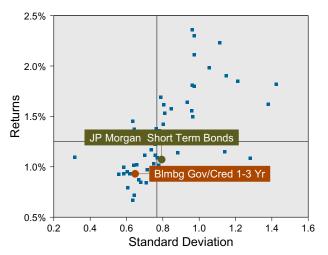
Performance vs CAI Defensive Fixed Income (Gross)





Relative Return vs Blmbg Gov/Cred 1-3 Yr





Callan

CALLAN INSTITUTE

1st Quarter 2017

Education

Research and Educational Programs

The Callan Institute provides both 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 to see all of our publications, and www.callan.com/blog to view our blog "Perspectives." For more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

Smart Beta Is the Gateway Drug to Factor Investing | In this paper, a reprint from the *Journal of Portfolio Management*'s special issue on Factor Investing, author Eugene Podkaminer, CFA, of Callan's Capital Markets Research group describes the connection between alternative indices and more sophisticated risk premia strategies.

2017 National Conference: 'It's Private' | A summary of "It's Private: Real Estate Debt and Middle Market Direct Lending," a presentation from Callan experts Kristin Bradbury, Alex Browning, and Jay Nayak.

Capital Market Projections for 2017-2026 | Callan prepares capital market projections annually to help guide clients with their long-term strategic planning. We publish three pieces authored by the team that creates them: Jay Kloepfer, John Pirone, CFA, CAIA, and Jim Van Heuit. A **white paper** delves into the process and thinking behind the 2017 figures; a **Manifesto** outlines the reasons that Callan produces its annual capital market projections and the rigorous process behind it; and a "**charticle**" (chart+article) summarizes key figures from Callan's 2017 capital market projections.

It's a (Fiduciary) Trap! But You Don't Have to Fall In | Defined contribution (DC) plan sponsors often worry about landing in hot water for doing the wrong thing. However, many fiduciary issues crop up because plan sponsors have failed to take action. Author Lori Lucas, CFA, Callan's Defined Contribution Practice Leader, lists eight potential fiduciary traps and ways for plan sponsors to avoid falling into them in 2017.

The Callan Periodic Table of Investment Returns (Key Indices: 1997-2016) and Collection | The Periodic Table of Investment Returns depicts annual returns for 10 asset classes, ranked from

best to worst performance for each calendar year. The Collection includes 10 additional versions, such as the indices relative to inflation, real estate, and hedge fund sub-strategies.

Periodicals

Real Assets Reporter, Winter/Spring 2017 | Avery Robinson, CAIA, explores how we developed our Real Estate Indicators. We also cover the latest on the real estate market, and share charts and tables on the long-term performance of various real assets.

Private Markets Trends, Winter 2017 | Gary Robertson provides an overview of the environment for private equity in 2016 and a look ahead at 2017. He sees continued liquidity in the private equity market, and writes that distributions will continue to benefit investors.

Hedge Fund Monitor, 4th Quarter 2016 | Jim McKee provides a view of the hedge fund industry and detailed quarterly performance. This quarter's cover story: "Alternative Facts and the Evolving Role of Hedge Funds."

DC Observer, 1st Quarter 2017 | Lori Lucas discusses the best approach to crafting, implementing, and maintaining an investment policy statement for defined contribution plans.

Market Pulse Flipbook, Fourth Quarter 2016 | 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, 4th Quarter 2016 | A quarterly macroeconomic newsletter providing thoughtful insights on the economy and recent performance in equity, fixed income, alternatives, international, real estate, and other capital markets.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: https://www.callan.com/education/CII/

'Why Diversify'

Our **June Regional Workshops**, June 27 in Atlanta and June 29 in San Francisco, will focus on diversification, which has turned out to be very expensive for U.S.-based investors, especially since the Global Financial Crisis. In this workshop, Callan experts Mark Andersen, Jay Kloepfer, and Brian Smith analyze diversification from multiple angles, answering the questions of whether investors erred in adopting diversified portfolios over the last 30 years, and what investors should do now.

Also mark your calendars for our **October Regional Workshops**, October 24 in New York and October 26 in Chicago.

For more information about events, please contact Barb Gerraty: 415.274.3093 / 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, July 25-26, 2017 Chicago, October 24-25, 2017

This program familiarizes fund sponsor trustees, staff, and asset management advisors 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 assetmanagement 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 https://www.callan.com/education/college/ or contact Kathleen Cunnie: 415.274.3029 / cunnie@callan.com

Education: By the Numbers

500	Attendees (on average) of the Institute's annual National Conference	50+	Unique pieces of research the Institute generates each year
3,500	Total attendees of the "Callan College" since 1994	1980	Year the Callan Institute was founded



"We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years."

Ron Peyton, Chairman and CEO

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Northern Trust Asset Management

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or i ciobal Asset Management	
Old Mutual Asset Management	
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Callan

March 31, 2017 North Dakota State Investment Board Legacy Fund

Investment Measurement Service Quarterly Review

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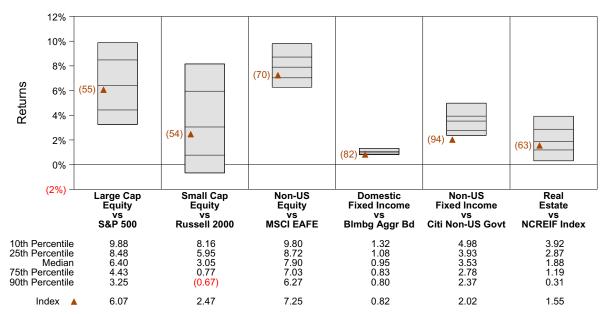
Disclosures

Market Overview Active Management vs Index Returns

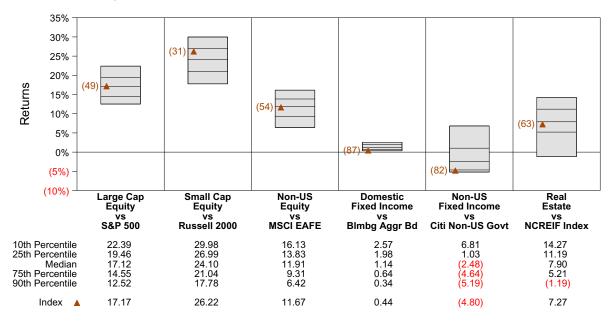
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2017



Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2017





Callan



First Quarter 2017

'Hitch in Our Git-Along'?

ECONOMY

2 PAGE GDP growth disappointed in the first quarter for the fourth straight year. But other measures such as consumer confidence held up during the quarter. The question is whether this is a hitch—or a problem with the GDP metric.

Steady as She Goes

U.S. EQUITY

The S&P 500 Index hit a high during the first quarter and ended with a 6.07% jump, continuing last year's gains. But in a reversal from the previous quarter, small cap stocks fell behind large cap and growth overtook value.

New Year, New Lows

REAL ESTATE

14 PAGE The NCREIF Property Index turned in its worst performance (+1.55%) since 2010, while the NCREIF Open End Diversified Core Equity Index also set a new seven-year low (+1.77%). U.S. REITs underperformed global REITs, but still managed to generate positive returns.

No Homefield Advantage

FUND SPONSOR

A G E P A G E for all fund types was +4.31%; endowments and foundations did best, jumping 4.58%. Taft-Hartley plans had the lowest return at +3.93%. The key difference was exposure to non-U.S. equities.

Profits Trump Populism

NON-U.S. EQUITY

B P A G E **Despite** political turmoil in Europe and choppy growth in Asia, non-U.S. markets advanced in the first quarter. The dollar's weakness bolstered returns for U.S. investors. Emerging markets outpaced their developed peers, and non-U.S. growth stocks bested their value counterparts.

On a Roll

PRIVATE EQUITY

16 PAGE Private equity stayed healthy in the first quarter. Buyout M&A exits dropped significantly, while venture capital-backed M&A exits were mixed. Both buyout and VC-backed IPOs raised more money than in the previous quarter.

Broad Market Quarterly Returns



Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

Up, Up, and Away

U.S. FIXED INCOME

10 PAGE Strong economic data and upbeat investors drove U.S. bond returns higher. High yield securities performed the best, but returns were up for all fixed income sectors. The Treasury yield curve flattened as short-term Treasuries rose while longer-term issues fell.

Dollops of Alpha with Beta

HEDGE FUNDS

Most hedge fund strategies reported positive returns in the first quarter, amid a broad rally in global markets. The **Credit Suisse Hedge Fund Index** advanced 2.07% and the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Separation Anxiety

NON-U.S. FIXED INCOME

12 PAGE Sovereign debt performed strongly amid policy uncertainty in the European Union, and emerging market debt outperformed developed market debt for the third straight quarter. Returns were bolstered by the U.S. dollar's broad-based decline against most currencies.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION

The Callan DC Index[™] increased 7.99% during 2016, its best year since 2013. But it trailed the Age 45 Target Date Fund, which gained 8.59% in 2016. For the year, DC plan balances increased 8.31%, mostly attributable to market performance.

'Hitch in Our Git-Along'?

ECONOMY | Jay Kloepfer

For the fourth year in a row, reported GDP growth disappointed in the first quarter, coming in at just 0.7%, down from a 2.1% rate in the fourth quarter. This paltry gain was the weakest in three years and was concentrated in consumer spending on autos and utilities (reflecting unseasonably warm weather in states with typically cold winters), a drop in defense spending, and a sharp slowdown in the accumulation of inventories. "Softer" measures of economic activity like consumer confidence and the ISM Report on Business, which records the forward-looking purchasing intentions of industry, held up through the first quarter, countering the weakening of GDP as the quarter unfolded. Business and consumer confidence rose after the U.S. presidential election, likely in anticipation of changes to policy and taxes, and without any reference to the strength of the underlying economy.

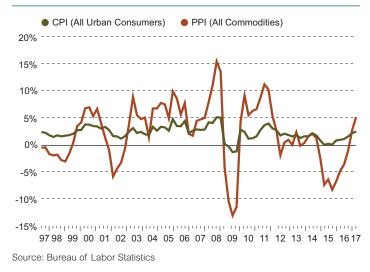
The question is whether we really have an annual "hitch in our git-along" each January, or is something else going on? Four years in a row with an unexpected drop in growth during the first quarter, which is then typically made up with an offsetting increase in the second quarter—although the GDP numbers are supposed to be seasonally adjusted—suggests perhaps a problem with this metric of evaluating the volume of our economic activity. GDP has come under increasing scrutiny as an outdated measure of the modern U.S. (and global) economy, predicated more on the flow of traditional goods and services, particularly agriculture and manufacturing. It may be very challenged to measure the output and economic impact of industries such as software, social media, and electronic commerce.

Inventory buildup usually signals confidence in the prospects for the economy. For several years prior to 2016, inventory "decumulation" was a clear drag on growth, as firms were reluctant to maintain output in the face of soft demand. The U.S. economy shifted toward inventory accumulation in the third and fourth quarters of 2016, only to reverse in the first quarter. That reversal subtracted almost 1% from GDP growth. Total personal



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



consumption expenditures led broad economic growth in 2016, averaging gains of well over 3% during each of the last three quarters of the year, only to drop to just 0.3% growth during the first quarter.

The U.S. job market enjoyed a robust 2016, adding 2.2 million new jobs. The economy entered 2017 with two strong months in January and February, adding more than 200,000 net new jobs each month, before the rate of job creation halved in March to 98,000. Retail jobs took a serious hit in both February and March (seasonally adjusted), with the continuing advance of e-commerce challenging retail establishments, particularly shopping malls. Signs now point to further softness in the job market as the second quarter begins.

In spite of this potential softening, the unemployment rate dipped to 4.5% in March, the lowest in the current cycle, and many urban regions report very tight job markets, with unemployment rates as low as 2% to 3%. In response, the growth in average hourly earnings, which had been stuck in a narrow range below a 2% annual rate for five years following the Global Financial Crisis, rose above 2.5% annual growth during 2016 and continued at this rate through the first quarter.

The minutes of the past several Federal Reserve Open Market Committee meetings show a continuing split among members about whether or not an acceleration of inflation is a looming concern. The data suggest inflation remains low, and futures markets indicate expectations are still anchored at or below the Fed's long-term target of 2% for core inflation. While the Fed uses the consumption deflator in its targeting, the CPI is still a useful measure of price activity. The headline CPI All-Urban index rose 2.4% year-over-year through March, although the measure actually declined between February and March. The energy portion of the Index rose 10.9% over the last 12 months, even after a 3.2% drop in March, reflecting a return toward normal in energy prices after the sharp drop in 2015. The core measure of CPI-which excludes food and energy-rose 2.0% over the 12 months ended in March, the smallest 12-month increase since the end of 2015.

The Long-Term View

	2017	Periods	ended	Dec. 3	1, 2016
Index	1st Qtr	Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	5.74	12.74	14.67	7.07	9.29
S&P 500	6.07	11.96	14.66	6.95	9.15
Russell 2000	2.47	21.31	14.46	7.07	9.69
Non-U.S. Equity					
MSCI EAFE	7.25	1.00	6.53	0.75	4.95
MSCI Emerging Markets	11.44	11.19	1.28	1.84	
MSCI ACWI ex USA Small Cap	8.78	3.91	7.74	2.89	_
Fixed Income					
Bloomberg Barclays Agg	0.82	2.65	2.23	4.34	5.63
90-Day T-Bill	0.10	0.33	0.12	0.80	2.71
Bloomberg Barclays Long G/C	1.58	6.67	4.07	6.85	7.58
Bloomberg Barclays GI Agg ex US	2.48	1.49	-1.39	2.44	4.73
Real Estate					
NCREIF Property	1.55	7.97	10.91	6.93	8.63
FTSE NAREIT Equity	1.16	8.52	12.01	5.08	11.13
Alternatives					
CS Hedge Fund	2.07	1.25	4.34	3.75	
Cambridge PE*	-	9.17	13.05	10.59	15.53
Bloomberg Commodity	-2.33	11.77	-8.95	-5.57	2.55
Gold Spot Price	8.64	8.63	-5.97	6.08	4.82
Inflation – CPI-U	0.98	2.07	1.36	1.81	2.26

*Private equity returns show pooled horizon IRRs for periods ended September 30, 2016. Most recent quarterly data not available.

Sources: Bloomberg Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15
Employment Cost–Total Compensation Growth	2.4%	2.2%	2.3%	2.3%	1.9%	2.0%	2.0%	2.0%
Nonfarm Business–Productivity Growth	-0.6%*	1.3%	3.3%	-0.1%	-0.6%	-2.0%	1.8%	1.0%
GDP Growth	0.7%	2.1%	3.5%	1.4%	0.8%	0.9%	2.0%	2.6%
Manufacturing Capacity Utilization	75.4%	75.1%	74.9%	75.1%	75.4%	75.4%	75.7%	75.5%
Consumer Sentiment Index (1966=100)	97.2	93.2	90.3	92.4	91.5	91.3	90.8	94.2

*Estimate.

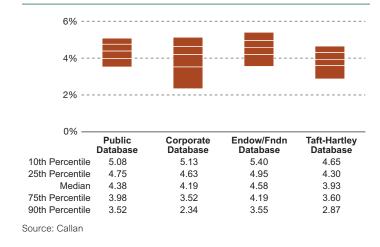
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

No Homefield Advantage

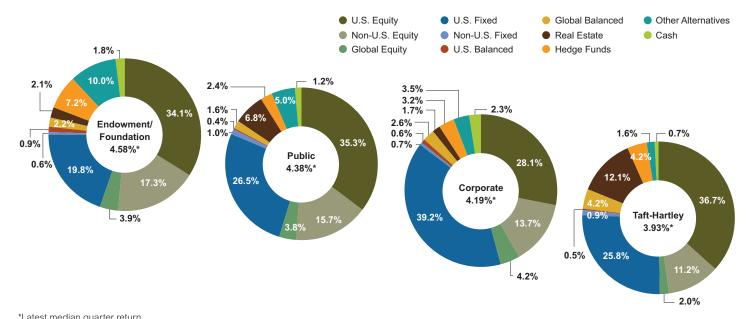
FUND SPONSOR | Kitty Lin

A post-election rally, higher interest rates, and political uncertainty in Europe and Asia left global markets unfazed as stocks and bonds rallied. Both U.S. and non-U.S. stocks delivered stellar returns in the first three months of 2017. That put some juice into the performance of institutional funds tracked by Callan, which did far better than they had in the last quarter of 2016.

The median return for all fund types for the first quarter clocked in at +4.31%, compared to only +0.65% in the fourth quarter. Endowment and foundation funds bested all other fund types and jumped 4.58%, while Taft-Hartley plans slipped in the ranks and had the lowest median return, up only 3.93%.



Callan Fund Sponsor Returns for the Quarter



Callan Fund Sponsor Average Asset Allocation

*Latest median quarter return. Note: charts may not sum to 100% due to rounding. Source: Callan

FUND SPONSOR (Continued)

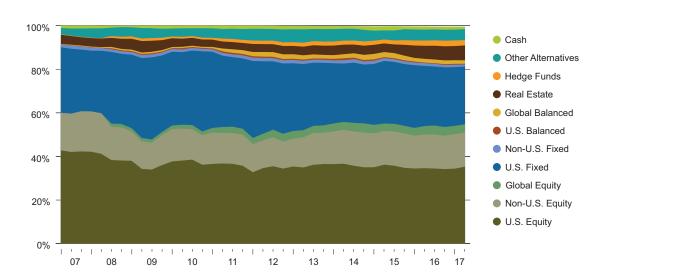
(10 Years)

How funds did depended in large part on where they had their money. Endowment and foundation plans have the highest exposure to non-U.S. equity, which performed quite well despite an ousted South Korean president and an unpredictable French election. The **MSCI ACWI ex USA Index** rose 7.86%, the **MSCI EAFE Index** gained 7.25%, and the **MSCI Emerging Markets Index** jumped 11.44%.

On the other end of the spectrum, Taft-Hartley plans had the most exposure to U.S. equity and the lowest to non-U.S. and global equity. While U.S. equities delivered strong returns, they

lagged their overseas counterparts; the **S&P 500 Index** surged 6.07% and the **Russell 1000 Index** rose 6.02%. Taft-Hartley plans had an average allocation of 11.2% to non-U.S. equity, which was the lowest of all fund types.

Although Taft-Hartley plans had the worst performance in the first quarter, they had the best returns over the last three (+5.99%) and five years (+8.22%) due to their home country bias in equities and the dominance of U.S. versus non-U.S. stocks. Endowment and foundation funds had the best performance in the first quarter (+4.58%) and last year (+11.32%).



Callan Public Fund Database Average Asset Allocation

Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Steady as She Goes

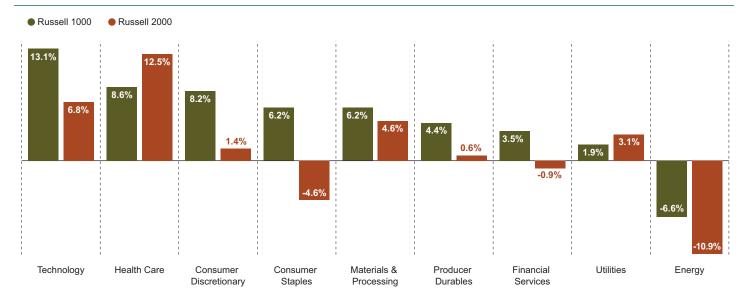
U.S. EQUITY | Lauren Mathias, CFA

Despite concerns over the Trump administration's ability to follow through on promises of lower taxes and decreased regulation, the market accelerated higher in the first quarter. The **S&P 500 Index** hit a peak (2,396) in March and notched a 6.07% gain over the full three-month period. But the quarter was marked by reversals from the previous one—small cap fell behind large cap (**Russell 2000 Index**: +2.47% vs. **Russell 1000 Index**: +6.03%) and growth overtook value (**Russell 1000 Growth Index**: +8.91% vs. **Russell 1000 Value Index**: +3.27%).

The broader U.S. economy reflected the market's optimism, and to no one's surprise the Fed raised rates a quarter-point in mid-March. Wages continued to grow, consumer confidence was up, inflation moved closer to the Fed's 2% target, and unemployment fell to 4.7%. Yet some headwinds persisted in the U.S., with slowing GDP growth (the fourth quarter trailed the third, 2.1% vs. 3.5%), and significant issues abroad: elections

and Brexit in Europe, the Syrian war in the Middle East, and South Korea's presidential impeachment in Asia. Valuations in the U.S. remain high by various measures, but investors appear unfazed—for now.

Technology shares were especially strong; the FANG stocks— Facebook, Amazon, Netflix, and Google—hit record highs during the quarter. (Technically it should be the FANA stocks because Google is officially Alphabet—but FANG sounds better!) Micro and small cap companies ran out of steam after a strong 2016, while mid and large cap stocks charged ahead (**Russell Microcap Index**: +0.38%, Russell 2000 Index: +2.47%, **Russell Midcap Index**: +5.15%, and Russell 1000 Index: +6.03%). Value lost its lead over growth in all capitalizations (**Russell 2000 Value Index**: -0.13% vs. **Russell 2000 Growth Index**: +5.35%). The dispersion in style returns was broad across market capitalizations.



Economic Sector Quarterly Performance

Source: Russell Investment Group

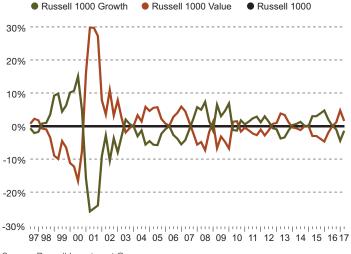
Note: As of the fourth quarter of 2015, the Capital Market Review reports sector-specific returns using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing 11 sectors.

U.S. EQUITY (Continued)

Reflecting the reversal in investor preference, the best-performing sectors in the S&P 500 Index during the quarter were growth-oriented; Technology (+12.57%) was No. 1, followed by Consumer Discretionary (+8.45%) and Health Care (+8.37%). After leading in the fourth quarter, Financials (+2.53%) and Energy (-6.68%) trailed the broad market in the first. Both Health Care and Financials traded on President Donald Trump's failure to amend the Affordable Care Act—Health Care stocks gained on the certainty of the status quo and Financials dropped on fear the administration may fall short on deregulation and tax reform as well. Energy was the worst-performing sector during the quarter as last year's agreement by the Organization of the

Rolling One-Year Relative Returns

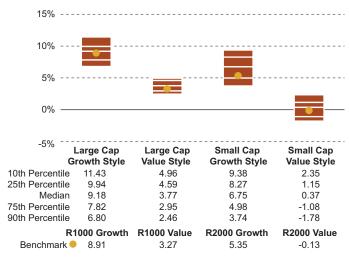
(vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns

geopolitical uncertainty.



Petroleum Exporting Countries (OPEC) has not reduced fears

As the U.S. equity market powered on, valuations across indi-

ces traded at historically high levels-the S&P 500 Index NTM

(next 12 months) P/E was 17.5x versus the 25-year average of

14x as of March 31, 2017. Correlation among stocks (measured

by S&P 500 stocks) ended the quarter below average and at levels not seen in 10 years, a positive for active management.

Volatility (as measured by the CBOE Market Volatility Index,

or VIX) also tracked below its average, seemingly unfazed by

of oversupply or meaningfully increased the price of oil.

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of March 31, 2017

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	507	2,941	995	792	2,438	1,946
Wtd Avg Mkt Cap (\$bn)	151.6	127.6	137.9	13.7	4.6	2.2
Price/Book Ratio	2.9	2.8	2.9	2.6	2.3	2.1
Forward P/E Ratio	17.7	18.2	18	19.3	20.4	21.1
Dividend Yield	2.0%	1.9%	2.0%	1.7%	1.5%	1.4%
5-Yr Earnings (forecasted)	12.6%	12.5%	12.5%	11.8%	11.8%	12.4%

Sources: Russell Investment Group, Standard & Poor's.

Knowledge. Experience. Integrity. 7

Profits Trump Populism

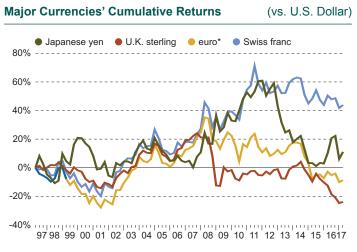
NON-U.S. EQUITY | Irina Sushch

A flurry of political skirmishes and uneven growth in Asia failed to deter non-U.S. equity investors, and the "risk-on" theme of last year continued into 2017. The weak U.S. dollar also bolstered overseas returns for U.S. investors.

The **MSCI ACWI ex USA Index** jumped 7.86% during the quarter. All of its sectors were in the black, with the exception of Energy (-0.91%), which was hurt by falling oil prices. Economically sensitive sectors led the pack: Information Technology contributed 14.59% and Industrials added 9.48%. Defensive and cyclical sectors such as Telecommunications (+5.98%) and Real Estate (+6.72%) lagged.

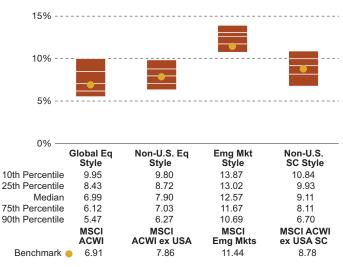
Helped by a weaker dollar, emerging markets (MSCI Emerging Markets Index: +11.44%) outperformed their developed peers (MSCI World ex USA Index: +6.81% and MSCI EAFE Index: +7.25%). The MSCI ACWI ex USA Growth Index (+9.13%) resumed dominance over the MSCI ACWI ex USA Value Index (+6.68%). Small cap stocks also performed well (MSCI ACWI ex USA Small Cap Index: +8.78%).

Politics continued to roil Europe. Most notably, British Prime Minister Theresa May triggered Article 50 of the Lisbon Treaty on March 29, giving the U.K. two years to negotiate an exit from the European Union. The negotiations are likely to be arduous, particularly concerning trade and immigration. And France's presidential elections weighed on investors during the guarter. (A runoff is slated for May. Marine Le Pen, the far right contender and opponent of the EU, finished second in the first round of voting but is widely expected to lose to Emmanuel Macron, a more centrist leader and supporter of the EU.) On the other hand, the economic outlook brightened in the euro zone. Inflation hit a four-year high (2%) in February. Fourth quarter GDP was 1.7% (year-over-year) and positive in each country except Greece (-1.2%). The MSCI Europe Index jumped 7.44% in the first quarter; all of the countries posted positive returns. Spain (+14.76%) and the Netherlands (+11.33%) contributed most, while Ireland (+3.75%) and Norway (+1.43%) lagged.



* German mark returns before 1Q99 Source: MSCI

Callan Style Group Quarterly Returns



Sources: Callan, MSCI

Information Technology (+12.89%) and Industrials (+10.39%) rallied, while Energy stocks (-3.10%) brought up the rear.

In Southeast Asia and the Pacific, Japan's economy grew at a meager (yet notably positive) annualized 1.2% in the fourth quarter. Industrial output and inflation rose and unemployment fell. But the stronger yen (+5%) dampened exporters' returns, and Japan ended the quarter up just 4.49%; only New Zealand

NON-U.S. EQUITY (Continued)

posted worse returns (+1.95%) in the region, owing to a faltering Materials sector (-19.33%). Singapore (+13.46%) and Hong Kong (+13.41%) fared best, thanks to thriving real estate markets. Australia advanced 10.98%, propped up by currency strength. The **MSCI Pacific Index** was up 6.92% and the **MSCI Pacific ex Japan Index** jumped 11.76%.

Emerging market returns were boosted by a weaker U.S. dollar, economic growth in China, and rising industrial metal prices. Poland (+17.75%) and India (+17.12%) were the top performers. The party of India's prime minister, Narendra Modi, won a key regional election despite an abrupt currency recall last year, and the central bank predicted strong economic growth for the next 12 months. Gains in IT stocks bolstered Korean returns. China, which makes up more than a quarter of the MSCI Emerging Markets Index, also experienced growth in its IT sector, as well as in Manufacturing and Real Estate. Its fourth

Quarterly Returns for Non-U.S. Developed Countries

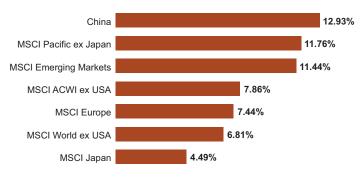
Equity Index						
Country	(US\$)	(Local Currency)	Currency Return	Weight*		
Australia	10.98%	5.34%	5.35%	5.30%		
Austria	8.96%	7.45%	1.40%	0.14%		
Belgium	5.13%	3.68%	1.40%	0.81%		
Canada	2.51%	1.94%	0.55%	6.85%		
Denmark	6.11%	4.65%	1.39%	1.14%		
Finland	7.31%	5.83%	1.40%	0.67%		
France	7.28%	5.80%	1.40%	7.10%		
Germany	8.36%	6.87%	1.40%	6.62%		
Hong Kong	13.41%	13.65%	-0.24%	2.44%		
Ireland	3.75%	2.32%	1.40%	0.32%		
Israel	5.53%	3.28%	6.01%	0.47%		
Italy	6.17%	4.70%	1.40%	1.51%		
Japan	4.49%	-0.17%	4.67%	16.29%		
Netherlands	11.33%	9.92%	1.40%	2.41%		
New Zealand	1.95%	1.69%	0.25%	0.12%		
Norway	1.43%	1.21%	0.22%	0.44%		
Portugal	8.25%	6.75%	1.40%	0.11%		
Singapore	13.46%	9.79%	3.39%	0.92%		
Spain	14.76%	13.18%	1.40%	2.34%		
Sweden	9.46%	7.58%	1.75%	2.01%		
Switzerland	8.34%	6.70%	1.54%	6.08%		
U.K.	5.04%	3.80%	1.20%	12.44%		

*Weight in the MSCI ACWI ex USA Index

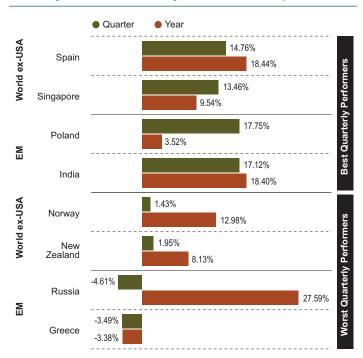
Sources: MSCI, Russell Investment Group, Standard & Poor's.

quarter GDP came in at 6.8%, and China ended the quarter up 12.93%. Mexico was among the top performers (+16.03%) as the peso rebounded 9%. Russia (-4.61%) and Greece (-3.49%) were the region's poorest performers. Russia was hurt by falling oil prices, and Greece by negative GDP growth.

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI



Quarterly and Annual Country Performance Snapshot

Source: MSCI

Up, Up, and Away

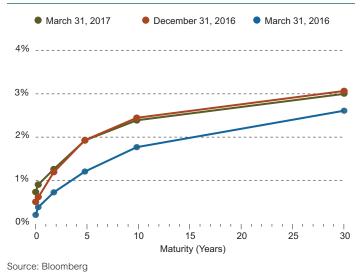
U.S. FIXED INCOME | Rufash Lama

During the first quarter, the U.S. bond market generated positive returns across the board due in part to strong economic data and upbeat investors compressing spreads. U.S. fourth quarter GDP grew at an annualized rate of 2.1%, consumer spending rose 3.5%, and the unemployment rate fell to 4.7%. High yield bonds performed best; the **Bloomberg Barclays High Yield Index** climbed 2.70% for the quarter.

The Fed increased rates by 25 basis points in March, to a range of 0.75% – 1.00%, as U.S. economic indicators continued to signal growth; two additional hikes are expected over the rest of the year. The Treasury yield curve flattened during the quarter as short-term Treasury yields rose while longer-term Treasury yields fell. Despite hitting an intra-quarter high of 2.62%, the benchmark 10-year Treasury note ended the quarter at 2.39%, 5 bps lower than the yield at the end of 2016. For the quarter, U.S. Treasuries returned 0.67%; long Treasuries (+1.40%) outperformed intermediate ones (+0.54%). TIPS were up 1.26% as expectations for future inflation rose. At the end of the quarter, the 10-year breakeven inflation rate, a market-based gauge of investors' expectations for future inflation, stood at 1.97%.

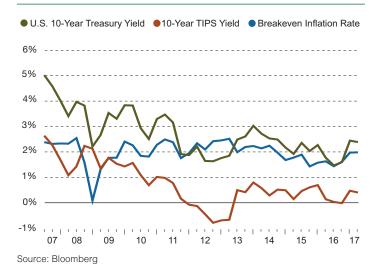
U.S. Treasury Yield Curves

10 Callan

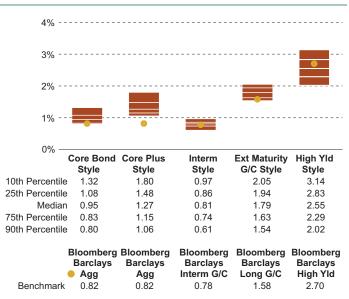


All fixed income sectors reported returns in the black as both the corporate credit market and the structured-debt market benefited from strong investor demand; the **Bloomberg Barclays U.S. Aggregate Bond Index** rose 0.82%. Issuance in the investment-grade primary market totaled \$390 billion, easily surpassing the prior record of \$357 billion in the second quarter

Historical 10-Year Yields



Callan Style Group Quarterly Returns



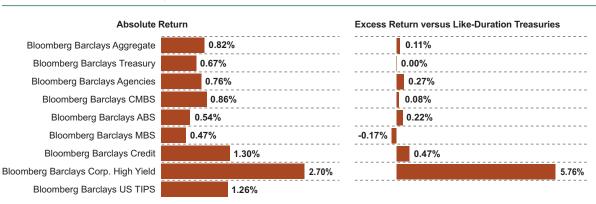
Source: Bloomberg Barclays, Callan

U.S. FIXED INCOME (Continued)

of 2015. Overall, spreads tightened and investor appetite for bonds remained strong despite the headwind of higher rates. High yield spreads over comparable Treasuries tightened by 26 bps and delivered the strongest return. Lower-rated bonds outperformed higher-rated issues; BBB-rated securities generated an excess return of 85 bps and outperformed AAA securities by 70 bps. ABS and investment-grade corporate spreads tightened by 5 bps and rose 1.22% and 0.54%, respectively. Mortgage-backed securities (MBS) (+0.47%) underperformed duration-matched Treasuries by 17 bps. Commercial mort-gage-backed securities (CMBS) rose 0.86% for the quarter and benefited from strong demand.

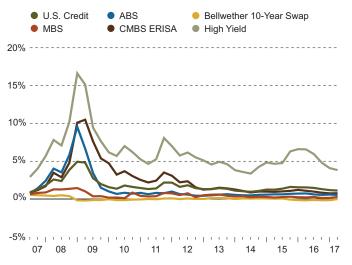
Municipal bonds also delivered a strong quarter as expectations for U.S. tax reform fell and new issuance remained light. The **Bloomberg Barclays Municipal Bond Index** jumped 1.58%.

Fixed Income Index Quarterly Returns



Source: Bloomberg Barclays

Effective Yield Over Treasuries



Source: Bloomberg Barclays

U.S. Fixed Income Index Characteristics as of March 31, 2017

Bloomberg Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Bloomberg Barclays Aggregate	2.61	6.00	8.22
Bloomberg Barclays Universal	2.95	5.78	7.99
Bloomberg Barclays Gov/Credit	2.49	6.47	8.70
1-3 Year	1.50	1.94	2.00
Intermediate	2.10	4.06	4.41
Long-Term	3.88	15.15	24.19
Bloomberg Barclays Long Credit	4.51	13.71	23.76
Bloomberg Barclays Corp High Yield	5.84	4.03	6.24
Bloomberg Barclays TIPS	2.27	5.72	8.31
Bloomberg Barclays Municipal	2.46	6.40	12.85
1-5 Year	1.46	2.65	3.13
1-10 Year	1.86	4.03	5.77

Source: Bloomberg Barclays

Separation Anxiety

NON-U.S. FIXED INCOME | Kyle Fekete

Sovereign debt performed well in the first quarter amid political uncertainty about the future of the European Union (EU). Emerging market debt outperformed developed market debt for the third straight quarter as the **JPM GBI-EM Global Diversified Index** advanced 6.50% versus the **Bloomberg Barclays Global Aggregate ex-US Index**'s 2.48% gain. Returns were bolstered by the U.S. dollar's drop against most currencies.

European sovereign bond yields rose in the midst of critical elections and debate over the future of the EU. The safehaven German 10-year bond yield climbed 12 basis points to

Country	Country Debt*	Country Debt**	Currency Return	Weight***
Australia	6.66%	1.24%	5.35%	2.64%
Austria	0.60%	-0.80%	1.40%	1.75%
Belgium	-0.31%	-1.69%	1.40%	2.99%
Canada	1.05%	0.50%	0.55%	2.54%
Denmark	0.79%	-0.59%	1.39%	0.71%
Finland	0.65%	-0.75%	1.40%	0.74%
France	-0.92%	-2.29%	1.40%	11.85%
Germany	0.64%	-0.75%	1.40%	8.62%
Ireland	0.05%	-1.34%	1.40%	0.96%
Italy	-0.60%	-1.98%	1.40%	11.24%
Japan	4.15%	-0.50%	4.67%	33.21%
Malaysia	2.94%	1.56%	1.37%	0.50%
Mexico	13.62%	3.88%	9.38%	1.11%
Netherlands	0.50%	-0.90%	1.40%	2.75%
Norway	1.44%	1.22%	0.22%	0.33%
Poland	7.16%	1.71%	5.36%	0.81%
Singapore	5.69%	2.22%	3.39%	0.50%
South Africa	4.42%	2.38%	1.99%	0.66%
Spain	0.60%	-0.79%	1.40%	6.70%
Sweden	1.31%	-0.43%	1.75%	0.55%
Switzerland	1.07%	-0.46%	1.54%	0.23%
U.K.	2.85%	1.63%	1.20%	8.63%

Quarterly Returns for Non-U.S. Government Indices

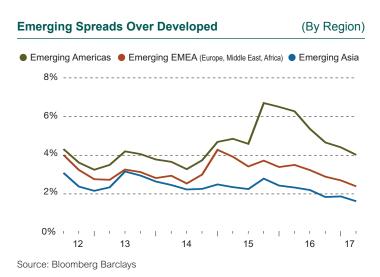
*U.S. dollar-denominated.

**Local currency-denominated.

***Weight in the Citi Non-U.S. World Government Bond Index. Source: Citigroup 0.33%, steepening the yield curve to its highest since 2014. France's 10-year bonds sold off in the middle of the quarter as the markets priced in the risk of a potential victory by presidential candidate Marine Le Pen, who wants the French to vote on whether to leave the EU. The Italian 10-year yield jumped 50 bps to 2.32% as an air of political risk also loomed over Europe's third-largest economy.

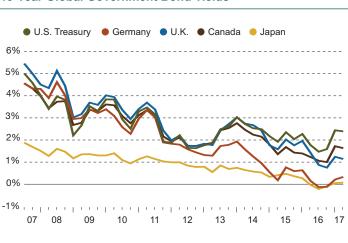
The European Central Bank continued its stimulus efforts, extending its bond-buying program until December 2017 and maintaining interest rates near record lows. Yet there was renewed confidence in the region's economic health as a result of solid manufacturing data, strength in the region's labor market, and encouraging inflation news. The euro strength-ened against the U.S. dollar, providing some headwind to the hedged Bloomberg Barclays Global Aggregate ex-US Index, which increased only slightly (+0.06%).

In the Asia-Pacific region, Japan's 10-year yield edged up 2 bps to 0.07%, in line with the Bank of Japan's goal of maintaining its yield at approximately zero. The Reserve Bank of Australia left rates unchanged despite rapid growth in household debt. The Australian 10-year yield declined 6 bps to 2.70%. Both countries' currencies advanced roughly 5% against the U.S. dollar.

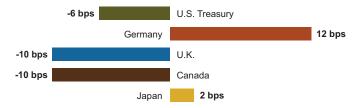


NON-U.S. FIXED INCOME (Continued)

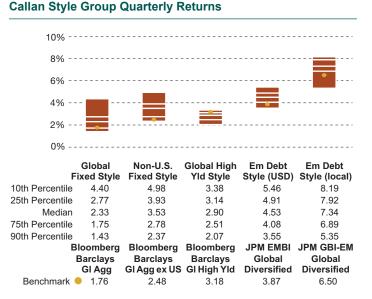
Emerging markets performed quite well. The U.S. dollardenominated **JPM EMBI Global Diversified Index** rose 3.87%, and only three countries out of 65 posted negative returns for the quarter. Mexico, the most heavily weighted in the Index, was the strongest performer (+5.46%). Venezuela was the worst, falling 1.29%. Emerging market currencies also generally appreciated versus the U.S. dollar, accounting for the JPM GBI-EM Global Diversified Index's 6.50% rise. Argentina reentered the Index in February, and its debt posted the strongest return (+15.60%). Mexico (+13.60%) and Brazil (+9.69%) were also top performers, while Turkey (-0.68%) was the only country in the index to deliver a negative return.



Change in 10-Year Yields from 4Q16 to 1Q17



10-Year Global Government Bond Yields Ca



Sources: Bloomberg Barclays, Callan, JPMorgan Chase

Source: Bloomberg

New Year, New Lows

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** advanced 1.55% during the first quarter (1.15% from income and 0.40% from appreciation). This was the lowest return since 2010, eclipsing the fourth quarter's mark of 1.73%. Appreciation fell for the eighth consecutive quarter and made up less than a third of total return.

Industrial (+2.83%) was the best-performing sector for the fourth consecutive quarter with Retail (+1.56%) and Apartments (+1.30%) also posting positive returns; Hotels (-0.16%) fared the worst and the was only property sector to fall during the quarter. All property sectors posted lower results than the previous quarter.

The West surpassed all other regions for the second quarter in a row, rising 1.96%; the East was the weakest, up only 0.95%. Transaction volume fell steeply to \$6.6 billion, a 53% decline from last quarter's all-time high. This also represented a drop of 13% from the first quarter of 2016. Appraisal capitalization rates stayed mostly flat, increasing to 4.44%, 1 basis point above last quarter's all-time low of 4.43%. Transaction capitalization rates recovered from the precipitous decline of the fourth quarter and rose from 5.7% to 6.3%. The spread between appraisal and transactional rates increased to 183 bps.

Occupancy rates dropped slightly from the 15-year high in the fourth quarter to 92.96%. Apartment occupancy rates increased slightly while Industrial, Office, and Retail rates decreased.

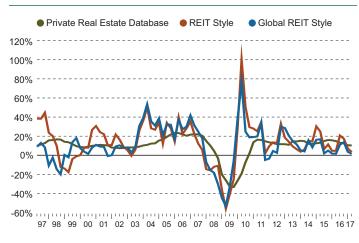
The **NCREIF Open End Diversified Core Equity Index** rose 1.54%. This marked a 34 basis point decrease from the fourth quarter return of 1.88%, and was the lowest for the index since 2010. Income accounted for 0.84% of the return, moderating slightly; appreciation (+0.71%, with rounding accounting for the slight discrepancy) fell to a new seven-year low.

Global real estate investment trusts (REITs), tracked by the **FTSE EPRA/NAREIT Developed REIT Index** (USD), outperformed their U.S. counterparts and rose 2.29%. U.S. REITs, as measured by the **FTSE NAREIT Equity REITs Index**, gained 1.16% for the quarter.

In the U.S., REITs enjoyed two months of positive returns to start the quarter before giving some of the gains back with a poor showing in March. Retail (-4.75%) fared the worst, hurt by weak earnings results from large retailers and the fear of store closings because of the emergence of e-commerce. Hotel (-1.90%) and Self Storage (-1.42%) also did poorly. Health Care (+6.92%) recovered from a sharp decline in the fourth quarter on the back of the failure of the new administration to fulfill its promise to repeal the Affordable Care Act. Specialty (+13.23%), Timber (+12.85%), Infrastructure (+12.25%), and Data Centers (+11.45%) all experienced double-digit gains.

Europe, as represented by the **FTSE EPRA/NAREIT Europe Index**, bested the U.S. in both local currency and U.S. dollar terms, buoyed by a weakening greenback and improving

Rolling One-Year Returns



Source: Callan

*Index subreturns are calculated separately from index return and may not total.

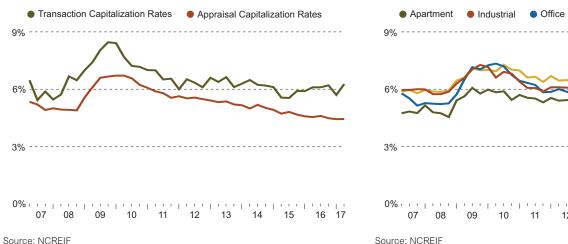
REAL ESTATE (Continued)

economic data. Markets also reacted positively to the failure of populist politicians to gain power in the Netherlands. As in the U.S., Retail lagged the broader index as e-commerce continued to take market share from traditional retailers.

The Asia-Pacific region beat all others with the FTSE EPRA/ NAREIT Asia Index jumping 5.94% during the first quarter in U.S. dollar terms. Singapore and Hong Kong were the major winners, up 17.4% and 16.2%, respectively. In both countries this was mainly attributed to strong performance by their residential sectors.

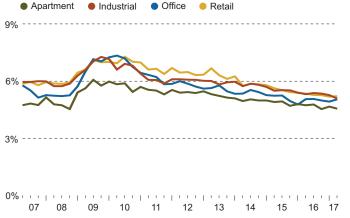
Commercial mortgage-backed securities (CMBS) issuance for the quarter was down sharply, by 58%, to \$11.3 billion from the \$26.9 billion in the fourth quarter of 2016. This represents a 42% decrease from the first guarter of 2016 (\$19.4 billion).

NCREIF Transaction and Appraisal Capitalization Rates



Note: Transaction capitalization rate is equal weighted.

NCREIF Capitalization Rates by Property Type



Source: NCREIF Note: Capitalization rates are appraisal-based.

On a Roll

PRIVATE EQUITY | Gary Robertson

New private equity partnership commitments totaled \$80.0 billion in the first quarter, with 310 new partnerships formed, according to preliminary data from *Private Equity Analyst*. The number of partnerships jumped 75% from 177 in the first quarter of 2016, and the dollar volume rose 51% from \$53.1 billion. KKR Americas Fund XII raised the most money in the quarter, \$3.1 billion, and its final close of \$13.9 billion exceeded its \$12 billion target.

Investments by funds into companies totaled 379 deals, up 18% from 322 in the prior quarter, according to *Buyouts* newsletter. The announced total volume was \$35.0 billion, up 24% from \$28.3 billion in the fourth quarter. The \$6.0 billion takeprivate of hospital staffing firm Team Health Holdings was the quarter's largest buyout. Nine deals with announced values of \$1 billion or more closed in the quarter.

According to the National Venture Capital Association, new investments in VC companies totaled 1,808 rounds with \$16.5 billion of announced value. The number of rounds fell by 5% from 1,898 in the fourth quarter, but disclosed value increased 15% from \$14.3 billion.

Buyout M&A exits fell steeply; there were just 117 in the first quarter, down 25% from the prior quarter's 157, according to

Funds Closed January 1 to March 31, 2017

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	145	7,505	9%
Buyouts	108	54,622	68%
Subordinated Debt	13	3,038	4%
Distressed Debt	7	4,526	6%
Secondary and Other	7	5,162	6%
Fund-of-funds	30	5,178	6%
Totals	310	80,031	100%

Source: Private Equity Analyst Figures may not total due to rounding.

Buyouts. Announced deal value also dropped: 30 deals totaling \$14.4 billion, off 47% from \$27.0 billion in the fourth. Three buyout-backed IPOs in the first quarter raised an aggregate \$2.4 billion. The number of IPOs was the same as the prior quarter, but the proceeds increased from \$2.0 billion.

Venture-backed M&A exits totaled 132 and disclosed value hit \$10.4 billion. The number of exits declined 19% but the dollar volume increased 53% from the fourth quarter, which had 162 sales totaling \$6.8 billion. There were seven VC-backed IPOs in the first quarter with a combined float of \$4 billion. The fourth quarter also had seven but they only raised \$684 million.

Please see our upcoming issue of *Private Markets Trends* for more in-depth coverage.

Private Equity Performance	Database (%) (Pooled Horizon IRF	Rs through September 30, 20	16*)

			•	•	,		
Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	3.33	3.35	17.77	14.78	10.51	6.72	20.92
Growth Equity	3.82	8.77	11.95	12.28	11.20	10.92	13.62
All Buyouts	3.91	11.48	11.97	13.68	10.41	12.96	12.60
Mezzanine	2.92	9.19	8.75	10.32	9.38	8.96	9.17
Distressed	4.22	7.72	7.30	11.93	9.42	10.71	10.67
All Private Equity	3.80	9.08	12.24	13.41	10.37	11.06	13.23
S&P 500	3.85	15.43	11.16	16.37	7.24	7.15	7.91
Russell 3000	4.40	14.96	10.44	16.36	7.37	7.61	8.03

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson Reuters/Cambridge

*Most recent data available at time of publication.

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of *Capital Market Review* and other Callan publications.



Dollops of Alpha with Beta

HEDGE FUNDS | Jim McKee

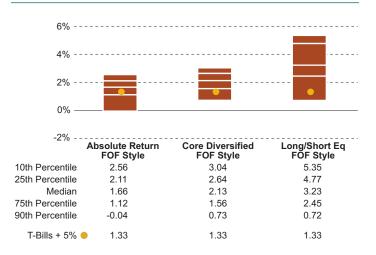
The U.S. economy moved steadily forward with revived animal spirits in the first quarter. Tangible evidence of growth and inflation emerged in the euro zone, soothing market worries globally. Amid geopolitical anxieties testing the Trump administration, the **S&P 500 Index** cleared 6.07% with very little market volatility. With more upbeat expectations abroad, **MSCI EAFE** climbed 7.25% while **MSCI Emerging Markets** soared 11.44%. After being beaten down in the prior quarter, the Citi **10-Year Treasury** (+0.79%) held steady.

With global risk appetites encouraged by improving fundamentals, most hedge fund strategies generated positive returns. The **Credit Suisse Hedge Fund Index (CS HFI)**, a proxy of unmanaged hedge fund interests gross of fees, advanced 2.07%. Representing live hedge fund portfolios net of all fees, the median manager in the **Callan Hedge Fund-of-Funds Database** appreciated 2.29%.

Within CS HFI, *Long-Short Equity* (+3.46%) was particularly strong in the first quarter compared to 2016, even after adjusting for equity beta. Lack of market volatility and distinct trends left *Managed Futures* (-1.02%) and *Global Macro* (+0.24%) struggling.

Within the **Callan Hedge Fund-of-Funds Database**, market exposures differentiated performance. Supported by the stock market rallies around the globe, the median *Callan Long/Short Equity FOF* (+3.23%) outpaced the *Callan Absolute Return FOF* (+1.66%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 2.13%.

Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Callan Database Median and Index Returns* for Periods ended March 31, 2017

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	2.29	2.29	8.04	2.00	4.66	3.24	4.83
CS Hedge Fund Index	2.07	2.07	5.67	1.92	3.95	3.62	5.83
CS Equity Market Neutral	2.13	2.13	-2.19	-0.62	1.26	-2.99	0.55
CS Convertible Arbitrage	2.25	2.25	9.43	1.78	3.33	3.61	4.74
CS Fixed Income Arbitrage	2.32	2.32	8.02	3.15	4.64	3.43	4.23
CS Multi-Strategy	2.76	2.76	7.92	5.05	6.9	5.09	6.98
CS Distressed	2.23	2.23	10.91	0.82	5.28	3.75	6.94
CS Risk Arbitrage	1.21	1.21	4.94	1.78	2.33	3.18	3.74
CS Event-Driven Multi-Strategy	2.88	2.88	10.33	-1.48	3.53	3.4	6.11
CS Long/Short Equity	3.46	3.46	3.91	2.44	5.35	3.99	6.29
CS Global Macro	0.24	0.24	6.2	2.57	2.87	5.53	7.88
CS Managed Futures	-1.02	-1.02	-11.63	4.15	0.59	3.06	5.02
CS Emerging Markets	4.27	4.27	10.28	4.04	4.55	3.79	7.59

*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

Eventful Year, but TDFs Still Rule

DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index[™] increased 7.99% during the wild year that was 2016, its best year since 2013. And the Index did not suffer a single negative quarter, ending with a fourth quarter return of 1.59%. But the Index trailed the average Age 45 Target Date Fund, which gained 8.59% in 2016.

For the year, DC plan balances increased 8.31%. Almost all of the growth is attributable to market performance. Inflows (participant and plan sponsor contributions) added only 32 basis points to total growth.

Turnover (i.e., net transfer activity levels within DC plans) in 2016 reached 2.31%, the highest since 2012.

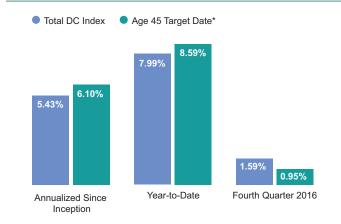
Last year, flows retreated from equities into stable value, money market, and domestic fixed income funds. As usual, TDFs dominated net inflows for the quarter and the year. For the year, roughly 61 cents of every dollar flowed to TDFs. The fourth quarter of 2016 saw a significant spike in TDF assets, increasing 1.3% from the third quarter to make up 29.0% of the average DC plan.

The Callan DC Index's equity allocation ended the quarter at 69%, below the equity allocation of the average Age 45 Target Date Fund (74%) but above the Index's historical average (67%).

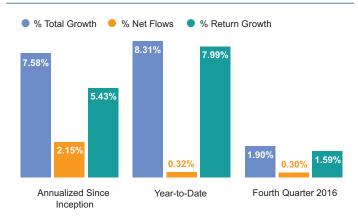
TDFs' dominance of the typical DC plan continues to grow. When TDFs are held within a DC plan, they now account for 35% of plan assets, up from 30% a year ago. The next largest plan holding, U.S. large cap equity funds, now account for 22.7% of plan assets. The fourth quarter of 2016 marks the highest level of TDF prevalence (91%) since the inception of the Callan DC IndexTM.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.

Investment Performance



Growth Sources



Net Cash Flow Analysis (Fourth Quarter 2016) (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	68.47%
Stable Value	22.76%
U.S. Large Cap	-30.44%
Company Stock	-40.41%
Total Turnover**	0.50%

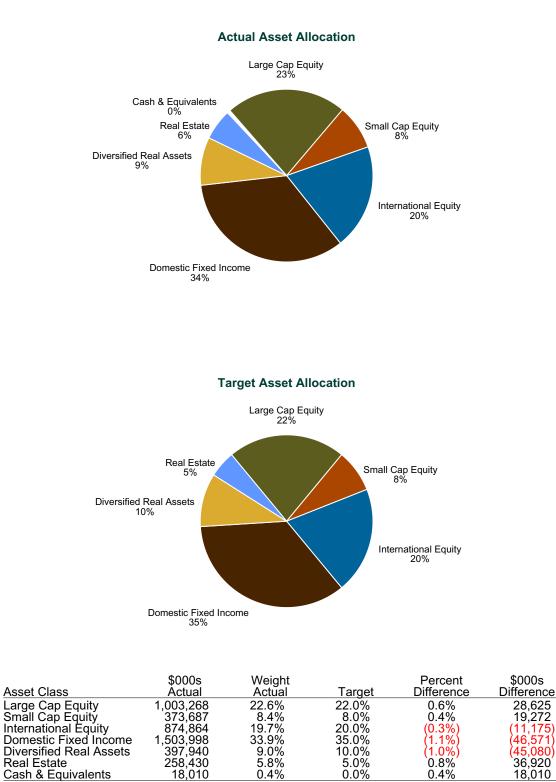
Data provided here is the most recent available at time of publication. Source: Callan DC Index

Note: DC Index inception date is January 2006.

- * The Age 45 Fund transitioned from the average 2030 TDF to the 2035 TDF in June 2013.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

Actual vs Target Asset Allocation As of March 31, 2017

The first chart below shows the Fund's asset allocation as of March 31, 2017. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

0.4%

100.0%

100.0%

18,010

4,430,196



Cash & Equivalents

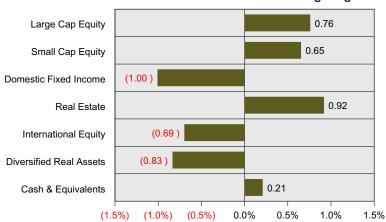
Total

18,010

0.4%

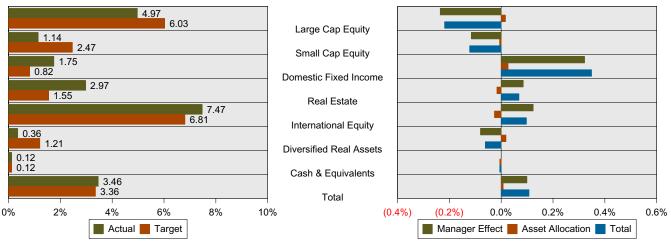
Quarterly Total Fund Relative Attribution - March 31, 2017

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 Effects for Quarter ended March 31, 2017

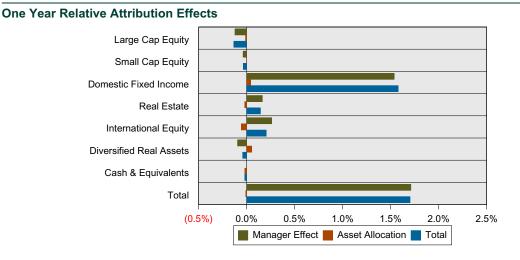
Asset Class	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	<u>Return</u>
Large Cap Equity	23%	22%	4.97%	6.03%	(0.24%)	0.02%	(0.22%)
Small Cap Equity	9%	8%	1.14%	2.47%	(0.12%)	(0.01%)	(0.12%)
Domestic Fixed Income	ə 34%	35%	1.75%	0.82%	0.32%	0.03%	0.35%
Real Estate	6%	5%	2.97%	1.55%	0.09%	(0.02%)	0.07%
International Equity	19%	20%	7.47%	6.81%	0.12%	(0.03%)	0.10%
Diversified Real Assets	s 9%	10%	0.36%	1.21%	(0.08%)	0.02%	(0.06%)
Cash & Equivalents	0%	0%	0.12%	0.12%	0.00%	(0.01%)	(0.01%)
Total			3.46% =	3.36%	+ 0.10% +	0.01%	0.11%

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

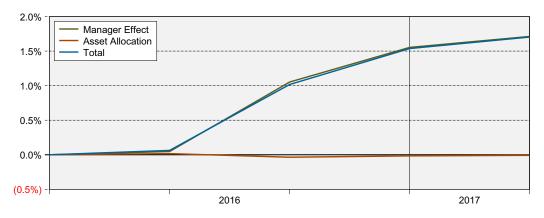
Relative Attribution by Asset Class

Cumulative Total Fund Relative Attribution - March 31, 2017

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.



Cumulative Relative Attribution Effects



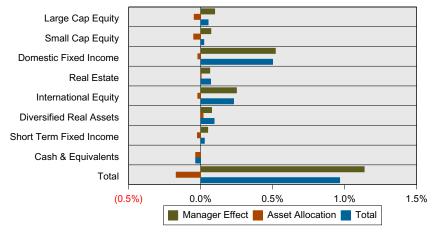
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	16.87%	17.43%	(0.12%)	(0.01%)	(0.13%)
Small Cap Equity Domestic Fixed Income	8% e 34%	8% 35%	25.73% 4.64%	26.22% 0.44%	<mark>(0.04%)</mark> 1.54%	0.00% 0.04%	<mark>(0.04%)</mark> 1.58%
Real Estate	6%	5%	10.17%	7.27%	0.16%	(0.02%)	0.14%
International Equity Diversified Real Assets	19% 3 9%	20% 10%	12.74% 0.10%	11.46% 1.01%	0.26% (0.09%)	<mark>(0.06%)</mark> 0.05%	0.20% (0.04%)
Cash & Equivalents	0%	0%	0.32%	0.32%	0.00%	(0.02%)	(0.02%)
Total			10.40% =	8.69%	+ 1.71% +	(0.01%)	1.70%

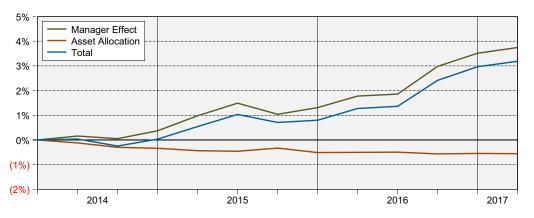
Cumulative Total Fund Relative Attribution - March 31, 2017

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



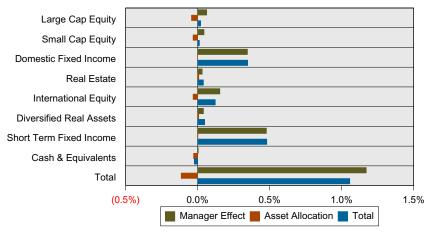
Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	21%	22%	10.48%	9.99%	0.10%	(0.05%)	0.05%
Small Cap Equity	8%	8%	8.27%	7.22%	0.07%	(0.05%)	0.02%
Domestic Fixed Incom		33%	4.28%	2.68%	0.52%	(0.02%)	0.50%
Real Estate	6%	5%	11.91%	10.58%	0.06%	0.00%	0.07%
International Equity	19%	20%	1.54%	0.43%	0.25%	(0.02%)	0.23%
Diversified Real Asset		8% 4%	1.29%	0.44%	0.08%	0.02%	0.09%
Short Term Fixed Inco		4%	-	-	0.05%	(0.02%)	0.03%
Cash & Equivalents	0%	0%	0.13%	0.13%	0.00%	(0.04%)	(0.04%)
						(0. (= 0 ()	
Total			5.33% =	÷ 4.36%	+ 1.14% +	(0.17%)	0.97%

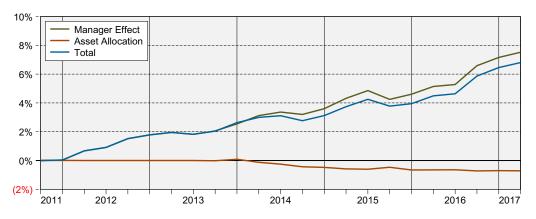
Cumulative Total Fund Relative Attribution - March 31, 2017

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.

Five and One-Half Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

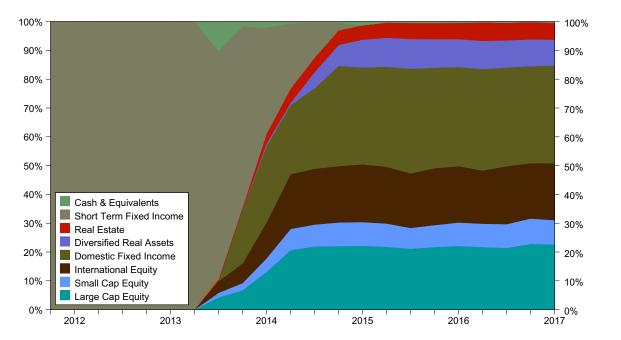


Five and One-Half Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	13%	13%	-	-	0.06%	(0.04%)	0.02%
Small Cap Equity	5%	5%	-	-	0.04%	(0.03%)	0.01%
Domestic Fixed Incom	e 20%	20%	-	-	0.35%	0.00%	0.35%
Real Estate	3%	3%	-	-	0.03%	0.01%	0.04%
International Equity	11%	11%	-	-	0.15%	(0.03%)	0.12%
Diversified Real Assets		5%	-	-	0.04%	0.01%	0.05%
Short Term Fixed Inco	me41%	41%	-	-	0.48%	0.00%	0.48%
Cash & Equivalents	4%	3%	0.14%	0.13%	0.01%	(0.03%)	_(0.02%)_
Total			4.08% =	3.02%	+ 1.17%	+ (0.11%)	1.06%

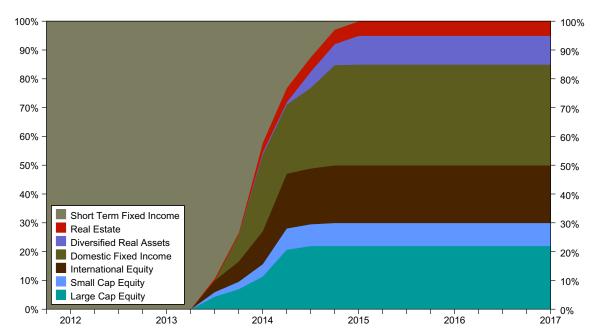
Actual vs Target Historical Asset Allocation

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

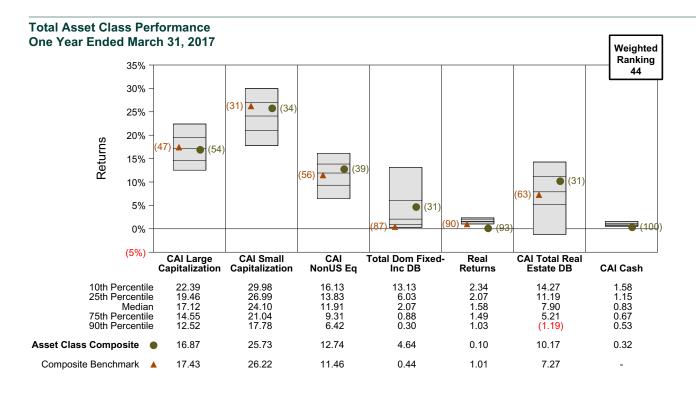
Target Historical Asset Allocation



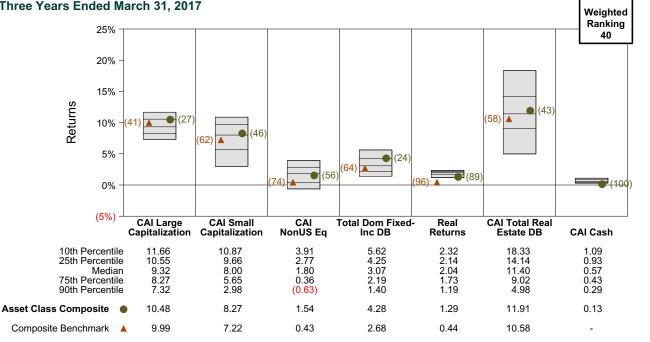


Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.



Total Asset Class Performance Three Years Ended March 31, 2017



Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2017, with the distribution as of December 31, 2016. 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 Class Allocation

	March 31,	2017			December 3 ⁻	1, 2016
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$1,376,954,873	31.08%	\$(525,499)	\$51,751,613	\$1,325,728,760	31.65%
Large Cap Equity	\$1,003,267,690	22.65%	\$(421,968)	\$47,532,463	\$956,157,195	22.82%
L.A. Capital Enhanced	196,839,473	4.44%	(61,819)	8,352,079	188,549,213	4.50%
L.A. Capital Large Cap Growth	302,905,433	6.84%	(140,171)	18,978,016	284,067,588	6.78%
Parametric Clifton Large Cap	197,600,238	4.46%	0	11,189,767	186,410,471	4.45%
LSV Large Cap Value	305,922,547	6.91%	(219,977)	9,012,601	297,129,923	7.09%
Small Cap Equity	\$373,687,183	8.44%	\$(103,532)	\$4,219,149	\$369,571,565	8.82%
Parametric Clifton SmallCap	202,968,479	4.58%	0	4,754,454	198,214,025	4.73%
PIMCO RAE	170,718,704	3.85%	(103,532)	(535,304)	171,357,540	4.09%
International Equity	\$874,864,166	19.75%	\$9,346,683	\$60,194,289	\$805,323,194	19.22%
DFA Intl SmallCap Value	88,073,494	1.99%	0	6,318,596	81,754,898	1.95%
LSV Intl Value	359,775,443	8.12%	(332,551)	22,389,351	337,718,643	8.06%
Vanguard Intl Explorer Fund	84,856,108	1.92%	0	7,915,506	76,940,602	1.84%
William Blair	342,159,121	7.72%	9,679,234	23,570,836	308,909,051	7.37%
Domestic Fixed Income	\$1,503,997,511	33.95%	\$68,303,375	\$25,142,102	\$1,410,552,034	33.67%
BND CDs	76,848,822	1.73%	31,196,448	410,715	45,241,659	1.08%
Declaration Total Return	106,161,914	2.40%	(76,171)	1,461,516	104,776,569	2.50%
Prudential	166,335,326	3.75%	9,896,864	3,055,628	153,382,834	3.66%
SSgA US Govt Credit Bd Idx	200,217,994	4.52%	10,983,855	1,828,629	187,405,511	4.47%
Wells Capital	434,965,887	9.82%	(387,300)	8,821,407	426,531,780	10.18%
Western Asset Management	447,506,219	10.10%	14,855,546	6,635,180	426,015,493	10.17%
Pooled Fixed Income(1)	71,961,350	1.62%	1,834,134	2,929,027	67,198,188	1.60%
Diversified Real Assets	\$397,939,858	8.98%	\$6,115,389	\$1,396,470	\$390,427,999	9.32%
Western TIPS	290,148,344	6.55%	(97,571)	2,904,369	287,341,546	6.86%
JP Morgan Infrastructure	87,519,754	1.98%	(173,662)	(1,254,105)	88,947,522	2.12%
Grosvenor Cust. Infrastructure	20,271,760	0.46%	6,386,622	(253,794)	14,138,932	0.34%
Real Estate	\$258,429,652	5.83%	\$(402,447)	\$7,464,674	\$251,367,424	6.00%
Invesco Core Real Estate	124,801,870	2.82%	(105,919)	3,092,769	121,815,020	2.91%
JP Morgan RE Inc & Growth	133,627,782	3.02%	(296,528)	4,371,905	129,552,404	3.09%
Cash & Equivalents	\$18,009,792	0.41%	\$12,060,766	\$12,773	\$5,936,253	0.14%
Securities Lending Income	\$0	0.00%	\$(125,204)	\$125,204	-	
Total Fund	\$4,430,195,852	100.0%	\$94,773,063	\$146,087,126	\$4,189,335,664	100.0%

(1) Comprised of PIMCO DiSCO II and PIMCO Bravo II.



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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.

			Last	Last	
	1 4	1 4			
	Last	Last	3	5-1/2	
	Quarter	Year	Years	Years	
Domestic Equity					
Gross	3.90%	19.26%	9.95%	-	
Net	3.86%	18.95%	9.69%	-	
_arge Cap Equity					
Gross	4.97%	16.87%	10.48%	-	
Net	4.93%	16.61%	10.26%	-	
Russell 1000 Index	6.03%	17.43%	9.99%	16.84%	
L.A. Capital Enhanced - Gross	4.43%	15.94%	10.67%	-	
L.A. Capital Enhanced - Net	4.40%	15.78%	10.52%	-	
Russell 1000 Index	6.03%	17.43%	9.99%	16.84%	
L.A. Capital LargeCap Growth - Gross	6.68%	13.47%	11.45%	-	
L.A. Capital LargeCap Growth - Net	6.63%	13.24%	11.23%	-	
Russell 1000 Growth Index	8.91%	15.76%	11.27%	16.99%	
Parametric Clifton Large Cap - Gross	6.00%	17.00%	10.81%	-	
Parametric Clifton Large Cap - Net	6.00%	16.72%	10.68%	-	
S&P 500 Index	6.07%	17.17%	10.37%	16.81%	
LSV Large Cap Value - Gross	3.03%	20.83%	9.04%	-	
LSV Large Cap Value - Net	2.96%	20.48%	8.73%	-	
Russell 1000 Value Index	3.27%	19.22%	8.67%	16.61%	
Small Cap Equity					
Gross	1.14%	25.73%	8.27%	-	
Net	1.11%	25.25%	7.89%	-	
Russell 2000 Index	2.47%	26.22%	7.22%	16.57%	
	a (aa)				
Parametric Clifton Small Cap - Gross	2.40%	26.79%	8.56%	-	
Parametric Clifton Small Cap - Net	2.40%	26.16%	8.13%	-	
Russell 2000 Index	2.47%	26.22%	7.22%	16.57%	
	(0.0.101)	a			
PIMCO RAE - Gross	(0.31%)	24.49%	7.62%	-	
PIMCO RAE - Net	(0.37%)	24.19%	7.31%	-	
Russell 2000 Index	2.47%	26.22%	7.22%	16.57%	
denote the set was the					
nternational Equity	7 470/	40 740/	4 = 40/		
Gross	7.47%	12.74%	1.54%	-	
Net	7.38%	12.43%	1.23%	-	
Benchmark(1)	6.81%	11.46%	0.43%	7.88%	
	7 700/	47 0000	0 7 1 0 1		
DFA Intl Small Cap Value	7.73%	17.30%	2.71%	-	
World ex US SC Va	6.80%	13.86%	1.77%	9.86%	
	0.000/	44.040/	0.040/		
LSV Intl Value - Gross	6.63%	14.81%	2.34%	-	
LSV Intl Value - Net	6.53%	14.38%	1.94%	-	
MSCI EAFE Index	7.25%	11.67%	0.50%	7.92%	
	10 000	10 -004	0.000		
Vanguard Intl Explorer Fund	10.29%	10.56%	3.08%	-	
BMI, EPAC, <\$2 B	7.79%	11.92%	4.48%	10.07%	
William Blair - Gross	7.61%	-	-	-	
William Blair - Net	7.50%	-	-	-	
MSCI ACWI ex US	7.86%	13.13%	0.56%	6.69%	

(1) MSCI EAFE through 6/30/2016 and MSCI World ex-US thereafter.



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2017. 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	s Ended March 3	1, 2017		
	Last Quarter	Last Year	Last 3 Years	Last 5-1/2 Years	
Domestic Fixed Income Gross Net Blmbg Aggregate Index	1.75% 1.71% 0.82%	4.64% 4.51% 0.44%	4.28% 4.15% 2.68%	- 2.39%	
BND CDs - Net	0.63%	-	-	-	
Declaration Total Return - Net Libor-3 Month	1.40% 0.26%	5.16% 0.84%	4.09% 0.49%	_ 0.44%	
Prudential - Gross Prudential - Net Blmbg Aggregate Index	1.97% 1.90% 0.82%	4.13% 3.86% 0.44%	4.23% 3.95% 2.68%	- 2.39%	
Wells Capital - Gross Wells Capital - Net Blmbg Baa Credit 3% In	2.07% 1.98% 1.72%	6.55% 6.36% 5.24%	4.59% 4.40% 3.72%	- 4.81%	
Western Asset - Gross Western Asset - Net Bimbg Aggregate Index	1.55% 1.51% 0.82%	3.45% 3.31% 0.44%	4.11% 3.97% 2.68%	- 2.39%	
SSgA US Govt Credit Bd Idx - Gross SSgA US Govt Credit Bd Idx - Net BImbg Govt/Credit Bd	0.96% 0.95% 0.96%	0.53% 0.50% 0.54%	2.70% 2.66% 2.69%	2.47%	
Pooled Fixed Income - Net(1) Blmbg Aggregate Index	4.34% 0.82%	13.16% 0.44%	2.68%	2.39%	
Diversified Real Assets Gross Net Weighted Benchmark	0.36% 0.30% 1.21%	0.10% (0.18%) 1.01%	1.29% 1.07% 0.44%	-	
Western Asset TIPS - Gross Western Asset TIPS - Net Bimbg Gibi Inftn-Lnked	1.01% 0.98% 1.30%	(0.43%) (0.56%) 0.53%	0.60% 0.47% 0.21%	_ 1.89%	
JP Morgan Infrastructure - Gross JP Morgan Infrastructure - Net CPI-W	(1.41%) (1.57%) 0.96%	2.16% 1.38% 2.35%	- 0.73%	- 1.11%	
Grosvenor Cust. Infrastructure - Net CPI-W	<mark>(1.35%)</mark> 0.96%	<mark>(4.74%)</mark> 2.35%	0.73%	- 1.11%	
teal Estate Gross Net NCREIF Total Index	2.97% 2.84% 1.55%	10.17% 9.45% 7.27%	11.91% 11.14% 10.58%	- 10.77%	
Invesco Core Real Estate - Gross Invesco Core Real Estate - Net NCREIF Total Index	2.54% 2.45% 1.55%	10.38% 10.00% 7.27%	12.38% 11.99% 10.58%	- 10.77%	
JP Morgan RE Inc & Growth - Gross JP Morgan RE Inc & Growth - Net NCREIF Total Index	3.38% 3.20% 1.55%	10.04% 8.94% 7.27%	11.67% 10.55% 10.58%	- 10.77%	
Cash & Equivalents - Net 90 Day Treasury Bills	0.12% 0.10%	0.32% 0.36%	0.13% 0.17%	0.14% 0.13%	
F otal Fund Gross Net Target*	3.46% 3.41% 3.36%	10.40% 10.13% 8.69%	5.33% 5.08% 4.36%	4.08% 3.91% 3.02%	

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index. (1) Comprised of PIMCO DiSCO II and PIMCO Bravo II.



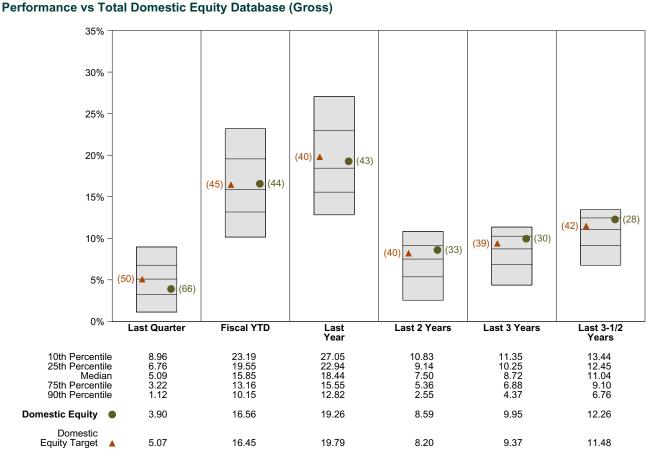
Domestic Equity Period Ended March 31, 2017

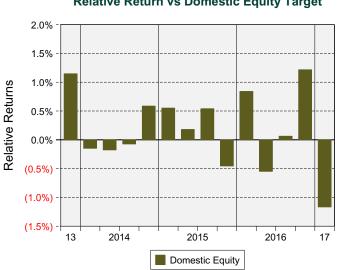
Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 3.90% return for the quarter placing it in the 66 percentile of the Total Domestic Equity Database group for the quarter and in the 43 percentile for the last year.
- Domestic Equity's portfolio underperformed the Domestic ٠ Equity Target by 1.17% for the guarter and underperformed the Domestic Equity Target for the year by 0.53%.

Quarterly Asset Growth

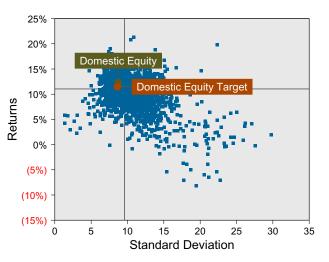
Beginning Market Value	\$1,325,728,760
Net New Investment	\$-525,499
Investment Gains/(Losses)	\$51,751,613
Ending Market Value	\$1,376,954,873





Relative Return vs Domestic Equity Target

Total Domestic Equity Database (Gross) Annualized Three and One-Half Year Risk vs Return



Parametric Clifton Large Cap Period Ended March 31, 2017

Investment Philosophy

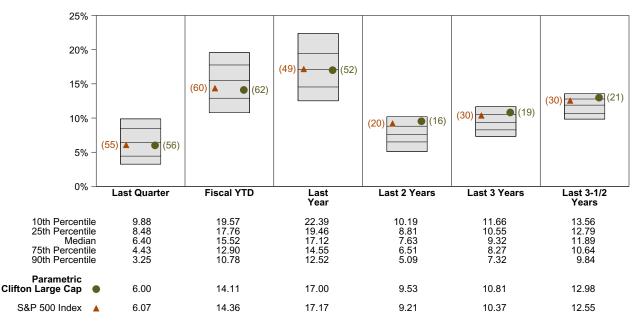
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

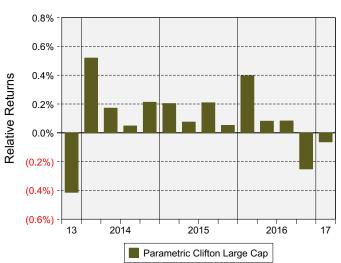
Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a 6.00% return for the quarter placing it in the 56 percentile of the CAI Large Capitalization group for the quarter and in the 52 percentile for the last year.
- Parametric Clifton Large Cap's portfolio underperformed the S&P 500 Index by 0.06% for the quarter and underperformed the S&P 500 Index for the year by 0.17%.

Quarterly Asset Growth			
Beginning Market Value	\$186,410,471		
Net New Investment	\$0		
Investment Gains/(Losses)	\$11,189,767		
Ending Market Value	\$197,600,238		

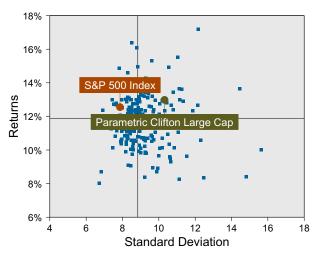






Relative Return vs S&P 500 Index

CAI Large Capitalization (Gross) Annualized Three and One-Half Year Risk vs Return



L.A. Capital Period Ended March 31, 2017

Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

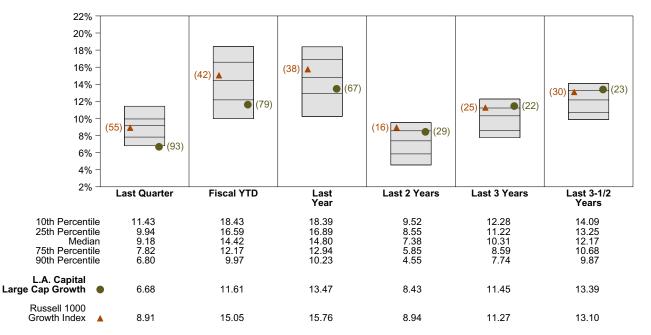
Quarterly Summary and Highlights

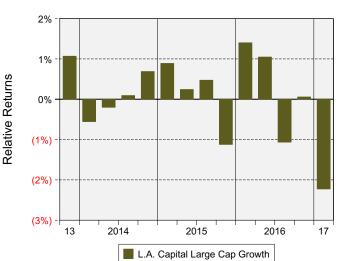
- L.A. Capital Large Cap Growth's portfolio posted a 6.68% return for the quarter placing it in the 93 percentile of the CAI Large Cap Growth group for the quarter and in the 67 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio underperformed the Russell 1000 Growth Index by 2.23% for the quarter and underperformed the Russell 1000 Growth Index for the year by 2.29%.

Quarterly Asset Growth

Beginning Market Value	\$284,067,588
Net New Investment	\$-140,171
Investment Gains/(Losses)	\$18,978,016
Ending Market Value	\$302,905,433

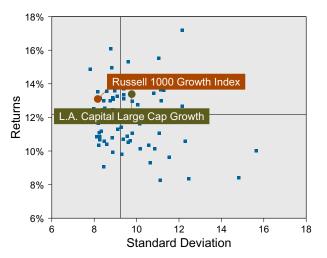






Relative Return vs Russell 1000 Growth Index

CAI Large Cap Growth (Gross) Annualized Three and One-Half Year Risk vs Return



L.A. Capital Enhanced Period Ended March 31, 2017

Investment Philosophy

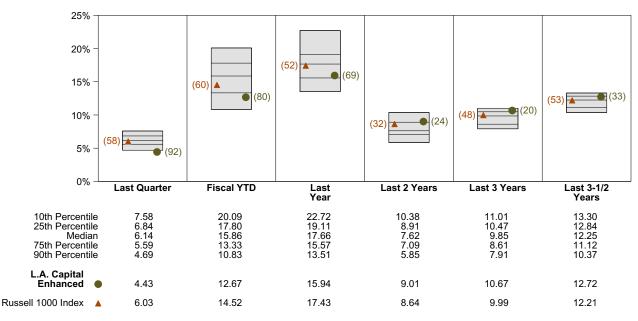
The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

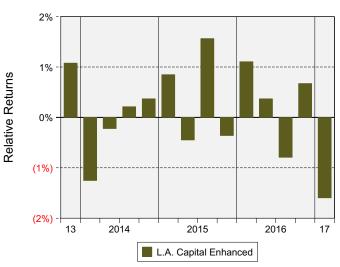
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 4.43% return for the quarter placing it in the 92 percentile of the CAI Large Cap Core group for the quarter and in the 69 percentile for the last year.
- L.A. Capital Enhanced's portfolio underperformed the Russell 1000 Index by 1.60% for the quarter and underperformed the Russell 1000 Index for the year by 1.49%.



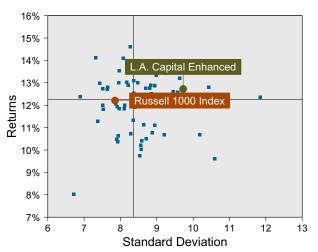






Relative Return vs Russell 1000 Index

CAI Large Cap Core (Gross) Annualized Three and One-Half Year Risk vs Return



LSV Asset Management Period Ended March 31, 2017

Investment Philosophy

The objective of LSV Asset Management's Large Cap Value Equity (U.S.) strategy is to outperform the Russell 1000 Value by at least 200 basis points (gross of fees) per annum over a 3-5 year period with a tracking error of approximately 4%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 100 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested.

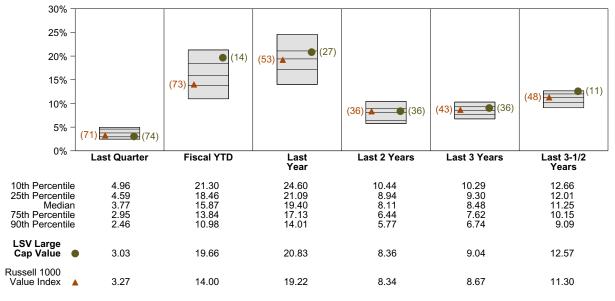
Quarterly Summary and Highlights

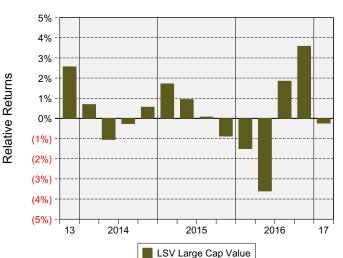
- LSV Large Cap Value's portfolio posted a 3.03% return for the quarter placing it in the 74 percentile of the CAI Large Cap Value group for the quarter and in the 27 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 0.23% for the quarter and outperformed the Russell 1000 Value Index for the year by 1.61%.

Performance vs CAI Large Cap Value (Gross)

Quarterly Asset Growth		
Beginning Market Value	\$297,129,923	
Net New Investment	\$-219.977	

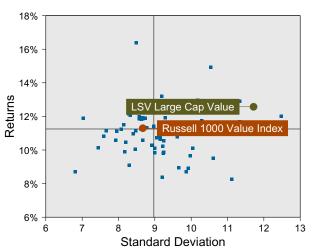
Net New Investment	\$-219,977
Investment Gains/(Losses)	\$9,012,601
Ending Market Value	\$305,922,547





Relative Return vs Russell 1000 Value Index

CAI Large Cap Value (Gross) Annualized Three and One-Half Year Risk vs Return



Parametric Clifton Small Cap Period Ended March 31, 2017

Investment Philosophy

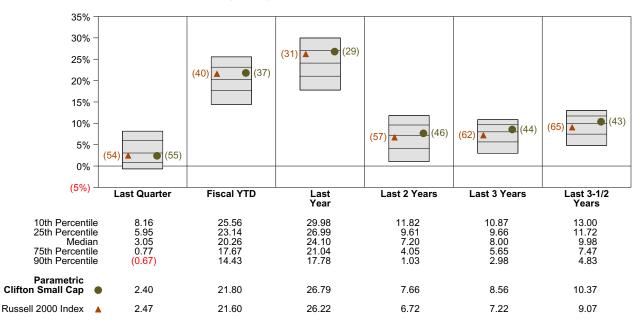
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

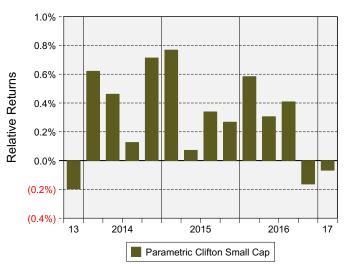
Quarterly Summary and Highlights

- Parametric Clifton Small Cap's portfolio posted a 2.40% return for the quarter placing it in the 55 percentile of the CAI Small Capitalization group for the quarter and in the 29 percentile for the last year.
- Parametric Clifton Small Cap's portfolio underperformed the Russell 2000 Index by 0.07% for the quarter and outperformed the Russell 2000 Index for the year by 0.57%.

Quarterly Asset Growth			
Beginning Market Value	\$198,214,025		
Net New Investment	\$0		
Investment Gains/(Losses)	\$4,754,454		
Ending Market Value	\$202,968,479		

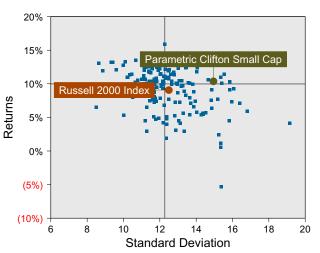
Performance vs CAI Small Capitalization (Gross)





Relative Return vs Russell 2000 Index

CAI Small Capitalization (Gross) Annualized Three and One-Half Year Risk vs Return



PIMCO RAE Period Ended March 31, 2017

Investment Philosophy

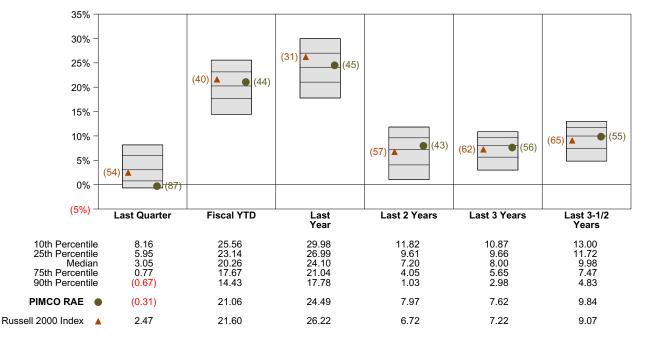
Small company value equity portfolio utilizing the index strategy and philosophy described as the Enhanced RAFI US Small strategy which relies on portfolio weights derived from firm fundamentals (free cash flow, book equity value, total sales and gross dividend), instead of market capitalization. Additionally, the enhanced portfolio strategy uses a quality of earnings screening and a financial distress screening to augment portfolio returns and reduce portfolio volatility.

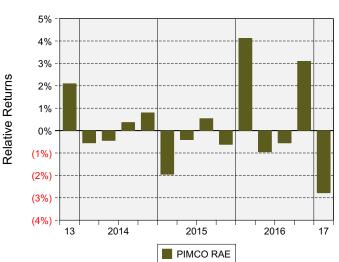
Quarterly Summary and Highlights

- PIMCO RAE's portfolio posted a (0.31)% return for the quarter placing it in the 87 percentile of the CAI Small Capitalization group for the quarter and in the 45 percentile for the last year.
- PIMCO RAE's portfolio underperformed the Russell 2000 Index by 2.78% for the quarter and underperformed the Russell 2000 Index for the year by 1.72%.

Quarterly Asset Growth			
Beginning Market Value	\$171,357,540		
Net New Investment	\$-103,532		
Investment Gains/(Losses)	\$-535,304		
Ending Market Value	\$170,718,704		

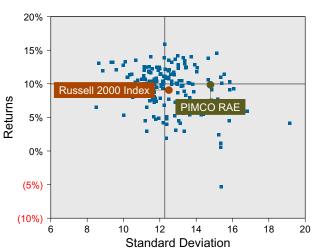






Relative Return vs Russell 2000 Index

CAI Small Capitalization (Gross) Annualized Three and One-Half Year Risk vs Return



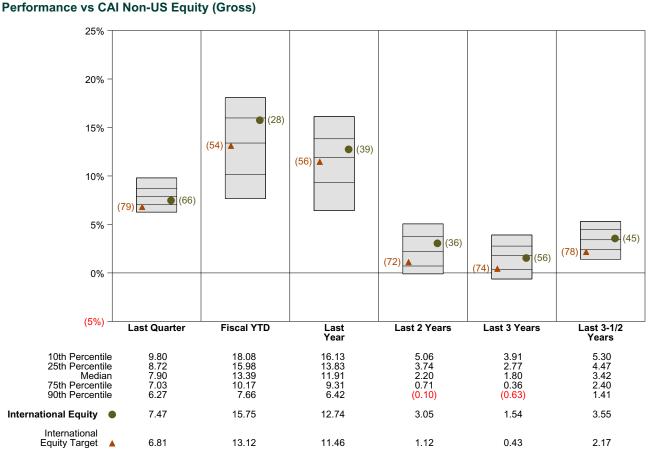
International Equity Period Ended March 31, 2017

Quarterly Summary and Highlights

- International Equity's portfolio posted a 7.47% return for the quarter placing it in the 66 percentile of the CAI Non-US Equity group for the guarter and in the 39 percentile for the last year.
- International Equity's portfolio outperformed the International ٠ Equity Target by 0.66% for the quarter and outperformed the International Equity Target for the year by 1.28%.

Quarterly Asset Growth

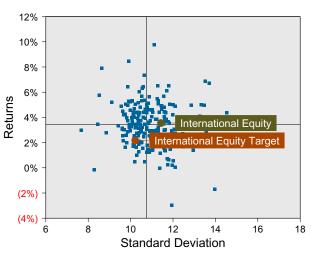
Beginning Market Value	\$805,323,194
Net New Investment	\$9,346,683
Investment Gains/(Losses)	\$60,194,289
Ending Market Value	\$874,864,166





Relative Return vs International Equity Target

CAI Non-US Equity (Gross) Annualized Three and One-Half Year Risk vs Return



DFA Intl Small Cap Value Period Ended March 31, 2017

Investment Philosophy

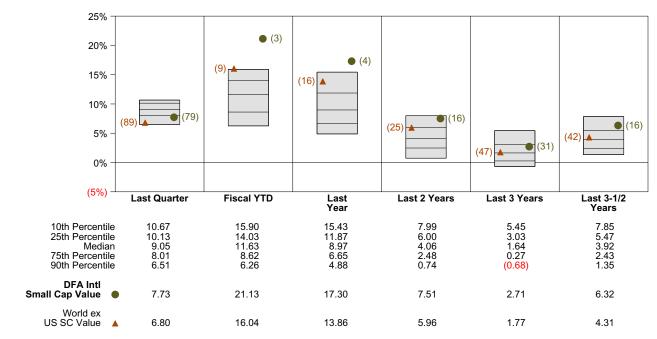
The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

Quarterly Summary and Highlights

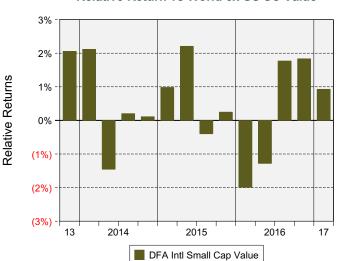
- DFA Intl Small Cap Value's portfolio posted a 7.73% return for the quarter placing it in the 79 percentile of the CAI International Small Cap Mut Funds group for the quarter and in the 4 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 0.93% for the quarter and outperformed the World ex US SC Value for the year by 3.44%.

Quarterly Asset Growth

Beginning Market Value	\$81,754,898
Net New Investment	\$0
Investment Gains/(Losses)	\$6,318,596
Ending Market Value	\$88,073,494

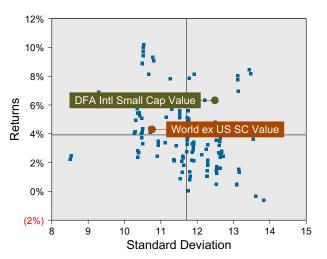






Relative Return vs World ex US SC Value

CAI International Small Cap Mut Funds (Net) Annualized Three and One-Half Year Risk vs Return



LSV Intl Value Period Ended March 31, 2017

Investment Philosophy

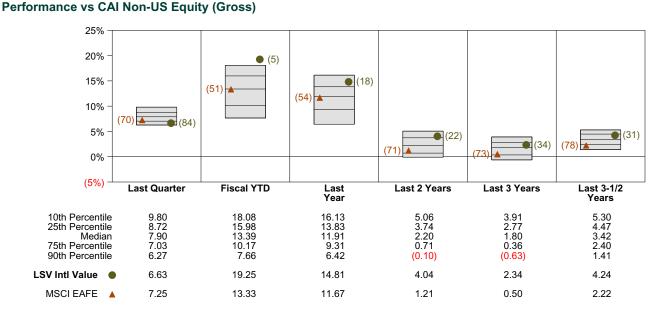
The objective of LSV Asset Management's International Large Cap Value strategy is to outperform the MSCI EAFE Index by at least 250 basis points (gross of fees) per annum over an annualized 3-5 year period with a tracking error of approximately 5-6%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 150 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested. LSV weights countries at a neutral weight relative to the benchmark country weights. 50% of the portfolio is US dollar hedged.

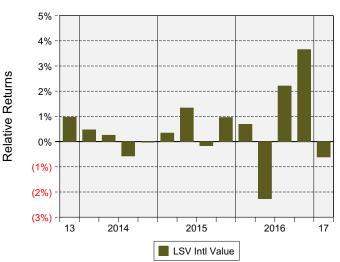
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a 6.63% return for the quarter placing it in the 84 percentile of the CAI Non-US Equity group for the quarter and in the 18 percentile for the last year.
- LSV Intl Value's portfolio underperformed the MSCI EAFE by 0.61% for the quarter and outperformed the MSCI EAFE for the year by 3.13%.

Quar	terly	Asset	Grow	/th

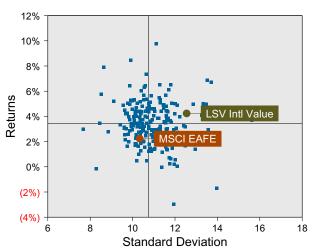
Beginning Market Value	\$337,718,643
Net New Investment	\$-332,551
Investment Gains/(Losses)	\$22,389,351
Ending Market Value	\$359,775,443





Relative Return vs MSCI EAFE

CAI Non-US Equity (Gross) Annualized Three and One-Half Year Risk vs Return



Vanguard Intl Explorer Fund Period Ended March 31, 2017

Investment Philosophy

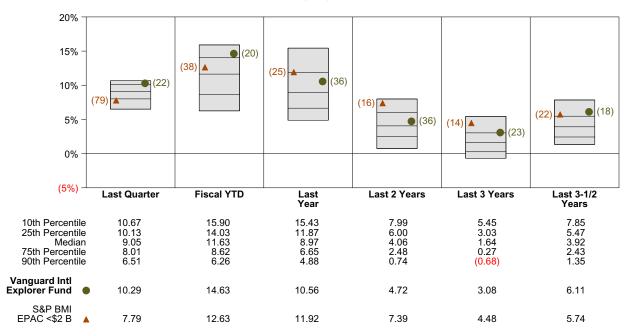
Vanguard International Explorer Fund invests primarily in the equity securities of small-capitalization companies located outside the United States that the advisor believes offer the potential for long-term capital appreciation. The advisor considers, among other things, whether a company is likely to have above-average earnings growth, whether the company's securities are attractively valued, and whether the company has any proprietary advantages.

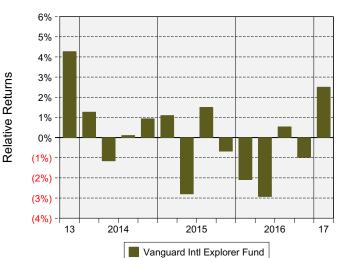
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a 10.29% return for the quarter placing it in the 22 percentile of the CAI International Small Cap Mut Funds group for the quarter and in the 36 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <\$2 B by 2.50% for the quarter and underperformed the S&P BMI EPAC <\$2 B for the year by 1.37%.

Quarterly Asset Growth			
Beginning Market Value	\$76,940,602		
Net New Investment	\$0		
Investment Gains/(Losses)	\$7,915,506		
Ending Market Value	\$84,856,108		

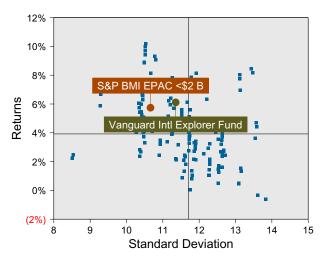






Relative Return vs S&P BMI EPAC <\$2 B

CAI International Small Cap Mut Funds (Net) Annualized Three and One-Half Year Risk vs Return



William Blair Period Ended March 31, 2017

Investment Philosophy

One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates the durability and rate of growth in companies that have the following characteristics: strong management with a unique vision, competitive advantages that prolong the duration and size of earnings growth, and conservative financing. Internationally, they believe that this philosophy can be combined with strategic flexibility in managing geographic exposure, capitalization, sector emphasis, and relative growth and valuation at the portfolio level in order to provide an appropriate degree of adaptability to cyclical conditions.

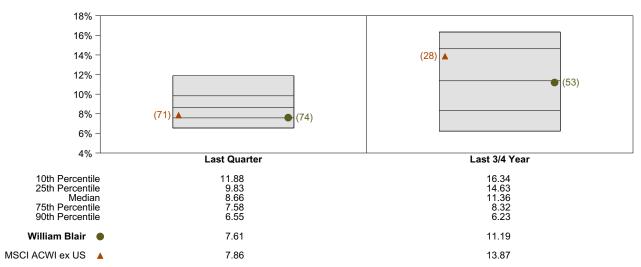
Quarterly Summary and Highlights

- William Blair's portfolio posted a 7.61% return for the quarter placing it in the 74 percentile of the CAI Non-US All Country Growth Equity group for the quarter and in the 53 percentile for the last three-quarter year.
- William Blair's portfolio underperformed the MSCI ACWI ex US by 0.25% for the quarter and underperformed the MSCI ACWI ex US for the three-quarter year by 2.68%.

Quarterly	Asset	Growth
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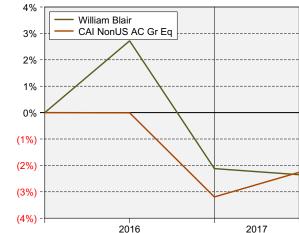
Beginning Market Value	\$308,909,051
Net New Investment	\$9,679,234
Investment Gains/(Losses)	\$23,570,836
Ending Market Value	\$342,159,121







Cumulative Returns vs MSCI ACWI ex US



Domestic Fixed Income Period Ended March 31, 2017

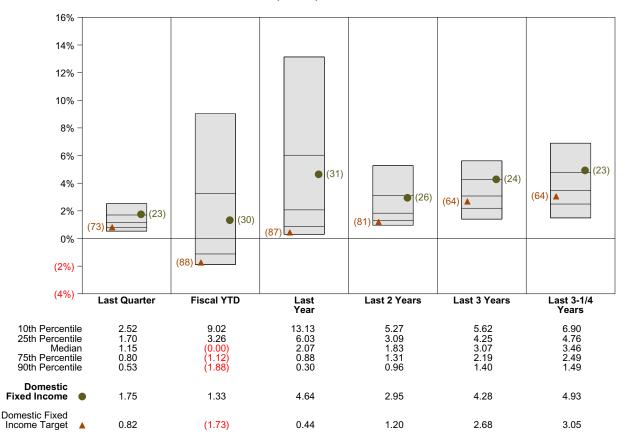
Quarterly Summary and Highlights

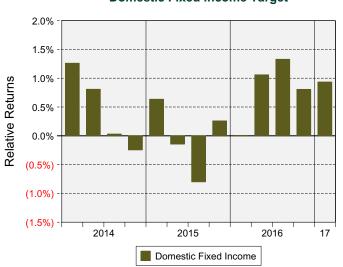
- Domestic Fixed Income's portfolio posted a 1.75% return for the quarter placing it in the 23 percentile of the Total Domestic Fixed-Inc Database group for the quarter and in the 31 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Income Target by 0.94% for the quarter and outperformed the Domestic Fixed Income Target for the year by 4.20%.

Performance vs Total Domestic Fixed-Inc Database (Gross)

Quarterly Asset Growth

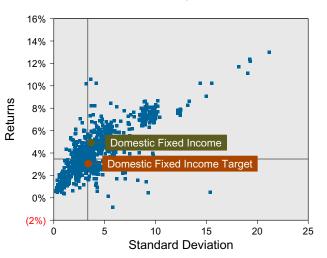
Beginning Market Value	\$1,410,552,034
Net New Investment	\$68,303,375
Investment Gains/(Losses)	\$25,142,102
Ending Market Value	\$1,503,997,511





Relative Returns vs Domestic Fixed Income Target

Total Domestic Fixed-Inc Database (Gross) Annualized Three and One-Quarter Year Risk vs Return



Declaration Total Return Period Ended March 31, 2017

Investment Philosophy

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

Be

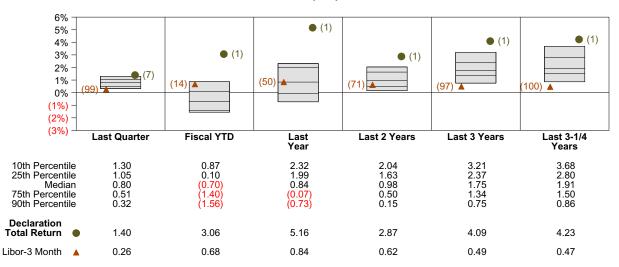
Quarterly Summary and Highlights

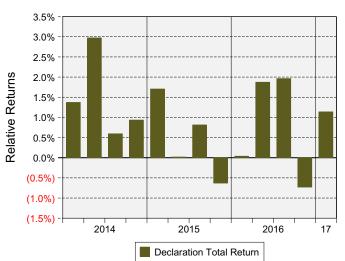
- Declaration Total Return's portfolio posted a 1.40% return for the quarter placing it in the 7 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.14% for the quarter and outperformed the Libor-3 Month for the year by 4.32%.

Quarterly Asset Growth	
ginning Market Value	\$104,776,569
et New Investment	\$-76,171

0 0	
Net New Investment	\$-76,171
Investment Gains/(Losses)	\$1,461,516
Ending Market Value	\$106,161,914

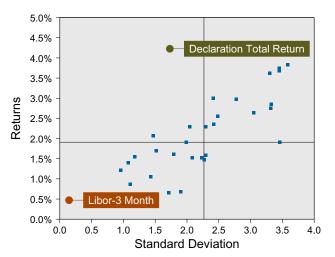






Relative Return vs Libor-3 Month

CAI Intermediate Fixed Income Mut Funds (Net) Annualized Three and One-Quarter Year Risk vs Return



Prudential Period Ended March 31, 2017

Investment Philosophy

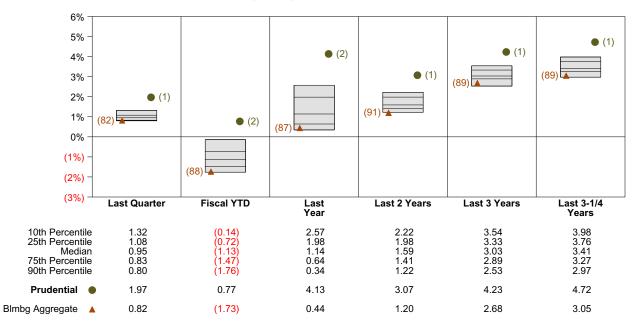
The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.

Quarterly Summary and Highlights

- Prudential's portfolio posted a 1.97% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 2 percentile for the last year.
- Prudential's portfolio outperformed the Blmbg Aggregate by 1.15% for the quarter and outperformed the Blmbg Aggregate for the year by 3.69%.

Performance vs CAI Core Bond Fixed Income (Gross)

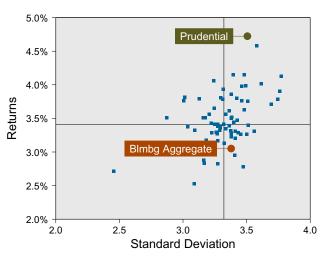






Relative Return vs Blmbg Aggregate

CAI Core Bond Fixed Income (Gross) Annualized Three and One-Quarter Year Risk vs Return



SSgA US Govt Credit Bd Idx Period Ended March 31, 2017

Investment Philosophy

The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Government/Credit Bond Index over the long term.

Quarterly Summary and Highlights

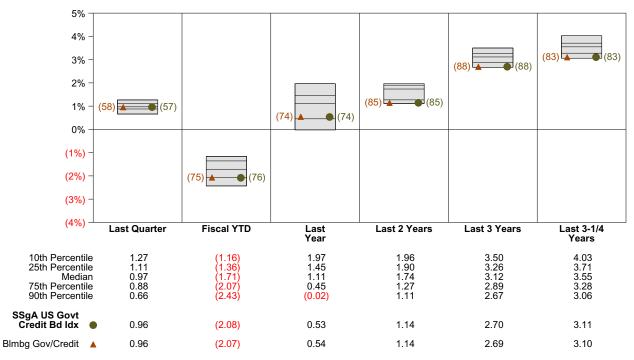
• SSgA US Govt Credit Bd Idx's portfolio posted a 0.96% return for the quarter placing it in the 57 percentile of the CAI Government/Credit group for the quarter and in the 74 percentile for the last year.

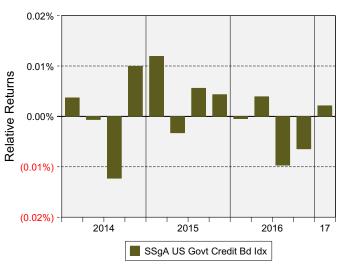
٠	SSgA US Govt Credit Bd Idx's portfolio outperformed the
	Blmbg Gov/Credit by 0.00% for the quarter and
	underperformed the Blmbg Gov/Credit for the year by 0.01%.

Quarterly Asset GrowthBeginning Market Value\$187,405,511Net New Investment\$10,983,855Investment Gains/(Losses)\$1,828,629

Ending Market Value \$200,217,994

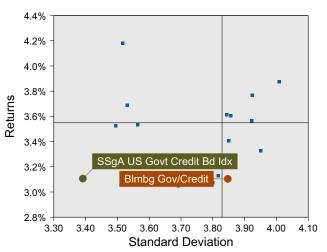
Performance vs CAI Government/Credit (Gross)





Relative Return vs Blmbg Gov/Credit

CAI Government/Credit (Gross) Annualized Three and One-Quarter Year Risk vs Return



Wells Capital Period Ended March 31, 2017

Investment Philosophy

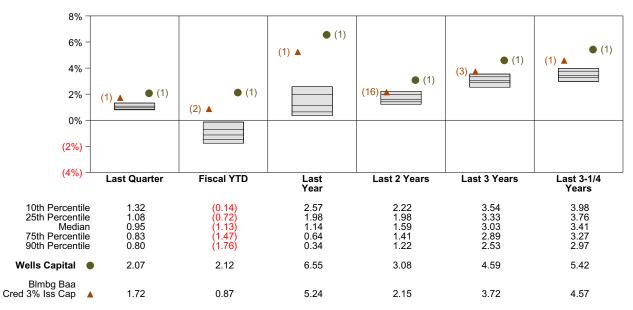
The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. The investment process for this fund starts with a "top-down" strategy. Security selection is determined by in-depth credit research, holding that in-depth knowledge of industries, companies, and their management teams can help identify credit trends that can lead to investment opportunities. Furthermore, a disciplined relative value framework is applied to help determine the optimal position to invest within an industry and within an individual issuer's capital structure.

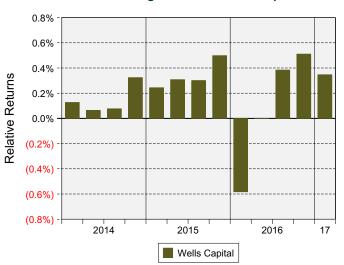
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 2.07% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 1 percentile for the last year.
- Wells Capital's portfolio outperformed the Blmbg Baa Cred 3% Iss Cap by 0.35% for the quarter and outperformed the Blmbg Baa Cred 3% Iss Cap for the year by 1.31%.

Quarterly Asset Growth		
Beginning Market Value	\$426,531,780	
Net New Investment	\$-387,300	
Investment Gains/(Losses)	\$8,821,407	
Ending Market Value	\$434,965,887	

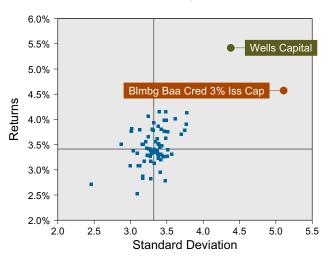
Performance vs CAI Core Bond Fixed Income (Gross)





Relative Returns vs Blmbg Baa Cred 3% lss Cap

CAI Core Bond Fixed Income (Gross) Annualized Three and One-Quarter Year Risk vs Return



Western Asset Management Company Period Ended March 31, 2017

Investment Philosophy

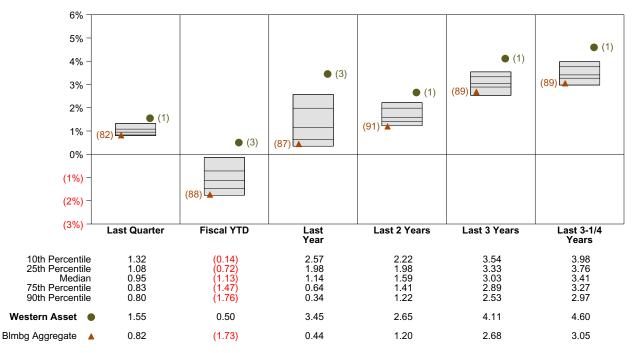
Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

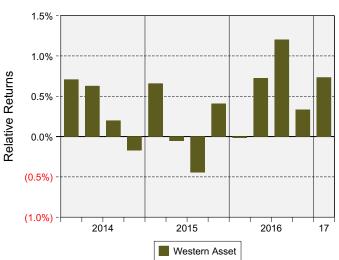
Quarterly Summary and Highlights

- Western Asset's portfolio posted a 1.55% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 3 percentile for the last year.
- Western Asset's portfolio outperformed the Blmbg Aggregate by 0.73% for the quarter and outperformed the Blmbg Aggregate for the year by 3.01%.

Quarterly Asset Growth		
Beginning Market Value	\$426,015,493	
Net New Investment	\$14,855,546	
Investment Gains/(Losses)	\$6,635,180	
Ending Market Value	\$447,506,219	

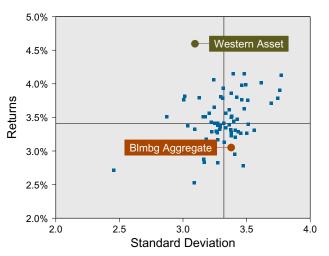
Performance vs CAI Core Bond Fixed Income (Gross)





Relative Return vs Blmbg Aggregate

CAI Core Bond Fixed Income (Gross) Annualized Three and One-Quarter Year Risk vs Return



Western Asset TIPS Period Ended March 31, 2017

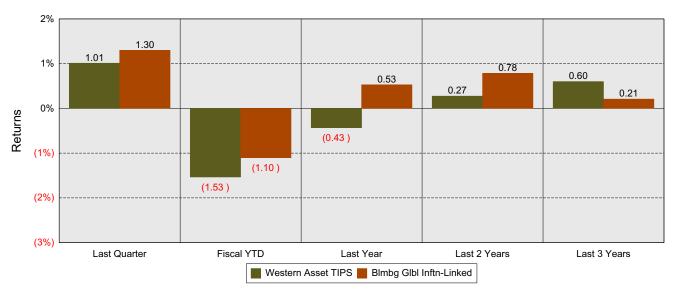
Investment Philosophy

Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add value while minimizing risk. Value can be added through country selection, term structure, issue selection, duration management and currency management.

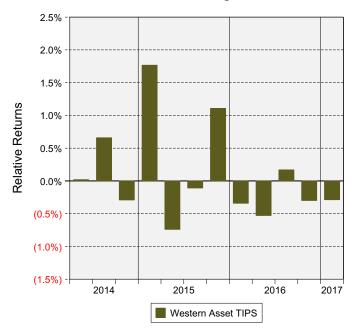
Quarterly Summary and Highlights

 Western Asset TIPS's portfolio underperformed the Blmbg Glbl Inftn-Linked by 0.29% for the quarter and underperformed the Blmbg Glbl Inftn-Linked for the year by 0.96%.

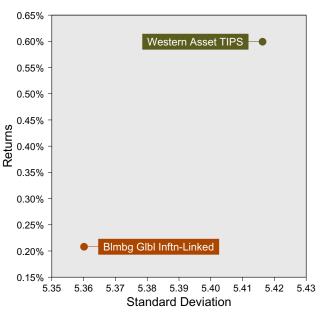
Quarterly Asset GrowthBeginning Market Value\$287,341,546Net New Investment\$-97,571Investment Gains/(Losses)\$2,904,369Ending Market Value\$290,148,344



Relative Return vs Blmbg Glbl Inftn-Linked



Annualized Three Year Risk vs Return



JP Morgan Infrastructure Period Ended March 31, 2017

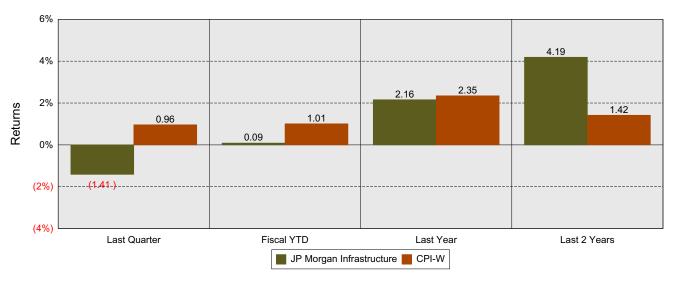
Investment Philosophy

The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

Quarterly Summary and Highlights

• JP Morgan Infrastructure's portfolio underperformed the CPI-W by 2.37% for the quarter and underperformed the CPI-W for the year by 0.19%.

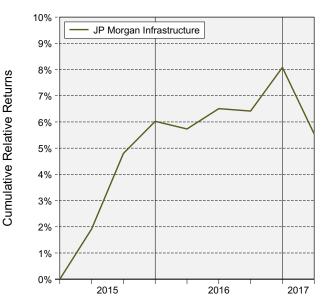
Quarterly Asset Growth		
Beginning Market Value	\$88,947,522	
Net New Investment	\$-173,662	
Investment Gains/(Losses)	\$-1,254,105	
Ending Market Value	\$87,519,754	



Relative Return vs CPI-W

Here is a second second

Cumulative Returns vs CPI-W

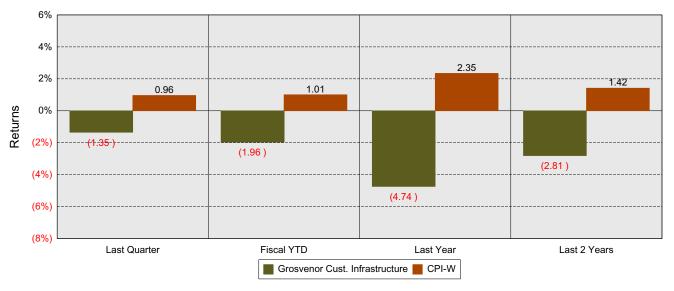


Grosvenor Cust. Infrastructure Period Ended March 31, 2017

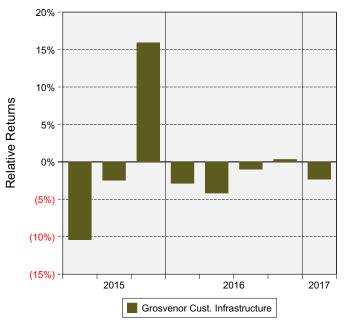
Investment Philosophy

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

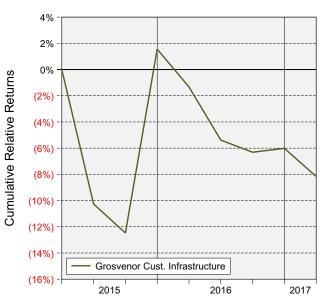
Quarterly Summary and Highlights	Quarterly Asset Growth		
 Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 2.31% for the quarter and underperformed the CPI-W for the year by 7.09%. 	Beginning Market Value Net New Investment Investment Gains/(Losses)	\$14,138,932 \$6,386,622 \$-253,794	
	Ending Market Value	\$20,271,760	







Cumulative Returns vs CPI-W



Callan

Invesco Core Real Estate Period Ended March 31, 2017

Investment Philosophy

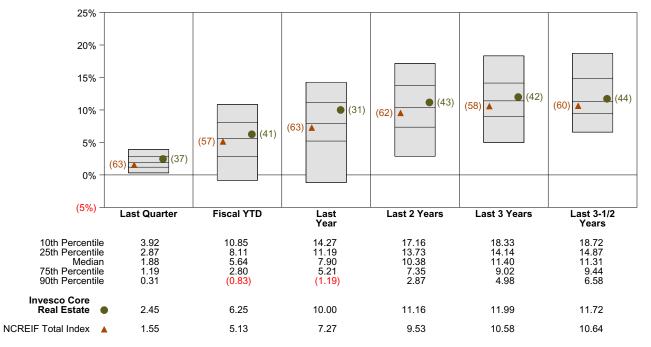
IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

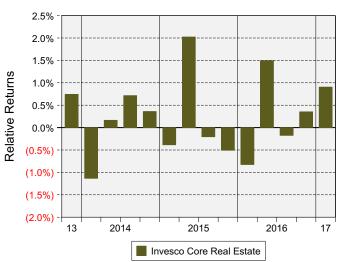
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 2.45% return for the quarter placing it in the 37 percentile of the CAI Total Real Estate Database group for the quarter and in the 31 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF Total Index by 0.91% for the quarter and outperformed the NCREIF Total Index for the year by 2.73%.

Quarterly Asset Growth				
Beginning Market Value	\$121,815,020			
Net New Investment	\$-105,919			
Investment Gains/(Losses)	\$3,092,769			
Ending Market Value	\$124,801,870			

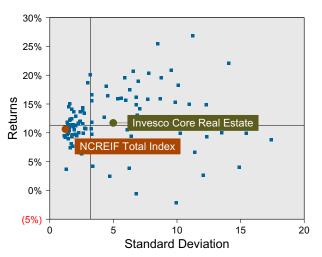
Performance vs CAI Total Real Estate Database (Net)





Relative Return vs NCREIF Total Index

CAI Total Real Estate Database (Net) Annualized Three and One-Half Year Risk vs Return



Callan

JP Morgan RE Inc & Growth Period Ended March 31, 2017

Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

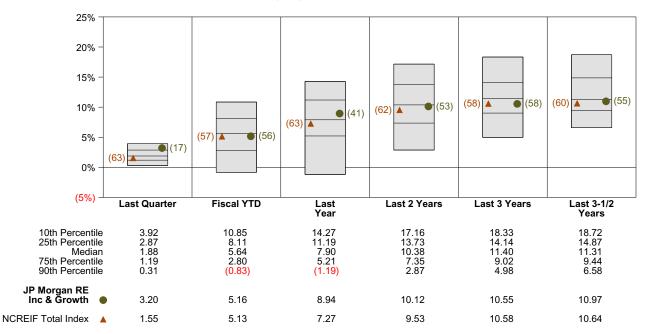
Quarterly Summary and Highlights

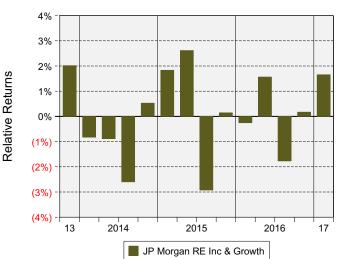
- JP Morgan RE Inc & Growth's portfolio posted a 3.20% return for the quarter placing it in the 17 percentile of the CAI Total Real Estate Database group for the quarter and in the 41 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio outperformed the NCREIF Total Index by 1.65% for the quarter and outperformed the NCREIF Total Index for the year by 1.67%.

Quarterly Asset Growth Beginning Market Value \$129,552,404

Net New Investment	\$-68,733
Investment Gains/(Losses)	\$4,144,111
Ending Market Value	\$133,627,782

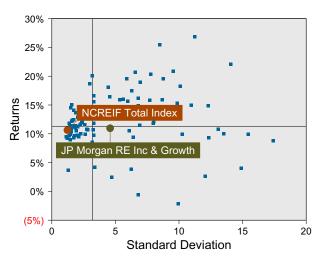






Relative Return vs NCREIF Total Index

CAI Total Real Estate Database (Net) Annualized Three and One-Half Year Risk vs Return



Callan

Callan

CALLAN INSTITUTE

1st Quarter 2017

Education

Research and Educational Programs

The Callan Institute provides both 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 to see all of our publications, and www.callan.com/blog to view our blog "Perspectives." For more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

Smart Beta Is the Gateway Drug to Factor Investing | In this paper, a reprint from the *Journal of Portfolio Management*'s special issue on Factor Investing, author Eugene Podkaminer, CFA, of Callan's Capital Markets Research group describes the connection between alternative indices and more sophisticated risk premia strategies.

2017 National Conference: 'It's Private' | A summary of "It's Private: Real Estate Debt and Middle Market Direct Lending," a presentation from Callan experts Kristin Bradbury, Alex Browning, and Jay Nayak.

Capital Market Projections for 2017-2026 | Callan prepares capital market projections annually to help guide clients with their long-term strategic planning. We publish three pieces authored by the team that creates them: Jay Kloepfer, John Pirone, CFA, CAIA, and Jim Van Heuit. A **white paper** delves into the process and thinking behind the 2017 figures; a **Manifesto** outlines the reasons that Callan produces its annual capital market projections and the rigorous process behind it; and a "**charticle**" (chart+article) summarizes key figures from Callan's 2017 capital market projections.

It's a (Fiduciary) Trap! But You Don't Have to Fall In | Defined contribution (DC) plan sponsors often worry about landing in hot water for doing the wrong thing. However, many fiduciary issues crop up because plan sponsors have failed to take action. Author Lori Lucas, CFA, Callan's Defined Contribution Practice Leader, lists eight potential fiduciary traps and ways for plan sponsors to avoid falling into them in 2017.

The Callan Periodic Table of Investment Returns (Key Indices: 1997-2016) and Collection | The Periodic Table of Investment Returns depicts annual returns for 10 asset classes, ranked from

best to worst performance for each calendar year. The Collection includes 10 additional versions, such as the indices relative to inflation, real estate, and hedge fund sub-strategies.

Periodicals

Real Assets Reporter, Winter/Spring 2017 | Avery Robinson, CAIA, explores how we developed our Real Estate Indicators. We also cover the latest on the real estate market, and share charts and tables on the long-term performance of various real assets.

Private Markets Trends, Winter 2017 | Gary Robertson provides an overview of the environment for private equity in 2016 and a look ahead at 2017. He sees continued liquidity in the private equity market, and writes that distributions will continue to benefit investors.

Hedge Fund Monitor, 4th Quarter 2016 | Jim McKee provides a view of the hedge fund industry and detailed quarterly performance. This quarter's cover story: "Alternative Facts and the Evolving Role of Hedge Funds."

DC Observer, 1st Quarter 2017 | Lori Lucas discusses the best approach to crafting, implementing, and maintaining an investment policy statement for defined contribution plans.

Market Pulse Flipbook, Fourth Quarter 2016 | 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, 4th Quarter 2016 | A quarterly macroeconomic newsletter providing thoughtful insights on the economy and recent performance in equity, fixed income, alternatives, international, real estate, and other capital markets.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: https://www.callan.com/education/CII/

'Why Diversify'

Our **June Regional Workshops**, June 27 in Atlanta and June 29 in San Francisco, will focus on diversification, which has turned out to be very expensive for U.S.-based investors, especially since the Global Financial Crisis. In this workshop, Callan experts Mark Andersen, Jay Kloepfer, and Brian Smith analyze diversification from multiple angles, answering the questions of whether investors erred in adopting diversified portfolios over the last 30 years, and what investors should do now.

Also mark your calendars for our **October Regional Workshops**, October 24 in New York and October 26 in Chicago.

For more information about events, please contact Barb Gerraty: 415.274.3093 / 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, July 25-26, 2017 Chicago, October 24-25, 2017

This program familiarizes fund sponsor trustees, staff, and asset management advisors 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 assetmanagement 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 https://www.callan.com/education/college/ or contact Kathleen Cunnie: 415.274.3029 / cunnie@callan.com

Education: By the Numbers

500	Attendees (on average) of the Institute's annual National Conference	50+	Unique pieces of research the Institute generates each year
3,500	Total attendees of the "Callan College" since 1994	1980	Year the Callan Institute was founded



"We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years."

Ron Peyton, Chairman and CEO

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 guarterly 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 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	Manager Name
1607 Capital Partners, LLC	Campbell Global, LLC
Aberdeen Asset Management PLC	Capital Group
Acadian Asset Management LLC	CastleArk Management, LLC
AEGON USA Investment Management	Causeway Capital Management
Affiliated Managers Group, Inc.	Cavanal Hill Investment Management, Inc.
Alcentra	Chartwell Investment Partners
AllianceBernstein	ClearBridge Investments, LLC
Allianz Global Investors	Cohen & Steers Capital Management, Inc.
Allianz Life Insurance Company of North America	Columbia Management Investment Advisers, LLC
American Century Investments	Columbus Circle Investors
Amundi Smith Breeden LLC	Cornerstone Capital Management
Angelo, Gordon & Co.	Cove Street Capital, LLC
Apollo Global Management	Cramer Rosenthal McGlynn, LLC
AQR Capital Management	Credit Suisse Asset Management
Ares Management LLC	Crestline Investors, Inc.
Ariel Investments, LLC	DDJ Capital Management, LLC
Aristotle Capital Management, LLC	D.E. Shaw Investment Management, L.L.C.
Artisan Holdings	DePrince, Race & Zollo, Inc.
Atlanta Capital Management Co., LLC	Deutsche Asset Management
Aviva Investors Americas	Diamond Hill Capital Management, Inc.
AXA Investment Managers	Dimensional Fund Advisors LP
Baillie Gifford Overseas Limited	Doubleline
Baird Advisors	Duff & Phelps Investment Mgmt. Co.
Bank of America	Eagle Asset Management, Inc.
Barings LLC	EARNEST Partners, LLC
Baron Capital Management, Inc.	Eaton Vance Management
Barrow, Hanley, Mewhinney & Strauss, LLC	Epoch Investment Partners, Inc.
BlackRock	Fayez Sarofim & Company
BMO Global Asset Management	Federated Investors
BNP Paribas Investment Partners	Fidelity Institutional Asset Management
BNY Mellon Asset Management	Fidelity Management & Research
Boston Partners	Fiera Capital Corporation
Brandes Investment Partners, L.P.	First Eagle Investment Management, LLC
Brandywine Global Investment Management, LLC	First Hawaiian Bank Wealth Management Division
Brown Brothers Harriman & Company	Fisher Investments
BTG Pactual	Franklin Templeton
Cambiar Investors, LLC	Franklin Templeton Institutional

Callan Knowledge. Experience. Integrity.

TO: State Investment Board

FROM: Dave Hunter

DATE: May 25, 2017

SUBJECT: Class Action Claims Filing Review

The SIB previously approved RIO's recommendation to engage a class action claims monitoring firm to review our historical U.S. activity. Financial Recovery Technologies (FRT) completed this review in May and confirmed that our existing custodian, Northern Trust, provided our clients an excellent overall service for U.S. cases.

In summary, FRT review identified approximately \$411,000 of "missed claims", "disputed claims" or potentially recoverable "transition claims" over the past 8.25 years (from January 1, 2009 to March 31, 2017). This equates to roughly \$50,000 of incremental cash flow per year (\$411,000 divided by 8.25 years = \$49,818) <u>before</u> fees.

In comparison, Northern Trust recovered over \$2.43 million in recoveries for our SIB clients during the last 5.25 years <u>after</u> fees. This equates to \$460,000/year of additional cash flow noting that Northern Trust earned approximately \$5,000/year for this service.

FRT has offered to provide U.S. and Global claims filing service on either a fixed fee or contingency basis. FRT has also offered to provide antitrust claims monitoring on a contingency fee. After a presentation by FRT representative John Menard, RIO will discuss the proposal (which may require an executive session) and make a recommendation for consideration by the SIB.

In summary, Northern Trust has done an excellent job for us in the U.S. and we believe that our global claims filing recovery rate may be increased by engaging a firm such as FRT to provide a comprehensive class action claims monitoring service in the future. RIO notes that Northern Trust does not currently offer international class action claims filing (but recently identified two preferred partners to offer this service in the future).



Best in Class Recoveries

NORTH DAKOTA STATE INVESTMENT BOARD MAY 26, 2017

Class Action Market Evolution

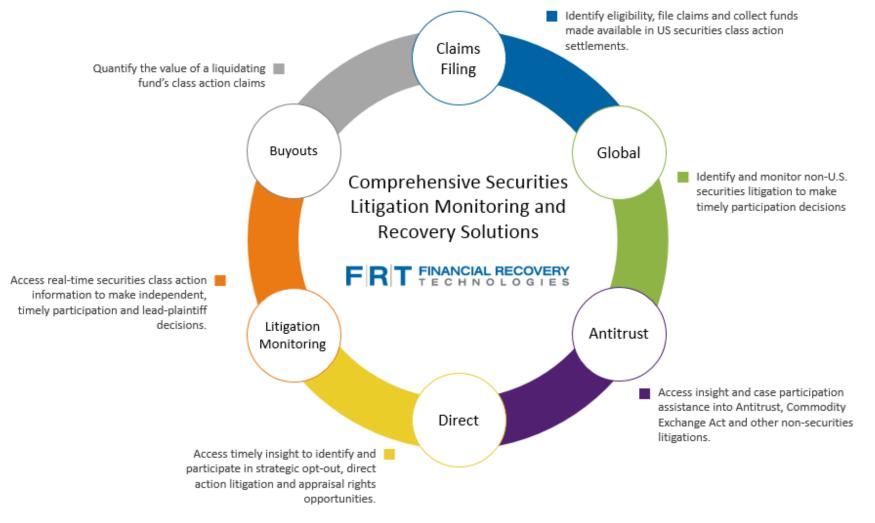
The world of class actions has evolved dramatically over the last five years requiring investors to upgrade their existing governance, controls, and protocols:

- Demand for improved corporate governance and transparency has never been higher. Class actions is not immune.
- Class action "type" activity has increased exponentially
 - Morrison (2010) has led to the growth of active jurisdictions and global group litigations (VW, Toshiba, Tesco, Treasury Wine Estates)
 - Antitrust settlements (CDS, LIBOR, FOREX) are on the rise
 - Appraisal and Direct litigations are increasing (Dell, Petrobras . . .)
- Legacy systems and bespoke manual processes have not kept up with the evolving landscape and can't handle today's data requirements
 - Enhanced filing capabilities and pre-filing analysis
 - Claims administrators make mistakes
 - Dynamic reporting and portfolio monitoring

FRT'S SOLUTIONS & SERVICES

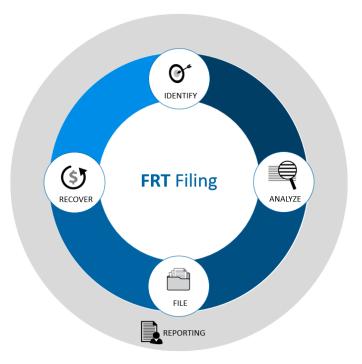
Comprehensive Monitoring and Claims Filing Services

Corporate governance solutions to address the growing complexities of the global securities class action landscape.



FRT Securities Class Action Filing

Identify eligibility, file claims, and recover funds from securities class action settlements



- 1. Identify: FRT proactively scours industry data sources to identify all cases and to ensure that every possible filing can be made.
- 2. Analyze: We analyze and match your trading history against our proprietary database to ensure that all relevant matches are evaluated against open class action cases and that filings are properly prepared
- **3. File:** Prepare and submit filings to claims administrators and conduct pre-filing analysis on behalf of customers.
- 4. Recover funds, verify accuracy and remit funds to client
- **5. Report:** FRT provides detailed distribution reports that provide a complete accounting and audit trail

Class Action Claims Filing

FRT Class Action Claims Filing, our core service, helps over 500 institutional investors identify eligibility, file claims and collect funds made available in securities class action settlements.

Features	Benefits
 Identification of eligibility in all securities class action settlements, including trading and recognized loss calculation 	 Assurance your firm is not missing any cases
 Pre-Filing Analytics and Claims filing for all	 Insight into how much each of your firm's
eligible accounts before the deadline	claims may be worth
 Constant communication with claims administrators 	• Knowledgeable Account Manager provides insight into cases and claims to resolve any issues that may arise
 Payment reconciliation on every case that	 Ensure your firm recovers everything for
disburses	which its eligible
 Frequent reporting on all eligibility, claim	 Visibility and an audit trail of the entire
filing and recovery activity	lifecycle of a claim

Client Service is Our Priority

Working with FRT

All clients receive a dedicated client service resource, allowing us to tailor our service to each clients unique needs. Your Account Manager is responsible for the following:

- Coordinated with Northern Trust to onboard your holdings and transactions information and subsequently will ensure we schedule regular data refreshes.
- Manages the data normalization process with our operations staff
- Act as your liaison between FRT's expert legal team and claims administrators as well as facilitate access to senior management
- Be single point of contact for all questions, assist with customizing and defining all your reporting requirements (monthly/quarterly/ad-hoc)

North Dakota State Investment Board Global Litigation Review

Non-US Litigation Summary as of 5/4/2017		North Dakota State Investment Board
Summary		
	Eligible	Current Non-US Activity
Non-US Cases	40	161
Jurisdictions		AU, BE, BR, CA, CH, DE, DK, ES, FR, GB, IT, JP, LU, NL, NZ, PT, SP, TW

Trends in Global Opt-In Litigation and Settlements

2017 YTD: 33 Cases across 8 different jurisdictions

- Increasingly sophisticated class action regimes outside U.S. and Canada
- # Case organizers 1
- # Dutch Foundations 1
- Complexity of participation calculus
 - Divergent loss calculations
 - Local methodologies always evolving
 - Covered Instruments
- Pressure on funders' fees
- Alternative fee and funding arrangements

Trends in Antitrust Class Actions

- Reliance on partial defendant data to project Recognized Loss
- Complex modeling to estimate artificial inflation to price or spread
- Online admin portals with estimated transactions and preliminary damages
- Non-U.S. competition-based direct claims (UK, AU, CAN)
- Rise of Dutch Foundations

Different laws impacting the investment community in different ways with unique processes for recovery resulting in investor challenges to data/damages and claims submission

Antitrust Settlement Pipeline Snapshot

FRT is tracking 60+ cases that will impact institutional investors

Forex

\$2 billion

 Alleged scheme among banks to rig the foreign exchange market, affecting the prices of a variety of FX instruments to the detriment of FX traders

Euribor

\$139 million

 Alleged fixing the Euro Interbank Offered Rate(Euribor), the benchmark rate used to price and settle futures contracts traded on the NYSE LIFFE exchange, and OTC instruments including interest rate swaps and other Euro-dominated instruments

Gold Price Fixing \$60 million

 Alleged scheme among banks to manipulate market prices for gold as well as the various financial instruments pegged to gold

- 9 out of 16 defendants have settled including Bank of America, Barclays, BNP Paribas, Citigroup, Goldman Sachs, HSBC, JP Morgan, RBS, and UBS.
- To date, Barclays and HSBC have agreed to settle. 15 defendants remain in litigation.

 Deutsche Bank is the only bank to settle thus far. Nearly half a dozen banks have yet to settle.

Why FRT?

The world of class actions has evolved dramatically over the last five years requiring investors to evaluate their existing governance, controls, and protocols. FRT's comprehensive suite meets our customers' needs with deep domain expertise, client-centric products, actionable intelligence, powered by the most robust, reliable and resilient technology.



- Disruptive tech business with a proven track record of being first to market with comprehensive coverage of Global, Antitrust, and Appraisal Rights cases
- As the industry has evolved, so has FRT. We've experienced over 50% growth for the past three years and are the leaders in class action recovery with over 70 employees, 550+ clients.



Expertise

- Unbiased information, analytics and consultative services to help you make informed decisions, reduce risk and drive Alpha.
- Dedicated in-house legal and research teams built to lift hours and ٠ hours of work into actionable information and comprehensive alerts.
- Domain experts in the rising litigations of Global and Antitrust opportunities - tracking 65 Antitrust cases, 200+ Global cases across every relevant jurisdiction



- Purpose-built technology that automates back-end processes such as claims identification, filing, and recovery and allows us to concentrate our expertise on value-added services
- **Pre- and post-analysis** to automatically calculate recognized loss ٠ and reconcile payments with filing options to maximize client returns
- Continuous investment in our Information Security tried and ٠ tested by our clients including the largest custodial banks, hedge funds, and pension funds

World-Class Service & Operations

- Seasoned leadership team in the financial services industry
- World-Class Service team of 29 client service and operations individuals dedicated to claims filing and recoveries

APPENDIX

FRT Client Portal

Eligibility, Filing, Recovery (EFR)

y Case	es - Next 30 days		My Cas	es - Last 30 days			My C	laims - Last 30 Days			
	Claim Deadline Opt-Out Deadline	9		Settled Passed Claim Dear Passed Opt-Out D		2 10 4		Filed Remitted Amount Recovered	1	157 35 \$2,015,455	
Standa	rd Filters: Last 365 Day Filed • Gase Name / Account Name	Account#	Market Loss	Rec Loss*	Damaged Shares	Claim Status	Custom Filter Claim Deadline	S: Accounts - Claim	Status - Date Ran	ges - APPLY FILTER	
D	GLOBAL GEOPHYSICAL SERVICES, INC.	3 Eligible Accounts	\$350,842	\$226,968	0		12-21-2015	12-21-2015			П
0	INVACARE CORPORATION	10 Eligible Accounts	\$733,497	\$93,429	0		12-22-2015	10-29-2015			
0	IMPAX LABORATORIES, INC.	21 Eligible Accounts	-\$20,683,867	\$0	0		12-19-2015	10-07-2015			
0	J.P. MORGAN CHASE & COMPANY	1 Eligible Accounts	-\$1,497,918	\$0	0		12-16-2015	10-07-2015			
8	BANK OF NEW YORK MELLON CORPORAT	21 Eligible Accounts	-\$495,323	\$371,115	0		12-11-2015	09-29-2015			
	WEATHERFORD INTERNATIONAL LTD.	21 Eligible Accounts	\$19,119,714	\$5,243,382	0		12-09-2015	10-13-2015			
8		15 Eligible Accounts	-\$14.057,097	\$18,505	0		12-03-2015	10-23-2015			
	MF SLOBAL HOLDINGS LIMITED	13 Eligible Accounts									
0	MF SLOBAL HOLDINGS LIMITED	15 Eligible Accounts	-\$14.057,097	\$18,505	0		12-03-2015	05-29-2015			
0			-\$14.057,097 -\$14.057,097	\$18,505 \$18,505			12-03-2015 12-03-2015	05-29-2015			_

The Dashboard gives you a quick look into what has happened in your eligible cases and claims within the past 30 days and what to be aware of in the next 30 days.

The Case Search Bar allows you to ook up information about any case in our database. Start typing the name of the case or defendant and results matching your entry will appear.

Download whatever data is currently being returned in the grid into a CSV file by selecting the Download button.

The data grid displays information about cases and claims as they stand today. You can expand the Case Row to show your eligible accounts for that case.

Select from a dropdown of **Standard Filters** that return information most frequently asked for including upcoming deadlines, recent settlements, filing and remittance activity, and all cases with eligible accounts. Define your own **Custom Filters** for specific queries based on eligibility of certain accounts, return claims of a given status, and even specify date ranges for when something has settled, been filed, or remitted.

The Class Action Landscape

- Over 3,000 settled or pending securities class actions over the past 10 years
- Over 300 new cases filed in 2016
- Roughly 150-250 new settlements and 150-250 prior case disbursements each year
- Probability of a company being a target in a given year is 4.2% (221/5,209)
 - Investor with 25 stocks in portfolio is highly likely to have at least one claim per year
 - Large cap stock portfolios have increased frequently
- Over \$55B in total settlement dollars have been made available to investors (2007-2016)
- Aggregate annual settlement amount has ranged from \$2.7B-11.6B (2007-2016)
- Average settlement amount grew 36% in 2016
- Average settlement size as a percentage of investor losses has ranged from 0.6%-18.4% (1996-2016)

Source: Recent Trends in Securities Class Action Litigation: 2016 Full-Year Review, NERA Economic Consulting, January 2017

FRT Global Alerts

FRT FINANCIAL RECOVERY

FRT Global: Update Alert April 15, 2016

UPDATED ALERT: GLOBAL OPT-IN OPPORTUNITY



Industry

Claim

April 15, 2016 Volkswagen AG (VW) Germany, Netherlands German and other European exchanges Automotive Securities fraud and misrepresentation



Securities Information

Summary of Matter

FRT previously alerted you to the 8 efforts being organized against VW in Germany and the Netherlands. The purpose of this Alert is to update you on their progress and participation deadlines, the expansion of covered securities by DRRT, and to highlight the benefits of Dutch Foundation involvement should you wish to participate in this low-risk, low-effort potential settlement vehicle, regardless of your loss size.

Updated Participation Deadlines*

Effort	Old Deadline	New Deadline		
DRRT	2/29/2016	5/30/2016		
Quinn	3/18/2016	"As soon as		
Emanuel/Bentham		possible"		
Rotter	3/31/2016	4/30/2016		
Deminor	3/25/2016	"Registration Open"		
TISAB	2/29/2016	5/30/2016		
Nieding + Barth	9/18/2016	9/18/2016		
Labaton Sucharow	"Earlier is better"	5/30/2016		
Bernstein Litowitz	"Earlier is better"	5/30/2016		
*Note: the deadlines set by each of the organizers above are a				

function of their respective legal strategies and German Law considerations related to limitation periods for certain trading activity.

Updated Securities Covered in DRRT Action

DRRT filed an initial complaint on March 14, 2016 covering VW equity securities, and plans to file a second group complaint by September 17, 2016. This second complaint will cover a larger number of affected securities, including certain VW debt and derivatives, as well as shares of Audi AG. Upon request, FRT can update your loss calculations for these additional securities.

Foundation Participation

Joining a Dutch Foundation – being proposed by Labaton Sucharow and Bernstein Litowitz – requires little in terms of risk and effort on the part of joining members. Dutch Foundations are organized for the primary purpose of global resolution of claims through the Court of Appeals in Amsterdam.

Relevant Parties

Additional securities covered by DRRT action

Ticker: VOW

CUSIP/ISIN:

(discussed below)

DE0007664005 (common)

DE0007664039 (preferred)

See the Comparison Chart and Participation deadlines in the Summary of Matter section

Participation Requirements

See the Comparison Chart and Participation deadlines in the Summary of Matter section

Next Steps

This Alert and attached <u>Comparison Chart</u> is being provided to assist you in making an informed decision regarding your participation in these matters.

Upon request, FRT will provide your trading data – anonymously and without disclosure of your identity – to any or all of these organizers for further evaluation of your losses and potential claims Receive notifications of strategic direct action opportunities likely to result in significant recovery relative to passive claims filing

Quickly access high level case information including name of case, settlement amount, court in which the case is proceeding, and the legal theories under which the claim is being brought.

Jurisdiction Risk: Assess country-specific litigation risks relevant to institutional investors.

- Costs out of pocket risk for the client joining non-us action
- Anonymity public exposure of clients name and participation
- · Discovery documentation or testimony requirement

Summary of Matter: Access high level case information including name of case, court in which the case is proceeding, the legal theories under which the claim is being brought, and eligibility requirements.

Securities Information: View relevant security identifiers including ticker, ISIN and CUSIP to help identify recovery opportunities and quickly determine eligibility for recovery

Relevant Parties: View partners involved to quickly scan for known counsel to help understand the strength of the case, known claims administrator, 3rd party data providers for preliminary assessment purposes, and litigation funders and investment recovery firms.

Participation Requirements: Understand what documentation and supporting trading data are required for participation

Next Steps: Quickly understand any steps that you may need to take if your firm decides to pursue the global opportunity

FRT Antitrust Alerts

	NCIAL RECOVERY	FRT A	ntitrust Preliminary Alert May 11, 2016	
PRELI	MINARY ALERT: ANTITRUST	RECOVERY OPPO	RTUNITY	
Date of Alert:	May 11, 2016		5.010	
Case:	Alaska Electrical Pension Fund v. Bank of A	America Corp. et al. ("ISDAfi	x")	
Settlement Amount:	\$324 million			
Court:	US District Court - Southern District of New	York		
Claims:	Federal antitrust violations; Commodity Exe	change Act; unjust enrichme	nt	
mmary of Matter		Counsel I	nformation	
eferenced class action the benchmark rate use his Alert serves as <u>prel</u> pportunity. Once a cla	ed of a partial settlement in the above related to alleged rigging of the "ISDAfix", d to set the terms for swap transactions. <u>iminary notice</u> of this potential recovery im form and filing deadline have been ad you a Full Alert with additional details.	Class Counsel: Robbins Geller Rudman & Scott + Scott LLP Quinn Emanuel Urquhart	-	
	include the banks listed below, along with er broker tasked with the daily setting of the of ISDAfix.	Covered In	nstruments below)	
he settlement class is a	presently defined as "all Persons or entities			
ho entered into, recei	ved or made payments on, terminated,	Importa	ant Dates	
	n ISDAfix Instrument during the Settlement Its and their affiliates excluded. The	Relevant Period: Jan. 1,		
ttlement has yet to be	e approved by the court, preliminarily or			
therwise.		Opt-out Deadline: To be		
	Next Steps	Claim Filing Deadline: To	be determined	
recover funds from thi Please note that your expressly cover antitry you to assist in this ma will provide FRT Antitr contingency fee arranj If you would like assist	Alert because you may be eligible to is settlement at some future date. current Service Agreement may not stc case. Upon receipt of instructions from stter – or to assist in all such matters – FRT ust services subject to the same gement in your Service Agreement. rance in this matter, or to learn more about ram, please contact your FRT			
Additional Informatio	<u>n</u>			
1. What is this case a				
interest rate derivative settlement the class a The Complaint filed Se PLC, which was respon	investigation into manipulation of the ISDAfix products. As of May 3, 2016, seven banks ha ction. Several defendants have yet to settle. ptember 4, 2014 alleges that setting of the U.S solible for managing the daily setting of the U.S I detriment of those purchasing or selling ISDA	we agreed to a pay a total of anks conspired together with dollar-rate version of the IS	S342 million to n interdealer broker ICAP DAfix, to manipulate the	
According to a recent	Law360 article ¹ ,			
says the parti including eng	ere responsible for submitting rate quotes, wi es worked together to set the rate at the poin aging in a process known in the industry as "bi ducts just before the fix was closed in order to	t where it was most profitab anging the close" where the	le to them,	
manipulation in violati	laint alleges: (1) conspiracy to restrain trade in ion of the Commodity Exchange Act; (3) princij nge Act; (4) aiding and abetting liability in viola uniust enrichment.	pal-agent liability in violation	of Section 2 of	

Receive notifications when new cases are added and significant milestones are reached:

- **Preliminary Alerts**: Alert clients that the case has settled and recovery opportunities will be forthcoming.
- **Full Alerts**: Alert clients that the recovery opportunity is available, plan of distribution has been finalized and client should consider taking some sort of action.

Quickly access high level case information including name of case, settlement amount, court in which the case is proceeding, and the legal theories under which the claim is being brought.

Summary of Matter: Provides additional details on the type of notice, known case information and details about the class definition.

Counsel Information: View partners involved to quickly scan for known counsel to help understand the strength of the case, known claims administrator, and 3rd party data providers for preliminary assessment purposes.

Covered Instruments: Determine which instruments are included within the recovery opportunity. Antitrust cases often involve complex financial instruments or contracts not tied to a security identifier, therefore it's critical to understand the covered instruments to determine eligibility for recovery and weight the costs / benefits of getting involved.

Important Dates: View relevant periods for trades in covered instruments, opt-out deadlines for firms with outsized losses and claims filing and data submission deadlines for recovery opportunities.

Additional Information: Supplementing the summary of matter, FRT provides in-depth case information including allegations involved, defendant parties, and case status. In addition, this section provides a comprehensive FAQ of all relevant and known information for assessing eligibility, potential for recovery, potential recovery amount, and ways in which FRT can facilitate in the recovery process.

Ten Largest Settlements

Settlement Name	Settlement Amount
Enron Corporation	\$7,242,000,000
WorldCom, Inc.	\$6,196,000,000
Cendant Corporation	\$3,692000,000
Tyco International Ltd.	\$3,200,000,000
AOL Time Warner, Inc.	\$2,650,000,000
Bank Of America/Merrill Lynch	\$2,425,000,000
Household International, Inc.	\$1,577,000,000
Nortel Networks Corp. (I)	\$1,143,500,000
Royal Ahold Corporation	\$1,100,000,000
Nortel Networks Corp. (II)	\$1,074,000,000

Contact Us

FRT FINANCIAL RECOVERY TECHNOLOGIES

John M. Menard

Sales Executive 617.894.2117 - mobile jmenard@frtservices.com 200 River's Edge Drive, Suite 300 Medford, MA 02155 339.674.1142 – office www.frtservices.com

Manager Name
Fred Alger Management, Inc.
Frost Investment Advisors, LLC
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GlobeFlex Capital, L.P.
GMO
Goldman Sachs Asset Management
Great Lakes Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Heitman LLC
Henderson Global Investors
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
Janus Capital Management, LLC
Jensen Investment Management
Jobs Peak Advisors
J.P. Morgan Asset Management
Kayne Anderson Capital Advisors LP
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
Man Investments Inc.
Manulife Asset Management
Macquarie Investment Management (formerly Delaware Investments)
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.
Neuberger Berman
Newton Investment Management (fka Newton Capital
Management)
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management

Manager Name	
Nuveen Investments, Inc.	
OFI Global Asset Management	
Old Mutual Asset Management	
Opus Capital Management Inc.	
O'Shaughnessy Asset Management, LLC	
Pacific Investment Management Company	
Peregrine Capital Management, Inc.	
PGIM	
PGIM Fixed Income	
PineBridge Investments	
Pioneer Investments	
PNC Capital Advisors, LLC	
•	
Principal Global Investors	
Private Advisors, LLC	
Putnam Investments, LLC	
QMA (Quantitative Management Associates)	
RBC Global Asset Management	
Regions Financial Corporation	
Reinhart Partners, Inc.	
RidgeWorth Capital Management, Inc.	
Rockefeller & Co., Inc.	
Rothschild Asset Management, Inc.	
Russell Investments	
Santa Barbara Asset Management	
Santander Global Facilities	
Schroder Investment Management North America Inc.	
Smith, Graham & Co. Investment Advisors, L.P.	
Smith Group Asset Management	
Standard Life Investments Limited	
Standish	
State Street Global Advisors	
Stone Harbor Investment Partners, L.P.	
T. Rowe Price Associates, Inc.	
Taplin, Canida & Habacht	
The Boston Company Asset Management, LLC	
The Hartford	
The London Company	
The TCW Group, Inc.	
Thompson, Siegel & Walmsley LLC	
Thornburg Investment Management, Inc.	
Tri-Star Trust Bank	
UBS Asset Management	
Van Eck Global	
Versus Capital Group	
Victory Capital Management Inc.	
Vontobel Asset Management, Inc.	
Voya Financial	
•	
Voya Investment Management (fka ING)	
Waterton Associates L.L.C.	
WCM Investment Management	
WEDGE Capital Management	
Wellington Management Company, LLP	
Wells Capital Management	
Western Asset Management Company	

BOARD ACCEPTANCE REQUESTED

TO: State Investment Board

FROM: Dave Hunter

DATE: May 19, 2017

SUBJECT: PERS, Job Service and City of Grand Forks Park District – Recommended Investment Policy Statement Changes

RIO requests the SIB accept investment policy statement changes recently approved by the boards which oversee the plans for PERS, Job Service and City of Grand Forks Park District.

<u>On May 17, 2017, the PERS board approved the recommendation of RIO, SEI and Gabriel Roeder</u> <u>Smith & Company (GRS) to de-risk the Job Service pension plan by reducing equities to 30% (from</u> <u>40%) and increasing fixed income to 70% (from 60%).</u> This recommendation was made by RIO and SEI due to the Job Service plan being closed with a funded ratio in excess of 143% assuming a discount rate of 6.0% (or 157% assuming a discount rate of 7.0%). PERS staff was instrumental in moving this de-risking strategy forward noting that they engaged their actuarial consulting firm (GRS) to review the overall recommendation and impact on the plan's funded ratio. In a PERS investment sub-committee in mid-May, GRS confirmed the reasonableness of this proposed de-risking strategy. SEI was also instrumental in analyzing this change by proposing the specific asset allocation policy which was approved by the PERS board on May 17, 2017.</u>

Asset Class	Current	Portfolio A
US Managed Volatility Equity	24.0	18.0
Global Managed Volatility Equity	16.0	12.0
Total Equity	40.0	30.0
US High Yield	3.0	3.0
Emerging Markets Debt	3.0	3.0
Core Fixed Income	19.0	23.0
Limited Duration Fixed Income	19.0	22.0
Diversified Short Term Fixed Income	10.0	12.0
Short Term Corporate Fixed Income	6.0	7.0
Total Fixed Income	60.0	70.0
Portfolio Metric (Net of Fees)		
Expected Return (Short Term)	5.0	4.6
Expected Return (Equilibrium)	7.0	6.7
Standard Deviation	7.5	6.4
Risk of Loss (5th percentile-Short Term)	-6.6	-5.4

Job Service

On April 27, 2017, the PERS board approved a reduction in the actuarial rate of return to 7.75% from 8.00%. RIO supports this 0.25% reduction noting that it is consistent with the actuarial rate of return adopted by TFFR in the prior year given that they have similar asset allocation policies. There are no other changes recommended to the PERS investment policy statement or asset allocation at this time. PERS current asset allocation is 58% equity, 23% fixed income and 19% real assets. For comparison, TFFR's asset allocation is 58% equity, 23% fixed income and 18% real assets and 1% cash.

On May 2, 2017, the City of Grand Forks Park District board approved a change in the Global Real Asset Allocation in which Infrastructure was increased to 7% (from 5%) and Timber was decreased to 3% (from 5%). RIO recommends this change given that the SIB is not committing any new capital to the timber sector such that our timber investment is effectively in a liquidation mode. In contrast, SIB clients continue to commit new capital to infrastructure. As such, this sector aligns the City of Grand Forks Park District real asset allocation with our other SIB clients with a timber allocation.

Based on the above factors, RIO requests the SIB accept the client board approved investment policy statements changes as highlighted below:

- 1. Job Service Reduce equity to 30% (from 40%) and increase fixed income to 70% (from 60%) as detailed in SEI and RIO's staff recommendation;
- 2. PERS Main Plan Reduce actuarial assumed rate of return to 7.75% from 8.00%; and
- 3. City of Grand Forks Park District Revise the 10% allocation to Global Real Assets by increasing infrastructure to 7% (from 5%) and reducing timber to 3% (from 5%).

RETIREMENT PLAN FOR EMPLOYEES OF JOB SERVICE NORTH DAKOTA INVESTMENT POLICY STATEMENT

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The Retirement Plan for the Employees of Job Service North Dakota (Plan) is a defined benefit retirement plan for the eligible employees hired before October 1, 1980. There have been no new entrants to the plan since October 1, 1980. The plan provides retirement benefits, disability benefits and survivor benefits consistent with the written Plan document. Until October 1, 1993, annuities were purchased from the Travelers for retirees, since that date retiree benefits are paid from Plan assets. Annual cost of living adjustments for all Plan pensioners including annuitants with the Travelers are paid from Plan assets. The NDPERS Board (the Board) is the Plan Administrator and administers the Plan in accord with Chapter 52-11 of the North Dakota Century Code.

Job Service North Dakota as the employer contributes 4% of the active participant's salary as a contribution 'on behalf of the employee' and the active participants pay 3% of their salary into Plan assets.

Each year the Plan has an actuarial valuation performed. The current actuarial assumed rate of return on assets is **6.5%**.

2. RESPONSIBILITIES AND DISCRETION OF THE STATE INVESTMENT BOARD (SIB)

Aggregate plan contributions plus earnings, minus allowable expenses constitute the Fund. The Board is charged by NDCC chapters 54-52, 21-10-01, and 39-03.1 to establish policies for the investment goals and asset allocation of the Fund. The State Investment Board (SIB) is charged with implementing the asset allocation as promptly and prudently as possible in accordance with the Board's policies by investing the assets of the Fund in the manner provided in the prudent investor rule, which provides:

Fund fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The retirement funds belonging to the teachers' fund for retirement and the public employees retirement system must be invested exclusively for the benefit of their members and in accordance with the respective funds' investment goals and objectives. (NDCC 21-10-07)

The SIB may delegate investment responsibility of the Fund or any portion of the Fund to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy is supervisory not advisory.

The SIB may at its discretion, pool the assets of the Fund with another fund or funds having similar investment objectives and time horizons in order to maximize returns and minimize costs. In pooling fund assets the SIB will establish asset class pools it deems necessary to achieve the specific quality, diversification, restrictions, and performance objectives subject to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing the selection criteria, determining the performance measures, and retaining all fund money managers. SIB is also responsible for the selection and retention of any investment consultants that may be employed in the investment of the Fund assets.

3. DELEGATION OF AUTHORITY

Management responsibility for NDPERS funds not assigned to the North Dakota State Investment Board (SIB) in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, which must establish written policies and procedures for the operation of the NDPERS funds, consistent with this investment policy.

Such procedures must provide for:

- 1. The definition and assignment of duties and responsibilities to advisory services and persons employed by the SIB pursuant to NDCC 21-10-02.1(1) (a).
- 2. Investment diversification, investment quality, qualification of money managers, and amounts to be invested by money managers pursuant to NDCC 21-10-02.1(1)(e). In developing these policies it is understood:
 - a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
 - b. The use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
 - c. All assets must be held in custody by the SIB's master custodian or such other custodians as are selected by the SIB.
- Guidelines for the selection and redemption of investments will be in accordance with NDCC 21-10-02.1(1) (d).
- 4. The criteria for making decisions with respect to hiring, retention, and termination of money managers will be clearly defined. This also includes selecting performance measurement standards, consultants, report formats, and frequency of meetings with money managers.

All participants in the investment process must seek to act responsibly as custodians of the public trust.

4. INVESTMENT GOALS

The investment objectives of the Plan have been established by the Plan's Administrator upon consideration of its strategic objectives and a comprehensive review of current and projected financial requirements.

Objective #1: To maintain a level of surplus sufficient to eliminate the need for future contributions;

Objective #2: To achieve a rate of return which exceeds the rate of inflation, as measured by the Consumer Price index (CPI), by 3.0 or more percentage points per year (based on current actuarial assumptions of 7.0% return and 2-to-3% inflation), over a complete market cycle; and

Objective #3: As a secondary objective, to maximize the Plan's surplus to increase future benefit payments.

5. INVESTMENT PERFORMANCE OBJECTIVE

The NDPERS Board will seek to make investments that generate sufficient return to meet the goals outlined in this policy. The objectives established in this section are in accordance with the fiduciary requirement in federal and state law.

It is in the best interest of NDPERS and its beneficiaries that performance objectives be established for the total Fund. It is clearly understood these objectives are to be viewed over the long term and have been established after full consideration of all factors set forth in this Statement of Investment Goals, Objectives and Policies.

a) The funds rate of return, over the long term should equal that of the policy portfolio which is comprised of policy weights of appropriate asset class benchmarks as set by the SIB.

- b) The annual standard deviation of total returns for the Fund should not materially exceed that of the policy portfolio by more than 15%.
- c) Over 5-year and longer periods the fund should match or exceed the expected rate of return projected in the most recent asset/liability study without exceeding the expected risk for the period as measured by standard deviation by more than 15%.

6. ASSET ALLOCATION

The NDPERS Board as plan Administrator establishes the asset allocation of the Fund, with input from consultants and SIB staff. The current asset allocation is based upon the asset/liability study completed by SEI Consultants in **2016**. That study provided an appraisal of current cash flow projections and estimates of the investment returns likely to be achieved by the various asset classes.

In recognition of the Plan's objectives, projected financial status, and capital market expectations, the following asset allocation options were deemed appropriate for the Fund:

Domestic Equity - 18% Global Equity - 12% U.S. High Yield Bonds - 3% Emerging Markets Debt - 3% Core Fixed Income - 23% Limited Duration Fixed Income - 22% Diversified Short Term Fixed Income - 12% Short Term Corporate Fixed Income - 7%

Rebalancing of the Fund to this target allocation will be done in accordance with the SIB's rebalancing policy, but not less than annually.

7. **RESTRICTIONS**

While the SIB is responsible for establishing specific quality, diversification, restrictions, and performance objectives for the investment vehicles in which the Fund's assets will be invested, it is understood that:

- a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
- b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
- c. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.

Social Investing is defined as "The investment or commitment of public pension fund money for the purpose of obtaining an effect other than a maximized return to the intended beneficiaries."

d. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

Economically targeted investment is defined as an investment designed to produce a competitive rate of return commensurate with risk involved, as well as to create collateral economic benefits for a targeted geographic area, group of people, or sector of the economy.

e. Economically targeted investing is prohibited unless the investment meets the Exclusive Benefit Rule.

The Exclusive Benefit Rule is met if the following four conditions are satisfied:

- (1) The cost does not exceed the fair market value at the time of investment.
- (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
- (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
- (4) The safeguards and diversity that a prudent investor would adhere to are present.

8. INTERNAL CONTROLS

The SIB must have a system of internal controls to prevent losses of public funds arising from fraud or employee error. The controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for broker relationships. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions and compliance with the investment policy.

9. EVALUATION

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards.

An annual performance report must be provided to the Board by the State Investment Officer at a regularly scheduled NDPERS Board meeting. The annual performance report must include asset returns and allocation data as well as information regarding all significant or material matters and changes pertaining to the investment of the Fund, including:

- Changes in asset class portfolio structures, tactical approaches and market values;
- All pertinent legal or legislative proceedings affecting the SIB.
- Compliance with these investment goals, objectives and policies.
- A general market overview and market expectations.
- A review of fund progress and its asset allocation strategy.

In addition, the State Investment Officer shall review with the Board the procedures and policies established by the SIB relating to this statement of investment goals, objectives, and policies.

J. Sparb Collins Plan Administrator and Trustee Retirement Plan for Employees of Job Service North Dakota David Hunter Executive Director North Dakota Retirement and Investment Office

Date:_____

Date:

STATEMENT OF INVESTMENT GOALS, OBJECTIVES AND POLICIES FOR THE PARK DISTRICT OF THE CITY OF GRAND FORKS, NORTH DAKOTA PENSION PLAN

INVESTMENT POLICY STATEMENT

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The Park District of the City of Grand Forks, North Dakota Pension Plan (the "Plan") is a costsharing public employee pension plan operated by The Park District of the City of Grand Forks, North Dakota (the "District") which serves as the Plan Administrator ("Administrator") and Plan Sponsor ("Sponsor"). All employees are required to participate in the Plan. Some participants have elected to cease benefit accruals under the Plan as of January, 1, 2010 and to participate in the North Dakota Public Employees Retirement System ("NDPERS") pension plan. All future hires after December 31, 2009, will be required to participate in the NDPERS plan. The investment assets of the Plan are held within the Plan Fund ("Fund").

Benefit provisions are established by the Park Board ("Board") of the Sponsor. The employers contribute such amounts as necessary to provide the promised benefits. The contribution amounts are determined by the annual actuarial valuation report and approved by the Board.

2. FUND GOALS

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

The Board acknowledges the material impact that funding the pension plan has on the District's financial performance. These goals affect the Fund's investment strategies and often represent conflicting goals. For example, minimizing the long-term funding costs implies a less conservative investment program, whereas dampening the volatility of contributions and avoiding large swings in the funding status implies a more conservative investment program. The Board places greater emphasis on the strategy of improving the funding status and reducing the contributions that must be made to the Fund, as it is most consistent with the long-term goal of conserving money to apply to other important projects.

3. RESPONSIBILITIES AND DISCRETION OF THE STATE INVESTMENT BOARD (SIB)

The Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the

assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, who must establish written policies for the operation of the investment program, consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory, not advisory.

At the discretion of the SIB, the Fund's assets may be pooled with other funds. In pooling funds, the SIB may establish whatever asset class pools it deems necessary with specific quality, diversification, restrictions, and performance objectives appropriate to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing criteria, procedures, and making decisions with respect to hiring, keeping, and terminating money managers. SIB investment responsibility also includes selecting performance measurement services, consultants, report formats, and frequency of meetings with managers.

The SIB will implement changes to this policy as promptly as is prudent.

4. RISK TOLERANCE

The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to finance the pension benefits promised to plan participants. However, funding the pension promise in an economical manner is critical to the Board's ability to continue to provide pension benefits to plan participants. Thus, the Board actively seeks to lower the cost of funding the plan's pension obligations by taking on risk for which it expects to be compensated over the long term. The Board understands that a prudent investment approach to risk taking can result in periods of under-performance for the Fund in which the funding status may decline. These periods, in turn, can lead to higher required contribution rates. Nevertheless, the Board believes that such an approach, prudently implemented, best serves the long-run interests of the District and, therefore, of plan participants.

5. INVESTMENT OBJECTIVES

The Board's investment objectives are expressed in terms of reward and risk expectations relative to investable, passive benchmarks. The Fund's policy benchmark is comprised of policy mix weights of appropriate asset class benchmarks as set by the SIB.

- 1. The fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
- 2. The fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
- 3. The risk-adjusted performance of the fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

6. POLICY ASSET MIX

Benefit payments are projected to occur over a long period of time. This allows the Board to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. Asset allocation policy is critical because it defines the basic risk and return characteristics of the investment portfolio. Asset allocation targets are established using an asset-liability analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates. After consideration of all the inputs and a discussion of its own collective risk tolerance, the Board approves the appropriate policy asset mix for the Fund.

<u>Asset Class</u>	Policy Target(%)	
Global Equity	65	
Domestic Equity	45	
Large	40	
Small	5	
International Equity	15	
Developed	12	
Emerging	3	
Private Equity	5	
Global Fixed Income	25	
Domestic Fixed	25	
Investment Grade	25	
Global Real Assets	10	
Infrastructure	7	
Timber	3	

While the Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Board does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

7. RESTRICTIONS

While the SIB is responsible for establishing specific quality, diversification, restrictions, and performance objectives for the investment vehicles in which the Fund's assets will be invested, it is understood that:

- a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
- b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
- c. No transaction shall be made which threatens the tax exempt status of the Fund.
- d. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
- e. No unhedged short sales or speculative margin purchases shall be made.

f. Social investing is prohibited unless it meets the exclusive benefit rule, and it can be substantiated that the investment provides an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the Fund.

g. Economically targeted investing is prohibited unless the investment meets the Exclusive Benefit Rule.

For the purpose of this document economically targeted investment is defined as an investment designed to produce a competitive rate of return commensurate with risk involved, as well as to create collateral economic benefits for a targeted geographic area, group of people, or sector of the economy.

Also, for the purpose of this document, the Exclusive Benefit Rule is met if the following four conditions are satisfied:

- (1) The cost does not exceed the fair market value at the time of investment.
- (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
- (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
- (4) The safeguards and diversity that a prudent investor would adhere to are present.

Where investment characteristics, including yield, risk, and liquidity are equivalent, the Board's policy favors investments which will have a positive impact on the economy of North Dakota.

8. INTERNAL CONTROLS

A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for investment manager selection and monitoring. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions and compliance with the investment policy.

9. EVALUATION AND REVIEW

Investment management of the Fund will be evaluated against the Fund's investment objectives. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives.

Performance reports will be provided to the Board periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including, but not limited to:

- 1. A list of the advisory services managing investments for the SIB.
- 2. A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- 3. Earnings, percentage earned, and change in market value of each account's investments.

- 4. Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- 5. All material legal or legislative proceedings affecting the SIB.
- 6. Compliance with this investment policy statement.

Trustee for the Park District of the City of Grand Forks, North Dakota Pension Plan

David J. Hunter Executive Director/CIO Retirement and Investment Office

By: _____

Date: _____

Date: _____

Approved by the Park District of the City of Grand Forks - May 2, 2017

Approved by the SIB -

ND STATE INVESTMENT BOARD AUDIT COMMITTEE MEETING

Thursday May 25, 2017 – 3:00 PM Peace Garden Room, North Dakota State Capitol 600 E Boulevard Ave, Bismarck, ND 58505

AGENDA

- 1. Call to Order and Approval of Agenda Chair (committee action) (5 minutes)
- 2. Approval of February 23, 2017 Minutes Chair (committee action) (5 minutes)
- 3. Presentation of July 1, 2016 to June 30, 2017 Fiscal Year Financial Audit Scope and Approach and Final GASB 68 Schedule Audit Report CliftonLarsonAllen (committee action)(60 minutes)
- 4. 2016 2017 Third Quarter Audit Activities Report Terra Miller Bowley (committee action)(10 minutes)
- 5. 2017-2018 Audit Services Workplan, Budgeted Hours, Employer Risk Assessment, and TFFR Employer Audit Plan Terra Miller Bowley (committee action)(45 minutes)
- 6. Fraud Hotline Terra Miller Bowley (information)(5 minutes)
- 7. Audit Services TFFR Board Education Terra Miller Bowley (information)(5 minutes)
- 8. 2017-2018 SIB Audit Committee Meeting Schedule Terra Miller Bowley (committee action)(5 minutes)
- 9. 2017-2018 SIB Audit Committee Membership Terra Miller Bowley (information)(5 minutes)
- 10. Other Next SIB Audit Committee Meeting

PENDING APPROVAL North Dakota State Capitol Building Thursday September 22, 2017 - 1:00 PM Peace Garden Room

11. Adjournment

Any individual requiring an auxiliary aid or service should contact the Retirement and Investment Office at (701) 328-9885 at least (3) days prior to the scheduled meeting.

STATE INVESTMENT BOARD AUDIT COMMITTEE MEETING MINUTES OF THE FEBRUARY 23, 2017, MEETING

- COMMITTEE MEMBERS PRESENT: Rebecca Dorwart, Chair Mike Gessner, TFFR Board (TLCF) Mike Sandal, PERS Board Cindy Ternes, Workforce Safety & Insurance Josh Wiens, External Representative
- STAFF PRESENT: Bonnie Heit, Assist to the Audit Committee David Hunter, ED/CIO Fay Kopp, Dep ED/CRO Terra Miller Bowley, Suprv Audit Services Dottie Thorsen, Internal Auditor

GUESTS: Jan Murtha, Attorney General's Office

CALL TO ORDER:

Ms. Dorwart called the State Investment Board (SIB) Audit Committee meeting to order at 3:00 p.m. on Thursday, February 13, 2017, at Workforce Safety & Insurance, 1600 E Century Ave., Bismarck, ND.

A quorum was present for the purpose of conducting business.

AGENDA:

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. SANDAL AND CARRIED ON A VOICE VOTE TO APPROVE THE AGENDA FOR THE FEBRUARY 23, 2017, MEETING AS DISTRIBUTED.

AYES: MR. SANDAL, MS. TERNES, MR. WIENS, MR. GESSNER, AND MS. DORWART NAYS: NONE MOTION CARRIED

MINUTES:

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MR. WIENS AND CARRIED ON A VOICE VOTE TO ACCEPT THE NOVEMBER 17, 2016, MINUTES AS AMENDED.

AYES: MR. GESSNER, MR. SANDAL, MS. TERNES, MR. WIENS, AND MS. DORWART NAYS: NONE MOTION CARRIED

AUDIT ACTIVITIES REPORT:

Ms. Miller Bowley reviewed activities of the Audit Division for the period of October 1, 2016 - December 31, 2016.

As of February 23, 2017, 17 employer audits were completed with three more estimated to be closed within the next 30 days. Ms. Miller Bowley stated a 100 percent audit is currently being done on Ft. Yates and will likely encompass three fiscal years.

years if 20-25 audits are completed per year.

The TFFR File Maintenance Audit was completed for the first quarter of fiscal year 2017 and no exceptions were noted.

An organization wide RIO employee survey was administered in December 2016 to provide employees the opportunity to evaluate the effectiveness of the Executive Director/CIO in the areas of leadership, communications, and valuing employees. This survey is in conjunction with the annual Executive Limitations Audit.

Ms. Miller Bowley also stated Audit Services continues to pursue networking and professional development opportunities via the IIA's local chapter, Central Nodak.

Discussion followed on employers who have reoccurring reporting discrepancies.

IT WAS MOVED BY MR. WIENS AND SECONDED BY MS. TERNES AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE OCTOBER 1, 2016 - DECEMBER 31, 2016, AUDIT ACTIVITIES REPORT.

AYES: MS. TERNES, MR. WIENS, MR. SANDAL, MR. GESSNER, AND MS. DORWART NAYS: NONE MOTION CARRIED

EXECUTIVE LIMITATIONS AUDIT:

Ms. Miller Bowley stated the Executive Limitations Audit for the period of January 1, 2016 through December 31, 2016, has been completed. On an annual basis Audit Services completes an annual review of the Executive Director/CIO's level of compliance with SIB Governance Manual Executive Limitation policies A1-A11.

Audit Services review found the Executive Director/CIO was in compliance with the policies.

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MR. WIENS AND CARRIED BY A VOICE VOTE TO ACCEPT THE EXECUTIVE LIMITATIONS AUDIT FOR THE 2016 CALENDAR YEAR.

AYES: MR. GESSNER, MR. WIENS, MR. SANDAL, MS.TERNES, AND MS. DORWART NAYS: NONE MOTION CARRIED

GASB 68 SCHEDULE AUDIT:

Ms. Miller Bowley informed the Committee CliftonLarsonAllen has concluded their audit of the GASB 68 schedules. The final audit report was issued in December 2016. CliftonLarsonAllen will be in attendance at the Audit Committee's May 25, 2017, meeting to present the results of the audit as well as the audit scope and approach for the upcoming financial audit of RIO for fiscal year July 1, 2016 to June 30, 2017.

TFFR EMPLOYER AUDITING:

Ms. Miller Bowley requested Ms. Jan Murtha, RIO legal counsel, to clarify N.D.C.C. $\S15-39.1-23$ as far as options available to TFFR to encourage participating employers to improve accuracy in reporting and implement audit recommendations.

Ms. Murtha is under the opinion, based on the information provided to her, and review of the applicable statutory authority and TFFR policies, that the current enforcement tools available to TFFR could be utilized more frequently. Ms. Murtha recommended that the TFFR Board engage in a more proactive use of these existing tools prior to seeking statutory authority for additional enforcement options. Ms. Murtha suggested the following in response to Ms. Miller Bowley's concerns on behalf of the SIB Audit committee:

- Review and consider amendments to Policies C-8 and C-9 of the TFFR Program Manual to provide additional clarity regarding TFFR's reporting expectations for employers;
- Review and consider amendments to Policies C-8 and C-9 of the TFFR Program Manual to provide additional clarity regarding the circumstances under which penalties will be assessed;
- Review the process by which a civil money penalty and the restriction on the disbursement of state funds is applied and consider elaborating on this process in policy or administrative rule.

Discussion followed on the above recommendations. Ms. Dorwart suggested RIO personnel discuss the recommendations by legal counsel, put a plan together, and report back to the Audit Committee.

ANNUAL MEETINGS WITH RIO STAFF:

On an annual basis or at the will of the Chair, the Audit Committee may elect to meet with RIO's Management and or Supervisor of Audit Services separately and out of the presence of the independent auditors to discuss/review any concerns regarding the audit program at RIO per the Audit Committee Charter.

The Audit Committee elected to meet with Mr. Hunter and Ms. Kopp. The meeting began at 3:50 pm and concluded at 4:08 pm.

The Audit Committee elected to meet with Ms. Miller Bowley and Ms. Thorsen. The meeting began at 4:10 pm and concluded at 4:45 pm.

The Audit Committee appreciated the discussion with staff and felt it was beneficial to talk about issues and what are the priorities. The Audit Committee felt TFFR policies as currently applied under N.D.C.C. §15-39.1-23 need to be expanded in order for RIO's Audit Division to be effective. The Audit Committee left it up to RIO personnel to discuss the issues and put a plan together that works for them and the Governing bodies. The Audit Committee felt Ms. Miller Bowley and Ms. Thorsen continue to do a wonderful job.

OTHER:

The next Audit Committee meeting is scheduled for Thursday, May 25, 2017, at 3:00 pm at the State Capitol, Peace Garden Room.

With no further business to come before the Audit Committee, Ms. Dorwart adjourned the meeting at 4:50 p.m.

Respectfully Submitted:

Ms. Rebecca Dorwart, Chair SIB Audit Committee

Bonnie Heit Assistant to the Audit Committee

Performance Evaluation Mr. David Hunter, Executive Director/Chief Investment Officer May 25, 2017

Evaluation Process:

In compliance with the State Investment Board (SIB) Governance Policy, a performance evaluation of the Executive Director/Chief Investment Officer was conducted. A survey instrument was completed by each of the members of the SIB. The instrument was designed to evaluate compliance with the SIB Governance Ends Policy and Executive Limitations Policies, focusing on board meetings, board relations, office operations, investment programs and program operations, public/legislative relations, and professional skills and development. The instrument used the following three-point scale: 1- Does Not Meet Expectations, 2-Meets Expectations, and 3 - Exceeds Expectations.) In addition to the survey, the performance evaluation included a review of the Executive Limitations Audit Report Calendar Year 2016, the ED/CIO Effectiveness Survey Results Calendar Year 2016, the RIO Financial Audit Fiscal Year Ended 06/31/2016, and the Quarterly Monitoring Reports. Mr. Hunter also completed a self-assessment of his performance for consideration.

On April 18 the Executive Review Committee reviewed the results of the survey and discussed areas of strength and developmental opportunities. The results and subsequent discussion form the basis for the formal evaluation, which will be reviewed with Mr. Hunter. The evaluation will be presented to the SIB for final approval at the May 26 SIB Board Meeting.

Findings and Conclusions:

- All members of the SIB completed the evaluation survey.
 - Of the eleven board members responding to the 29 questions, the results were as follows:
 - "Meets Expectations" or "Exceeds Expectations" comprised 98.4% (312 of 317) of the responses.
 - "Does Not Meet Expectations" comprised 0.6% (2 of 317) of the responses.
 - Not Applicable" comprised 1% (3 of 317) of the responses.
 - The composite score improved from 2.06 in 2015 to 2.24 in 2016.
 - Board members were particularly pleased with the appropriateness of information provided to the SIB, the positive work environment Mr. Hunter fosters, and the effectiveness with which Mr. Hunter advises, monitors and reports on the performance of investments.
- All eighteen employees participated in the ED/CIO Effectiveness Survey Results for Calendar Year 2016, resulting in the following:
 - Employees continue to provide the ED/CIO with high marks with regards to leadership.

- Employees are confident in the ED/CIO and overwhelmingly believe that he demonstrates integrity, sets an example for others, shows genuine concern for staff, and treats everyone with respect.
- Communication within the office is an area of mixed findings. While the majority of responses (74%) were positive in their ratings of intra-office communication, a number of the responses (26%) indicated a need for improvement.
- Thirteen of the fourteen SIB Customer boards responded to the Client Satisfaction Survey, resulting in the following:
 - Clients assigned an overall rating of 3.6 on a 4-point scale. This is comparable to the previous year's overall rating of 3.7 on a 4-point scale.
 - Comments received were very positive and complimentary.
 - Two responses requested a faster turn-around time on reports.
- Investment Performance
 - Every SIB client generated positive excess returns for the five years ending 12/31/16. These returns were achieved in a risk controlled framework through the prudent use of active management.
 - Investment management fees have been reduced from .65% in FY 2013 to .42% in FY 2016. This translates into over \$20 million in annual savings.
 - Under Mr. Hunter's leadership, the RIO staff continue to closely monitor all investments to provide the SIB with strategic recommendations based upon careful due diligence in a timely manner.

In summary, this evaluation has reinforced our perception that Mr. Hunter's performance is exceptional. He has solid credibility among those with whom he interacts. His strong communication skills foster understanding among the SIB board members, clients, legislators, and other stakeholders, which creates an environment where positive decisions are made and fiduciary responsibilities are accomplished.

Mr. Hunter is cognizant of and committed to areas that need continued attention and improvement. In particular, he will continue to find methods to improve intra-office communication, increase transparency, work to improve cyber-security and continue to build upon his success in working with the legislature.

Mr. David Hunter, State Investment Board ED/CIO

Ms. Yvonne M. Smith, Executive Review Committee Chair

CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY





CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY

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Preamble

The conduct of those who govern **pension schemes**¹ significantly impacts the lives of millions of people around the world who are dependent on pensions for their retirement income. Consequently, it is critical that **pension plans**, also known as systems, schemes, or funds, are overseen by a strong, well-functioning **governing body** in accordance with fundamental ethical principles of honesty, integrity, independence, fairness, openness, and competence.

Codes of conduct addressing professional activities are standard practice for many successful investment firms and have become increasingly common among public and private pension schemes. Such codes are established to improve the performance of schemes sponsored by private enterprise and public pension schemes alike. Just as there is no one-size-fits-all governance structure for investment firms, there is no single governance structure that can be universally applied to pension schemes. Varying goals, restrictions, political environments, market conditions, manager/**trustee** competencies, regulatory schemes, and many other factors will affect the appropriate governance structure for any pension scheme.

This *Code of Conduct for Members of a Pension Scheme Governing Body* (the code) represents best practice for members of the pension governing body when complying with their duties to the pension scheme. Whether public or private, each pension scheme board that adopts the code will demonstrate its commitment to serving the best interests of **participants** and **beneficiaries**.

The code provides guidance to those *individuals* overseeing the management of the scheme regarding their individual duties and responsibilities and is not meant to replace the overall policies and procedures established for the governance of the pension scheme. However, to reflect best ethical practice, incorporating the fundamental ethical principles embodied in this code will enhance those policies and procedures.

Depending on the nature and type of pension scheme, members of the governing body may have responsibility for overseeing the administration of benefits as well as the scheme's investment decision-making process. All of the principles outlined in this code apply equally to the officials' duties in each of these roles.

¹Bold indicates terms defined in Appendix A.

Code of Conduct for Members of a Pension Scheme Governing Body

For the purposes of this document, pension plans, systems, and funds are referred to collectively as "plans" or "schemes" and the individuals who serve on the governing body of the plans, schemes, or funds are referred to as "trustees."

Code of Conduct

Pension trustees

- 1. Act in good faith and in the best interest of the scheme participants and beneficiaries.
- 2. Act with prudence and reasonable care.
- 3. Act with skill, competence, and diligence.
- 4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.
- 5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.
- 6. Deal fairly, objectively, and impartially with all participants and beneficiaries.
- 7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.
- 8. Review on a regular basis the efficiency and effectiveness of the scheme's success in meeting its goals, including assessing the performance and actions of scheme service providers, such as investment managers, consultants, and actuaries.
- 9. Maintain confidentiality of scheme, participant, and beneficiary information.
- 10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Code of Conduct Guidance

1. Act in good faith and in the best interest of the scheme participants and beneficiaries.

The overriding objective of the pension scheme is to serve as a secure source of retirement income. Pension scheme trustees have a primary duty to act for the benefit of the scheme participants and beneficiaries. Trustees comply with this duty by striving to safeguard and grow the assets of the pension scheme to provide maximum benefit to the scheme participants and beneficiaries.

To act in the participants' and beneficiaries' best interest, an effective trustee will

- Consider the different types of beneficiaries relevant to each pension scheme, including **deferred beneficiaries** and pensioners. Trustees often engage in a delicate balancing act of taking sufficient risk to generate long-term returns high enough to support real benefit increases for active participants who will become future beneficiaries while avoiding a level of risk that jeopardizes the safety of the payments to existing pensioners.
- Place the benefit of the scheme participants and beneficiaries above that of the sponsor of the pension scheme even if the trustee is employed by or appointed to the board of the pension scheme by the scheme's sponsor.
- Consider whether the position of the scheme is enhanced by any investment or action and will not be swayed by other considerations, such as the interests of the employer sponsor of the pension or other external institutions (e.g., trade unions or political parties).

However, trustees who exclusively seek to enhance the position of participants and beneficiaries cannot discount additional considerations, such as the effect of the trustees' decisions on the financial health and viability of the scheme sponsor or their impact on scheme investments. In carrying out their responsibilities, effective trustees will

- Consider the additional objectives of ensuring an adequate match between plan assets and liabilities, maintaining stable funding costs over time, keeping management costs down, and paying benefits upon the death, disability, retirement, or other special circumstances of plan members.
- Carry out the scheme activities in a way that does not impose an unnecessary financial burden on the plan sponsor and serves the interests of plan members well but without excessive burden to the plan sponsor.
- Consider the position of other stakeholders when carrying out their duties to the fund. If appropriate under applicable law, it is acceptable for a trustee to consider the impact that the investment of scheme assets may have—for example, creating jobs or stimulating industry in the local area—so long as the interests of the participants and beneficiaries remain paramount.
- Consider all relevant risk and value factors deemed appropriate when designing the scheme's investment strategy. In addition to typical financial measures, these factors may include environmental, social, and corporate governance issues.

2. Act with prudence and reasonable care.

Effective trustees will exhibit the care and prudence necessary to meet their obligations to pension scheme participants and beneficiaries. The exercise of prudence requires acting with the appropriate levels of care, skill, and diligence that a person acting in a like capacity and familiar with such matters would use under the same circumstances.

In the context of serving as a trustee, prudence requires

- Acting in a judicious manner to avoid harming scheme participants and beneficiaries.
- Acting in good faith, without improper motive or purpose.
- Exercising power and discretion consistently.
- Following the investment parameters set forth by the scheme documents and applicable regulation.

 Having appropriate knowledge of and skill in balancing risk and return by seeking appropriate levels of diversification.

Pension schemes typically employ experts to advise, direct, and implement the decisions of their trustees. Both internal staff and **external consultants** are retained for this purpose. These "designees" thereby partner with the trustees in carrying out the responsibilities set forth in this code. However, external third-party service providers and professional consultants may have less accountability or vested interest in the outcome of actions resulting from their advice.

Trustees can rely on external third-party service providers and professional consultants provided that the trustees have made reasonable and diligent effort to

- Determine that the service providers act with appropriate skill, competence, and diligence.
- Determine that third-party experts are independent and free of conflicts of interest and have the proper incentives to act in the best interests of the fund participants.
- Ensure that the designees' decisions have a reasonable and adequate basis and that the decision process is adequately documented.

Trustees may also consider

- Appointing expert trustees.
- Hiring internal staff with investment expertise who may act as an internal consultant.
- Developing an internal investment team to manage the fund directly.

However, although the delegation of certain trustee responsibilities to experts is a prudent option, the trustees retain the ultimate fiduciary duty and responsibility to monitor the experts and to ensure that the delegated responsibilities are carried out appropriately.

3. Act with skill, competence, and diligence.

Skill and diligence require trustees to be knowledgeable about the matters and duties with which they have been entrusted. Ignorance of a situation or an improper course of action on matters for which the trustee is responsible or should at least be aware is a violation of this code. Improper or ill-advised decisions can be costly to the pension scheme and detrimental to the scheme's participants and beneficiaries. Prior to taking action on behalf of the scheme, effective trustees and/or their designees analyze the potential investment opportunities and act only after undertaking due diligence to ensure they have sufficient knowledge about specific investments or strategies.

Effective trustees will have knowledge and understanding of

- Trust and pension laws.
- Pension scheme funding and liabilities.
- The policies of the scheme.
- The strategies in which the scheme is investing.
- Investment research and will consider the assumptions used—such as risks, inflation, and rates of return—as well as the thoroughness of the analysis performed, the time-liness and completeness of the information, and the objectivity and independence of the source.
- The basic structure and function of the selected investments and securities in which the scheme invests.
- How investments and securities are traded, their liquidity, and any other risks (including counterparty risk).

The level of such analysis will depend on the investment style and strategy employed by the scheme. Certain types of investments, such as hedge funds, private equity, or more sophisticated derivative instruments, necessitate more thorough investigation and understanding than do fundamental investments, such as straightforward and transparent equity, fixed-income, or mutual fund products. Trustees may seek appropriate expert or professional guidance if they believe themselves lacking the expertise necessary to make an informed decision. Trustees should not act—or fail to act—for the beneficiaries if lacking appropriate understanding or knowledge.

- Trustees are expected to take any training or educational opportunities necessary to ensure that their level of knowledge and understanding about pensions and investments remains current.
- Incumbent trustees and the pension scheme sponsor have a responsibility to ensure that new trustees receive proper training and education to fulfill their duties.

4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.

Effective trustees endeavor to avoid actual and potential conflicts of interest between their work with the pension scheme and other personal or outside interests. Conflicts of interest are many and varied, but the interests of pension scheme participants and beneficiaries are paramount.

Effective trustees

- Strive to avoid even the appearance of impropriety. Outside duties or responsibilities should not influence decisions because the trustee acts primarily for the beneficiaries and participants of the scheme.
- Take great care to put their duties to the pension scheme before their loyalty to the sponsoring entity that appointed them (such as a company plan sponsor or labor union).
- Do not solicit political contributions from service providers to the fund, either personally or on behalf of another.
- Do not allow political interests, philosophy, or political party loyalty to influence decisions made on behalf of the scheme.

- Do not put themselves in a position where their interests and the interests of the pension scheme conflict. Trustees who also are pension scheme participants or beneficiaries should take precautions to avoid any personal profit at the expense of the scheme.
- Do not use the prestige or influence of their position for private gain or advantage.
- Avoid any employment or contractual relationship with, or any interest in, firms that provide services to the pension scheme.
- Are not involved in any retention or termination decisions of such firms or otherwise vote on matters related to the trustees' firms.
- Refuse any gift or benefit that could reasonably be expected to affect their independence, objectivity, or loyalty.
- Do not receive or accept, directly or indirectly, any gift, service, favor, entertainment, or any other thing of value from anyone currently engaged by or seeking business from the pension scheme if it could reasonably be expected to influence a decision or be considered a reward. The governing body should establish a written policy limiting the acceptance of gifts and entertainment in a variety of contexts.
- Refuse to accept gifts or entertainment of more than a minimal value from service providers, consultants, potential investment targets, or other business partners. Pension scheme governing bodies should define what the minimum value is and should consult applicable regulations, which may help establish limits as well. The governing body should also create a reporting mechanism for disclosure of gifts and consider creating limits (e.g., amount per time period, per vendor) for accepting gifts and prohibit the acceptance of any cash gifts.

To the extent conflicts may not be avoided, effective trustees recognize and take appropriate measures to deal with and manage the conflict, such as

- Disclosing all real or perceived conflicts of interests.
- Abstaining from a vote or excluding themselves from any deliberations in which they are in direct conflict.
- Ensuring that the pension scheme has procedures in place to manage and disclose any such conflicts. Policies should be appropriate to the circumstances and level of control that the trustees have over trading decisions of the fund.

Documenting and disclosing to the pension scheme the acceptance of any gift or entertainment.

The overriding principle is that trustees should act in the best interests of the participants of the pension scheme and disclose any conflicts of interest.

The personal and business relationships that are built among the trustees or between trustees and outside experts, such as **investment managers**, are an intangible asset to be leveraged for the benefit of the scheme. The scheme should adopt policies to prohibit former trustees from using information gained about the scheme or relationships with incumbent trustees, investment managers, or other experts for personal benefit.

5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.

The pension scheme governing body, having been vested with the power to manage and administer the pension scheme, is responsible for ensuring adherence to the terms of the arrangement, statutes, bylaws, contract, trust instrument, or other associated governing documents. As a general matter, pension schemes operate in a complex, varied, and rapidly changing regulatory environment. Generally, trustees are not expected to master the nuances of technical, complex law or become experts in compliance with pension regulation.

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- Consult with professional advisers retained by the scheme to provide technical expertise on applicable law and regulation.
- Regularly investigate and ensure that the pension scheme has adopted and updated compliance policies and procedures designed to maintain compliance with laws and regulations that govern the pension scheme.
- Report any suspected illegal, unethical, or financial irregularities to the appropriate parties, including the scheme's internal auditor.

Policies and procedures are critical tools to ensure that pension schemes meet their legal and ethical requirements. Specific policies and procedures of the pension scheme

supplement the fundamental principle-based ethical concepts embodied in this code. Documented compliance procedures will assist trustees in fulfilling the responsibilities enumerated in this code.

6. Deal fairly, objectively, and impartially with all participants and beneficiaries.

To maintain the trust that beneficiaries of the pension scheme place in them, trustees deal with all scheme participants and beneficiaries in a fair and objective manner. Effective trustees do not give preferential treatment to beneficiaries within a particular class of members or otherwise favor one class over the others. Many schemes have different types of participants: **active members** who are making contributions and accruing benefits, deferred members who have left employment but have not transferred their assets and will draw future benefits when reaching retirement age, and **retirees**, including spouses of deceased members, who are currently drawing retirement benefits. Effective trustees balance the interests of all types of members, treating each category of member fairly.

7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.

Effective trustees develop and implement comprehensive written investment policies that set forth the mission, beliefs, and strategic investment plans that guide the investment decisions of the scheme (the "policies").

Trustees

- Draft written policies that include a discussion of risk tolerances, return objectives, liquidity requirements, liabilities, tax considerations, and any legal, regulatory, or other unique circumstances.
- Review and approve the scheme's investment policies as necessary, but at least annually, to ensure that the policies remain current.

- Only take investment actions that are consistent with the stated objectives and constraints of these established scheme policies.
- Consider the suitability of investments given the needs of the pension scheme, its future (or projected) liabilities, risk tolerance, and diversification goals.
- Select investment options within the context of the stated mandates or strategies and appropriate asset allocation.
- Establish policy frameworks within which to allocate risk for both asset mix policy risk and active risk as well as frameworks within which to monitor performance of the asset mix policies and the risk of the overall pension fund.
- Work to achieve the proper investment blend to reflect the sometimes competing interests among the different classes of scheme members while focusing on long-term stability and growth.
- Carry out the terms of the scheme while abiding by any supplemental legal or regulatory requirements.

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Effective trustees have the knowledge and understanding to critically review and verify the performance of the scheme's investment managers.

Trustees

Develop disciplined decision rules for hiring, firing, and retaining investment managers that foster a long-term investment focus and are consistent with the scheme's investment policy statement. Hiring and firing decisions should be made by

considering well-reasoned criteria that may include performance, organizational or operational strength, personnel quality, and other considerations.

- Ensure that the investment entity managing scheme assets employs qualified staff and sufficient human and technological resources to thoroughly investigate, analyze, implement, and monitor investment decisions and actions.
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10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Full and fair disclosure of relevant information is a fundamental ethical principle of capital markets and the investment services industry. Developing and maintaining clear, timely, and thorough communication practices is critical to providing high-quality financial services to scheme participants and beneficiaries.

Trustees have a responsibility to

- Ensure that the information they provide to scheme participants and beneficiaries is accurate, pertinent, and complete.
- Not misrepresent any aspect of their services or activities in any communications, including oral representations, electronic communications, or written materials (whether publicly disseminated or not).

Communication with participants and beneficiaries is generally provided on a regular timetable and by the pension scheme, not by individual trustees. Nevertheless, effective trustees work to ensure that all communications with scheme participants and beneficiaries are timely, relevant, complete, and accurate. If the pension scheme is considering significant changes, such as mandating a later retirement age, lowering the percentage of future benefits, or closing the scheme to new members, trustees will communicate this information well in advance to allow affected parties the opportunity to provide input. Among other disclosures, trustees have a duty to present performance information that is a fair representation of the scheme's investment record and that includes all relevant factors. Trustees have a responsibility to comply with the scheme's disclosure policies by submitting any requested information in a timely manner. To be effective, disclosures of information must be made in plain language and in a manner designed to effectively communicate the information.

Appendix A. Definitions

Active member. See Participants.

Beneficiaries. Those persons who are no longer making contributions to the pension scheme but who are receiving benefits.

Deferred member or **Beneficiary.** Those persons who are eligible for benefits in the future but who are no longer making contributions.

External consultant. An individual or entity outside the pension plan retained to provide professional services to the plan, including assisting the plan in selecting investment managers.

Governing body. The group of persons or legal entity responsible for managing and safeguarding the assets of the pension scheme.

Investment manager. An individual or entity retained by the pension scheme to invest the assets of the plan.

Participants. Those persons who are participating in the pension scheme by making contributions but who are not yet receiving benefits.

Pension plan or **Pension scheme.** An arrangement whereby a public or private employer, such as a corporation, labor union, or government agency, provides income through deferred compensation to its employees after retirement.

Plan sponsor. The entity that establishes the pension scheme and employs the members of the scheme.

Retirees. Those persons who are receiving pension benefits from the scheme.

Trustee. An individual who serves on the governing body of a pension plan, scheme, or fund.

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The Code of Conduct for Members of a Pension Scheme Governing Body (the code) is a joint effort to develop and promote a code of professional conduct for individuals who sit on the governing bodies of pension funds. The CFA Institute Centre for Financial Market Integrity invited representatives from a number of industry organizations to participate in a working group that guided the creation of the initial draft of the code. We are grateful to the following groups who contributed to the working group's efforts: the Council of Institutional Investors (United States), the National Association of Pension Funds (United Kingdom), the Dutch Association of Industry-wide Pension Funds, the Swiss Pension Funds Association, the Hong Kong Retirement Schemes Association, and the Organisation for Economic Co-operation and Development. We are also thankful for the efforts of individuals and organizations who reviewed the document and sent in their contributions during the public comment period.

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CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY





CODE OF CONDUCT FOR MEMBERS OF A PENSION SCHEME GOVERNING BODY

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CFA Institute is the global association of investment professionals that sets the standards for professional excellence. We are a champion for ethical behavior in investment markets and a respected source of knowledge in the global financial community.

Our mission is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

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Preamble

The conduct of those who govern **pension schemes**¹ significantly impacts the lives of millions of people around the world who are dependent on pensions for their retirement income. Consequently, it is critical that **pension plans**, also known as systems, schemes, or funds, are overseen by a strong, well-functioning **governing body** in accordance with fundamental ethical principles of honesty, integrity, independence, fairness, openness, and competence.

Codes of conduct addressing professional activities are standard practice for many successful investment firms and have become increasingly common among public and private pension schemes. Such codes are established to improve the performance of schemes sponsored by private enterprise and public pension schemes alike. Just as there is no one-size-fits-all governance structure for investment firms, there is no single governance structure that can be universally applied to pension schemes. Varying goals, restrictions, political environments, market conditions, manager/**trustee** competencies, regulatory schemes, and many other factors will affect the appropriate governance structure for any pension scheme.

This *Code of Conduct for Members of a Pension Scheme Governing Body* (the code) represents best practice for members of the pension governing body when complying with their duties to the pension scheme. Whether public or private, each pension scheme board that adopts the code will demonstrate its commitment to serving the best interests of **participants** and **beneficiaries**.

The code provides guidance to those *individuals* overseeing the management of the scheme regarding their individual duties and responsibilities and is not meant to replace the overall policies and procedures established for the governance of the pension scheme. However, to reflect best ethical practice, incorporating the fundamental ethical principles embodied in this code will enhance those policies and procedures.

Depending on the nature and type of pension scheme, members of the governing body may have responsibility for overseeing the administration of benefits as well as the scheme's investment decision-making process. All of the principles outlined in this code apply equally to the officials' duties in each of these roles.

¹Bold indicates terms defined in Appendix A.

Code of Conduct for Members of a Pension Scheme Governing Body

For the purposes of this document, pension plans, systems, and funds are referred to collectively as "plans" or "schemes" and the individuals who serve on the governing body of the plans, schemes, or funds are referred to as "trustees."

Code of Conduct

Pension trustees

- 1. Act in good faith and in the best interest of the scheme participants and beneficiaries.
- 2. Act with prudence and reasonable care.
- 3. Act with skill, competence, and diligence.
- 4. Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that could reasonably be expected to affect their loyalty.
- 5. Abide by all applicable laws, rules, and regulations, including the terms of the scheme documents.
- 6. Deal fairly, objectively, and impartially with all participants and beneficiaries.
- 7. Take actions that are consistent with the established mission of the scheme and the policies that support that mission.
- 8. Review on a regular basis the efficiency and effectiveness of the scheme's success in meeting its goals, including assessing the performance and actions of scheme service providers, such as investment managers, consultants, and actuaries.
- 9. Maintain confidentiality of scheme, participant, and beneficiary information.
- 10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Code of Conduct Guidance

1. Act in good faith and in the best interest of the scheme participants and beneficiaries.

The overriding objective of the pension scheme is to serve as a secure source of retirement income. Pension scheme trustees have a primary duty to act for the benefit of the scheme participants and beneficiaries. Trustees comply with this duty by striving to safeguard and grow the assets of the pension scheme to provide maximum benefit to the scheme participants and beneficiaries.

To act in the participants' and beneficiaries' best interest, an effective trustee will

- Consider the different types of beneficiaries relevant to each pension scheme, including **deferred beneficiaries** and pensioners. Trustees often engage in a delicate balancing act of taking sufficient risk to generate long-term returns high enough to support real benefit increases for active participants who will become future beneficiaries while avoiding a level of risk that jeopardizes the safety of the payments to existing pensioners.
- Place the benefit of the scheme participants and beneficiaries above that of the sponsor of the pension scheme even if the trustee is employed by or appointed to the board of the pension scheme by the scheme's sponsor.
- Consider whether the position of the scheme is enhanced by any investment or action and will not be swayed by other considerations, such as the interests of the employer sponsor of the pension or other external institutions (e.g., trade unions or political parties).

However, trustees who exclusively seek to enhance the position of participants and beneficiaries cannot discount additional considerations, such as the effect of the trustees' decisions on the financial health and viability of the scheme sponsor or their impact on scheme investments. In carrying out their responsibilities, effective trustees will

- Consider the additional objectives of ensuring an adequate match between plan assets and liabilities, maintaining stable funding costs over time, keeping management costs down, and paying benefits upon the death, disability, retirement, or other special circumstances of plan members.
- Carry out the scheme activities in a way that does not impose an unnecessary financial burden on the plan sponsor and serves the interests of plan members well but without excessive burden to the plan sponsor.
- Consider the position of other stakeholders when carrying out their duties to the fund. If appropriate under applicable law, it is acceptable for a trustee to consider the impact that the investment of scheme assets may have—for example, creating jobs or stimulating industry in the local area—so long as the interests of the participants and beneficiaries remain paramount.
- Consider all relevant risk and value factors deemed appropriate when designing the scheme's investment strategy. In addition to typical financial measures, these factors may include environmental, social, and corporate governance issues.

2. Act with prudence and reasonable care.

Effective trustees will exhibit the care and prudence necessary to meet their obligations to pension scheme participants and beneficiaries. The exercise of prudence requires acting with the appropriate levels of care, skill, and diligence that a person acting in a like capacity and familiar with such matters would use under the same circumstances.

In the context of serving as a trustee, prudence requires

- Acting in a judicious manner to avoid harming scheme participants and beneficiaries.
- Acting in good faith, without improper motive or purpose.
- Exercising power and discretion consistently.
- Following the investment parameters set forth by the scheme documents and applicable regulation.

 Having appropriate knowledge of and skill in balancing risk and return by seeking appropriate levels of diversification.

Pension schemes typically employ experts to advise, direct, and implement the decisions of their trustees. Both internal staff and **external consultants** are retained for this purpose. These "designees" thereby partner with the trustees in carrying out the responsibilities set forth in this code. However, external third-party service providers and professional consultants may have less accountability or vested interest in the outcome of actions resulting from their advice.

Trustees can rely on external third-party service providers and professional consultants provided that the trustees have made reasonable and diligent effort to

- Determine that the service providers act with appropriate skill, competence, and diligence.
- Determine that third-party experts are independent and free of conflicts of interest and have the proper incentives to act in the best interests of the fund participants.
- Ensure that the designees' decisions have a reasonable and adequate basis and that the decision process is adequately documented.

Trustees may also consider

- Appointing expert trustees.
- Hiring internal staff with investment expertise who may act as an internal consultant.
- Developing an internal investment team to manage the fund directly.

However, although the delegation of certain trustee responsibilities to experts is a prudent option, the trustees retain the ultimate fiduciary duty and responsibility to monitor the experts and to ensure that the delegated responsibilities are carried out appropriately.

3. Act with skill, competence, and diligence.

Skill and diligence require trustees to be knowledgeable about the matters and duties with which they have been entrusted. Ignorance of a situation or an improper course of action on matters for which the trustee is responsible or should at least be aware is a violation of this code. Improper or ill-advised decisions can be costly to the pension scheme and detrimental to the scheme's participants and beneficiaries. Prior to taking action on behalf of the scheme, effective trustees and/or their designees analyze the potential investment opportunities and act only after undertaking due diligence to ensure they have sufficient knowledge about specific investments or strategies.

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- Trust and pension laws.
- Pension scheme funding and liabilities.
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- Investment research and will consider the assumptions used—such as risks, inflation, and rates of return—as well as the thoroughness of the analysis performed, the time-liness and completeness of the information, and the objectivity and independence of the source.
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10. Communicate with participants, beneficiaries, and supervisory authorities in a timely, accurate, and transparent manner.

Full and fair disclosure of relevant information is a fundamental ethical principle of capital markets and the investment services industry. Developing and maintaining clear, timely, and thorough communication practices is critical to providing high-quality financial services to scheme participants and beneficiaries.

Trustees have a responsibility to

- Ensure that the information they provide to scheme participants and beneficiaries is accurate, pertinent, and complete.
- Not misrepresent any aspect of their services or activities in any communications, including oral representations, electronic communications, or written materials (whether publicly disseminated or not).

Communication with participants and beneficiaries is generally provided on a regular timetable and by the pension scheme, not by individual trustees. Nevertheless, effective trustees work to ensure that all communications with scheme participants and beneficiaries are timely, relevant, complete, and accurate. If the pension scheme is considering significant changes, such as mandating a later retirement age, lowering the percentage of future benefits, or closing the scheme to new members, trustees will communicate this information well in advance to allow affected parties the opportunity to provide input. Among other disclosures, trustees have a duty to present performance information that is a fair representation of the scheme's investment record and that includes all relevant factors. Trustees have a responsibility to comply with the scheme's disclosure policies by submitting any requested information in a timely manner. To be effective, disclosures of information must be made in plain language and in a manner designed to effectively communicate the information.

Appendix A. Definitions

Active member. See Participants.

Beneficiaries. Those persons who are no longer making contributions to the pension scheme but who are receiving benefits.

Deferred member or **Beneficiary.** Those persons who are eligible for benefits in the future but who are no longer making contributions.

External consultant. An individual or entity outside the pension plan retained to provide professional services to the plan, including assisting the plan in selecting investment managers.

Governing body. The group of persons or legal entity responsible for managing and safeguarding the assets of the pension scheme.

Investment manager. An individual or entity retained by the pension scheme to invest the assets of the plan.

Participants. Those persons who are participating in the pension scheme by making contributions but who are not yet receiving benefits.

Pension plan or **Pension scheme.** An arrangement whereby a public or private employer, such as a corporation, labor union, or government agency, provides income through deferred compensation to its employees after retirement.

Plan sponsor. The entity that establishes the pension scheme and employs the members of the scheme.

Retirees. Those persons who are receiving pension benefits from the scheme.

Trustee. An individual who serves on the governing body of a pension plan, scheme, or fund.

CFA Institute

STAFF

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CFA INSTITUTE CENTRE FOR FINANCIAL MARKET INTEGRITY

The Code of Conduct for Members of a Pension Scheme Governing Body (the code) is a joint effort to develop and promote a code of professional conduct for individuals who sit on the governing bodies of pension funds. The CFA Institute Centre for Financial Market Integrity invited representatives from a number of industry organizations to participate in a working group that guided the creation of the initial draft of the code. We are grateful to the following groups who contributed to the working group's efforts: the Council of Institutional Investors (United States), the National Association of Pension Funds (United Kingdom), the Dutch Association of Industry-wide Pension Funds, the Swiss Pension Funds Association, the Hong Kong Retirement Schemes Association, and the Organisation for Economic Co-operation and Development. We are also thankful for the efforts of individuals and organizations who reviewed the document and sent in their contributions during the public comment period.

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AGENDA ITEM IV.D.

INFORMATIONAL

SUBJECT:	Callan College Onsite – July 28, 2017
DATE:	May 19, 2017
FROM:	Dave Hunter
TO:	State Investment Board

Callan College will be held at Bismarck State College Energy Center – Room #335 from 8:30 am to 2:00 pm on Friday, July 28th. The proposed agenda is as follows:

8:30 - 8:45	Introduction and Welcome Remarks
8:45 - 9:45	Capital Market Theory
9:45 - 10:00	Break
10:00 - 11:00	Asset Allocation
11:00 - 12:00	Role of the Fiduciary and Investment Policy Statements
12:00 - 12:45	Lunch - Hosted by Callan Associates Guest Speaker - Jena Gullo, Executive Director, MSA United Way
12:45 – 2:00	Fixed Income Manager Interviews (if necessary)

Callan College is divided into three major segments: Capital Market Theory; Asset Allocation; and Fiduciary Practices. The session is intended to provide fund sponsor trustees and staff with an understanding of functional investment theory, terminology, and best practices. It is designed for individuals who are relatively new to investment oversight responsibilities.

Participants will gain a fundamental understanding of the basics behind Capital Market Theory, Asset Allocation, and their role as fiduciaries including their purpose within the structure of investment programs. The session includes:

- An overview of capital market theory, characteristics of various asset classes and the processes by which fiduciaries implement their investment decisions;
- A review of asset allocation and how risk and return objectives are analyzed within the framework of promised benefits and funding responsibilities; and
- An introduction to fiduciary issues as they pertain to fund management and oversight.

Section Descriptions:

Capital Market Theory – The objective of this section is to demystify investment terminology, explain key investment fundamentals, provide sound basis for investment decisions, and discuss how institutional clients apply theory in their board rooms. This course will examine the quantitative tools used in asset allocation, style analysis, manager structure, manager search, investment policy, and performance measurement.

Asset Allocation – The objection of this section is to provide an overview of asset/liability modeling from the standpoint of the plan sponsor, investment manager, and consultant. Callan will delve into why it is important, when sponsors review their allocations and how the review takes place. Integral to this discussion is a description on how capital market assumptions; efficient portfolios (the efficient frontier), correlation, and diversification play a role in creating asset mix alternatives. The trade-off between risk and return is examined in detail. We define risk tolerance, return need and demonstrate how sponsors and consultants select the appropriate mix.

The Role of the Fiduciary – The objective of this section is to define the role of the fiduciary. We do this by tracing the history of fiduciary conduct and describing the appropriate activities of persons responsible for the assets of others. We examine the various laws and concepts governing the activities of fiduciaries and translate these concepts into practical guidelines. We explore and describe the differences among different plan types and the laws governing each.