ND STATE INVESTMENT BOARD MEETING

Friday, August 26, 2016, 8:30 a.m.
Peace Garden Room, State Capitol
600 E Blvd., Bismarck, ND

I. APPROVAL OF AGENDA

II. APPROVAL OF MINUTES (JULY 22, 2016)

III. INVESTMENTS

A. Asset and Performance Overview - Mr. Hunter (enclosed) (30 minutes) *(Informational)*
   1. SIB Fee Reduction Initiatives - Callan, RIO, Novarca and Northern Trust **Board Action**

B. Callan Performance Review - Mr. Erlendson & Mr. Browning (enclosed) (60 minutes) **Board Acceptance**
   2. Pension Trust Review - June 30, 2016
   3. Insurance Trust Review - June 30, 2016
   4. Legacy Fund Review - June 30, 2016

============================ Break from 10:00 to 10:15 am ============================

IV. BOARD EDUCATION (enclosed) *(Informational) (60 minutes)*

A. Governance Meeting Review - Mr. Hunter
   1. Why is good governance important? *"Good Governance Adds Value"*
   2. Does our current governance model meet the Board's needs?
   3. Next Steps - Enhance "stakeholder confidence" by raising awareness of SIB activity and results
   4. Governance model alignment of our strategic investment beliefs including board education

B. Recommended Education: Callan College Onsite - Mr. Erlendson and Mr. Browning

C. Asset Class Definitions / Glossary - Mr. Hunter

V. QUARTERLY MONITORING (enclosed) **(Questions Only - Board Acceptance)** (15 minutes)

A. Executive Limitations/Staff Relations - Mr. Hunter
B. Budget and Financial Conditions - Ms. Flanagan
C. Investment Program - Mr. Schulz
D. Retirement Program - Ms. Kopp
E. Watch List - Mr. Schulz

VI. OTHER

Next Meeting: SIB meeting - September 23, 2016, 8:30 a.m. - State Capitol, Peace Garden Room
SIB Audit Committee meeting - September 23, 2016, 1:00 p.m. - State Capitol, Peace Garden Room

VII. ADJOURNMENT

NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
JULY 22, 2016, BOARD MEETING

MEMBERS PRESENT:	Drew Wrigley, Lt. Governor, Chair (TLCF) Mike Sandal, Vice Chair Lance Gaebe, Commissioner of Trust Lands Mike Gessner, TFFR Board Rob Lech, TFFR Board Mel Olson, TFFR Board Yvonne Smith, PERS Board Cindy Ternes, WSI designee Kim Wassim, PERS Board
MEMBERS ABSENT:	Adam Hamm, Insurance Commissioner Kelly Schmidt, State Treasurer Tom Trenbeath, PERS Board
STAFF PRESENT:	Connie Flanagan, Fiscal & Invt Ops Mgr Bonnie Heit, Assist to the SIB David Hunter, ED/CIO Bradley Kasper, Intern Fay Kopp, Dep ED/CRA Terra Miller Bowley, Supvr Audit Services Cody Schmidt, Compliance Officer Susan Walcker, Invt Acct
GUESTS PRESENT:	Mike Burton, TFFR Board Jeanna Cullins, Aon Hewitt Jeff Engleson, Dept. of Trust Lands Levi Erdmann, Dept. of Trust Lands Toni Gumeringer, TFFR Board Lynn Hart, HRMS Bryan Kilpfel, WSI Jan Murtha, Attorney General's Office Bryan Reinhardt, PERS

CALL TO ORDER:

Mr. Mike Sandal, Vice Chair, called the State Investment Board (SIB) meeting to order at 8:37 a.m. on Friday, July 22, 2016, at Bismarck State College, National Energy Center of Excellence, Bismarck, ND.

AGENDA:

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MS. TERNES AND CARRIED ON A VOICE VOTE TO ACCEPT THE AGENDA FOR THE JULY 22, 2016, MEETING AS DISTRIBUTED.

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

MINUTES:

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. OLSON AND CARRIED ON A VOICE VOTE TO ACCEPT THE MAY 27, 2016, MINUTES AS DISTRIBUTED.

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

AUDIT COMMITTEE MEMBERSHIP:

RIO requested the reappointment of the following Audit Committee members for the period of July 1, 2016 – June 30, 2017: Ms. Rebecca Dorwart, Ms. Cindy Ternes, Mr. Mike Sandal, and Mr. Michael Gessner. Staff also recommended that Mr. Joshua Wiens be appointed as a new member of the Audit Committee to replace the position previously held by Ms. Karol Riedman, who no longer wishes to serve on the Committee.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE MEMBERSHIP OF THE STATE INVESTMENT BOARD AUDIT COMMITTEE FOR THE PERIOD OF JULY 1, 2016 THROUGH JUNE 30, 2017.

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

INVESTMENTS:

Public Employees Retirement System (PERS) – PERS recently conducted an asset liability study and RIO personnel recommended approval of their revised investment policy statement, which reflects a revised asset allocation in which equity and fixed income are increased by 1% each and real assets and cash are both reduced by 1%.

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE PERS INVESTMENT POLICY STATEMENT AS DISTRIBUTED.

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

Legacy Fund and Budget Stabilization Funds – RIO personnel recommended the approval of revised investment policy statements for the Legacy Fund and Budget Stabilization Fund. The revised policies incorporate the previously discussed transfer of the Bank of North Dakota Match Loan CD Program to the Legacy Fund from the Budget Stabilization Fund. The governing bodies of the Legacy Fund and Budget Stabilization Fund approved the recommendations on June 15, 2016.

IT WAS MOVED BY MS. TERNES AND SECONDED BY COMMISSIONER GAEBE AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE LEGACY FUND AND BUDGET STABILIZATION INVESTMENT POLICY STATEMENTS AS DISTRIBUTED.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, MR. LECH, MR. OLSON, MS. WASSIM, MR. SANDAL, AND MS. TERNES
NAY: NONE
MOTION CARRIED

ABSENT: TREASURER SCHMIDT, COMMISSIONER HAMM, AND LT. GOVERNOR WRIGLEY

GOVERNANCE:

Code of Conduct – The SIB was provided a copy of their Governance Process Policy B-8, Board Members' Code of Conduct. As outlined in the policy, board members are annually required to affirm their understanding of the policy by signing and dating the acknowledgement.

Investment Manager Catalog – Board members were provided a separate listing of each of the current investment managers and their mandates as well as closed accounts.

Planning Cycle/Meeting Schedule – The board was provided a planning calendar for Fiscal Years 2016 and 2017, the 2016-17 meeting schedule, and board education plan for 2016-17 for planning and reference purposes. Discussion was held on bringing the Callan College to a future board meeting. The Board concurred to bring the Callan College to either the February or the March 2017 meetings. Mr. Hunter will coordinate with Callan personnel.

Strategic Investment Beliefs – Mr. Hunter reviewed RIO's mission statement and the 2015-17 strategic investment plan.

Governance Education – Ms. Jeanna Cullins, Partner-Fiduciary Services Practice, Aon Hewitt Investment Consulting, presented an educational session on board governance and governance models.

The Board recessed at 10:35 a.m. and reconvened at 10:45 a.m.

GOVERNANCE:

Open Records – Ms. Murtha presented an educational segment on North Dakota open meetings laws.

Lt. Governor Wrigley participated by teleconference at 10:47 a.m.

The Board discussed election of officers for the period of July 1, 2016 – June 30, 2017. After discussion,

IT WAS MOVED BY COMMISSIONER GAEBE AND SECONDED BY MS. TERNES AND CARRIED BY A ROLL CALL VOTE TO CONTINUE WITH LT. GOVERNOR WRIGLEY AS CHAIR AND MR. SANDAL AS VICE CHAIR FOR THE PERIOD OF JULY 1, 2016 THROUGH JUNE 30, 2017.

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

Lt. Governor Wrigley reappointed Mr. Lech as Parliamentarian for the period of July 1, 2016 – June 30, 2017.

Lt. Governor Wrigley exited the meeting at 10:57 a.m.

Ms. Murtha continued with her presentation on open records.

INVESTMENTS:

Private Equity – Mr. Hunter stated RIO personnel would begin to implement the revised asset allocations to private equity for PERS and Teachers' Fund for Retirement (TFFR). Recently, the TFFR board approved a 6% target allocation to private equity and the PERS board approved a 7% target allocation. RIO intends to split future private equity commitments equally between Adams Street and BlackRock. The size of private equity commitments to Adams Street and BlackRock will effectively increase up to $100 million per annum because of the higher strategic asset allocations.

Mr. Hunter also informed the board RIO personnel will be proposing a new fixed income manager framework for the Pension Trust given the fixed income market climate and breadth of investment options that has evolved over the past several years. Additionally, as part of a search for alternative credit managers to diversify and enhance returns within the fixed income allocation, staff will be bringing forward finalist candidates for consideration as part of the implementation of the new framework.

Mr. Hunter also updated the board on staff's search for risk management providers that would develop and implement a comprehensive risk management solution for the SIB. Following a rigorous due diligence process for the past year and a half, staff has determined that BlackRock Solutions offers the combination of sophisticated risk analytics, data management capabilities, and advisory services that best meets RIO's technological, intellectual, and operational demands.

Litigation – Ms. Murtha updated the board on the Volkswagen Securities Fraud Litigation. The Board elected to participate in the litigation and the Emergency Commission has approved the contingency fee arrangement. The Attorney General's Office has appointed Special Assistant Attorney's General in Germany and the US firm Grant and Eisenhofer. The Attorney General's Office is in the process of finalizing the paperwork.

General Motors Litigation - The defendants group, which the SIB is a part of, filed a motion to dismiss based on the lack of notice to the defendants within the group. The motion to dismiss was denied by the bankruptcy judge. The group of defendants is in the process of filing a motion to appeal that decision.

OTHER:

The next meeting of the SIB is scheduled for August 26, 2016, at 8:30 a.m. in the Peace Garden Room at the State Capitol.

The next meeting of the SIB Audit Committee is scheduled for September 23, 2016, at 1:00 p.m. in the Peace Garden Room at the State Capitol.

ADJOURNMENT:

With no further business to come before the SIB, Mr. Sandal adjourned the meeting at 11:40 a.m.

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Mr. Mike Sandal, Vice Chair
State Investment Board

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Bonnie Heit
Assistant to the Board

AGENDA ITEM III.A.

State Investment Board

Asset and Investment Performance Overview

For the periods ended June 30, 2016

August 19, 2016

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

State Investment Board – Client Assets Under Management

Fund Name	Market Values as of 6/30/16 [1]	Market Values as of 6/30/15 [2]
Pension Trust Fund		
Public Employees Retirement System (PERS)	2,459,388,086	2,422,579,595
Teachers' Fund for Retirement (TFFR)	2,082,183,640	2,103,807,355
Job Service of North Dakota Pension		96,392,560
City of Bismarck Employees Pension	82,441,003	81,745,817
City of Grand Forks Employees Pension	57,975,758	59,232,375
City of Bismarck Police Pension	33,983,598	35,889,940
Grand Forks Park District	5,720,245	6,035,136
City of Fargo Employees Pension		1,461
Subtotal Pension Trust Fund	**4,721,692,330**	**4,805,684,242**
Insurance Trust Fund		
Workforce Safety & Insurance (WSI)	1,832,104,203	1,762,659,138
Budget Stabilization Fund	575,918,381	574,011,151
ND Tobacco Control and Prevention	54,366,538	
PERS Group Insurance Account	37,715,356	39,653,686
City of Fargo FargoDome Permanent Fund	38,782,721	41,007,046
State Fire and Tornado Fund	24,091,203	23,416,232
Petroleum Tank Release Compensation Fund	7,149,512	7,162,837
State Risk Management Fund	6,534,801	6,849,214
State Risk Management Workers Comp Fund	5,516,177	6,224,542
ND Association of Counties (NDACo) Fund	4,048,863	3,833,500
State Bonding Fund	3,296,372	3,180,023
ND Board of Medical Examiners	2,208,667	2,174,703
Insurance Regulatory Trust Fund	1,085,836	2,636,662
Bismarck Deferred Sick Leave Account	642,265	872,177
Cultural Endowment Fund	386,452	383,049
Subtotal Insurance Trust Fund	**2,593,847,347**	**2,474,063,959**
Legacy Trust Fund		
Legacy Fund	3,809,485,177	3,328,631,303
Individual Investment Accounts		
PERS Retiree Insurance Credit Fund	101,623,224	97,671,060
Job Service of North Dakota Pension	96,588,333	
Total Assets Under SIB Management	**11,323,236,411**	**10,706,050,563**

[1] *6/30/16 market values are unaudited and subject to change.*
[2] *6/30/15 market values as stated in the Comprehensive Annual Financial Report.*

- SIB client assets grew by approximately 5.8% (or $617 million) in the last year with the Legacy Fund creating the largest asset growth of $481 million primarily due to tax collections.
- The Legacy Fund generated a net investment gain of 1.06% for the year ended June 30, 2016, slightly exceeding its performance benchmark. Since inception, the Legacy Fund has generated a net annualized return of 2.78% (over the last 4.75 years) exceeding the performance benchmark of 2.05%.
- The Pension Trust posted a net return of 0.31% in the last year. During the last 5-years, the Pension Trust generated a net annualized return of 6.35%, exceeding the performance benchmark of 5.99%.
- The Insurance Trust generated a net return of 3.12% in the last year. During the last 5-years, the Insurance Trust posted a net annualized return of 4.83%, exceeding the performance benchmark of 3.81%.
- SIB client assets exceeded $11.3 billion as of June 30, 2016, based on unaudited valuations.

Investment Performance Evaluation – June 30, 2016

Investment Performance Criteria :

SIB clients should receive investment returns consistent with their investment policies and market variables (pursuant to Section D.3 of the SIB Governance Manual). **The "Ends" for investment performance is evaluated based on comparison of each client's actual rate of return (net of fees), risk levels and risk adjusted returns, versus the client's policy benchmark over 5 years.**

Pension Trust:

Every Pension Trust client posted positive Excess Returns for the 3- and 5-year periods ended June 30, 2016. For PERS, Excess Return approximated 0.59% and 0.41% over the last 3- and 5-year periods, respectively. For TFFR, Excess Return approximated 0.60% for the last 3-years and 0.59% for the last 5-years ended June 30, 2016.

For the 5-years ended June 30, 2016, PERS generated a net return of approximately 6.49%, while TFFR generated a net return of approximately 6.32%. U.S. Public Equity and Real Estate were the top two performers with net annualized returns of 11% and 13%, respectively, for the last 5-years. U.S. Fixed Income and Infrastructure also performed well with annual returns over 5% (since 6/30/2011). International Equity returns outperformed their benchmark, but underperformed long term expectations with (annualized) returns only approximating 2% (for the last 5 years). International Fixed Income, Timber and Private Equity were disappointing generating a net annual return of only 1%, 2% and 0.4%, respectively, for the last 5-years.

During the last year, PERS and TFFR generated a net investment return of approximately 0.28%. This underperformed PERS and TFFR benchmarks by 0.28% and 0.34%, respectively, largely due to our fixed income portfolio being positioned for a gradual rise in interest rates. In contrast, interest rates actually declined sharply during the past year with 10-year U.S. Treasury rates falling from 2.35% at June 30, 2015, to less than 1.5% at June 30, 2016. Two global equity managers (LSV with $428 million and Epoch with $338 million of assets under management as of June 30, 2016) also materially underperformed in the last year.

Non-Pension Trust:

Every Non-Pension Trust client generated positive Excess Return and positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2016, if applicable, with one exception for the PERS Retiree Health Insurance Credit Fund. WSI generated net returns of 6.5% over the last 5-years and 3.5% over the last year, both of which exceeded the performance benchmark. The Budget Stabilization Fund also performed well and generated above benchmark returns of 1.8% over the last year and 1.9% over the last 5-years. **Risk, as measured by standard deviation, was within approved levels for all SIB clients for the five-years ended June 30, 2016, if applicable.**

Actual asset allocations are within Target ranges and guidelines as confirmed by Callan Associates as of June 30, 2016.

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

Pension Trust Return & Risk Summary – **June 30, 2016**

Returns and Risk: Every Pension Trust client portfolio generated positive "Excess Return" for the 3- and 5-year periods ended June 30, 2016, while adhering to prescribed risk levels (e.g. within 115% of the Policy Benchmark for the 5-years ended 6/30/2016).

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
PERS (Main Plan)					
$ 2,459,388,086					
Total Fund Return - Net	**0.28%**	**6.51%**	**6.49%**	7.7%	**0.09%**
Policy Benchmark Return	0.56%	5.92%	6.08%	7.4%	
Excess Return	**-0.28%**	**0.59%**	**0.41%**	**105%**	
TFFR					
$ 2,082,183,640					
Total Fund Return - Net	**0.27%**	**6.55%**	**6.32%**	8.2%	**0.31%**
Policy Benchmark Return	0.62%	5.95%	5.73%	7.9%	
Excess Return	**-0.34%**	**0.60%**	**0.59%**	**105%**	
BISMARCK EMPLOYEES					
$ 82,441,003					
Total Fund Return - Net	**0.82%**	**6.20%**	**6.46%**	6.7%	**0.21%**
Policy Benchmark Return	1.38%	5.66%	5.95%	6.4%	
Excess Return	**-0.56%**	**0.54%**	**0.52%**	**105%**	

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

Pension Trust Return & Risk Summary – **June 30, 2016**

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
BISMARCK POLICE					
$ 33,983,598					
Total Fund Return - Net	**0.32%**	**6.20%**	**6.52%**	7.3%	**0.24%**
Policy Benchmark Return	0.77%	5.64%	6.02%	7.0%	
Excess Return	**-0.45%**	**0.55%**	**0.50%**	**104%**	
JOB SERVICE PENSION PLAN					
$ 96,588,333					
Total Fund Return - Net	**5.45%**	**7.35%**	**7.33%**	6.0%	**1.01%**
Policy Benchmark Return	2.20%	5.48%	5.70%	5.5%	
Excess Return	**3.24%**	**1.87%**	**1.63%**	**109%**	
CITY OF GRAND FORKS PENSION PLAN					
$ 57,975,758					
Total Fund Return - Net	**0.11%**	**6.44%**	**6.80%**	7.9%	**0.14%**
Policy Benchmark Return	0.56%	6.03%	6.42%	7.7%	
Excess Return	**-0.45%**	**0.41%**	**0.38%**	**104%**	
GRAND FORKS PARK DISTRICT PENSION PLAN					
$ 5,720,245					
Total Fund Return - Net	**0.36%**	**6.80%**	**7.05%**	8.1%	**-0.09%**
Policy Benchmark Return	0.51%	6.33%	6.75%	7.6%	
Excess Return	**-0.15%**	**0.47%**	**0.29%**	**106%**	

Risk Adjusted Excess Returns for the 5-years ended June 30, 2016, were positive for all Pension Trust clients with one exception (of -0.09%) for the Grand Forks Park District Plan (which still generated 0.29% of Excess Return over the past five-years).

Risk Adjusted Excess Return measures actual portfolio results versus a benchmark adjusted by its risk relative to a benchmark portfolio. This metric is positive if excess returns are due to "smart" investment decisions or negative if driven by excess risk.

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

Non-Pension Trust Return & Risk Summary – **June 30, 2016**

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016 (within 1%)	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
WSI					
$ 1,832,104,203					
Total Fund Return - Net	**3.58%**	**6.12%**	**6.56%**	**3.9%**	**0.62%**
Policy Benchmark Return	3.42%	5.29%	4.99%	**3.3%**	
Excess Return	**0.16%**	**0.83%**	**1.57%**		
LEGACY FUND			*4.75 Yrs Ended 6/30/2016*		
$ 3,809,485,177					
Total Fund Return - Net	**1.06%**	**3.65%**	*2.78%*		
Policy Benchmark Return	1.01%	3.06%	*2.05%*		
Excess Return	**0.04%**	**0.59%**	*0.73%*		
BUDGET STABILIZATION					
$ 575,918,381					
Total Fund Return - Net	**1.82%**	**1.88%**	**1.91%**	**0.7%**	**0.56%**
Policy Benchmark Return	1.50%	0.96%	0.69%	**0.5%**	
Excess Return	**0.33%**	**0.92%**	**1.21%**		
FIRE & TORNADO FUND					
$ 24,091,203					
Total Fund Return - Net	**2.67%**	**6.10%**	**6.75%**	**5.3%**	**0.35%**
Policy Benchmark Return	2.58%	5.20%	5.24%	**4.4%**	
Excess Return	**0.09%**	**0.90%**	**1.51%**		

Returns and Risk: All but one Non-Pension Trust client generated positive Excess Return and Risk Adjusted Excess Return for the 5-year period ended June 30, 2016 (if applicable). These returns were achieved while adhering to reasonable risk levels which were generally 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.

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

Non-Pension Trust Return & Risk Summary – **June 30, 2016**

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
STATE BONDING FUND					
$ 3,296,372					
Total Fund Return - Net	**3.48%**	**2.92%**	**3.40%**	**1.9%**	**0.95%**
Policy Benchmark Return	3.35%	2.26%	2.10%	**1.7%**	
Excess Return	**0.13%**	**0.66%**	**1.30%**		
INSURANCE REGULATORY TRUST FUND (IRTF)					
$ 1,085,836					
Total Fund Return - Net	**1.46%**	**4.38%**	**4.87%**	**4.5%**	**0.27%**
Policy Benchmark Return	1.40%	3.86%	3.91%	**3.8%**	
Excess Return	**0.06%**	**0.52%**	**0.96%**		
PETROLEUM TANK RELEASE COMPENSATION FUND					
$ 7,149,512					
Total Fund Return - Net	**3.17%**	**2.66%**	**3.06%**	**1.6%**	**0.88%**
Policy Benchmark Return	3.06%	2.06%	1.92%	**1.5%**	
Excess Return	**0.11%**	**0.60%**	**1.14%**		
STATE RISK MANAGEMENT FUND					
$ 6,534,801					
Total Fund Return - Net	**4.46%**	**6.88%**	**7.68%**	**4.8%**	**0.24%**
Policy Benchmark Return	4.26%	5.89%	5.97%	**3.9%**	
Excess Return	**0.20%**	**0.98%**	**1.72%**		

SIB Client Commentary:

The State Bonding Fund, Insurance Regulatory Trust Fund, Petroleum Tank Release Compensation Fund, and State Risk Management Fund have all posted positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2016, including Excess Returns of 0.96% or more.

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

Non-Pension Trust Return & Risk Summary – **June 30, 2016**

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
STATE RISK MANAGEMENT WORKERS COMP FUND					
$ 5,516,177					
Total Fund Return - Net	**4.21%**	**7.40%**	**8.23%**	**5.7%**	**0.34%**
Policy Benchmark Return	4.01%	6.44%	6.58%	**4.7%**	
Excess Return	**0.20%**	**0.96%**	**1.65%**		
ND ASSOCIATION OF COUNTIES FUND (NDACo)					
$ 4,048,863					
Total Fund Return - Net	**2.76%**	**5.63%**	**5.58%**	**5.5%**	**0.51%**
Policy Benchmark Return	2.67%	4.75%	4.13%	**4.6%**	
Excess Return	**0.09%**	**0.88%**	**1.45%**		
CITY OF BISMARCK DEFERRED SICK LEAVE ACCOUNT					
$ 642,265					
Total Fund Return - Net	**3.26%**	**6.10%**	**6.75%**	**4.8%**	**0.27%**
Policy Benchmark Return	3.13%	5.08%	5.05%	**3.8%**	
Excess Return	**0.13%**	**1.02%**	**1.71%**		
FARGODOME PERMANENT FUND					
$ 38,782,721					
Total Fund Return - Net	**1.19%**	**6.76%**	**7.32%**	**7.6%**	**0.59%**
Policy Benchmark Return	1.03%	5.95%	6.03%	**6.8%**	
Excess Return	**0.15%**	**0.82%**	**1.29%**		

SIB Client Commentary:

The State Risk Management Workers Compensation Fund, North Dakota Association of Counties, City of Bismarck Deferred Sick Leave Account and FargoDome Permanent Fund have all posted positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2016, including Excess Returns of 1.29% or more.

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

Non-Pension Trust Return & Risk Summary – **June 30, 2016**

	1 Yr Ended 6/30/2016	3 Yrs Ended 6/30/2016	5 Yrs Ended 6/30/2016	Risk 5 Yrs Ended 6/30/2016	Risk Adj Excess Return 5 Yrs Ended 6/30/2016
CULTURAL ENDOWMENT FUND					
$ 386,452					
Total Fund Return - Net	**2.18%**	**7.94%**	**8.74%**	**8.0%**	**0.46%**
Policy Benchmark Return	2.13%	7.14%	7.38%	**7.2%**	
Excess Return	**0.05%**	**0.80%**	**1.36%**		
BOARD OF MEDICAL EXAMINERS					
$ 2,208,667					
Total Fund Return - Net	**1.63%**				
Policy Benchmark Return	1.32%				
Excess Return	**0.31%**				
PERS RETIREE HEALTH					
$ 101,623,224					
Total Fund Return - Net	**0.72%**	**6.55%**	**6.94%**	**8.6%**	**-0.80%**
Policy Benchmark Return	1.60%	6.97%	7.11%	**7.8%**	
Excess Return	**-0.88%**	**-0.42%**	**-0.17%**		
PERS GROUP INSURANCE					
$ 37,715,356					
Total Fund Return - Net	**1.49%**	**0.51%**	**0.41%**	**0.5%**	**0.04%**
Policy Benchmark Return	1.56%	0.54%	0.36%	**0.5%**	
Excess Return	**-0.07%**	**-0.03%**	**0.05%**		

SIB Client Specific Commentary:

The Cultural Endowment Fund has generated the highest absolute level of net investment returns (of 8.7%) over the last 5-years.

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

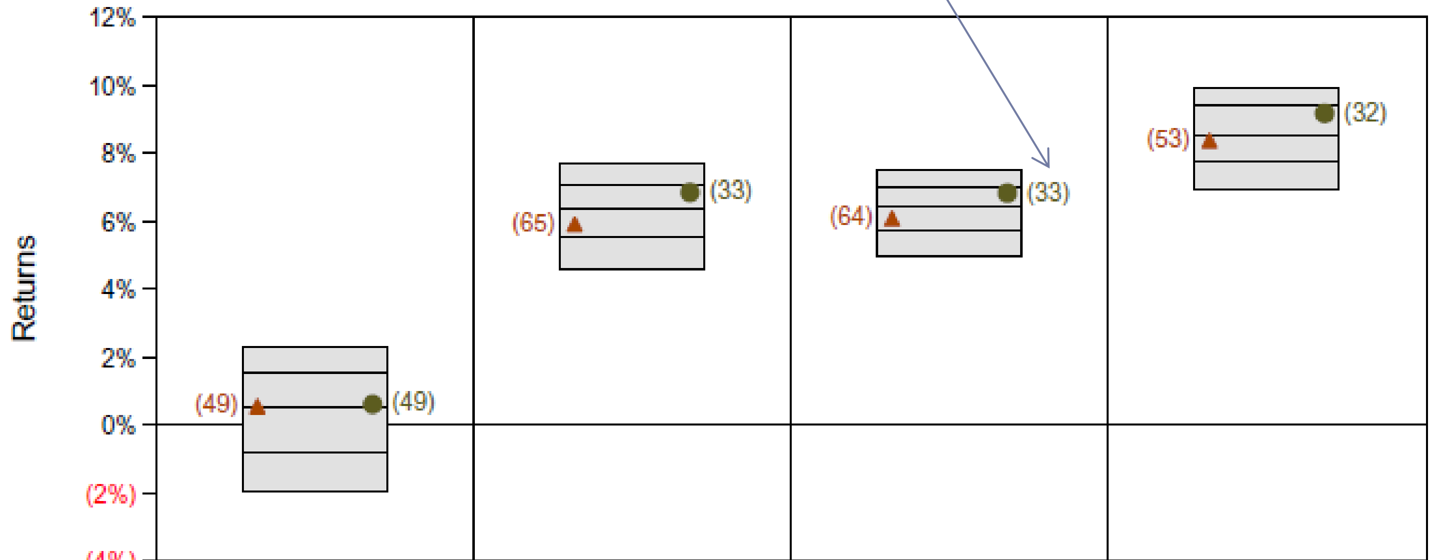
PERS Retiree Health absolute returns have been reasonable the last 5-years (6.94%) but disappointing on a risk adjusted basis.(-0.80%). We are re-examining SEI's benchmarks and risk and return profile.

RIO implemented a new asset allocation policy for PERS Group Insurance in late-2105 to enhance returns and lower fees.

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

PERS "gross" returns were ranked in the 33rd percentile for the 5-years ended June 30, 2016, based on Callan's "Public Fund Sponsor Database".

CAI Public Fund Sponsor Database

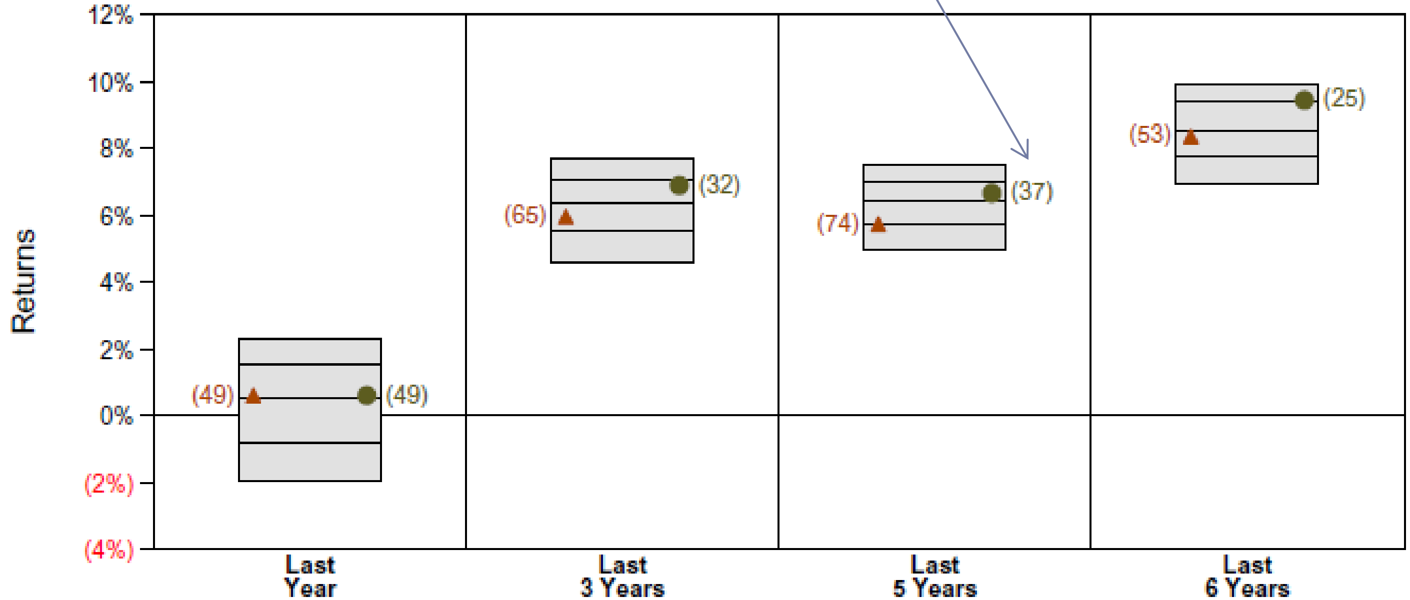


	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.31	7.70	7.53	9.95
25th Percentile	1.56	7.06	7.02	9.39
Median	0.54	6.39	6.42	8.53
75th Percentile	(0.81)	5.51	5.70	7.77
90th Percentile	(1.97)	4.57	4.94	6.96
Total Fund ●	0.61	6.84	6.82	9.17
Policy Target ▲	0.56	5.91	6.08	8.37

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

TFFR's "gross" returns were ranked in the 37th percentile for the 5-years ended June 30, 2016, based on Callan's "Public Fund Sponsor Database".

CAI Public Fund Sponsor Database



	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.31	7.70	7.53	9.95
25th Percentile	1.56	7.06	7.02	9.39
Median	0.54	6.39	6.42	8.53
75th Percentile	(0.81)	5.51	5.70	7.77
90th Percentile	(1.97)	4.57	4.94	6.96
Total Fund ●	0.61	6.89	6.66	9.44
Policy Target ▲	0.61	5.95	5.73	8.36

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

SIB Fee Reduction Initiatives – Callan, RIO, Novarca & Northern Trust

In recent years, the SIB has approved several important fee reduction initiatives including the following:

1. In 2010, 2012 and 2014, **Callan** was engaged to perform comprehensive reviews of SIB client investment fees and expenses. Callan's reviews have confirmed that the fees charged by our investment firms are reasonable on an overall basis and consistent with general industry levels.
2. Since 2012, **RIO** staff and the SIB have worked to streamline our manager line-up in order to increase negotiating leverage with our strategic partners. The impressive growth of the Legacy Fund has played a critical role in enhancing our negotiating position.
3. In 2015, the SIB engaged **Novarca** to perform an in-depth review of individual manager fee levels including Transaction Pattern Analysis of security trading levels. Thus far, Novarca has reviewed 51% of our investment managers and identified over $200,000 in net fee savings, while making RIO aware of certain strategies which may be more susceptible to additional cost savings initiatives.
4. In 2015, the SIB engaged **Northern Trust** to implement a conservative securities lending program. This initiative will likely generate over $1.2 million of incremental income in the current fiscal year.
5. In 2016, JPMorgan intends to reduce certain real asset management fees by over 20% based on anticipated capital contributions which is expected to generate $1 million of incremental fee savings.

Impact: Net Returns Enhanced by over $30 million between June 30, 2013 and June 30, 2015

SIB client fees declined from **0.65%** in fiscal 2013 to **0.47%** for the year ended June 30, 2015. This **0.17%** decline in fees translates into $17 million of annual incremental income for our SIB clients (based on $10 billion of assets under management). Although current year data is not yet final, RIO is striving to reduce overall SIB client investment management fees to **0.45%** for the fiscal year ended June 30, 2016.

Board Action Requested

Callan Fee Study and Class Action Claims Filing Review

SIB Governance Policy D-1 on Ends states that "SIB clients receive investment returns … in a cost effective manner …" and SIB Policy E-1 on Investment Fiduciary Duties states that "investment expenses must be controlled". As consistent with prior years, **RIO requests the SIB engage Callan to conduct a review of our investment manager fee levels for the fiscal year ended June 30, 2016.** RIO notes the existing Callan contract includes two projects every fiscal year and the proposed fee study will represent one of these two projects for the current fiscal year. In the interim, RIO will continue to work with our existing investment managers on various fee reduction initiatives. This includes an expansion of the Novarca contract to additional investment managers and maintaining our recently implemented securities lending program.

RIO also requests the SIB to engage Financial Recovery Technologies ("FRT"), Institutional Shareholder Services ("ISS") and/or Broadridge Investor Communication Services ("Broadridge") to perform a review of our existing class action claims filing review process performed by our custodian, Northern Trust. RIO has no reason to believe that Northern Trust has failed to perform in any material manner. In contrast, Callan's most recent review of Northern Trust's operations confirmed that Northern Trust provides a high level of service quality to RIO at a reasonable cost. Similar to Novarca's ongoing review of our existing investment manager fee levels, RIO deems it prudent to engage another third party to review Northern Trust's class action claims filing review process on a contingency fee basis. In the event a third party is unable to generate any realized cash proceeds, there is no material incremental cost other than the administrative cost of entering into a contingency fee agreement. In the event FRT, ISS or Broadridge is able to realize incremental cash proceeds from its claim filing review process, they will be entitled to 20% of the incremental realized cash proceeds (subject to an agreed upon cap). As example, if FRT identifies $100,000 of additional realized cash proceeds, SIB clients will benefit by $80,000 and FRT will receive $20,000. This proposal has been discussed with Northern Trust who expressed no material concerns. RIO also notes that Bo Abesamis, Senior Vice President and Manager of Callan's Master Trust, Global Custody & Securities Lending Group, raised no material concerns (other than recommending a cap).

Summary - The SIB is requested to approve RIO's recommendation to: 1) engage Callan to perform a fee study to confirm the overall reasonableness of SIB client investment management expenses; and 2) engage a third party servicer to perform a review of Northern Trust's class action claims filing process subject to negotiation of satisfactory legal documentation.

Investment Work Plan (Informational Update) – August 19, 2016

Pension Trust:

1. Conduct annual investment performance and policy statement reviews for all Pension Trust clients;
2. Implement asset allocation policy changes recently approved by the SIB client boards in a diligent, prudent and timely manner;
3. **Continue to review our overall fixed income allocation including our international debt, unconstrained bond and mortgage backed securities mandates in light of the long-anticipated raising interest rate environment;**
4. Complete board approved equity manager transitions (e.g. U.S. Small Cap, Private and International) while considering the merits of reverse inquiries relating to non-strategic, private strategies and implementing board approved litigation monitoring policies; and
5. Implement de-risking strategies as approved by the SIB and SIB client boards (e.g. Job Service).

Legacy and Insurance Trusts:

1. Conduct annual investment performance and policy statement reviews (WSI, Legacy & Budget Stabilization have been scheduled);
2. **Assist the SIB and Legacy and Budget Stabilization Advisory Board prepare for potential liquidity needs within the Budget Stabilization Fund while continuing a review of our fixed income strategies in light of the long-anticipated raising interest rate environment; and**
3. Complete board approved equity manager transitions while considering the merits of reverse inquiries relating to non-strategic, private strategies and implementing SIB approved litigation monitoring policy.

Strategic Investment Plan:

1. **Remain steadfast in our commitment to continuing education (e.g. investment conferences and capital market updates) while raising awareness of other governance models (e.g. governance retreat in July of 2016);**
2. **Enhance transparency and understanding of our core goals and beliefs by easing public website access while promoting the benefits of active management ($200+ million for the 5-years ended June 30, 2016);**
3. **Heighten employee engagement by promoting an open and collaborative work environment while improving compensation levels particularly for RIO team members with more than 15-to-25 years of service;**
4. **Strengthen professional relationships with existing SIB clients, local organizations and legislative leaders;**
5. **Enhance risk management by using proven institutional grade risk management tools (i.e. a robust risk management framework provides a foundation to understand downside risks and the ability to withstand market corrections); and**
6. **Expand the efficient use of technology within RIO to enhance overall effectiveness while becoming fully staffed within our IT team**.

Callan

August 26, 2016

North Dakota
State Investment Board

Performance Evaluation
as of June 30, 2016

Paul Erlendson
Senior Vice President

Alex Browning
Vice President

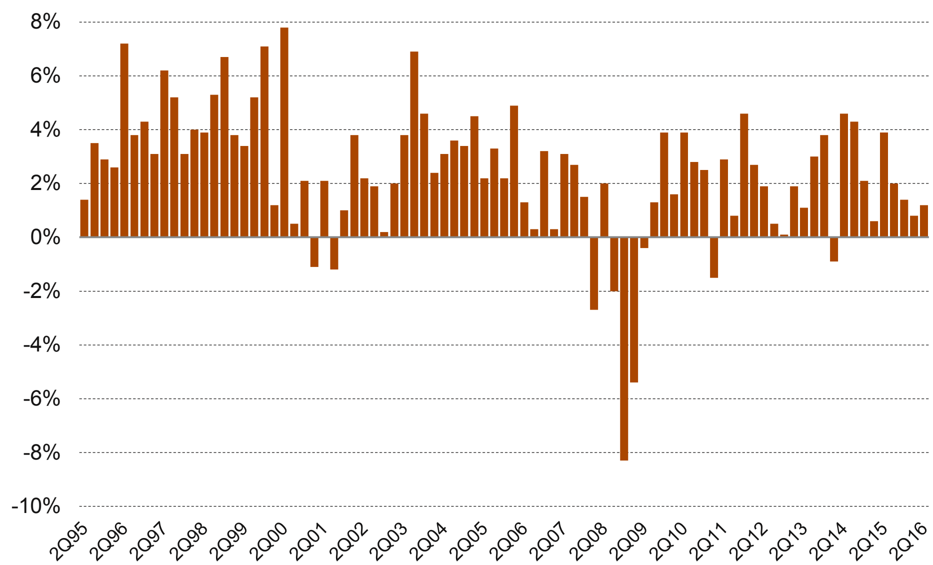
Agenda

- Review economic and market environment for periods ended June 30, 2016
- Pension Trust Quarterly Review
  - Results and Observations
- Insurance Trust Quarterly Review
  - Results and Observations

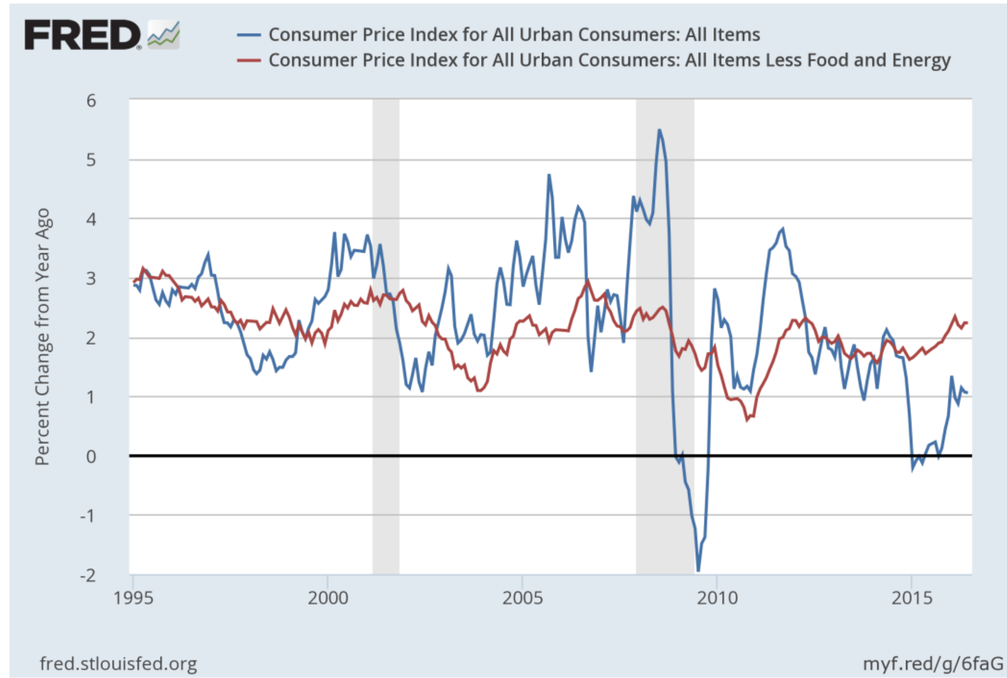
U.S. Economy

Periods Ending June 30, 2016

Quarterly Real GDP Growth (20 Years)



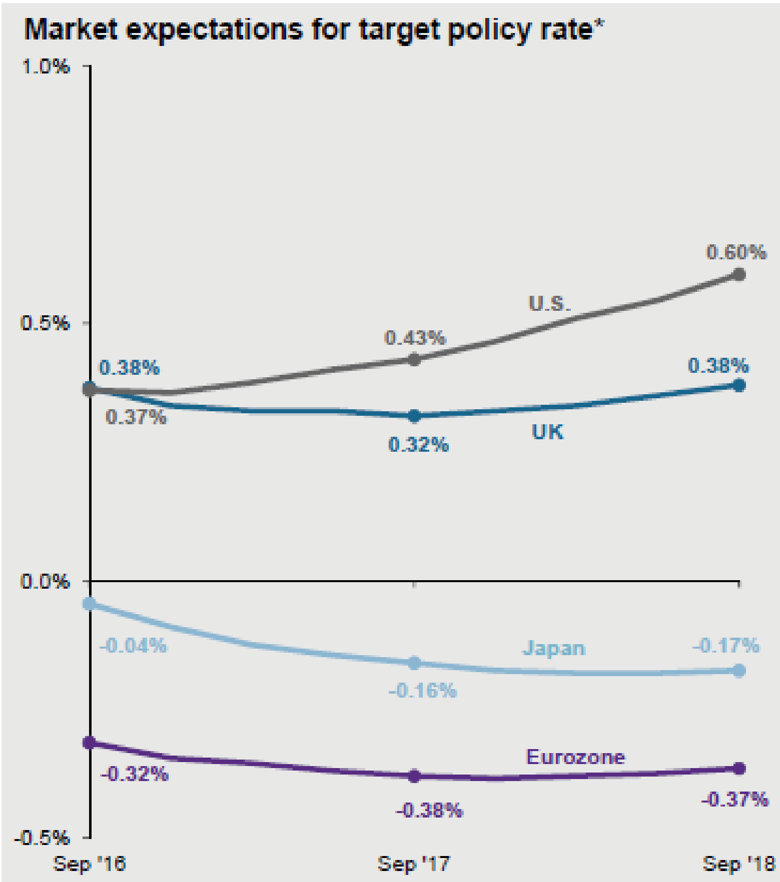
Source: Bureau of Economic Analysis

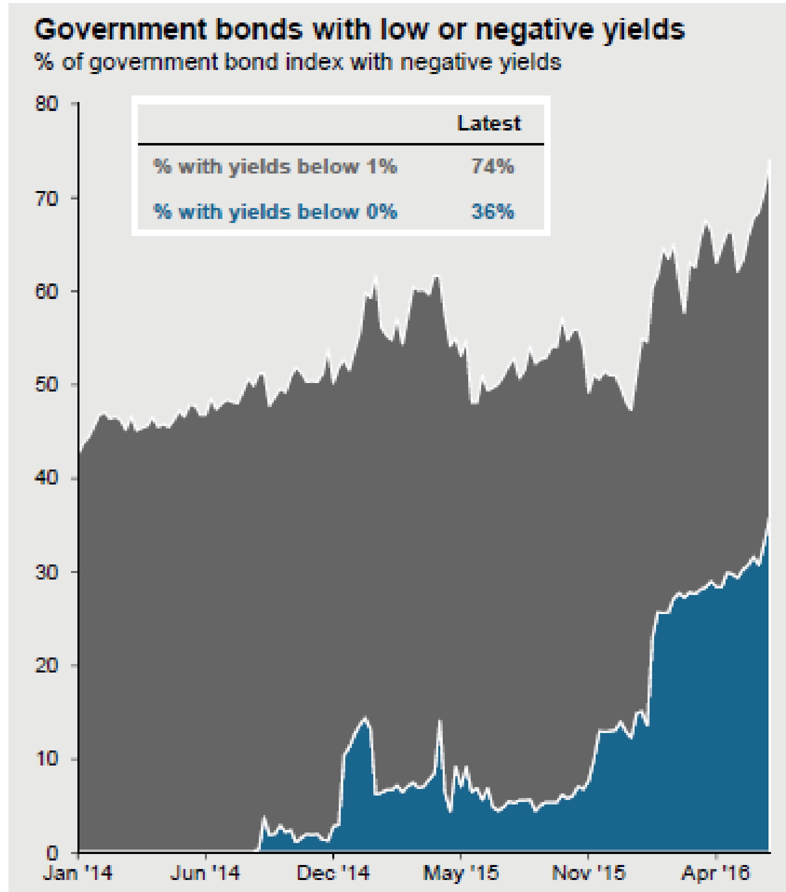


Source: Bureau of Labor Statistics

- Initial estimate of second quarter GDP came out at 1.2%, up from a first quarter reading of 0.8%.
- June headline inflation rose 1.0% over the trailing twelve months. Core CPI Increased 2.3%.
- June unemployment was 4.9% (down 0.1% from March) and the labor force participation rate dropped to 62.7% (down 0.3%).
- The Fed maintained a target rate of 0.25% - 0.50%.

Global Rate Expectations and Current Environment



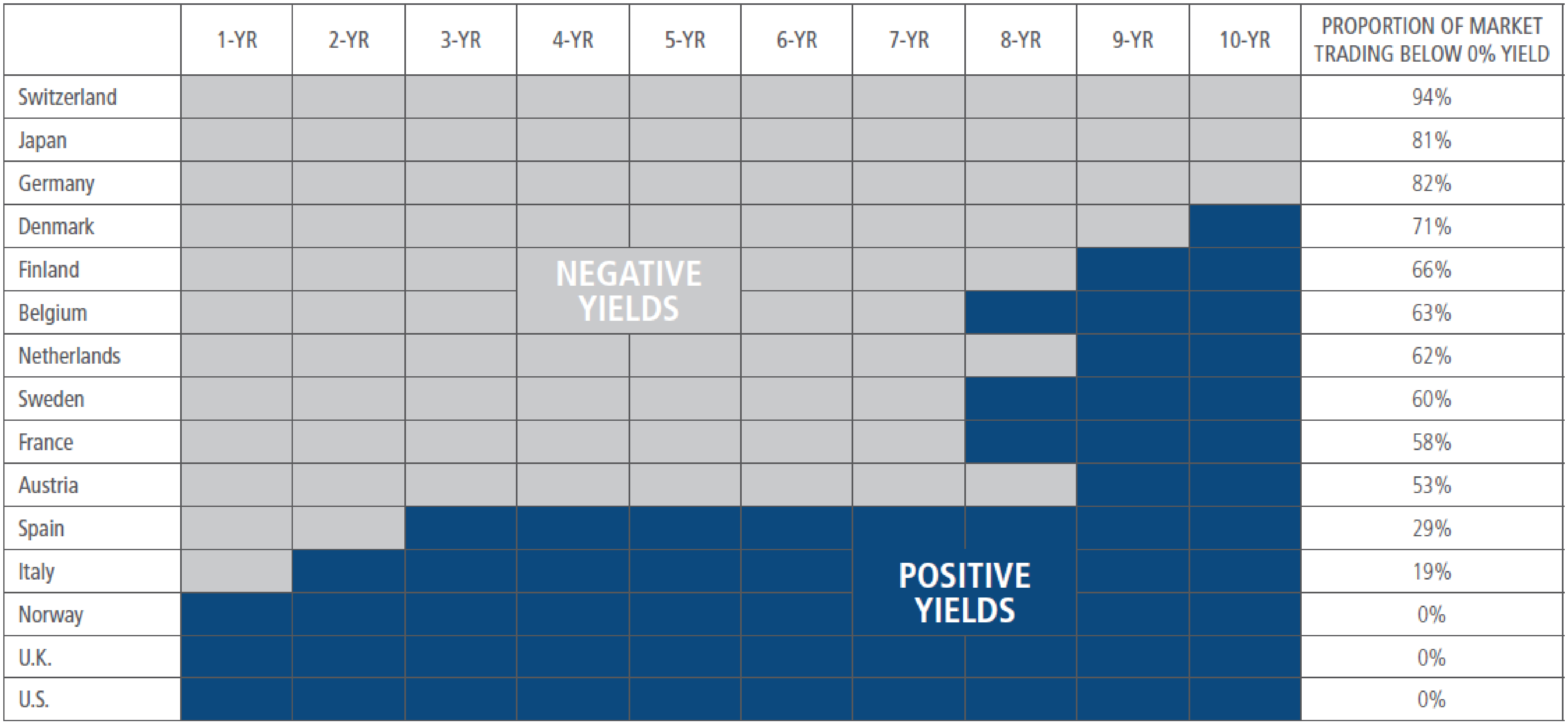


* Target policy rates for Japan are estimated using EuroYen 3-month futures contracts less a 6 bps risk premium.

Sources: JP Morgan, Guide to the Markets, June 30, 2016. Bank of America / Merrill Lynch Global Government Bond Index

Increasing Volume of Global Bonds Have Negative Yields

German bonds dipped below zero interest rates in June, 2016

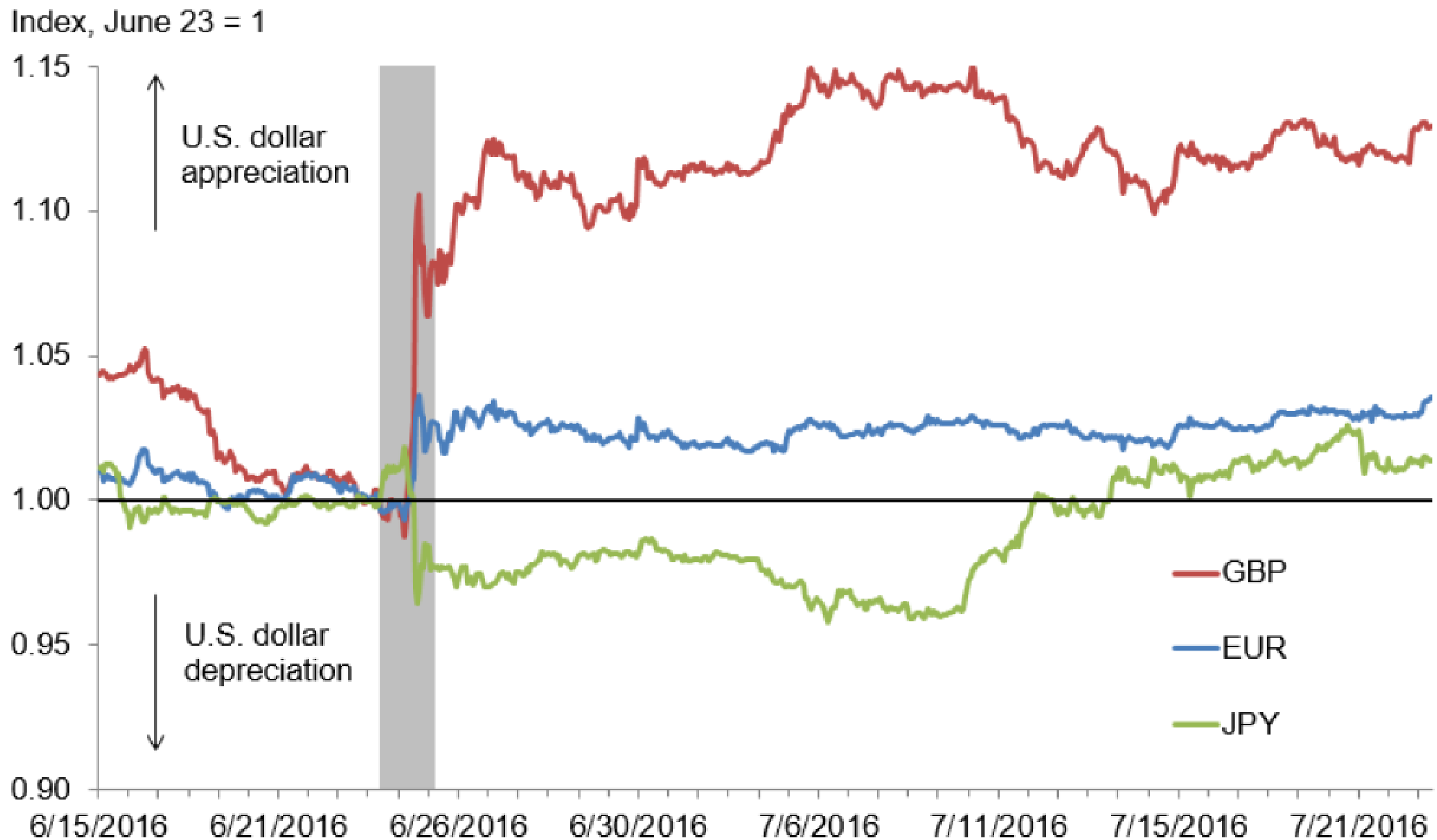


Sources: Neuberger Berman; Bloomberg. Data as of 5/31/16.

- Negative yields tended to be the province of sovereign issuers. However, some European credit bonds have begun to yield less than zero as they are part of the ECB's asset purchase program.
- Approximately $11 Trillion (that's 11,000 billions) of global government debt has negative yields.

Impact of Brexit on U.S. Dollar

Brexit vote uncertainty led to turbulent foreign exchange markets



Sources: Dallas Federal Reserve and Bloomberg

Note: The start date is 10 a.m. June 15, 2016. Shaded bar represents the time between the Brexit vote and final results. Currencies used are the British pound (GBP), the Euro (EUR) and Japanese Yen (JPY).

Asset Class Performance

Periodic Table of Investment Returns
for Periods Ended June 30, 2016

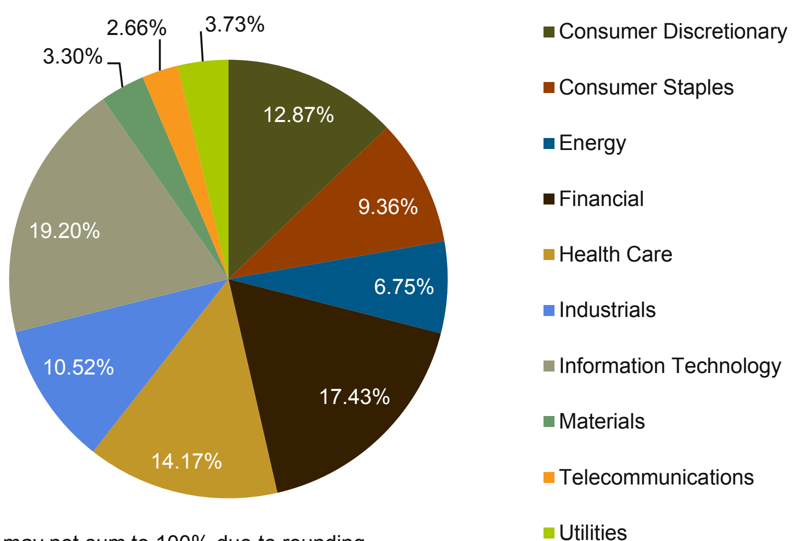
Best → Worst

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
BLMBRG:Commdty Idx **12.7%**	Barclays:Aggregate Index 6.0%	S&P:500 11.7%	S&P:500 12.1%	S&P:500 7.4%
Russell:2000 Index 3.8%	S&P:500 4.0%	Russell:2000 Index 7.1%	Russell:2000 Index 8.4%	Russell:2000 Index 6.2%
S&P:500 2.5%	3 Month T-Bill 0.2%	Barclays:Aggregate Index 4.1%	Barclays:Aggregate Index 3.8%	Barclays:Aggregate Index 5.1%
Barclays:Aggregate Index 2.2%	Russell:2000 Index (6.7%)	MSCI:EAFE 2.1%	MSCI:EAFE 1.7%	MSCI:EM Gross 3.9%
MSCI:EM Gross 0.8%	MSCI:EAFE (10.2%)	3 Month T-Bill 0.1%	3 Month T-Bill 0.1%	MSCI:EAFE 1.6%
3 Month T-Bill 0.1%	MSCI:EM Gross (11.7%)	MSCI:EM Gross (1.2%)	MSCI:EM Gross (3.4%)	3 Month T-Bill 1.0%
MSCI:EAFE (1.5%)	BLMBRG:Commdty Idx **(13.5%)**	BLMBRG:Commdty Idx **(10.6%)**	BLMBRG:Commdty Idx **(10.9%)**	BLMBRG:Commdty Idx **(6.5%)**

U.S. Equity Returns

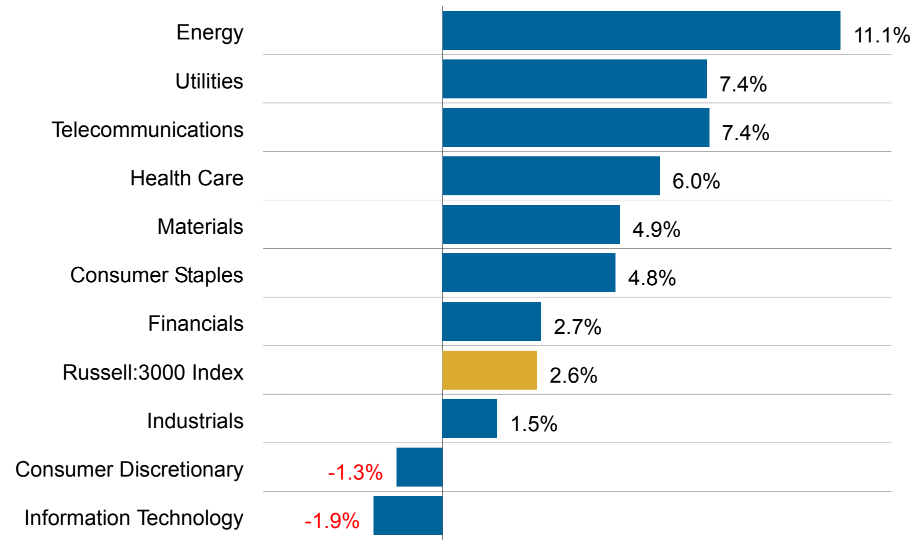
Periods Ending June 30, 2016

Economic Sector Exposure (Russell 3000)



Pie chart may not sum to 100% due to rounding
Source: Russell Investment Group

Quarterly Returns (Russell 3000)



- Sectors with low foreign earnings and high yield outperformed. Energy rebounded.
- The RU 1000 was up 2.5% - high P/E, low quality and low beta were the best performing factors.
  - Best performing sector: Energy (+11.1%); Worst: Information Technology (-2.3%).
- The RU 2000 was up 3.8% - high P/E, low quality and low beta were the best performing factors.
  - Best performing sectors: Utilities (+10.3%) and Materials (+10.2%); Worst: Consumer Discretionary (-1.4%)

U.S. Equity Style Returns

Periods Ending June 30, 2016

	2Q 2016		
	Value	Core	Growth
Large	4.6%	2.5%	0.6%
Mid	4.8%	3.2%	1.6%
Small	4.3%	3.8%	3.2%

	Annualized 1 Year Returns		
	Value	Core	Growth
Large	2.9%	2.9%	3.0%
Mid	3.3%	0.6%	-2.1%
Small	-2.6%	-6.7%	-10.8%

Represents 3 best performing asset classes in time period

Represents 3 middle performing asset classes in time period

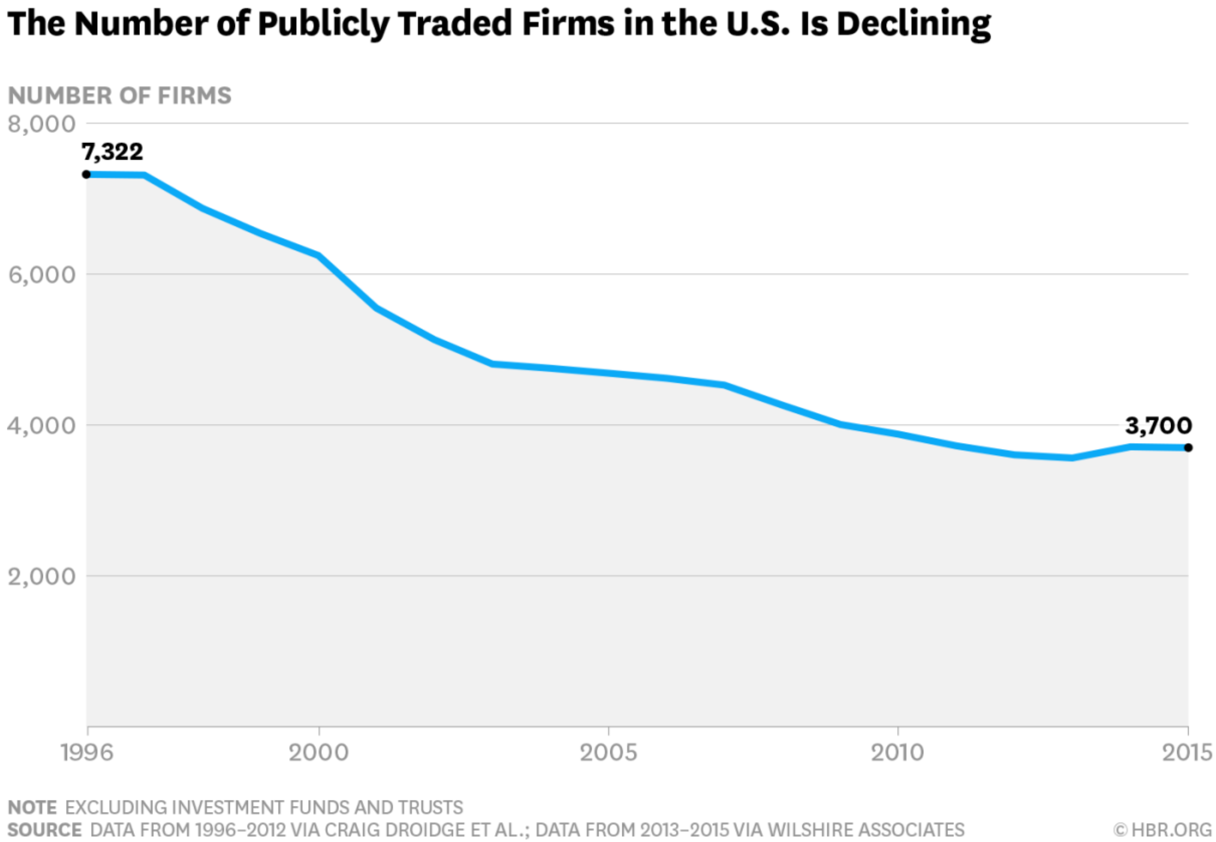
Represents 3 worst performing asset classes in time period

- Last Quarter: Size mixed; value outperformed
- Last Year: Small cap underperformed; style mixed

Large Cap Core is represented by the Russell 1000 Index, Large Cap Value is represented by the Russell 1000 Value Index and Large Cap Growth is represented by the Russell 1000 Growth Index. Mid Cap Core is represented by the Russell Midcap Index, Mid Cap Value is represented by the Russell Midcap Value Index and Mid Cap Growth is represented by the Russell Midcap Growth Index. Small Cap Core is represented by the Russell 2000 Index, Small Cap Value is represented by the Russell 2000 Value Index and Small Cap Growth is represented by the Russell 2000 Growth Index.

Fewer opportunities for public equity investors

The number of US listed companies is down by half since 1996



Source: "Private Equity's New Phase," Harvard Business Review, 9 August 2016

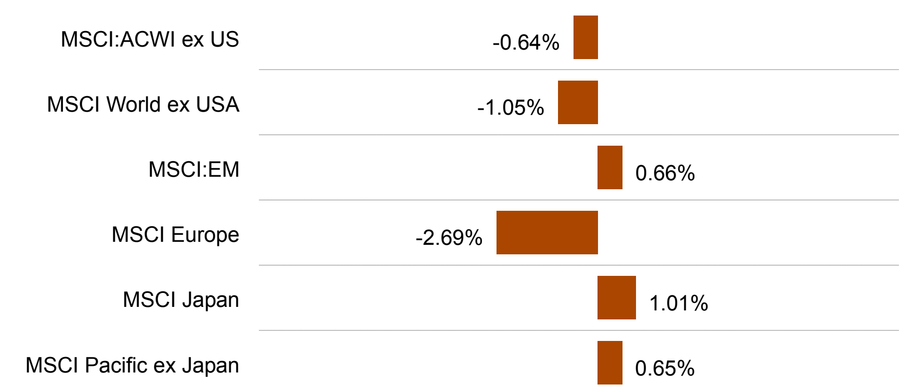
According to the authors:

- "Some of this ownership shift includes failure of firms or acquisition of firms into larger conglomerates (either domestic or foreign), but much of the de-listing shift comes from publicly traded firms becoming private."
- "A major catalyst for this shift has been private equity firms, which take companies private and incorporate them into their own portfolios."

International Equity Returns

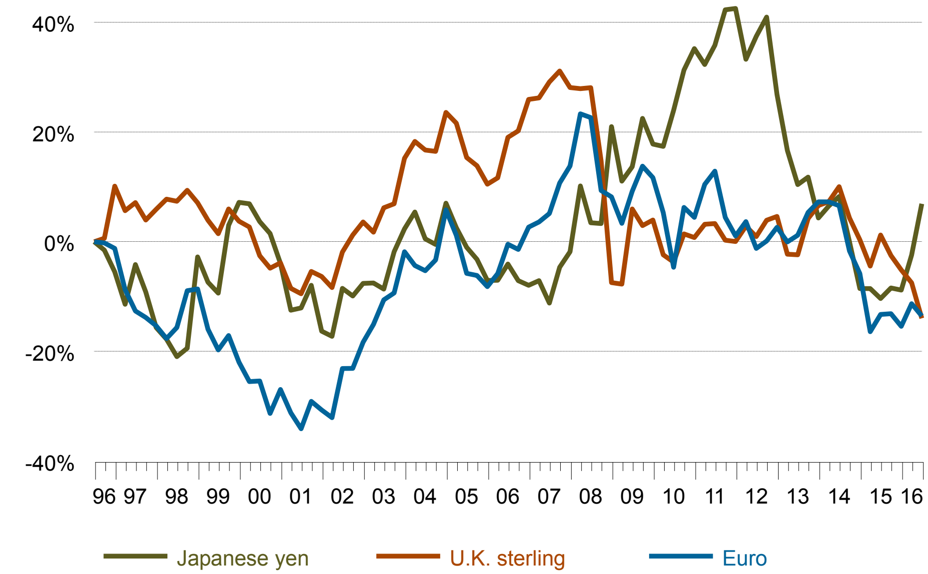
Periods Ending June 30, 2016

Regional Quarterly Performance (U.S. Dollar)



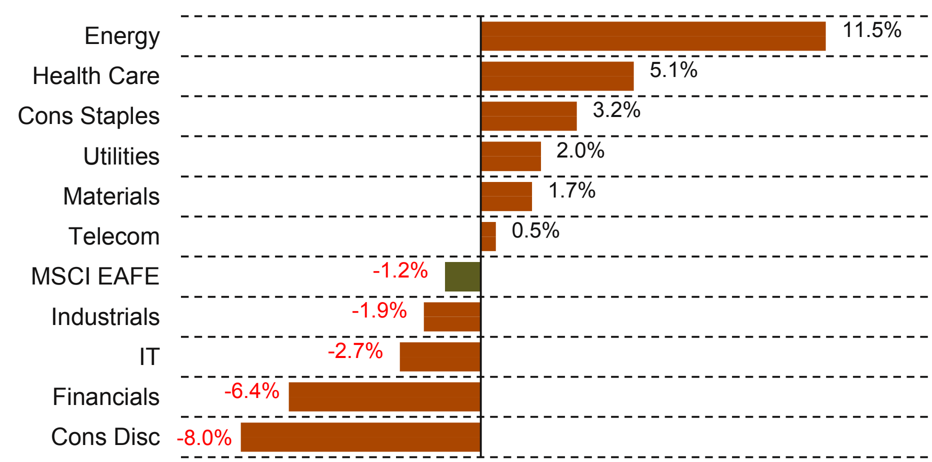
Source: MSCI

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



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

MSCI EAFE Sector Returns



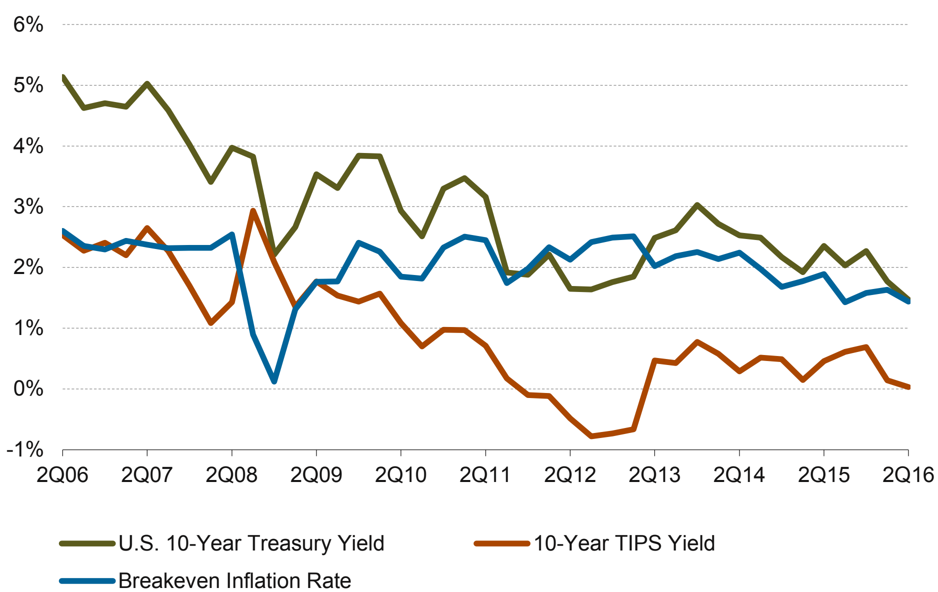
Source: Barrow Hanley Quarterly Benchmark Review

- Best performing region was Japan.
- The Yen strengthened (+9.1%) and the Euro weakened (-2.4%) vs the US Dollar.
- Sterling fell 7% coming mostly post-Brexit.
- Energy was the top sector performer in both the US and non-US markets.

Yield Curve Changes

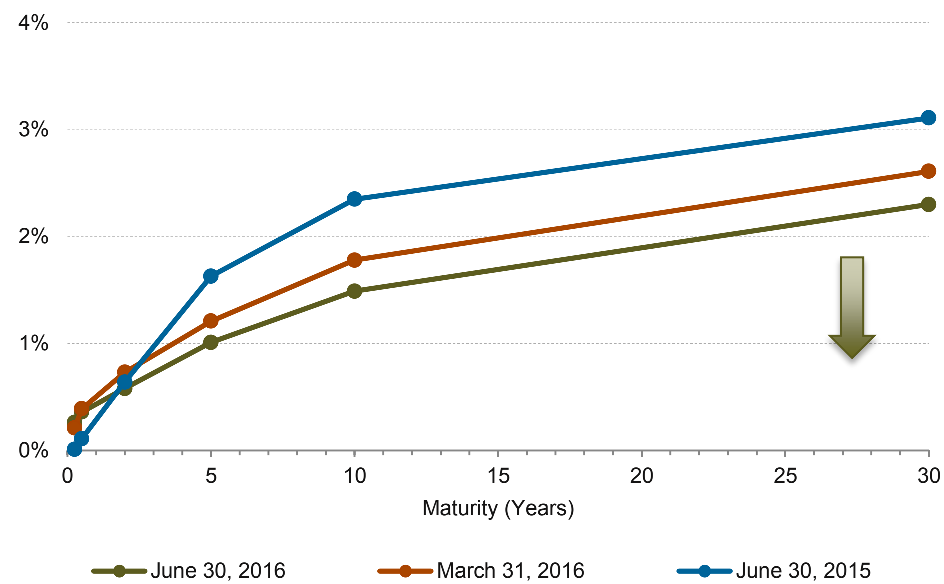
Periods Ending June 30, 2016

Historical 10-Year Yields



Source: Bloomberg

U.S. Treasury Yield Curves

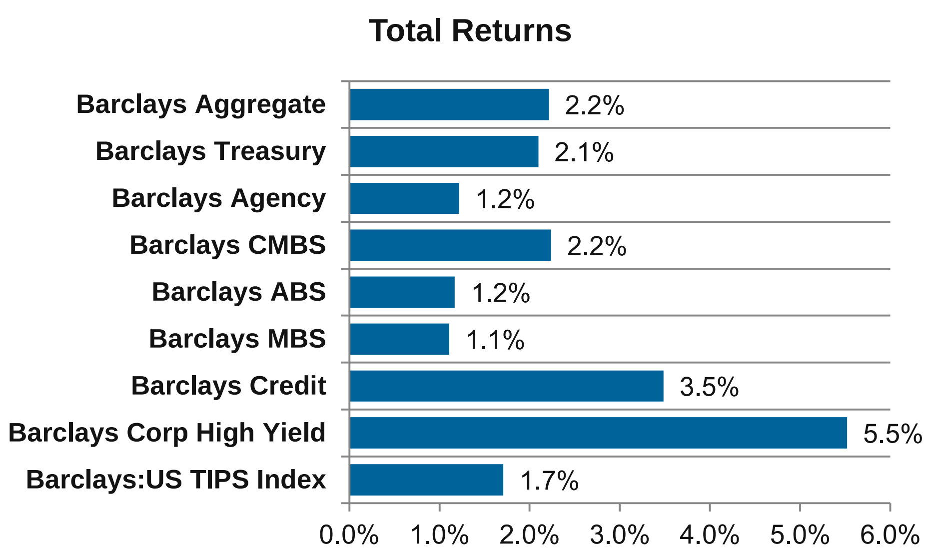


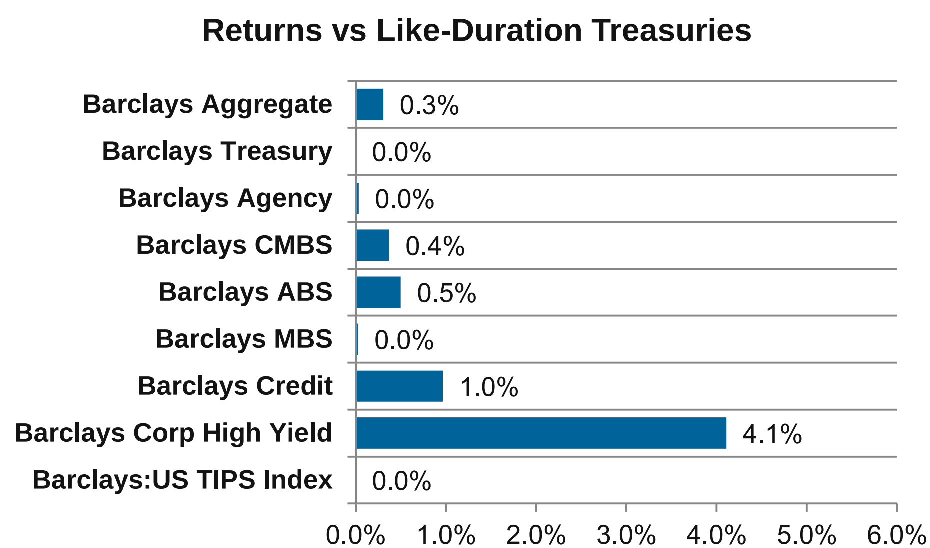
Source: U.S. Department of the Treasury

- Low rates abroad kept demand for U.S. assets strong. The German 10-year sovereign bond traded at a negative yield for the first time ever.
- The decline in Treasury yields boosted returns across all segments, with longer maturities posting the biggest gains. The 10-year dropped 29 basis points to a low not seen since 2012, finishing June at 1.49%.
- Breakeven inflation ended lower despite a climb in oil prices and healthy core inflation numbers.

Total Rates of Return by Bond Sector

Quarter Ended June 30, 2016



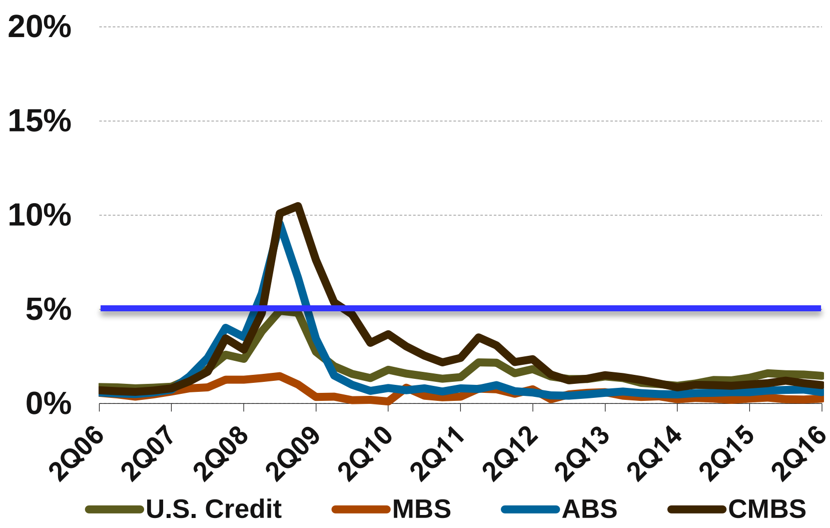


Source: Barclays

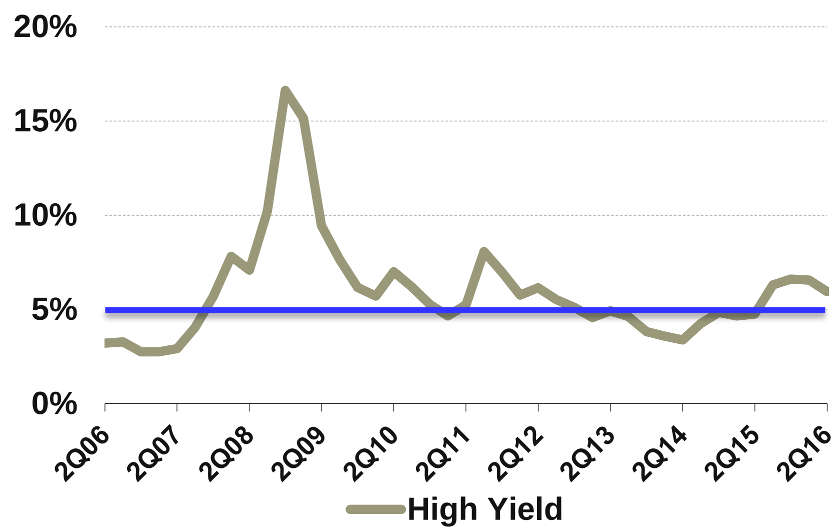
- Aggregate Bond Index gained 2.2% on declining rates and tightening credit spreads.
- Best performing sector of the Aggregate was investment grade credit (+3.5%).
- High yield was the best segment of the bond market with a gain of 5.5% on spread narrowing.

Yield Spreads by Bond Sector (Quarter Ended June 30, 2016)

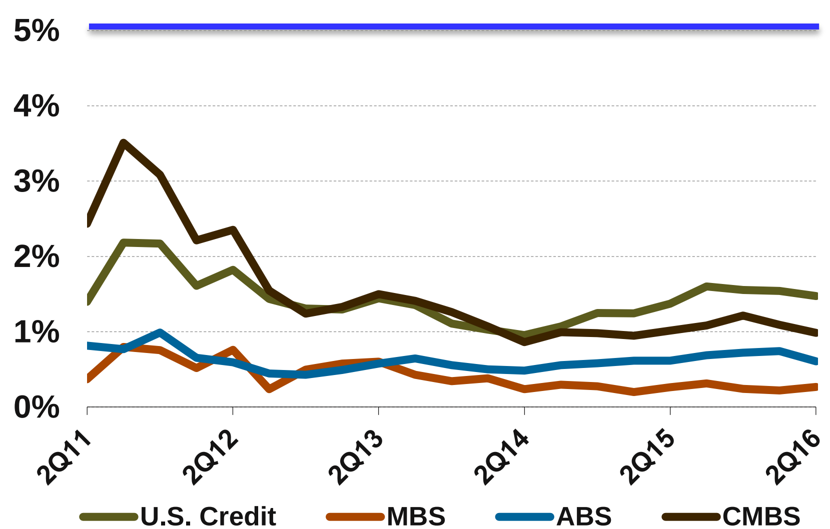
US Investment Grade Yield Spread Over Treasuries



US High Yield Yield Spread Over Treasuries



US Investment Grade Yield Spread Over Treasuries

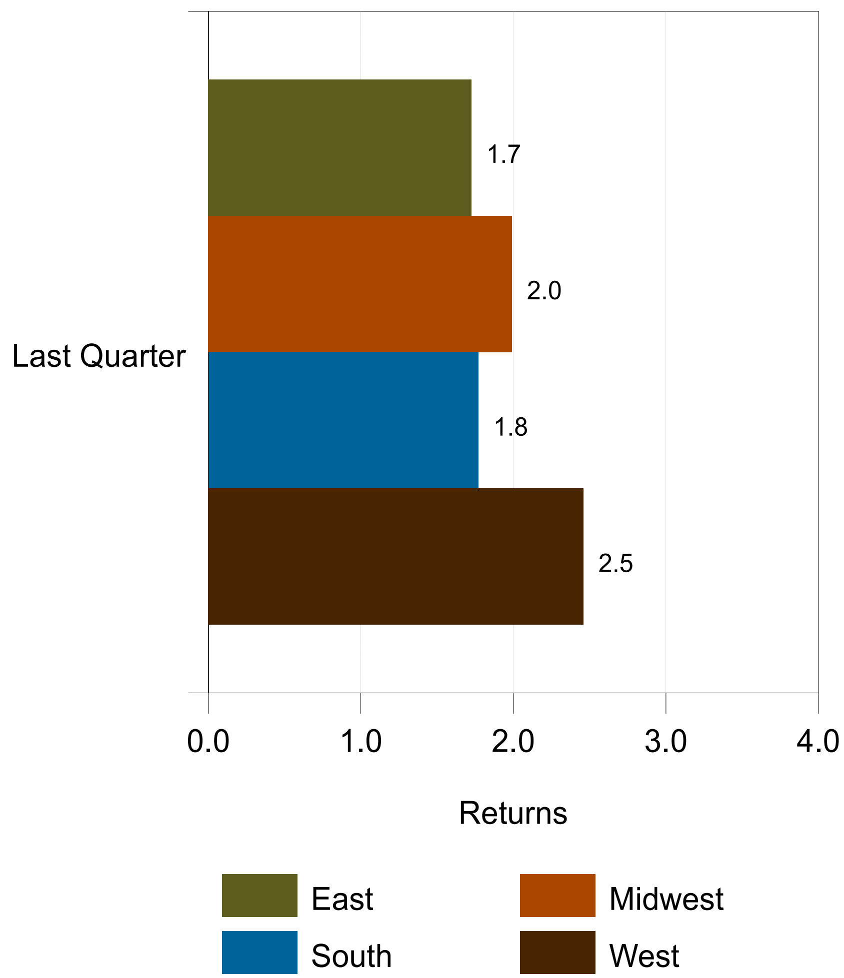


Source: Barclays

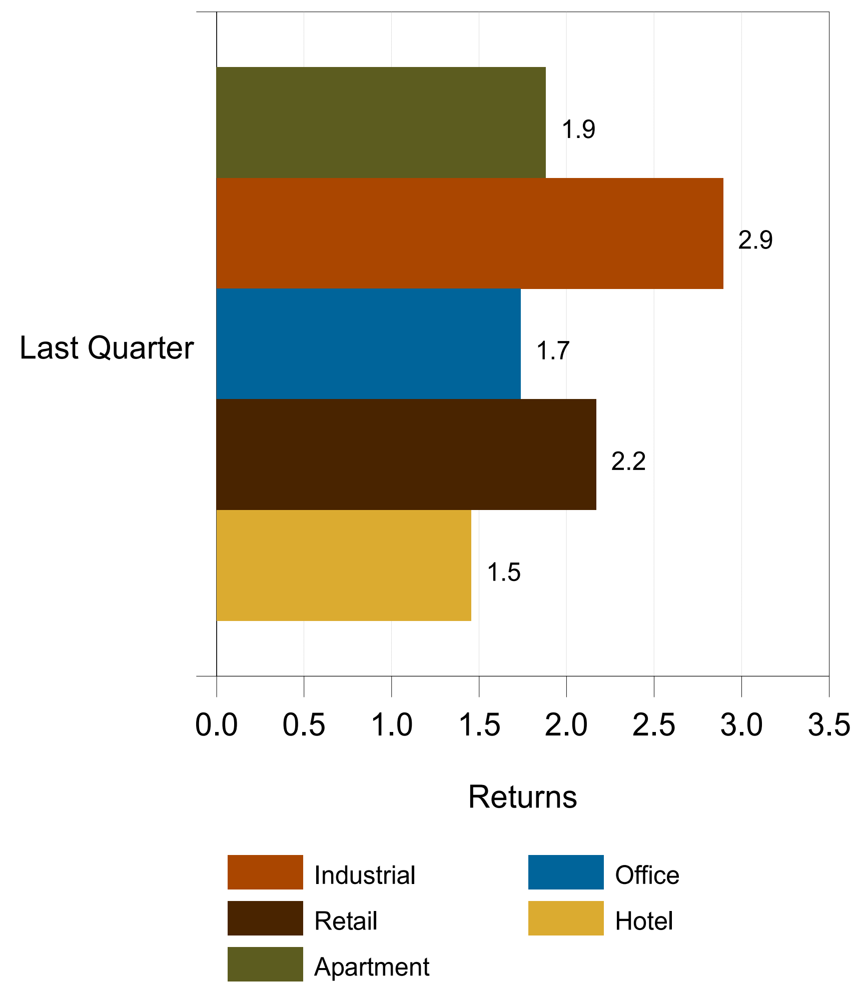
- For the most part, yields have been falling since the Global Financial Crisis (2008-09).
- The highest yields accrue to investors who are willing to take credit (i.e.—repayment) risk.
- Defaults remain low by historical standards but have been rising. Energy is the economic sector that has been most battered by defaults.

Real Estate

NCREIF Regional Returns for Quarter Ending June 30, 2016



NCREIF Property Type Returns for Quarter Ending June 30, 2016



Private Equity

Pooled Horizon IRRs as of December 31, 2015*

Private Equity Performance Database (%)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	2.1	13.8	22.0	16.5	11.1	4.7	24.3
Growth Equity	3.3	9.2	13.6	11.3	11.8	9.8	14.3
All Buyouts	2.4	8.5	13.3	12.3	11.2	11.8	12.8
Mezzanine	0.5	5.2	9.5	10.7	9.6	7.8	9.5
Distressed	-0.1	1.8	9.2	9.4	9.6	10.7	10.8
All Private Equity	**2.1**	**8.6**	**14.1**	**12.4**	**11.0**	**9.6**	**13.8**
S&P 500 Index	7.0	1.4	15.1	12.6	7.3	5.0	8.2
Russell 3000	6.3	0.5	14.7	12.2	7.4	5.4	8.3

Private equity returns are net of fees.
Sources: Callan Associates Inc.; Standard & Poor's; Thomson/Cambridge
* Most recent data available at time of publication

- According to *Private Equity Analyst*, $102.2 billion was committed to 196 partnerships during Q2 of 2016.
  - The number of funds increase by 11% (from 177 in the first quarter) while commitment volume increased by 92% (from $53.2 billion).
- Distressed debt funds raised $13.3 billion during the second calendar quarter, up from only $2.2 billion in the first quarter of 2016.

Funds Closed January 1 to June 30, 2016

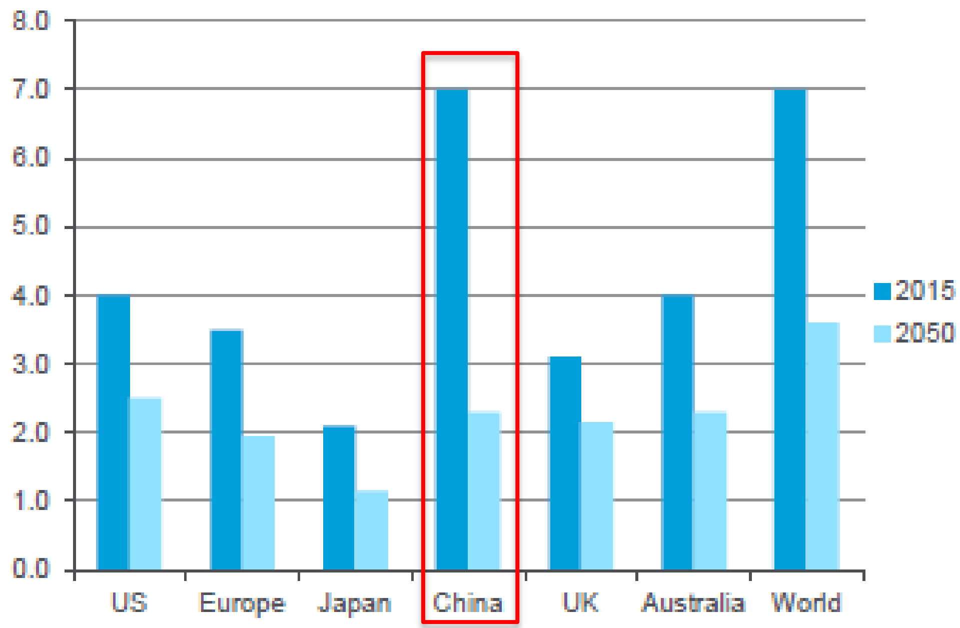
Strategy	No. of Funds	Amt ($mm)	Percent*
Venture Capital	201	23,441	15%
Buyouts	119	102,687	66%
Subordinated Debt	9	2,397	2%
Distressed Debt	11	15,568	10%
Secondary and Other	10	5,513	4%
Fund-of-funds	23	5,767	4%
Totals	**373**	**155,373**	**100%**

Sources: Callan Associates Inc.; *Private Equity Analyst*

The Dynamics and Nature of Retirement Funding

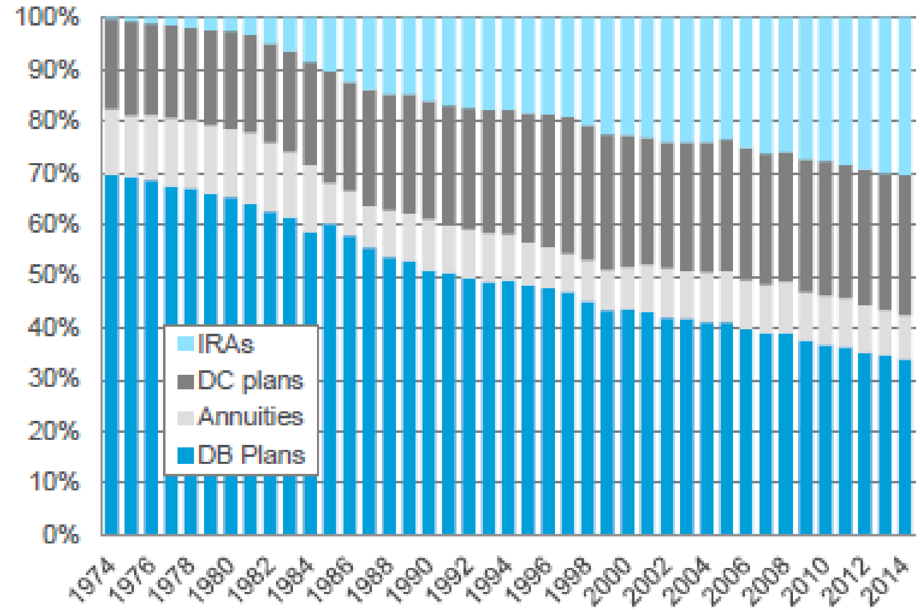
Fundamental changes are afoot

Ratio of Workers (15-64) to Retired (+65)



Sources: Citi, “The Coming Pensions Crisis,” March 2016; UN.

Mix of US Retirement Assets

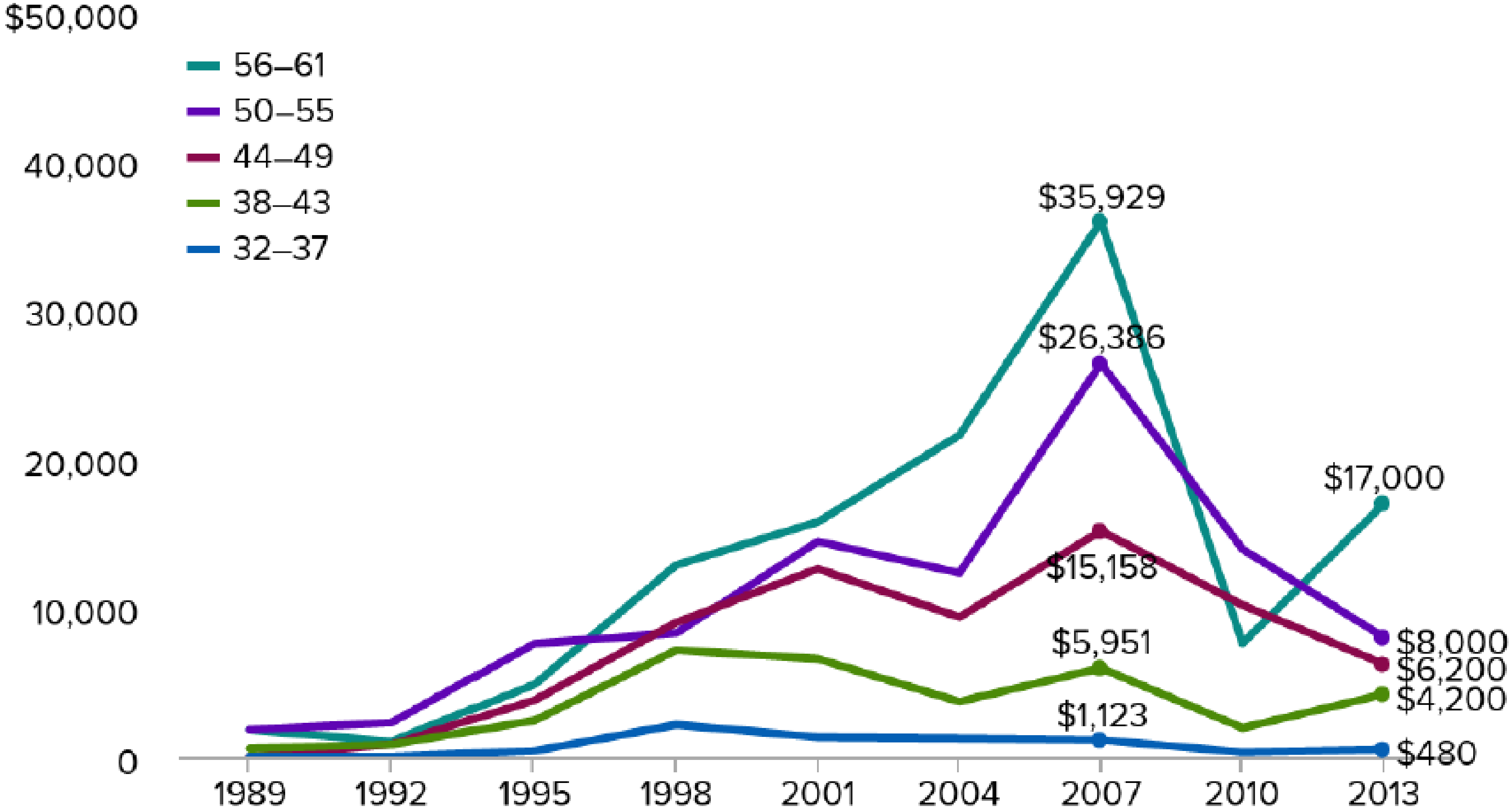


Sources: Citi, “The Coming Pensions Crisis,” March 2016; Investment Company Institute (ICI).

- The cost of supporting retirees is shifting from the many to the few, particularly in China.
- Within the US, the retirement wealth accumulation is shifting from a group risk/insurance model (i.e.—Defined Benefit plans) to an individual risk model (i.e.—IRAs, Defined Contribution plans).

Why DB Plans matter: people save too little to retire

Median retirement account savings[1] of families by age, 1989-2013 (in 2013 dollars)

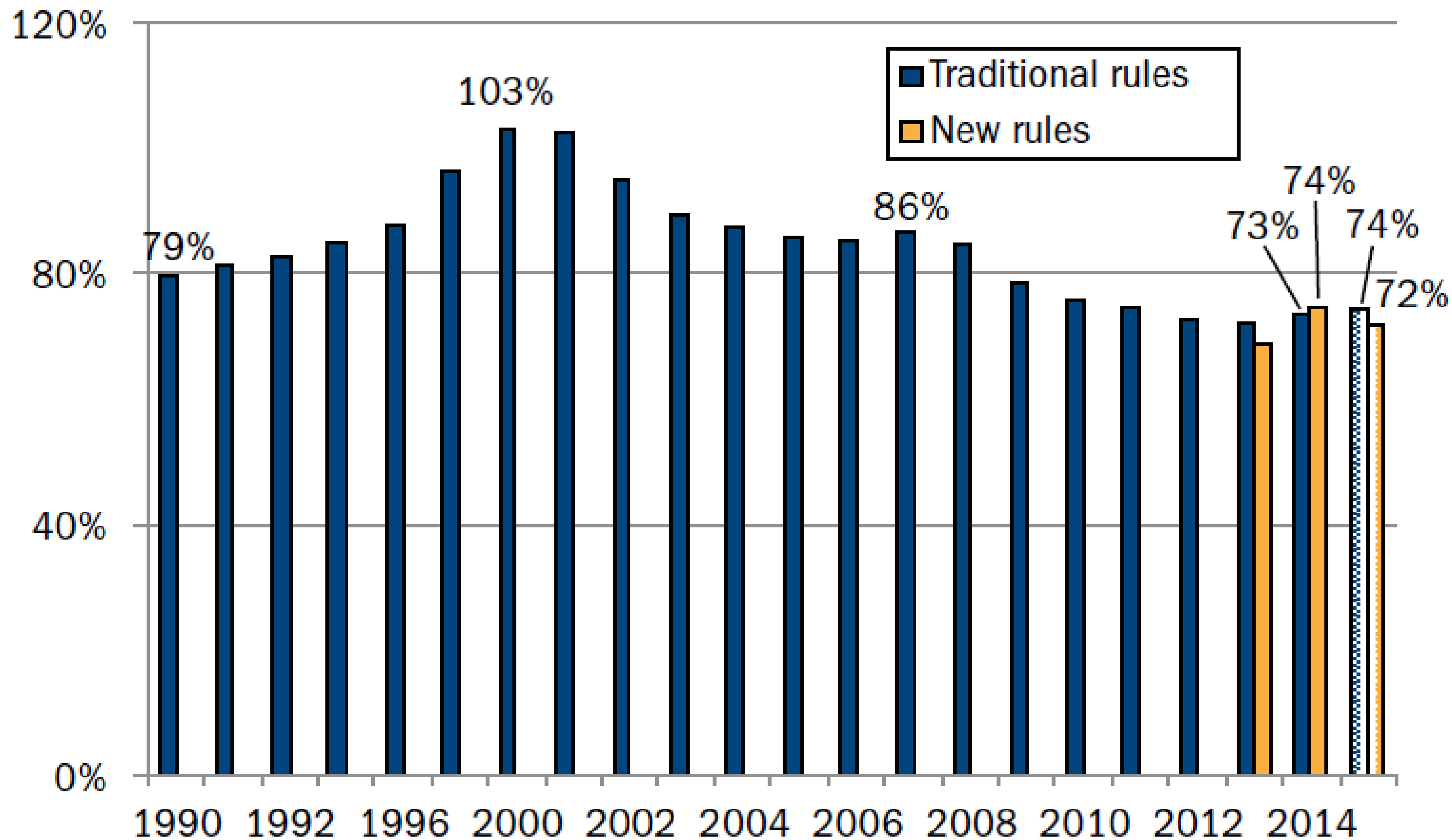


[1] Retirement account savings include 401(k)s, IRAs, and Keogh plans

Source: Economic Policy Institute analysis of "Survey of Consumer Finances" data, 2013. The Survey is conducted every three years for the Federal Reserve Board. The 2016 survey is expected to be conducted from April through December 2016.

The State of Public Pension Funds, Fiscal Years 1990 - 2015

Nearly two-thirds of public pension plans (65%) remain below 80% funded.



Sources: The Center for State & Local Government Excellence, "The Funding of State and Local Pensions: 2015 – 2020." 2015 actuarial valuations; Public Plans Database (2001-2015); "Survey of State and Local Government Retirement Systems," Zorn (1990-2000).

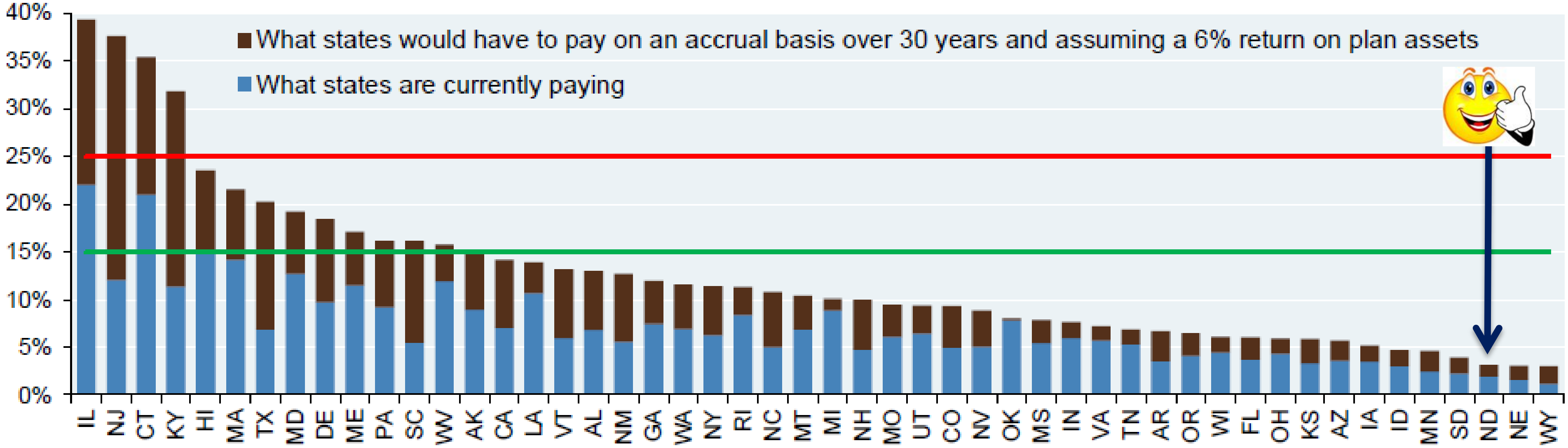
- The survey covered 160 public pension plans with $3.2 trillion in assets and $4.5 trillion in liabilities as determined using the new GASB 67 rules.
- The 'average' discount rate used by Public Plans dropped from 8.1% in 2001 to 7.6% in 2015.

How big is the post-retirement bill?

A relative comparison of the 50 states' payment obligations

The state of the states: how much states spend on debt, pensions and retiree healthcare

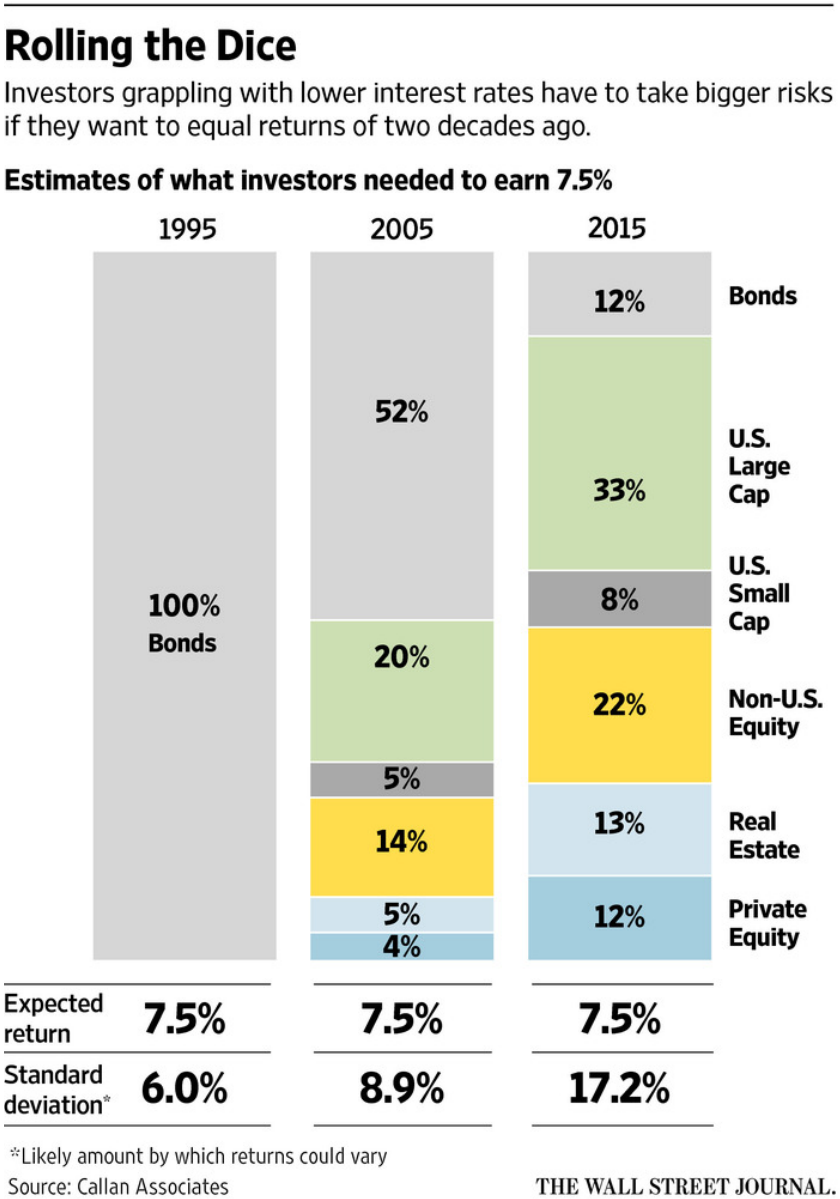
% of state revenue collections required to pay the sum of interest on bonds, the state's share of unfunded pension and retiree healthcare liabilities, and defined contribution plan payments



Source: J.P. Morgan Asset Management, state/pension plan Comprehensive Annual Financial Reports, Census, Loop Capital Markets. FY 2015.

- Bars that appear above the **red line** indicate a level at which states face critical challenges in meeting an ability to service their debt and post-retirement benefit obligations.
- Bars that appear below the **green line** identify states that one might view not requiring "a disproportionate share of revenues to service their debts."
- Note that North Dakota's overall funding obligations are comparatively low (third from the right).

A lot has changed in 20 years.



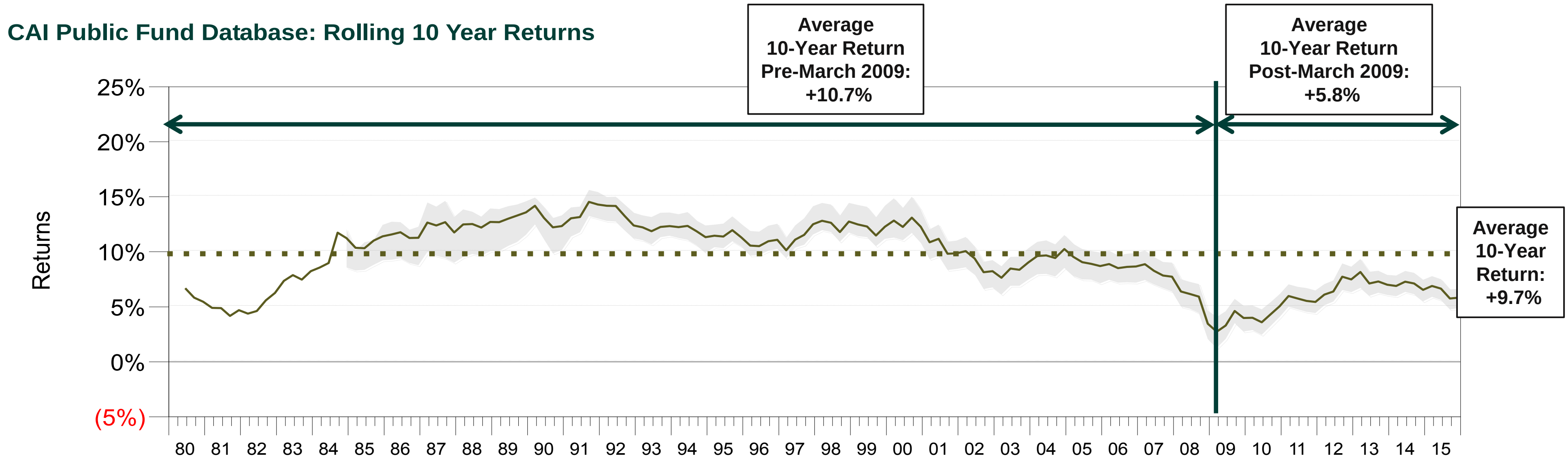
- As the Wall Street Journal said in an article published on May 31, 2016:

  "What it means to be a successful investor in 2016 can be summed up in four words: ***bigger gambles, lower returns***."

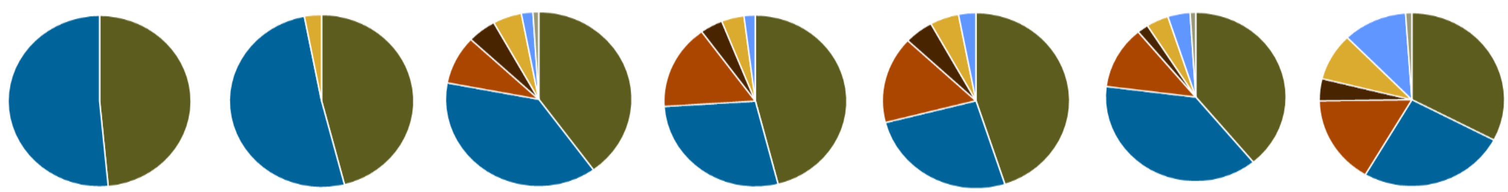
- The chart to the left indicates that an investor could have achieved a 7.5% return by investing 100% of Plan assets in fixed-income in 1995.
- To achieve a 7.5% return in 2005, nearly half the assets would have to have been invested in return-seeking (i.e.—equity) assets. The volatility for that same return would have gone up by half: from 6.0% in 1995 to 8.9% in 2005.
- In 2015, an investor would have had to invest nearly 90% of Plan assets in riskier assets than bonds to achieve a 7.5% return. And the commensurate expected volatility would have **tripled**.

Historical Public Fund Asset Allocation and Returns

Lower returns but higher investment costs?



10 Year Return	10.7%	12.0%	11.3%	12.3%	8.7%	5.0%	5.7%



ASSET CLASS	1985	1990	1995	2000	2005	2010	2015
Domestic Equity	49%	46%	40%	46%	45%	39%	33%
Domestic Fixed Income	52%	51%	38%	28%	26%	30%	26%
Non-U.S. Equity			9%	16%	16%	15%	16%
Non-U.S. Fixed Income			5%	4%	5%	4%	4%
Real Estate		3%	5%	4%	5%	4%	9%
Other Alternatives			2%	2%	3%	7%	11%
Cash Equivalents			1%			1%	1%

Allocations are as of December 31 of the applicable year.

Source: Callan

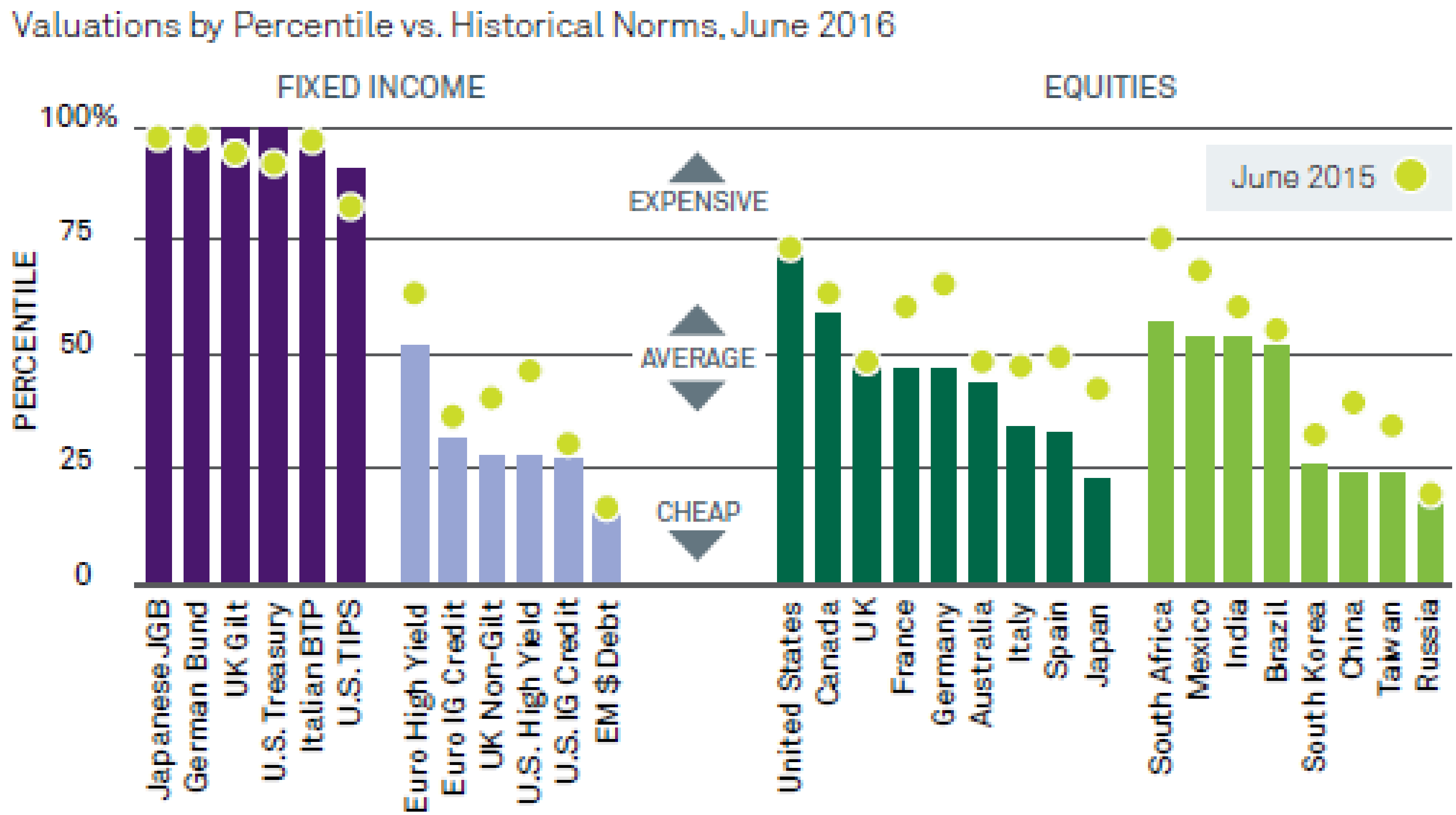
Role of Asset Classes/Strategies

- Capital Accumulation
  - U.S. equity
  - Non-U.S. equity
  - Emerging markets
  - **Private equity**
  - High yield
  - **Public/private real estate**
- Diversification/Expand Opportunity Set
  - TIPS
  - High yield
  - Non-U.S. equity
  - Emerging markets
  - Global
  - Non-U.S. fixed income
  - Commodities
  - **Private equity**
  - **Private real estate**
  - **Hedge funds**
  - **Infrastructure**
  - **Timber**
- Lower Volatility
  - Stable value
  - Short duration fixed income
  - **Hedge funds**
- Flight to Quality
  - Treasury bonds
  - Cash equivalents
- Alpha Generation
  - Small/Mid Cap U.S. equity
  - Non-U.S. equity
  - Emerging markets
  - **Private equity**
  - **Private real estate**
  - **Hedge funds**
- Inflation hedge
  - TIPS
  - REITs
  - **Private real estate**
  - **Infrastructure**
  - Commodities
  - **Timber**
  - Equity
  - Other real assets

Colored strategies = illiquid investments

As of June 2016: few bargains in which to invest

Maybe European credit? How's your appetite for emerging market equities?



Sources: Blackrock Investment Institute, "Global Investment Outlook: Midyear 2016" and Thomson Reuters, June 2016.

- Dots illustrate where valuations were on an historical basis one year ago, as of June 30, 2015.
- "Government Bonds" are 10-year benchmark issues.
- Fixed income credit series reflect Barclays indices and the spread over government bonds.
- Equity valuations are based on MSCI index series data.

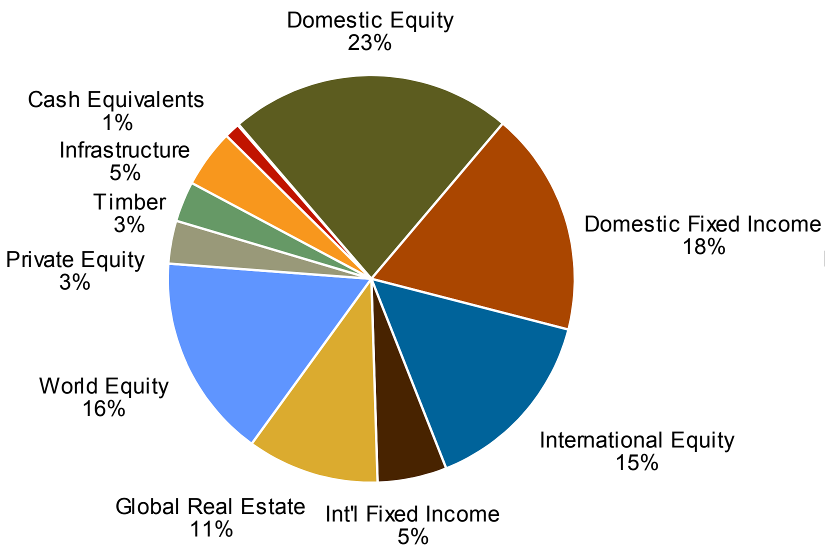
Consolidated Pension Trusts Quarterly Review

- Public Employees Retirement System
- Teachers’ Fund for Retirement

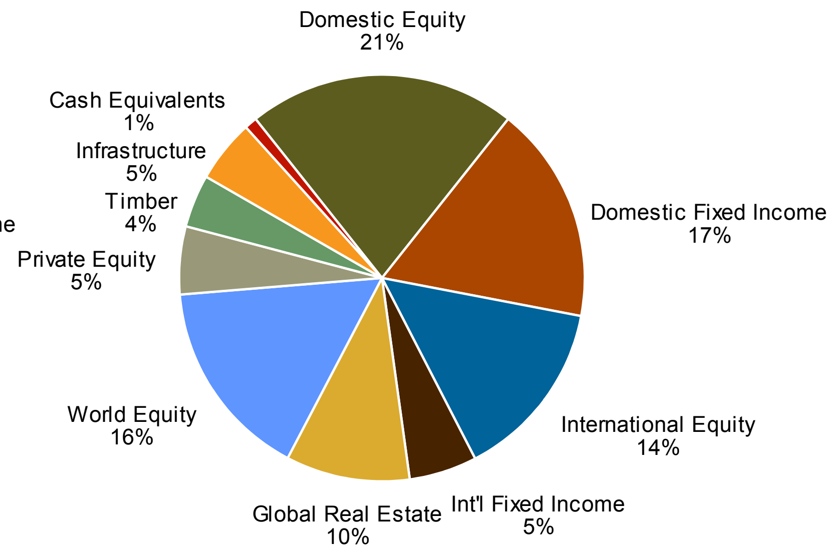
Consolidated Pension Trust Allocation

As of June 30, 2016

Actual Asset Allocation



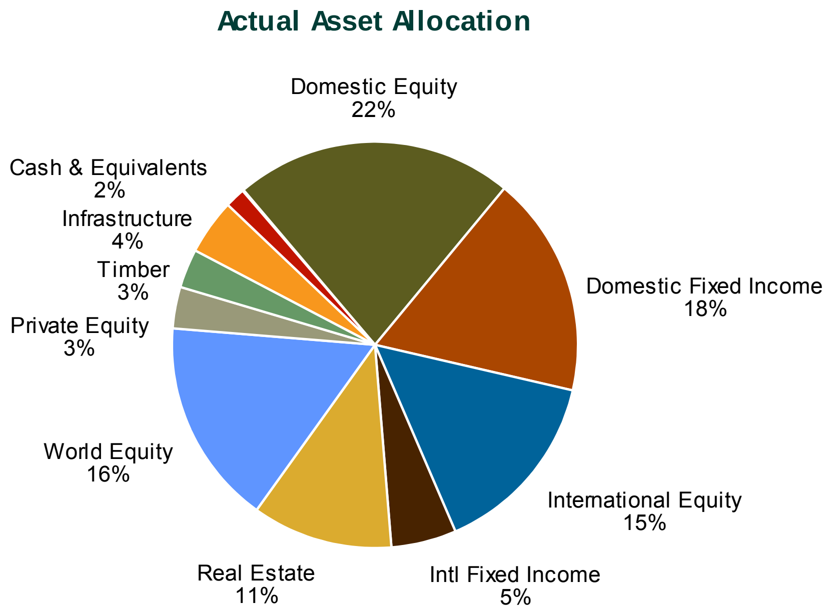
Target Asset Allocation

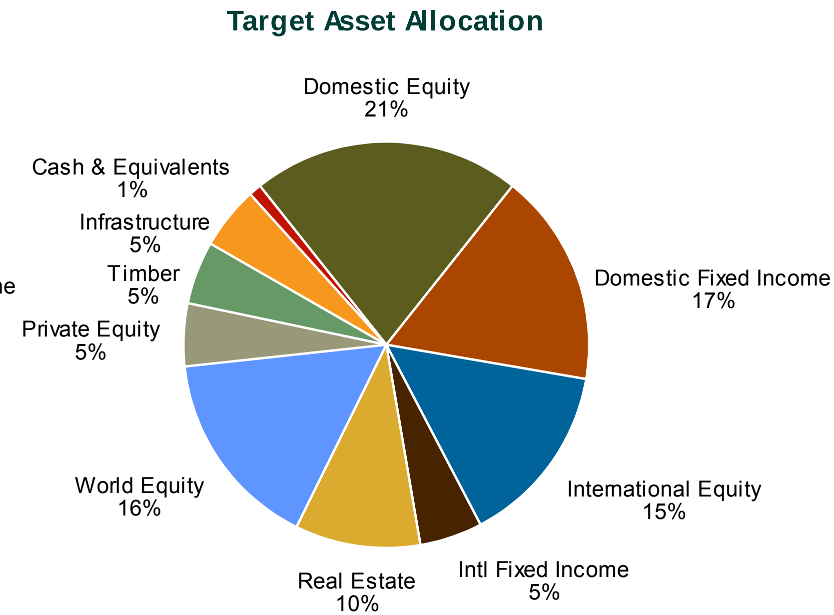


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	1,062,966	22.5%	21.4%	1.1%	52,566
Domestic Fixed Income	840,686	17.8%	17.3%	0.5%	23,868
International Equity	709,193	15.0%	14.4%	0.6%	29,298
Int'l Fixed Income	257,712	5.5%	5.4%	0.1%	2,752
Global Real Estate	497,508	10.5%	9.9%	0.6%	30,081
World Equity	767,124	16.2%	16.0%	0.2%	11,686
Private Equity	159,340	3.4%	5.4%	(2.0%)	(95,621)
Timber	153,349	3.2%	4.2%	(1.0%)	(44,954)
Infrastructure	215,451	4.6%	5.0%	(0.4%)	(20,624)
Cash Equivalents	58,164	1.2%	1.0%	0.2%	10,949
Total	4,721,493	100.0%	100.0%		

PERS Allocation

As of June 30, 2016



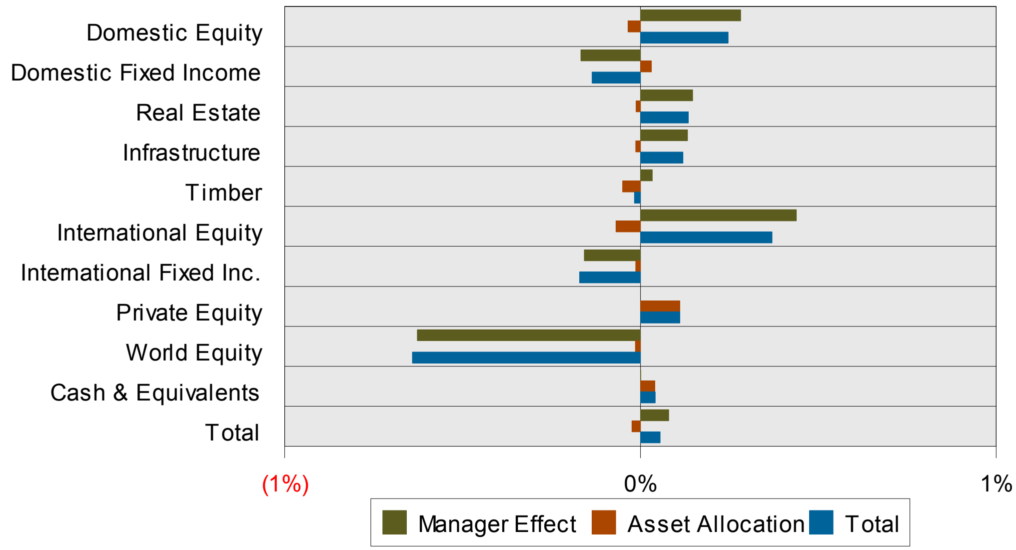


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	546,892	22.2%	21.4%	0.8%	20,609
Domestic Fixed Income	433,307	17.6%	17.0%	0.6%	15,232
International Equity	367,297	14.9%	14.6%	0.3%	8,244
Intl Fixed Income	128,666	5.2%	5.0%	0.2%	5,702
Real Estate	275,539	11.2%	10.0%	1.2%	29,612
World Equity	402,558	16.4%	16.0%	0.4%	9,075
Private Equity	79,938	3.3%	5.0%	(1.7%)	(43,025)
Timber	77,460	3.1%	5.0%	(1.9%)	(45,504)
Infrastructure	108,994	4.4%	5.0%	(0.6%)	(13,969)
Cash & Equivalents	38,615	1.6%	1.0%	0.6%	14,023
Total	2,459,266	100.0%	100.0%		

PERS Performance and Attribution

As of June 30, 2016

One Year Relative Attribution Effects



<u>1 Year Ended 6/30/2016</u>

Gross:	0.61%
Net of fees:	0.28%
Target:	<u>0.56%</u>
Net Added:	-0.28%

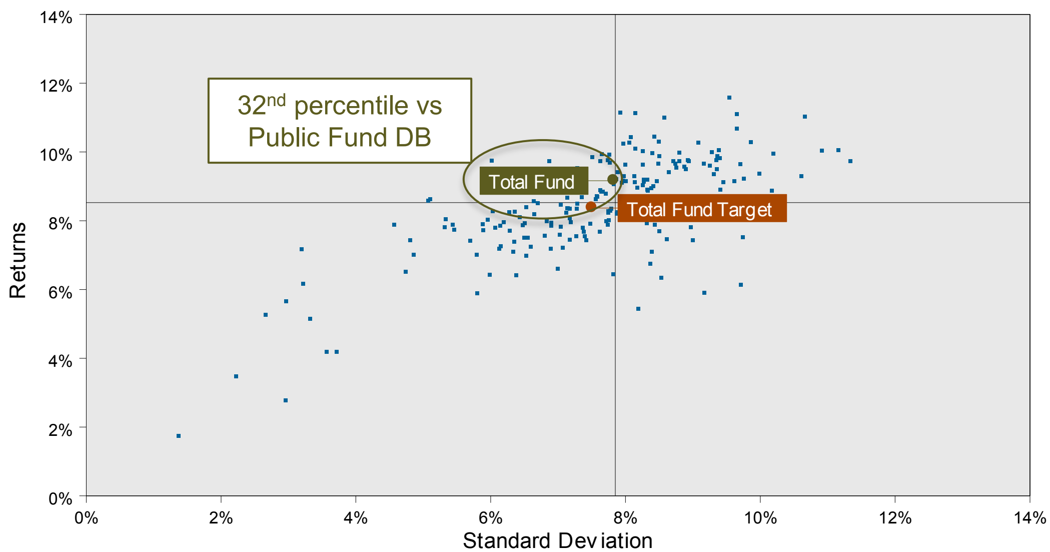
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	2.03%	0.73%	0.28%	(0.03%)	0.25%
Domestic Fixed Income	18%	17%	3.85%	4.77%	(0.17%)	0.03%	(0.14%)
Real Estate	11%	10%	11.96%	10.64%	0.15%	(0.01%)	0.13%
Infrastructure	5%	5%	3.65%	0.64%	0.13%	(0.01%)	0.12%
Timber	3%	5%	4.34%	3.49%	0.03%	(0.05%)	(0.02%)
International Equity	15%	15%	(7.76%)	(10.45%)	0.44%	(0.07%)	0.37%
International Fixed Inc.	5%	5%	7.88%	11.24%	(0.16%)	(0.01%)	(0.17%)
Private Equity	4%	5%	(7.19%)	(7.19%)	0.00%	0.11%	0.11%
World Equity	16%	16%	(6.53%)	(2.78%)	(0.63%)	(0.01%)	(0.64%)
Cash & Equivalents	1%	1%	0.29%	0.19%	0.00%	0.04%	0.04%
Total			**0.61% =**	**0.56% +**	**0.08% +**	**(0.02%)**	**0.06%**

PERS Performance and Attribution

As of June 30, 2016

Six Year Annualized Risk vs Return



Squares represent membership of the CAI Public Fund Sponsor Database

6 Years Ended 6/30/2016	
Gross:	9.17%
Net of fees:	8.82%
Target:	8.37%
Net Added:	0.45%

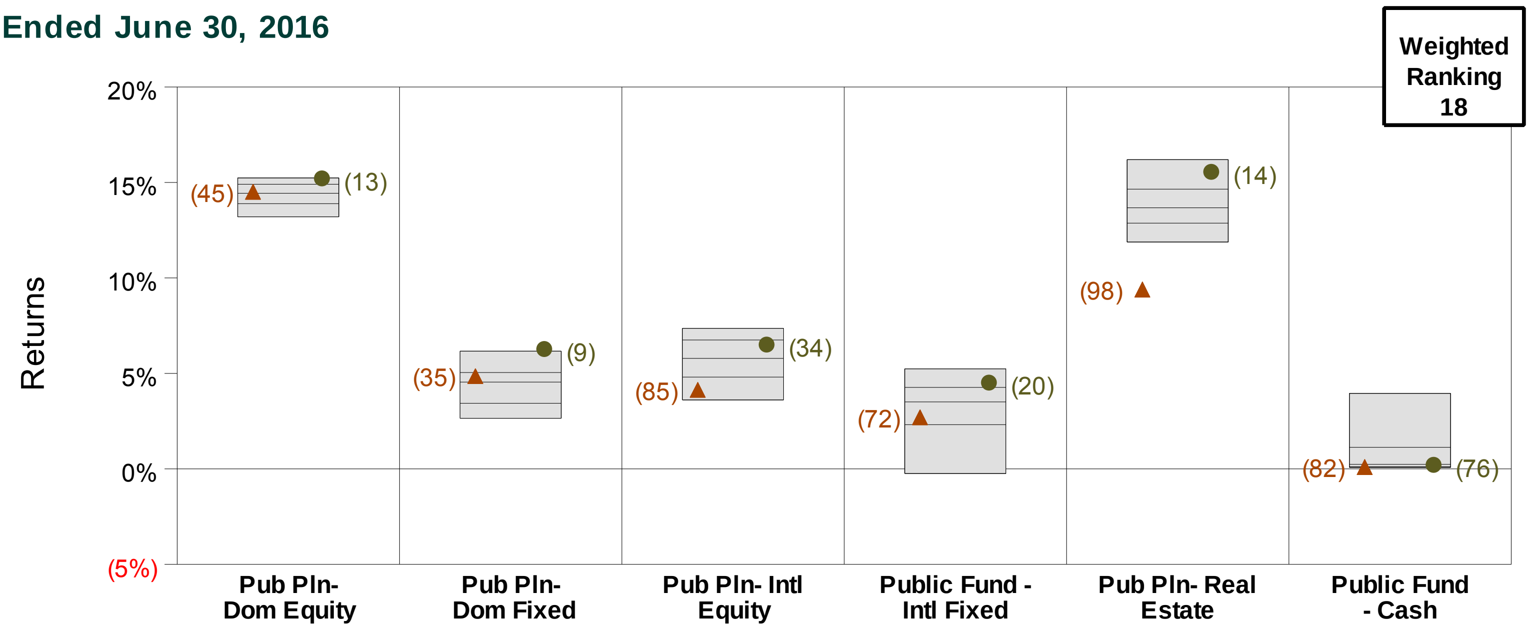
Six Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	28%	27%	15.13%	14.52%	0.08%	0.10%	0.18%
Domestic Fixed Income	20%	20%	6.18%	4.86%	0.21%	(0.04%)	0.17%
Real Estate	9%	9%	15.46%	12.37%	0.24%	0.01%	0.25%
Timber	4%	4%	-	-	(0.24%)	(0.05%)	(0.29%)
Infrastructure	3%	4%	-	-	0.15%	0.08%	0.23%
Interntional Equity	16%	16%	6.41%	4.14%	0.35%	(0.07%)	0.28%
International Fixed Inc.	5%	5%	4.43%	2.71%	0.09%	(0.01%)	0.08%
Private Equity	5%	5%	2.76%	2.76%	0.00%	(0.03%)	(0.03%)
World Equity	10%	10%	-	-	(0.03%)	(0.04%)	(0.07%)
Cash & Equivalents	1%	1%	0.12%	0.10%	0.00%	(0.01%)	(0.01%)
Total			**9.17% =**	**8.37% +**	**0.85% +**	**(0.06%)**	**0.80%**

Asset class composite results

PERS' results vs other Public Funds

Total Asset Class Performance
Six Years Ended June 30, 2016

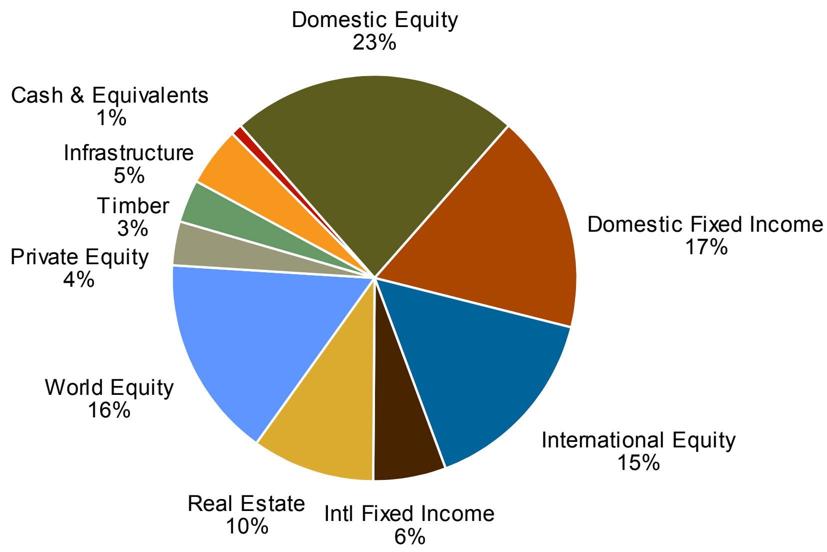


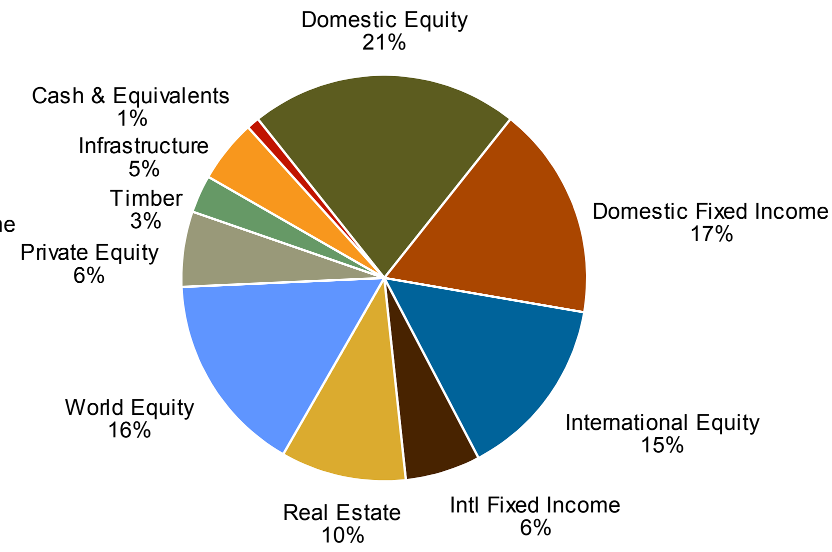
	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	15.24	6.17	7.37	5.24	16.20	3.96
25th Percentile	14.91	5.05	6.75	4.28	14.65	1.13
Median	14.44	4.55	5.79	3.51	13.68	0.24
75th Percentile	13.90	3.44	4.81	2.32	12.87	0.12
90th Percentile	13.21	2.65	3.62	(0.24)	11.88	0.08
Asset Class Composite ●	15.13	6.18	6.41	4.43	15.46	0.12
Composite Benchmark ▲	14.52	4.86	4.14	2.71	9.40	0.10

- Public market asset classes are all above their respective medians except cash.
  - Many "cash" funds have exposure to higher return and risk strategies (i.e. credit and longer duration) than NDSIB does.
- U.S. equity and fixed income, international fixed income and real estate returns in top quartile.

TFFR Allocation

As of June 30, 2016



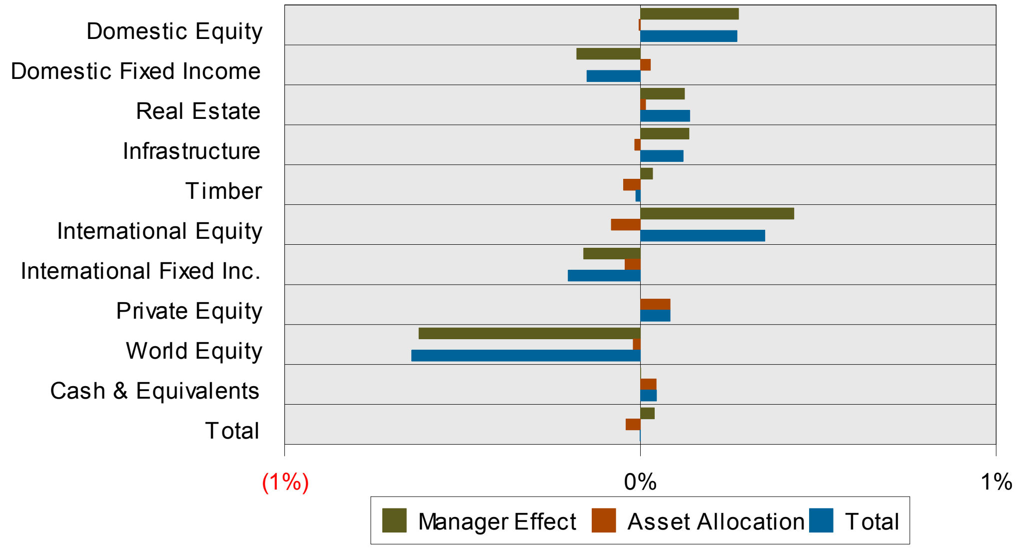


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	478,122	23.0%	21.4%	1.6%	32,554
Domestic Fixed Income	361,707	17.4%	17.0%	0.4%	7,751
International Equity	321,177	15.4%	14.6%	0.8%	17,192
Intl Fixed Income	121,443	5.8%	6.0%	(0.2%)	(3,483)
Real Estate	204,184	9.8%	10.0%	(0.2%)	(4,025)
World Equity	335,715	16.1%	16.0%	0.1%	2,580
Private Equity	73,374	3.5%	6.0%	(2.5%)	(51,551)
Timber	70,258	3.4%	3.0%	0.4%	7,796
Infrastructure	97,588	4.7%	5.0%	(0.3%)	(6,517)
Cash & Equivalents	18,522	0.9%	1.0%	(0.1%)	(2,299)
Total	2,082,090	100.0%	100.0%		

TFFR Performance and Attribution

As of June 30, 2016

One Year Relative Attribution Effects



1 Year Ended 6/30/16

Gross:	0.61%
Net of fees:	0.28%
Target:	0.61%
Net Added:	-0.33%

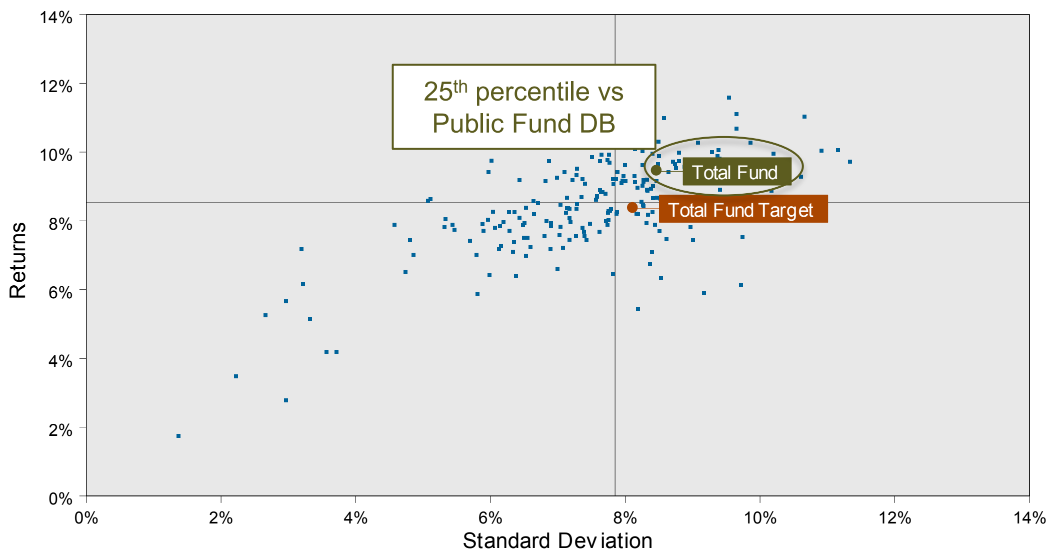
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	2.02%	0.73%	0.28%	(0.00%)	0.27%
Domestic Fixed Income	18%	17%	3.82%	4.83%	(0.18%)	0.03%	(0.15%)
Real Estate	11%	10%	11.96%	10.64%	0.12%	0.02%	0.14%
Infrastructure	5%	5%	3.65%	0.64%	0.14%	(0.02%)	0.12%
Timber	4%	5%	4.34%	3.49%	0.03%	(0.05%)	(0.01%)
International Equity	15%	15%	(7.71%)	(10.39%)	0.43%	(0.08%)	0.35%
International Fixed Inc.	5%	5%	7.88%	11.24%	(0.16%)	(0.04%)	(0.20%)
Private Equity	4%	5%	(7.19%)	(7.19%)	0.00%	0.08%	0.08%
World Equity	16%	16%	(6.53%)	(2.78%)	(0.62%)	(0.02%)	(0.64%)
Cash & Equivalents	1%	1%	0.29%	0.19%	0.00%	0.04%	0.05%
Total			**0.61% =**	**0.61% +**	**0.04% +**	**(0.04%)**	**(0.00%)**

TFFR Performance and Attribution

As of June 30, 2016

Six Year Annualized Risk vs Return



Squares represent membership of the CAI Public Fund Sponsor Database

6 Years Ended 6/30/2016

Gross:	9.44%
Net of fees:	9.09%
Target:	8.36%
Net Added:	0.73%

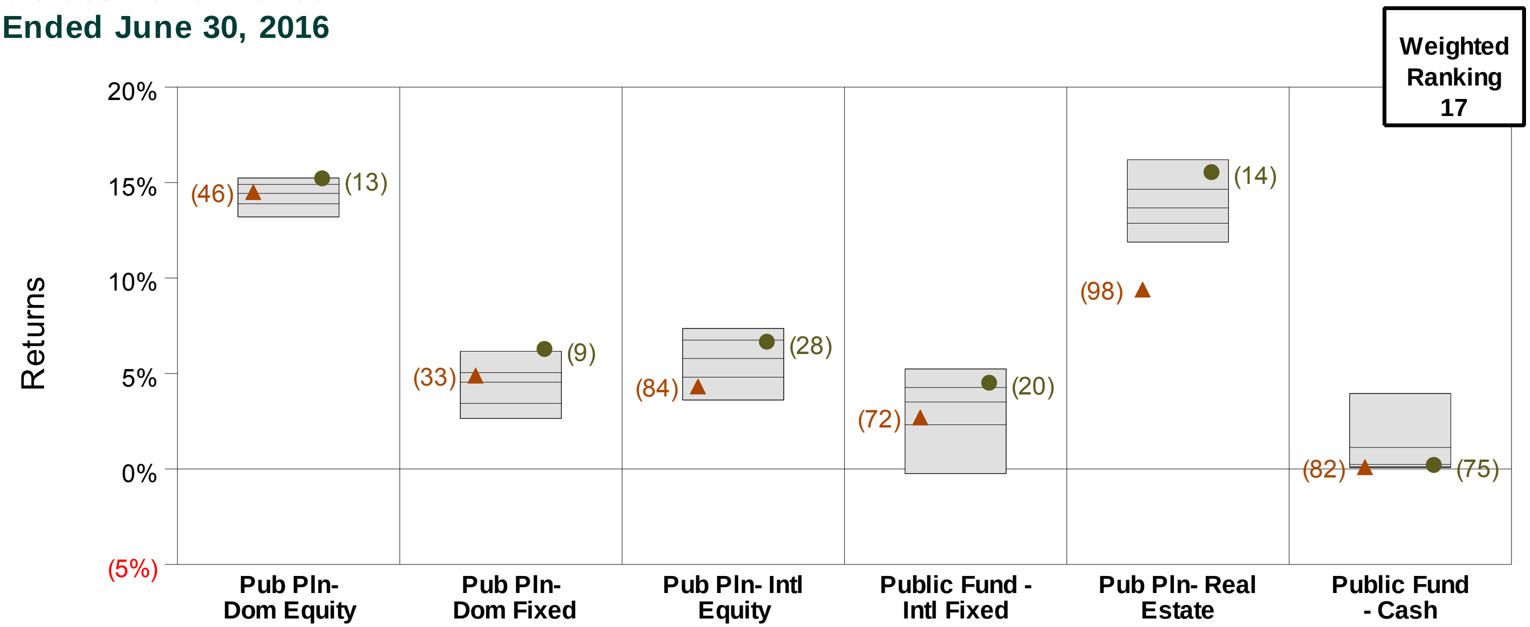
Six Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	15.13%	14.51%	0.10%	0.09%	0.19%
Domestic Fixed Income	18%	17%	6.20%	4.90%	0.22%	(0.02%)	0.20%
Real Estate	10%	10%	15.46%	12.37%	0.29%	0.03%	0.31%
Timber	4%	4%	-	-	(0.23%)	(0.00%)	(0.24%)
Infrastructure	3%	4%	-	-	0.15%	0.10%	0.25%
International Equity	17%	17%	6.57%	4.33%	0.41%	(0.03%)	0.38%
International Fixed Inc.	5%	5%	4.43%	2.71%	0.09%	(0.02%)	0.08%
Private Equity	5%	5%	2.78%	2.78%	0.00%	(0.02%)	(0.02%)
World Equity	10%	10%	-	-	(0.03%)	(0.04%)	(0.07%)
Cash & Equivalents	1%	1%	0.12%	0.10%	0.00%	(0.01%)	(0.00%)
Total			**9.44% =**	**8.36% +**	**1.00% +**	**0.08%**	**1.08%**

Asset Class Composite Results

TFFR's asset class results vs other Public Pension Funds

Total Asset Class Performance
Six Years Ended June 30, 2016



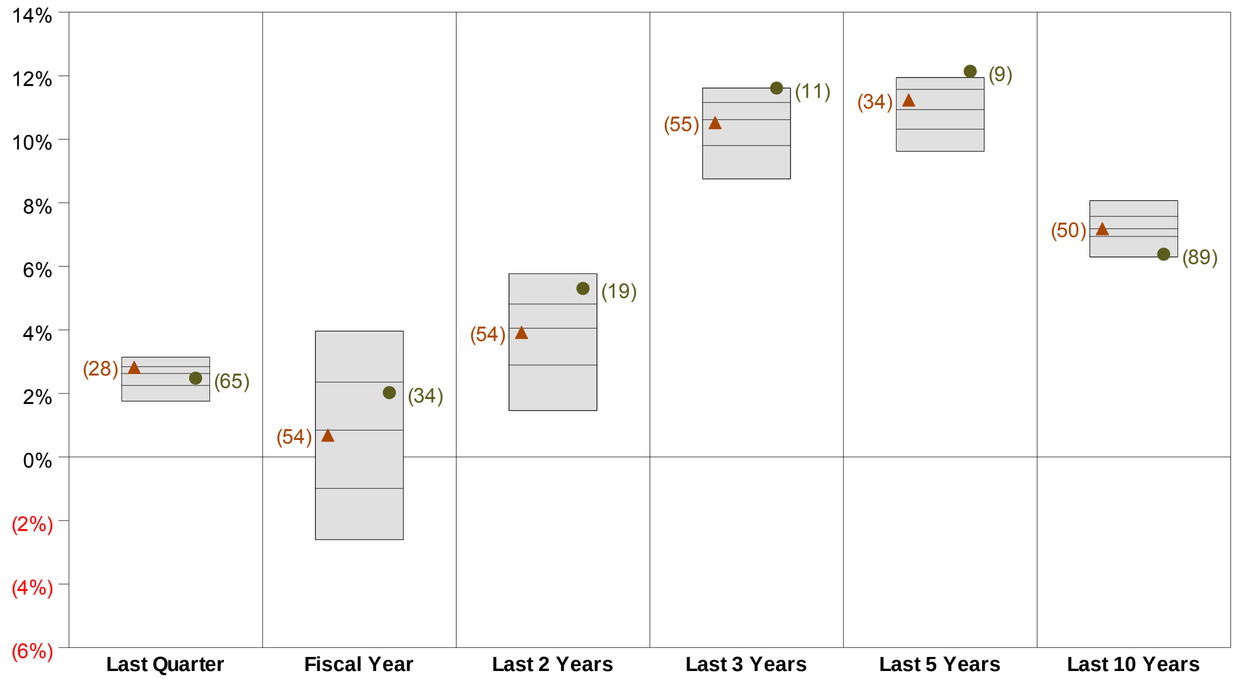
	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	15.24	6.17	7.37	5.24	16.20	3.96
25th Percentile	14.91	5.05	6.75	4.28	14.65	1.13
Median	14.44	4.55	5.79	3.51	13.68	0.24
75th Percentile	13.90	3.44	4.81	2.32	12.87	0.12
90th Percentile	13.21	2.65	3.62	(0.24)	11.88	0.08
Asset Class Composite ●	15.13	6.20	6.57	4.43	15.46	0.12
Composite Benchmark ▲	14.51	4.90	4.33	2.71	9.40	0.10

- Public market asset classes are all above their respective medians except cash.
  - Many "cash" funds have exposure to higher return and risk strategies (i.e. credit and longer duration) than NDSIB does.
- U.S. equity and fixed income, international fixed income and real estate returns in top quartile.

Consolidated Pension Trust: U.S. Equity

As of June 30, 2016

Performance vs Pub Pln- Domestic Equity (Gross)



	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	3.14	3.96	5.77	11.61	11.94	8.07
25th Percentile	2.84	2.36	4.82	11.16	11.57	7.57
Median	2.63	0.84	4.06	10.62	10.93	7.18
75th Percentile	2.25	(0.99)	2.89	9.80	10.32	6.94
90th Percentile	1.76	(2.60)	1.46	8.75	9.62	6.30
Domestic Equity ●	2.43	1.98	5.26	11.57	12.10	6.34
Domestic Equity Target ▲	2.82	0.69	3.92	10.53	11.24	7.19

- The Domestic Equity returns are above median and the target index for all time periods except the last quarter and 10 years ended June 30, 2016.

Domestic Equity

Quarter Ended June 30, 2016

Index	Return
Russell 3000 Index	2.6%
Russell 3000 Value	4.6%
Russell 3000 Growth	0.8%

Style Exposure Matrix
Holdings as of June 30, 2016

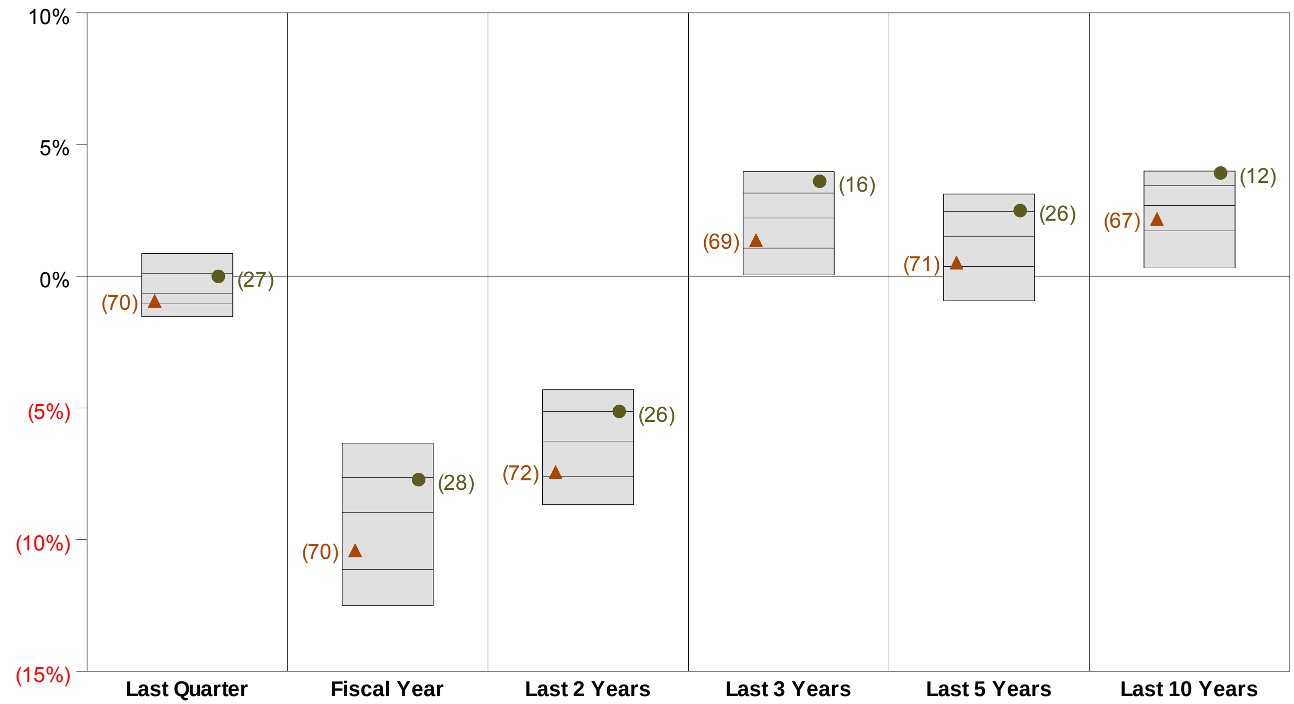
	Value	Core	Growth	Total
Large	13.8% (97) 22.4% (97)	24.1% (112) 31.7% (114)	17.2% (95) 21.0% (98)	55.2% (304) 75.1% (309)
Mid	7.2% (123) 5.4% (188)	8.1% (145) 6.5% (240)	9.3% (103) 5.3% (190)	24.7% (371) 17.2% (618)
Small	4.2% (302) 1.9% (328)	8.1% (464) 2.7% (493)	6.4% (390) 2.3% (417)	18.7% (1156) 6.9% (1238)
Micro	0.5% (268) 0.3% (268)	0.6% (358) 0.3% (359)	0.4% (182) 0.2% (183)	1.5% (808) 0.8% (810)
Total	25.8% (790) 30.0% (881)	40.9% (1079) 41.2% (1206)	33.3% (770) 28.8% (888)	100.0% (2639) 100.0% (2975)

- For the quarter, the primary reason that the Consolidated Pension Trust's domestic equity allocation trailed its benchmark is due to the overweight in growth-oriented strategies.
- As noted in the table to the left, growth stocks trailed value stocks by 3.8% during the quarter.
- The red box in the matrix to the right shows that the Pension Trust's equity allocation had 33.3% of its allocation in "growth" stocks versus an index weight of 28.8%.
- The largest detractor has been Northern Trust which trails its benchmark for the last three years.

Consolidated Pension Trust: International Equity

As of June 30, 2016

Performance vs Pub Pln- International Equity (Gross)



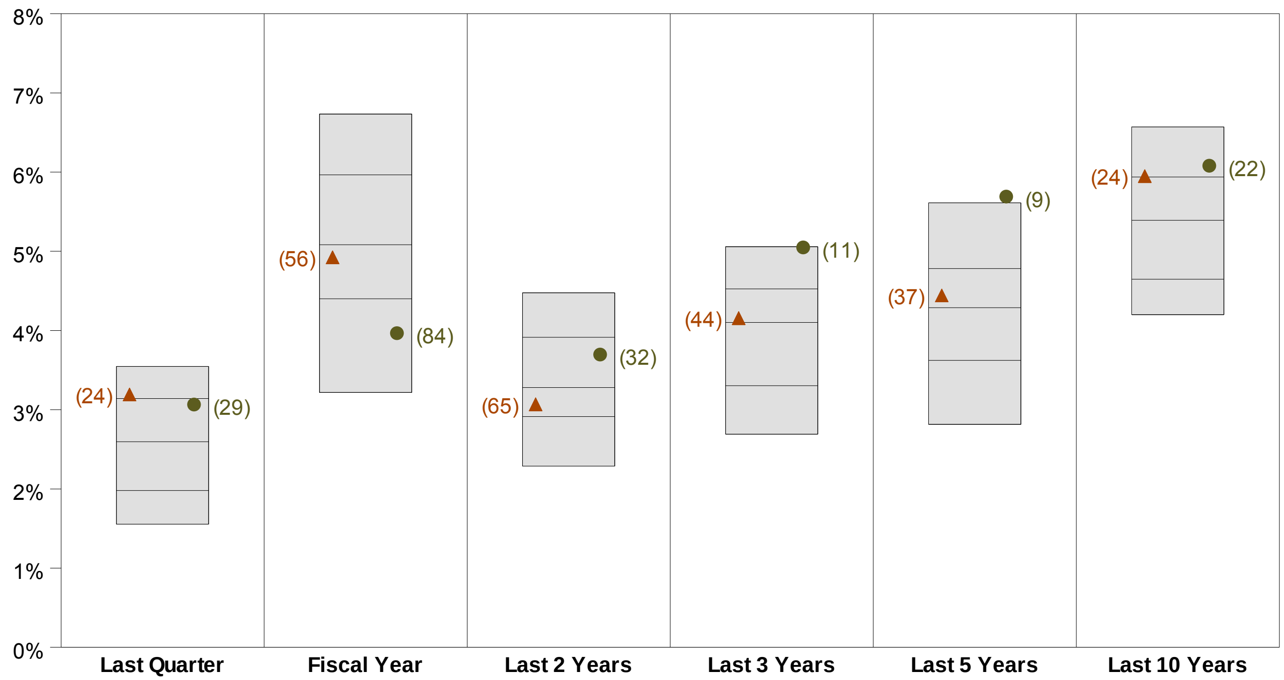
	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	0.87	(6.34)	(4.31)	3.98	3.12	3.99
25th Percentile	0.10	(7.65)	(5.13)	3.16	2.47	3.44
Median	(0.66)	(8.97)	(6.26)	2.22	1.52	2.69
75th Percentile	(1.05)	(11.13)	(7.60)	1.07	0.37	1.73
90th Percentile	(1.53)	(12.50)	(8.67)	0.05	(0.93)	0.32
International Equity ●	(0.06)	(7.78)	(5.19)	3.55	2.44	3.86
International Equity Target ▲	(0.94)	(10.40)	(7.43)	1.37	0.52	2.18

- The Consolidated Pension Trust's International Equity pool's returns are above both those of the median manager and the target index over the 10-year period ending June 30, 2016.

Consolidated Pension Trust: U.S. Fixed Income

As of June 30, 2016

Performance vs Pub Pln- Domestic Fixed (Gross)



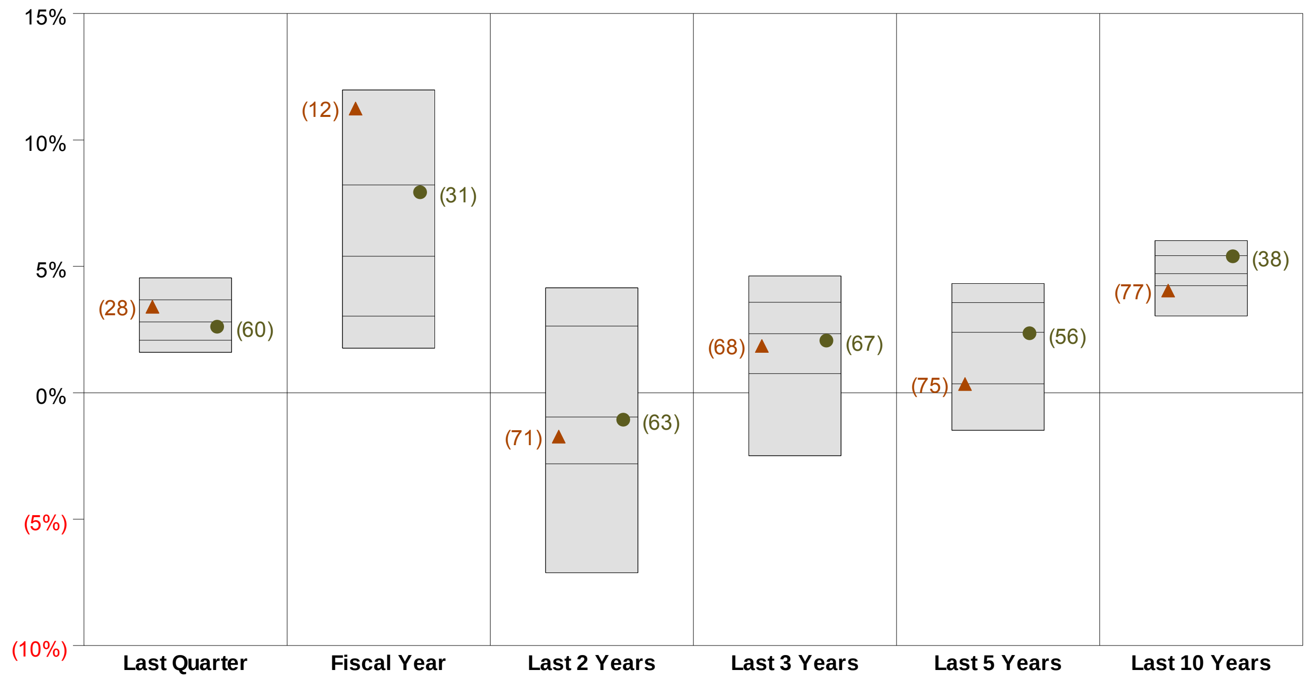
	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	3.55	6.73	4.48	5.06	5.61	6.57
25th Percentile	3.14	5.96	3.91	4.53	4.78	5.94
Median	2.60	5.08	3.28	4.10	4.29	5.39
75th Percentile	1.98	4.40	2.91	3.30	3.62	4.65
90th Percentile	1.56	3.22	2.29	2.69	2.82	4.20
Domestic Fixed Income ●	3.05	3.95	3.68	5.03	5.67	6.06
Domestic Fixed Income Target ▲	3.19	4.92	3.07	4.16	4.44	5.95

- The Consolidated Pension Trust's domestic fixed income program has outperformed its peers and the benchmark for the trailing two-, three-, five- and 10-year periods.

Consolidated Pension Trust: International Fixed Income

As of June 30, 2016

Performance vs Public Fund - International Fixed (Gross)



	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	4.54	11.98	4.15	4.62	4.32	6.02
25th Percentile	3.67	8.22	2.63	3.58	3.56	5.42
Median	2.80	5.40	(0.96)	2.33	2.39	4.71
75th Percentile	2.08	3.03	(2.81)	0.75	0.35	4.24
90th Percentile	1.60	1.76	(7.12)	(2.49)	(1.48)	3.03
International Fixed Income ●	2.56	7.87	(1.13)	2.01	2.28	5.33
International Fixed Income Target ▲	3.40	11.24	(1.73)	1.85	0.35	4.04

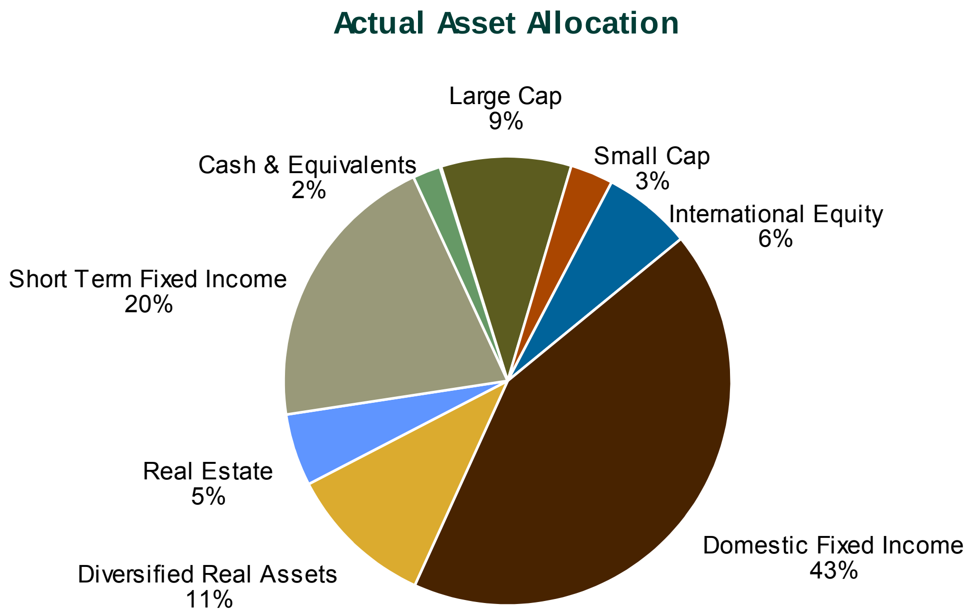
- International Fixed Income exceeds index for the last two-, three-, five-, and 10-year periods.

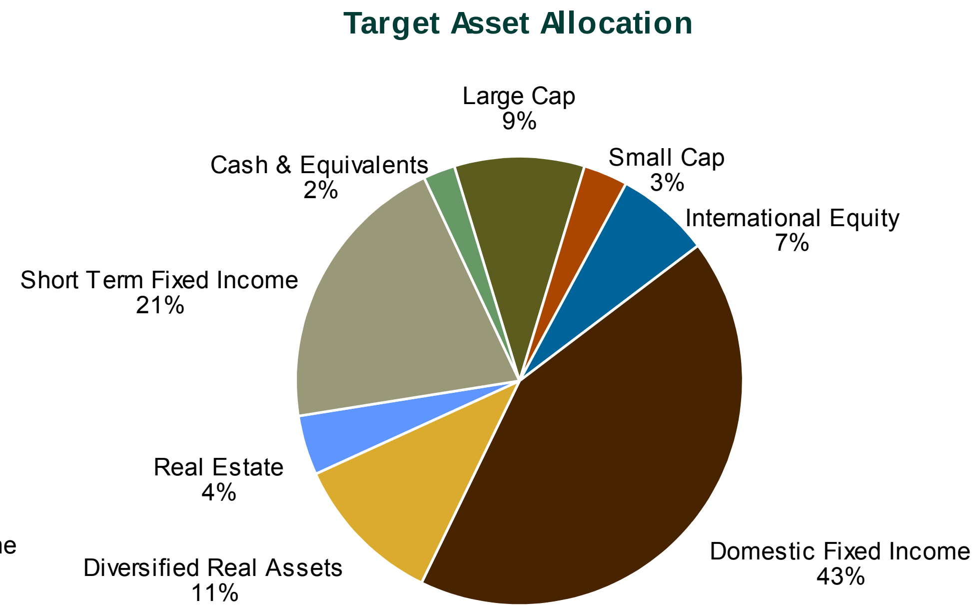
Consolidated Insurance Trust Quarterly Review

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

Consolidated Insurance Trust Allocation

As of June 30, 2016

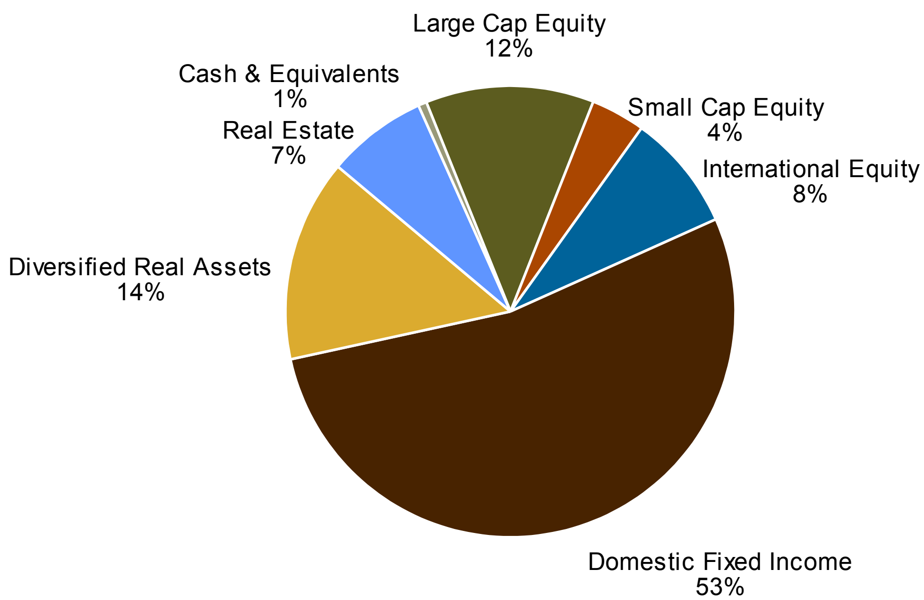


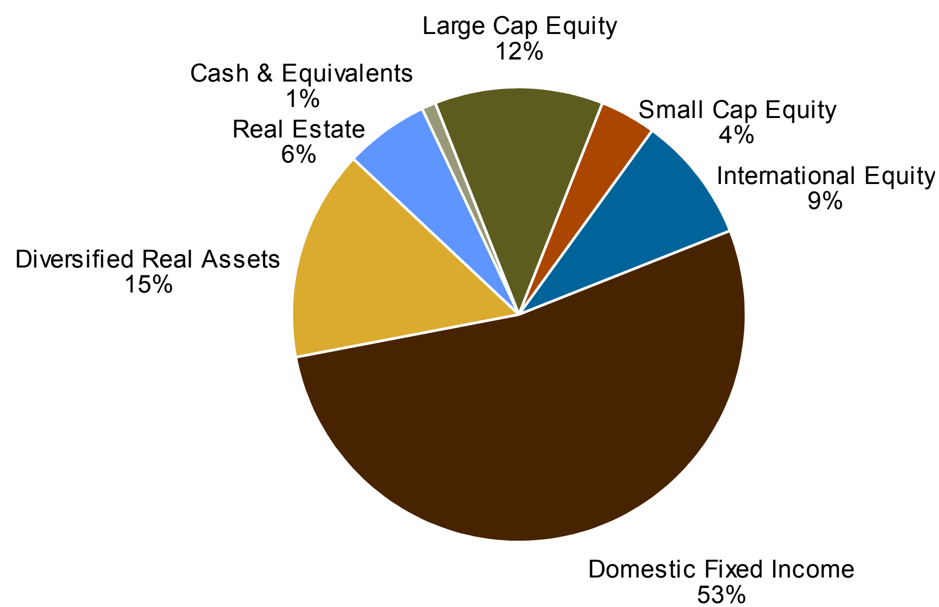


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	239,350	9.4%	9.4%	0.0%	728
Small Cap	79,585	3.1%	3.2%	(0.1%)	(1,649)
International Equity	162,877	6.4%	6.8%	(0.4%)	(9,744)
Domestic Fixed Income	1,084,806	42.7%	42.5%	0.2%	5,927
Diversified Real Assets	268,751	10.6%	11.0%	(0.4%)	(10,488)
Real Estate	131,285	5.2%	4.3%	0.9%	22,127
Short Term Fixed Income	520,366	20.5%	20.5%	0.0%	(35)
Cash & Equivalents	51,519	2.0%	2.3%	(0.3%)	(6,867)
Total	2,538,538	100.0%	100.0%		

WSI Allocation

As of June 30, 2016



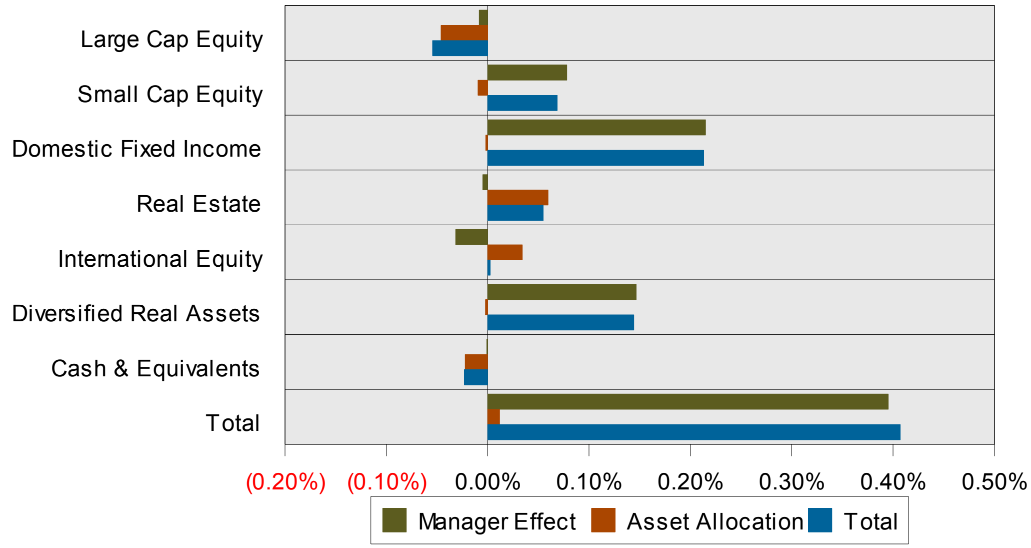


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap Equity	221,627	12.1%	12.0%	0.1%	1,775
Small Cap Equity	71,992	3.9%	4.0%	(0.1%)	(1,292)
International Equity	154,030	8.4%	9.0%	(0.6%)	(10,860)
Domestic Fixed Income	976,544	53.3%	53.0%	0.3%	5,529
Diversified Real Assets	264,886	14.5%	15.0%	(0.5%)	(9,930)
Real Estate	131,219	7.2%	6.0%	1.2%	21,293
Cash & Equivalents	11,805	0.6%	1.0%	(0.4%)	(6,516)
Total	1,832,104	100.0%	100.0%		

WSI Performance and Attribution

As of June 30, 2016

One Year Relative Attribution Effects



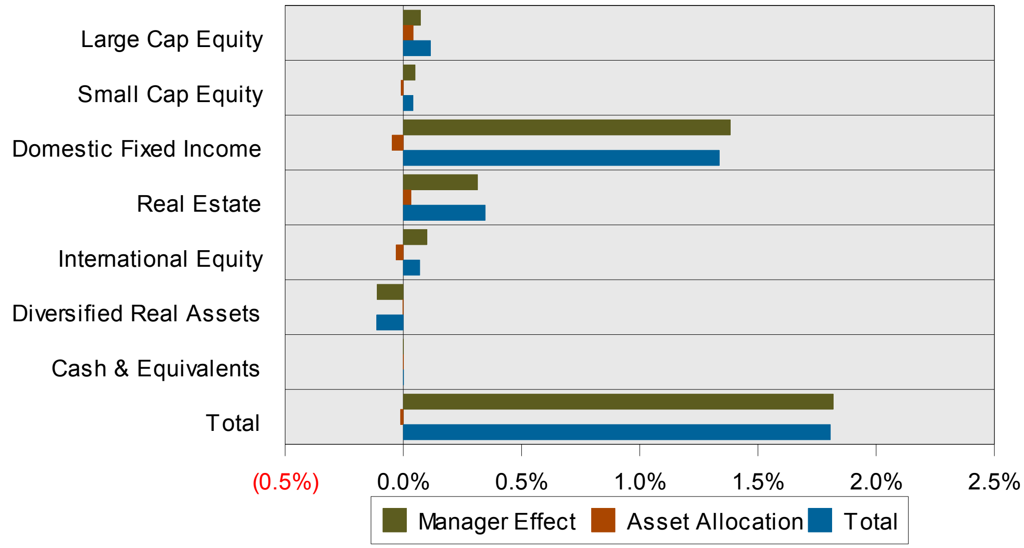
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	2.91%	2.93%	(0.01%)	(0.05%)	(0.05%)
Small Cap Equity	4%	4%	(4.86%)	(6.73%)	0.08%	(0.01%)	0.07%
Domestic Fixed Income	53%	53%	6.49%	6.00%	0.22%	(0.00%)	0.21%
Real Estate	7%	6%	10.51%	10.64%	(0.00%)	0.06%	0.05%
International Equity	9%	9%	(10.43%)	(10.16%)	(0.03%)	0.03%	0.00%
Diversified Real Assets	15%	15%	3.19%	2.19%	0.15%	(0.00%)	0.14%
Cash & Equivalents	1%	1%	0.12%	0.19%	(0.00%)	(0.02%)	(0.02%)
Total			**3.83% =**	**3.42% +**	**0.40% +**	**0.01%**	**0.41%**

WSI Performance and Attribution

As of June 30, 2016

Six Year Annualized Relative Attribution Effects

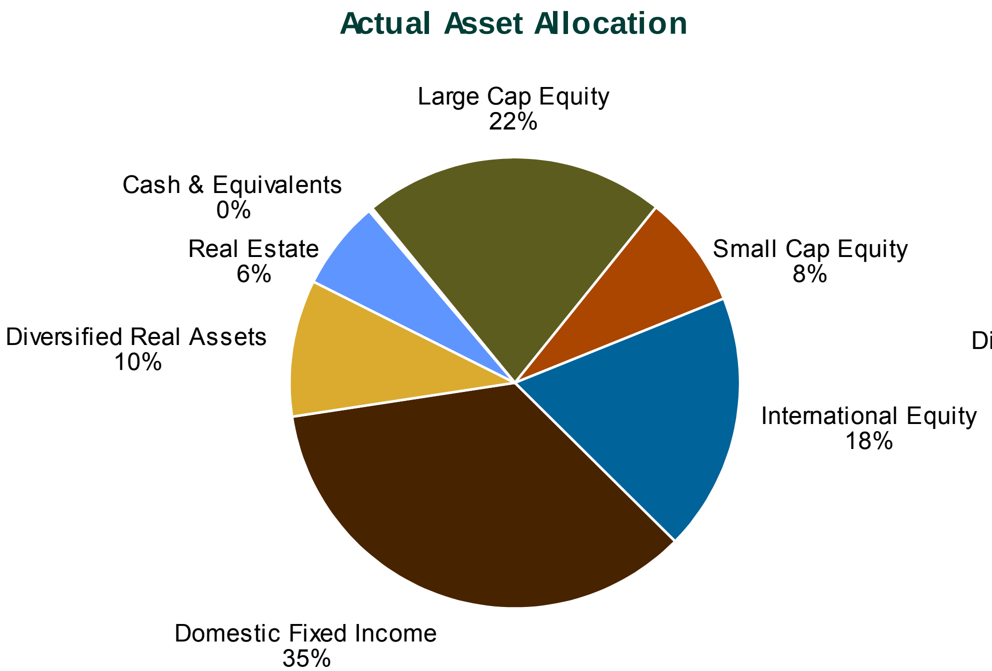


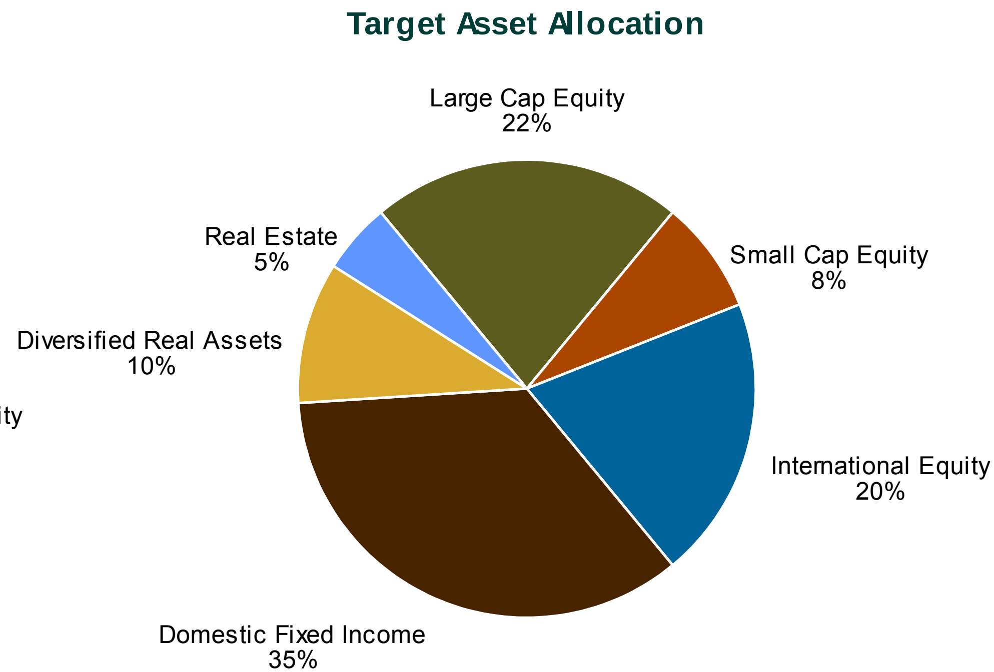
Six Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	11%	10%	15.71%	15.00%	0.07%	0.04%	0.12%
Small Cap Equity	4%	4%	14.22%	12.73%	0.05%	(0.01%)	0.04%
Domestic Fixed Income	52%	52%	6.45%	3.79%	1.38%	(0.05%)	1.34%
Real Estate	6%	6%	17.74%	12.37%	0.31%	0.03%	0.35%
International Equity	7%	8%	6.35%	5.04%	0.10%	(0.03%)	0.07%
Diversified Real Assets	19%	20%	4.51%	5.08%	(0.11%)	(0.00%)	(0.11%)
Cash & Equivalents	1%	1%	0.16%	0.10%	0.00%	0.00%	0.00%
Total			**7.95% =**	**6.14% +**	**1.82% +**	**(0.01%)**	**1.81%**

Legacy Fund Allocation

As of June 30, 2016



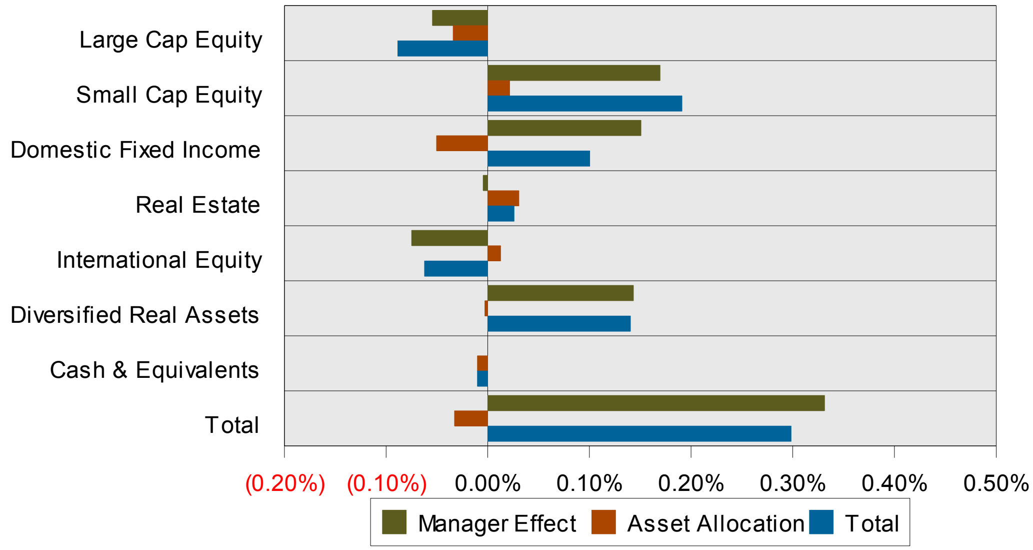


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap Equity	828,297	21.7%	22.0%	(0.3%)	(9,789)
Small Cap Equity	308,761	8.1%	8.0%	0.1%	4,002
International Equity	703,294	18.5%	20.0%	(1.5%)	(58,603)
Domestic Fixed Income	1,340,865	35.2%	35.0%	0.2%	7,545
Diversified Real Assets	374,417	9.8%	10.0%	(0.2%)	(6,531)
Real Estate	244,647	6.4%	5.0%	1.4%	54,173
Cash & Equivalents	9,202	0.2%	0.0%	0.2%	9,202
Total	3,809,483	100.0%	100.0%		

Legacy Fund Performance and Attribution

As of June 30, 2016

One Year Relative Attribution Effects



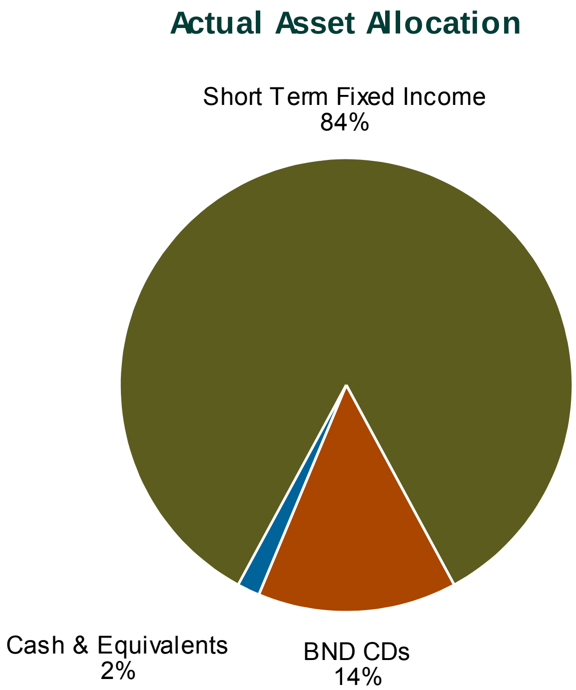
1 Year Ended 6/30/2016	
Gross:	1.31%
Net of fees:	1.06%
Target:	1.01%
Net Added:	0.05%

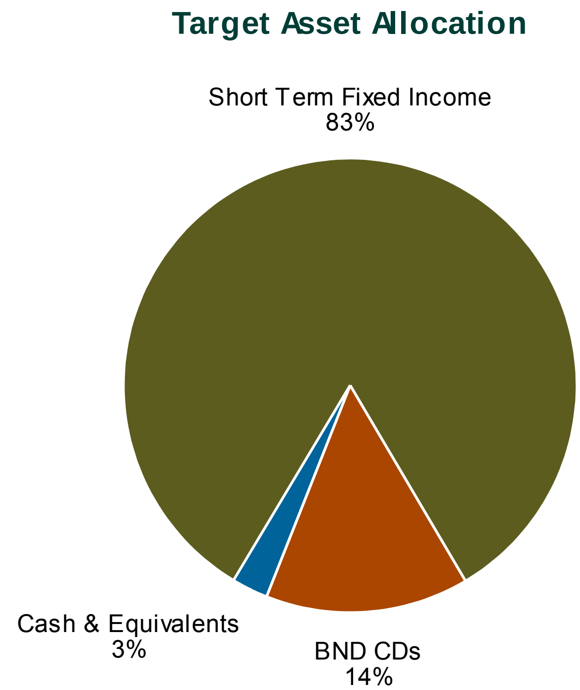
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	2.71%	2.93%	(0.05%)	(0.03%)	(0.09%)
Small Cap Equity	8%	8%	(4.58%)	(6.73%)	0.17%	0.02%	0.19%
Domestic Fixed Income	35%	35%	6.54%	6.00%	0.15%	(0.05%)	0.10%
Real Estate	6%	5%	10.51%	10.64%	(0.00%)	0.03%	0.03%
International Equity	19%	20%	(10.46%)	(10.16%)	(0.07%)	0.01%	(0.06%)
Diversified Real Assets	10%	10%	3.51%	2.00%	0.14%	(0.00%)	0.14%
Cash & Equivalents	0%	0%	0.12%	0.12%	0.00%	(0.01%)	(0.01%)
Total			**1.31% =**	**1.01% +**	**0.33% +**	**(0.03%)**	**0.30%**

Budget Stabilization Fund Allocation

As of June 30, 2016



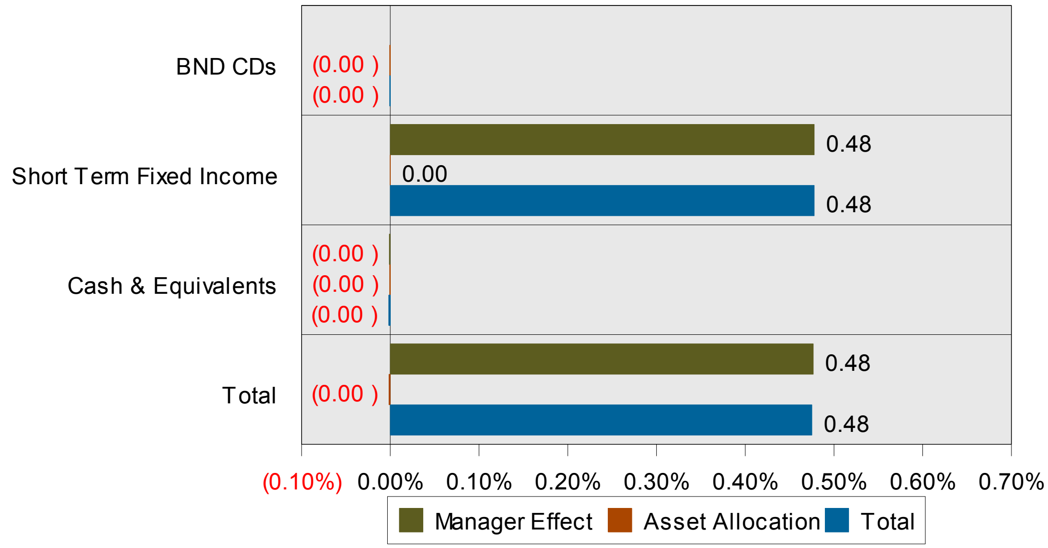


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Short Term Fixed Income	485,318	84.3%	83.0%	1.3%	7,479
BND CDs	81,604	14.2%	14.5%	(0.3%)	(1,674)
Cash & Equivalents	8,997	1.6%	2.6%	(1.0%)	(5,805)
Total	575,918	100.0%	100.0%		

Budget Stabilization Fund Overview

As of June 30, 2016

One Year Relative Attribution Effects



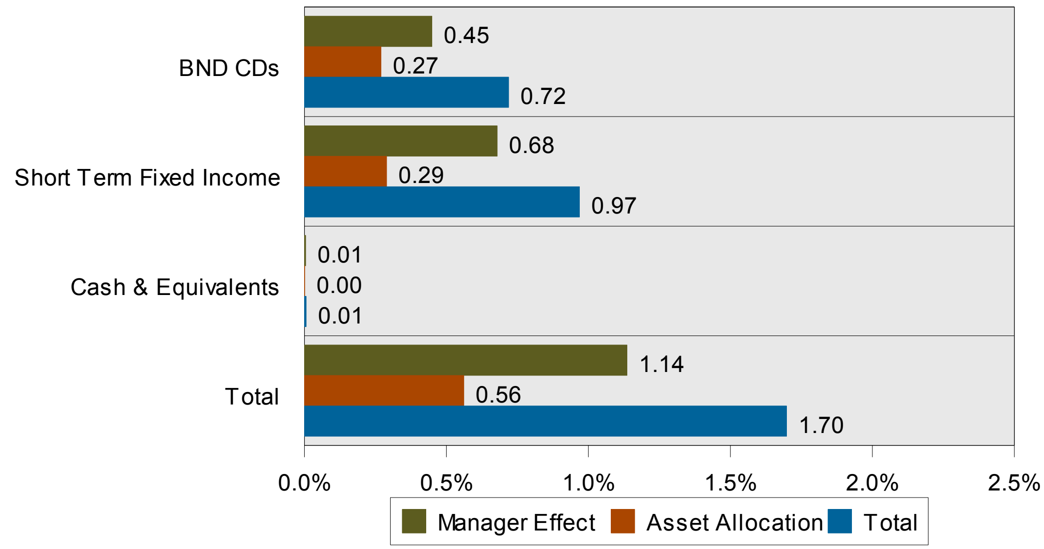
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return		Target Return		Manager Effect		Asset Allocation	Total Relative Return
BND CDs	15%	16%	2.61%		2.61%		0.00%		(0.00%)	(0.00%)
Short Term Fixed Income	83%	83%	1.88%		1.31%		0.48%		0.00%	0.48%
Cash & Equivalents	2%	2%	0.12%		0.19%		(0.00%)		(0.00%)	(0.00%)
Total			**1.97%**	**=**	**1.49%**	**+**	**0.48%**	**+**	**(0.00%)**	**0.48%**

Budget Stabilization Fund Overview

As of June 30, 2016

Six Year Annualized Relative Attribution Effects



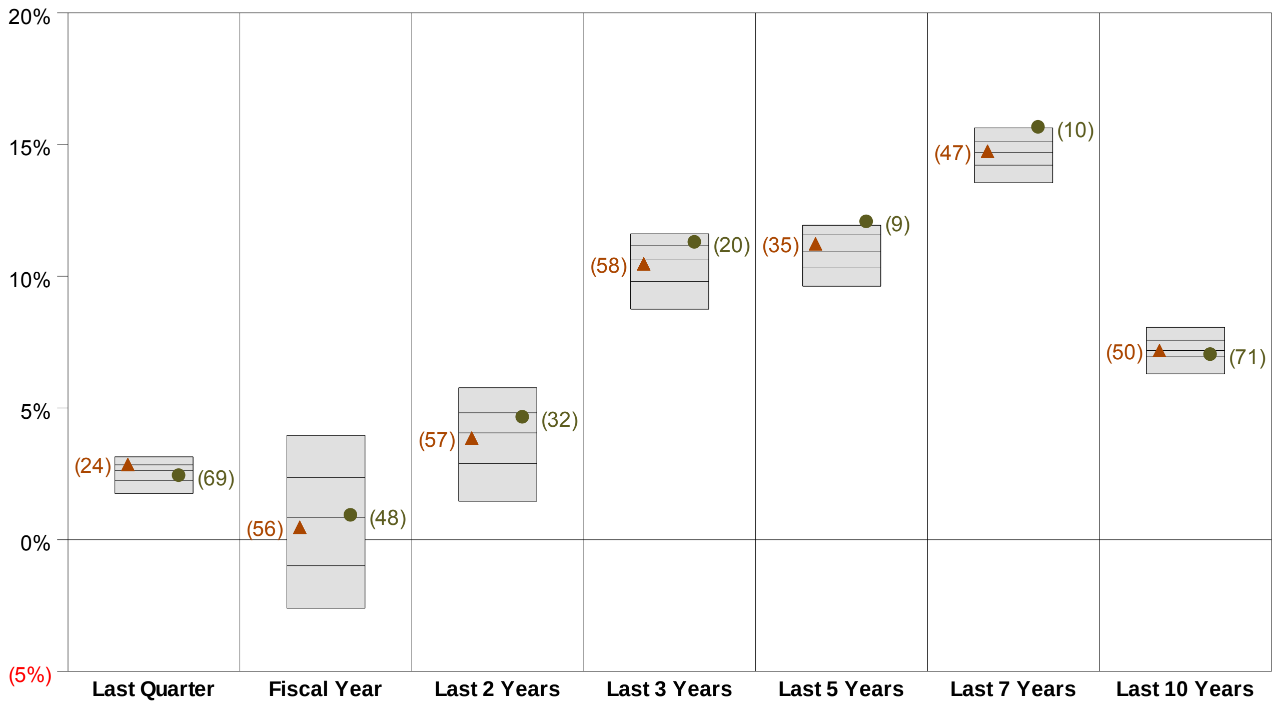
Six Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return		Target Return		Manager Effect		Asset Allocation	Total Relative Return
BND CDs	22%	16%	3.43%		1.38%		0.45%		0.27%	0.72%
Short Term Fixed Income	73%	62%	2.02%		1.14%		0.68%		0.29%	0.97%
Cash & Equivalents	4%	22%	0.16%		0.10%		0.01%		0.00%	0.01%
Total			**2.30%**	**=**	**0.60%**	**+**	**1.14%**	**+**	**0.56%**	**1.70%**

Consolidated Insurance Trust: Domestic Equity

As of June 30, 2016

Performance vs Pub Pln- Domestic Equity (Gross)



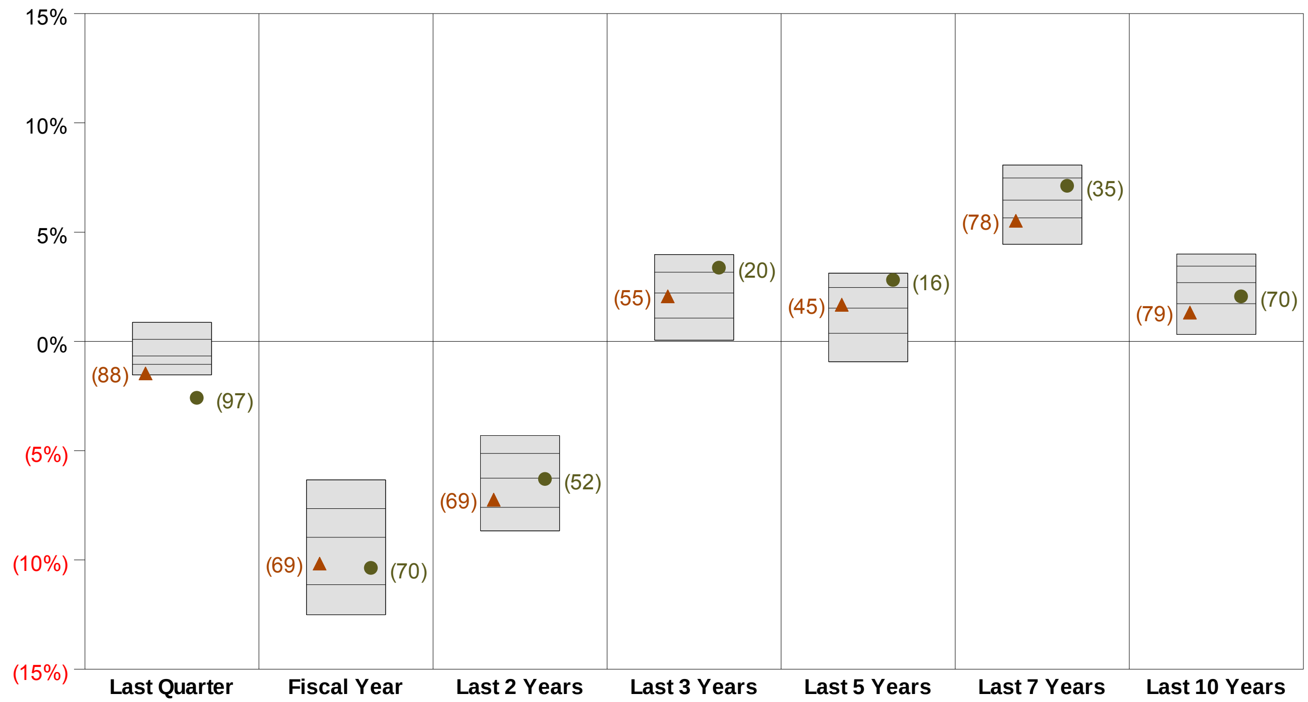
	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	3.14	3.96	5.77	11.61	11.94	15.63	8.07
25th Percentile	2.84	2.36	4.82	11.16	11.57	15.11	7.57
Median	2.63	0.84	4.06	10.62	10.93	14.70	7.18
75th Percentile	2.25	(0.99)	2.89	9.80	10.32	14.22	6.94
90th Percentile	1.76	(2.60)	1.46	8.75	9.62	13.55	6.30
Domestic Equity ●	2.39	0.90	4.62	11.25	12.04	15.62	7.00
Domestic Equity Target ▲	2.86	0.47	3.86	10.47	11.23	14.75	7.18

- The fund has outperformed the benchmark and placed above median for all time frames except the last quarter and the last 10 years.

Consolidated Insurance Trust: International Equity

As of June 30, 2016

Performance vs Pub Pln- International Equity (Gross)



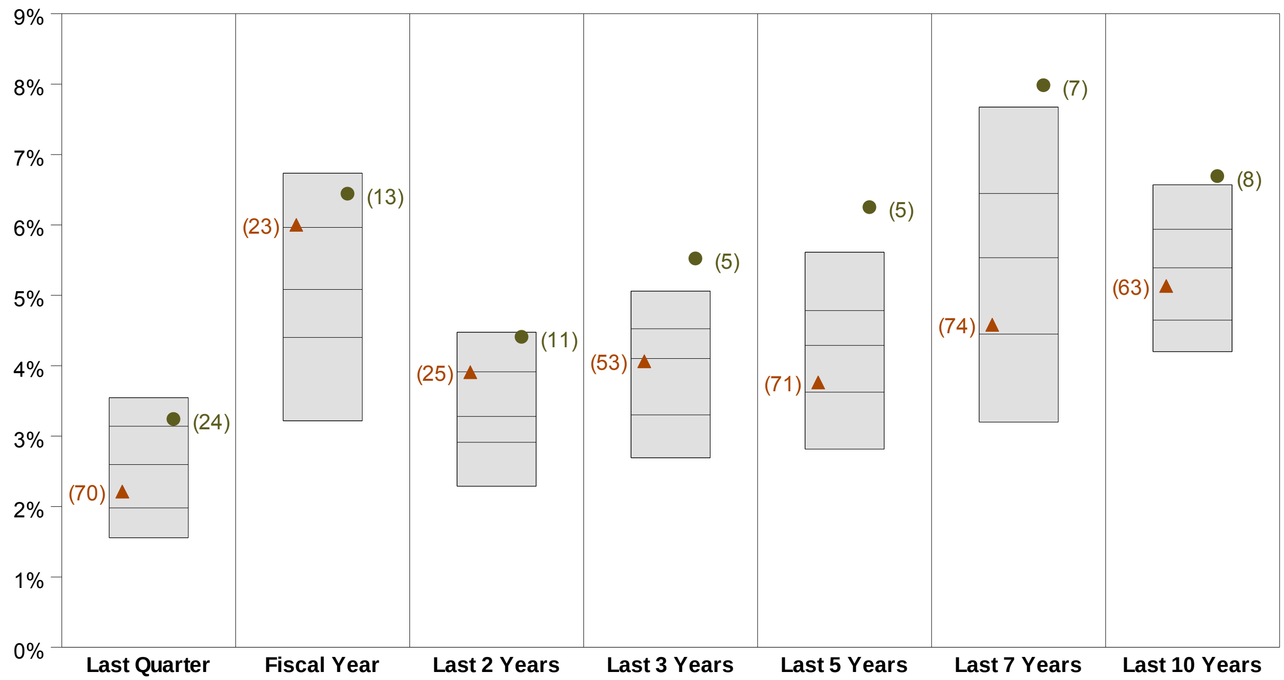
	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	0.87	(6.34)	(4.31)	3.98	3.12	8.08	3.99
25th Percentile	0.10	(7.65)	(5.13)	3.16	2.47	7.48	3.44
Median	(0.66)	(8.97)	(6.26)	2.22	1.52	6.47	2.69
75th Percentile	(1.05)	(11.13)	(7.60)	1.07	0.37	5.66	1.73
90th Percentile	(1.53)	(12.50)	(8.67)	0.05	(0.93)	4.44	0.32
International Equity ●	(2.65)	(10.44)	(6.37)	3.31	2.74	7.05	1.99
International Equity Target ▲	(1.46)	(10.16)	(7.24)	2.06	1.68	5.52	1.32

- The International Equity program has beaten the benchmark over the last two, three, five, seven and 10 year time frames.

Consolidated Insurance Trust: Domestic Fixed Income

As of June 30, 2016

Performance vs Pub Pln- Domestic Fixed (Gross)



	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	3.55	6.73	4.48	5.06	5.61	7.67	6.57
25th Percentile	3.14	5.96	3.91	4.53	4.78	6.45	5.94
Median	2.60	5.08	3.28	4.10	4.29	5.53	5.39
75th Percentile	1.98	4.40	2.91	3.30	3.62	4.45	4.65
90th Percentile	1.56	3.22	2.29	2.69	2.82	3.20	4.20
Domestic Fixed Income ●	3.22	6.42	4.39	5.50	6.23	7.96	6.67
Domestic Fixed Inc. Target ▲	2.21	6.00	3.91	4.06	3.76	4.58	5.13

- Fixed Income has been an exceptionally well-performing asset in the Insurance Trust, especially over the last two, three, five, seven, and 10 year time frames.

Watchlist Managers

As of June 30, 2016

- **PIMCO:** On July 19th, PIMCO announced the appointment of **Emmanuel (Manny) Roman** as PIMCO's next Chief Executive Officer. Manny will replace **Doug Hodge** who, prior to **Mohammed El-Erian's** departure from the CEO post, was PIMCO's COO**.**
- **PIMCO MBS**: Net performance has trailed the peer group in the QTD, one, and three year periods.
- **PIMCO Unconstrained**: Net performance has trailed the peer in the QTD, one, and three year periods. With the exception of the QTD period, manager has been solidly in the fourth quartile.
- **UBS Global Fixed Income**: Net performance has trailed the blended index in the two, three, five, and 10 year periods. Relative to the peer universe, the manager has been almost solidly in the fourth quartile with the exception of the last quarter, fiscal year to date, and two year time frames.
- **JP Morgan MBS**: Added to watchlist for personnel changes.

Callan

June 30, 2016

North Dakota State Investment Board Pension Funds

Investment Measurement Service Quarterly Review

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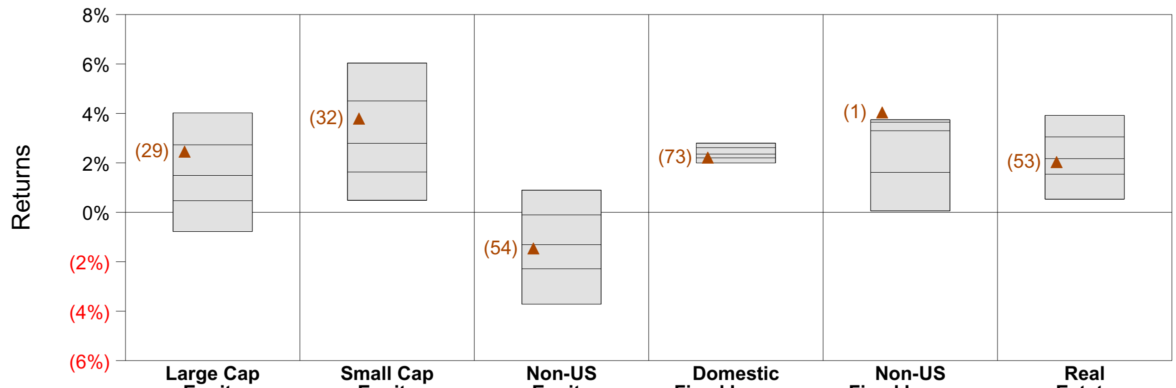
Market Overview

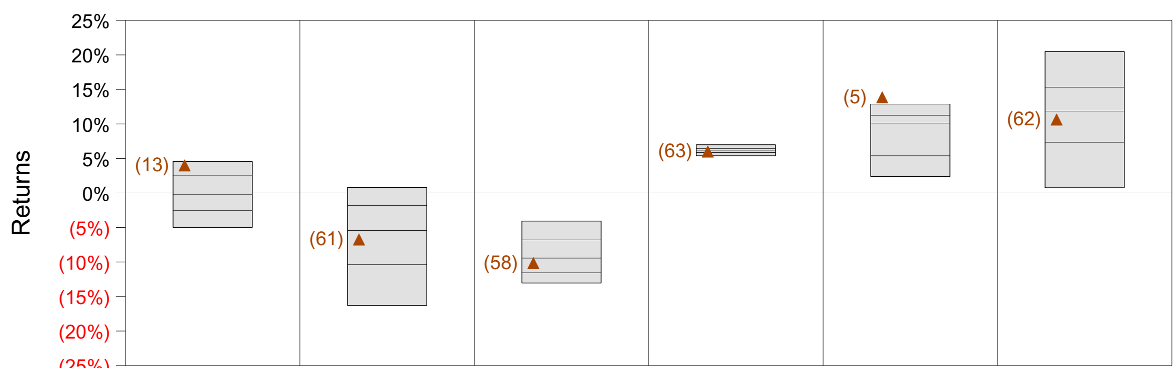
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also 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 June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.02	6.04	0.90	2.80	3.74	3.92
25th Percentile	2.73	4.51	(0.10)	2.62	3.64	3.05
Median	1.49	2.79	(1.31)	2.36	3.30	2.17
75th Percentile	0.47	1.63	(2.29)	2.20	1.62	1.54
90th Percentile	(0.78)	0.48	(3.72)	2.00	0.06	0.53
Index ▲	2.46	3.79	(1.46)	2.21	4.04	2.03

Range of Separate Account Manager Returns by Asset Class
One Year Ended June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.57	0.80	(4.07)	6.98	12.87	20.51
25th Percentile	2.57	(1.79)	(6.80)	6.46	11.25	15.32
Median	(0.25)	(5.42)	(9.43)	6.20	10.12	11.86
75th Percentile	(2.56)	(10.37)	(11.56)	5.85	5.39	7.35
90th Percentile	(4.99)	(16.30)	(13.04)	5.39	2.38	0.75
Index ▲	3.99	(6.73)	(10.16)	6.00	13.85	10.64

Callan

Second Quarter 2016

Keep Calm and Carry On

ECONOMY

2 PAGE

Despite global turmoil, all indicators of the U.S. economy pointed toward the strongest growth in consumption in a decade. But a disappointing first read on GDP for the second quarter is likely to give the Fed enough reason to delay a much-anticipated September rate hike.

Any Relief in Sight?

FUND SPONSOR

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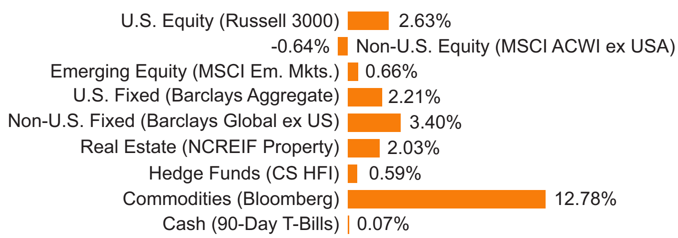
Corporate funds outperformed all others during the quarter because of their higher exposure to U.S. fixed income investments. But that brought little relief for their funding status, which fell by more than 3 percentage points.

Broad Market Quarterly Returns



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

Greener Grass

U.S. EQUITY

6 PAGE

The **S&P 500** ended the quarter only 1.5% below its all-time high achieved in May 2015, indicating that for investors wary of the turbulence around the world, the grass does appear to be greener in the United States.

Fasten Your Seat Belts

NON-U.S. EQUITY

9 PAGE

Markets around the world ended the quarter relatively stable despite the Brexit vote, with the **MSCI ACWI ex USA Index** down only slightly (-0.64%), and the **MSCI Pacific Index** up a bit (+0.87%). The **MSCI Europe Index**, not surprisingly, finished down more 2.69%.

Rally Across the Board

U.S. FIXED INCOME

12 PAGE

All sectors rallied during the quarter and produced positive returns, with investment-grade corporates leading the way, as investors assessed the broad strength of the U.S. economy and relatively attractive opportunities with the U.S. fixed income markets in the wake of Brexit.

How Low Can Rates Go?

NON-U.S. FIXED INCOME

15 PAGE

Major global bond indices showed positive returns for the quarter, as sovereign yields fell. Most major global currencies weakened against the U.S. dollar; the British pound was hit hardest. Emerging market bonds continued to rebound despite a bumpy ride.

It Really Is Location, Location, Location

REAL ESTATE

17 PAGE

The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, Brexit uncertainties, and concerns about China's slowing growth.

Sticker Shock

PRIVATE EQUITY

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Fundraising surged in the second quarter, with a large jump in venture capital. The investment pace by funds into companies slowed, but the amount invested into VC companies increased. And IPOs by both buyout-backed and VC-backed firms increased in the quarter.

Caution as Britannia Waives the Rule

HEDGE FUNDS

20 PAGE

Hedge funds eked out modest gains in the second quarter, with convertible arb funds performing best and short bias the worst. Emerging market and fixed income arb funds showed positive returns, making up for losses in the first quarter.

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION

21 PAGE

As usual, target date funds attracted most of the assets during the first quarter, and now command more than a quarter of total DC assets. But the **Callan DC Index** lagged the Age 45 Target Date Fund by 42 bps in the quarter.

Keep Calm and Carry On

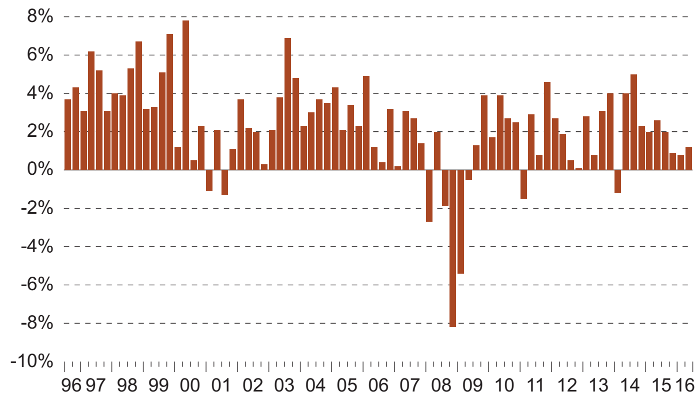
ECONOMY | Jay Kloepfer

Voters in the United Kingdom narrowly approved a referendum to leave the European Union on June 23, and this unexpected result completely overshadowed everything else that happened in the global economy during the second quarter. Global bond yields fell to record lows, the British pound hit a 31-year low versus the U.S. dollar, and global equity markets plunged before quickly bouncing back to regain much of what they lost over a period of just a week.

In the background, the U.S. economy seemed to be calmly carrying on, as all indicators pointed toward the strongest growth in consumption in a decade. The first read of second-quarter gross domestic product (GDP) growth was therefore clearly disappointing at just 1.2%, dashing consensus expectations (or maybe just hopes) for a rate of 2% or higher. The revision to the first-quarter result was disappointing as well, pulled down from 1.1% to just 0.8%. The U.S. economy has now expanded by just 1.2% over the past year, the weakest 12-month gain since the reduction in Federal fiscal stimulus during 2013. Second-quarter growth was fueled by the standout strength in consumer spending, which increased at a robust rate of 4.2%. Gains in employment, disposable income, and home asset values (boosting household wealth)—along with low energy prices, modest inflation, and low interest rates—are providing the tailwind for consumers. Weighing down overall GDP growth is continued retrenchment in non-residential fixed investment, a blip downward in residential investment, and the fourth consecutive quarter of inventory reduction, which subtracted more than 1% from overall GDP growth. This weak GDP growth is likely to give the Federal Reserve sufficient reason to delay a much-anticipated September rate hike.

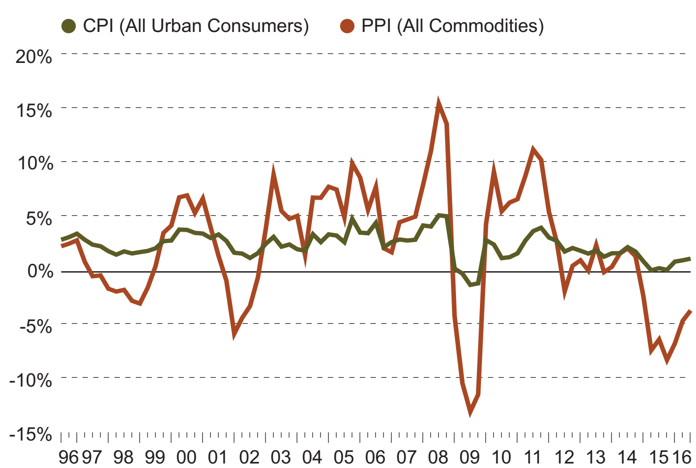
The job market gave quite a scare during the second quarter and was likely a primary factor in derailing what looked to be a certain Fed rate hike in June. April job gains slowed to 144,000 after averaging close to 200,000 during the first quarter, and then plummeted to just 11,000 in May, before recovering to an impressive 287,000 gain in June. The April and May jobs reports spurred fears that the economy was stalling, but the June gain may dispel some of those fears. As the U.S. economy approaches full employment, payroll gains can't grow at 200,000 per month indefinitely, let alone the 250,000 rate achieved in much of 2015. The unemployment rate remains below 5%, although it actually bounced up in June from 4.7% to 4.9% as more people rejoined the workforce. The biggest challenge for the labor market is the mismatch between the strong demand for skilled labor and the ample supply of relatively lower-skilled workers.

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

The conundrum holding back stronger economic growth is the decline in company capital investment in a period of very low interest rates. Non-residential fixed investment fell in both the first and second quarters of 2016, dragged down by the collapse in drilling activity for oil and natural gas. The strong dollar has also hit exports and domestic sales of manufacturing industries exposed to international competition, and weak global growth has suppressed prices for agricultural goods. On a more positive note, the impact of these forces suppressing capital spending has peaked and is fading relative to last year. The Institute for Supply Management's index of manufacturing activity rose back above 50—the line between expansion and contraction—and reached a 16-month high in June, suggesting that manufacturing may have bottomed in the first quarter of the year. Another anomaly impacting GDP growth is the inventory buildup caused by last winter's warm weather. A huge buildup in natural gas stocks was to be expected, but oddly enough, the warm weather spurred excess inventories in wholesalers and retailers, and the correction has slowed demand from manufacturers.

The Brexit vote will likely be a small bump in the road for U.S. trade. U.S. exports of goods and services to the U.K. and the EU constitute just 1% and 3% of GDP, respectively. The damage to U.S. GDP will likely be limited to a few tenths of one percent. The larger impact may come from Brexit's potential to dampen consumer and business confidence and to complicate central governments' attempts to address global economic stagnation.

The European Central Bank (ECB) continued its efforts to stimulate euro-zone economies, where unemployment remains at 10%. The ECB began buying corporate bonds in June, reaching nearly 5 billion euros by the end of the month. The average yield on investment-grade European corporate debt dropped to a record low of less than 1%. Negative-yielding government debt in the euro zone surged to nearly $12 trillion. By comparison, U.S. yields look high, suggesting further downward pressure on seemingly rock-bottom U.S. interest rates is possible. The decline in U.S. rates since the start of the year caught most market participants by surprise. The consensus was for the U.S. to embark on a path to gradually higher rates, starting this year. As expectations for rising rates fade, the fear is that the optimism for growth which would have justified higher rates will fade, too.

The Long-Term View

Index	2016 2nd Qtr	Periods ended December 31, 2015 Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	2.63	0.48	12.18	7.35	10.03
S&P 500	2.46	1.38	12.57	7.31	9.82
Russell 2000	3.79	-4.41	9.19	6.80	10.50
Non-U.S. Equity					
MSCI EAFE	-1.46	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	0.66	-14.92	-4.80	3.61	–
S&P ex-U.S. Small Cap	-1.30	5.92	5.51	5.33	6.80
Fixed Income					
Barclays Aggregate	2.21	0.55	3.25	4.51	6.15
90-Day T-Bill	0.07	0.05	0.07	1.24	2.93
Barclays Long G/C	6.55	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	3.40	-5.54	-1.30	3.05	5.37
Real Estate					
NCREIF Property	2.03	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	6.96	3.20	11.96	7.41	12.13
Alternatives					
CS Hedge Fund	0.59	-0.71	3.55	4.97	–
Cambridge PE*	–	6.69	13.08	11.18	15.74
Bloomberg Commodity	12.78	-24.66	-13.47	-6.43	–
Gold Spot Price	6.88	-10.46	-5.70	7.41	4.02
Inflation – CPI-U	1.22	0.73	1.53	1.86	2.30

*Private equity data is time-weighted return for period. Most recent quarterly data not available.
Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14
Employment Cost–Total Compensation Growth	2.3%	1.9%	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%
Nonfarm Business–Productivity Growth	1.9%*	-0.6%	-1.7%	2.0%	3.1%	-0.8%	-1.7%	3.1%
GDP Growth	1.2%	0.8%	0.9%	2.0%	2.6%	2.0%	2.3%	5.0%
Manufacturing Capacity Utilization	75.0%	75.3%	75.4%	75.6%	75.5%	75.5%	76.0%	75.7%
Consumer Sentiment Index (1966=100)	92.4	91.5	91.3	90.8	94.2	95.5	89.8	83.0

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

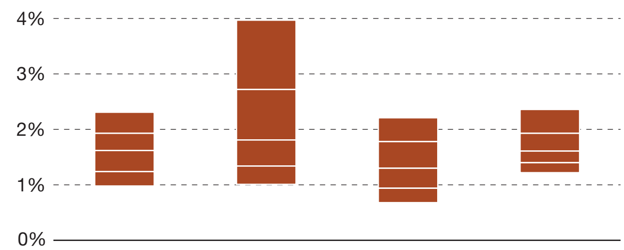
Any Relief in Sight?

FUND SPONSOR | Rufash Lama

A closer look at returns for the quarter from the Callan Fund Sponsor Databases reveals that the median corporate fund bested all other fund types. Corporate funds also had the widest dispersion of returns, and the highest total return as shown by results for funds in the 10th percentile. However, some Taft-Hartley funds outperformed the lowest-performing corporate funds, as shown by returns in the 90th percentile.

The outperformance of corporate funds during the quarter stemmed from their higher exposure to U.S. fixed income, particularly those funds with long duration. At the other end of the spectrum, endowments/foundations lagged all other fund types given their minimal exposure to U.S. fixed income. Higher allocations to non-U.S. equity and hedge funds also dragged down relative performance for endowments/foundations. Over longer time periods (5 and 10 years), compound returns for all fund sponsors have been in the range of 5% to 7%, with endowments/foundations lagging over short- and long-term periods.

Callan Fund Sponsor Returns for the Quarter



	Public	Corporate	Endow/Fndn	Taft-Hartley
10th Percentile	2.31	3.97	2.21	2.36
25th Percentile	1.93	2.72	1.78	1.93
Median	1.62	1.81	1.30	1.61
75th Percentile	1.24	1.34	0.94	1.40
90th Percentile	0.98	1.01	0.68	1.22

Source: Callan

The median funded status of corporate defined benefit plans declined for the quarter, primarily due to the dramatic fall in interest rates. Based on data from actuaries and asset managers, the median and average funded ratio fell by more than 3 percentage points in the quarter, to 76.0% and 76.4%, respectively. Year to date, the median funded status has declined by more than 6 percentage points.

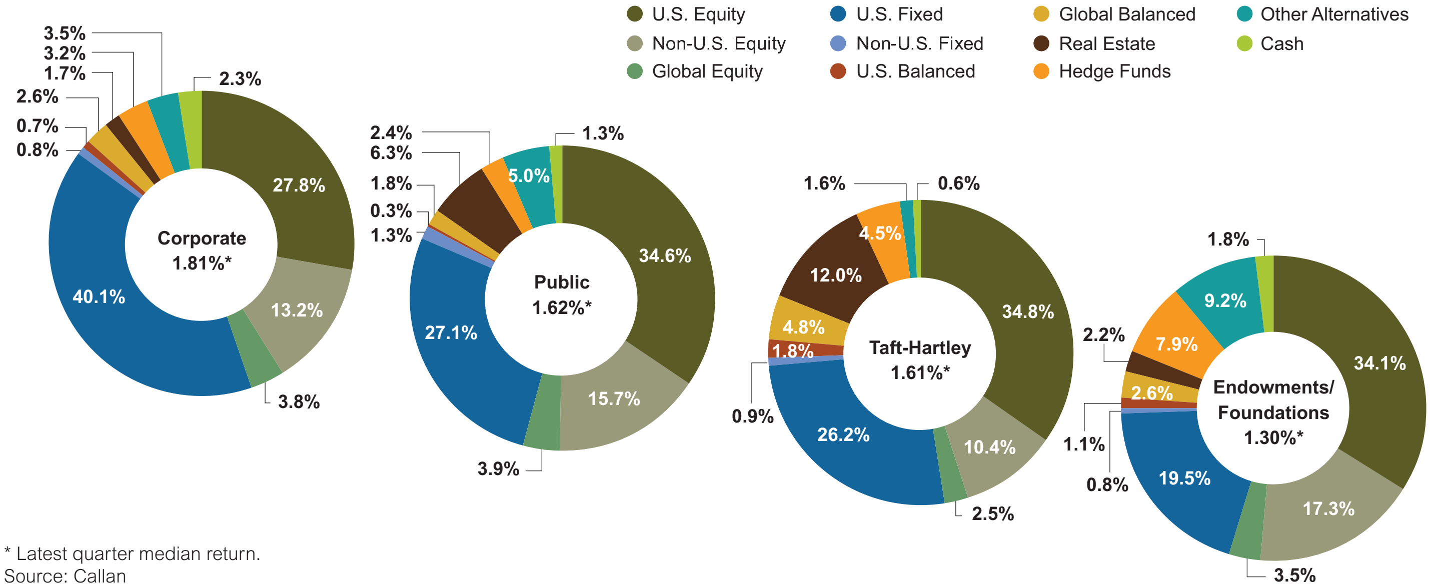
Callan Database Median Returns* for Periods ended June 30, 2016

Fund Sponsor	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Public Funds	**1.62**	**2.98**	**0.54**	**6.39**	**6.42**	**5.65**	**5.94**
Corporate Funds	**1.81**	**3.88**	**1.66**	**6.59**	**6.62**	**5.85**	**6.00**
Endowments/Foundations	**1.30**	**2.05**	**-1.55**	**5.24**	**5.53**	**5.34**	**5.69**
Taft-Hartley	**1.61**	**2.69**	**0.97**	**7.12**	**6.97**	**5.54**	**5.68**

*Returns less than one year are not annualized.

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.

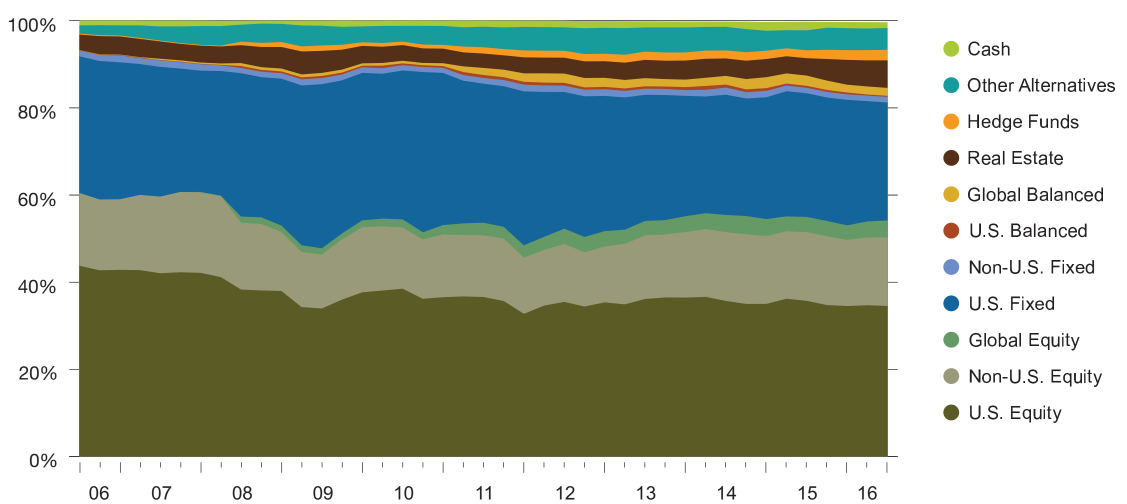
Callan Fund Sponsor Average Asset Allocation



* Latest quarter median return.
Source: Callan

Callan Public Fund Database Average Asset Allocation

(10 Years)



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.

Greener Grass

U.S. EQUITY | Lauren Mathias, CFA

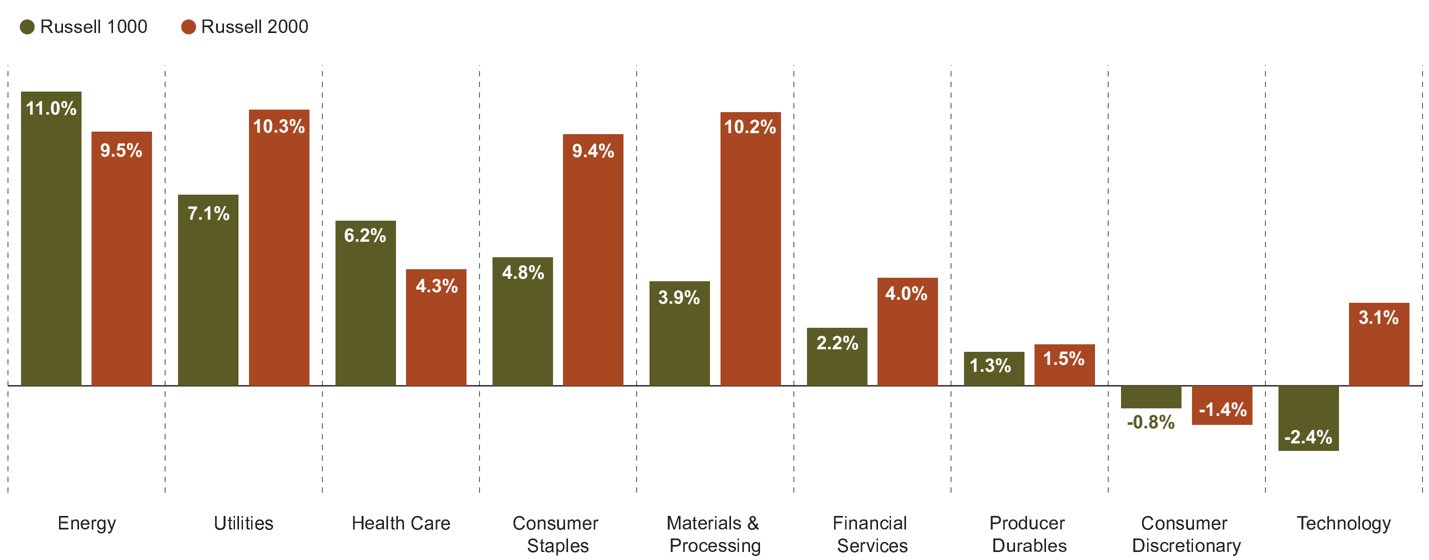
Though the **S&P 500 Index** ended in positive territory (+2.46%), it was subject to substantial volatility during the quarter. The U.K.'s vote to leave the European Union sent global markets reeling in late June; the S&P 500 fell 5.3% in the first two trading days after the vote. Volatility, as measured by VIX, spiked but remained below values posted in January. Despite uncertainty abroad and the steep drop after Brexit, the S&P 500 ended the quarter only 1.5% below its all-time high achieved in May 2015. Amid the global turmoil, it appears the grass is greener in the U.S.

Global markets did not appear to affect domestic production either: Manufacturing activity increased (the ISM Composite Index hit a 16-month high); existing home sales were up 4.5% in May; and retail sales showed strength. But disappointing unemployment figures—4.7% due to a lower labor force participation rate of 62.6%—and low first-quarter GDP prompted the Fed to keep interest rates at current levels.

After another strong quarter, value remained ahead of growth in all capitalizations (**Russell 2000 Value Index:** +4.31% and **Russell 2000 Growth Index:** +3.24%); the difference was most significant within large capitalizations (**Russell 1000 Value Index:** +4.58% and **Russell 1000 Growth Index:** +0.61%). Smaller was better: micro-, small-, and mid-capitalization companies outpaced large-capitalization stocks (**Russell Microcap Index:** +3.97%, **Russell 2000 Index:** +3.79%, **Russell Midcap Index:** +3.18%, and **Russell 1000 Index:** +2.54%).

With economic uncertainty and lower interest rates in the foreseeable future, defensive and yielding areas of the mar-

Economic Sector Quarterly Performance



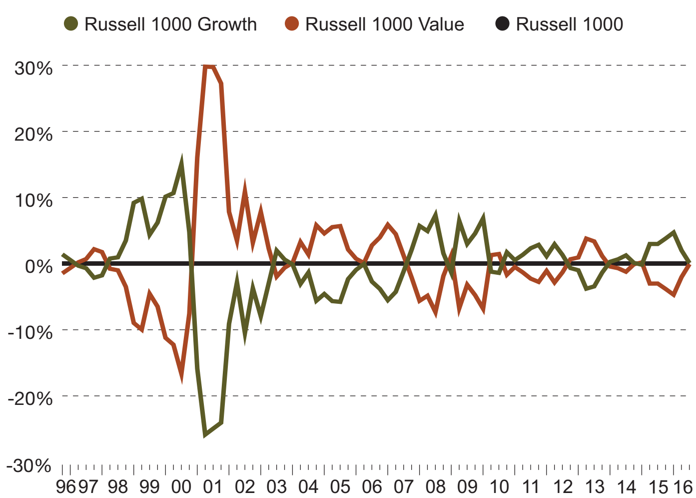
Source: Russell Investment Group

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 10 sectors.

ket did well: Utilities, Telecommunications, Health Care, and Consumer Staples. Factors like low beta and high dividend yield were in favor and boosted the performance of these sectors. After a long period of poor performance, Energy was by far the leading sector, buoyed by an almost 30% increase in oil prices. Financials lagged, mostly due to a tough June—both the Brexit crisis and absent interest rate hike were the culprits. Health Care and Technology, large sectors in the growth benchmark, were dragged down by the pharmaceuticals/biotechnology and hardware and equipment industries, respectively. Stock correlations elevated in June, making it challenging for active management; however, levels remain below those experienced in 2015.

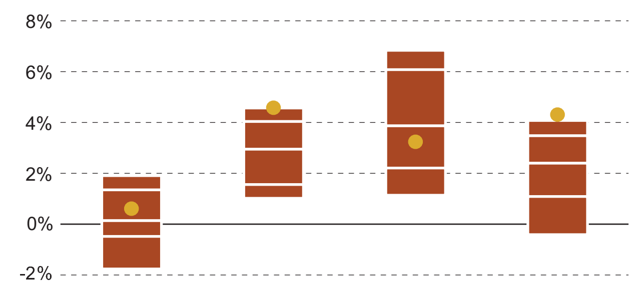
The U.S. equity market managed to escape a tumultuous June with positive results in the full quarter. However, active funds have found it challenging to outpace their respective benchmarks this year—fewer than 50% were able to do so.

Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns



	Large Cap Growth Style	Large Cap Value Style	Small Cap Growth Style	Small Cap Value Style
10th Percentile	1.91	4.57	6.84	4.08
25th Percentile	1.35	4.04	6.08	3.48
Median	0.14	2.95	3.87	2.40
75th Percentile	-0.48	1.56	2.21	1.09
90th Percentile	-1.76	1.02	1.14	-0.41
	R1000 Growth	**R1000 Value**	**R2000 Growth**	**R2000 Value**
Benchmark	0.61	4.58	3.24	4.31

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of June 30, 2016

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	506	3,007	1,000	800	2,507	2,006
% of Russell 3000	82%	100%	92%	27%	17%	7%
Wtd Avg Mkt Cap ($bn)	127.80	106.54	114.81	12.03	3.79	1.70
Price/Book Ratio	2.7	2.6	2.7	2.4	2.1	1.9
Forward P/E Ratio	16.6	17.1	17	18.5	18.4	18.7
Dividend Yield	2.2%	2.1%	2.1%	1.8%	1.7%	1.6%
5-Yr Earnings (forecasted)	11.9%	12.0%	12.0%	10.2%	11.7%	12.9%

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

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Large Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Large Cap Core Style	**1.73**	**1.44**	**0.33**	**11.02**	**11.74**	**7.68**	**6.31**
Russell 3000	**2.63**	**3.62**	**2.14**	**11.13**	**11.60**	**7.40**	**6.09**
Russell 1000	**2.54**	**3.74**	**2.93**	**11.48**	**11.88**	**7.51**	**6.02**
S&P 500	**2.46**	**3.84**	**3.99**	**11.66**	**12.10**	**7.42**	**5.75**
Large Cap Growth Style	0.14	-1.72	-0.14	12.60	11.60	8.68	5.75
Russell 1000 Growth	0.61	1.36	3.02	13.07	12.35	8.78	5.50
Large Cap Value Style	2.95	3.34	-0.81	9.20	10.97	6.52	7.07
Russell 1000 Value	4.58	6.30	2.86	9.87	11.35	6.13	6.38

Mid Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Mid Cap Core Style	**1.67**	**3.33**	**-1.67**	**10.90**	**10.64**	**8.25**	**9.24**
Russell Midcap	3.18	5.50	0.56	10.80	10.90	8.07	8.68
Mid Cap Growth Style	**2.31**	**-0.02**	**-5.69**	**9.24**	**8.94**	**8.17**	**7.86**
Russell Midcap Growth	1.56	2.15	-2.14	10.52	9.98	8.12	6.99
Mid Cap Value Style	**3.29**	**4.90**	**-0.82**	**10.13**	**10.67**	**8.17**	**9.91**
Russell Midcap Value	4.77	8.87	3.25	11.00	11.70	7.79	9.50

Small Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Small Cap Core Style	**2.85**	**2.80**	**-4.76**	**9.34**	**10.24**	**7.92**	**9.43**
Russell 2000	3.79	2.22	-6.73	7.09	8.35	6.20	6.96
Small Cap Growth Style	**3.87**	**-1.57**	**-12.40**	**7.18**	**8.37**	**7.55**	**7.39**
Russell 2000 Growth	3.24	-1.59	-10.75	7.74	8.51	7.14	5.91
Small Cap Value Style	**2.40**	**4.64**	**-2.44**	**8.63**	**9.94**	**7.61**	**10.00**
Russell 2000 Value	4.31	6.08	-2.58	6.36	8.15	5.15	7.73

Smid Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Smid Cap Broad Style	**2.21**	**2.85**	**-4.23**	**8.86**	**10.29**	**9.49**	**–**
Russell 2500	3.57	3.98	-3.67	8.61	9.48	7.32	8.09
Smid Cap Growth Style	**3.25**	**-0.46**	**-8.43**	**8.00**	**8.70**	**8.35**	**8.01**
Russell 2500 Growth	2.70	-0.03	-7.69	9.06	9.27	7.96	6.76
Smid Cap Value Style	**2.39**	**5.38**	**-4.11**	**8.27**	**9.86**	**7.95**	**10.08**
Russell 2500 Value	4.37	7.84	0.22	8.14	9.59	6.52	8.77

Russell 3000 Sectors	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Consumer Discretionary	-0.88	0.98	0.99	11.18	14.59	9.98	–
Consumer Staples	4.94	10.42	18.31	15.50	15.49	12.63	–
Energy	10.94	14.41	-8.17	-3.18	-0.85	3.18	–
Financial Services	2.35	-1.03	-1.30	9.00	11.42	0.99	–
Health Care	6.04	-1.44	-5.23	16.22	17.08	11.43	–
Materials & Processing	4.70	10.67	1.01	8.70	6.88	6.17	–
Producer Durables	1.28	6.10	4.35	11.33	10.81	6.76	–
Technology	-2.06	-0.37	2.44	14.67	11.81	9.83	–
Utilities	7.34	23.69	28.37	13.60	12.63	8.50	–

*Returns less than one year are not annualized.
Sources: Callan, Russell Investment Group, Standard & Poor's.

Fasten Your Seat Belts

NON-U.S. EQUITY | Lyman Jung

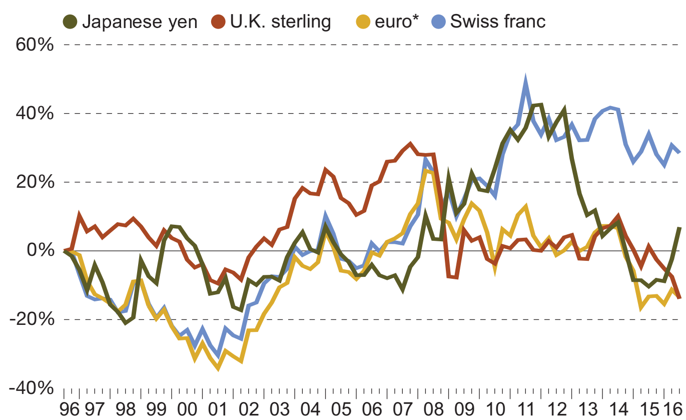
For the second consecutive quarter, non-U.S. equity markets endured a bout of extreme volatility. After a tepid start to the quarter, markets reacted to the surprise June 23 Brexit referendum to leave the European Union. Global markets lost $2 trillion the day after, but quickly stabilized. In this uncertain environment, we expect volatility to continue.

Despite the vote, the **MSCI ACWI ex USA Index** ended the quarter down only slightly (-0.64%), buoyed by accommodative central bank policies and a strong rebound in commodity prices. Energy (+8.05%) led the charge followed by Health Care (+4.29%), as investors favored defensive, dividend-paying stocks amid the turmoil. Economic and interest-rate-sensitive sectors fared worst, with Consumer Discretionary (-6.87%) and Financials (-4.31%) leading the plunge.

Around the broader markets, the **MSCI Emerging Markets Index** (+0.66%) bested its developed counterpart in the **MSCI World ex USA Index** (-1.05%). Without Canada (+3.40%), one of the best-performing countries in developed markets, the **MSCI EAFE Index** was even more depressed (-1.46%). The **MSCI ACWI ex USA Growth Index** continued an eight-quarter trend of outperforming the Value Index. Moreover, the **MSCI ACWI ex USA Small Cap** (-0.87%) topped its developed cousin, the **MSCI World ex USA Small Cap Index** (-1.28%).

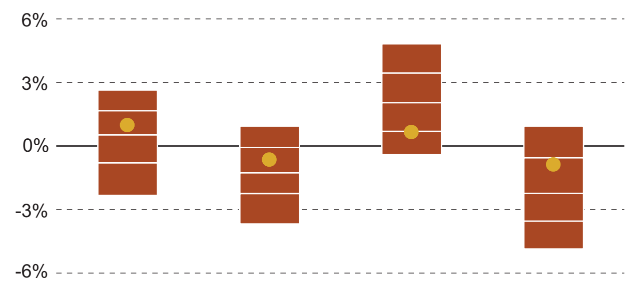
As Brexit dominated the headlines, European equity markets fell sharply only to rally in the final few days of the quarter. The **MSCI Europe Index** finished down 2.69%. Amid a general move to safe-haven countries, Switzerland (+2.03%) was a top-performer. Italy (-10.45%) and Spain (-7.67%) were among the worst mainly due to double-digit declines in banks burdened by souring loans and the potential loss of the U.K. as the financial center. Regionally, European sectors performed in line with the rest of the developed world. Energy stocks contributed 12.51% thanks to oil at nearly $50. Conversely, Consumer Discretionary and Financials tumbled 11.10% and 10.82%, respectively,

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



*German mark returns before 1Q99
Source: MSCI

Callan Style Group Quarterly Returns



	Global Eq Style	Non-U.S. Eq Style	Emg Mkt Style	Non-U.S. Small Cap Style
10th Percentile	2.60	0.90	4.78	0.90
25th Percentile	1.62	-0.11	3.40	-0.60
Median	0.48	-1.31	2.00	-2.28
75th Percentile	-0.84	-2.29	0.65	-3.59
90th Percentile	-2.37	-3.72	-0.45	-4.90
	MSCI ACWI	**MSCI ACWI ex USA**	**MSCI Emg Mkts**	**MSCI ACWI ex USA SC**
Benchmark ●	0.99	-0.64	0.66	-0.87

Sources: Callan, MSCI

weighed down by recession fears and concerns about a slowdown in finance and investment activity.

In contrast to Europe, the **MSCI Pacific Index** (+0.87%) fared much better, boosted by Japan (+1.01%) and New Zealand (+5.85%). While Japan was positive on a U.S. dollar-return basis, on a local-return basis it fell 7.80% because the yen

surged 10% in the quarter—despite operating in a negative interest rate environment. The yen has been bolstered by its re-emergence as a haven currency with an uncertain Europe and also by the dollar's recent weakness after the Federal Reserve pared back expectations of U.S. interest rate increases. New Zealand gained on improved sentiment partly due to a reported trade surplus that was more than double analysts' forecasts.

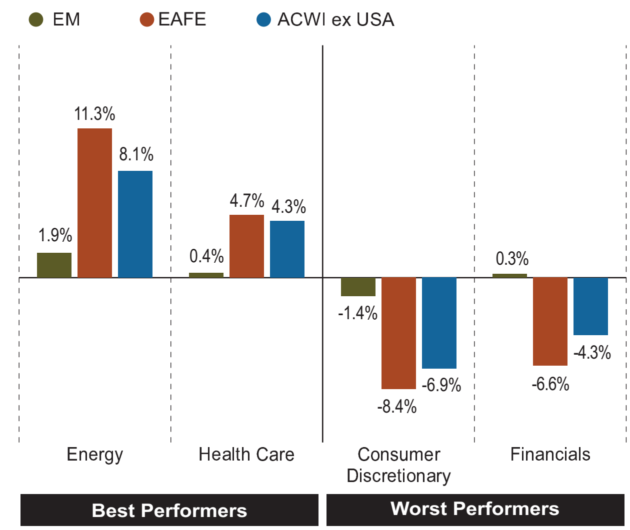
Emerging market countries produced a wide spectrum of returns, but closed out the quarter slightly ahead (MSCI Emerging Market Index: +0.66%). Commodity producers such as Brazil (+13.90%) and Russia (+4.05%) benefited from the rebound in oil prices, continuing their first-quarter rally. The former was also propped up by an impeachment motion against President Dilma Rousseff that sent the equity market into a frenzied rally. Stocks in China ended the quarter nearly flat (+0.11%) thanks to a slower predicted growth of 6.6%, the weakest since the Global Financial Crisis. Further, concerns about the amount of debt on corporate balance sheets and recent policy changes led to questions on how much stimulus the government would provide to sustain growth. Elsewhere, stocks in India (+3.72%) advanced on faster-than-expected growth and earnings of some of its biggest companies, bolstered by optimism about the nation's economic recovery.

Quarterly Return Attribution for Non-U.S. Developed Countries (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	0.46%	3.79%	-3.20%	5.13%
Austria	-9.99%	-7.67%	-2.51%	0.12%
Belgium	2.29%	4.92%	-2.51%	1.05%
Canada	3.40%	3.82%	-0.40%	6.82%
Denmark	-0.58%	1.84%	-2.37%	1.40%
Finland	-2.12%	0.40%	-2.51%	0.69%
France	-4.31%	-1.85%	-2.51%	6.79%
Germany	-5.57%	-3.14%	-2.51%	6.11%
Hong Kong	0.94%	0.96%	-0.02%	2.34%
Ireland	-9.87%	-7.55%	-2.51%	0.33%
Israel	-3.80%	-1.72%	-2.38%	0.55%
Italy	-10.45%	-8.14%	-2.51%	1.38%
Japan	1.01%	-7.80%	9.56%	16.43%
Netherlands	-5.06%	-2.72%	-2.51%	2.24%
New Zealand	5.85%	3.19%	2.58%	0.13%
Norway	2.35%	3.55%	-1.16%	0.45%
Portugal	-2.76%	-0.25%	-2.51%	0.11%
Singapore	0.35%	0.29%	0.05%	0.96%
Spain	-7.67%	-5.29%	-2.51%	2.08%
Sweden	-5.38%	-1.11%	-4.32%	1.95%
Switzerland	2.03%	3.80%	-1.70%	6.55%
U.K.	-0.73%	6.73%	-6.99%	13.83%

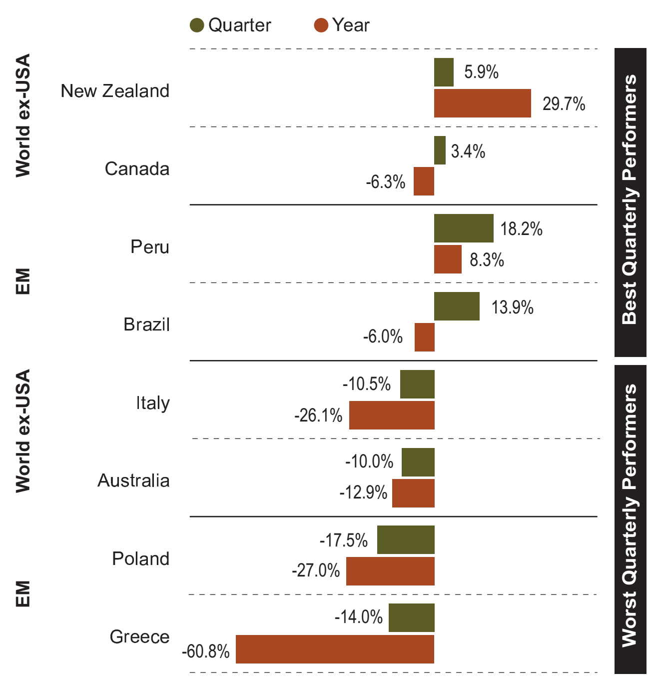
Sources: MSCI, Russell Investment Group, Standard & Poor's.

Quarterly Returns: Strong and Struggling Sectors



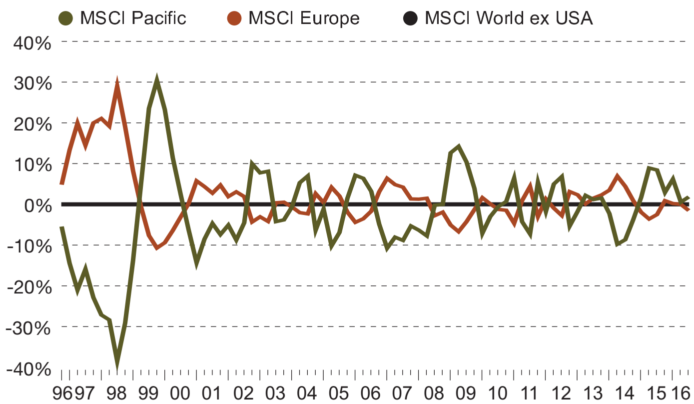
Source: MSCI

Quarterly and Annual Country Performance Snapshot



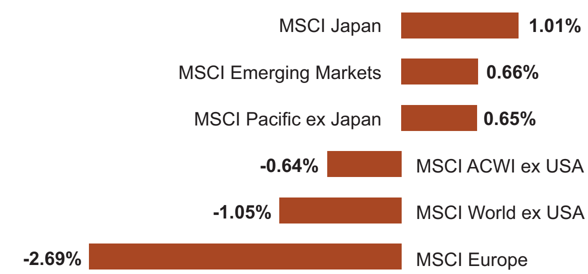
Source: MSCI

Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI

Style Median and Index Returns* for Periods ended June 30, 2016

Global Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Equity Style	**0.48**	**-0.92**	**-4.47**	**7.16**	**7.08**	**5.37**	**6.31**
MSCI World	1.01	0.66	-2.78	6.95	6.63	4.43	4.86
MSCI ACWI	0.99	1.23	-3.73	6.03	5.38	4.26	4.98
Non-U.S. Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Style	**-1.31**	**-3.49**	**-9.43**	**3.27**	**2.83**	**2.91**	**6.25**
MSCI World ex USA	-1.05	-2.98	-9.84	1.88	1.23	1.63	4.47
MSCI ACWI ex USA	-0.64	-1.02	-10.24	1.16	0.10	1.87	4.96
Regional Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
MSCI Europe ex UK	-3.53	-6.02	-10.80	2.58	0.66	1.56	4.52
MSCI Japan	1.01	-5.58	-8.94	2.71	4.21	0.14	2.32
MSCI Japan (local)	-7.80	-19.47	-23.66	3.82	9.31	-0.93	1.00
MSCI Pacific	0.87	-2.94	-8.19	2.16	2.98	1.72	4.10
MSCI Pacific (local)	-4.29	-13.22	-17.85	4.25	7.59	0.59	2.38
MSCI Pacific ex Japan	0.65	2.47	-6.75	1.08	0.86	5.43	8.89
MSCI Pacific ex Japan (local)	2.64	0.47	-5.02	5.64	5.69	5.01	6.69
MSCI United Kingdom	-0.73	-3.05	-12.14	0.67	1.71	1.43	4.22
MSCI United Kingdom (local)	6.73	6.89	3.36	5.00	5.50	4.78	4.57
Emerging/Frontier Markets	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Market Style	**2.00**	**6.57**	**-8.83**	**-0.07**	**-2.06**	**4.88**	**10.67**
MSCI Emerging Markets	0.66	6.41	-12.05	-1.56	-3.78	3.54	9.12
MSCI Emerging Markets (local)	0.70	3.45	-7.70	3.70	2.02	5.72	9.92
MSCI Frontier Markets	0.47	-0.47	-12.09	1.00	1.45	0.18	–
Global/Non-U.S. Small Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Small Cap Style	**-2.28**	**-3.11**	**-3.61**	**7.82**	**6.35**	**5.52**	**10.28**
MSCI World Small Cap	1.61	2.29	-3.76	7.60	6.80	5.58	8.51
MSCI ACWI Small Cap	1.51	2.22	-4.72	6.79	5.83	6.00	8.60
MSCI World ex USA Small Cap	-1.28	-0.69	-3.35	6.34	3.61	3.33	8.17
MSCI ACWI ex USA Small Cap	-0.87	-0.20	-5.46	4.93	2.28	4.08	8.71

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

Rally Across the Board

U.S. FIXED INCOME | Nate Wong, CFA

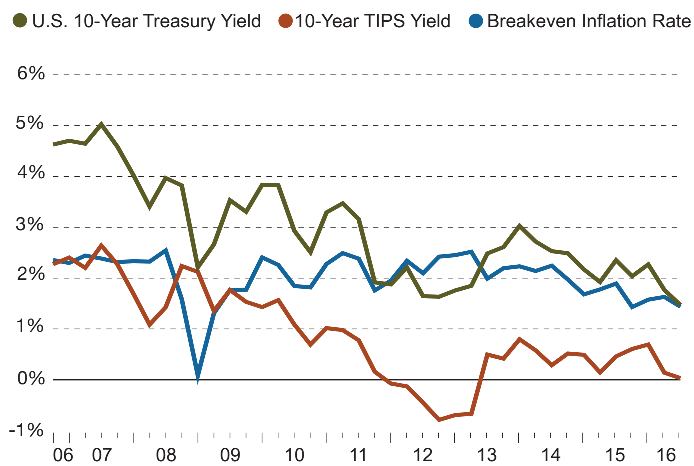
Treasuries rallied in a flight to quality during the second quarter as U.S. economic data and trepidation surrounding the U.K.'s Brexit dominated activity. The Fed changed to a more dovish tone as the quarter ended. The **Barclays U.S. Aggregate Index** increased 2.21% while the **Barclays High Yield Corporate Index** again outpaced it with a 5.52% gain.

The surprising vote in the U.K. to exit the European Union triggered an immediate run on risk assets. The panic was short-lived and credit spreads ended the quarter marginally tighter as more-rational investors assessed the broader strength of the U.S. economy and the relatively attractive opportunities within the U.S. fixed income markets.

Following the Brexit vote, the Fed elected not to make any changes at its June meeting. Its forward-looking dot plot now implies a reduced number of rate hikes from four to three, while the long-term projection for the short-term rate was lowered from 3.25% to 3.0%.

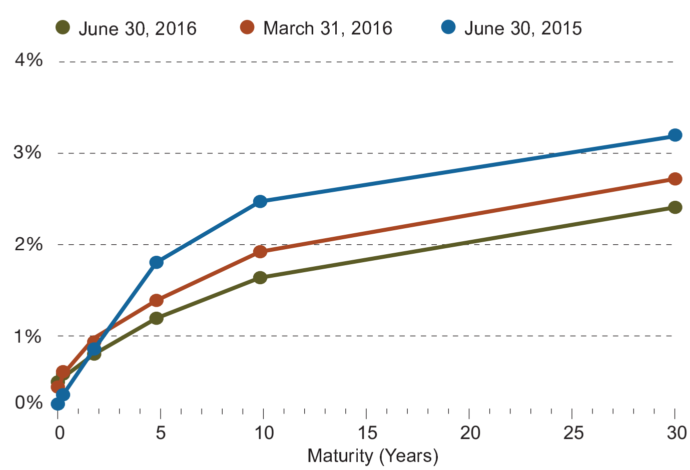
Yields declined across the maturity spectrum with the 10-year yield closing the quarter at 1.47%, its lowest level in nearly three years. Weak economic data and the negative yield environment around the globe contributed to downward pressure on U.S. yields. The 2- to 30-year spread tightened to 170 bps by the end of the quarter. Treasury returns were strong, particularly on the

Historical 10-Year Yields



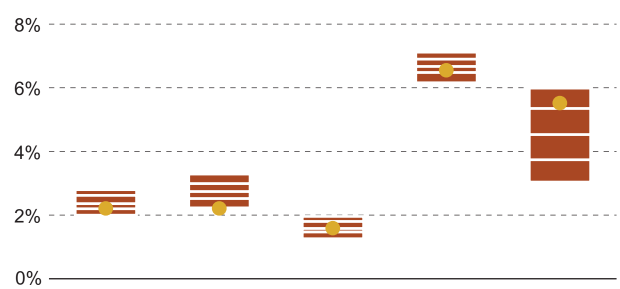
Source: Bloomberg

U.S. Treasury Yield Curves



Source: Bloomberg

Callan Style Group Quarterly Returns



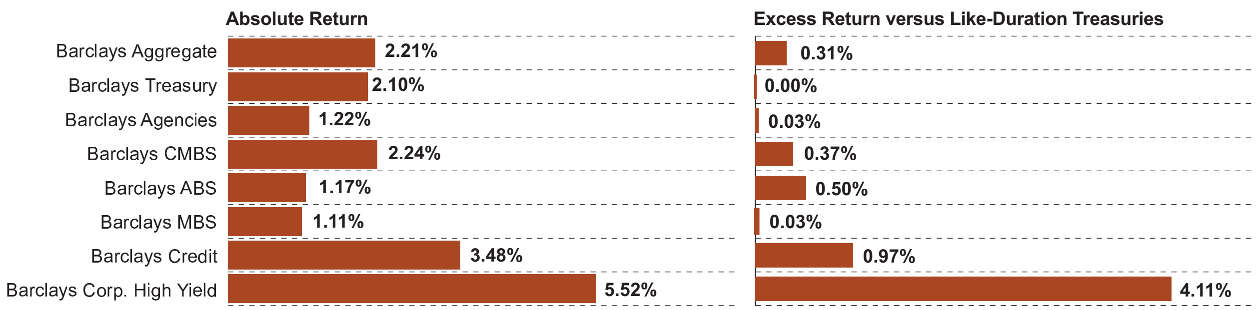
	Core Bond Style	Core Plus Style	Interm Style	Ext Mat G/C Style	High Yld Style
10th Percentile	2.80	3.29	1.96	7.12	5.99
25th Percentile	2.62	2.99	1.80	6.90	5.35
Median	2.36	2.74	1.58	6.67	4.53
75th Percentile	2.20	2.52	1.47	6.48	3.74
90th Percentile	2.00	2.23	1.26	6.16	3.04
	Barclays Agg	Barclays Agg	Barclays Interm	Barclays Long G/C	Barclays High Yld
Benchmark ●	2.21	2.21	1.59	6.55	5.52

Sources: Barclays, Callan

long end of the curve, with 30-year Treasuries gaining 7.24%. All sectors rallied and produced positive returns, with investment-grade corporates leading the way. Inflation-protected securities trailed their nominal counterparts but continued their strong performance for the year.

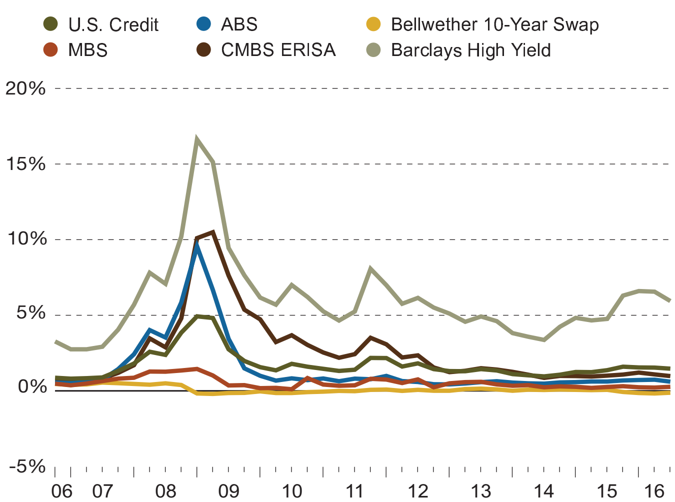
Corporate credit performed well across the quality spectrum, gaining 3.48% and outperforming Treasuries by 97 bps on a duration-adjusted basis. Companies took advantage of low rates, with new issuance of $350 billion during the quarter. On a duration-adjusted basis, industrials outperformed utilities and financials. Corporate spreads were generally flat before experiencing some widening in reaction to the Brexit and ended the quarter at 156 bps. MBS gained 1.11%, outperforming like-duration Treasuries by 3 bps. MBS spreads also widened as the quarter closed on prepayment fears. High-yield bonds continued to rebound, gaining 5.52% and outperforming like-duration Treasuries by 411 bps. New issuance amounted to $84 billion, returning to more normal levels and more than doubling the amount in the prior quarter.

Fixed Income Index Quarterly Returns



Source: Barclays

Effective Yield Over Treasuries



Source: Barclays

U.S. Fixed Income Index Characteristics as of June 30, 2016

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Barclays Aggregate	1.91	5.47	7.77
Barclays Universal	2.42	5.36	7.63
Barclays Govt/Credit	1.85	6.69	8.96
1-3 Year	0.89	1.91	1.98
Intermediate	1.41	4.08	4.44
Long-Term	3.36	15.59	24.36
Barclays Long Credit	4.16	13.99	23.99
Barclays Corp High Yield	7.27	4.26	6.30
Barclays TIPS	1.47	5.26	8.71
Barclays Muni Bond 1-5 Year	0.94	2.67	3.16
Barclays Muni 1-10 Year	1.20	3.97	5.81
Barclays Municipal	1.61	5.55	13.06

Source: Barclays

U.S. FIXED INCOME (Continued)

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Broad Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Core Bond Style	**2.36**	**5.39**	**6.20**	**4.37**	**4.25**	**5.62**	**5.54**
Core Bond Plus Style	**2.74**	**5.68**	**5.45**	**4.48**	**4.62**	**6.00**	**6.09**
Barclays Aggregate	2.21	5.31	6.00	4.06	3.76	5.13	5.08
Barclays Universal	2.53	5.68	5.82	4.19	4.01	5.30	5.33
Long-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Extended Maturity Credit Style	**6.77**	**14.26**	**14.09**	**9.26**	**9.15**	**8.65**	**--**
Barclays Long Credit	6.65	13.92	13.76	8.70	8.45	8.14	7.78
Extended Maturity Gov/Credit Style	**6.67**	**14.56**	**15.48**	**9.46**	**9.61**	**9.00**	**8.22**
Barclays Long Gov/Credit	6.55	14.33	15.72	9.33	9.18	8.42	7.88
Intermediate-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Intermediate Style	**1.58**	**3.95**	**4.44**	**3.19**	**3.23**	**4.92**	**4.92**
Barclays Intermediate Gov/Credit	1.59	4.07	4.33	2.95	2.90	4.48	4.52
Short-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Defensive Style	**0.72**	**1.76**	**1.95**	**1.57**	**1.49**	**3.13**	**3.30**
Barclays Gov/Credit 1-3 Year	0.67	1.65	1.59	1.22	1.10	2.80	3.03
Bank Loans	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Bank Loan Style	**2.43**	**4.11**	**2.01**	**3.28**	**4.28**	**4.61**	**4.85**
Credit Suisse Leveraged Loans	2.86	4.23	0.93	3.03	3.87	4.10	4.51
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
High Yield Style	**4.53**	**7.34**	**1.10**	**4.37**	**5.97**	**7.52**	**7.95**
Barclays Corp High Yield	5.52	9.06	1.62	4.18	5.84	7.56	7.93
Unconstrained	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Unconstrained Fixed Style	**1.50**	**1.74**	**0.92**	**2.11**	**2.77**	**4.68**	**6.31**
90 Day T-Bill + 3%	0.81	1.63	3.19	3.09	3.09	4.04	4.44
Stable Value	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Stable Value Style	**0.45**	**0.91**	**1.81**	**1.79**	**2.14**	**3.03**	**3.82**
iMoneyNet Mutual Fund Avg	0.03	0.05	0.06	0.03	0.03	0.94	–
TIPS	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Inflation-Linked Style	**1.74**	**6.35**	**4.30**	**2.27**	**2.70**	**4.82**	**5.60**
Barclays TIPS	1.71	6.24	4.35	2.31	2.63	4.75	5.49
Municipal	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Short Municipal Style	**0.43**	**0.82**	**1.17**	**0.94**	**1.02**	**1.95**	**2.07**
Barclays Municipal 1-5 Year	0.75	1.55	2.60	2.03	1.93	3.30	3.26
Intermediate Municipal Style	**2.06**	**3.54**	**6.19**	**4.29**	**4.10**	**4.23**	**4.21**
Barclays Municipal 1-10 Year	1.44	2.70	4.88	3.62	3.45	4.33	4.21
Long Municipal Style	**2.63**	**4.42**	**8.10**	**5.93**	**5.76**	**5.43**	**5.42**
Barclays Municipal	2.61	4.33	7.65	5.58	5.33	5.13	5.10

*Returns for less than one year are not annualized.

Sources: Barclays, Callan, Citigroup, Merrill Lynch.

How Low Can Rates Go?

NON-U.S. FIXED INCOME | Kevin Machiz, CFA, FRM

Sovereign yields fell in the second quarter, driven largely by a knee-jerk reaction to Brexit, sentiment to reduce risk, and globally loose monetary policy. That led major global bond indices to show positive returns for the quarter.

In addition, most major global currencies weakened against the U.S. dollar during the quarter. The British pound was hit hardest, plummeting 7% versus the U.S. dollar. While the U.S. dollar broadly strengthened immediately following Brexit, some of those gains were quickly erased over the remainder of the quarter. The Japanese yen took an opposite tack among global currencies during the quarter and soared 10% versus the U.S. dollar by the end of the period. The yen's tendency to strengthen in risk-off environments proved a tailwind to unhedged foreign bond returns for the quarter. The euro was weaker versus the dollar (-2.51%). The ECB maintained its dovish stance, keeping interest rates negative and proceeding with asset purchases announced in March. Interest rates fell across developed markets, leading to strong bond returns. The **Barclays Global Aggregate** gained 2.89% (+2.51% hedged).

In Germany, 10-year yields fell 28 bps and joined the rapidly growing universe of negative-yielding bonds. Similarly, 10-year yields in Japan, which were already negative, fell a further 19 bps as the Bank of Japan maintained its easy monetary policy stance. The 10-year yield in the U.K. led the pack following Brexit, falling 55 bps, though it remained in positive territory by the end of the quarter. Market expectations moved firmly toward relatively easier monetary policy in the U.K.

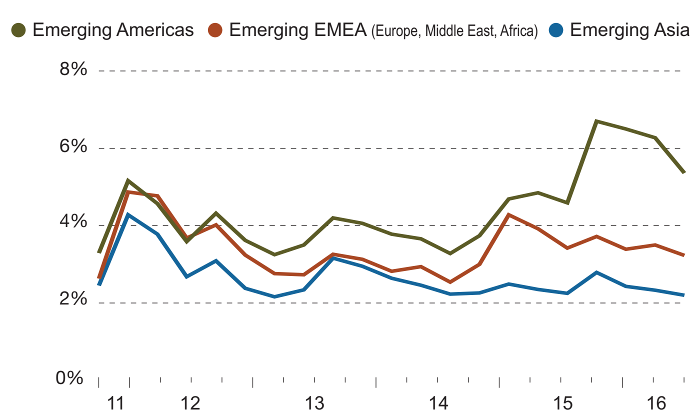
Emerging market bonds continued to rebound in the second quarter despite a bumpy ride. Falling bond yields were a tailwind and narrowing sovereign credit spreads further contributed to returns. The hard currency **JPM EMBI Global Diversified Index** gained 5.02%. Hard currency returns in most countries were positive, led by Venezuela. Bonds there have suffered extreme volatility as markets speculate on the timing of the country's default. The local currency **JPM GBI-EM Global Diversified** returned 2.96%, as local yields in emerging markets generally followed those in developed markets lower. Brazil was the leader for returns in local markets as yields fell and

Quarterly Return Attribution for Non-U.S. Gov't Indices
(U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	0.19%	3.51%	-3.20%	2.17%
Austria	-0.02%	2.56%	-2.51%	1.76%
Belgium	0.81%	3.40%	-2.51%	2.90%
Canada	1.58%	1.99%	-0.40%	2.29%
Denmark	1.51%	3.97%	-2.37%	0.79%
Finland	-0.18%	2.39%	-2.51%	0.70%
France	0.32%	2.90%	-2.51%	11.31%
Germany	0.27%	2.85%	-2.51%	8.49%
Ireland	-0.92%	1.63%	-2.51%	0.91%
Italy	-2.08%	0.45%	-2.51%	10.81%
Japan	12.91%	3.06%	9.56%	35.77%
Malaysia	-1.89%	1.38%	-3.22%	0.54%
Mexico	-5.45%	1.79%	-7.11%	0.99%
Netherlands	0.42%	3.01%	-2.51%	2.76%
Norway	-0.08%	1.08%	-1.16%	0.29%
Poland	-5.79%	0.27%	-6.04%	0.67%
Singapore	0.56%	0.51%	0.05%	0.42%
South Africa	5.03%	4.58%	0.43%	0.53%
Spain	-0.33%	2.23%	-2.51%	6.22%
Sweden	-1.65%	2.79%	-4.32%	0.57%
Switzerland	-0.83%	0.88%	-1.70%	0.27%
U.K.	-0.73%	6.74%	-6.99%	8.83%

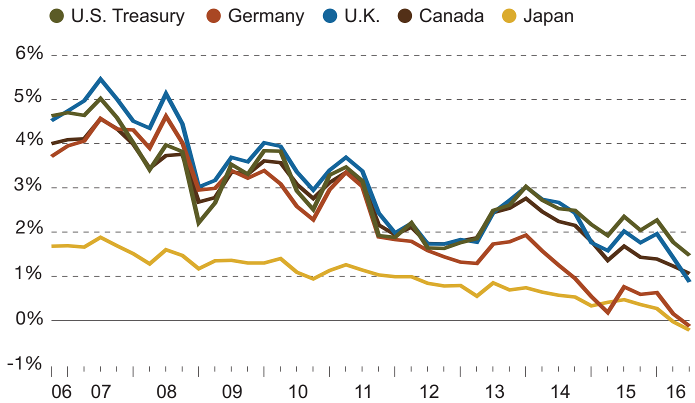
Source: Citigroup

Emerging Spreads Over Developed (By Region)

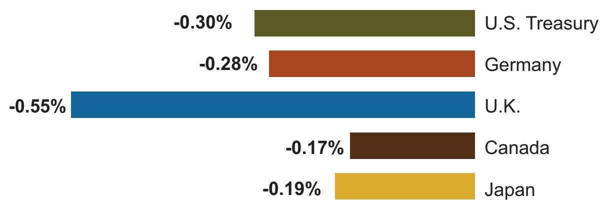


Source: Barclays

10-Year Global Government Bond Yields



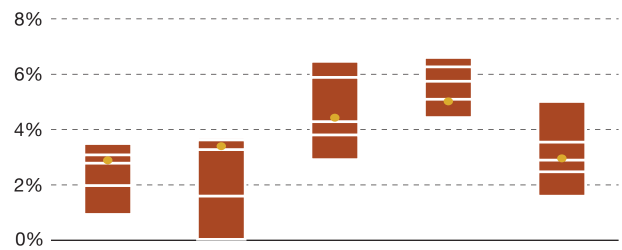
Change in 10-Year Yields from 1Q16 to 2Q16



Source: Bloomberg

the currency strengthened. During the quarter, Brazil's President Dilma Rousseff was suspended from the presidency during her impeachment trial. The market in Brazil has experienced volatility as the political future of the country is being determined.

Callan Style Group Quarterly Returns



	Global Fixed Style	Non-U.S. Fixed Style	Global High Yld	Em Debt USD DB	Em Debt Local
10th Percentile	3.52	3.75	6.49	6.63	5.04
25th Percentile	3.11	3.65	5.91	6.29	3.57
Median	2.81	3.30	4.31	5.77	2.92
75th Percentile	2.00	1.62	3.83	5.12	2.50
90th Percentile	0.96	0.06	2.94	4.46	1.62
	Barclays Gl Agg	Barclays Gl Agg ex US	Barclays High Yld	JPM EMBI Gl Div	JPM GBI-EM Gl Div
Benchmark ●	2.89	3.40	4.43	5.02	2.96

Sources: Callan, JPMorgan Chase

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Global Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Fixed Income Style	**2.81**	**8.34**	**7.56**	**2.84**	**2.20**	**4.89**	**6.54**
Barclays Global Aggregate	2.89	8.96	8.87	2.80	1.77	4.40	5.50
Global Fixed Income Style (hedged)	**2.67**	**5.87**	**7.22**	**5.49**	**5.29**	**5.60**	**5.83**
Barclays Global Aggregate (hedged)	2.51	5.87	7.37	5.15	4.76	5.03	4.92
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Global High Yield Style	**4.31**	**7.39**	**1.29**	**3.03**	**4.96**	**7.20**	**9.08**
Barclays Global High Yield	4.43	8.73	3.76	4.35	5.71	7.80	8.70
Non-U.S. Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Fixed Income Style	**3.30**	**11.49**	**10.12**	**2.17**	**1.04**	**4.39**	**6.71**
Barclays Global Agg ex US	3.40	11.94	11.24	1.85	0.34	3.83	5.85
Emerging Markets Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Debt Style (US$)	**5.77**	**11.06**	**8.44**	**5.62**	**5.99**	**8.35**	**10.42**
JPM EMBI Global Diversified	5.02	10.31	9.79	7.20	6.46	7.97	9.16
Emerging Debt Style (local)	**2.92**	**13.64**	**1.62**	**-3.12**	**-2.10**	**5.04**	**7.18**
JPM GBI-EM Global Diversified	2.96	14.30	2.24	-3.49	-2.19	5.74	--
Emerging Debt Blend Style	**4.03**	**11.28**	**4.99**	**1.14**	**2.77**	**8.01**	**11.56**
JPM EMBI Gl Div/JPM GBI-EM Gl Div	3.99	12.34	6.11	1.82	2.14	6.94	--
Emerging Debt Corporate Style	**4.45**	**8.60**	**4.93**	**5.71**	**5.32**	**--**	**--**
JPM CEMBI	4.27	9.02	5.78	5.72	5.45	7.45	--

*Returns less than one year are not annualized.
Sources: Barclays, Callan, JPMorgan Chase.

It Really Is Location, Location, Location

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** gained 2.03% during the second quarter, the lowest return since the first quarter of 2010, recording a 1.19% income return and a 0.84% appreciation return. Industrial (+2.90%) and retail (+2.17%) topped property sector performance for the quarter while hotels (+1.46%) brought up the rear. The West region was the strongest performer, up 2.46%, while the East was the worst at 1.73%. Transaction volume hit $9 billion, which represents a 25% increase over the second quarter of 2015. Appraisal capitalization rates increased to 4.60%, up from an all-time low of 4.55% last quarter. Occupancy rates also increased and hit a 15-year high at 93.2%. All property types have seen occupancy increase for the year, though retail was down 20 bps for the quarter.

The preliminary return for the **NFI-ODCE Index** was 1.91%, comprising a 0.90% income return and a 1.01% appreciation return. This marks a decrease of 5 bps from last quarter's return and a new low since 2010. The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, uncertainty caused by the Brexit vote in late June, and concerns about China's slowing growth. According to Preqin, which provides data on the alternative assets industry, the amount of dry powder for real estate investing globally increased to $234 billion in the quarter, up 11.4% from year-end 2015.

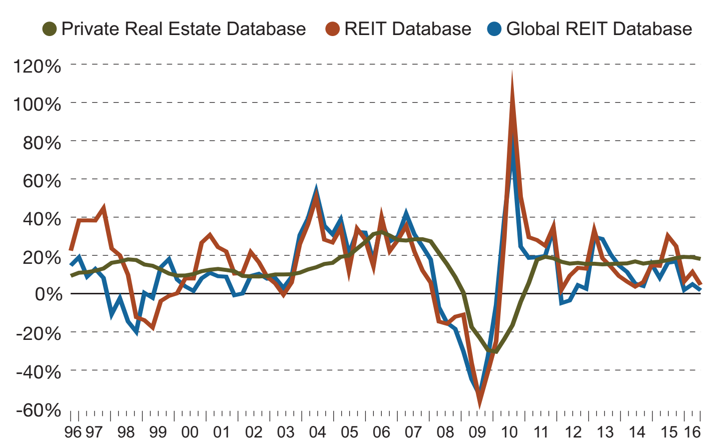
The **FTSE EPRA/NAREIT Developed REIT Index** (USD) overcame the shock of Brexit and gained 3.74%, while U.S. REITs tracked by the **FTSE NAREIT Equity Index** surged ahead 6.96%.

In the U.S., the strong performance of REITs was attributed to investors in search of yield. After the Brexit vote cast doubt on a Fed rate increase, global bond yields compressed 25 bps, making high-yielding REITs more attractive. Data centers (+20.59%), industrial (+15.38%), and infrastructure (+15.33%) were the best-performing sectors. Self-storage (-5.76%) suffered a sharp fall from grace and was the worst performer in the second quarter after being the strongest performer in the first. Strong data center performance was driven by robust tenant demand and less economic sensitivity. Conversely, self-storage assets with more acute economic sensitivity struggled due to fears of slowing growth. As of June 30, U.S. REITs were trading at a 7.1% premium to net asset value (NAV), contrasting sharply with U.K. REITs, which were trading at a 21.6% discount to NAV.

Uncertainty over the Brexit vote—and its surprising result—had a tremendous effect on real estate in the U.K. compared to continental Europe. According to Cushman & Wakefield, investment volume in the U.K. was down 25% year-to-date compared to 2015, versus a 10% increase in the rest of the EU.

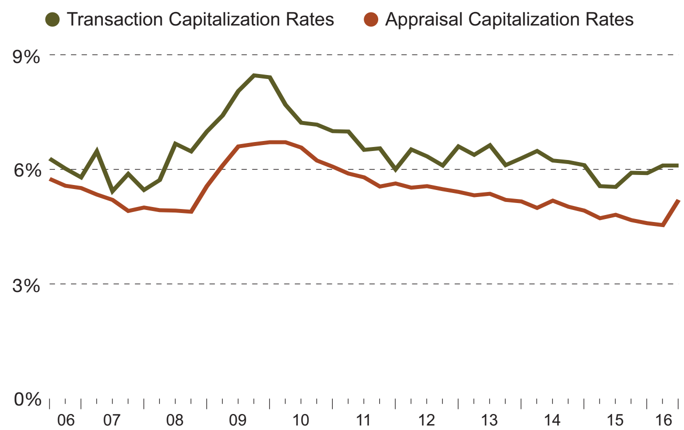
CMBS issuance for the quarter was $10.8 billion, down sharply from the second quarter of 2015 ($26.0 billion) and first quarter of 2016 ($19.3 billion). The decline was attributed to continued concerns over economic instability, including the Brexit vote; only $800 million in CMBS was issued in June.

Rolling One-Year Returns



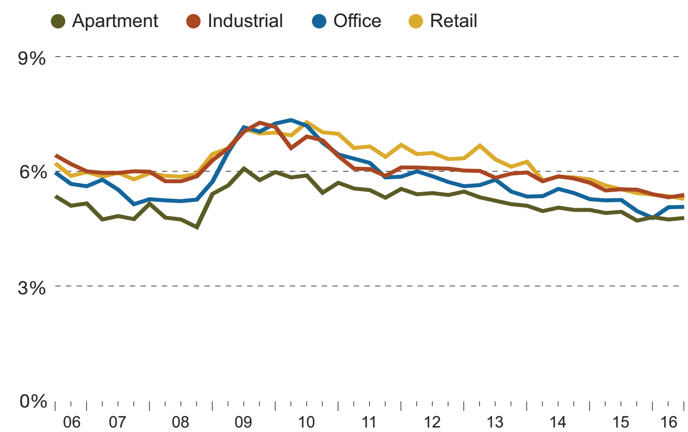
Source: Callan

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF
Note: Transaction capitalization rate is equal-weighted.

NCREIF Capitalization Rates by Property Type



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

Callan Database Median and Index Returns* for Periods ended June 30, 2016

Private Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Real Estate Database (net of fees)	**2.17**	**4.38**	**11.86**	**13.09**	**12.23**	**4.89**	**7.36**
NCREIF Property	2.03	4.29	10.64	11.61	11.51	7.40	8.91
NFI-ODCE (value wtd. net)	1.91	3.89	10.80	11.97	11.66	5.19	6.95
Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
REIT Database	**5.87**	**11.19**	**23.14**	**13.97**	**13.00**	**8.24**	**12.57**
FTSE NAREIT Equity	6.96	13.38	24.04	13.58	12.60	7.45	11.29
Global Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global REIT Database	**2.96**	**7.74**	**10.87**	**9.50**	**9.24**	**5.56**	**10.14**
FTSE EPRA/NAREIT Developed REIT	3.74	9.38	12.57	8.95	8.63	5.00	9.81
Global ex U.S. Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global ex-U.S. REIT Database	**0.46**	**4.08**	**0.47**	**4.98**	**5.41**	**3.12**	**--**
EPRA/NAREIT Dev REITs ex-U.S.	0.68	5.91	1.40	4.26	4.97	3.12	9.31

*Returns for less than one year are not annualized.
All REIT returns are reported gross in USD.
Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

Sticker Shock

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that second-quarter commitments totaled $102.2 billion with 196 new partnerships formed. The number of funds raised increased by only 11% from 177 in the first quarter, but the dollar volume rocketed 92% from $53.2 billion. Distressed debt surged to $13.3 billion from only $2.4 billion in the first quarter of 2016. Venture capital also saw a large jump of $14.6 billion from only $8.9 billion in the first quarter.

According to *Buyouts* newsletter, the investment pace by funds into companies totaled 356 transactions, bringing the first-half total to 816. The deal count is down by 86 transactions (19%) from the first quarter, and 216 transactions (21%) from the first half of 2015. The announced aggregate dollar volume in the second quarter was $37.6 billion, and $95.8 billion for the first half. The announced volume is down by $20.6 billion (35%) from the first quarter, but up $26 billion (27%) year-to-date. Only six deals with announced values of $1 billion or more closed in the second quarter, down from 12 in the first quarter.

According to the National Venture Capital Association, new investments in venture capital companies totaled 961 rounds and $15.3 billion in announced volume. The number of rounds decreased from 1,011 in the first quarter, but the dollar volume jumped from $12.7 billion, primarily due to a $3.5 billion expansion investment in Uber.

Funds Closed January 1 to June 30, 2016

Strategy	No. of Funds	Amt ($mm)	Percent*
Venture Capital	201	23,441	15%
Buyouts	119	102,687	66%
Subordinated Debt	9	2,397	2%
Distressed Debt	11	15,568	10%
Secondary and Other	10	5,513	4%
Fund-of-funds	23	5,767	4%
Totals	**373**	**155,373**	**100%**

Source: Private Equity Analyst
*Totals more than 100% due to rounding.

Regarding exits, *Buyouts* reports that there were 118 private M&A exits of buyout-backed companies, with 35 deals disclosing values totaling $24.6 billion. The M&A exits count was down from 140 in the first quarter, but the announced value increased from $15.6 billion. There were three buyout-backed IPOs floating an aggregate $1.6 billion—a recovery from no IPOs in the first quarter.

Venture-backed M&A exits totaled 64 transactions, with 11 disclosing a total dollar volume of $9.0 billion. The number of private sale exits declined from 91 in the first quarter, but the announced dollar volume increased from the first quarter's $5.2 billion, driven by a single $5.8 billion biotechnology exit. There were 12 VC-backed IPOs in the second quarter with a combined float of $893.9 million. For comparison, the first quarter of 2016 had 6 IPOs and total issuance of $574.5 million.

Private Equity Performance Database (%) (Pooled Horizon IRRs through December 31, 2015*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	2.1	13.8	22.0	16.5	11.1	4.7	24.3
Growth Equity	3.3	9.2	13.6	11.3	11.8	9.8	14.3
All Buyouts	2.4	8.5	13.3	12.3	11.2	11.8	12.8
Mezzanine	0.5	5.2	9.5	10.7	9.6	7.8	9.5
Distressed	-0.1	1.8	9.2	9.4	9.6	10.7	10.8
All Private Equity	**2.1**	**8.6**	**14.1**	**12.4**	**11.0**	**9.6**	**13.8**
S&P 500 Index	7.0	1.4	15.1	12.6	7.3	5.0	8.2
Russell 3000	6.3	0.5	14.7	12.2	7.4	5.4	8.3

Private equity returns are net of fees.
Sources: Standard & Poor's, Thomson/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.

Caution as Britannia Waives the Rule

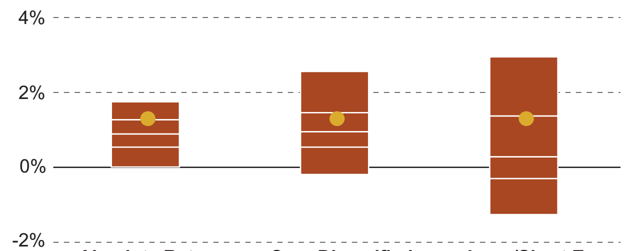
HEDGE FUNDS | Jim McKee

Amid the sudden disorder caused by Brexit, already cautious hedge funds mistrustful of the first quarter's skittishness were relatively unaffected and eked out modest gains, on average. Representing a paper portfolio of hedge fund interests without implementation costs, the **Credit Suisse Hedge Fund Index** (CS HFI) gained 0.59%. The median manager in the **Callan Hedge Fund-of-Funds Database** edged ahead 0.78%, net of all fees.

Returns across underlying strategies, however, were varied. The strongest performers were *Convertible Arb* (+2.65%), *Event-Driven Multi-Strategy* (+2.24%), and *Distressed* (+1.95%), as their credit exposures mended strongly from weakness in the prior quarter. *Emerging Markets* (+1.77%) and *Fixed Income Arb* (+1.02%) also regained ground from first-quarter losses.

Aside from the endangered species of *Short Bias* managers (-6.32%), the quarter's most notable loser was *Equity Market Neutral* (-3.17%), caught flat-footed by shifting risk appetites surrounding Brexit. Suffering from range-bound markets earlier in the quarter, *Managed Futures* lost 2.22% while *Global Macro* salvaged a 0.71% gain. The average *Long/Short Equity* fell 1.21%, trailing the S&P 500 (+2.46%) for the third consecutive quarter.

Callan Style Group Quarterly Returns



	Absolute Return FOF Style	Core Diversified FOF Style	Long/Short Eq FOF Style
10th Percentile	1.75	2.56	2.95
25th Percentile	1.27	1.46	1.37
Median	0.89	0.95	0.28
75th Percentile	0.54	0.54	-0.30
90th Percentile	0.01	-0.19	-1.26
T-Bills + 5% ●	1.30	1.30	1.30

Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market movements only marginally affected investment styles in the second quarter. For instance, despite the stock rally at quarter end, the median *Callan Long/Short Equity FOF* (+0.28%) trailed the *Callan Absolute Return FOF* (+0.89%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 0.95%.

Callan Database Median and Index Returns* for Periods ended June 30, 2016

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	**0.78**	**-2.18**	**-5.26**	**2.32**	**2.94**	**3.43**	**4.56**
CS Hedge Fund Index	0.59	-1.62	-4.23	2.49	2.88	4.17	5.69
CS Equity Market Neutral	-3.17	-3.52	-1.49	1.02	1.13	-2.43	0.72
CS Convertible Arbitrage	2.65	2.24	0.10	1.16	2.48	3.90	4.52
CS Fixed Income Arbitrage	1.02	-0.21	-0.37	2.37	4.07	3.25	4.17
CS Multi-Strategy	1.24	0.65	1.23	5.90	5.99	5.51	6.68
CS Distressed	1.95	-0.04	-5.25	1.41	3.17	4.08	6.93
CS Risk Arbitrage	0.58	2.71	0.73	1.55	1.46	3.46	3.49
CS Event-Driven Multi-Strategy	2.24	-3.46	-12.43	-0.49	0.32	3.98	5.92
CS Long/Short Equity	-1.21	-5.01	-5.00	4.53	4.00	4.73	5.86
CS Dedicated Short Bias	-6.32	-7.16	4.31	-8.41	-10.15	-9.89	-7.63
CS Global Macro	0.71	-1.54	-3.86	1.54	3.11	5.75	8.15
CS Managed Futures	-2.22	2.03	5.37	6.54	2.34	4.20	5.59
CS Emerging Markets	1.77	0.52	-2.43	2.39	2.21	4.50	7.85

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

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION | Tom Szkwarla

In a tumultuous first quarter, the Callan DC Index™ earned just 0.38%, lagging the Age 45 Target Date Fund, which gained nearly 1%. Over the past three years the Index has performed in line with the Age 45 fund; however, since inception, it has trailed with just 5.09% annually versus the Age 45 fund's 5.70% return.

For the quarter, DC plan balances grew 0.85%. Inflows—participant and plan sponsor contributions—added slightly more to total growth (+0.475%) than market performance (+0.375%).

As usual, target date funds attracted the majority of assets during the quarter, approximately 72 cents of every dollar that flowed into DC funds. Target date funds grew to their largest allocation yet, commanding 26.1% of total DC assets in the quarter. The growth seems to be at the expense of U.S. equity, which contracted to 23.4% of total assets.

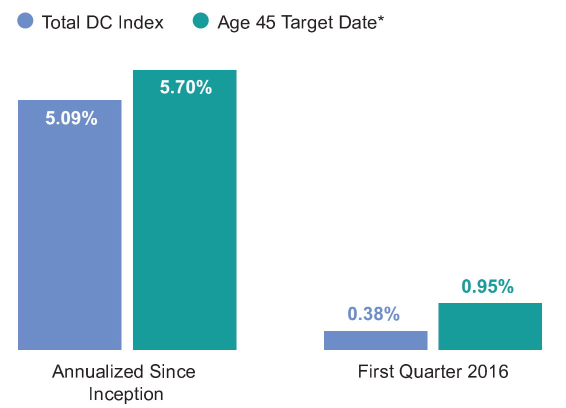
Stable value was the only other asset class with sizable inflows; this asset class typically attracts flows when markets are weak or particularly volatile. Several DC investments saw material net outflows, including U.S. equities (large and small/mid cap), U.S./global balanced, U.S. fixed income, non-U.S. equities, and company stock.

Overall turnover (i.e., net transfer activity levels within DC plans) was on par with last quarter (0.46%) at 0.44%. Turnover has been well below the historical average of 0.64% since mid-2014.

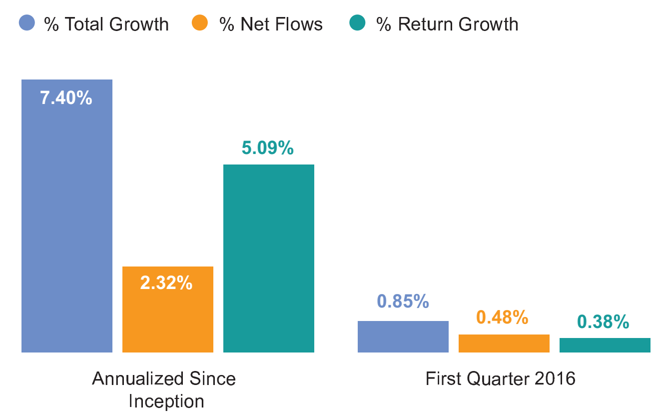
The Callan DC Index's overall equity allocation ended the quarter at 69%. Overall equity allocation has remained fairly static over the past few quarters, modestly above the Index's historical average (67%).

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 (First Quarter 2016)*
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	71.60%
Stable Value	15.57%
U.S. Small/Mid Cap	-23.49%
U.S. Large Cap	-29.02%
Total Turnover**	**0.44%**

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

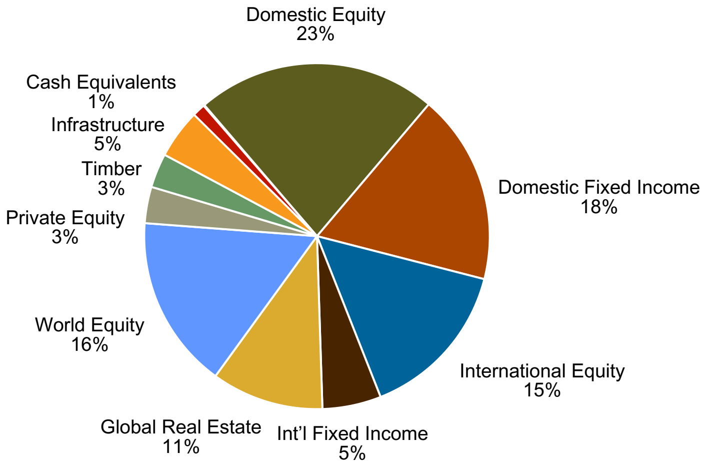
* DC Index inception date is January 2006.

**Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

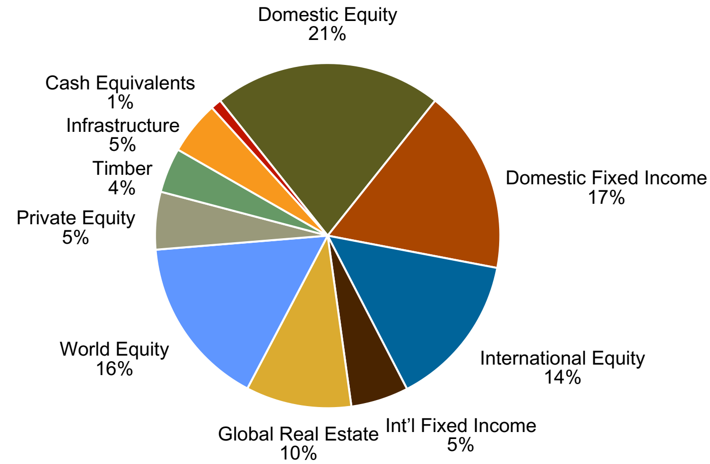
Actual vs Target Asset Allocation
As of June 30, 2016

The top left chart shows the Fund's asset allocation as of June 30, 2016. 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.

Actual Asset Allocation

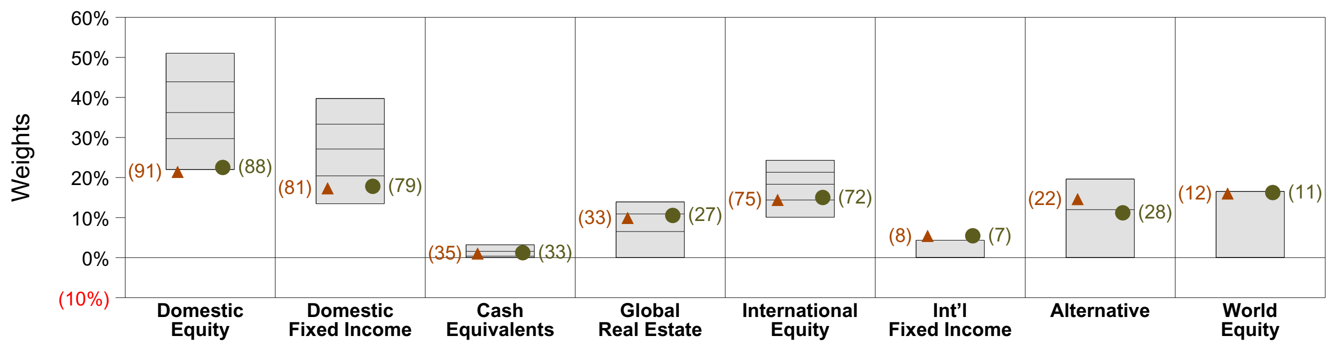


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	1,062,966	22.5%	21.4%	1.1%	52,566
Domestic Fixed Income	840,686	17.8%	17.3%	0.5%	23,868
International Equity	709,193	15.0%	14.4%	0.6%	29,298
Int'l Fixed Income	257,712	5.5%	5.4%	0.1%	2,752
Global Real Estate	497,508	10.5%	9.9%	0.6%	30,081
World Equity	767,124	16.2%	16.0%	0.2%	11,686
Private Equity	159,340	3.4%	5.4%	(2.0%)	(95,621)
Timber	153,349	3.2%	4.2%	(1.0%)	(44,954)
Infrastructure	215,451	4.6%	5.0%	(0.4%)	(20,624)
Cash Equivalents	58,164	1.2%	1.0%	0.2%	10,949
Total	4,721,493	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



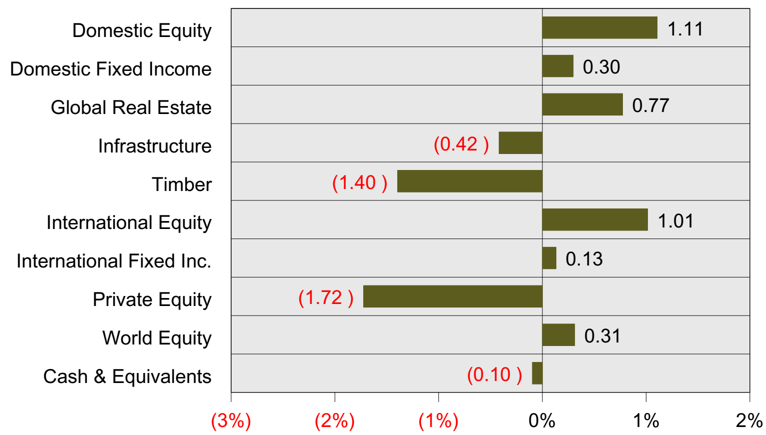
	Domestic Equity	Domestic Fixed Income	Cash Equivalents	Global Real Estate	International Equity	Int'l Fixed Income	Alternative	World Equity
10th Percentile	51.04	39.73	3.20	13.92	24.31	4.34	19.62	16.54
25th Percentile	43.91	33.33	1.58	10.91	21.32	0.00	11.98	0.00
Median	36.23	27.12	0.38	6.51	18.33	0.00	0.00	0.00
75th Percentile	29.72	20.42	0.00	0.00	14.39	0.00	0.00	0.00
90th Percentile	22.00	13.45	0.00	0.00	10.09	0.00	0.00	0.00
Fund ●	22.51	17.81	1.23	10.54	15.02	5.46	11.19	16.25
Target ▲	21.40	17.30	1.00	9.90	14.40	5.40	14.60	16.00
% Group Invested	97.34%	97.87%	68.62%	62.23%	89.36%	18.09%	43.62%	22.87%

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

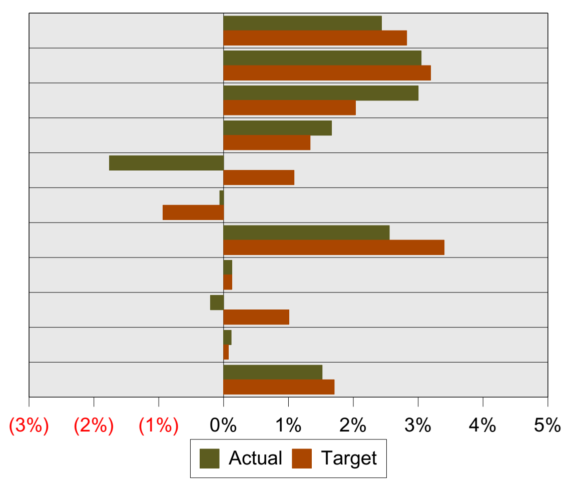
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

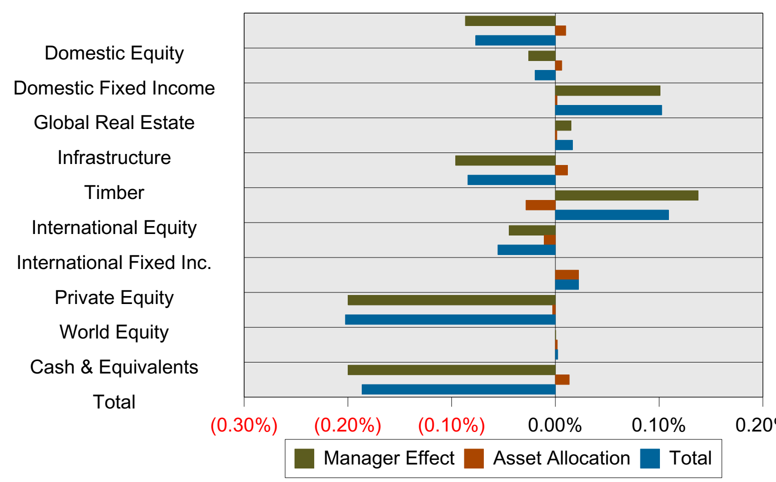
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

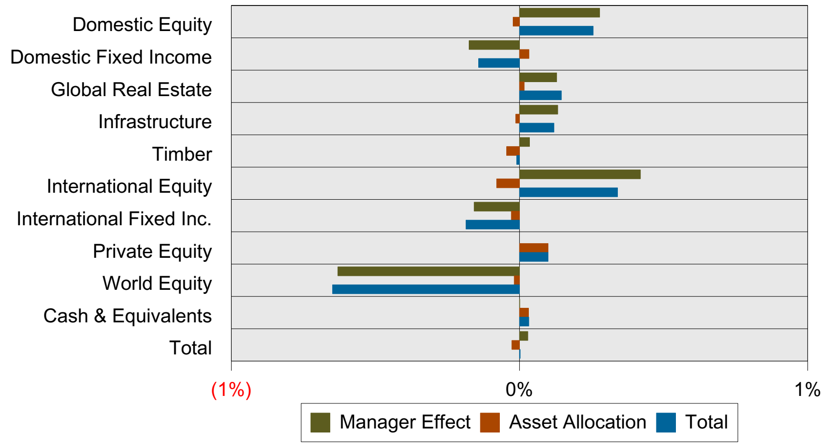
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	2.43%	2.82%	(0.09%)	0.01%	(0.08%)
Domestic Fixed Income	18%	17%	3.05%	3.19%	(0.03%)	0.01%	(0.02%)
Global Real Estate	11%	10%	3.00%	2.03%	0.10%	0.00%	0.10%
Infrastructure	5%	5%	1.67%	1.33%	0.02%	0.00%	0.02%
Timber	3%	5%	(1.76%)	1.09%	(0.10%)	0.01%	(0.08%)
International Equity	15%	14%	(0.06%)	(0.94%)	0.14%	(0.03%)	0.11%
International Fixed Inc.	5%	5%	2.56%	3.40%	(0.04%)	(0.01%)	(0.06%)
Private Equity	3%	5%	0.13%	0.13%	0.00%	0.02%	0.02%
World Equity	16%	16%	(0.20%)	1.01%	(0.20%)	(0.00%)	(0.20%)
Cash & Equivalents	1%	1%	0.12%	0.07%	0.00%	0.00%	0.00%
Total			**1.52% =**	**1.71% +**	**(0.20%) +**	**0.01%**	**(0.19%)**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

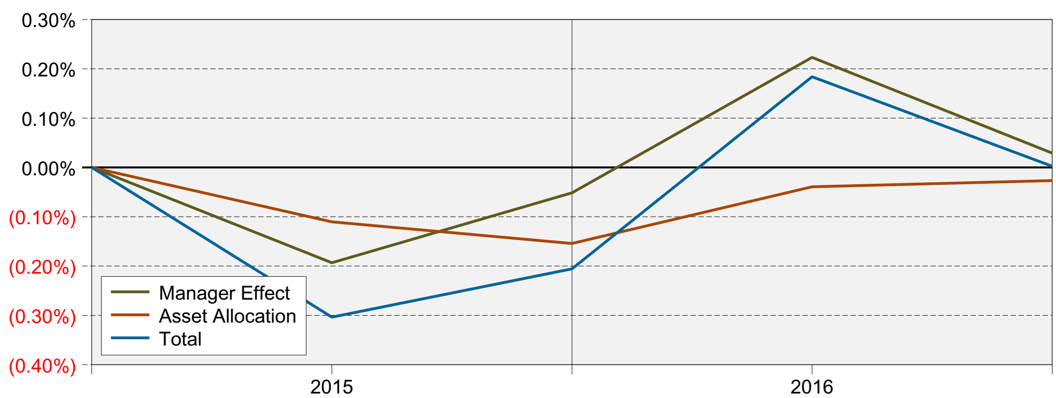
Cumulative Total Fund Relative Attribution - June 30, 2016

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

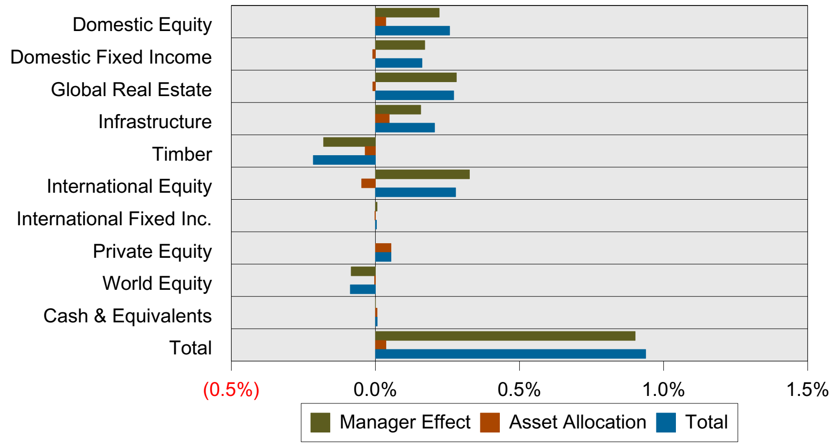
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	1.98%	0.69%	0.28%	(0.02%)	0.26%
Domestic Fixed Income	19%	18%	3.95%	4.92%	(0.18%)	0.03%	(0.14%)
Global Real Estate	11%	10%	11.88%	10.64%	0.13%	0.02%	0.15%
Infrastructure	5%	5%	3.65%	0.64%	0.13%	(0.01%)	0.12%
Timber	4%	5%	4.34%	3.49%	0.03%	(0.04%)	(0.01%)
International Equity	15%	14%	(7.78%)	(10.40%)	0.42%	(0.08%)	0.34%
International Fixed Inc.	5%	5%	7.87%	11.24%	(0.16%)	(0.03%)	(0.19%)
Private Equity	4%	5%	(7.19%)	(7.19%)	0.00%	0.10%	0.10%
World Equity	16%	16%	(6.56%)	(2.78%)	(0.63%)	(0.02%)	(0.65%)
Cash & Equivalents	1%	1%	0.29%	0.19%	0.00%	0.03%	0.03%
Total			**0.64% =**	**0.63% +**	**0.03% +**	**(0.03%)**	**0.00%**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

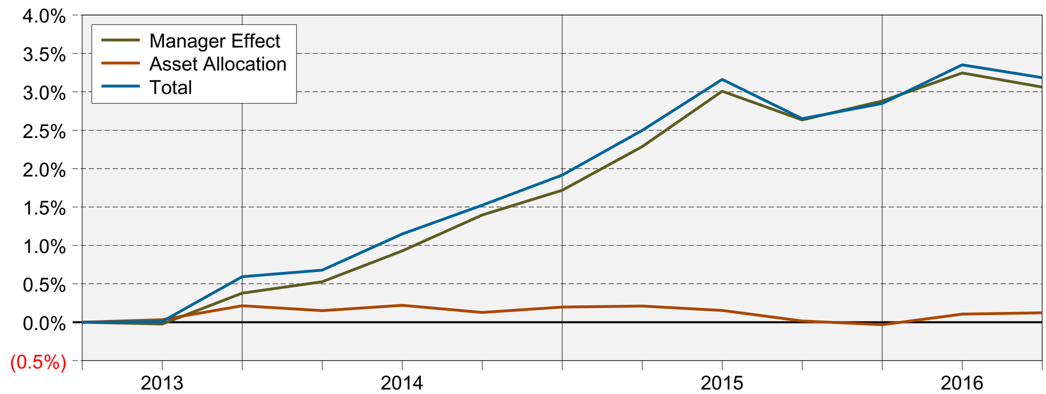
Cumulative Total Fund Relative Attribution - June 30, 2016

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

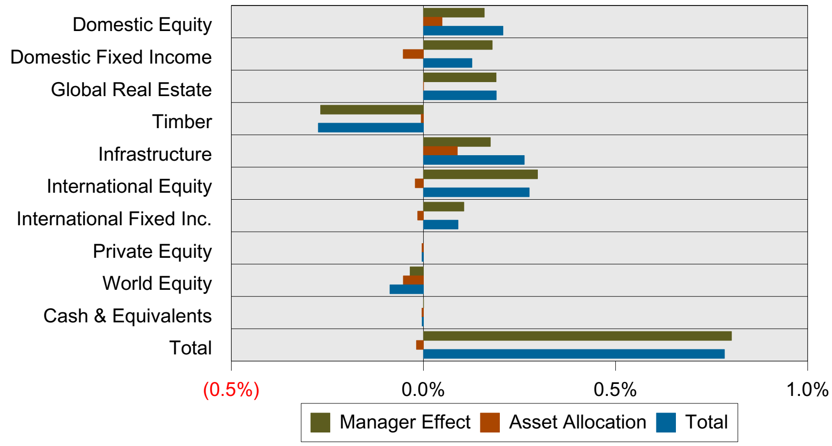
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	11.57%	10.53%	0.22%	0.04%	0.26%
Domestic Fixed Income	19%	18%	5.03%	4.16%	0.17%	(0.01%)	0.16%
Global Real Estate	10%	10%	14.74%	11.61%	0.28%	(0.01%)	0.27%
Infrastructure	4%	5%	4.73%	0.76%	0.16%	0.05%	0.21%
Timber	4%	5%	3.63%	7.77%	(0.18%)	(0.04%)	(0.22%)
International Equity	15%	14%	3.55%	1.37%	0.33%	(0.05%)	0.28%
International Fixed Inc.	5%	5%	2.01%	1.85%	0.01%	(0.00%)	0.00%
Private Equity	4%	5%	(2.94%)	(2.94%)	0.00%	0.05%	0.05%
World Equity	16%	16%	6.44%	6.95%	(0.08%)	(0.00%)	(0.09%)
Cash & Equivalents	1%	1%	0.13%	0.09%	0.00%	0.01%	0.01%
Total			**6.85% =**	**5.92% +**	**0.90% +**	**0.04%**	**0.94%**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

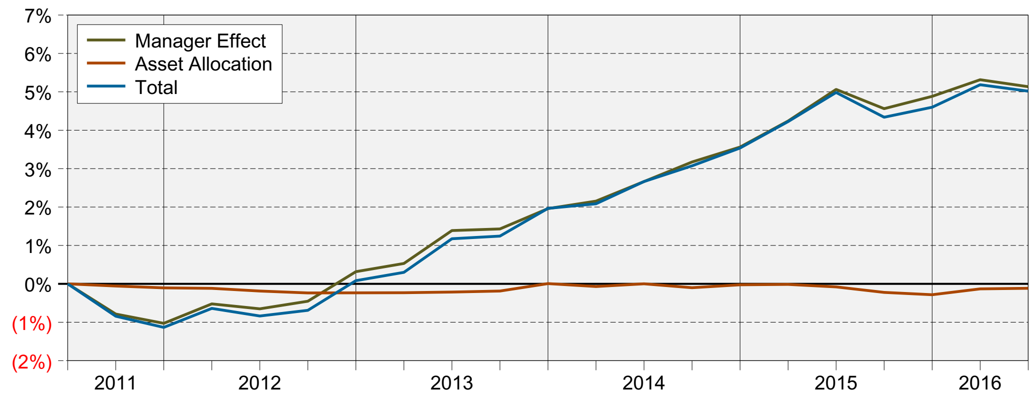
Cumulative Total Fund Relative Attribution - June 30, 2016

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

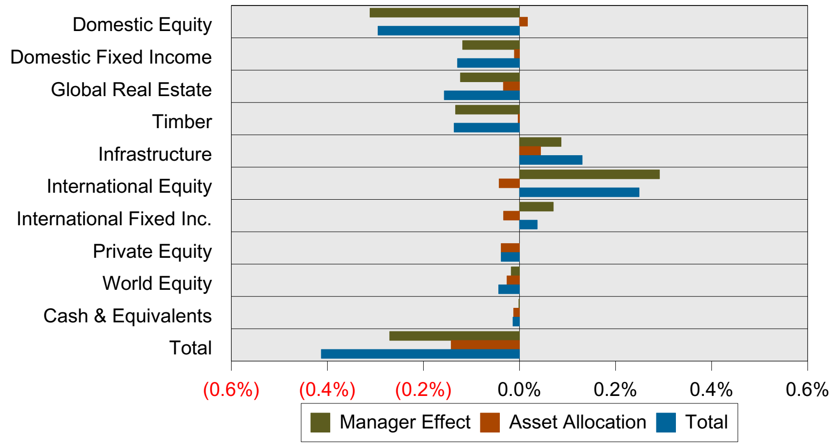
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	25%	24%	12.10%	11.24%	0.16%	0.05%	0.21%
Domestic Fixed Income	19%	18%	5.67%	4.44%	0.18%	(0.05%)	0.13%
Global Real Estate	9%	10%	13.64%	11.51%	0.19%	0.00%	0.19%
Timber	4%	5%	-	-	(0.27%)	(0.01%)	(0.27%)
Infrastructure	4%	5%	-	-	0.17%	0.09%	0.26%
International Equity	16%	15%	2.44%	0.52%	0.30%	(0.02%)	0.28%
International Fixed Inc.	5%	5%	2.28%	0.35%	0.11%	(0.02%)	0.09%
Private Equity	5%	5%	0.51%	0.51%	0.00%	(0.00%)	(0.00%)
World Equity	12%	12%	-	-	(0.03%)	(0.05%)	(0.09%)
Cash & Equivalents	1%	1%	0.12%	0.09%	0.00%	(0.00%)	(0.00%)
Total			**6.78% =**	**5.99% +**	**0.80% +**	**(0.02%)**	**0.78%**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

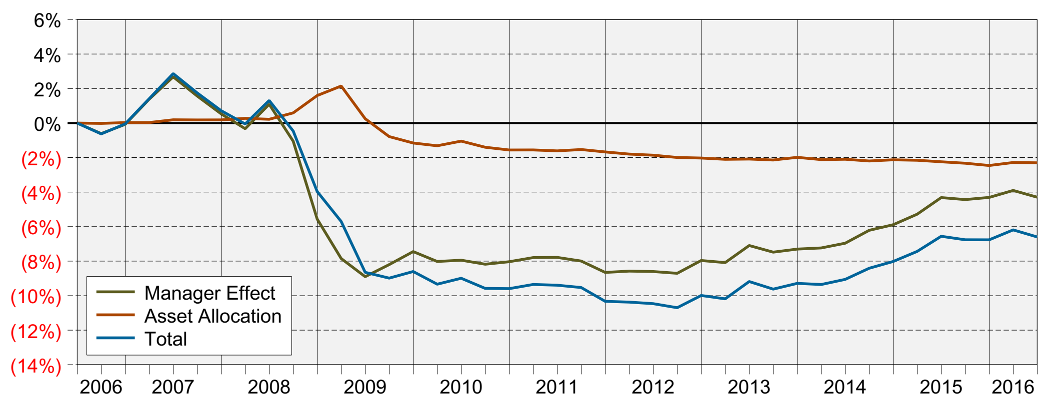
Cumulative Total Fund Relative Attribution - June 30, 2016

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

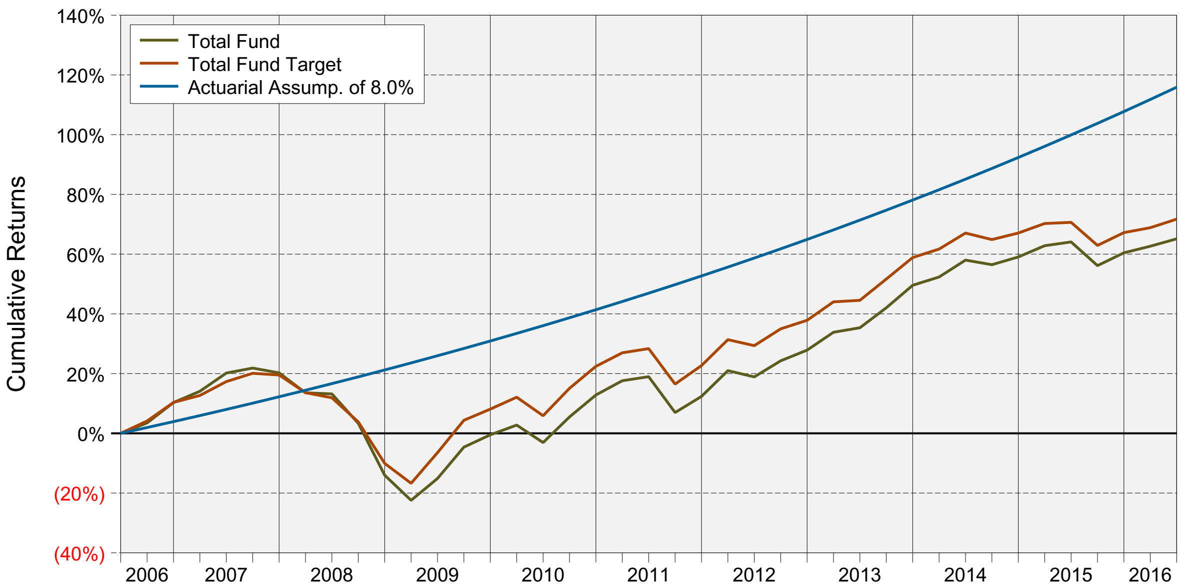
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	31%	31%	6.34%	7.19%	(0.31%)	0.02%	(0.29%)
Domestic Fixed Income	23%	22%	6.06%	5.95%	(0.12%)	(0.01%)	(0.13%)
Global Real Estate	9%	8%	5.92%	7.40%	(0.12%)	(0.03%)	(0.16%)
Timber	2%	2%	-	-	(0.13%)	(0.00%)	(0.14%)
Infrastructure	2%	2%	-	-	0.09%	0.04%	0.13%
International Equity	16%	17%	3.86%	2.18%	0.29%	(0.04%)	0.25%
International Fixed Inc.	5%	5%	5.33%	4.04%	0.07%	(0.03%)	0.04%
Private Equity	4%	5%	0.73%	0.73%	0.00%	(0.04%)	(0.04%)
World Equity	6%	6%	-	-	(0.02%)	(0.03%)	(0.04%)
Cash & Equivalents	1%	1%	0.80%	1.04%	(0.00%)	(0.01%)	(0.01%)
Total			**5.14% =**	**5.56% +**	**(0.27%) +**	**(0.14%)**	**(0.41%)**

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

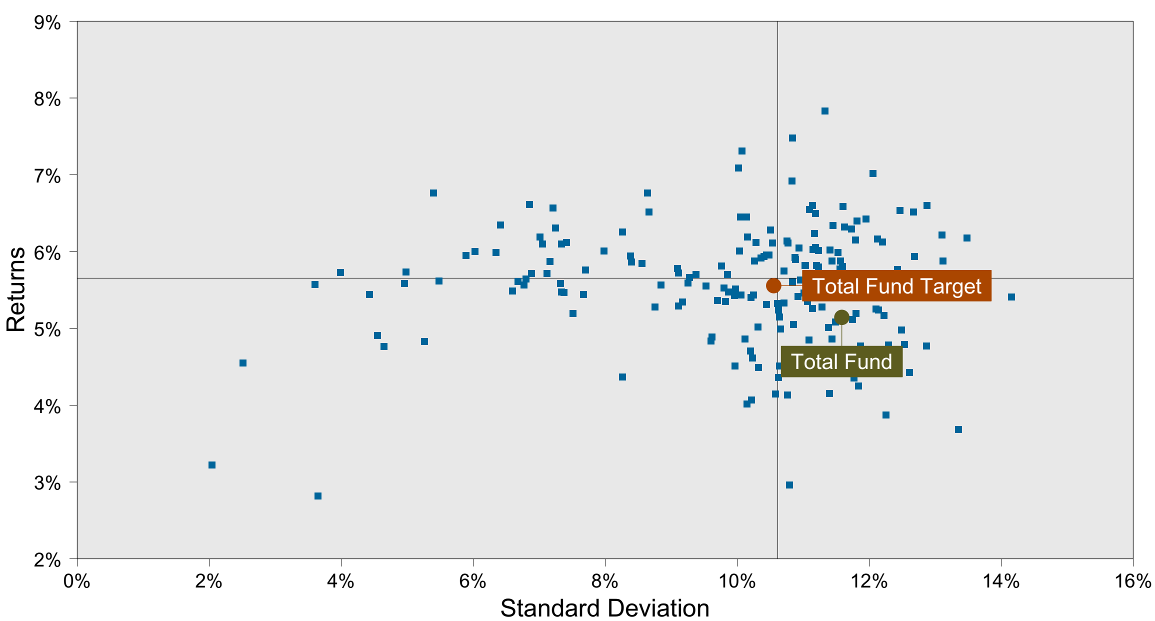
Cumulative Performance Relative to Target

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



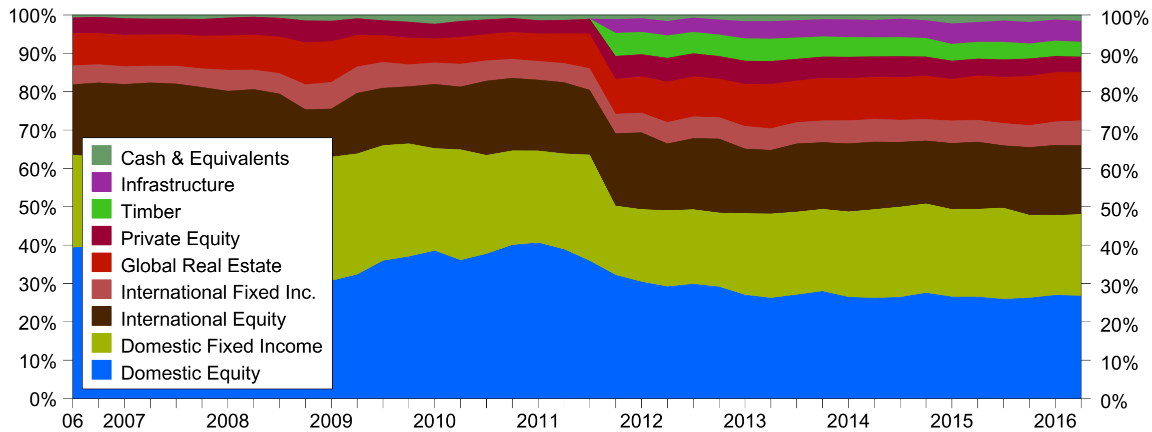
Squares represent membership of the CAI Public Fund Sponsor Database

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

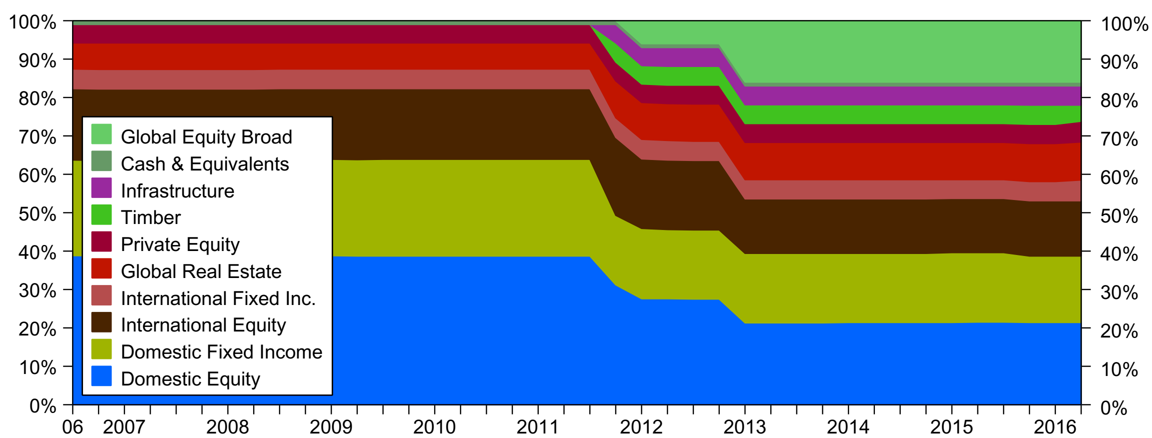
Actual vs Target Historical Asset Allocation

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.

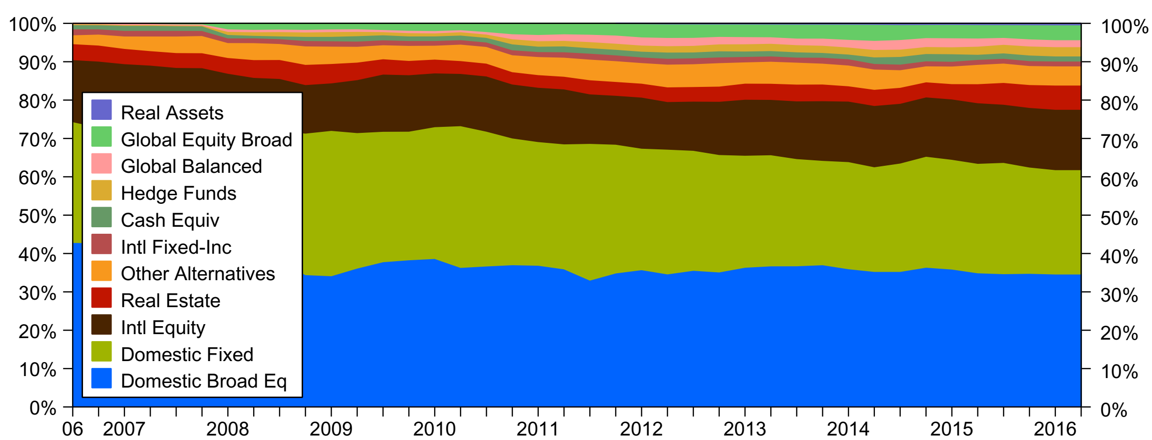
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average CAI Public Fund Sponsor Database Historical Asset Allocation

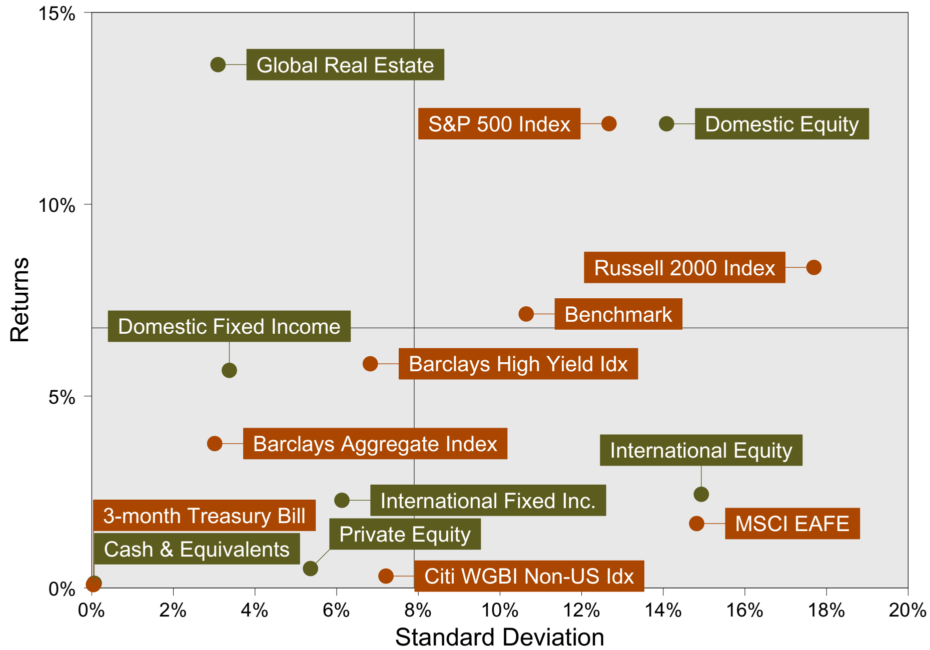


* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

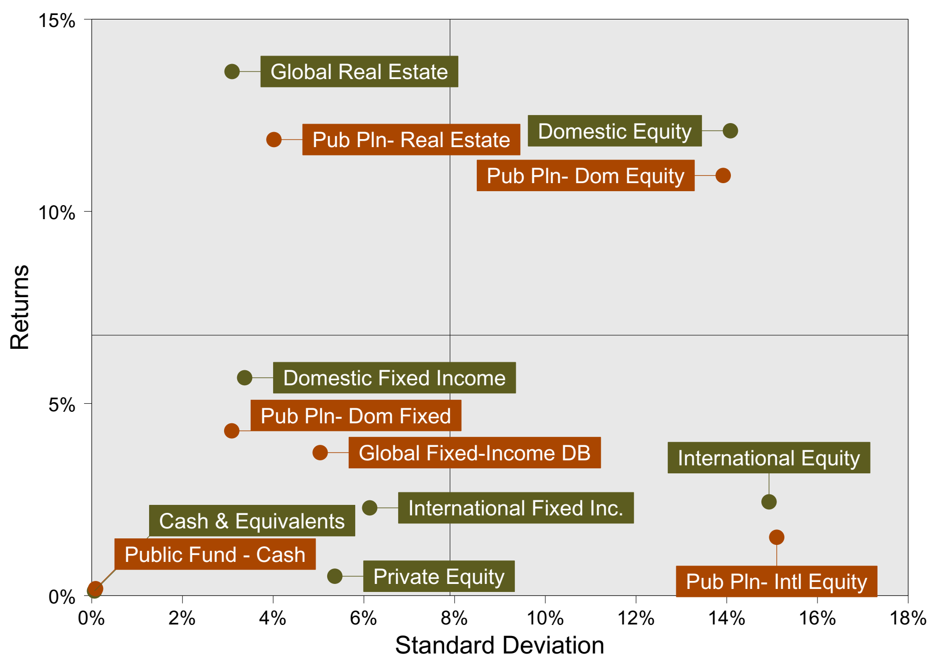
Asset Class Risk and Return

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



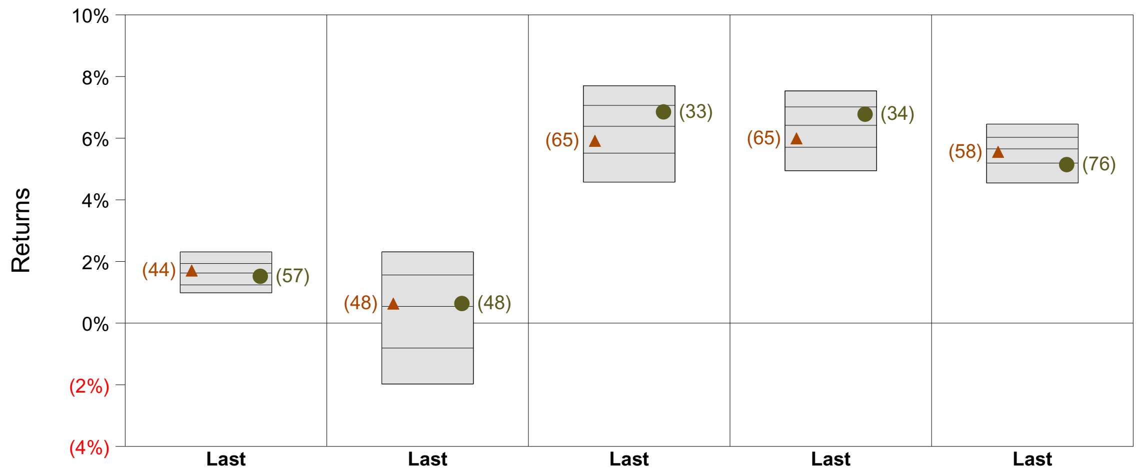
Five Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

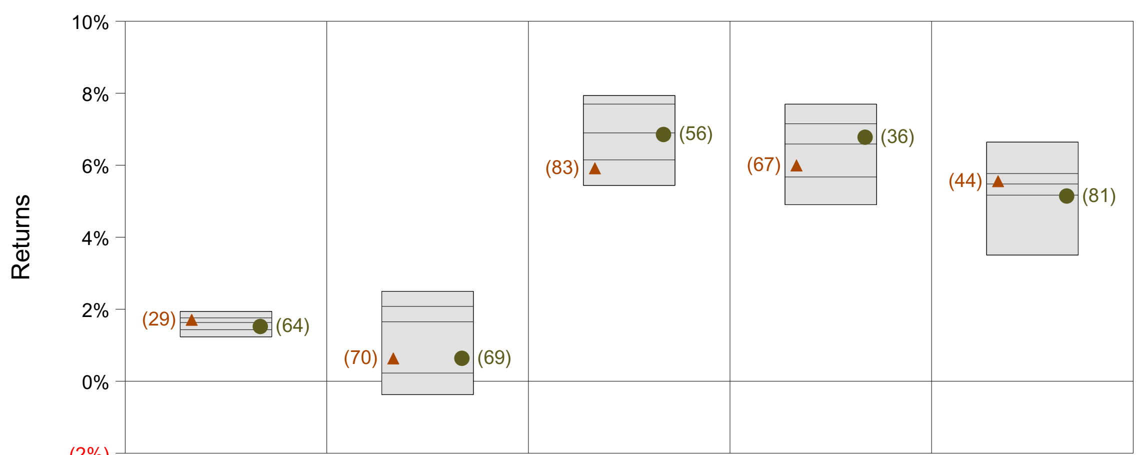
The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended June 30, 2016. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

CAI Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.31	2.31	7.70	7.53	6.46
25th Percentile	1.93	1.56	7.06	7.02	6.03
Median	1.62	0.54	6.39	6.42	5.65
75th Percentile	1.24	(0.81)	5.51	5.70	5.19
90th Percentile	0.98	(1.97)	4.57	4.94	4.55
Total Fund ●	1.52	0.64	6.85	6.78	5.14
Policy Target ▲	1.71	0.63	5.92	5.99	5.56

Asset Allocation Adjusted Ranking



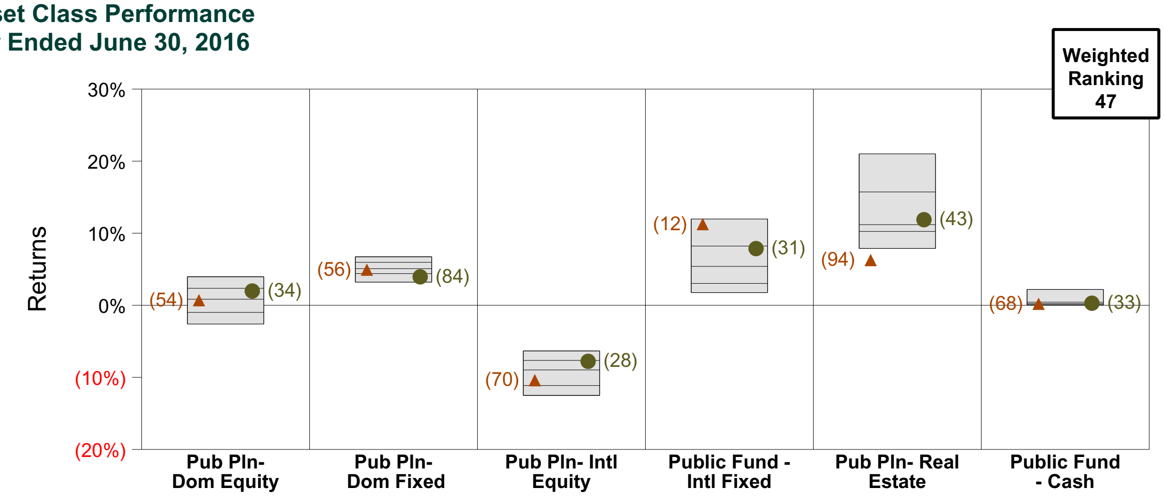
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	1.94	2.50	7.94	7.70	6.64
25th Percentile	1.76	2.08	7.70	7.15	5.77
Median	1.63	1.65	6.90	6.59	5.48
75th Percentile	1.43	0.23	6.15	5.67	5.17
90th Percentile	1.23	(0.37)	5.44	4.90	3.50
Total Fund ●	1.52	0.64	6.85	6.78	5.14
Policy Target ▲	1.71	0.63	5.92	5.99	5.56

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

Asset Class Rankings

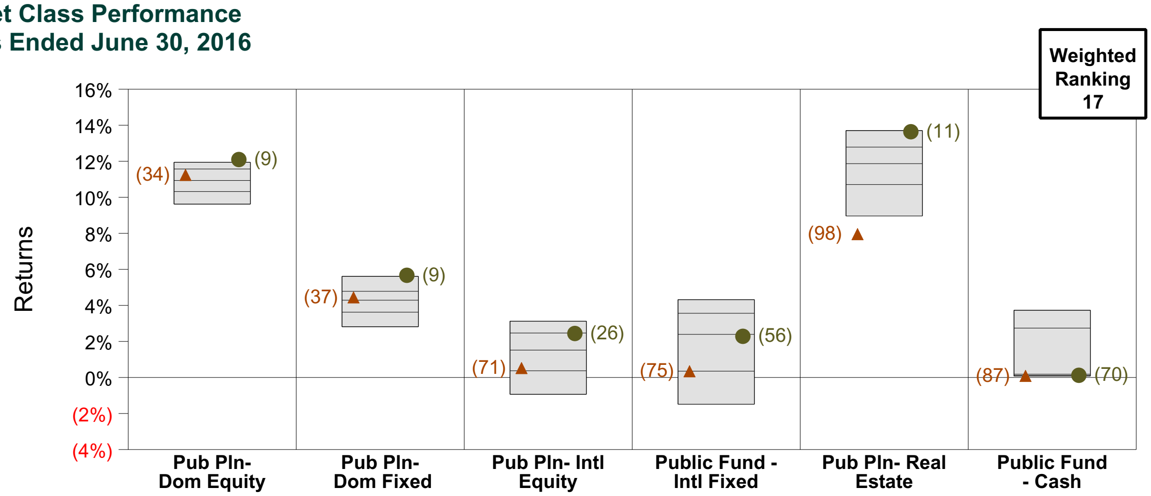
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Year Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	3.96	6.73	(6.34)	11.98	21.01	2.20
25th Percentile	2.36	5.96	(7.65)	8.22	15.73	0.44
Median	0.84	5.08	(8.97)	5.40	11.19	0.24
75th Percentile	(0.99)	4.40	(11.13)	3.03	10.25	0.08
90th Percentile	(2.60)	3.22	(12.50)	1.76	7.89	0.05
Asset Class Composite ●	1.98	3.95	(7.78)	7.87	11.88	0.29
Composite Benchmark ▲	0.69	4.92	(10.40)	11.24	6.26	0.19

Total Asset Class Performance
Five Years Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	11.94	5.61	3.12	4.32	13.70	3.73
25th Percentile	11.57	4.78	2.47	3.56	12.79	2.74
Median	10.93	4.29	1.52	2.39	11.87	0.18
75th Percentile	10.32	3.62	0.37	0.35	10.71	0.11
90th Percentile	9.62	2.82	(0.93)	(1.48)	8.96	0.08
Asset Class Composite ●	12.10	5.67	2.44	2.28	13.64	0.12
Composite Benchmark ▲	11.24	4.44	0.52	0.35	7.96	0.09

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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 Distribution Across Investment Managers

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	**$2,698,622,870**	**57.16%**	**$(12,556,280)**	**$23,698,011**	**$2,687,481,139**	**57.72%**
Domestic Equity	**$1,062,965,897**	**22.51%**	**$(16,253,958)**	**$25,329,085**	**$1,053,890,769**	**22.63%**
Large Cap Domestic Equity	**$815,792,350**	**17.28%**	**$(16,200,729)**	**$15,581,674**	**$816,411,405**	**17.53%**
L.A. Capital	308,454,836	6.53%	(6,155,003)	4,643,156	309,966,684	6.66%
LACM Enhanced Index	191,342,879	4.05%	(45,726)	5,131,535	186,257,069	4.00%
Northern Trust AM Enh S&P 500	143,612,731	3.04%	0	1,437,280	142,175,451	3.05%
Parametric Clifton Enh S&P 500	172,381,903	3.65%	(10,000,000)	4,369,703	178,012,201	3.82%
Small Cap Domestic Equity	**$247,173,547**	**5.24%**	**$(53,228)**	**$9,747,412**	**$237,479,364**	**5.10%**
Atlanta Capital	113,269,259	2.40%	108,857,677	4,411,582	-	-
Parametric Clifton Enh Small Cap	133,904,288	2.84%	0	5,335,825	128,568,464	2.76%
Small Cap Transition Account	0	0.00%	(108,910,906)	5	108,910,901	2.34%
International Equity	**$709,192,595**	**15.02%**	**$(1,833,310)**	**$(226,828)**	**$711,252,733**	**15.28%**
Developed Int'l Equity	**$530,756,692**	**11.24%**	**$(1,833,310)**	**$(5,508,819)**	**$538,098,821**	**11.56%**
Capital Group	93,828	0.00%	(125,795,292)	2,337,058	123,552,063	2.65%
DFA Int'l Small Cap	71,922,590	1.52%	0	(2,346,298)	74,268,888	1.60%
Northern Trust AM World Ex US	255,177,849	5.40%	8,980,277	(2,010,724)	248,208,296	5.33%
Wellington Management Co.	81,532,906	1.73%	(10,183,539)	(353,130)	92,069,575	1.98%
William Blair	122,029,518	2.58%	125,165,244	(3,135,726)	-	-
Emerging Markets Equity	**$178,435,903**	**3.78%**	**$0**	**$5,281,991**	**$173,153,912**	**3.72%**
Axiom	132,327,251	2.80%	0	3,660,800	128,666,451	2.76%
DFA	46,108,652	0.98%	0	1,621,191	44,487,461	0.96%
World Equity	**$767,124,427**	**16.25%**	**$9,351,376**	**$(1,554,763)**	**$759,327,813**	**16.31%**
EPOCH Investment Partners	338,524,029	7.17%	(545,671)	(300,567)	339,370,267	7.29%
LSV Asset Management	428,600,398	9.08%	9,897,047	(1,254,196)	419,957,546	9.02%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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 Distribution Across Investment Managers

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Private Equity	**$159,339,951**	**3.37%**	**$(3,820,389)**	**$150,516**	**$163,009,824**	**3.50%**
Adams Street Direct Co-Invest Fd	5,574,253	0.12%	(2,933,236)	186,243	8,321,246	0.18%
Adams Street Direct Fund 2010	1,351,602	0.03%	(24,451)	(101,124)	1,477,177	0.03%
Adams Street 1998 Partnership	125,801	0.00%	0	125	125,676	0.00%
Adams Street 1999 Partnership	337,984	0.01%	0	5,701	332,283	0.01%
Adams Street 2000 Partnership	938,044	0.02%	(474,696)	(42,823)	1,455,563	0.03%
Adams Street 2001 Partnership	1,516,486	0.03%	0	(111,149)	1,627,635	0.03%
Adams Street 2002 Partnership	738,435	0.02%	0	34,653	703,782	0.02%
Adams Street 2003 Partnership	358,630	0.01%	0	(14,164)	372,794	0.01%
Adams Street 2010 Partnership	5,513,205	0.12%	0	(30,409)	5,543,614	0.12%
Adams Street 2008 Fund	7,468,204	0.16%	(130,374)	(31,554)	7,630,132	0.16%
Adams Street 1999 Non-US	401,159	0.01%	0	4,654	396,505	0.01%
Adams Street 2000 Non-US	709,712	0.02%	0	(12,711)	722,423	0.02%
Adams Street 2001 Non-US	169,925	0.00%	0	(9,664)	179,589	0.00%
Adams Street 2002 Non-US	1,028,252	0.02%	0	13,107	1,015,145	0.02%
Adams Street 2003 Non-US	565,080	0.01%	(315,975)	23,093	857,962	0.02%
Adams Street 2004 Non-US	402,925	0.01%	0	(22,019)	424,944	0.01%
Adams Street 2010 Non-US	2,630,679	0.06%	0	4,987	2,625,692	0.06%
Adams Street 2010 Non-US Emg	1,290,610	0.03%	0	(12,118)	1,302,728	0.03%
Adams Street 2015 Global Fd	1,512,943	0.03%	0	(82,425)	1,595,368	0.03%
Adams Street BVCF IV Fund	3,764,686	0.08%	0	(12,040)	3,776,726	0.08%
Hearthstone Advisors MSII	12,792	0.00%	0	12,791	1	0.00%
Hearthstone Advisors MSIII	4,421,442	0.09%	4,275,061	128,255	18,126	0.00%
CorsAir III	13,394,710	0.28%	(15,406)	(129,050)	13,539,166	0.29%
ND Investors	11,921,782	0.25%	25,000	(707,708)	12,604,490	0.27%
CorsAir IV	17,104,833	0.36%	(4,573,546)	1,149,272	20,529,107	0.44%
Capital International V	7,819,086	0.17%	24,729	402,898	7,391,459	0.16%
Capital International VI	17,880,644	0.38%	29,445	2,331,001	15,520,198	0.33%
EIG Energy Fund XIV	4,666,317	0.10%	166,162	(1,834,821)	6,334,976	0.14%
Lewis & Clark, LP	1,329,909	0.03%	0	(1,394,581)	2,724,490	0.06%
Lewis & Clark II	9,613,134	0.20%	0	177,226	9,435,908	0.20%
Quantum Energy Partners	6,127,000	0.13%	0	(875,399)	7,002,399	0.15%
Quantum Resources	51,635	0.00%	0	51,634	1	0.00%
Matlin Patterson I	1	0.00%	(13,696)	296	13,401	0.00%
Matlin Patterson II	1,625,922	0.03%	0	(118,160)	1,744,082	0.04%
Matlin Patterson III	26,972,129	0.57%	140,594	1,166,499	25,665,036	0.55%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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 Distribution Across Investment Managers

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL FIXED INCOME	**$1,098,398,589**	**23.26%**	**$15,244,969**	**$31,208,247**	**$1,051,945,373**	**22.59%**
Domestic Fixed Income	**$840,686,350**	**17.81%**	**$2,451,742**	**$24,829,334**	**$813,405,274**	**17.47%**
Inv. Grade Fixed Income	**$604,078,109**	**12.79%**	**$22,758,685**	**$13,088,863**	**$568,230,561**	**12.20%**
Declaration Total Return	86,560,533	1.83%	(30,387)	1,727,662	84,863,258	1.82%
J. P. Morgan MBS	113,899,252	2.41%	(61,067)	1,761,133	112,199,186	2.41%
PIMCO DiSCO II	91,713,399	1.94%	0	2,100,909	89,612,490	1.92%
PIMCO MBS	183,187,244	3.88%	14,930,172	2,342,867	165,914,206	3.56%
PIMCO Unconstrained	61,676,161	1.31%	(73,738)	1,037,682	60,712,217	1.30%
SSgA Long US Treas Index	67,041,520	1.42%	7,993,706	4,118,611	54,929,204	1.18%
Below Inv. Grade Fixed Income	**$236,608,241**	**5.01%**	**$(20,306,943)**	**$11,740,471**	**$245,174,713**	**5.27%**
Goldman Sachs 2006 Offshore	1,100,000	0.02%	(63,000)	(13,294)	1,176,294	0.03%
Goldman Sachs Offshore V	2,586,000	0.05%	0	(135,258)	2,721,258	0.06%
Loomis Sayles	185,839,941	3.94%	(20,243,943)	10,929,326	195,154,558	4.19%
PIMCO Bravo II Fund	47,082,300	1.00%	0	959,697	46,122,603	0.99%
Internationall Fixed Income	**$257,712,240**	**5.46%**	**$12,793,227**	**$6,378,913**	**$238,540,099**	**5.12%**
Brandywine	147,344,567	3.12%	12,873,506	2,497,612	131,973,448	2.83%
UBS Global Asset Mgmt.	110,367,673	2.34%	(80,279)	3,881,301	106,566,651	2.29%
GLOBAL REAL ASSETS	**$866,308,046**	**18.35%**	**$(22,612,750)**	**$15,523,281**	**$873,397,515**	**18.76%**
Global Real Estate	**$497,508,378**	**10.54%**	**$(19,494,728)**	**$14,725,399**	**$502,277,707**	**10.79%**
Invesco Core Real Estate	223,431,979	4.73%	(197,073)	7,810,580	215,818,471	4.64%
Invesco Fund II	8,294,747	0.18%	(855,849)	168,649	8,981,947	0.19%
Invesco Fund III	28,060,334	0.59%	0	927,622	27,132,712	0.58%
Invesco Asia RE Feeder	1,712,797	0.04%	0	606,508	1,106,290	0.02%
Invesco Asia RE Fund III	8,440,457	0.18%	0	131,747	8,308,710	0.18%
Invesco Value Added Fd IV	19,341,946	0.41%	0	(167,414)	19,509,360	0.42%
JP Morgan	186,433,014	3.95%	0	4,170,293	182,262,721	3.91%
JP Morgan Alternative Fd	312,204	0.01%	0	(1,700)	313,904	0.01%
JP Morgan China Property Fd	11,459,032	0.24%	(3,829)	1,764,534	9,698,327	0.21%
JP Morgan Greater European Opp Fd	10,021,867	0.21%	(18,437,978)	(685,419)	29,145,265	0.63%
Timber	**$153,349,151**	**3.25%**	**$0**	**$(2,748,557)**	**$156,097,708**	**3.35%**
TIR Teredo	33,820,778	0.72%	0	(1,815,586)	35,636,364	0.77%
TIR Springbank	119,528,373	2.53%	0	(932,971)	120,461,344	2.59%
Infrastructure	**$215,450,517**	**4.56%**	**$(3,118,021)**	**$3,546,439**	**$215,022,099**	**4.62%**
JP Morgan Asian Infrastructure	28,039,002	0.59%	152,517	(782,278)	28,668,764	0.62%
JP Morgan IIF	142,195,646	3.01%	(764,732)	2,901,019	140,059,358	3.01%
Grosvenor Cust. Infrastructure	41,367,135	0.88%	(627,599)	1,512,842	40,481,892	0.87%
Grosvenor Cust. Infrastructure II	3,848,734	0.08%	(1,878,208)	(85,143)	5,812,085	0.12%
CASH & CASH EQUIVALENTS	**$58,163,522**	**1.23%**	**$14,851,858**	**$60,642**	**$43,251,022**	**0.93%**
Cash Account	58,163,522	1.23%	14,851,858	60,642	43,251,022	0.93%
Securities Lending Income	**$0**	**0.00%**	**$(228,462)**	**$228,462**	**-**	**-**
Total Fund	**$4,721,493,026**	**100.0%**	**$(5,300,665)**	**$70,718,643**	**$4,656,075,049**	**100.0%**

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equity					
Gross	0.88%	(3.62%)	6.93%	-	-
Net	0.83%	(3.92%)	6.56%	-	-
Wtd Avg Global Equity Benchmark	1.14%	(3.75%)	6.08%	-	-
Domestic Equity					
Gross	2.43%	1.98%	11.57%	12.10%	6.34%
Net	2.41%	1.86%	11.34%	11.83%	6.03%
Wtd Avg Domestic Equity Benchmark	2.82%	0.69%	10.53%	11.24%	7.19%
Large Cap Equity					
Gross	1.95%	4.66%	12.82%	12.89%	5.91%
Net	1.92%	4.55%	12.63%	12.69%	5.66%
Large Cap Benchmark (1)	2.54%	2.93%	11.48%	12.09%	7.42%
L.A. Capital - Gross	1.53%	5.17%	14.27%	13.62%	9.22%
L.A. Capital - Net	1.48%	4.95%	14.03%	13.39%	9.01%
Russell 1000 Growth Index	0.61%	3.02%	13.07%	12.35%	8.78%
LACM Enhanced Index - Goss	2.76%	6.03%	12.62%	13.07%	8.35%
LACM Enhanced Index - Net	2.73%	5.92%	12.48%	12.92%	8.19%
Russell 1000 Index	2.54%	2.93%	11.48%	11.88%	7.51%
Northern Tr AM Enh S&P500 - Gross	1.01%	1.76%	11.10%	12.55%	7.40%
Northern Tr AM Enh S&P500 - Net	1.01%	1.76%	10.70%	12.19%	7.22%
S&P 500 Index	2.46%	3.99%	11.66%	12.10%	7.42%
Parametric Clifton Enh S&P500 - Gross	2.49%	4.60%	11.89%	12.45%	-
Parametric Clifton Enh S&P500 - Net	2.49%	4.60%	11.88%	12.38%	-
S&P 500 Index	2.46%	3.99%	11.66%	12.10%	7.42%
Small Cap Equity					
Gross	4.11%	(6.87%)	7.23%	9.41%	7.15%
Net	4.11%	(7.04%)	6.88%	8.95%	6.64%
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	6.20%
Parametric Clifton Enh SmCap - Gross	4.15%	(5.49%)	8.31%	9.61%	-
Parametric Clifton Enh SmCap - Net	4.15%	(5.84%)	7.84%	9.12%	-
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	6.20%

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

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equity					
Gross	(0.06%)	(7.78%)	3.55%	2.44%	3.86%
Net	(0.10%)	(7.96%)	3.28%	2.10%	3.48%
Wtd Avg Int'l Equity Benchmark	(0.94%)	(10.40%)	1.37%	0.52%	2.18%
Developed Intl Equity					
Gross	(1.10%)	(7.71%)	4.17%	3.12%	2.79%
Net	(1.16%)	(7.94%)	3.88%	2.79%	2.45%
Benchmark(1)	(1.46%)	(10.16%)	2.06%	1.68%	1.32%
DFA Int'l Small Cap Value - Net	(3.16%)	(9.28%)	6.01%	4.04%	-
World ex US SC Value	(1.88%)	(6.05%)	4.76%	3.03%	3.50%
Northern Tr AM World ex US - Gross	(0.84%)	(9.51%)	-	-	-
Northern Tr AM World ex US - Net	(0.85%)	(9.54%)	-	-	-
MSCI World ex US	(1.05%)	(9.84%)	1.88%	1.23%	1.63%
Wellington Management - Gross	(0.87%)	1.90%	9.80%	9.09%	6.76%
Wellington Management - Net	(1.06%)	1.06%	8.90%	8.17%	5.86%
BMI, EPAC, <$2 B	(0.63%)	(3.38%)	7.29%	4.37%	3.51%
Emerging Markets Equity					
Gross	3.05%	(9.25%)	0.55%	(0.71%)	5.63%
Net	3.05%	(9.25%)	0.33%	(1.09%)	5.14%
Emerging Mkts - Net	0.66%	(12.05%)	(1.56%)	(3.78%)	3.54%
Axiom - Net	2.85%	(10.32%)	-	-	-
Emerging Mkts - Net	0.66%	(12.05%)	(1.56%)	(3.78%)	3.54%
DFA - Net	3.64%	(5.64%)	2.43%	(0.55%)	7.67%
Emerging Mkts - Net	0.66%	(12.05%)	(1.56%)	(3.78%)	3.54%
World Equity					
Gross	(0.20%)	(6.56%)	6.44%	-	-
Net	(0.29%)	(7.27%)	5.71%	-	-
MSCI World Index	1.01%	(2.78%)	6.95%	6.63%	4.43%
EPOCH Investment - Gross(2)	(0.09%)	(5.93%)	6.49%	-	-
EPOCH Investment - Net	(0.25%)	(6.53%)	5.78%	-	-
MSCI World Index	1.01%	(2.78%)	6.95%	6.63%	4.43%
LSV Asset Management - Gross(3)	(0.30%)	(7.05%)	6.58%	-	-
LSV Asset Management - Net	(0.32%)	(7.85%)	5.84%	-	-
MSCI ACWI Idx	1.19%	(3.17%)	6.60%	5.95%	4.82%

(1) MSCI EAFE through 12/31/1996; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again 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.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Private Equity*					
Net	0.12%	(7.20%)	(2.97%)	0.45%	0.93%
Adams Street Direct Co-Invest Fd	1.54%	8.04%	15.92%	12.50%	-
Adams Street Direct Fund 2010	(6.96%)	7.48%	15.27%	13.88%	-
Adams Street 1998 Partnership	0.10%	4.14%	1.77%	0.95%	2.28%
Adams Street 1999 Partnership	1.72%	12.03%	2.61%	2.21%	4.08%
Adams Street 2000 Partnership	(3.52%)	(1.75%)	(1.74%)	1.43%	4.53%
Adams Street 2001 Partnership	(6.83%)	(10.10%)	2.31%	4.78%	4.89%
Adams Street 2002 Partnership	4.92%	9.43%	1.65%	4.69%	4.16%
Adams Street 2003 Partnership	(3.80%)	(2.55%)	13.28%	7.77%	7.96%
Adams Street 2010 Partnership	(0.55%)	6.18%	13.70%	12.03%	-
Adams Street 2008 Fund	(0.42%)	11.84%	12.71%	9.22%	-
Adams Street 1999 Non-US	1.17%	13.44%	1.29%	5.77%	9.75%
Adams Street 2000 Non-US	(1.76%)	(7.68%)	(2.64%)	(2.51%)	3.45%
Adams Street 2001 Non-US	(5.38%)	23.36%	24.09%	12.41%	4.79%
Adams Street 2002 Non-US	1.29%	29.09%	8.10%	5.92%	8.22%
Adams Street 2003 Non-US	4.26%	18.08%	11.09%	9.99%	13.84%
Adams Street 2004 Non-US	(5.18%)	(8.27%)	5.80%	3.35%	5.24%
Adams Street 2010 Non-US	0.19%	9.63%	6.70%	7.21%	-
Adams Street 2010 Non-US Emg	(0.93%)	10.50%	11.83%	0.77%	-
Adams Street 2015 Global Fd	(5.17%)	-	-	-	-
Adams Street BVCF IV Fund	(0.32%)	(1.65%)	18.20%	29.22%	29.63%
CorsAir III	(0.95%)	34.22%	7.06%	1.35%	-
ND Investors	(5.60%)	6.41%	(0.10%)	2.53%	-
CorsAir IV	6.84%	(2.38%)	13.58%	6.00%	-
Capital International V	5.43%	(25.52%)	(10.61%)	(9.07%)	-
Capital International VI	14.99%	1.06%	(9.32%)	-	-
EIG Energy Fund XIV	(27.87%)	(67.59%)	(38.29%)	(24.04%)	-
Lewis & Clark, LP	(51.19%)	(51.19%)	(35.55%)	(19.67%)	(5.49%)
Lewis & Clark II	1.88%	1.88%	(6.77%)	(5.56%)	-
Quantum Energy Partners	(12.50%)	(22.63%)	(6.45%)	4.85%	-
Matlin Patterson I	2.21%	13.00%	4.54%	649.79%	182.38%
Matlin Patterson II	(6.77%)	7.27%	3.19%	(27.34%)	(23.74%)
Matlin Patterson III	4.54%	(5.66%)	(1.30%)	22.01%	-

* Corsair III and North Dakota Investors were taken out from the Private Equity Composite on July 1, 2009. They were 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.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Fixed Income					
Gross	2.94%	4.84%	4.47%	-	-
Net	2.88%	4.58%	4.23%	-	-
Wtd Avg Global FI Benchmark	3.28%	6.39%	3.71%	-	-
Domestic Fixed Income					
Gross	3.05%	3.95%	5.03%	5.67%	6.06%
Net	2.99%	3.72%	4.81%	5.46%	5.79%
Wtd Avg Domestic FI Benchmark	3.19%	4.92%	4.16%	4.44%	5.95%
Inv. Grade Fixed Income					
Gross	2.24%	5.13%	4.81%	5.16%	5.78%
Net	2.21%	4.99%	4.68%	5.01%	5.55%
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	5.13%
Declaration Total Return - Net	2.04%	2.60%	4.30%	-	-
Libor-3 Month	0.16%	0.49%	0.33%	0.36%	1.44%
J.P. Morgan MBS - Gross	1.57%	4.60%	-	-	-
J.P. Morgan MBS - Net	1.52%	4.32%	-	-	-
Barclays Mortgage	1.11%	4.34%	3.76%	3.01%	4.96%
PIMCO Unconstrained - Gross(1)	1.71%	(0.64%)	0.71%	-	-
PIMCO Unconstrained - Net	1.59%	(0.95%)	0.45%	-	-
Blended Benchmark(2)	0.16%	0.49%	0.40%	-	-
PIMCO DiSCO II - Net	2.34%	4.39%	6.84%	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	5.13%
PIMCO MBS - Gross	1.32%	4.42%	3.60%	-	-
PIMCO MBS - Net	1.28%	4.24%	3.42%	-	-
Barclays Mortgage	1.11%	4.34%	3.76%	3.01%	4.96%
SSgA Long US Treas Idx - Gross	6.44%	19.28%	10.44%	-	-
SSgA Long US Treas Idx - Net	6.43%	19.23%	10.40%	-	-
Barclays Long Treas	6.44%	19.30%	10.46%	10.31%	8.77%
Below Inv. Grade Fixed Income					
Gross	4.98%	0.74%	5.45%	6.72%	6.44%
Net	4.88%	0.33%	5.00%	6.32%	6.04%
Barclays HY Corp 2% Issue	5.52%	1.65%	4.20%	5.84%	7.61%
Goldman Sachs 2006 Offshore - Net	(1.18%)	3.00%	17.57%	8.95%	6.50%
Goldman Sachs Offshore V - Net	(4.97%)	(5.12%)	6.11%	8.41%	-
PIMCO Bravo II Fund - Net	2.08%	7.02%	-	-	-
Barclays HY Corp 2% Issue	5.52%	1.65%	4.20%	5.84%	7.61%
Loomis Sayles - Gross	5.82%	(0.25%)	4.61%	5.77%	7.74%
Loomis Sayles - Net	5.69%	(0.75%)	4.10%	5.33%	7.38%
Barclays HY Corp 2% Issue	5.52%	1.65%	4.20%	5.84%	7.61%

(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.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Fixed Income					
Gross	2.56%	7.87%	2.01%	2.28%	5.33%
Net	2.47%	7.49%	1.64%	1.98%	5.09%
Wtd Avg Int'l FI Benchmark	3.40%	11.24%	1.85%	0.35%	4.04%
Brandywine - Gross	1.67%	5.12%	2.66%	4.50%	6.84%
Brandywine - Net	1.58%	4.72%	2.26%	4.19%	6.66%
Barclays Global Aggregate	2.89%	8.87%	2.80%	1.77%	4.40%
UBS Global Asset Mgmt. - Gross	3.64%	11.43%	1.52%	0.03%	3.61%
UBS Global Asset Mgmt. - Net	3.57%	11.07%	1.20%	(0.28%)	3.30%
Blended Benchmark(1)	3.40%	11.24%	1.85%	0.34%	4.04%
Global Real Assets					
Gross	1.80%	8.38%	9.71%	-	-
Net	1.65%	7.85%	9.26%	-	-
Wtd Avg Global Real Assets Benchmark	1.62%	6.25%	7.84%	-	-
Global Real Estate					
Gross	3.00%	11.88%	14.74%	13.64%	5.92%
Net	2.87%	11.26%	14.18%	12.83%	4.16%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	7.40%
Invesco Core Real Estate - Gross	3.62%	10.96%	12.72%	12.09%	6.42%
Invesco Core Real Estate - Net	3.53%	10.59%	12.32%	11.66%	5.91%
Invesco Fund II - Net	1.81%	6.65%	9.06%	15.56%	-
Invesco Fund III - Net	3.42%	14.25%	17.06%	-	-
Invesco Asia RE Feeder - Net	54.82%	121.40%	43.66%	23.12%	-
Invesco Asia RE Fund III - Net	1.59%	-	-	-	-
Invesco Value Added Fd IV - Net	(0.86%)	4.66%	-	-	-
JP Morgan - Gross	2.29%	12.24%	14.01%	14.00%	6.71%
JP Morgan - Net	2.05%	10.95%	12.87%	12.89%	5.62%
JP Morgan Alternative Fd - Net	(0.54%)	2.80%	(10.60%)	0.69%	(5.85%)
JP Morgan China Property Fd - Net	18.19%	16.24%	31.24%	15.64%	-
JPM Greater European Opp Fd - Net	3.77%	24.44%	35.37%	(20.00%)	-
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	7.40%
Timber					
Net	(1.76%)	4.34%	3.63%	-	-
TIR Teredo	(5.09%)	9.29%	10.42%	6.70%	10.54%
TIR Springbank	(0.77%)	2.97%	0.38%	(1.38%)	1.61%
NCREIF Timberland Index	1.09%	3.49%	7.77%	6.72%	6.40%
Infrastructure					
Gross	1.67%	3.65%	4.73%	-	-
Net	1.34%	2.88%	4.09%	-	-
JP Morgan Asian Infrastructure - Net	(2.71%)	(9.66%)	(3.00%)	1.61%	-
JP Morgan IIF - Gross	2.07%	5.11%	5.27%	6.17%	-
JP Morgan IIF - Net	1.57%	3.93%	4.26%	5.06%	-
Grosvenor Cust. Infrastructure - Net	3.80%	8.42%	8.86%	-	-
Grosvenor Cust. Infrastructure II - Net	(2.84%)	6.10%	-	-	-
CPI-W	1.33%	0.64%	0.76%	1.12%	1.71%
Cash & Cash Equivalents - Net	**0.12%**	**0.29%**	**0.13%**	**0.12%**	**0.80%**
Cash Account - Net	0.12%	0.29%	0.13%	0.12%	0.79%
3-month Treasury Bill	0.07%	0.19%	0.09%	0.09%	1.04%
Total Fund					
Gross	1.52%	0.64%	6.85%	6.78%	5.14%
Net	1.45%	0.31%	6.51%	6.35%	4.77%
Target*	1.71%	0.63%	5.92%	5.99%	5.56%

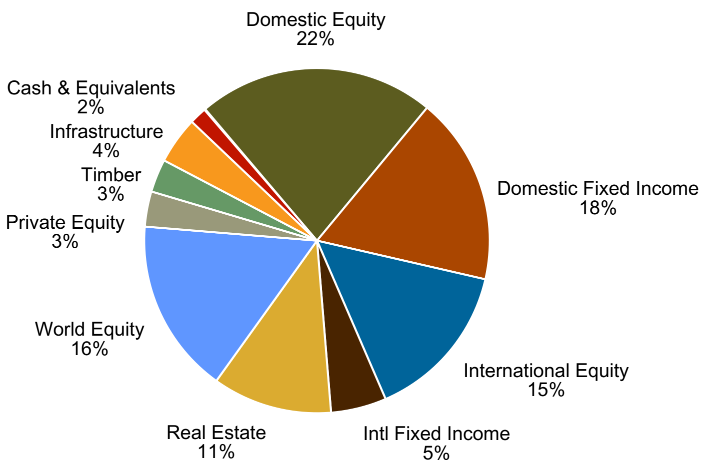
* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World, 12.7% Barclays Aggregate Index, 11.2% MSCI EAFE, 9.9% NCREIF Total Index, 5.4% NDSIB PEN - Private Equity, 5.4% Barclays Global Agg ex-US, 5.0% CPI-W, 4.9% Russell 2000 Index, 4.6% Barclays US HY Corp 2% Cp, 4.2% NCREIF Timberland Index, 3.2% MSCI EM and 1.0% 3-month Treasury Bill.

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

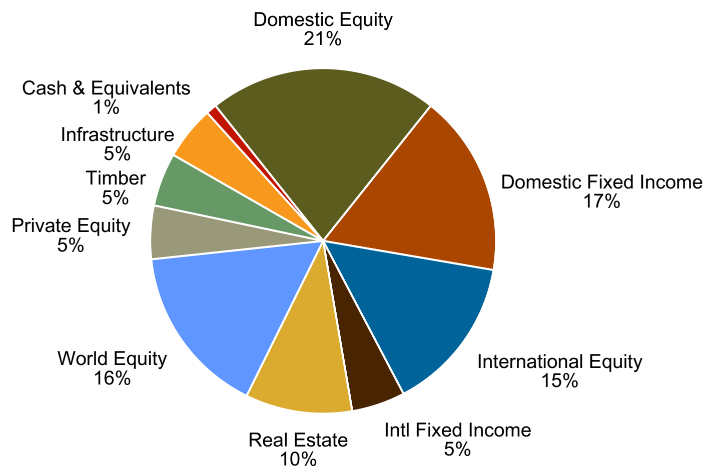
Actual vs Target Asset Allocation
As of June 30, 2016

The top left chart shows the Fund's asset allocation as of June 30, 2016. 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.

Actual Asset Allocation

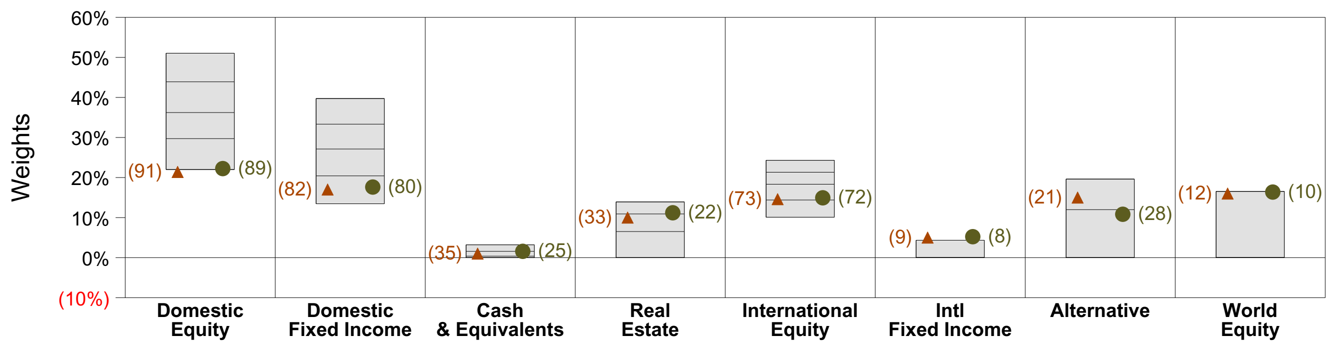


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	546,892	22.2%	21.4%	0.8%	20,609
Domestic Fixed Income	433,307	17.6%	17.0%	0.6%	15,232
International Equity	367,297	14.9%	14.6%	0.3%	8,244
Intl Fixed Income	128,666	5.2%	5.0%	0.2%	5,702
Real Estate	275,539	11.2%	10.0%	1.2%	29,612
World Equity	402,558	16.4%	16.0%	0.4%	9,075
Private Equity	79,938	3.3%	5.0%	(1.7%)	(43,025)
Timber	77,460	3.1%	5.0%	(1.9%)	(45,504)
Infrastructure	108,994	4.4%	5.0%	(0.6%)	(13,969)
Cash & Equivalents	38,615	1.6%	1.0%	0.6%	14,023
Total	2,459,266	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



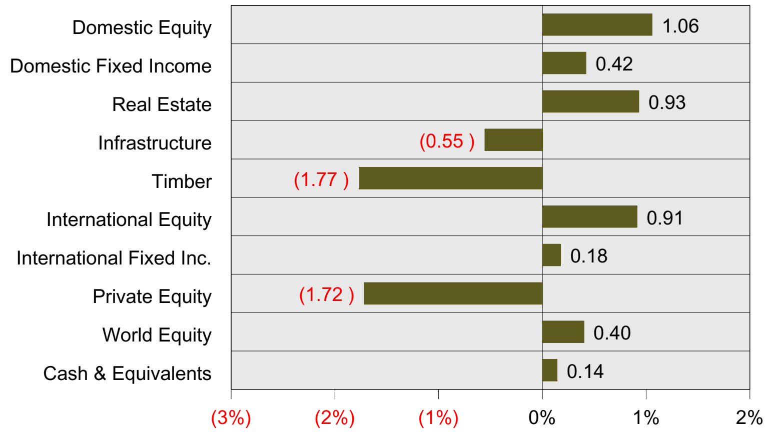
	Domestic Equity	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equity	Intl Fixed Income	Alternative	World Equity
10th Percentile	51.04	39.73	3.20	13.92	24.31	4.34	19.62	16.54
25th Percentile	43.91	33.33	1.58	10.91	21.32	0.00	11.98	0.00
Median	36.23	27.12	0.38	6.51	18.33	0.00	0.00	0.00
75th Percentile	29.72	20.42	0.00	0.00	14.39	0.00	0.00	0.00
90th Percentile	22.00	13.45	0.00	0.00	10.09	0.00	0.00	0.00
Fund ●	22.24	17.62	1.57	11.20	14.94	5.23	10.83	16.37
Target ▲	21.40	17.00	1.00	10.00	14.60	5.00	15.00	16.00
% Group Invested	97.34%	97.87%	68.62%	62.23%	89.36%	18.09%	43.62%	22.87%

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

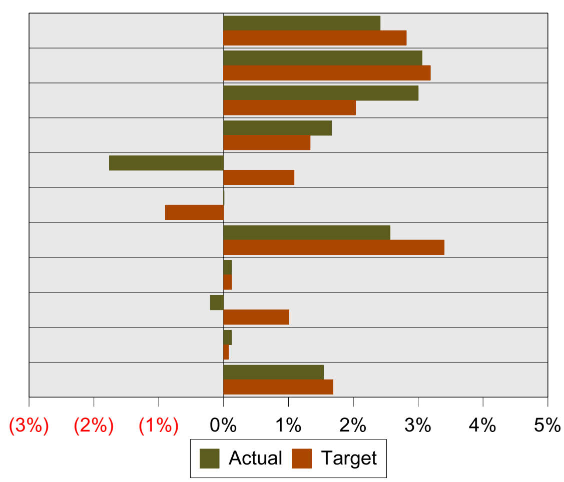
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

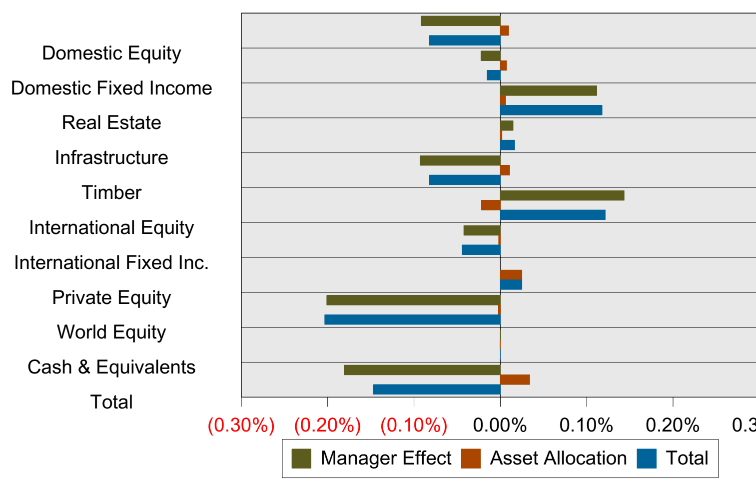
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

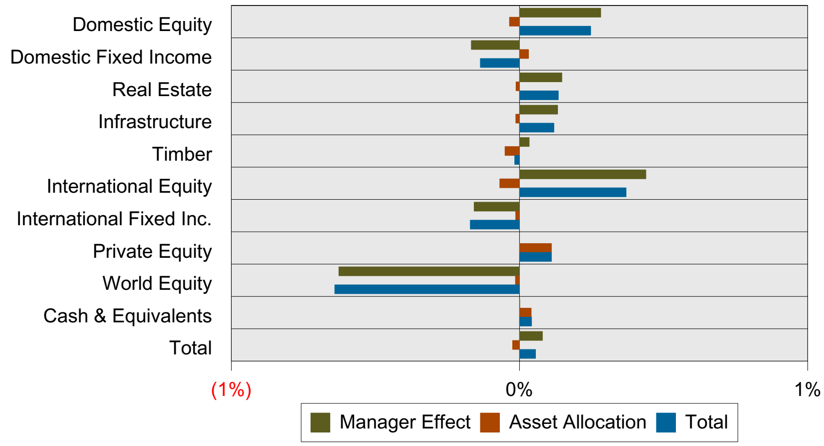
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	2.41%	2.82%	(0.09%)	0.01%	(0.08%)
Domestic Fixed Income	17%	17%	3.06%	3.19%	(0.02%)	0.01%	(0.02%)
Real Estate	11%	10%	3.00%	2.03%	0.11%	0.01%	0.12%
Infrastructure	4%	5%	1.67%	1.33%	0.01%	0.00%	0.02%
Timber	3%	5%	(1.76%)	1.09%	(0.09%)	0.01%	(0.08%)
International Equity	16%	15%	0.01%	(0.90%)	0.14%	(0.02%)	0.12%
International Fixed Inc.	5%	5%	2.57%	3.40%	(0.04%)	(0.00%)	(0.04%)
Private Equity	3%	5%	0.12%	0.12%	0.00%	0.02%	0.02%
World Equity	16%	16%	(0.20%)	1.01%	(0.20%)	(0.00%)	(0.20%)
Cash & Equivalents	1%	1%	0.12%	0.07%	0.00%	(0.00%)	0.00%
Total			**1.54% =**	**1.69% +**	**(0.18%) +**	**0.03%**	**(0.15%)**

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

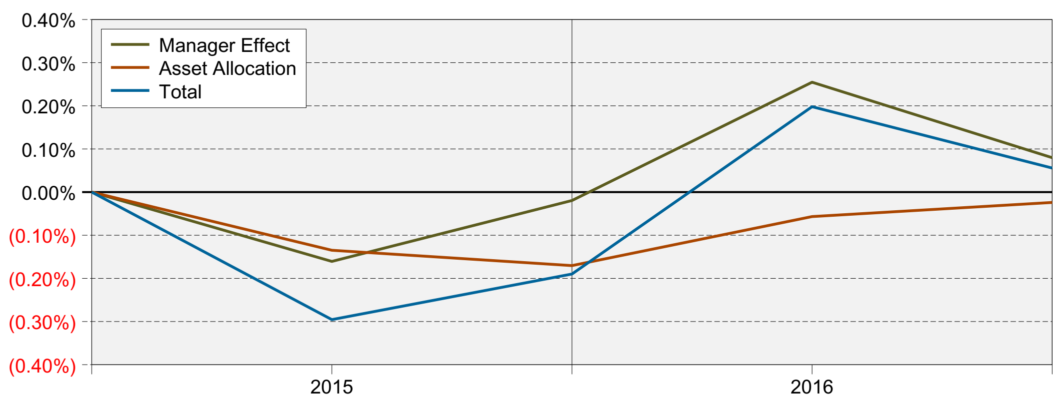
Cumulative Total Fund Relative Attribution - June 30, 2016

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

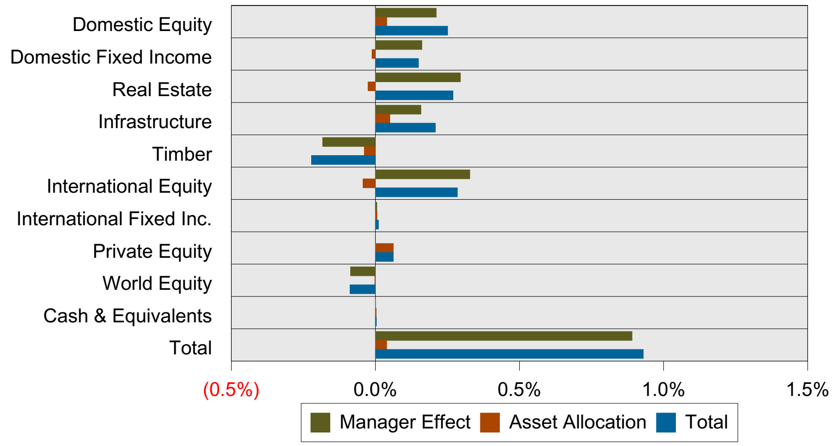
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	2.03%	0.73%	0.28%	(0.03%)	0.25%
Domestic Fixed Income	18%	17%	3.85%	4.77%	(0.17%)	0.03%	(0.14%)
Real Estate	11%	10%	11.96%	10.64%	0.15%	(0.01%)	0.13%
Infrastructure	5%	5%	3.65%	0.64%	0.13%	(0.01%)	0.12%
Timber	3%	5%	4.34%	3.49%	0.03%	(0.05%)	(0.02%)
International Equity	15%	15%	(7.76%)	(10.45%)	0.44%	(0.07%)	0.37%
International Fixed Inc.	5%	5%	7.88%	11.24%	(0.16%)	(0.01%)	(0.17%)
Private Equity	4%	5%	(7.19%)	(7.19%)	0.00%	0.11%	0.11%
World Equity	16%	16%	(6.53%)	(2.78%)	(0.63%)	(0.01%)	(0.64%)
Cash & Equivalents	1%	1%	0.29%	0.19%	0.00%	0.04%	0.04%
Total			**0.61% =**	**0.56% +**	**0.08% +**	**(0.02%)**	**0.06%**

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

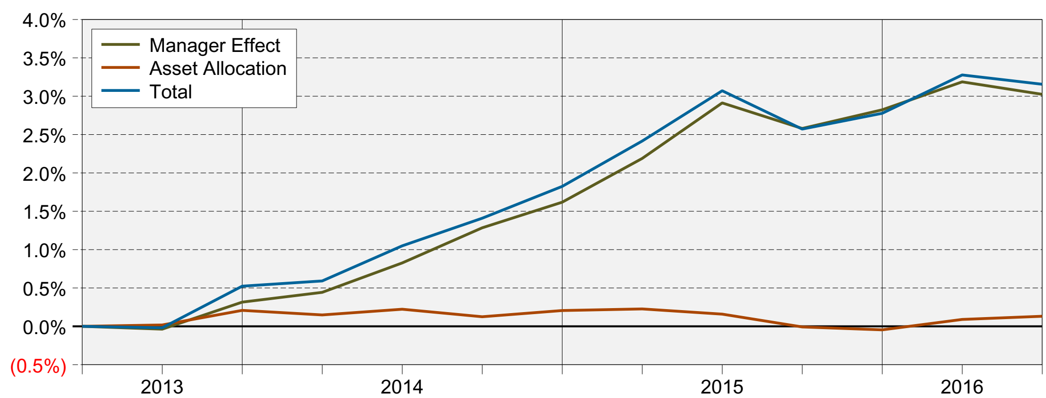
Cumulative Total Fund Relative Attribution - June 30, 2016

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

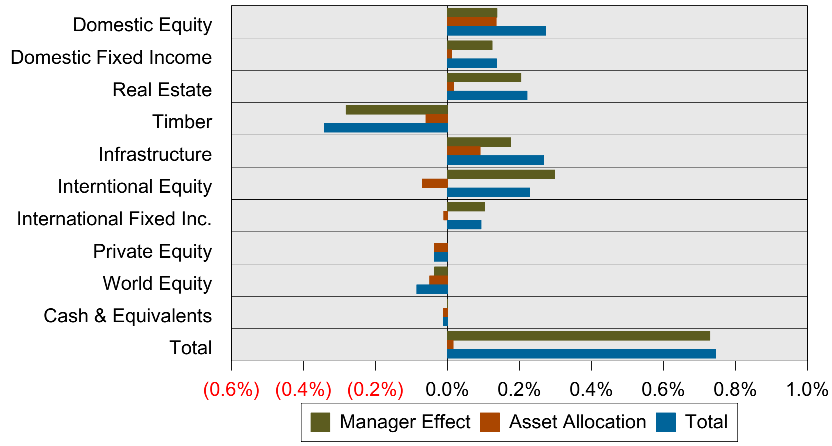
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	11.52%	10.54%	0.21%	0.04%	0.25%
Domestic Fixed Income	18%	17%	5.03%	4.14%	0.16%	(0.01%)	0.15%
Real Estate	10%	10%	14.82%	11.61%	0.29%	(0.03%)	0.27%
Infrastructure	4%	5%	4.74%	0.76%	0.16%	0.05%	0.21%
Timber	4%	5%	3.63%	7.77%	(0.18%)	(0.04%)	(0.22%)
International Equity	15%	15%	3.43%	1.29%	0.33%	(0.04%)	0.28%
International Fixed Inc.	5%	5%	2.02%	1.85%	0.00%	0.01%	0.01%
Private Equity	4%	5%	(2.95%)	(2.95%)	0.00%	0.06%	0.06%
World Equity	16%	16%	6.44%	6.95%	(0.09%)	(0.00%)	(0.09%)
Cash & Equivalents	1%	1%	0.13%	0.09%	0.00%	0.00%	0.00%
Total			**6.84% =**	**5.91% +**	**0.89% +**	**0.04%**	**0.93%**

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

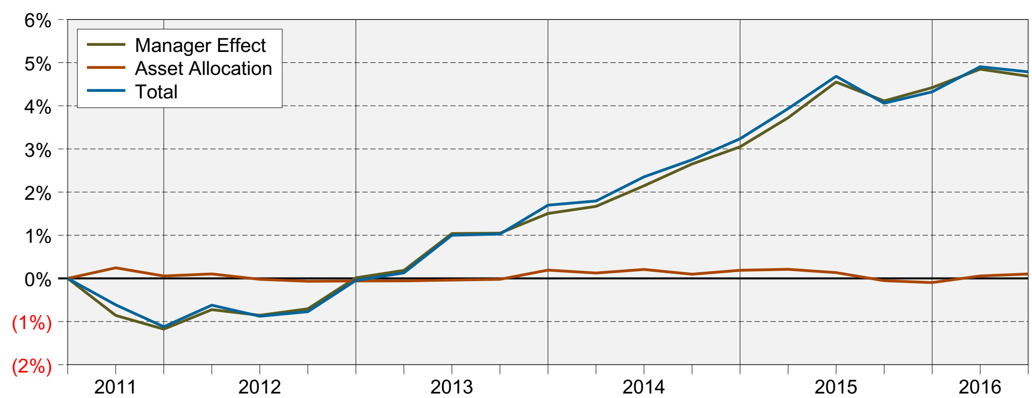
Cumulative Total Fund Relative Attribution - June 30, 2016

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

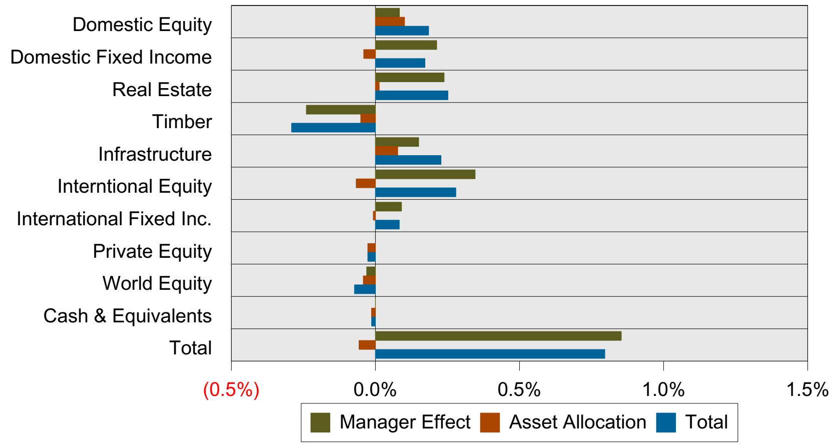
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	25%	24%	12.03%	11.24%	0.14%	0.14%	0.27%
Domestic Fixed Income	18%	18%	5.80%	4.67%	0.12%	0.01%	0.14%
Real Estate	10%	10%	13.68%	11.51%	0.20%	0.02%	0.22%
Timber	4%	5%	-	-	(0.28%)	(0.06%)	(0.34%)
Infrastructure	4%	5%	-	-	0.18%	0.09%	0.27%
Interntional Equity	16%	16%	2.30%	0.37%	0.30%	(0.07%)	0.23%
International Fixed Inc.	5%	5%	2.29%	0.35%	0.10%	(0.01%)	0.09%
Private Equity	5%	5%	0.46%	0.46%	0.00%	(0.04%)	(0.04%)
World Equity	12%	12%	-	-	(0.04%)	(0.05%)	(0.09%)
Cash & Equivalents	1%	1%	0.11%	0.09%	0.00%	(0.01%)	(0.01%)
Total			**6.82% =**	**6.08% +**	**0.73% +**	**0.02%**	**0.75%**

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

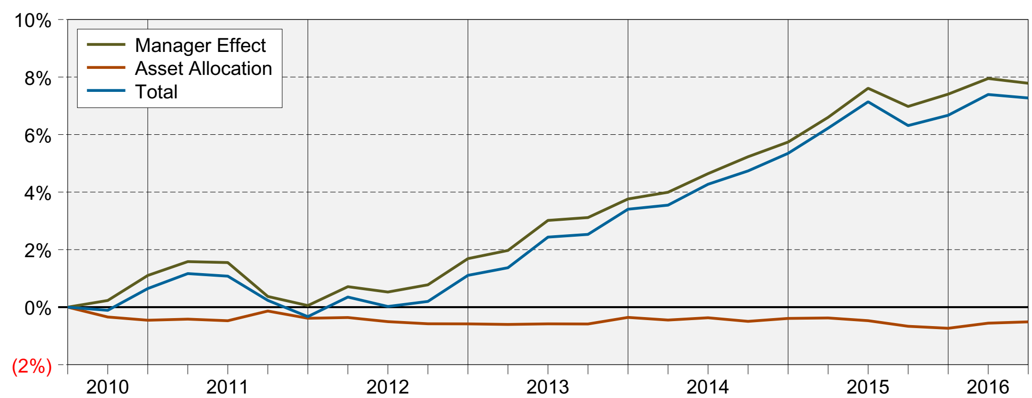
Cumulative Total Fund Relative Attribution - June 30, 2016

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 Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Six Year Annualized Relative Attribution Effects

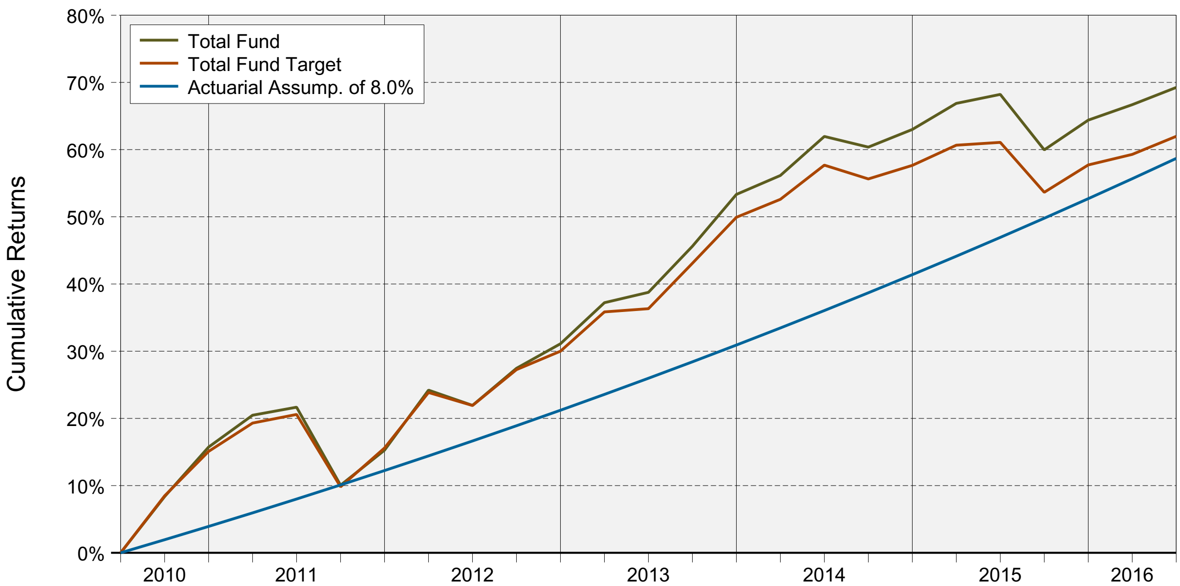
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	28%	27%	15.13%	14.52%	0.08%	0.10%	0.18%
Domestic Fixed Income	20%	20%	6.18%	4.86%	0.21%	(0.04%)	0.17%
Real Estate	9%	9%	15.46%	12.37%	0.24%	0.01%	0.25%
Timber	4%	4%	-	-	(0.24%)	(0.05%)	(0.29%)
Infrastructure	3%	4%	-	-	0.15%	0.08%	0.23%
Interntional Equity	16%	16%	6.41%	4.14%	0.35%	(0.07%)	0.28%
International Fixed Inc.	5%	5%	4.43%	2.71%	0.09%	(0.01%)	0.08%
Private Equity	5%	5%	2.76%	2.76%	0.00%	(0.03%)	(0.03%)
World Equity	10%	10%	-	-	(0.03%)	(0.04%)	(0.07%)
Cash & Equivalents	1%	1%	0.12%	0.10%	0.00%	(0.01%)	(0.01%)
Total			**9.17% =**	**8.37% +**	**0.85% +**	**(0.06%)**	**0.80%**

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

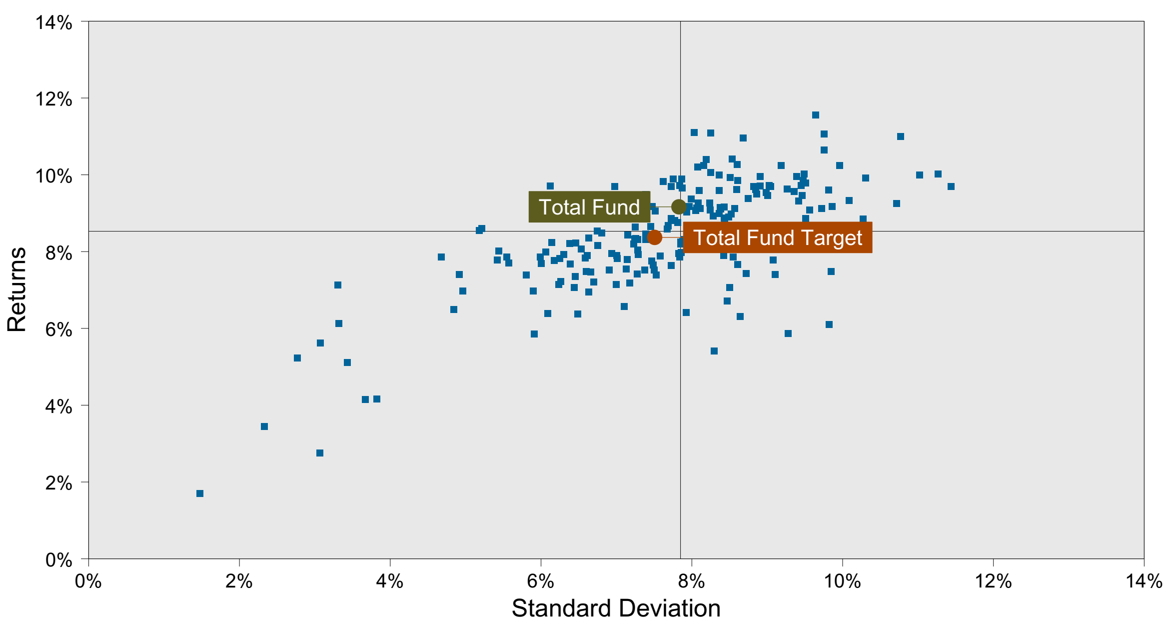
Cumulative Performance Relative to Target

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 Year Annualized Risk vs Return



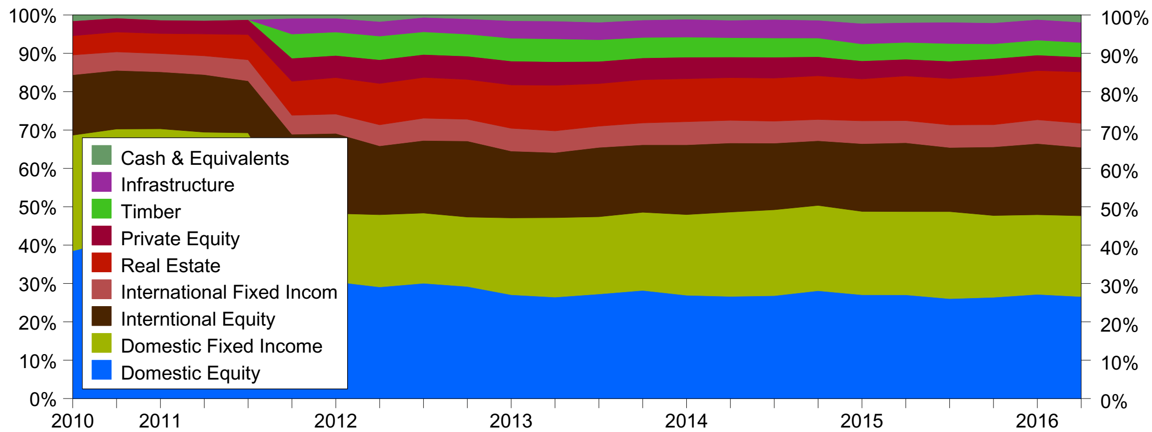
Squares represent membership of the CAI Public Fund Sponsor Database

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

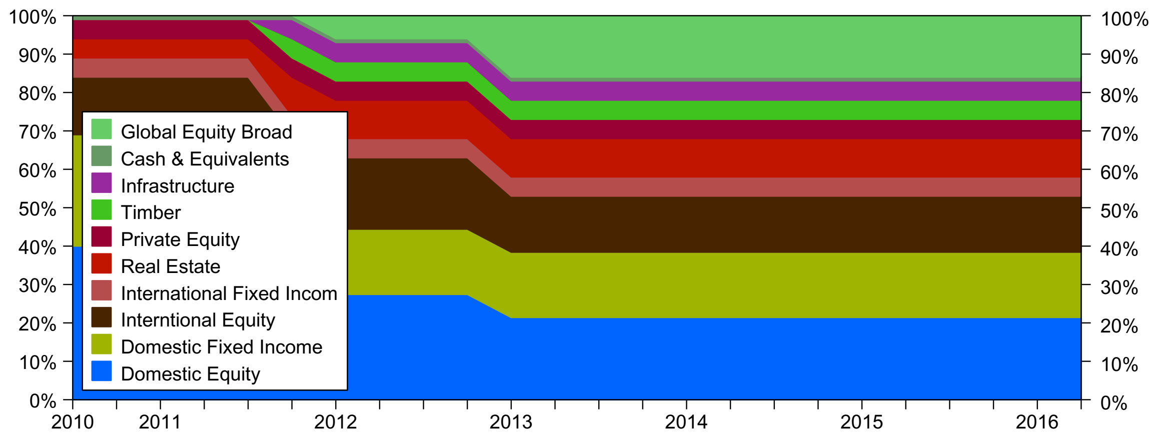
Actual vs Target Historical Asset Allocation

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.

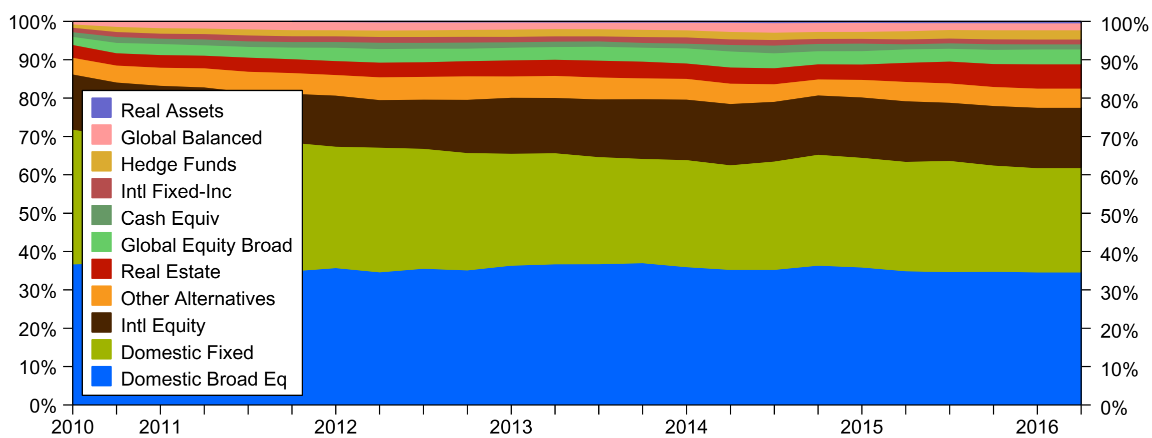
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average CAI Public Fund Sponsor Database Historical Asset Allocation

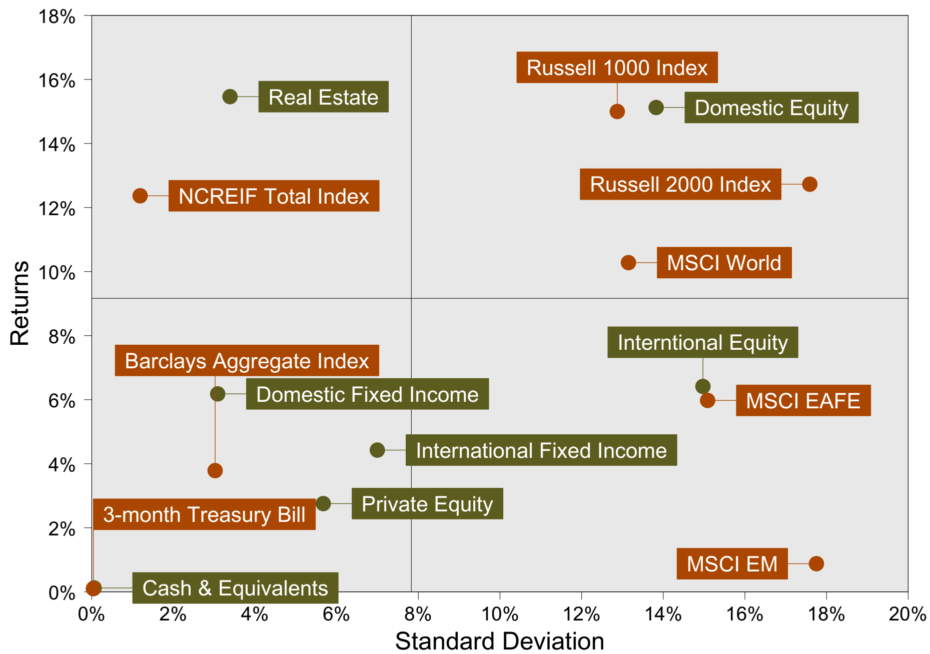


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

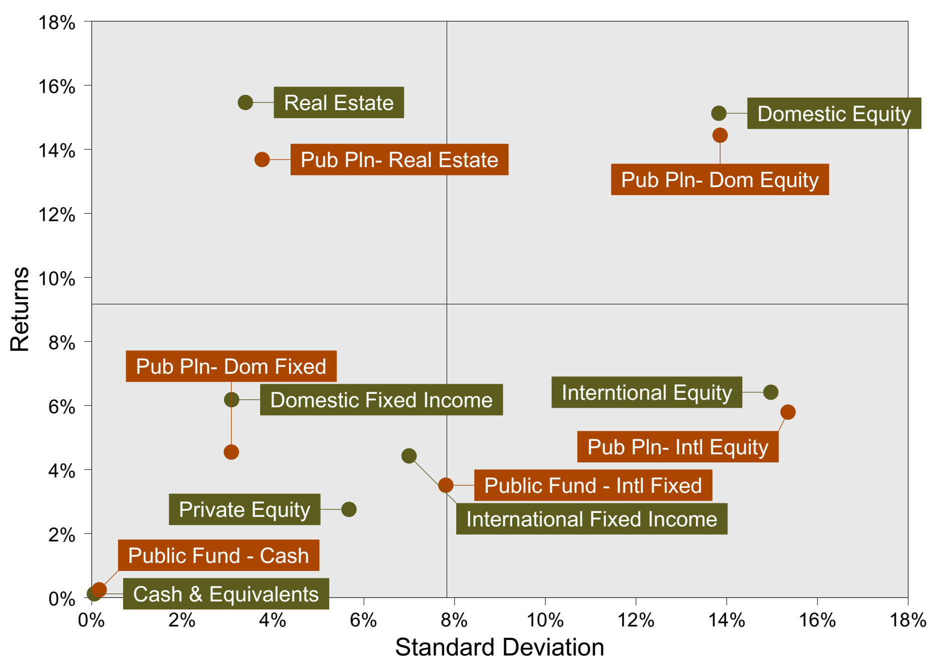
Asset Class Risk and Return

The charts below show the six 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 Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



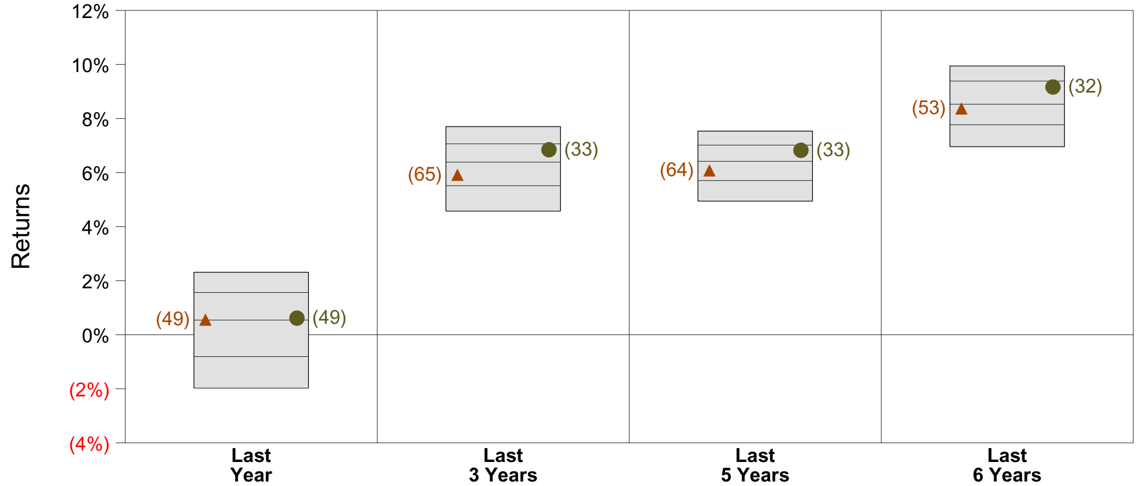
Six Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

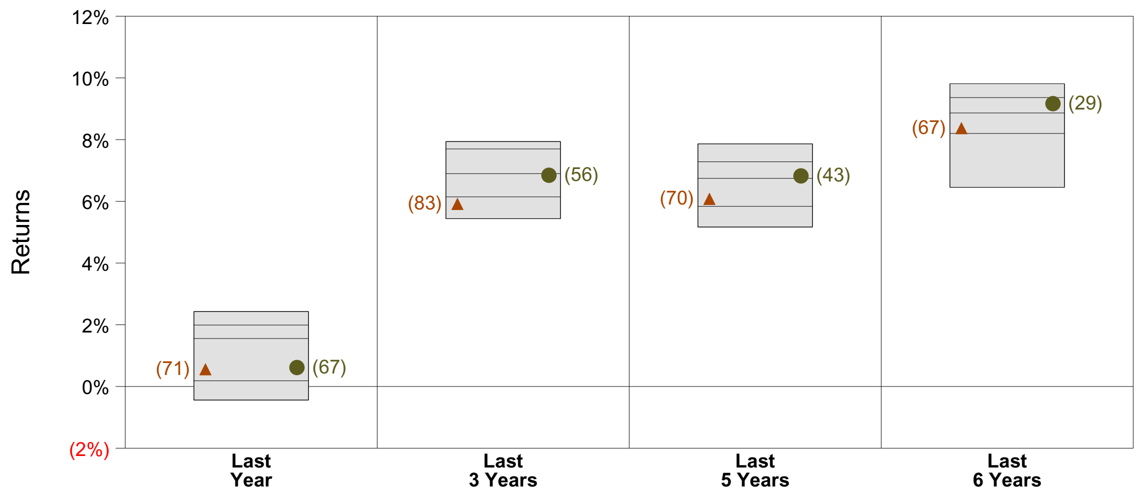
The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended June 30, 2016. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

CAI Public Fund Sponsor Database



	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.31	7.70	7.53	9.95
25th Percentile	1.56	7.06	7.02	9.39
Median	0.54	6.39	6.42	8.53
75th Percentile	(0.81)	5.51	5.70	7.77
90th Percentile	(1.97)	4.57	4.94	6.96
Total Fund ●	0.61	6.84	6.82	9.17
Policy Target ▲	0.56	5.91	6.08	8.37

Asset Allocation Adjusted Ranking



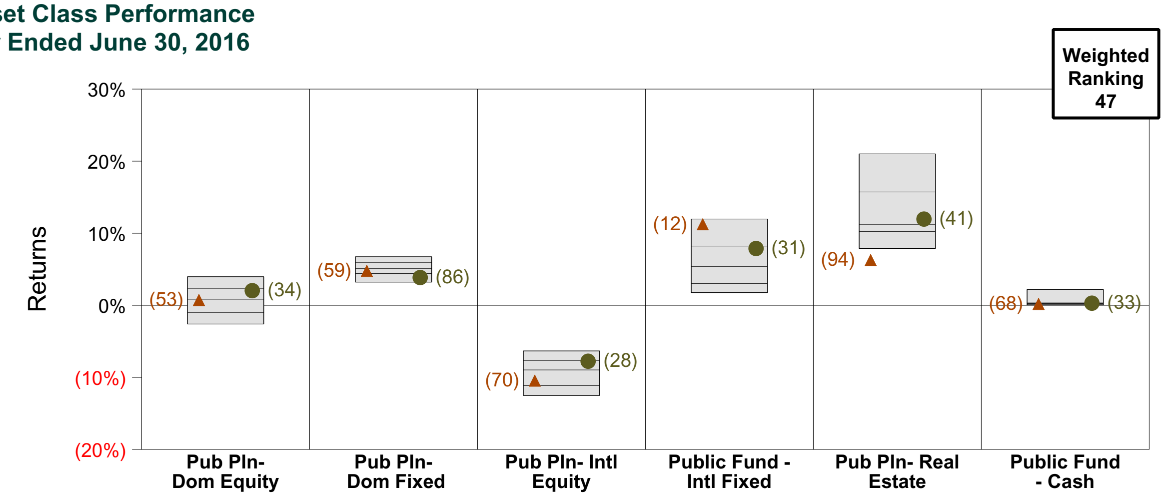
	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.43	7.94	7.86	9.81
25th Percentile	1.99	7.70	7.28	9.36
Median	1.55	6.90	6.75	8.86
75th Percentile	0.18	6.14	5.84	8.20
90th Percentile	(0.44)	5.44	5.17	6.45
Total Fund ●	0.61	6.84	6.82	9.17
Policy Target ▲	0.56	5.91	6.08	8.37

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

Asset Class Rankings

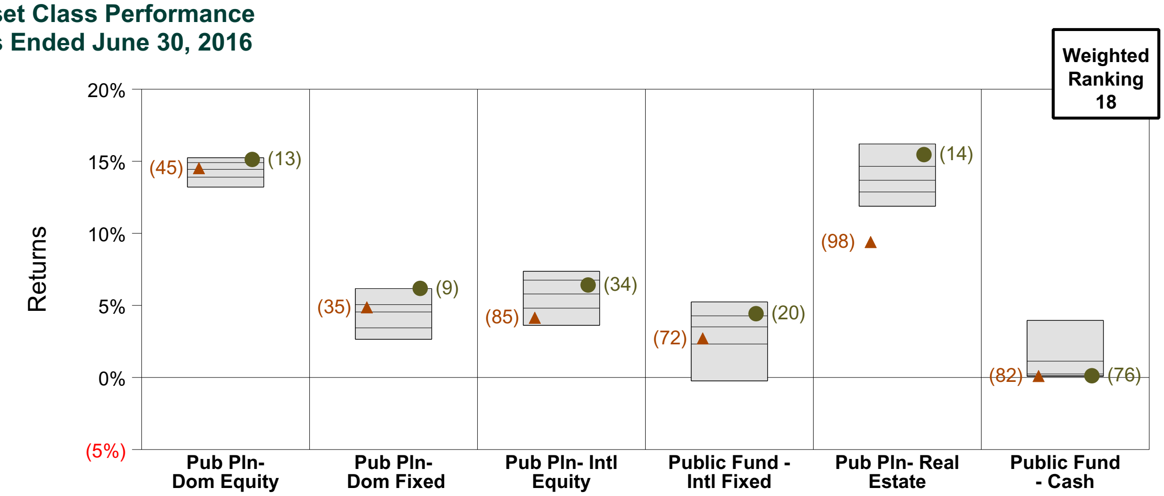
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Year Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	3.96	6.73	(6.34)	11.98	21.01	2.20
25th Percentile	2.36	5.96	(7.65)	8.22	15.73	0.44
Median	0.84	5.08	(8.97)	5.40	11.19	0.24
75th Percentile	(0.99)	4.40	(11.13)	3.03	10.25	0.08
90th Percentile	(2.60)	3.22	(12.50)	1.76	7.89	0.05
Asset Class Composite ●	2.03	3.85	(7.76)	7.88	11.96	0.29
Composite Benchmark ▲	0.73	4.77	(10.45)	11.24	6.27	0.19

Total Asset Class Performance
Six Years Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	15.24	6.17	7.37	5.24	16.20	3.96
25th Percentile	14.91	5.05	6.75	4.28	14.65	1.13
Median	14.44	4.55	5.79	3.51	13.68	0.24
75th Percentile	13.90	3.44	4.81	2.32	12.87	0.12
90th Percentile	13.21	2.65	3.62	(0.24)	11.88	0.08
Asset Class Composite ●	15.13	6.18	6.41	4.43	15.46	0.12
Composite Benchmark ▲	14.52	4.86	4.14	2.71	9.40	0.10

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	**$1,396,685,124**	**56.79%**	**$(21,187,815)**	**$12,555,687**	**$1,405,317,251**	**58.02%**
Domestic Equity	**$546,891,974**	**22.24%**	**$(16,173,669)**	**$13,100,658**	**$549,964,985**	**22.71%**
Large Cap	419,489,559	17.06%	(16,231,544)	8,079,788	427,641,315	17.66%
Small Cap	127,402,415	5.18%	57,875	5,020,871	122,323,669	5.05%
International Equity	**$367,296,626**	**14.94%**	**$(8,418,997)**	**$194,574**	**$375,521,049**	**15.50%**
Developed Intl Equity	269,125,528	10.94%	(7,323,997)	(2,700,860)	279,150,385	11.53%
Emerging Markets	98,171,098	3.99%	(1,095,000)	2,895,434	96,370,664	3.98%
World Equity	**$402,558,064**	**16.37%**	**$5,321,484**	**$(815,057)**	**$398,051,637**	**16.43%**
Private Equity	**$79,938,460**	**3.25%**	**$(1,916,632)**	**$75,512**	**$81,779,580**	**3.38%**
GLOBAL FIXED INCOME	**$561,973,075**	**22.85%**	**$301,200**	**$16,082,094**	**$545,589,781**	**22.53%**
Domestic Fixed Income	**$433,307,321**	**17.62%**	**$288,939**	**$12,861,980**	**$420,156,402**	**17.35%**
Inv. Grade Fixed Income	300,029,063	12.20%	372,576	6,588,287	293,068,200	12.10%
Below Inv. Grade Fixed Income	133,278,258	5.42%	(83,637)	6,273,693	127,088,202	5.25%
International Fixed Income	**$128,665,754**	**5.23%**	**$12,262**	**$3,220,113**	**$125,433,379**	**5.18%**
GLOBAL REAL ASSETS	**$461,992,896**	**18.79%**	**$6,228,856**	**$8,489,376**	**$447,274,664**	**18.47%**
Real Estate	275,538,912	11.20%	7,806,233	8,083,615	259,649,063	10.72%
Timber	77,459,623	3.15%	0	(1,388,349)	78,847,973	3.26%
Infrastructure	108,994,361	4.43%	(1,577,377)	1,794,110	108,777,628	4.49%
Cash & Equivalents	**$38,615,338**	**1.57%**	**$14,776,628**	**$33,278**	**$23,805,431**	**0.98%**
Securities Lending Income	**$0**	**0.00%**	**$(119,687)**	**$119,687**	**-**	**-**
Total Fund	**$2,459,266,432**	**100.0%**	**$(817)**	**$37,280,122**	**$2,421,987,127**	**100.0%**

PLEASE REFER TO PAGES 36-38 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Global Equity					
Gross	0.89%	(3.60%)	6.87%	-	-
Net	0.84%	(3.90%)	6.53%	-	-
Wtd Avg Global Equity Benchmark	1.10%	(3.86%)	5.93%	-	-
Domestic Equity					
Gross	2.41%	2.03%	11.52%	12.03%	15.13%
Net	2.39%	1.90%	11.33%	11.81%	14.88%
Wtd Avg Domestci Equity Benchmark	2.82%	0.73%	10.54%	11.24%	14.52%
Large Cap Equity					
Gross	1.93%	4.63%	12.77%	12.87%	15.65%
Net	1.91%	4.52%	12.60%	12.65%	15.39%
Benchmark(1)	2.54%	2.93%	11.48%	12.09%	15.00%
Small Cap Equity					
Gross	4.10%	(6.86%)	7.11%	9.28%	13.28%
Net	4.10%	(7.04%)	6.86%	9.03%	13.05%
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	12.73%
International Equity					
Gross	0.01%	(7.76%)	3.43%	2.30%	6.41%
Net	(0.04%)	(7.95%)	3.20%	2.01%	6.09%
Wtd Avg Intl Equity Benchmark	(0.90%)	(10.45%)	1.29%	0.37%	4.14%
Developed Intl Equity					
Gross	(1.09%)	(7.68%)	4.12%	2.94%	7.15%
Net	(1.15%)	(7.92%)	3.86%	2.65%	6.83%
Benchmark(2)	(1.46%)	(10.16%)	2.06%	1.68%	5.04%
Emerging Markets					
Gross	3.05%	(9.26%)	0.43%	(0.73%)	3.54%
Net	3.05%	(9.26%)	0.29%	(1.03%)	3.20%
Benchmark(3)	0.66%	(12.05%)	(1.56%)	(3.78%)	0.93%
World Equity					
Gross	(0.20%)	(6.53%)	6.44%	-	-
Net	(0.29%)	(7.27%)	5.70%	-	-
MSCI World Index	1.01%	(2.78%)	6.95%	6.63%	10.28%
Private Equity					
Net	0.12%	(7.20%)	(2.98%)	0.41%	2.67%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.
(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.
(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 39-43 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Global Fixed Income					
Gross	2.95%	4.76%	4.44%	-	-
Net	2.88%	4.50%	4.19%	-	-
Wtd Avg Global Fixed Income Benchmark	3.23%	6.22%	3.65%	-	-
Domestic Fixed Income					
Gross	3.06%	3.85%	5.03%	5.80%	6.18%
Net	3.00%	3.63%	4.81%	5.56%	5.93%
Wtd Avg Domestic FI Benchmark	3.19%	4.77%	4.14%	4.67%	4.86%
Inv. Grade Fixed Income					
Gross	2.25%	5.15%	4.81%	5.16%	5.32%
Net	2.21%	5.00%	4.69%	5.01%	5.15%
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	3.79%
Below Inv. Grade Fixed Income					
Gross	4.94%	0.69%	5.43%	6.70%	8.54%
Net	4.84%	0.28%	4.98%	6.26%	8.10%
Barclays HY Corp 2% Issue	5.52%	1.65%	4.20%	5.84%	7.39%
International Fixed Income					
Gross	2.57%	7.88%	2.02%	2.29%	4.43%
Net	2.48%	7.50%	1.65%	1.93%	4.06%
Wtd Avg Intl Fixed Income Benchmark	3.40%	11.24%	1.85%	0.35%	2.71%
Global Real Assets					
Gross	1.87%	8.53%	9.80%	-	-
Net	1.71%	7.99%	9.34%	-	-
Wtd Avg Global Real Assets Benchmark	1.62%	6.29%	7.89%	-	-
Real Estate					
Gross	3.00%	11.96%	14.82%	13.68%	15.46%
Net	2.87%	11.34%	14.26%	13.13%	14.89%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	12.37%
Timber					
Net	(1.76%)	4.34%	3.63%	-	-
NCREIF Timberland Index	1.09%	3.49%	7.77%	6.72%	5.66%
Infrastructure					
Gross	1.67%	3.65%	4.74%	-	-
Net	1.34%	2.88%	4.09%	-	-
CPI-W	1.33%	0.64%	0.76%	1.12%	1.61%
Cash & Equivalents - Net	**0.12%**	**0.29%**	**0.13%**	**0.11%**	**0.12%**
3-month Treasury Bill	0.07%	0.19%	0.09%	0.09%	0.10%
Total Fund					
Gross	1.54%	0.61%	6.84%	6.82%	9.17%
Net	1.47%	0.28%	6.51%	6.49%	8.82%
Target*	1.69%	0.56%	5.91%	6.08%	8.37%

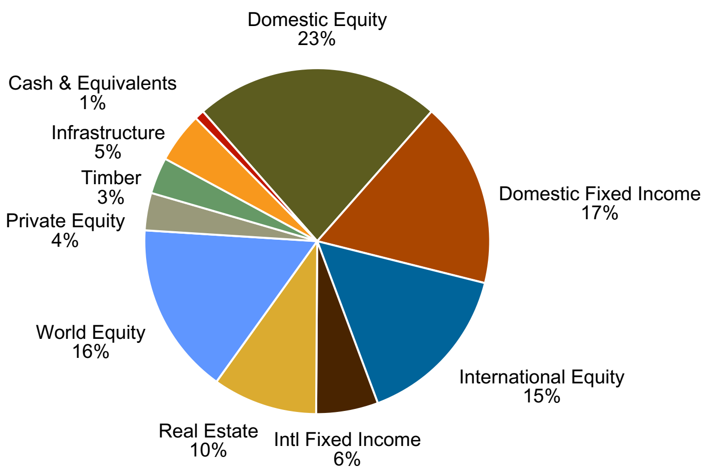
* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

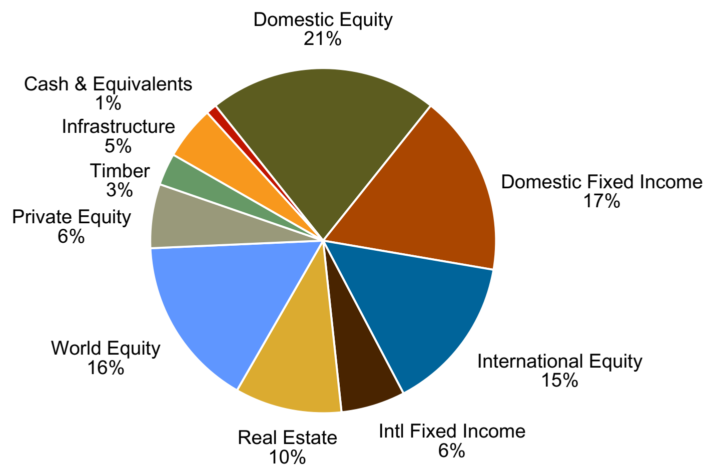
Actual vs Target Asset Allocation
As of June 30, 2016

The top left chart shows the Fund's asset allocation as of June 30, 2016. 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.

Actual Asset Allocation

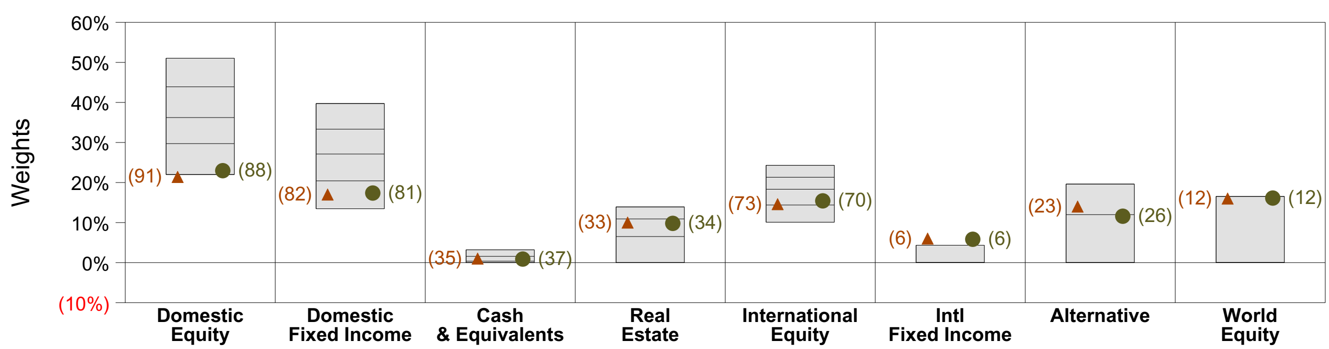


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	478,122	23.0%	21.4%	1.6%	32,554
Domestic Fixed Income	361,707	17.4%	17.0%	0.4%	7,751
International Equity	321,177	15.4%	14.6%	0.8%	17,192
Intl Fixed Income	121,443	5.8%	6.0%	(0.2%)	(3,483)
Real Estate	204,184	9.8%	10.0%	(0.2%)	(4,025)
World Equity	335,715	16.1%	16.0%	0.1%	2,580
Private Equity	73,374	3.5%	6.0%	(2.5%)	(51,551)
Timber	70,258	3.4%	3.0%	0.4%	7,796
Infrastructure	97,588	4.7%	5.0%	(0.3%)	(6,517)
Cash & Equivalents	18,522	0.9%	1.0%	(0.1%)	(2,299)
Total	2,082,090	100.0%	100.0%		

Asset Class Weights vs CAI Public Fund Sponsor Database



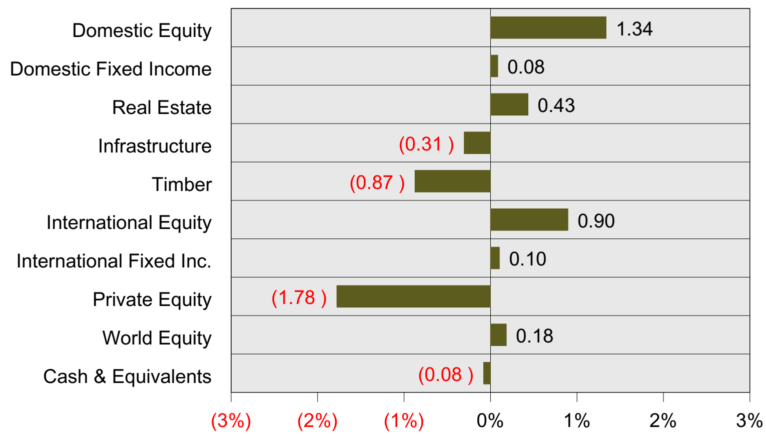
	Domestic Equity	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equity	Intl Fixed Income	Alternative	World Equity
10th Percentile	51.04	39.73	3.20	13.92	24.31	4.34	19.62	16.54
25th Percentile	43.91	33.33	1.58	10.91	21.32	0.00	11.98	0.00
Median	36.23	27.12	0.38	6.51	18.33	0.00	0.00	0.00
75th Percentile	29.72	20.42	0.00	0.00	14.39	0.00	0.00	0.00
90th Percentile	22.00	13.45	0.00	0.00	10.09	0.00	0.00	0.00
Fund ●	22.96	17.37	0.89	9.81	15.43	5.83	11.59	16.12
Target ▲	21.40	17.00	1.00	10.00	14.60	6.00	14.00	16.00
% Group Invested	97.34%	97.87%	68.62%	62.23%	89.36%	18.09%	43.62%	22.87%

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

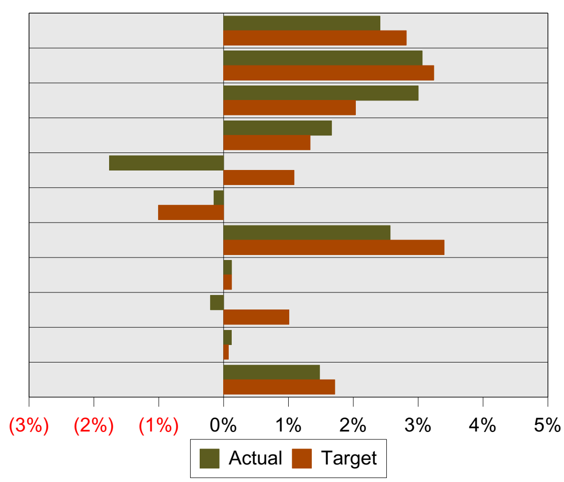
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

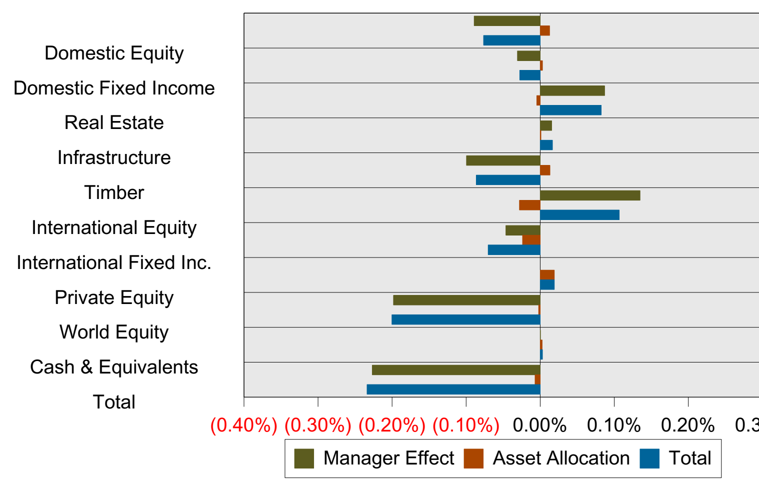
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

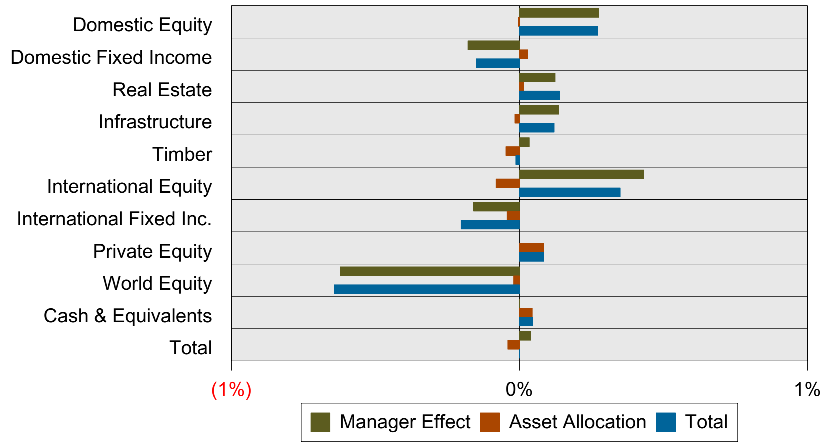
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	2.41%	2.82%	(0.09%)	0.01%	(0.08%)
Domestic Fixed Income	17%	17%	3.06%	3.24%	(0.03%)	0.00%	(0.03%)
Real Estate	10%	10%	3.00%	2.03%	0.09%	(0.00%)	0.08%
Infrastructure	5%	5%	1.67%	1.33%	0.02%	0.00%	0.02%
Timber	3%	4%	(1.76%)	1.09%	(0.10%)	0.01%	(0.09%)
International Equity	15%	15%	(0.15%)	(1.01%)	0.13%	(0.03%)	0.11%
International Fixed Inc.	5%	5%	2.57%	3.40%	(0.05%)	(0.02%)	(0.07%)
Private Equity	4%	5%	0.12%	0.12%	0.00%	0.02%	0.02%
World Equity	16%	16%	(0.20%)	1.01%	(0.20%)	(0.00%)	(0.20%)
Cash & Equivalents	1%	1%	0.12%	0.07%	0.00%	0.00%	0.00%
Total			**1.48% =**	**1.71% +**	**(0.23%) +**	**(0.01%)**	**(0.23%)**

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

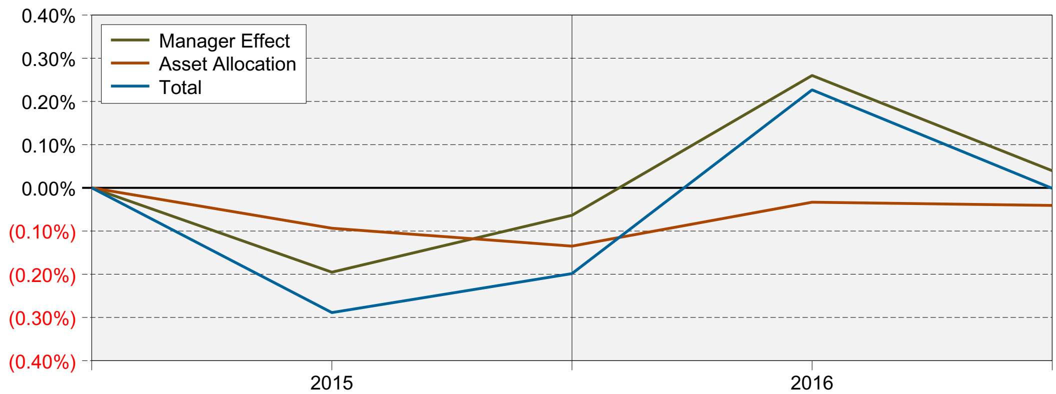
Cumulative Total Fund Relative Attribution - June 30, 2016

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

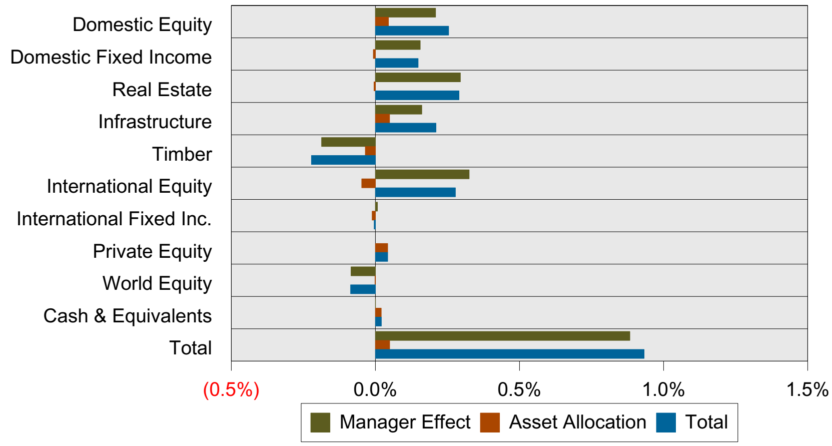
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	22%	21%	2.02%	0.73%	0.28%	(0.00%)	0.27%
Domestic Fixed Income	18%	17%	3.82%	4.83%	(0.18%)	0.03%	(0.15%)
Real Estate	11%	10%	11.96%	10.64%	0.12%	0.02%	0.14%
Infrastructure	5%	5%	3.65%	0.64%	0.14%	(0.02%)	0.12%
Timber	4%	5%	4.34%	3.49%	0.03%	(0.05%)	(0.01%)
International Equity	15%	15%	(7.71%)	(10.39%)	0.43%	(0.08%)	0.35%
International Fixed Inc.	5%	5%	7.88%	11.24%	(0.16%)	(0.04%)	(0.20%)
Private Equity	4%	5%	(7.19%)	(7.19%)	0.00%	0.08%	0.08%
World Equity	16%	16%	(6.53%)	(2.78%)	(0.62%)	(0.02%)	(0.64%)
Cash & Equivalents	1%	1%	0.29%	0.19%	0.00%	0.04%	0.05%
Total			**0.61%** =	**0.61%** +	**0.04%** +	**(0.04%)**	**(0.00%)**

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

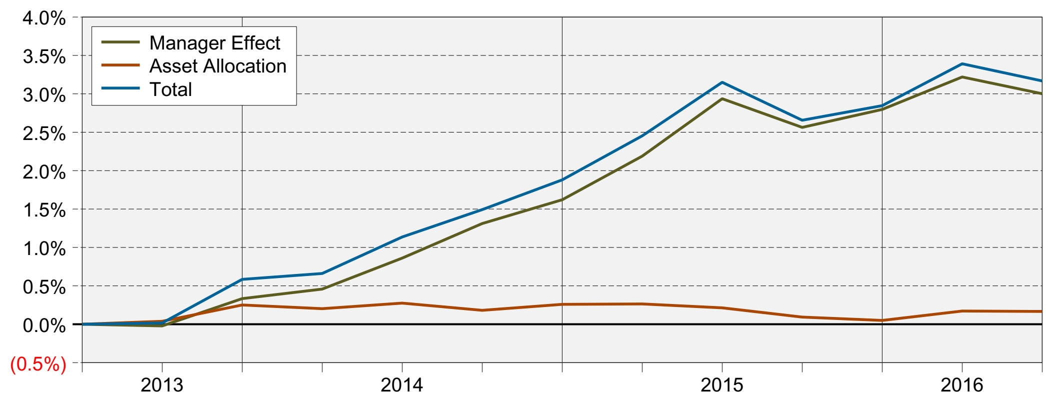
Cumulative Total Fund Relative Attribution - June 30, 2016

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

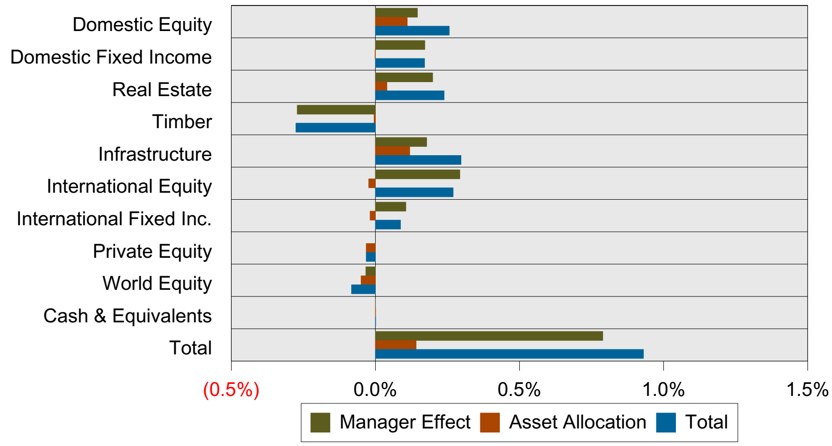
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	23%	21%	11.53%	10.54%	0.21%	0.05%	0.25%
Domestic Fixed Income	18%	17%	5.02%	4.16%	0.16%	(0.01%)	0.15%
Real Estate	10%	10%	14.82%	11.61%	0.29%	(0.00%)	0.29%
Infrastructure	4%	5%	4.74%	0.76%	0.16%	0.05%	0.21%
Timber	4%	5%	3.63%	7.77%	(0.19%)	(0.04%)	(0.22%)
International Equity	15%	15%	3.57%	1.45%	0.33%	(0.05%)	0.28%
International Fixed Inc.	5%	5%	2.02%	1.85%	0.01%	(0.01%)	(0.00%)
Private Equity	4%	5%	(2.95%)	(2.95%)	0.00%	0.04%	0.04%
World Equity	16%	16%	6.44%	6.95%	(0.08%)	(0.00%)	(0.09%)
Cash & Equivalents	1%	1%	0.13%	0.09%	0.00%	0.02%	0.02%
Total			**6.89% =**	**5.95% +**	**0.88% +**	**0.05%**	**0.93%**

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

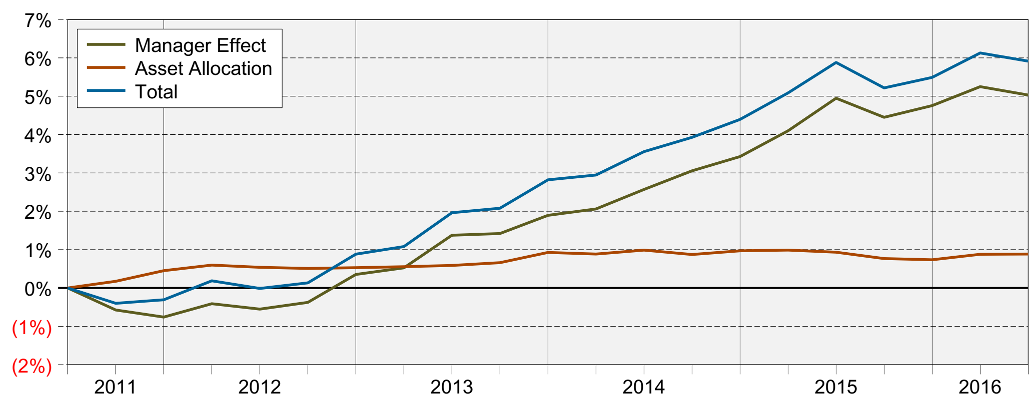
Cumulative Total Fund Relative Attribution - June 30, 2016

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

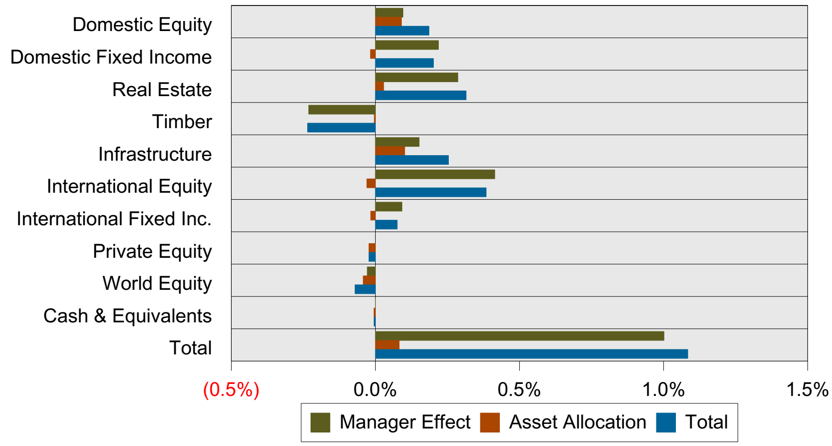
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	25%	24%	12.02%	11.21%	0.15%	0.11%	0.26%
Domestic Fixed Income	17%	17%	5.34%	4.27%	0.17%	(0.00%)	0.17%
Real Estate	10%	10%	13.67%	11.51%	0.20%	0.04%	0.24%
Timber	4%	5%	-	-	(0.27%)	(0.00%)	(0.28%)
Infrastructure	4%	5%	-	-	0.18%	0.12%	0.30%
International Equity	16%	16%	2.48%	0.68%	0.29%	(0.02%)	0.27%
International Fixed Inc.	5%	5%	2.29%	0.35%	0.11%	(0.02%)	0.09%
Private Equity	5%	5%	0.47%	0.47%	0.00%	(0.03%)	(0.03%)
World Equity	12%	12%	-	-	(0.03%)	(0.05%)	(0.08%)
Cash & Equivalents	1%	1%	0.11%	0.09%	0.00%	0.00%	0.00%
Total			**6.66% =**	**5.73% +**	**0.79% +**	**0.14%**	**0.93%**

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

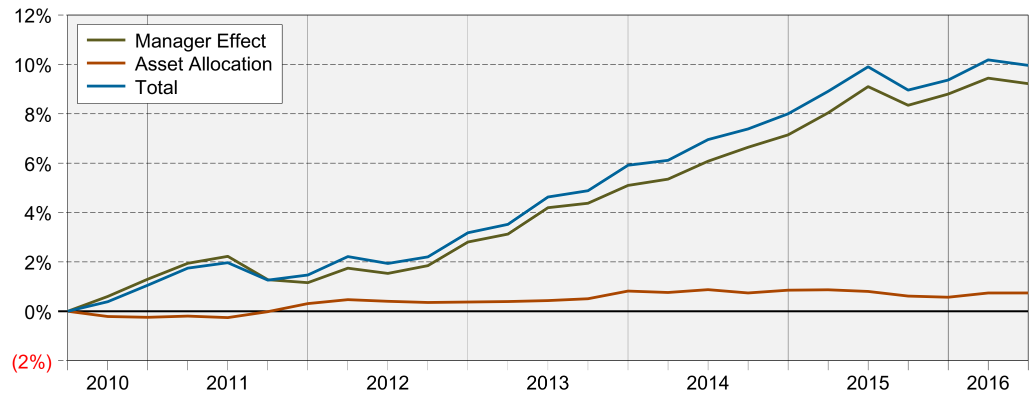
Cumulative Total Fund Relative Attribution - June 30, 2016

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 Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Six Year Annualized Relative Attribution Effects

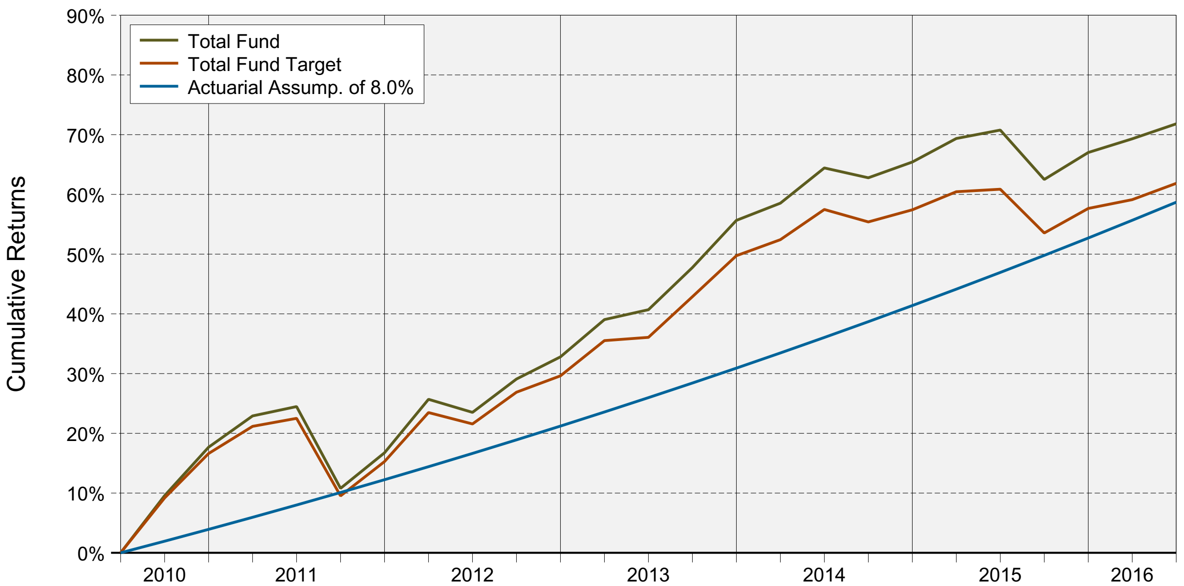
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	26%	15.13%	14.51%	0.10%	0.09%	0.19%
Domestic Fixed Income	18%	17%	6.20%	4.90%	0.22%	(0.02%)	0.20%
Real Estate	10%	10%	15.46%	12.37%	0.29%	0.03%	0.31%
Timber	4%	4%	-	-	(0.23%)	(0.00%)	(0.24%)
Infrastructure	3%	4%	-	-	0.15%	0.10%	0.25%
International Equity	17%	17%	6.57%	4.33%	0.41%	(0.03%)	0.38%
International Fixed Inc.	5%	5%	4.43%	2.71%	0.09%	(0.02%)	0.08%
Private Equity	5%	5%	2.78%	2.78%	0.00%	(0.02%)	(0.02%)
World Equity	10%	10%	-	-	(0.03%)	(0.04%)	(0.07%)
Cash & Equivalents	1%	1%	0.12%	0.10%	0.00%	(0.01%)	(0.00%)
Total			**9.44% =**	**8.36% +**	**1.00% +**	**0.08%**	**1.08%**

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

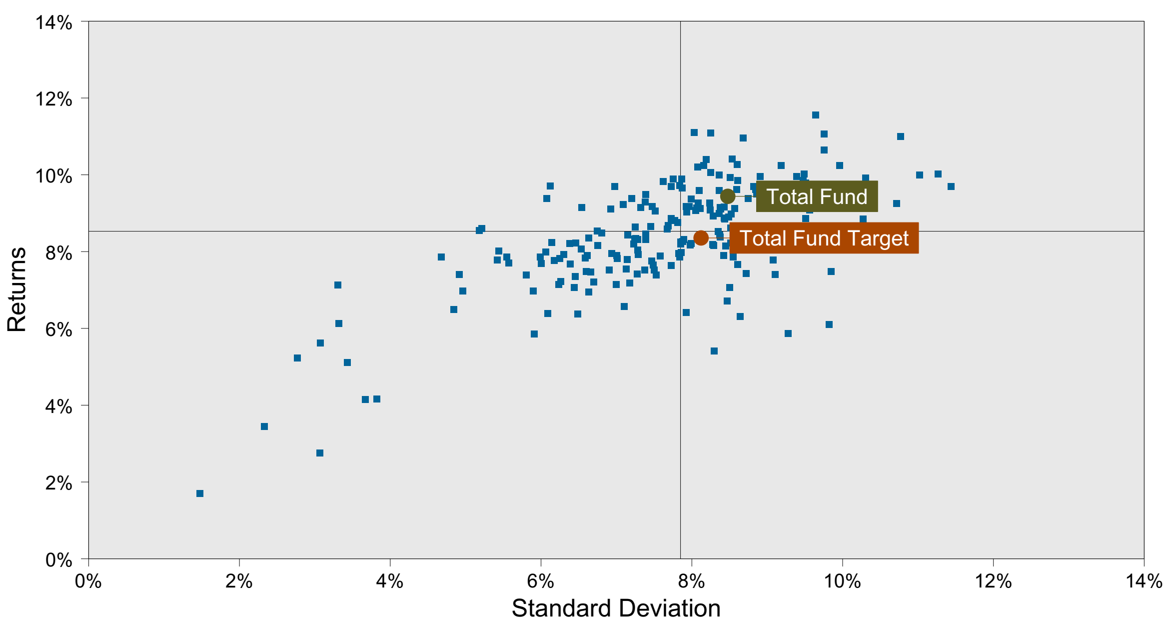
Cumulative Performance Relative to Target

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 Year Annualized Risk vs Return



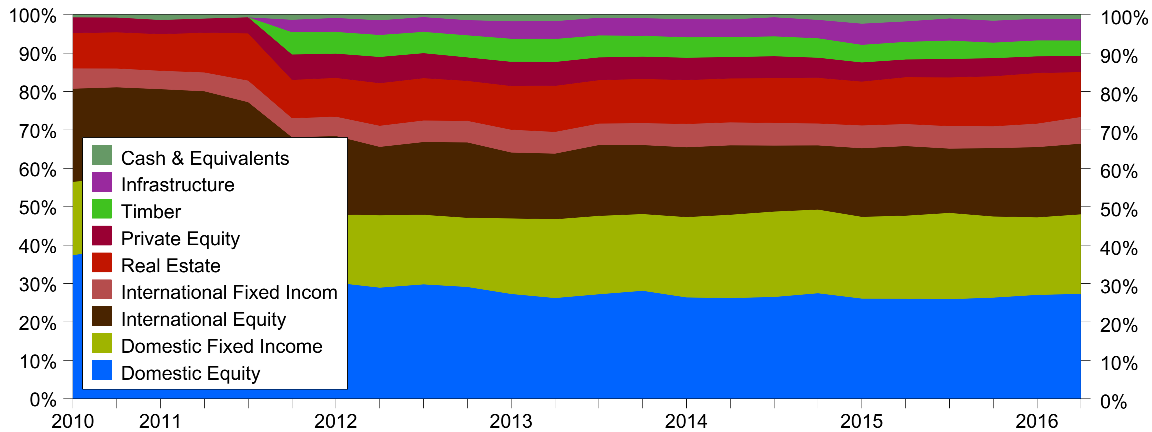
Squares represent membership of the CAI Public Fund Sponsor Database

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

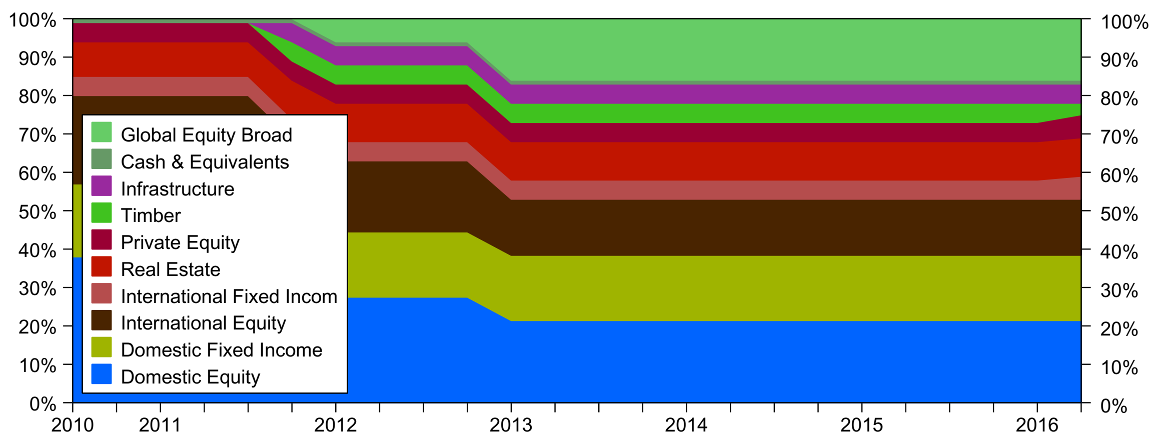
Actual vs Target Historical Asset Allocation

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.

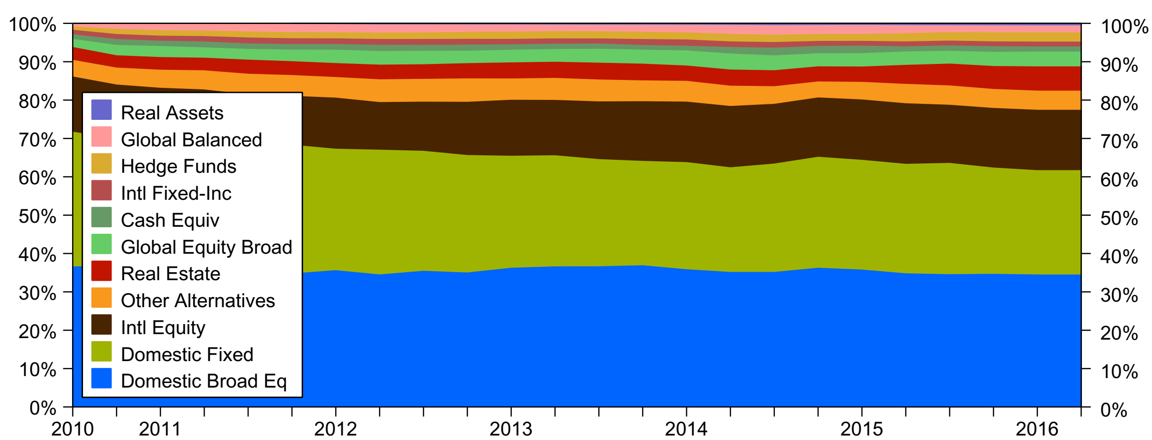
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average CAI Public Fund Sponsor Database Historical Asset Allocation

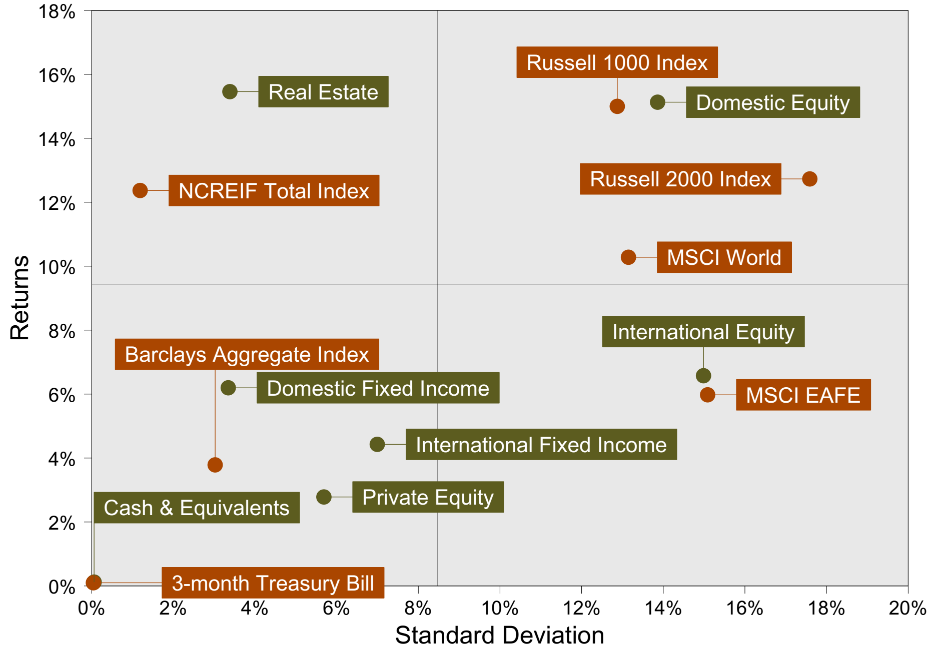


* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 13.0% Barclays Aggregate Index, 11.8% MSCI EAFE, 10.0% NCREIF Total Index, 6.0% NDSIB TFFR - Private Equity, 6.0% Barclays Global Agg ex-US, 5.0% CPI-W, 4.8% Russell 2000 Index, 4.0% Barclays US HY Corp 2% Cp, 3.0% NCREIF Timberland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

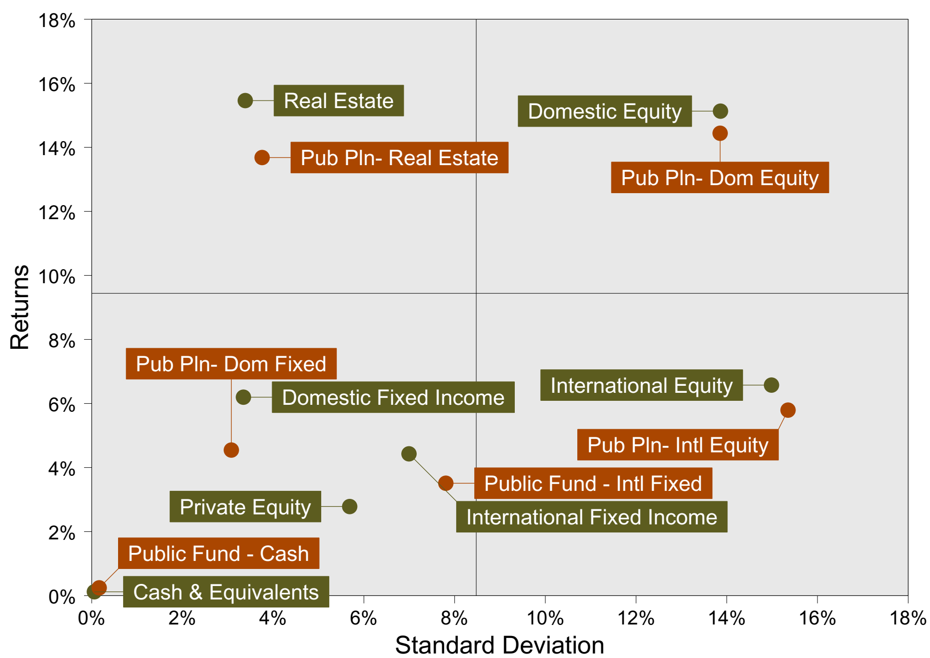
Asset Class Risk and Return

The charts below show the six 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 Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



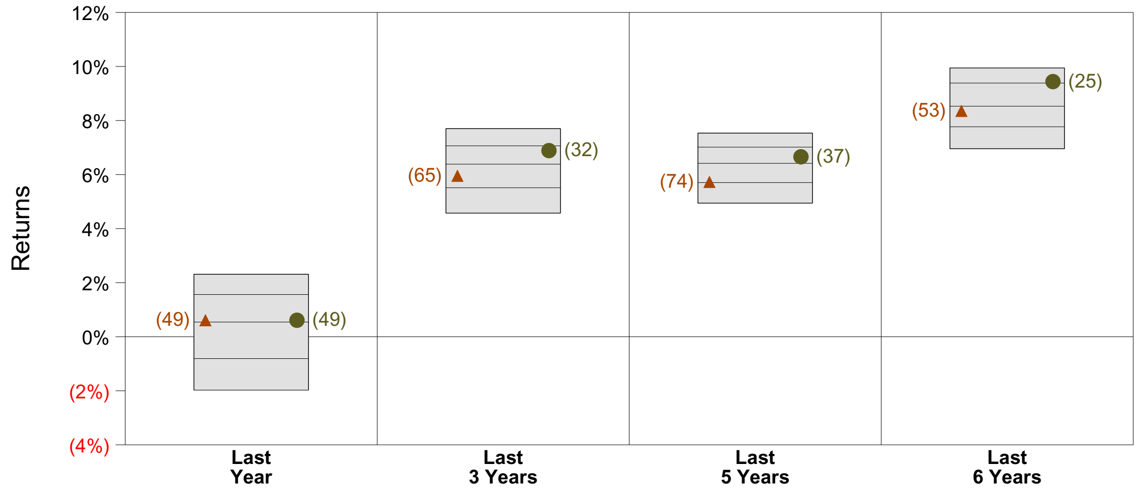
Six Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

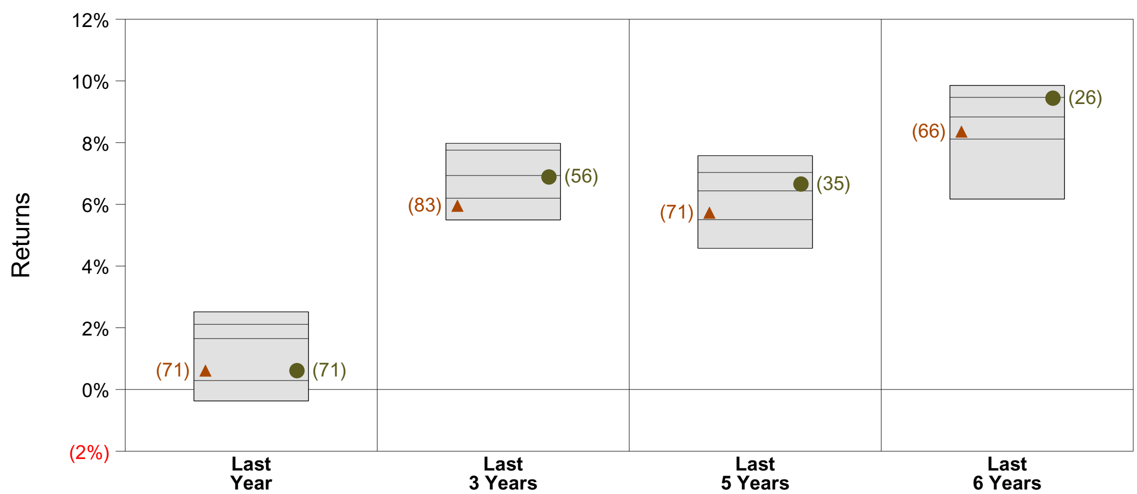
The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended June 30, 2016. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

CAI Public Fund Sponsor Database



	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.31	7.70	7.53	9.95
25th Percentile	1.56	7.06	7.02	9.39
Median	0.54	6.39	6.42	8.53
75th Percentile	(0.81)	5.51	5.70	7.77
90th Percentile	(1.97)	4.57	4.94	6.96
Total Fund ●	0.61	6.89	6.66	9.44
Policy Target ▲	0.61	5.95	5.73	8.36

Asset Allocation Adjusted Ranking



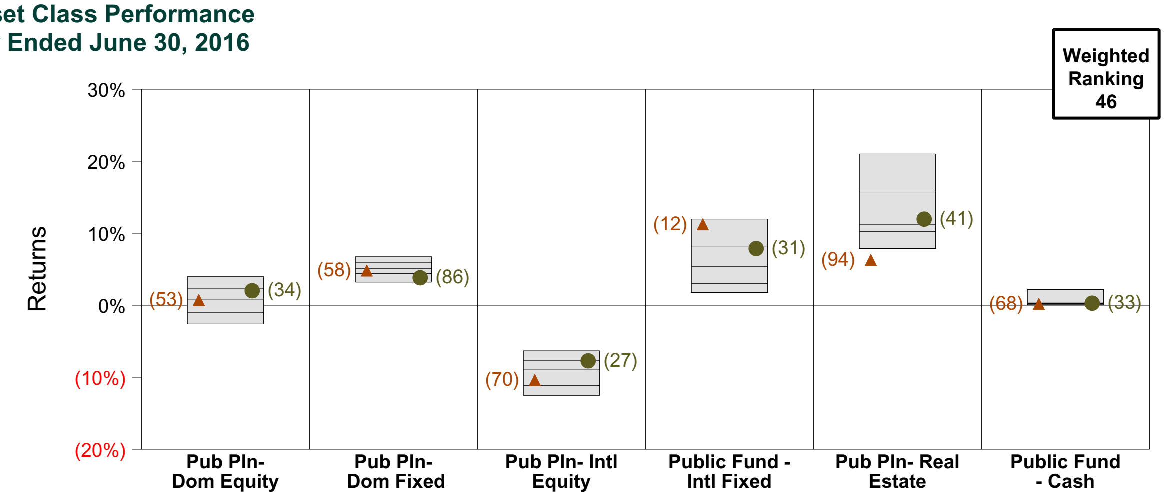
	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
10th Percentile	2.52	7.98	7.58	9.85
25th Percentile	2.11	7.76	7.03	9.47
Median	1.65	6.93	6.44	8.83
75th Percentile	0.29	6.20	5.50	8.12
90th Percentile	(0.37)	5.49	4.58	6.17
Total Fund ●	0.61	6.89	6.66	9.44
Policy Target ▲	0.61	5.95	5.73	8.36

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

Asset Class Rankings

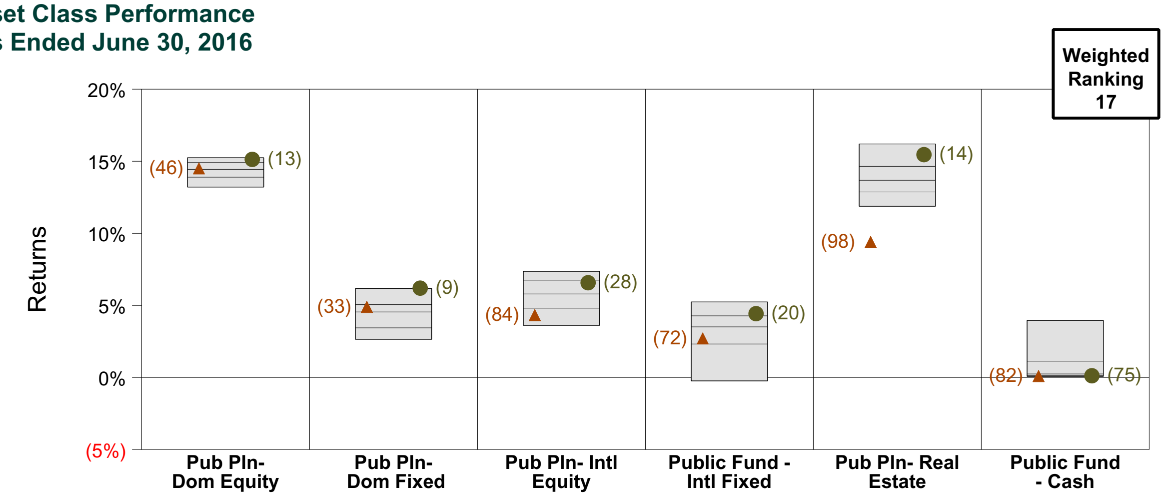
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Year Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	3.96	6.73	(6.34)	11.98	21.01	2.20
25th Percentile	2.36	5.96	(7.65)	8.22	15.73	0.44
Median	0.84	5.08	(8.97)	5.40	11.19	0.24
75th Percentile	(0.99)	4.40	(11.13)	3.03	10.25	0.08
90th Percentile	(2.60)	3.22	(12.50)	1.76	7.89	0.05
Asset Class Composite ●	2.02	3.82	(7.71)	7.88	11.96	0.29
Composite Benchmark ▲	0.73	4.83	(10.39)	11.24	6.29	0.19

Total Asset Class Performance
Six Years Ended June 30, 2016



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	15.24	6.17	7.37	5.24	16.20	3.96
25th Percentile	14.91	5.05	6.75	4.28	14.65	1.13
Median	14.44	4.55	5.79	3.51	13.68	0.24
75th Percentile	13.90	3.44	4.81	2.32	12.87	0.12
90th Percentile	13.21	2.65	3.62	(0.24)	11.88	0.08
Asset Class Composite ●	15.13	6.20	6.57	4.43	15.46	0.12
Composite Benchmark ▲	14.51	4.90	4.33	2.71	9.40	0.10

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

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	**$1,208,387,564**	**58.04%**	**$7,389,596**	**$10,165,019**	**$1,190,832,950**	**57.88%**
Domestic Equity	**$478,121,552**	**22.96%**	**$(501,473)**	**$11,264,785**	**$467,358,240**	**22.72%**
Large Cap	370,687,777	17.80%	(415,114)	7,029,723	364,073,168	17.70%
Small Cap	107,433,775	5.16%	(86,359)	4,235,063	103,285,072	5.02%
International Equity	**$321,176,957**	**15.43%**	**$6,299,809**	**$(487,611)**	**$315,364,760**	**15.33%**
Developed Intl Equity	247,919,083	11.91%	5,394,809	(2,670,853)	245,195,128	11.92%
Emerging Markets	73,257,874	3.52%	905,000	2,183,242	70,169,632	3.41%
World Equity	**$335,714,674**	**16.12%**	**$3,350,510**	**$(681,467)**	**$333,045,631**	**16.19%**
Private Equity	**$73,374,381**	**3.52%**	**$(1,759,250)**	**$69,312**	**$75,064,319**	**3.65%**
GLOBAL FIXED INCOME	**$483,149,237**	**23.21%**	**$15,650,156**	**$13,675,879**	**$453,823,202**	**22.06%**
Fixed Income Comp	**$361,706,587**	**17.37%**	**$2,805,270**	**$10,707,745**	**$348,193,572**	**16.92%**
Investment Grade Fixed	268,380,865	12.89%	22,952,474	5,712,454	239,715,936	11.65%
Below Inv. Grade Fixed Income	93,325,722	4.48%	(20,147,204)	4,995,290	108,477,636	5.27%
International Fixed Income	**$121,442,651**	**5.83%**	**$12,844,886**	**$2,968,134**	**$105,629,631**	**5.13%**
GLOBAL REAL ASSETS	**$372,030,580**	**17.87%**	**$(30,413,206)**	**$6,472,174**	**$395,971,612**	**19.25%**
Real Estate	204,184,309	9.81%	(29,000,906)	6,125,103	227,060,113	11.04%
Timber	70,258,495	3.37%	0	(1,259,280)	71,517,775	3.48%
Infrastructure	97,587,776	4.69%	(1,412,300)	1,606,351	97,393,725	4.73%
Cash & Equivalents	**$18,522,293**	**0.89%**	**$1,730,621**	**$24,583**	**$16,767,088**	**0.81%**
Securities Lending Income	**$0**	**0.00%**	**$(100,710)**	**$100,710**	**-**	**-**
Total Fund	**$2,082,089,674**	**100.0%**	**$(5,743,543)**	**$30,438,365**	**$2,057,394,852**	**100.0%**

PLEASE REFER TO PAGES 36-38 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Global Equity					
Gross	0.85%	(3.62%)	6.86%	-	-
Net	0.81%	(3.93%)	6.52%	-	-
Wtd Avg Global Equity Benchmark	1.10%	(3.88%)	5.92%	-	-
Domestic Equity					
Gross	2.41%	2.02%	11.53%	12.02%	15.13%
Net	2.39%	1.90%	11.34%	11.79%	14.88%
Wtd Avg Domestic Equity Benchmark	2.82%	0.73%	10.54%	11.21%	14.51%
Large Cap Equity					
Gross	1.93%	4.63%	12.77%	12.85%	15.63%
Net	1.91%	4.52%	12.60%	12.63%	15.37%
Benchmark(1)	2.54%	2.93%	11.48%	12.09%	15.00%
Small Cap Equity					
Gross	4.10%	(6.86%)	7.11%	9.27%	13.31%
Net	4.10%	(7.04%)	6.87%	9.03%	13.07%
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	12.73%
International Equity					
Gross	(0.15%)	(7.71%)	3.57%	2.48%	6.57%
Net	(0.20%)	(7.90%)	3.33%	2.19%	6.25%
Wtd Avg Intl Equity Benchmark	(1.01%)	(10.39%)	1.45%	0.68%	4.33%
Developed Intl Equity					
Gross	(1.09%)	(7.68%)	4.12%	3.10%	7.20%
Net	(1.15%)	(7.92%)	3.86%	2.81%	6.88%
Benchmark(2)	(1.46%)	(10.16%)	2.06%	1.68%	5.04%
Emerging Markets					
Gross	3.05%	(9.25%)	0.43%	(0.77%)	3.50%
Net	3.05%	(9.25%)	0.29%	(1.06%)	3.17%
Benchmark(3)	0.66%	(12.05%)	(1.56%)	(3.78%)	0.93%
World Equity					
Gross	(0.20%)	(6.53%)	6.44%	-	-
Net	(0.29%)	(7.27%)	5.70%	-	-
MSCI World Index	1.01%	(2.78%)	6.95%	6.63%	10.28%
Private Equity					
Net	0.12%	(7.20%)	(2.98%)	0.41%	2.69%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.
(2) 50% Hedged EAFE through 3/31/2011 and MSCI EAFE thereafter.
(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 39-43 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Global Fixed Income					
Gross	2.96%	4.75%	4.41%	-	-
Net	2.89%	4.49%	4.16%	-	-
Wtd Avg Global Fixed Inc. Benchmark	3.36%	6.36%	3.68%	-	-
Domestic Fixed Income					
Gross	3.06%	3.82%	5.02%	5.34%	6.20%
Net	3.01%	3.59%	4.80%	5.25%	6.06%
Wtd Avg Domestic FI Benchmark	3.24%	4.83%	4.16%	4.27%	4.90%
Inv. Grade Fixed Income					
Gross	2.25%	5.15%	4.81%	5.15%	5.33%
Net	2.21%	5.00%	4.69%	5.01%	5.15%
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	3.79%
Below Inv. Grade Fixed Income					
Gross	4.94%	0.69%	5.43%	6.70%	8.53%
Net	4.84%	0.28%	4.98%	6.25%	8.09%
Barclays HY Corp 2% Issue	5.52%	1.65%	4.20%	5.84%	7.39%
International Fixed Income					
Gross	2.57%	7.88%	2.02%	2.29%	4.43%
Net	2.48%	7.50%	1.65%	1.93%	4.06%
Wtd Avg Intl Fixed Income Benchmark	3.40%	11.24%	1.85%	0.35%	2.71%
Global Real Assets					
Gross	1.72%	8.37%	9.76%	-	-
Net	1.57%	7.83%	9.30%	-	-
Wtd Avg Global Real Assets Benchmark	1.64%	6.29%	7.86%	-	-
Real Estate					
Gross	3.00%	11.96%	14.82%	13.67%	15.46%
Net	2.87%	11.34%	14.26%	13.13%	14.88%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	12.37%
Timber					
Net	(1.76%)	4.34%	3.63%	-	-
NCREIF Timberland Index	1.09%	3.49%	7.77%	6.72%	5.66%
Infrastructure					
Gross	1.67%	3.65%	4.74%	-	-
Net	1.34%	2.88%	4.09%	-	-
CPI-W	1.33%	0.64%	0.76%	1.12%	1.61%
Cash & Equivalents - Net	**0.12%**	**0.29%**	**0.13%**	**0.11%**	**0.12%**
3-month Treasury Bill	0.07%	0.19%	0.09%	0.09%	0.10%
Total Fund					
Gross	1.48%	0.61%	6.89%	6.66%	9.44%
Net	1.41%	0.28%	6.55%	6.32%	9.09%
Target*	1.71%	0.61%	5.95%	5.73%	8.36%

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

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

L.A. Capital
Period Ended June 30, 2016

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.

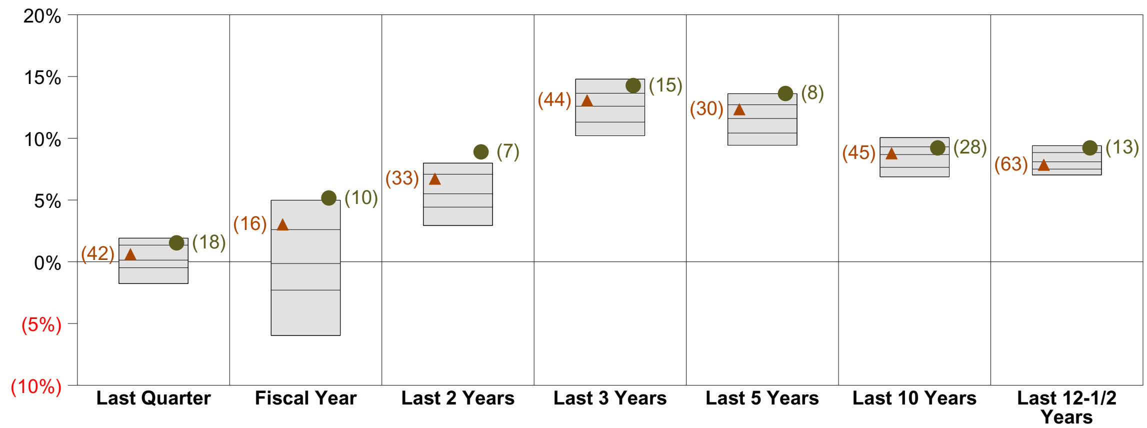
Quarterly Summary and Highlights

- L.A. Capital's portfolio posted a 1.53% return for the quarter placing it in the 18 percentile of the CAI Large Cap Growth group for the quarter and in the 10 percentile for the last year.
- L.A. Capital's portfolio outperformed the Russell 1000 Growth Index by 0.92% for the quarter and outperformed the Russell 1000 Growth Index for the year by 2.14%.

Quarterly Asset Growth

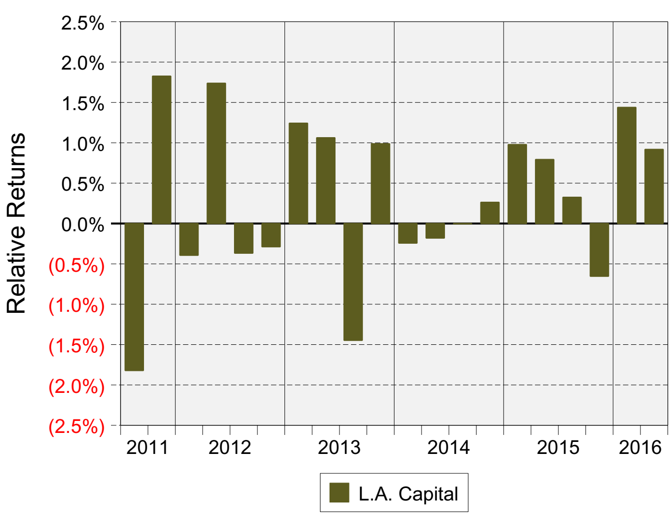
Beginning Market Value	$309,966,684
Net New Investment	$-6,155,003
Investment Gains/(Losses)	$4,643,156
Ending Market Value	$308,454,836

Performance vs CAI Large Cap Growth (Gross)

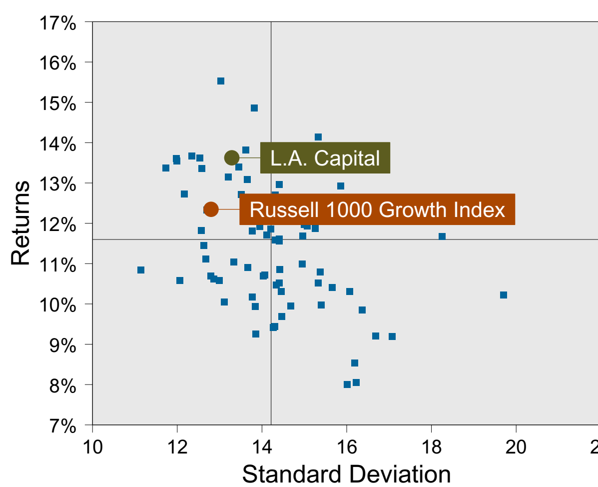


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 12-1/2 Years
10th Percentile	1.91	4.98	7.99	14.79	13.61	10.05	9.40
25th Percentile	1.35	2.60	7.09	13.64	12.71	9.30	8.84
Median	0.14	(0.14)	5.50	12.60	11.60	8.68	8.09
75th Percentile	(0.48)	(2.29)	4.42	11.31	10.42	7.65	7.51
90th Percentile	(1.76)	(5.97)	2.94	10.20	9.43	6.88	7.03
L.A. Capital ●	1.53	5.17	8.90	14.27	13.62	9.22	9.22
Russell 1000 Growth Index ▲	0.61	3.02	6.72	13.07	12.35	8.78	7.85

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 June 30, 2016

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.

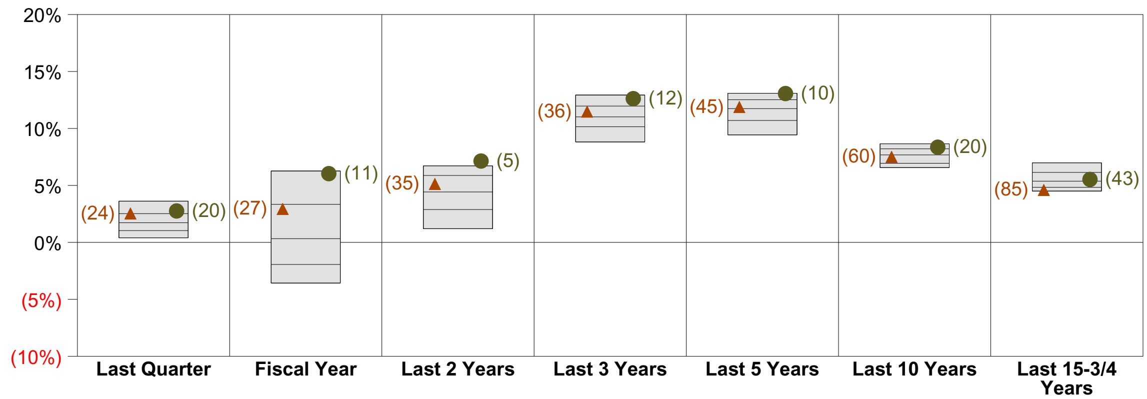
Quarterly Summary and Highlights

- LACM Enhanced Index's portfolio posted a 2.76% return for the quarter placing it in the 20 percentile of the CAI Large Cap Core group for the quarter and in the 11 percentile for the last year.
- LACM Enhanced Index's portfolio outperformed the Russell 1000 Index by 0.22% for the quarter and outperformed the Russell 1000 Index for the year by 3.10%.

Quarterly Asset Growth

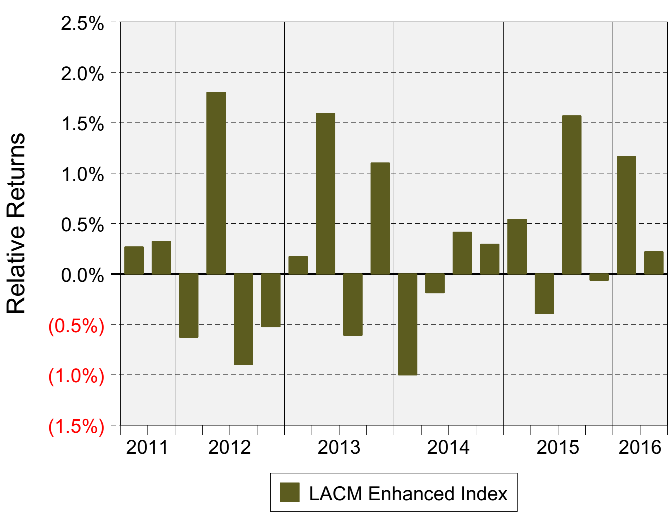
Beginning Market Value	$186,257,069
Net New Investment	$-45,726
Investment Gains/(Losses)	$5,131,535
Ending Market Value	$191,342,879

Performance vs CAI Large Cap Core (Gross)

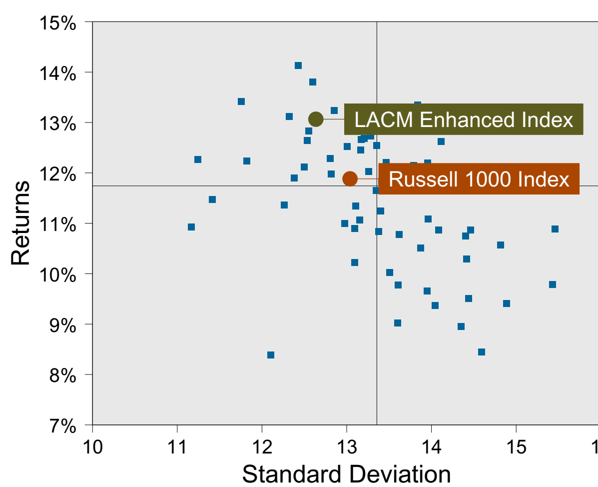


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 15-3/4 Years
10th Percentile	3.62	6.27	6.72	12.94	13.09	8.65	6.98
25th Percentile	2.52	3.34	5.87	11.97	12.52	8.21	6.14
Median	1.73	0.33	4.43	11.02	11.74	7.68	5.37
75th Percentile	1.03	(1.94)	2.88	10.15	10.70	6.94	4.84
90th Percentile	0.40	(3.57)	1.20	8.82	9.44	6.56	4.50
LACM Enhanced Index ●	2.76	6.03	7.14	12.62	13.07	8.35	5.52
Russell 1000 Index ▲	2.54	2.93	5.13	11.48	11.88	7.51	4.60

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 June 30, 2016

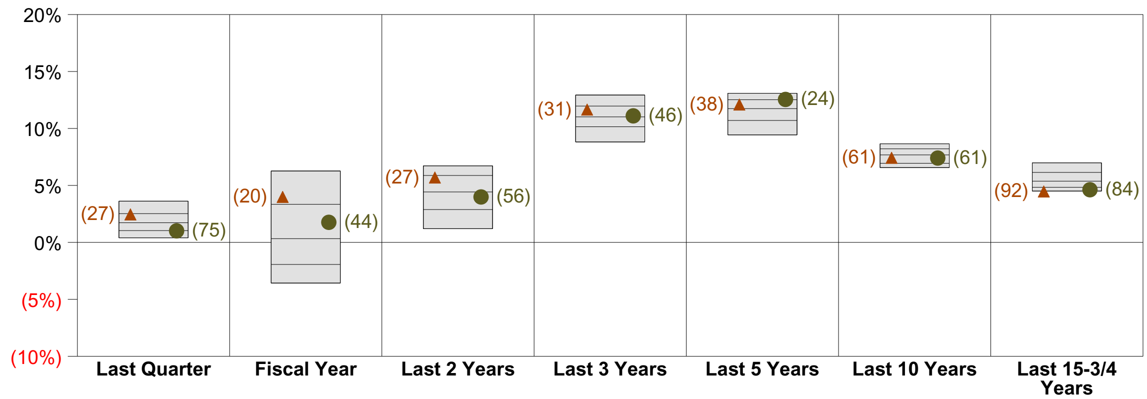
Investment Philosophy
Northern Trust AM Enhanced S&P 500 employs a quantitative investment approach, focusing on the stock selection process as the principal source of value added. The account invests primarily in a broadly diversified portfolio of equity securities that include securities convertible 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 1.01% return for the quarter placing it in the 75 percentile of the CAI Large Cap Core group for the quarter and in the 44 percentile for the last year.
- Northern Trust AM Enh S&P500's portfolio underperformed the S&P 500 Index by 1.44% for the quarter and underperformed the S&P 500 Index for the year by 2.23%.

Quarterly Asset Growth

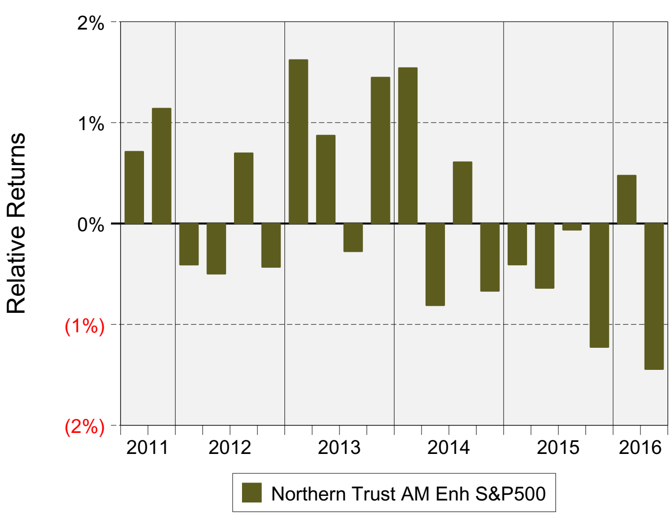
Beginning Market Value	$142,175,451
Net New Investment	$0
Investment Gains/(Losses)	$1,437,280
Ending Market Value	$143,612,731

Performance vs CAI Large Cap Core (Gross)

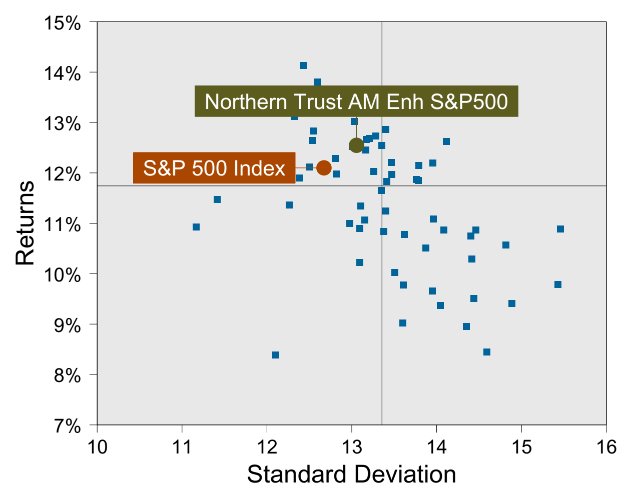


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 15-3/4 Years
10th Percentile	3.62	6.27	6.72	12.94	13.09	8.65	6.98
25th Percentile	2.52	3.34	5.87	11.97	12.52	8.21	6.14
Median	1.73	0.33	4.43	11.02	11.74	7.68	5.37
75th Percentile	1.03	(1.94)	2.88	10.15	10.70	6.94	4.84
90th Percentile	0.40	(3.57)	1.20	8.82	9.44	6.56	4.50
Northern Trust AM Enh S&P500 ●	1.01	1.76	3.99	11.10	12.55	7.40	4.62
S&P 500 Index ▲	2.46	3.99	5.69	11.66	12.10	7.42	4.47

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 June 30, 2016

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.

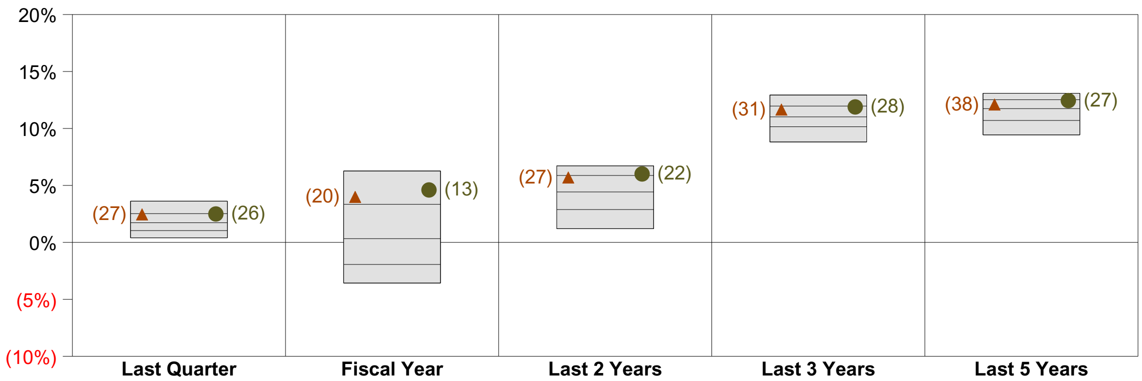
Quarterly Summary and Highlights

- Parametric Clifton Enh S&P's portfolio posted a 2.49% return for the quarter placing it in the 26 percentile of the CAI Large Cap Core group for the quarter and in the 13 percentile for the last year.
- Parametric Clifton Enh S&P's portfolio outperformed the S&P 500 Index by 0.04% for the quarter and outperformed the S&P 500 Index for the year by 0.61%.

Quarterly Asset Growth

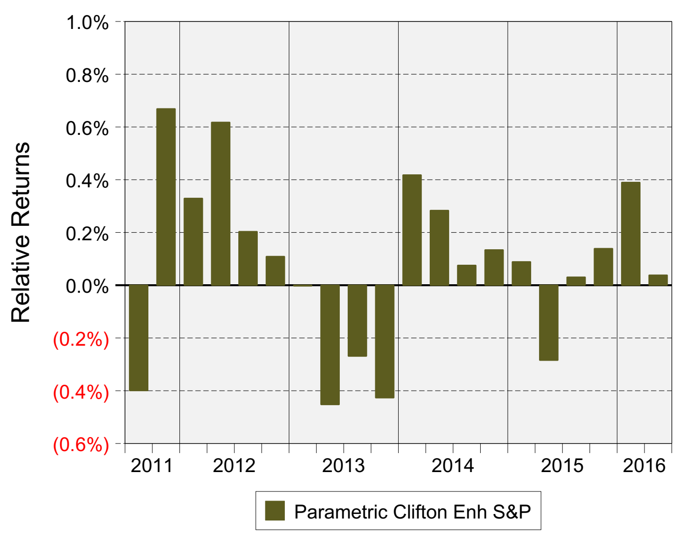
Beginning Market Value	$178,012,201
Net New Investment	$-10,000,000
Investment Gains/(Losses)	$4,369,703
Ending Market Value	$172,381,903

Performance vs CAI Large Cap Core (Gross)

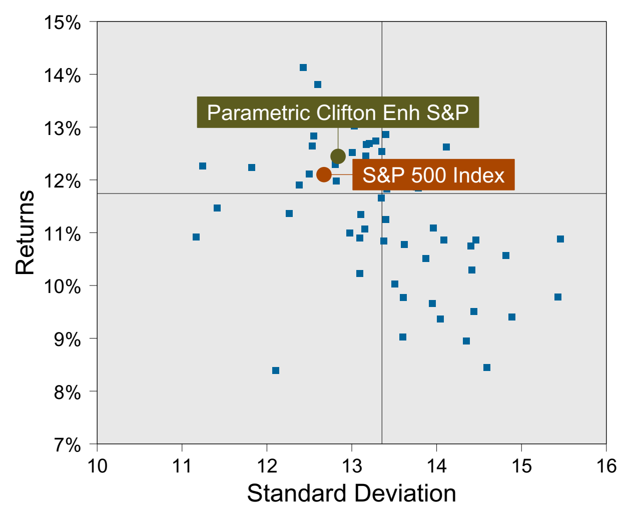


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years
10th Percentile	3.62	6.27	6.72	12.94	13.09
25th Percentile	2.52	3.34	5.87	11.97	12.52
Median	1.73	0.33	4.43	11.02	11.74
75th Percentile	1.03	(1.94)	2.88	10.15	10.70
90th Percentile	0.40	(3.57)	1.20	8.82	9.44
Parametric Clifton Enh S&P ●	2.49	4.60	6.01	11.89	12.45
S&P 500 Index ▲	2.46	3.99	5.69	11.66	12.10

Relative Return vs S&P 500 Index



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



Parametric Clifton Enh SmCap
Period Ended June 30, 2016

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.

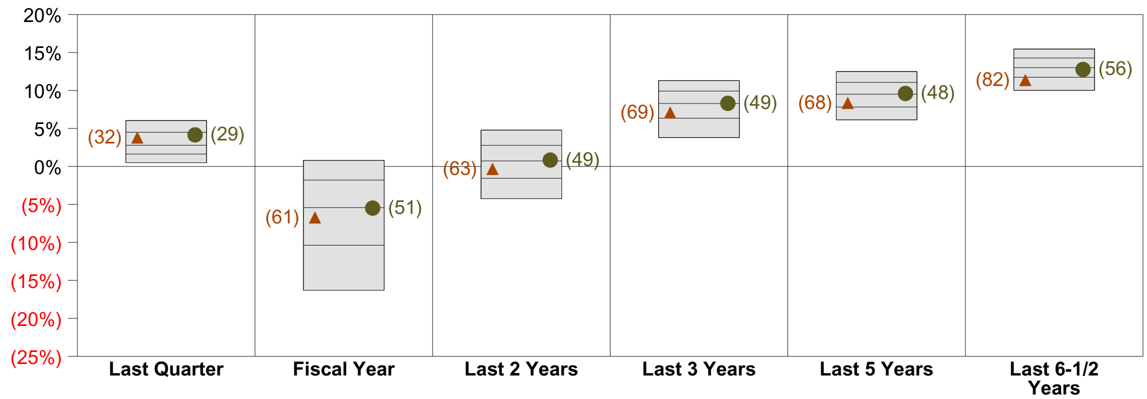
Quarterly Summary and Highlights

- Parametric Clifton Enh SmCap's portfolio posted a 4.15% return for the quarter placing it in the 29 percentile of the CAI Small Capitalization group for the quarter and in the 51 percentile for the last year.
- Parametric Clifton Enh SmCap's portfolio outperformed the Russell 2000 Index by 0.36% for the quarter and outperformed the Russell 2000 Index for the year by 1.24%.

Quarterly Asset Growth

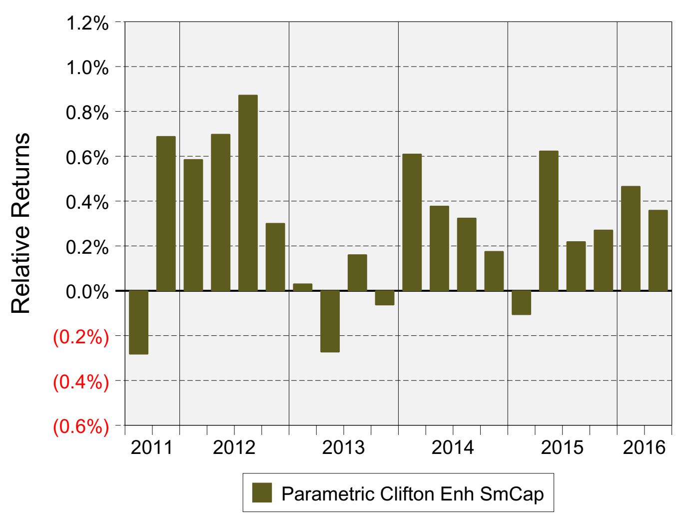
Beginning Market Value	$128,568,464
Net New Investment	$0
Investment Gains/(Losses)	$5,335,825
Ending Market Value	$133,904,288

Performance vs CAI Small Capitalization (Gross)

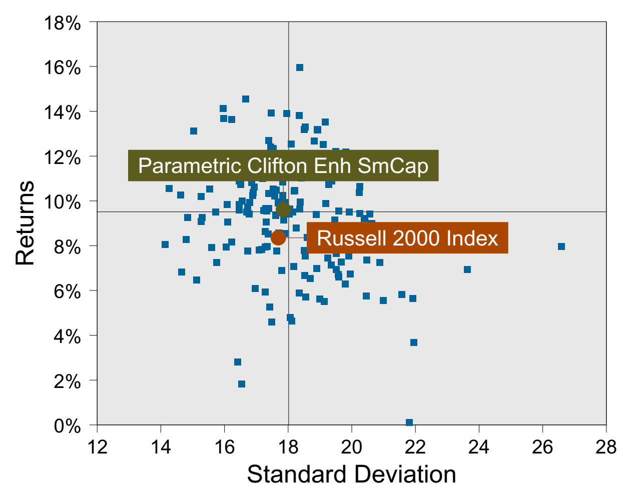


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6-1/2 Years
10th Percentile	6.04	0.80	4.79	11.30	12.50	15.46
25th Percentile	4.51	(1.79)	2.78	9.92	11.07	14.28
Median	2.79	(5.42)	0.72	8.29	9.51	13.00
75th Percentile	1.63	(10.37)	(1.56)	6.35	7.82	11.74
90th Percentile	0.48	(16.30)	(4.25)	3.79	6.14	10.02
Parametric Clifton Enh SmCap ●	4.15	(5.49)	0.84	8.31	9.61	12.77
Russell 2000 Index ▲	3.79	(6.73)	(0.34)	7.09	8.35	11.36

Relative Return vs Russell 2000 Index



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



DFA International Small Cap Value Fund
Period Ended June 30, 2016

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.

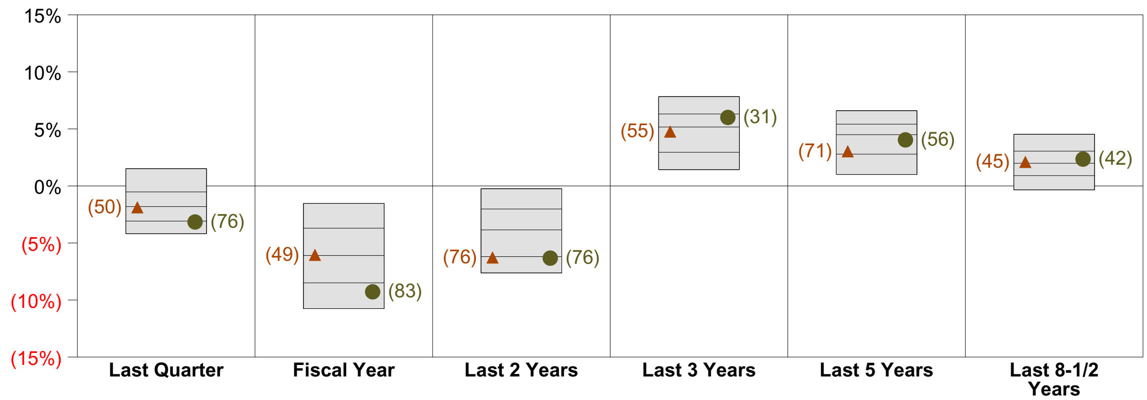
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a (3.16)% return for the quarter placing it in the 76 percentile of the Lipper International Small Cap Funds group for the quarter and in the 83 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 1.28% for the quarter and underperformed the World ex US SC Value for the year by 3.23%.

Quarterly Asset Growth

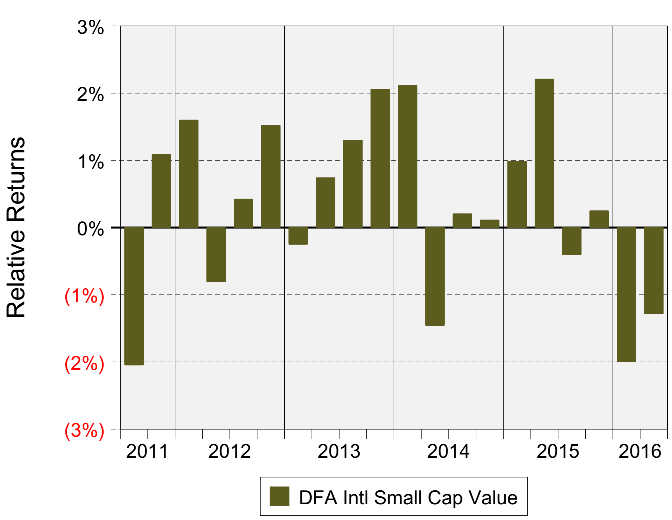
Beginning Market Value	$74,268,888
Net New Investment	$0
Investment Gains/(Losses)	$-2,346,298
Ending Market Value	$71,922,590

Performance vs Lipper International Small Cap Funds (Net)

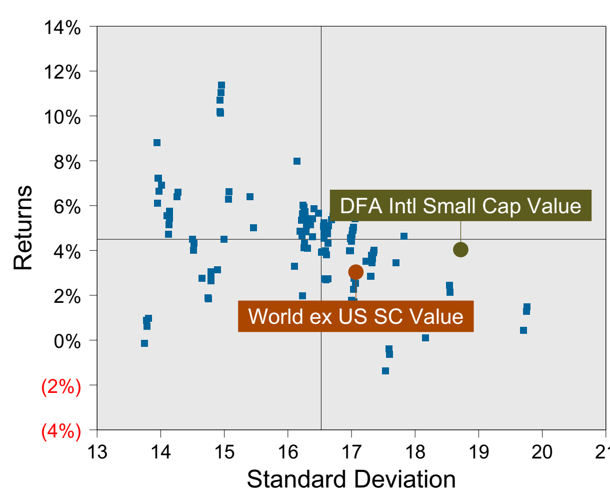


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-1/2 Years
10th Percentile	1.52	(1.53)	(0.24)	7.84	6.60	4.53
25th Percentile	(0.52)	(3.70)	(2.02)	6.31	5.42	3.05
Median	(1.81)	(6.10)	(3.85)	5.17	4.50	1.99
75th Percentile	(3.08)	(8.49)	(6.20)	2.95	2.79	0.91
90th Percentile	(4.18)	(10.75)	(7.63)	1.43	1.00	(0.34)
DFA Intl Small Cap Value ●	(3.16)	(9.28)	(6.33)	6.01	4.04	2.35
World ex US SC Value ▲	(1.88)	(6.05)	(6.28)	4.76	3.03	2.10

Relative Return vs World ex US SC Value



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



Northern Tr AM Wrld ex US
Period Ended June 30, 2016

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 (0.84)% return for the quarter placing it in the 36 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 51 percentile for the last year.
- Northern Tr AM Wrld ex US's portfolio outperformed the MSCI World ex US by 0.22% for the quarter and outperformed the MSCI World ex US for the year by 0.33%.

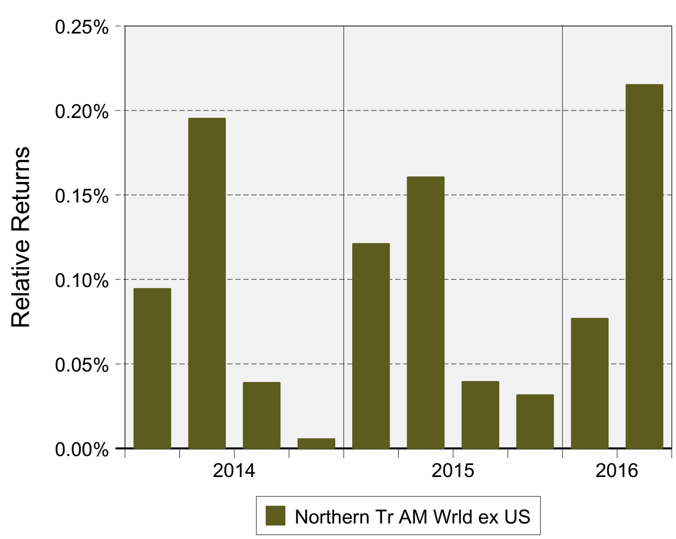
Quarterly Asset Growth

Beginning Market Value	$248,208,296
Net New Investment	$8,980,277
Investment Gains/(Losses)	$-2,010,724
Ending Market Value	$255,177,849

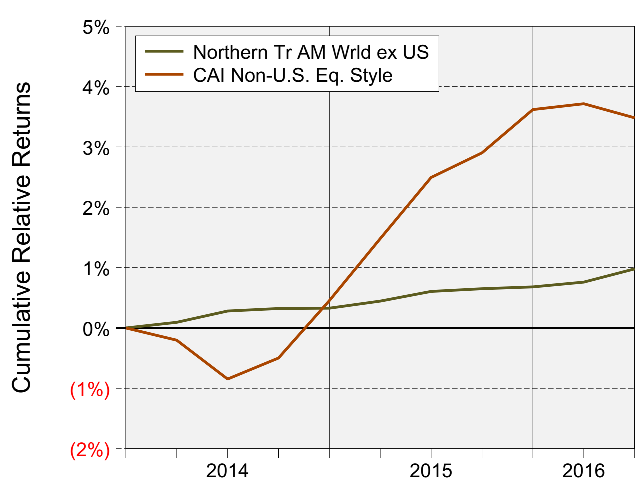
Performance vs CAI Non-U.S. Equity Style (Gross)

	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	0.90	(4.07)	(2.36)	(0.17)
25th Percentile	(0.10)	(6.80)	(3.88)	(1.33)
Median	(1.31)	(9.43)	(5.67)	(2.83)
75th Percentile	(2.29)	(11.56)	(7.03)	(4.27)
90th Percentile	(3.72)	(13.04)	(9.08)	(5.40)
Northern Tr AM Wrld ex US ●	(0.84)	(9.51)	(7.27)	(3.75)
MSCI World ex US ▲	(1.05)	(9.84)	(7.59)	(4.13)

Relative Return vs MSCI World ex US



Cumulative Returns vs MSCI World ex US



Wellington Management
Period Ended June 30, 2016

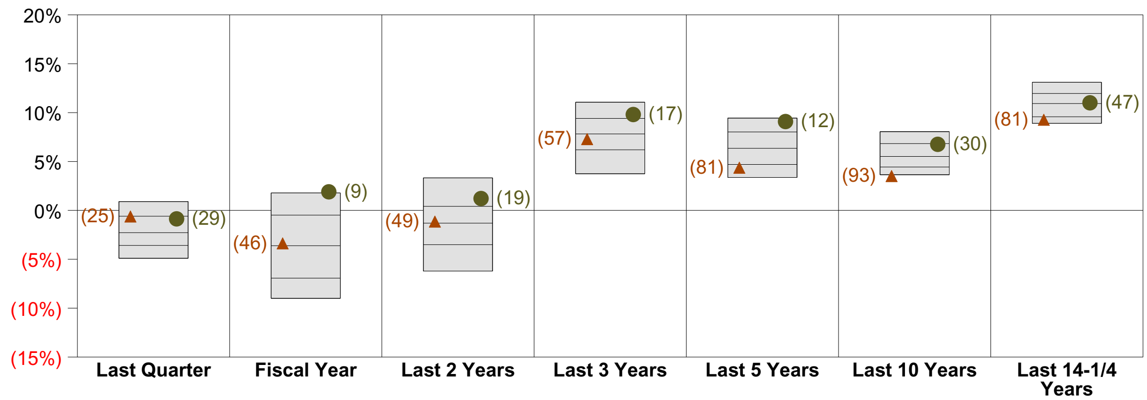
Investment Philosophy
The International Small Cap Opportunities investment approach is bottom-up focused, and leverages the global research resources at Wellington Management. In implementing purchase decisions, consideration is given to the size, liquidity, and volatility of these prospects. Sell decisions 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 (0.87)% return for the quarter placing it in the 29 percentile of the CAI International Small Cap group for the quarter and in the 9 percentile for the last year.
- Wellington Management's portfolio underperformed the S&P BMI EPAC <$2 B by 0.24% for the quarter and outperformed the S&P BMI EPAC <$2 B for the year by 5.27%.

Quarterly Asset Growth

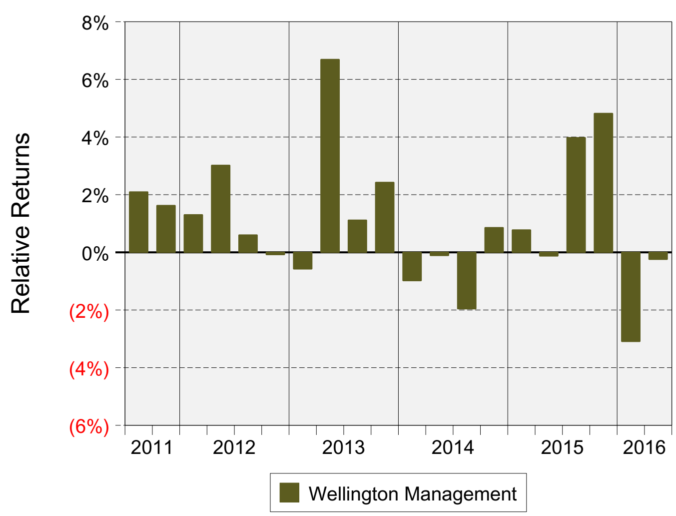
Beginning Market Value	$92,069,575
Net New Investment	$-10,183,539
Investment Gains/(Losses)	$-353,130
Ending Market Value	$81,532,906

Performance vs CAI International Small Cap (Gross)

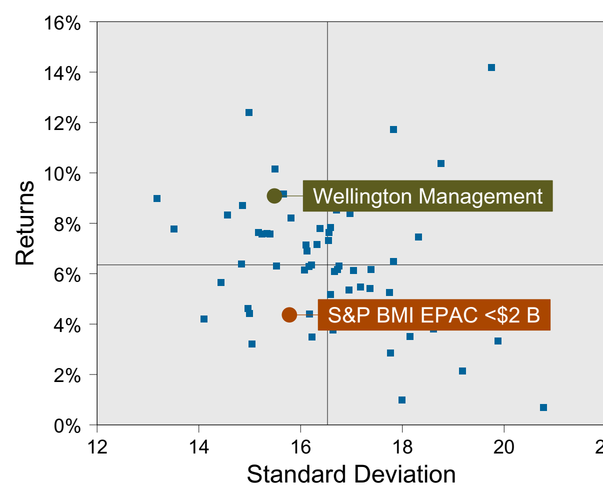


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 14-1/4 Years
10th Percentile	0.90	1.79	3.33	11.06	9.44	8.05	13.10
25th Percentile	(0.60)	(0.49)	0.41	9.41	8.02	6.83	11.96
Median	(2.28)	(3.61)	(1.31)	7.82	6.35	5.52	10.93
75th Percentile	(3.59)	(6.93)	(3.51)	6.20	4.70	4.44	9.58
90th Percentile	(4.90)	(9.00)	(6.21)	3.74	3.37	3.65	8.90
Wellington Management ●	(0.87)	1.90	1.21	9.80	9.09	6.76	11.01
S&P BMI EPAC <$2 B ▲	(0.63)	(3.38)	(1.14)	7.29	4.37	3.51	9.27

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



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



Axiom Emerging Markets
Period Ended June 30, 2016

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, 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.

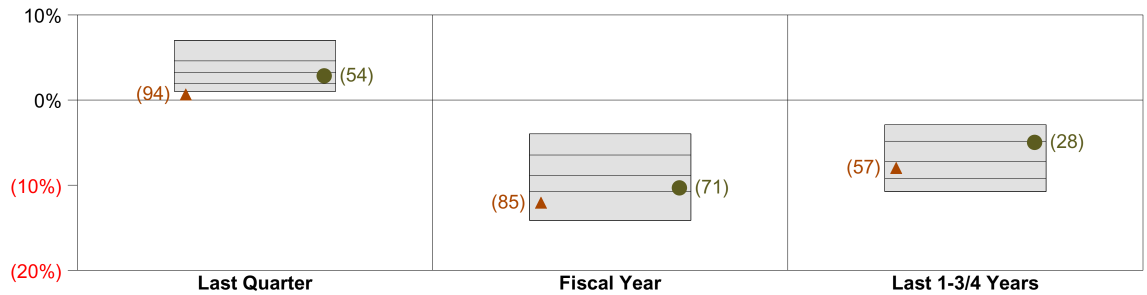
Quarterly Summary and Highlights

- Axiom Emerging Markets's portfolio posted a 2.85% return for the quarter placing it in the 54 percentile of the CAI Emerging Markets Equity Mut Funds group for the quarter and in the 71 percentile for the last year.
- Axiom Emerging Markets's portfolio outperformed the MSCI EM by 2.18% for the quarter and outperformed the MSCI EM for the year by 1.74%.

Quarterly Asset Growth

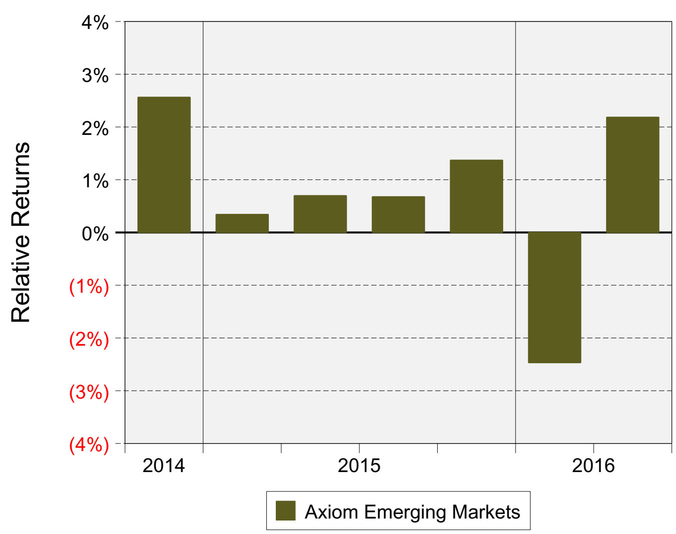
Beginning Market Value	$128,666,451
Net New Investment	$0
Investment Gains/(Losses)	$3,660,800
Ending Market Value	$132,327,251

Performance vs CAI Emerging Markets Equity Mut Funds (Net)

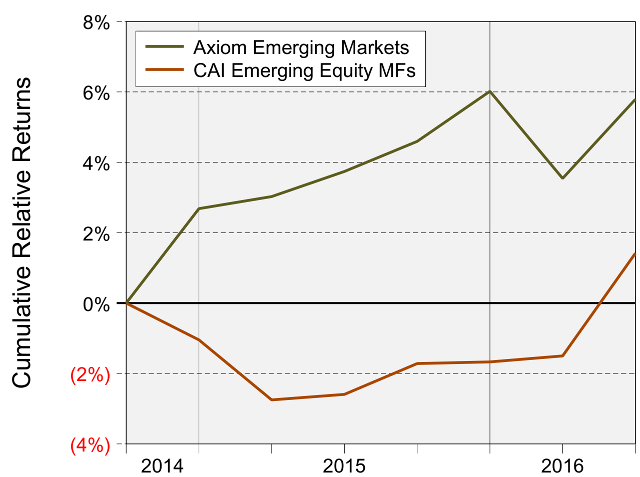


	Last Quarter	Fiscal Year	Last 1-3/4 Years
10th Percentile	7.00	(3.96)	(2.90)
25th Percentile	4.60	(6.46)	(4.84)
Median	3.23	(8.85)	(7.23)
75th Percentile	1.93	(10.76)	(9.25)
90th Percentile	1.02	(14.14)	(10.75)
Axiom Emerging Markets ●	2.85	(10.32)	(4.97)
MSCI EM ▲	0.66	(12.05)	(7.98)

Relative Return vs MSCI EM



Cumulative Returns vs MSCI EM



DFA Emerging Markets
Period Ended June 30, 2016

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.

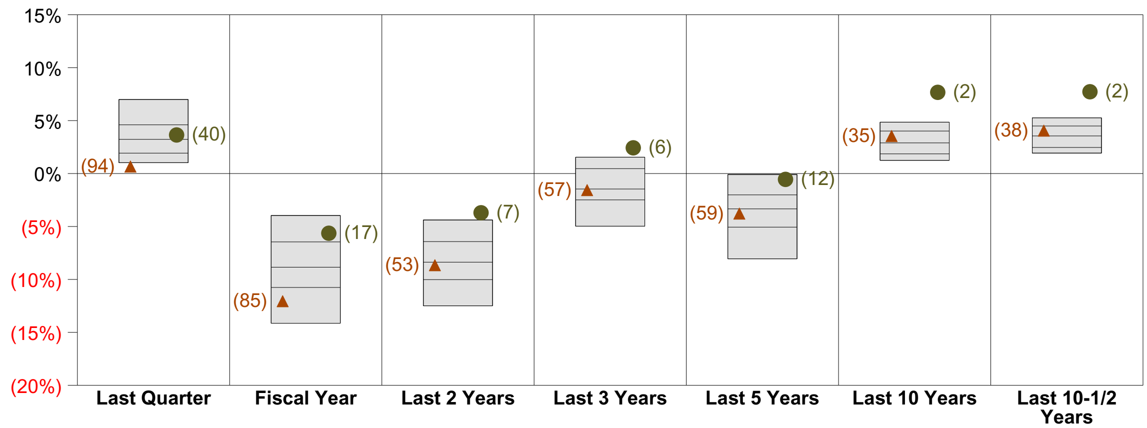
Quarterly Summary and Highlights

- DFA Emerging Markets's portfolio posted a 3.64% return for the quarter placing it in the 40 percentile of the CAI Emerging Markets Equity Mut Funds group for the quarter and in the 17 percentile for the last year.
- DFA Emerging Markets's portfolio outperformed the MSCI EM by 2.98% for the quarter and outperformed the MSCI EM for the year by 6.42%.

Quarterly Asset Growth

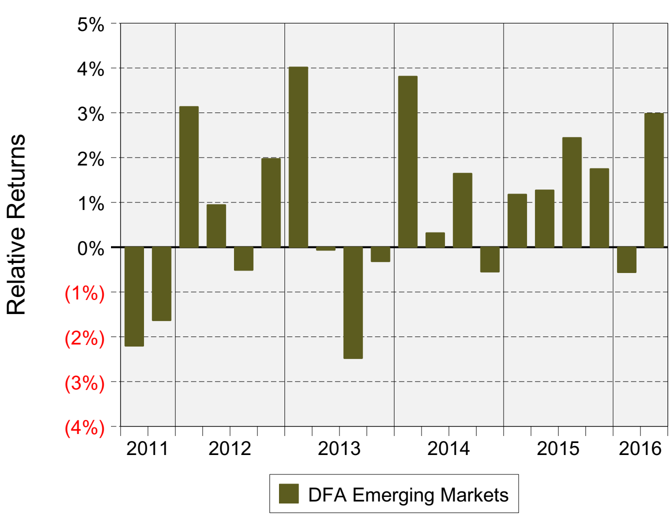
Beginning Market Value	$44,487,461
Net New Investment	$0
Investment Gains/(Losses)	$1,621,191
Ending Market Value	$46,108,652

Performance vs CAI Emerging Markets Equity Mut Funds (Net)

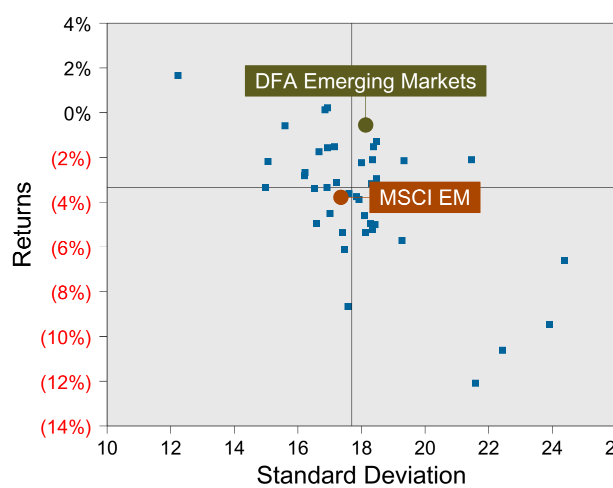


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 10-1/2 Years
10th Percentile	7.00	(3.96)	(4.38)	1.55	(0.09)	4.85	5.26
25th Percentile	4.60	(6.46)	(6.43)	0.46	(2.01)	4.02	4.49
Median	3.23	(8.85)	(8.37)	(1.46)	(3.34)	2.90	3.55
75th Percentile	1.93	(10.76)	(10.02)	(2.49)	(5.06)	1.86	2.46
90th Percentile	1.02	(14.14)	(12.49)	(4.97)	(8.05)	1.25	1.93
DFA Emerging Markets ●	3.64	(5.64)	(3.70)	2.43	(0.55)	7.67	7.73
MSCI EM ▲	0.66	(12.05)	(8.66)	(1.56)	(3.78)	3.54	4.05

Relative Return vs MSCI EM



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



EPOCH Investment
Period Ended June 30, 2016

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.**

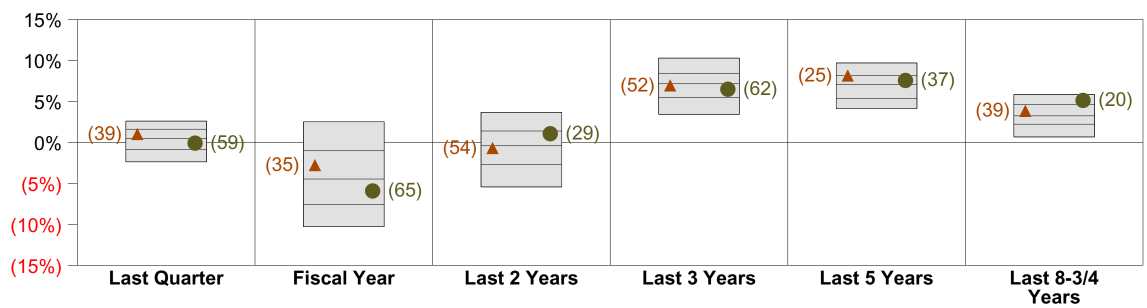
Quarterly Summary and Highlights

- EPOCH Investment's portfolio posted a (0.09)% return for the quarter placing it in the 59 percentile of the CAI Global Equity Broad Style group for the quarter and in the 65 percentile for the last year.
- EPOCH Investment's portfolio underperformed the EPOCH Blended Benchmark by 1.10% for the quarter and underperformed the EPOCH Blended Benchmark for the year by 3.15%.

Quarterly Asset Growth

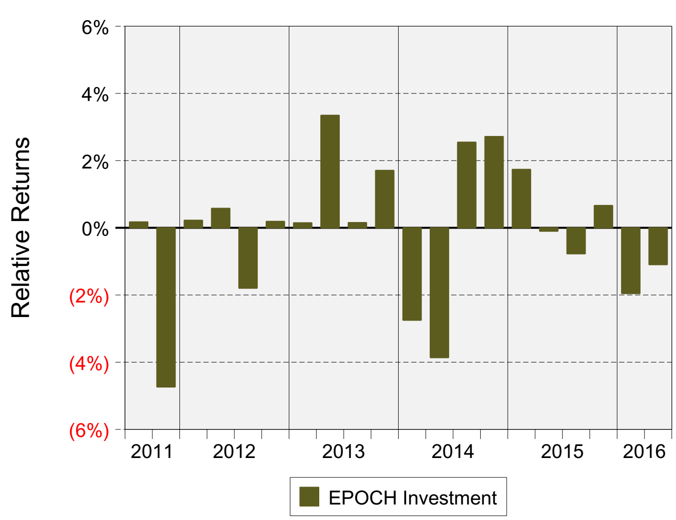
Beginning Market Value	$339,370,267
Net New Investment	$-545,671
Investment Gains/(Losses)	$-300,567
Ending Market Value	$338,524,029

Performance vs CAI Global Equity Broad Style (Gross)

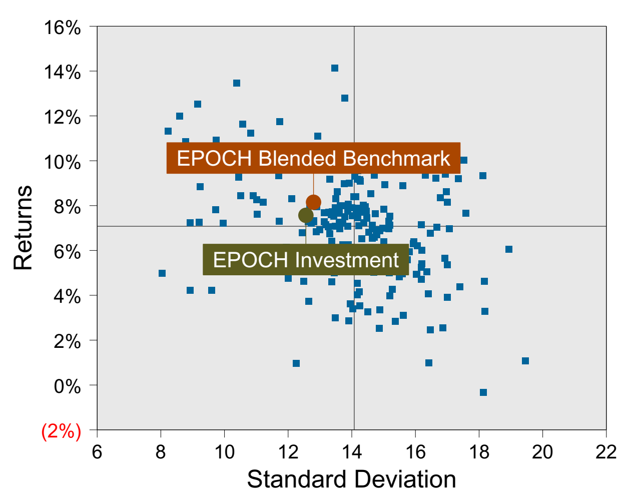


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-3/4 Years
10th Percentile	2.60	2.52	3.67	10.29	9.70	5.84
25th Percentile	1.62	(1.02)	1.39	8.38	8.14	4.65
Median	0.48	(4.47)	(0.41)	7.16	7.08	3.24
75th Percentile	(0.84)	(7.57)	(2.68)	5.51	5.37	2.23
90th Percentile	(2.37)	(10.29)	(5.43)	3.42	4.11	0.67
EPOCH Investment ●	(0.09)	(5.93)	1.06	6.49	7.57	5.13
EPOCH Blended Benchmark ▲	1.01	(2.78)	(0.70)	6.95	8.15	3.84

Relative Returns vs EPOCH Blended Benchmark



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



LSV Asset Management
Period Ended June 30, 2016

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.

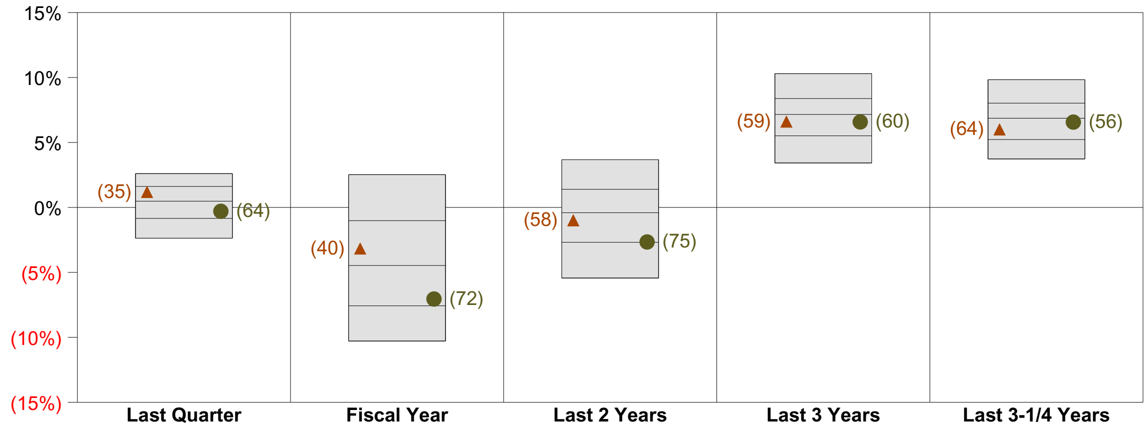
Quarterly Summary and Highlights

- LSV Asset Management's portfolio posted a (0.30)% return for the quarter placing it in the 64 percentile of the CAI Global Equity Broad Style group for the quarter and in the 72 percentile for the last year.
- LSV Asset Management's portfolio underperformed the MSCI ACWI Gross by 1.48% for the quarter and underperformed the MSCI ACWI Gross for the year by 3.88%.

Quarterly Asset Growth

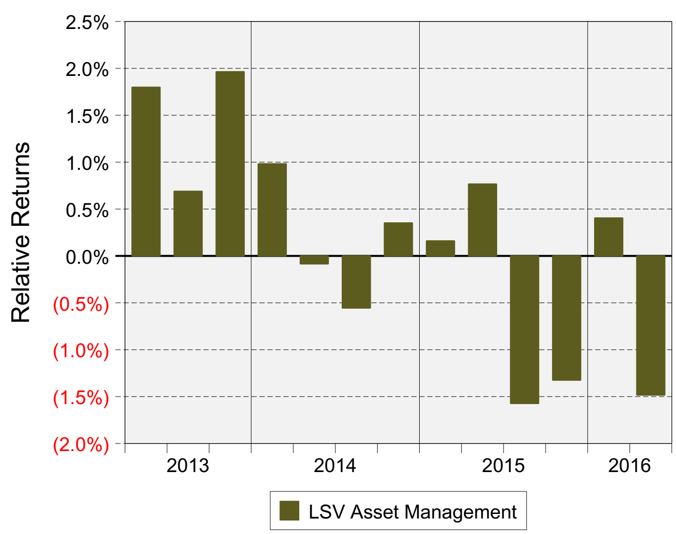
Beginning Market Value	$419,957,546
Net New Investment	$9,897,047
Investment Gains/(Losses)	$-1,254,196
Ending Market Value	$428,600,398

Performance vs CAI Global Equity Broad Style (Gross)

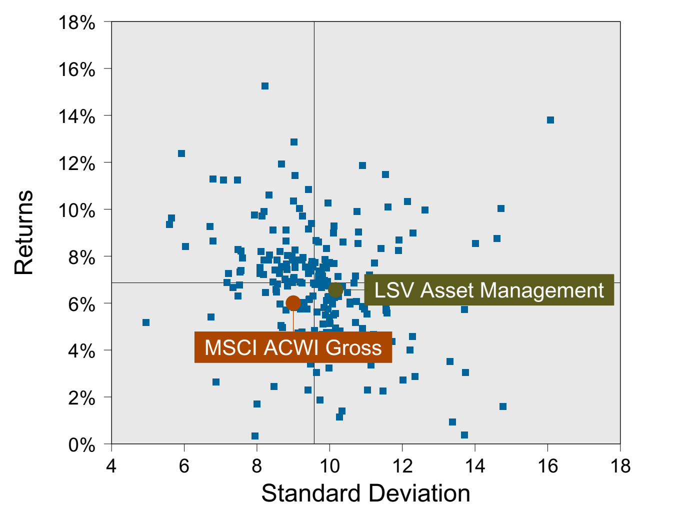


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 3-1/4 Years
10th Percentile	2.60	2.52	3.67	10.29	9.83
25th Percentile	1.62	(1.02)	1.39	8.38	8.03
Median	0.48	(4.47)	(0.41)	7.16	6.87
75th Percentile	(0.84)	(7.57)	(2.68)	5.51	5.22
90th Percentile	(2.37)	(10.29)	(5.43)	3.42	3.73
LSV Asset Management ●	(0.30)	(7.05)	(2.66)	6.58	6.57
MSCI ACWI Gross ▲	1.19	(3.17)	(0.99)	6.60	6.00

Relative Return vs MSCI ACWI Gross



CAI Global Equity Broad Style (Gross)
Annualized Three and One-Quarter 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 15-1/2 Years
Private Equity	**0.12%**	**(7.20%)**	**(2.97%)**	**0.45%**	**1.83%**
Adams Street Direct Co-Invest Fd	1.54%	8.04%	15.92%	12.50%	-
Adams Street Direct Fd 2010	(6.96%)	7.48%	15.27%	13.88%	-
Adams Street 1998 Partnership	0.10%	4.14%	1.77%	0.95%	1.79%
Adams Street 1999 Partnership	1.72%	12.03%	2.61%	2.21%	2.94%
Adams Street 2000 Partnership	(3.52%)	(1.75%)	(1.74%)	1.43%	3.23%
Adams Street 2001 Partnership	(6.83%)	(10.10%)	2.31%	4.78%	3.46%
Adams Street 2002 Partnership	4.92%	9.43%	1.65%	4.69%	-
Adams Street 2003 Partnership	(3.80%)	(2.55%)	13.28%	7.77%	-
Adams Street 2010 Partnership	(0.55%)	6.18%	13.70%	12.03%	-
Adams Street 2008 Fund	(0.42%)	11.84%	12.71%	9.22%	-
Adams Street 1999 Non-US	1.17%	13.44%	1.29%	5.77%	6.52%
Adams Street 2000 Non-US	(1.76%)	(7.68%)	(2.64%)	(2.51%)	2.54%
Adams Street 2001 Non-US	(5.38%)	23.36%	24.09%	12.41%	-
Adams Street 2002 Non-US	1.29%	29.09%	8.10%	5.92%	-
Adams Street 2003 Non-US	4.26%	18.08%	11.09%	9.99%	-
Adams Street 2004 Non-US	(5.18%)	(8.27%)	5.80%	3.35%	-
Adams Street 2010 Non-US	0.19%	9.63%	6.70%	7.21%	-
Adams Street 2010 NonUS Emg	(0.93%)	10.50%	11.83%	0.77%	-
Adams Street 2015 Global Fd	(5.17%)	-	-	-	-
Adams Street BVCF IV Fund	(0.32%)	(1.65%)	18.20%	29.22%	18.60%
CorsAir III	(0.95%)	34.22%	7.06%	1.35%	-
ND Investors	(5.60%)	6.41%	(0.10%)	2.53%	-
CorsAir IV	6.84%	(2.38%)	13.58%	6.00%	-
Capital International V	5.43%	(25.52%)	(10.61%)	(9.07%)	-
Capital International VI	14.99%	1.06%	(9.32%)	-	-
EIG Energy Fund XIV	(27.87%)	(67.59%)	(38.29%)	(24.04%)	-
Lewis & Clark	(51.19%)	(51.19%)	(35.55%)	(19.67%)	-
Lewis & Clark II	1.88%	1.88%	(6.77%)	(5.56%)	-
Quantum Energy Partners	(12.50%)	(22.63%)	(6.45%)	4.85%	-
Matlin Patterson I	2.21%	13.00%	4.54%	649.79%	-
Matlin Patterson II	(6.77%)	7.27%	3.19%	(27.34%)	-
Matlin Patterson III	4.54%	(5.66%)	(1.30%)	22.01%	-
Russell 1000 Index	2.54%	2.93%	11.48%	11.88%	5.33%
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	7.18%

Declaration Total Return
Period Ended June 30, 2016

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.

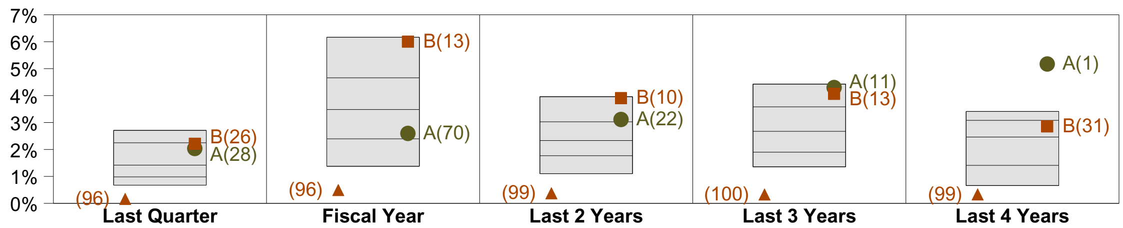
Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 2.04% return for the quarter placing it in the 28 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 70 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.87% for the quarter and outperformed the Libor-3 Month for the year by 2.10%.

Quarterly Asset Growth

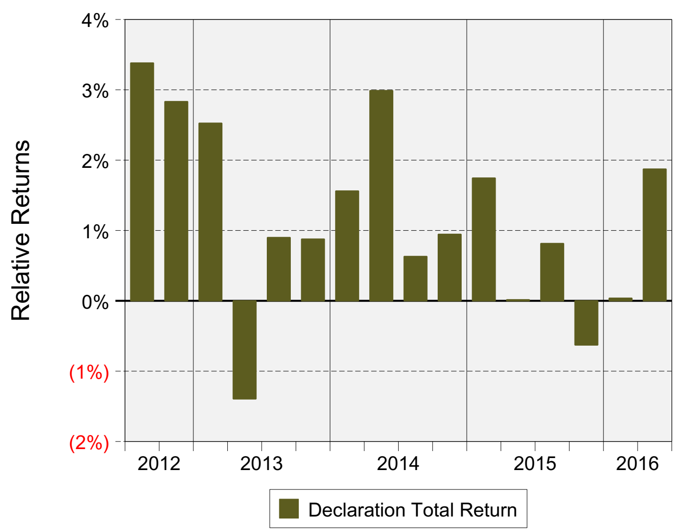
Beginning Market Value	$84,863,258
Net New Investment	$-30,387
Investment Gains/(Losses)	$1,727,662
Ending Market Value	$86,560,533

Performance vs CAI Intermediate Fixed Income Mut Funds (Net)

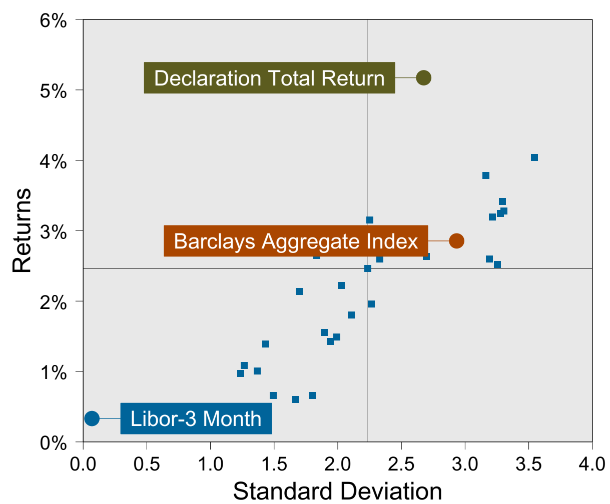


		Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4 Years
10th Percentile		2.71	6.17	3.96	4.43	3.41
25th Percentile		2.25	4.66	3.03	3.58	3.08
Median		1.42	3.48	2.33	2.67	2.46
75th Percentile		0.98	2.39	1.77	1.90	1.41
90th Percentile		0.67	1.38	1.10	1.36	0.66
Declaration Total Return	● A	2.04	2.60	3.11	4.30	5.17
Barclays Aggregate Index	■ B	2.21	6.00	3.91	4.06	2.85
Libor-3 Month	▲	0.16	0.49	0.37	0.33	0.33

Relative Return vs Libor-3 Month



CAI Intermediate Fixed Income Mut Funds (Net)
Annualized Four Year Risk vs Return



J.P. Morgan MBS
Period Ended June 30, 2016

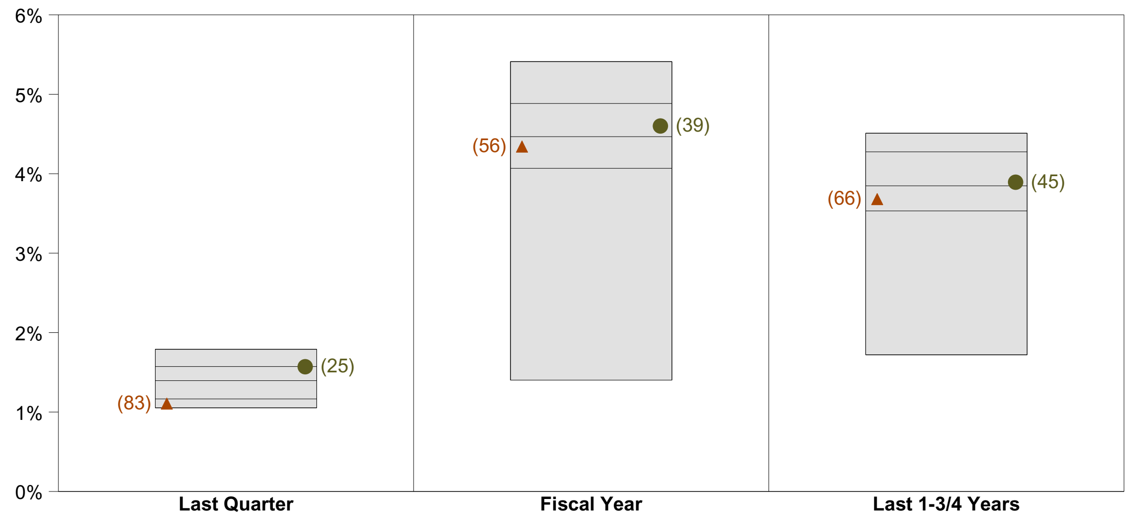
Investment Philosophy
JP Morgan seeks to outperform the benchmark over longer horizons regardless of the market environment.

Quarterly Summary and Highlights
- J.P. Morgan MBS's portfolio posted a 1.57% return for the quarter placing it in the 25 percentile of the CAI Mortgage Backed Fixed Income group for the quarter and in the 39 percentile for the last year.
- J.P. Morgan MBS's portfolio outperformed the Barclays Mortgage by 0.46% for the quarter and outperformed the Barclays Mortgage for the year by 0.26%.

Quarterly Asset Growth

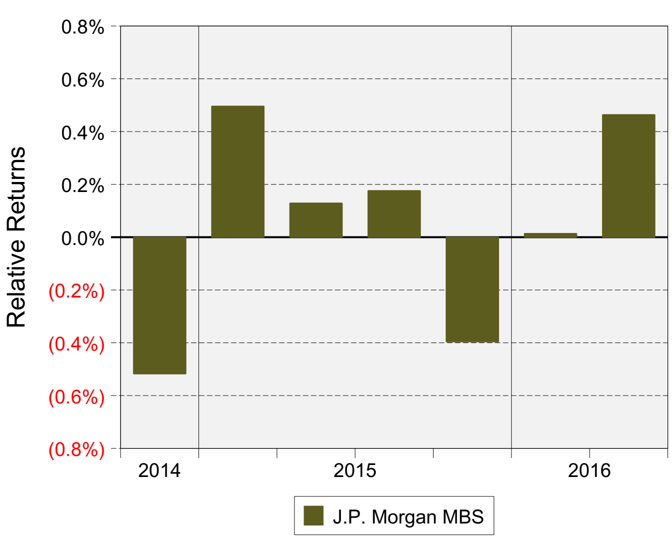
Beginning Market Value	$112,199,186
Net New Investment	$-61,067
Investment Gains/(Losses)	$1,761,133
Ending Market Value	$113,899,252

Performance vs CAI Mortgage Backed Fixed Income (Gross)

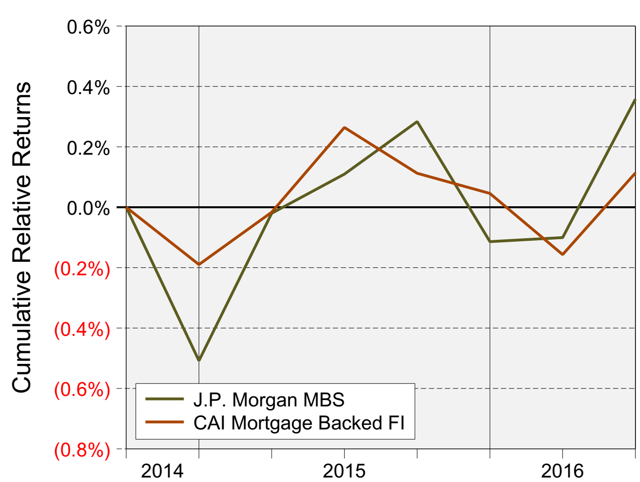


	Last Quarter	Fiscal Year	Last 1-3/4 Years
10th Percentile	1.79	5.41	4.51
25th Percentile	1.57	4.88	4.28
Median	1.39	4.47	3.85
75th Percentile	1.16	4.07	3.53
90th Percentile	1.05	1.40	1.72
J.P. Morgan MBS ●	1.57	4.60	3.89
Barclays Mortgage ▲	1.11	4.34	3.68

Relative Return vs Barclays Mortgage



Cumulative Returns vs Barclays Mortgage



PIMCO DiSCO II
Period Ended June 30, 2016

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.

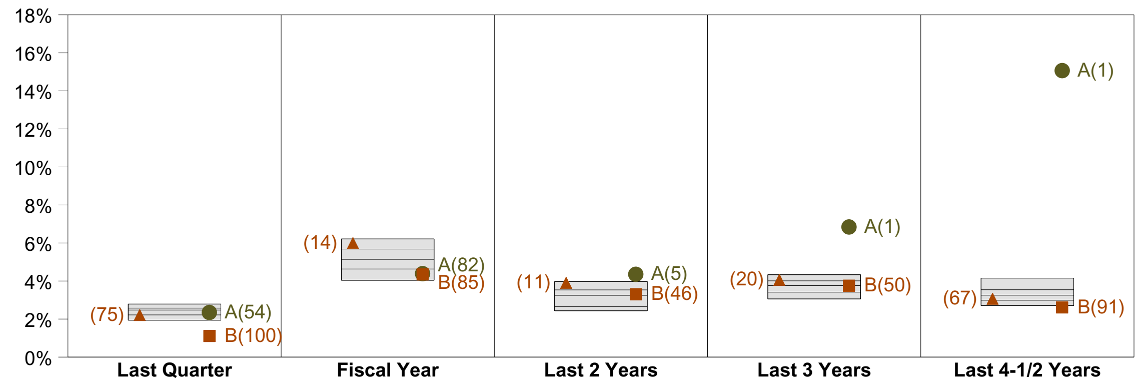
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 2.34% return for the quarter placing it in the 54 percentile of the CAI Core Bond Mutual Funds group for the quarter and in the 82 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Barclays Aggregate Index by 0.13% for the quarter and underperformed the Barclays Aggregate Index for the year by 1.61%.

Quarterly Asset Growth

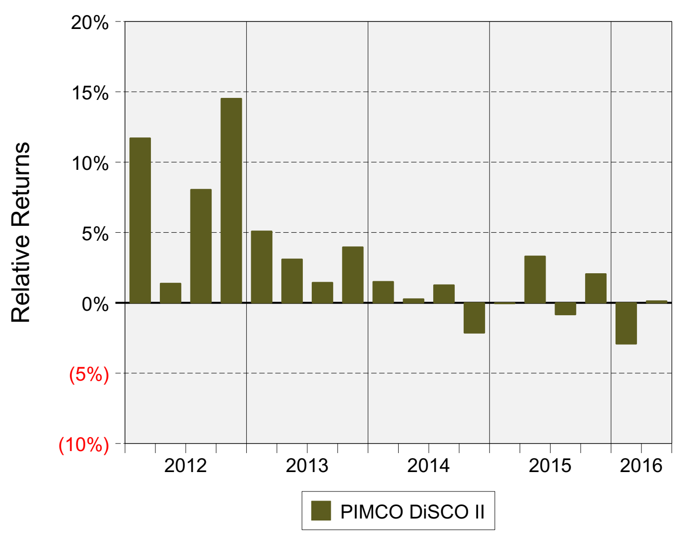
Beginning Market Value	$89,612,490
Net New Investment	$0
Investment Gains/(Losses)	$2,100,909
Ending Market Value	$91,713,399

Performance vs CAI Core Bond Mutual Funds (Net)

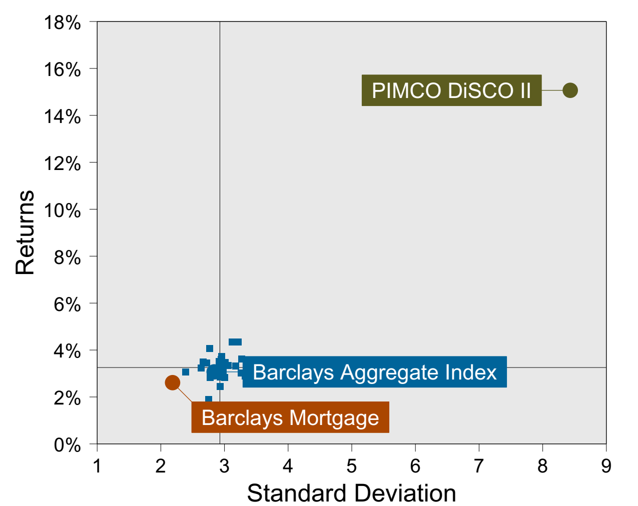


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile	2.79	6.21	3.97	4.33	4.15
25th Percentile	2.58	5.68	3.53	4.01	3.54
Median	2.47	5.14	3.25	3.76	3.25
75th Percentile	2.22	4.63	2.65	3.41	2.99
90th Percentile	1.94	4.04	2.44	3.06	2.71
PIMCO DiSCO II ● A	2.34	4.39	4.35	6.84	15.07
Barclays Mortgage ■ B	1.11	4.34	3.31	3.76	2.61
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.06	3.07

Relative Return vs Barclays Aggregate Index



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



PIMCO MBS
Period Ended June 30, 2016

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.

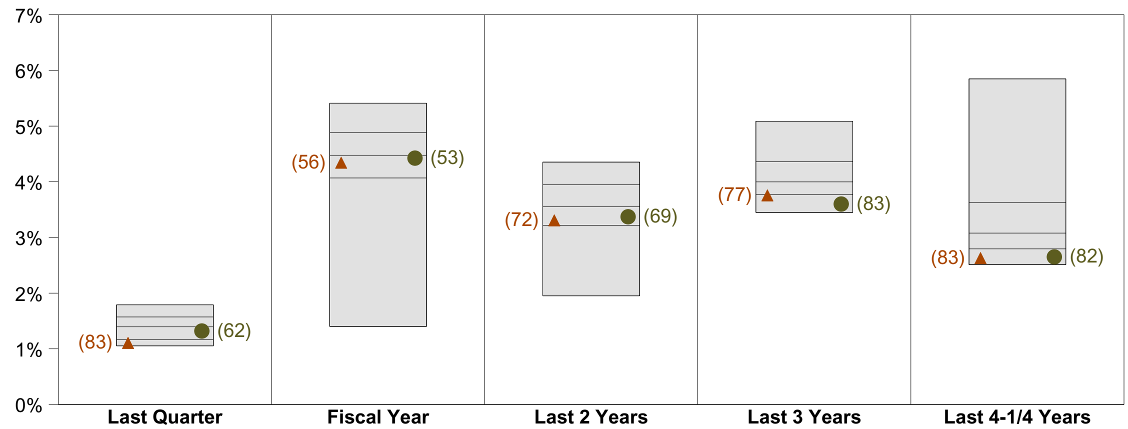
Quarterly Summary and Highlights

- PIMCO MBS's portfolio posted a 1.32% return for the quarter placing it in the 62 percentile of the CAI Mortgage Backed Fixed Income group for the quarter and in the 53 percentile for the last year.
- PIMCO MBS's portfolio outperformed the Barclays Mortgage by 0.21% for the quarter and outperformed the Barclays Mortgage for the year by 0.08%.

Quarterly Asset Growth

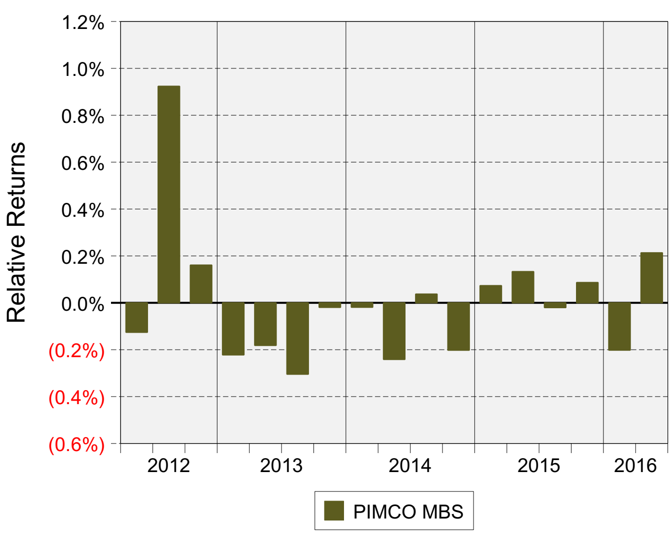
Beginning Market Value	$165,914,206
Net New Investment	$14,930,172
Investment Gains/(Losses)	$2,342,867
Ending Market Value	$183,187,244

Performance vs CAI Mortgage Backed Fixed Income (Gross)

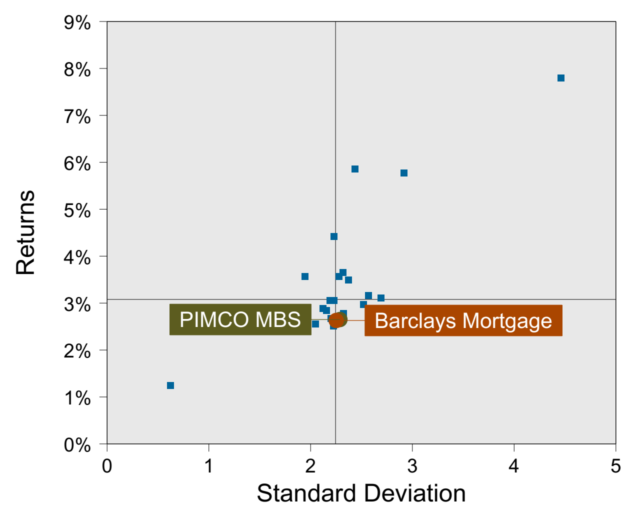


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-1/4 Years
10th Percentile	1.79	5.41	4.35	5.09	5.85
25th Percentile	1.57	4.88	3.95	4.36	3.63
Median	1.39	4.47	3.55	4.00	3.08
75th Percentile	1.16	4.07	3.22	3.77	2.80
90th Percentile	1.05	1.40	1.95	3.45	2.51
PIMCO MBS ●	1.32	4.42	3.37	3.60	2.65
Barclays Mortgage ▲	1.11	4.34	3.31	3.76	2.63

Relative Return vs Barclays Mortgage



CAI Mortgage Backed Fixed Income (Gross) Annualized Four and One-Quarter Year Risk vs Return



PIMCO Unconstrained
Period Ended June 30, 2016

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.**

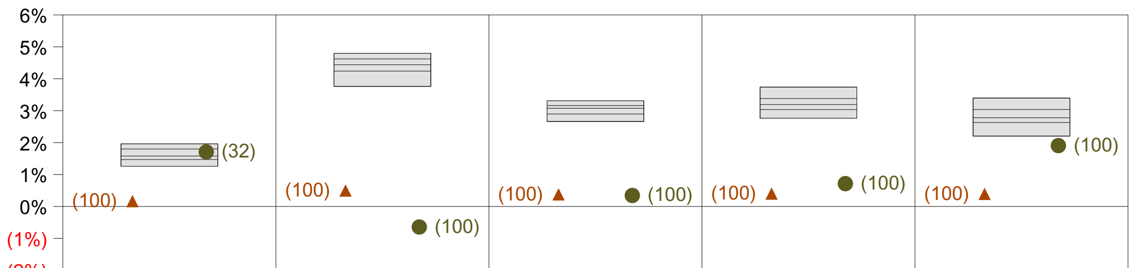
Quarterly Summary and Highlights

- PIMCO Unconstrained's portfolio posted a 1.71% return for the quarter placing it in the 32 percentile of the CAI Intermediate Fixed Income group for the quarter and in the 100 percentile for the last year.
- PIMCO Unconstrained's portfolio outperformed the Blended Benchmark* by 1.55% for the quarter and underperformed the Blended Benchmark* for the year by 1.14%.

Quarterly Asset Growth

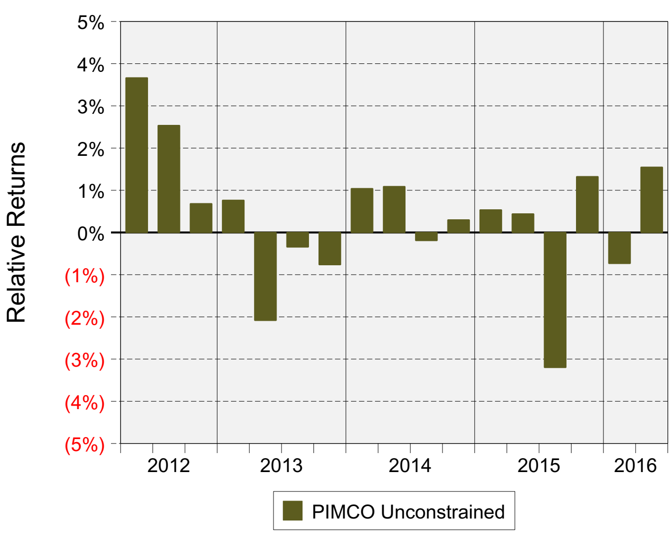
Beginning Market Value	$60,712,217
Net New Investment	$-73,738
Investment Gains/(Losses)	$1,037,682
Ending Market Value	$61,676,161

Performance vs CAI Intermediate Fixed Income (Gross)

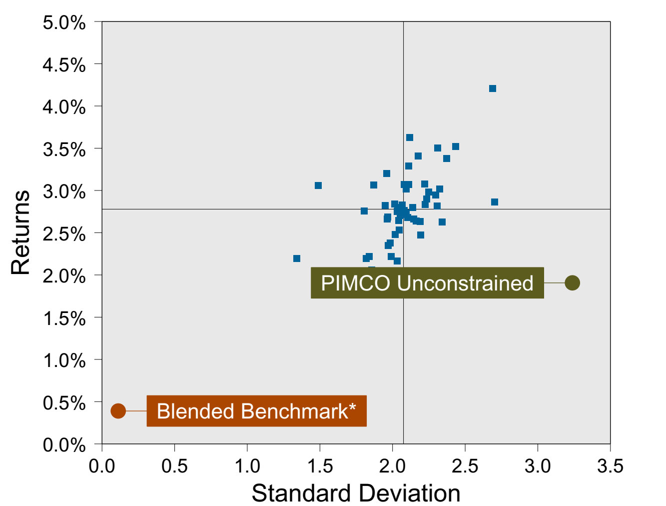


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-1/4 Years
10th Percentile	1.96	4.80	3.31	3.74	3.40
25th Percentile	1.80	4.62	3.16	3.38	3.04
Median	1.58	4.44	3.07	3.19	2.78
75th Percentile	1.47	4.24	2.90	3.04	2.63
90th Percentile	1.26	3.76	2.66	2.76	2.20
PIMCO Unconstrained ●	1.71	(0.64)	0.34	0.71	1.91
Blended Benchmark* ▲	0.16	0.49	0.37	0.40	0.39

Relative Return vs Blended Benchmark*



CAI Intermediate Fixed Income (Gross)
Annualized Four and One-Quarter Year Risk vs Return



SSgA Long US Treas Index
Period Ended June 30, 2016

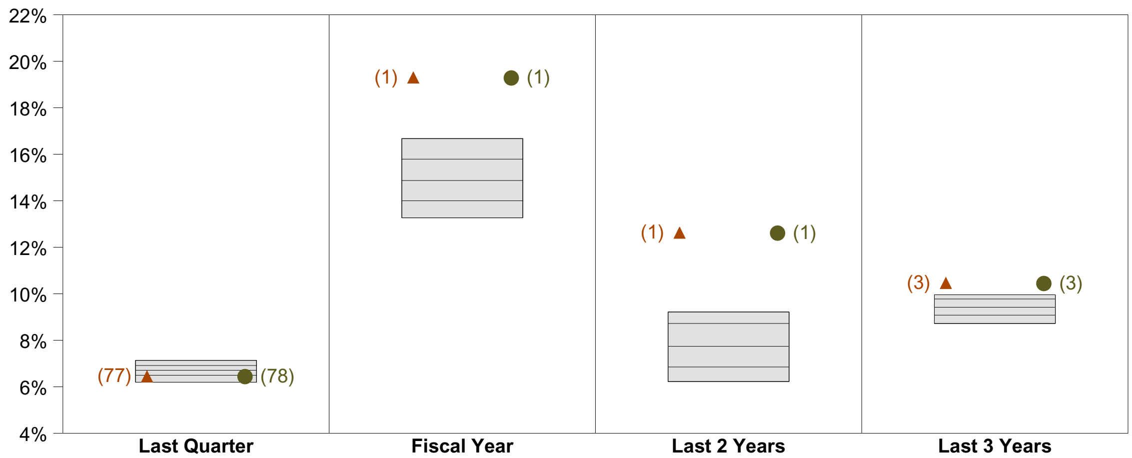
Investment Philosophy
The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Long Treasury Bond Index over the long term.

Quarterly Summary and Highlights
- SSgA Long US Treas Index's portfolio posted a 6.44% return for the quarter placing it in the 78 percentile of the CAI Extended Maturity Fixed Income group for the quarter and in the 1 percentile for the last year.
- SSgA Long US Treas Index's portfolio underperformed the Barclays Long Treas by 0.01% for the quarter and underperformed the Barclays Long Treas for the year by 0.02%.

Quarterly Asset Growth

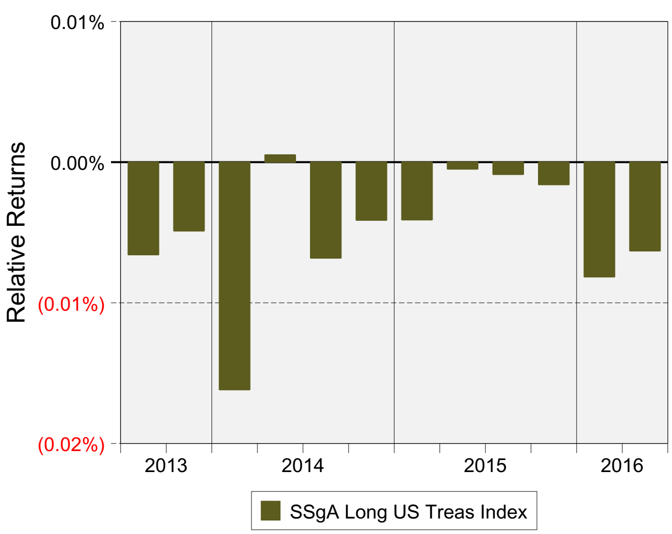
Beginning Market Value	$54,929,204
Net New Investment	$7,993,706
Investment Gains/(Losses)	$4,118,611
Ending Market Value	$67,041,520

Performance vs CAI Extended Maturity Fixed Income (Gross)

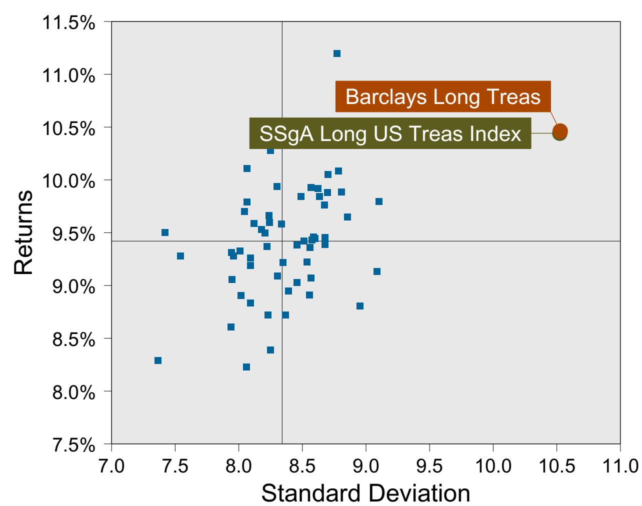


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years
10th Percentile	7.14	16.67	9.22	9.96
25th Percentile	6.91	15.79	8.72	9.78
Median	6.71	14.87	7.74	9.42
75th Percentile	6.50	14.00	6.85	9.08
90th Percentile	6.20	13.27	6.23	8.72
SSgA Long US Treas Index ●	6.44	19.28	12.61	10.44
Barclays Long Treas ▲	6.44	19.30	12.63	10.46

Relative Return vs Barclays Long Treas



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



Goldman Sachs 2006 Offshore
Period Ended June 30, 2016

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.

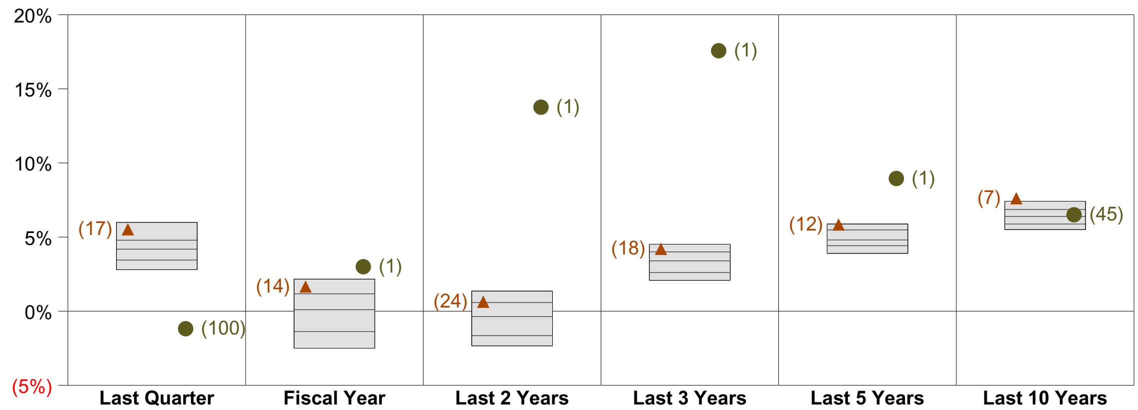
Quarterly Summary and Highlights

- Goldman Sachs's portfolio posted a (1.18)% return for the quarter placing it in the 100 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 underperformed the Barclays US HY Corp 2% Cp by 6.70% for the quarter and outperformed the Barclays US HY Corp 2% Cp for the year by 1.35%.

Quarterly Asset Growth

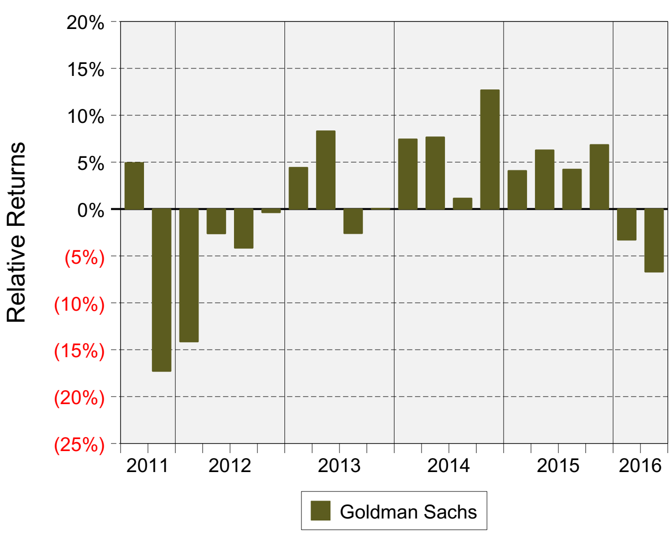
Beginning Market Value	$1,176,294
Net New Investment	$-63,000
Investment Gains/(Losses)	$-13,294
Ending Market Value	$1,100,000

Performance vs CAI High Yield Mutual Funds (Net)

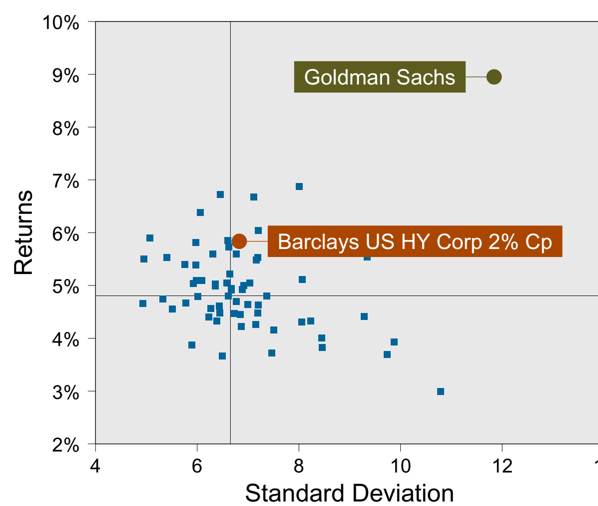


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	5.99	2.16	1.36	4.52	5.88	7.42
25th Percentile	4.79	1.17	0.58	4.00	5.48	6.86
Median	4.19	0.10	(0.36)	3.40	4.81	6.39
75th Percentile	3.45	(1.37)	(1.65)	2.61	4.42	5.88
90th Percentile	2.80	(2.50)	(2.34)	2.08	3.90	5.50
Goldman Sachs ●	(1.18)	3.00	13.76	17.57	8.95	6.50
Barclays US HY Corp 2% Cp ▲	5.52	1.65	0.63	4.20	5.84	7.61

Relative Returns vs Barclays US HY Corp 2% Cp



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



Goldman Sachs Offshore Fund V
Period Ended June 30, 2016

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.

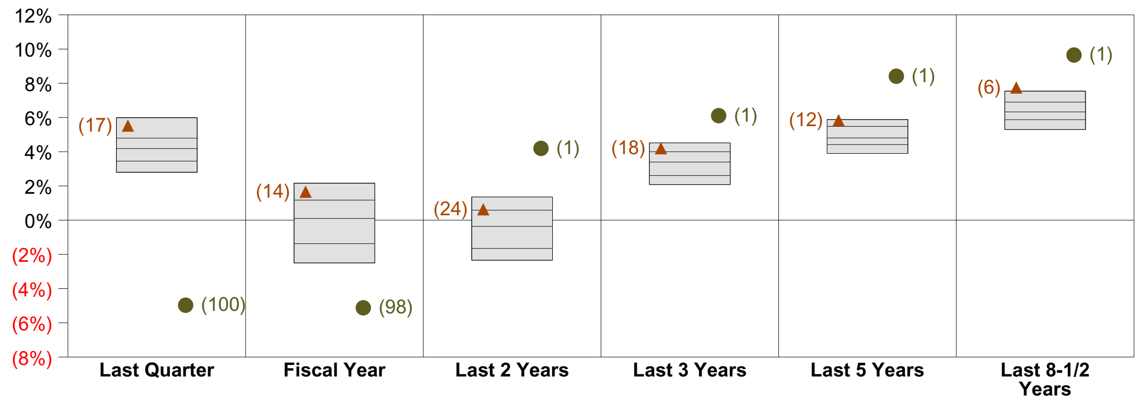
Quarterly Summary and Highlights

- Goldman Sachs Offshore V's portfolio posted a (4.97)% return for the quarter placing it in the 100 percentile of the CAI High Yield Mutual Funds group for the quarter and in the 98 percentile for the last year.
- Goldman Sachs Offshore V's portfolio underperformed the Barclays US HY Corp 2% Cp by 10.49% for the quarter and underperformed the Barclays US HY Corp 2% Cp for the year by 6.78%.

Quarterly Asset Growth

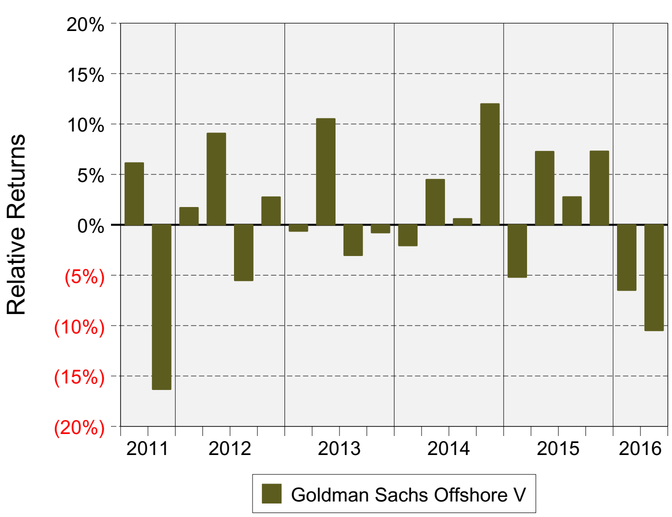
Beginning Market Value	$2,721,258
Net New Investment	$0
Investment Gains/(Losses)	$-135,258
Ending Market Value	$2,586,000

Performance vs CAI High Yield Mutual Funds (Net)

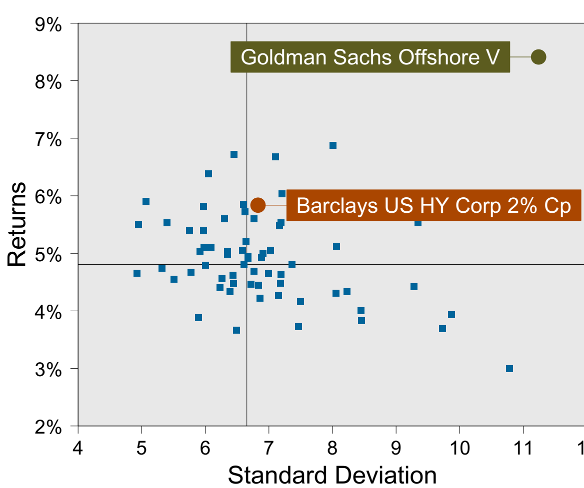


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-1/2 Years
10th Percentile	5.99	2.16	1.36	4.52	5.88	7.54
25th Percentile	4.79	1.17	0.58	4.00	5.48	6.90
Median	4.19	0.10	(0.36)	3.40	4.81	6.33
75th Percentile	3.45	(1.37)	(1.65)	2.61	4.42	5.87
90th Percentile	2.80	(2.50)	(2.34)	2.08	3.90	5.30
Goldman Sachs Offshore V ●	(4.97)	(5.12)	4.20	6.11	8.41	9.65
Barclays US HY Corp 2% Cp ▲	5.52	1.65	0.63	4.20	5.84	7.75

Relative Returns vs Barclays US HY Corp 2% Cp



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



Loomis Sayles
Period Ended June 30, 2016

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.

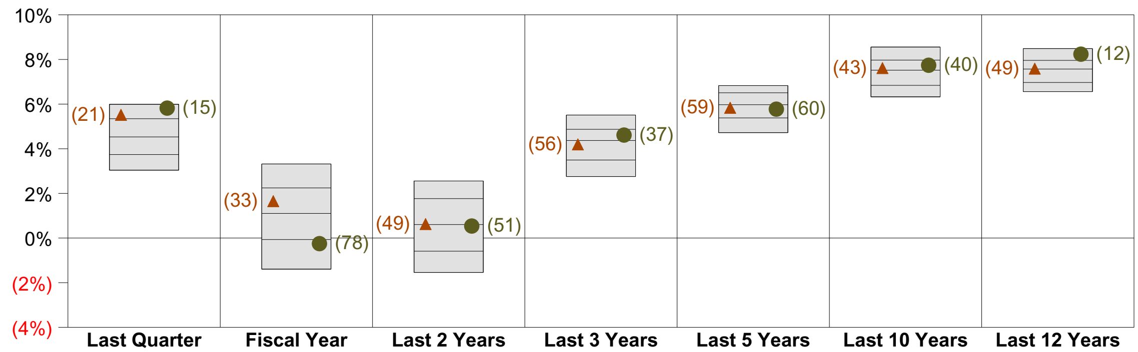
Quarterly Summary and Highlights

- Loomis Sayles's portfolio posted a 5.82% return for the quarter placing it in the 15 percentile of the CAI High Yield Fixed Income group for the quarter and in the 78 percentile for the last year.
- Loomis Sayles's portfolio outperformed the Barclays US HY Corp 2% Cp by 0.30% for the quarter and underperformed the Barclays US HY Corp 2% Cp for the year by 1.90%.

Quarterly Asset Growth

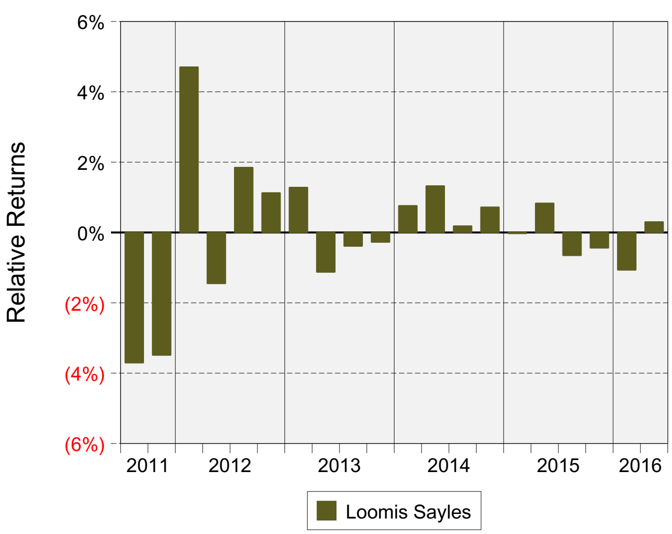
Beginning Market Value	$195,154,558
Net New Investment	$-20,243,943
Investment Gains/(Losses)	$10,929,326
Ending Market Value	$185,839,941

Performance vs CAI High Yield Fixed Income (Gross)

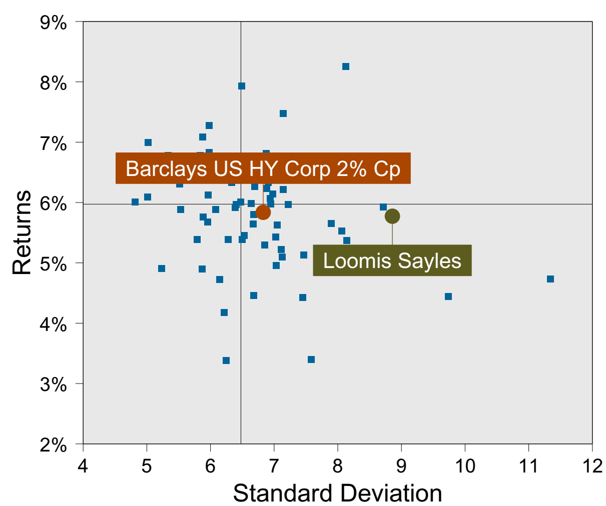


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 12 Years
10th Percentile	5.99	3.32	2.56	5.51	6.83	8.56	8.49
25th Percentile	5.34	2.25	1.77	4.87	6.51	7.97	7.96
Median	4.53	1.10	0.60	4.37	5.97	7.52	7.57
75th Percentile	3.74	(0.07)	(0.59)	3.49	5.38	6.84	6.97
90th Percentile	3.04	(1.39)	(1.54)	2.76	4.72	6.33	6.56
Loomis Sayles ●	5.82	(0.25)	0.54	4.61	5.77	7.74	8.24
Barclays US HY Corp 2% Cp ▲	5.52	1.65	0.63	4.20	5.84	7.61	7.59

Relative Returns vs Barclays US HY Corp 2% Cp



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



PIMCO Bravo II Fund
Period Ended June 30, 2016

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.

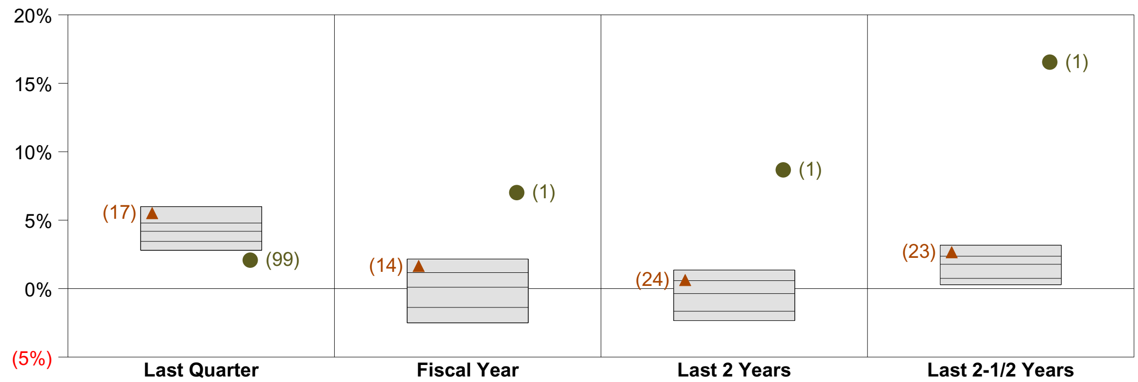
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 2.08% return for the quarter placing it in the 99 percentile of the CAI High Yield Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO Bravo II Fund's portfolio underperformed the Barclays US HY Corp 2% Cp by 3.44% for the quarter and outperformed the Barclays US HY Corp 2% Cp for the year by 5.36%.

Quarterly Asset Growth

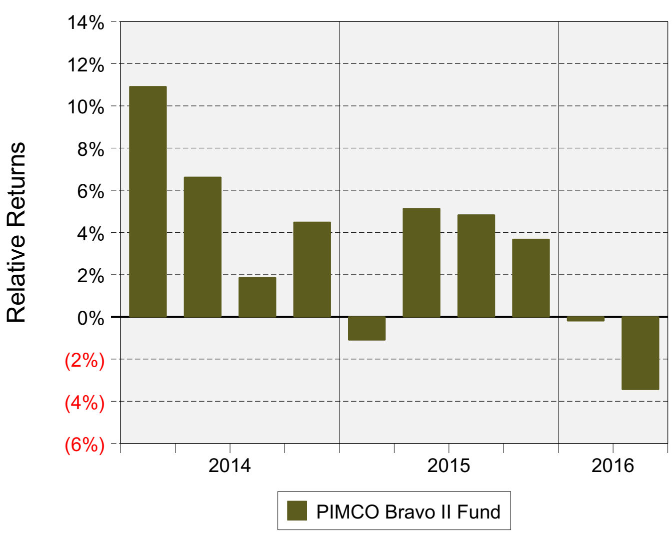
Beginning Market Value	$46,122,603
Net New Investment	$0
Investment Gains/(Losses)	$959,697
Ending Market Value	$47,082,300

Performance vs CAI High Yield Mutual Funds (Net)

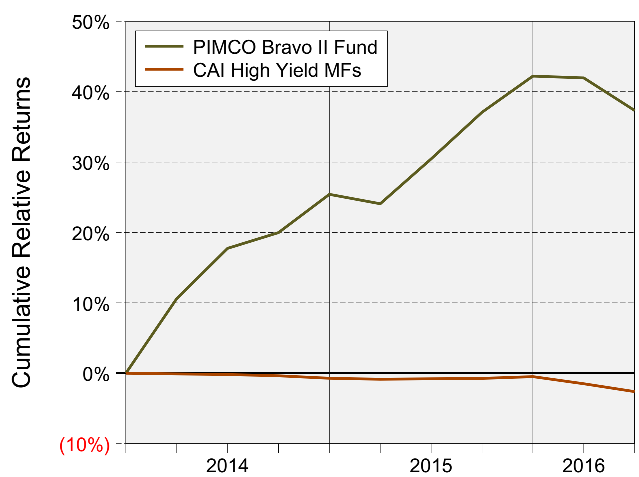


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	5.99	2.16	1.36	3.18
25th Percentile	4.79	1.17	0.58	2.37
Median	4.19	0.10	(0.36)	1.78
75th Percentile	3.45	(1.37)	(1.65)	0.75
90th Percentile	2.80	(2.50)	(2.34)	0.29
PIMCO Bravo II Fund ●	2.08	7.02	8.67	16.55
Barclays US HY Corp 2% Cp ▲	5.52	1.65	0.63	2.66

Relative Returns vs Barclays US HY Corp 2% Cp



Cumulative Returns vs Barclays US HY Corp 2% Cp



Brandywine Asset Management
Period Ended June 30, 2016

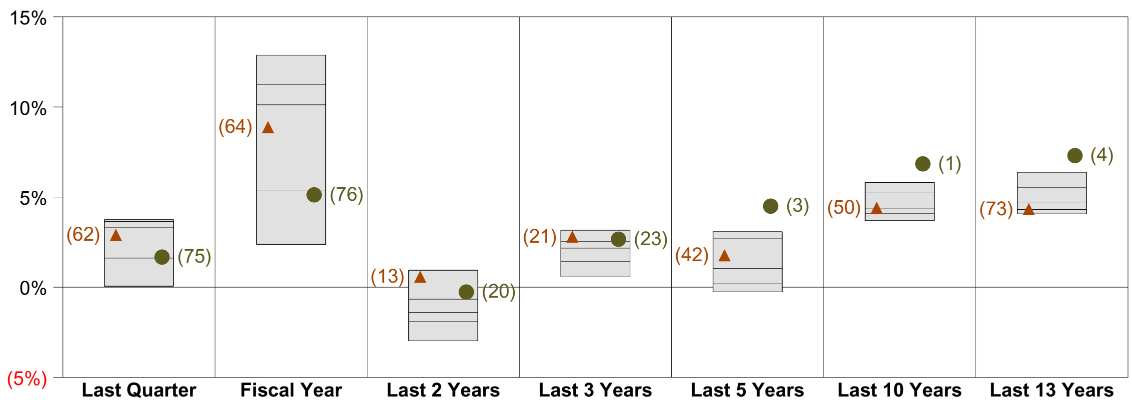
Investment Philosophy
Brandywine engages in a disciplined, active, value-driven, strategic approach. Their investment strategy concentrates on top-down analysis of macro-economic conditions in order to determine where the most attractive valuations exist. Specifically, they invest in bonds with the highest 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 1.67% return for the quarter placing it in the 75 percentile of the CAI Non US Fixed Income (Unhedged) group for the quarter and in the 76 percentile for the last year.
- Brandywine's portfolio underperformed the Barclays Global Aggregate Index by 1.22% for the quarter and underperformed the Barclays Global Aggregate Index for the year by 3.75%.

Quarterly Asset Growth

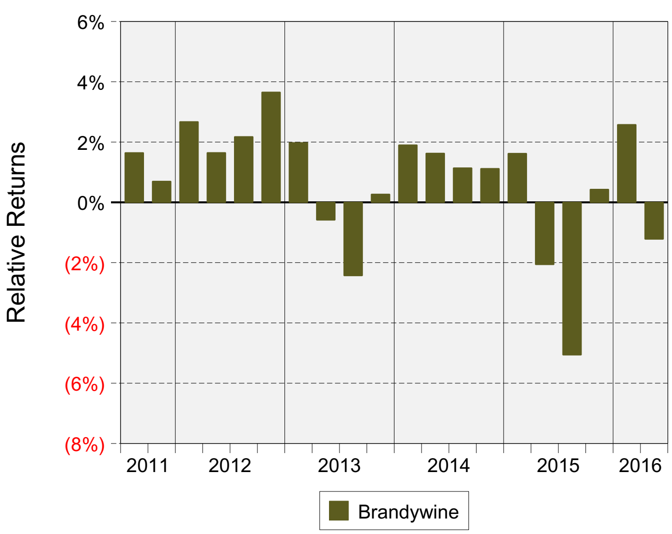
Beginning Market Value	$131,973,448
Net New Investment	$12,873,506
Investment Gains/(Losses)	$2,497,612
Ending Market Value	$147,344,567

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

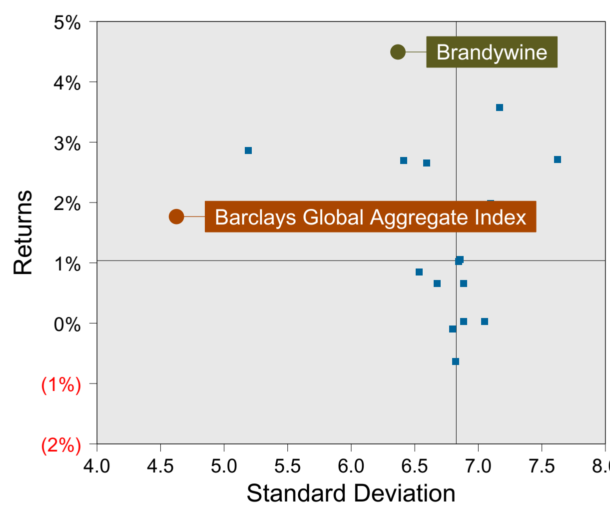


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 13 Years
10th Percentile	3.74	12.87	0.94	3.17	3.08	5.81	6.38
25th Percentile	3.64	11.25	(0.66)	2.53	2.69	5.28	5.54
Median	3.30	10.12	(1.40)	2.17	1.04	4.39	4.73
75th Percentile	1.62	5.39	(1.91)	1.42	0.19	4.08	4.31
90th Percentile	0.06	2.38	(2.97)	0.57	(0.26)	3.69	4.07
Brandywine ●	1.67	5.12	(0.27)	2.66	4.50	6.84	7.30
Barclays Global Aggregate Index ▲	2.89	8.87	0.57	2.80	1.77	4.40	4.32

Relative Returns vs Barclays Global Aggregate Index



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



UBS Global Asset Management
Period Ended June 30, 2016

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 and the Barclays Global Aggregate ex-US Index thereafter.**

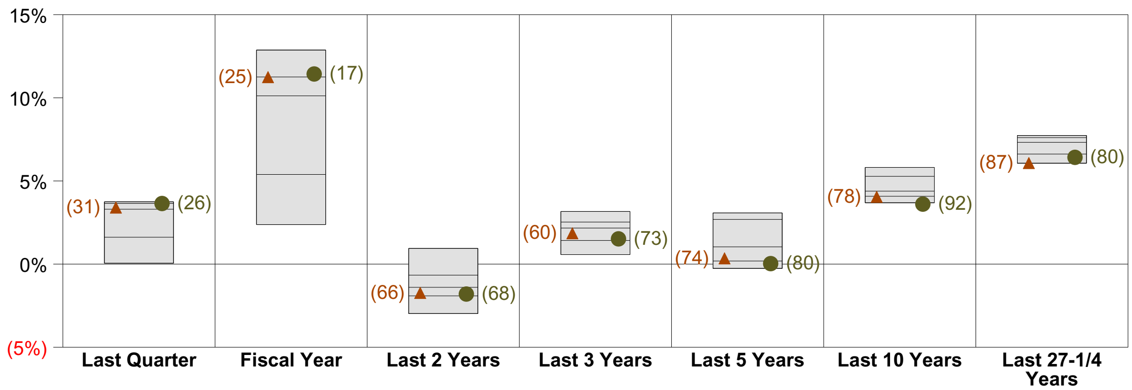
Quarterly Summary and Highlights

- UBS Global Asset Management's portfolio posted a 3.64% return for the quarter placing it in the 26 percentile of the CAI Non US Fixed Income (Unhedged) group for the quarter and in the 17 percentile for the last year.
- UBS Global Asset Management's portfolio outperformed the Blended Benchmark* by 0.24% for the quarter and outperformed the Blended Benchmark* for the year by 0.19%.

Quarterly Asset Growth

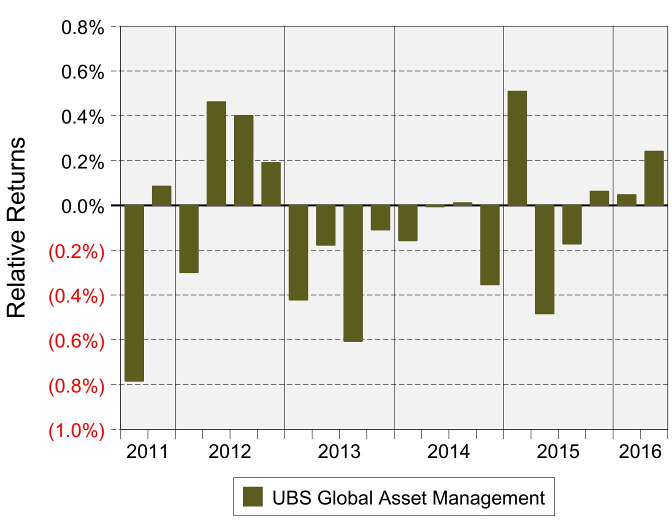
Beginning Market Value	$106,566,651
Net New Investment	$-80,279
Investment Gains/(Losses)	$3,881,301
Ending Market Value	$110,367,673

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

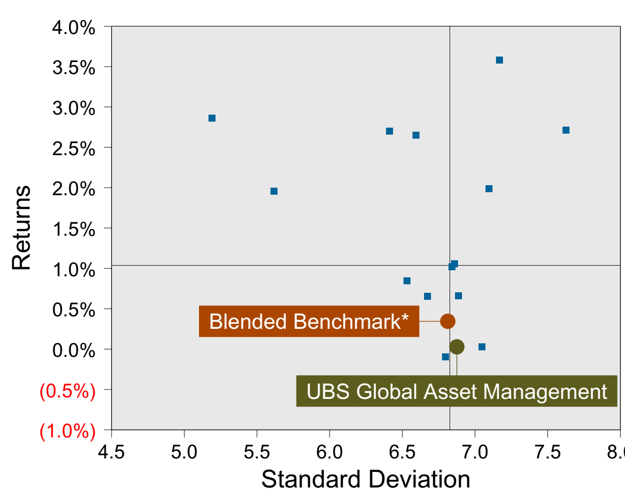


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 27-1/4 Years
10th Percentile	3.74	12.87	0.94	3.17	3.08	5.81	7.73
25th Percentile	3.64	11.25	(0.66)	2.53	2.69	5.28	7.61
Median	3.30	10.12	(1.40)	2.17	1.04	4.39	7.32
75th Percentile	1.62	5.39	(1.91)	1.42	0.19	4.08	6.62
90th Percentile	0.06	2.38	(2.97)	0.57	(0.26)	3.69	6.07
UBS Global Asset Management ●	3.64	11.43	(1.80)	1.52	0.03	3.61	6.42
Blended Benchmark* ▲	3.40	11.24	(1.73)	1.85	0.34	4.04	6.08

Relative Return vs Blended Benchmark*



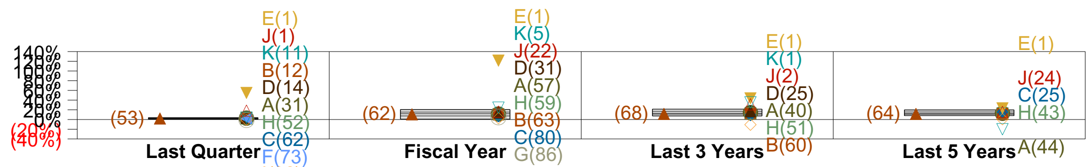
CAI Non US Fixed Income (Unhedged) (Gross)
Annualized Five Year Risk vs Return



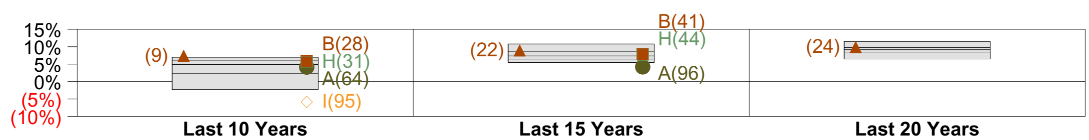
North Dakota State Investment Board Pension Funds
Performance vs CAI Total Domestic Real Estate Database
Periods Ended June 30, 2016

Return Ranking

The chart below illustrates fund rankings over various periods versus the CAI Total Domestic 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 Domestic 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.



		Last Quarter	Fiscal Year	Last 3 Years	Last 5 Years
10th Percentile		3.92	20.51	21.38	19.75
25th Percentile		3.05	15.32	17.08	15.54
Median		2.17	11.86	13.09	12.23
75th Percentile		1.54	7.35	10.97	10.99
90th Percentile		0.53	0.75	7.44	7.99
Total Real Estate	● A	2.87	11.26	14.18	12.83
Invesco Core Real Estate	■ B	3.53	10.59	12.32	11.66
Invesco Fund II	◆ C	1.81	6.65	9.06	15.56
Invesco Fund III	▲ D	3.42	14.25	17.06	-
Invesco Asia RE Feeder	▼ E	54.82	121.40	43.66	23.12
Invesco Asia RE Fund III	◄ F	1.59	-	-	-
Invesco Value Added Fd IV	○ G	(0.86)	4.66	-	-
JP Morgan Investment	□ H	2.05	10.95	12.87	12.89
JP Morgan Alternative Fd	◇ I	(0.54)	2.80	(10.60)	0.69
JP Morgan Greater China Fund	△ J	18.19	16.24	31.24	15.64
JPM GreaterEur Opp Prop Fd	▽ K	3.77	24.44	35.37	(20.00)
NCREIF Total Index	▲	2.03	10.64	11.61	11.51



		Last 10 Years	Last 15 Years	Last 20 Years
10th Percentile		7.01	10.78	11.56
25th Percentile		6.13	8.69	9.76
Median		4.89	7.36	9.16
75th Percentile		2.26	6.46	8.47
90th Percentile		(2.33)	5.50	6.47
Total Real Estate	● A	4.16	4.21	-
Invesco Core Real Estate	■ B	5.91	7.92	-
Invesco Fund II	◆ C	-	-	-
Invesco Fund III	▲ D	-	-	-
Invesco Asia RE Feeder	▼ E	-	-	-
Invesco Asia RE Fund III	◄ F	-	-	-
Invesco Value Added Fd IV	○ G	-	-	-
JP Morgan Investment	□ H	5.62	7.72	-
JP Morgan Alternative Fd	◇ I	(5.85)	-	-
JP Morgan Greater China Fund	△ J	-	-	-
JPM GreaterEur Opp Prop Fd	▽ K	-	-	-
NCREIF Total Index	▲	7.40	8.91	9.88

TIR Teredo
Period Ended June 30, 2016

Investment Philosophy

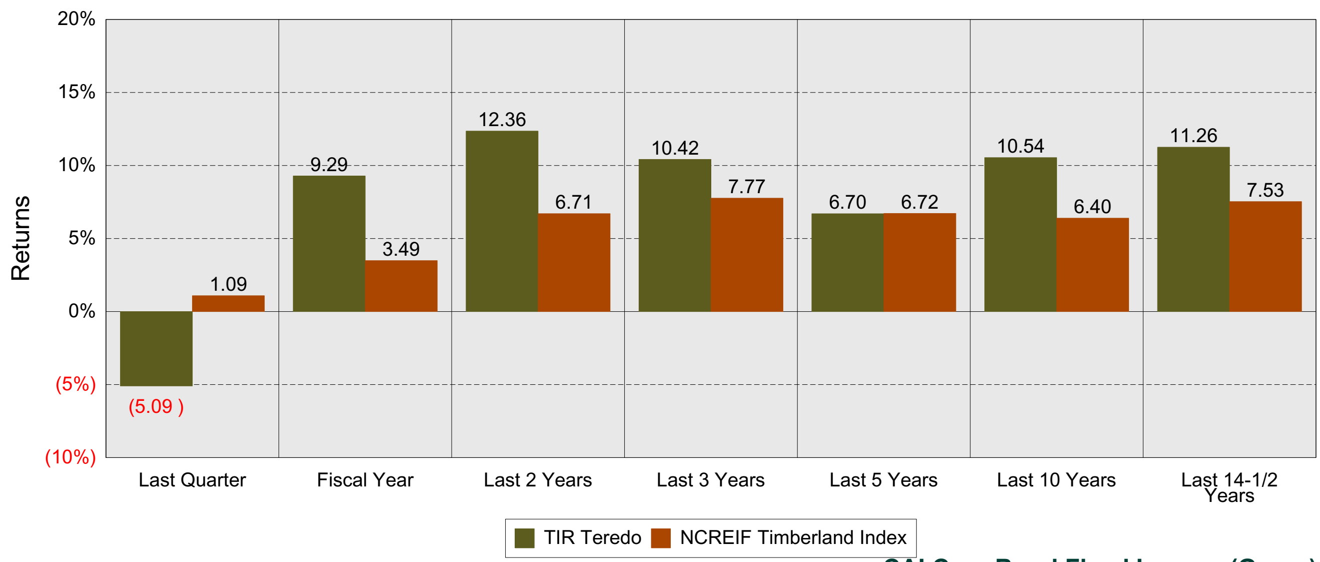
Teredo Timber LLC - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate 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

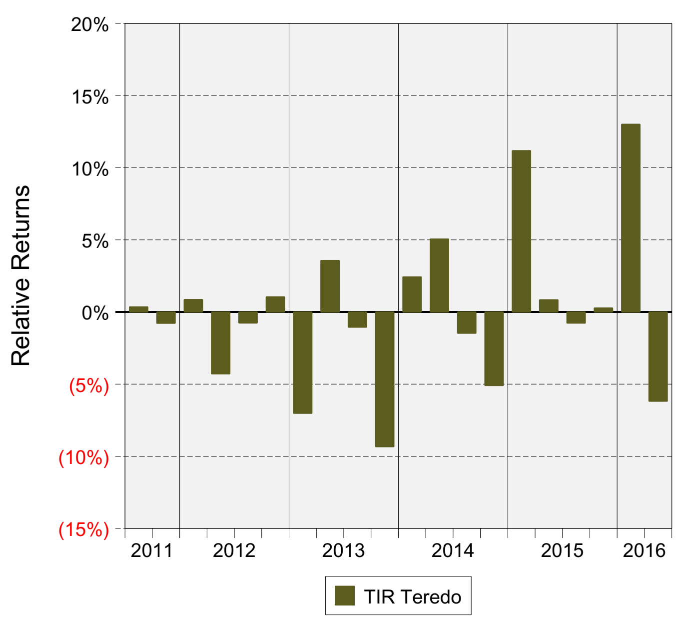
- TIR Teredo's portfolio posted a (5.09)% return for the quarter placing it in the 100 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 1 percentile for the last year.
- TIR Teredo's portfolio underperformed the NCREIF Timberland Index by 6.18% for the quarter and outperformed the NCREIF Timberland Index for the year by 5.80%.

Quarterly Asset Growth

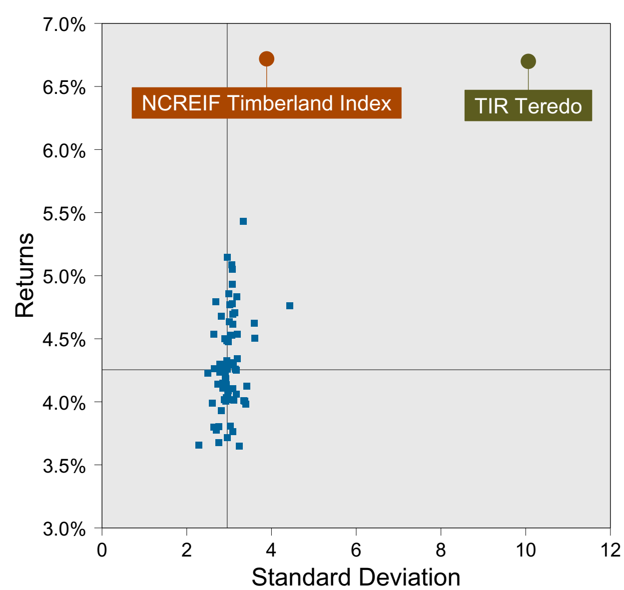
Beginning Market Value	$35,636,364
Net New Investment	$0
Investment Gains/(Losses)	$-1,815,586
Ending Market Value	$33,820,778



Relative Return vs NCREIF Timberland Index



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



TIR Springbank
Period Ended June 30, 2016

Investment Philosophy

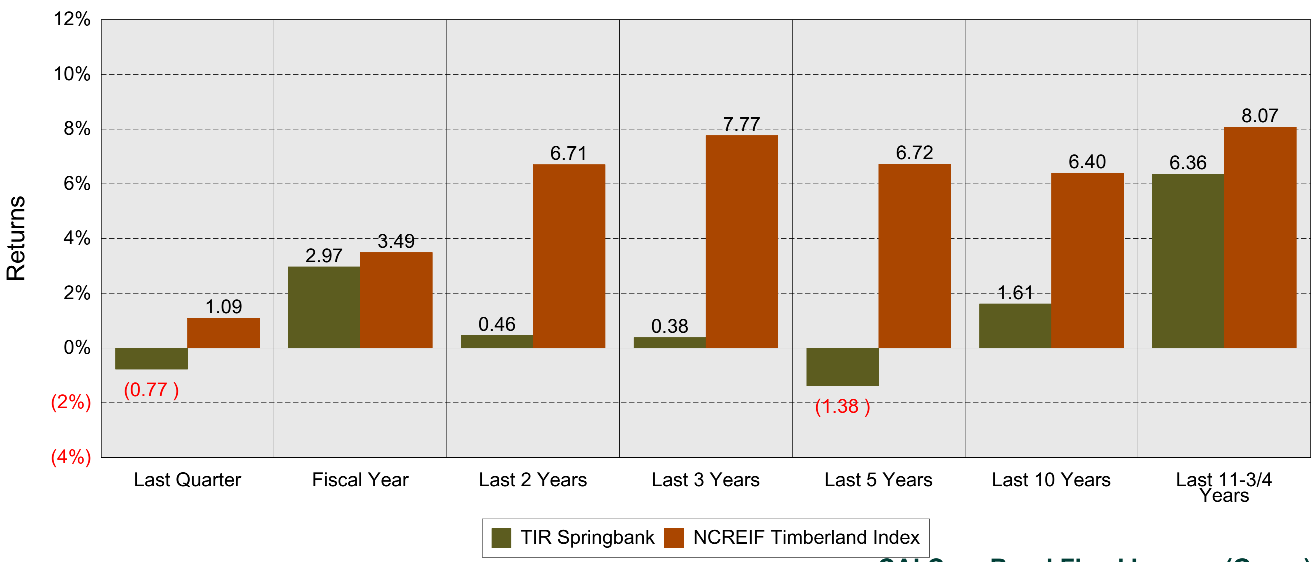
Springbank LLC - The investment objective of Springbank is to maximize long-term investment potential by means of the formation of a dedicated land management group, intensive timber management to increase timber production, the coordination of timber harvesting with land management activities and direct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

Quarterly Summary and Highlights

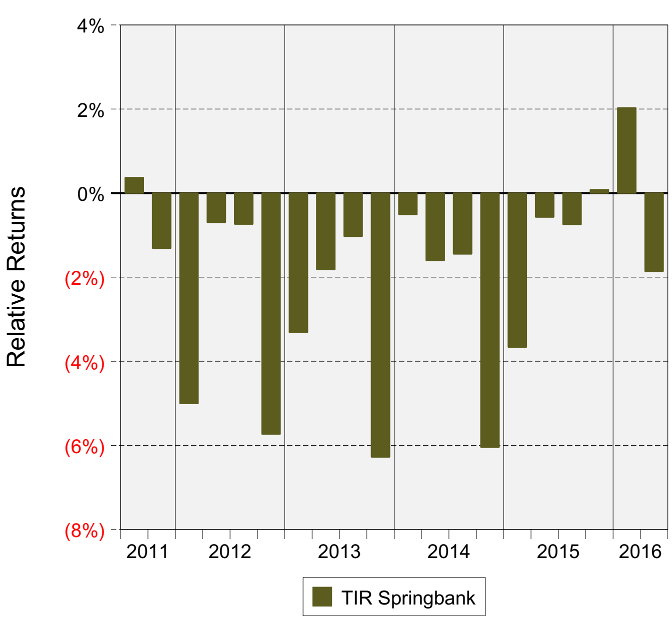
- TIR Springbank's portfolio posted a (0.77)% return for the quarter placing it in the 100 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 100 percentile for the last year.
- TIR Springbank's portfolio underperformed the NCREIF Timberland Index by 1.86% for the quarter and underperformed the NCREIF Timberland Index for the year by 0.52%.

Quarterly Asset Growth

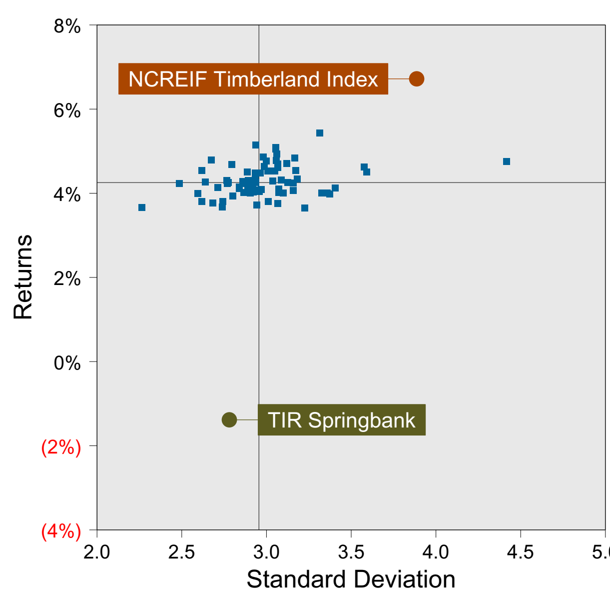
Beginning Market Value	$120,461,344
Net New Investment	$0
Investment Gains/(Losses)	$-932,971
Ending Market Value	$119,528,373



Relative Return vs NCREIF Timberland Index



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



JP Morgan Asian Infrastructure
Period Ended June 30, 2016

Investment Philosophy

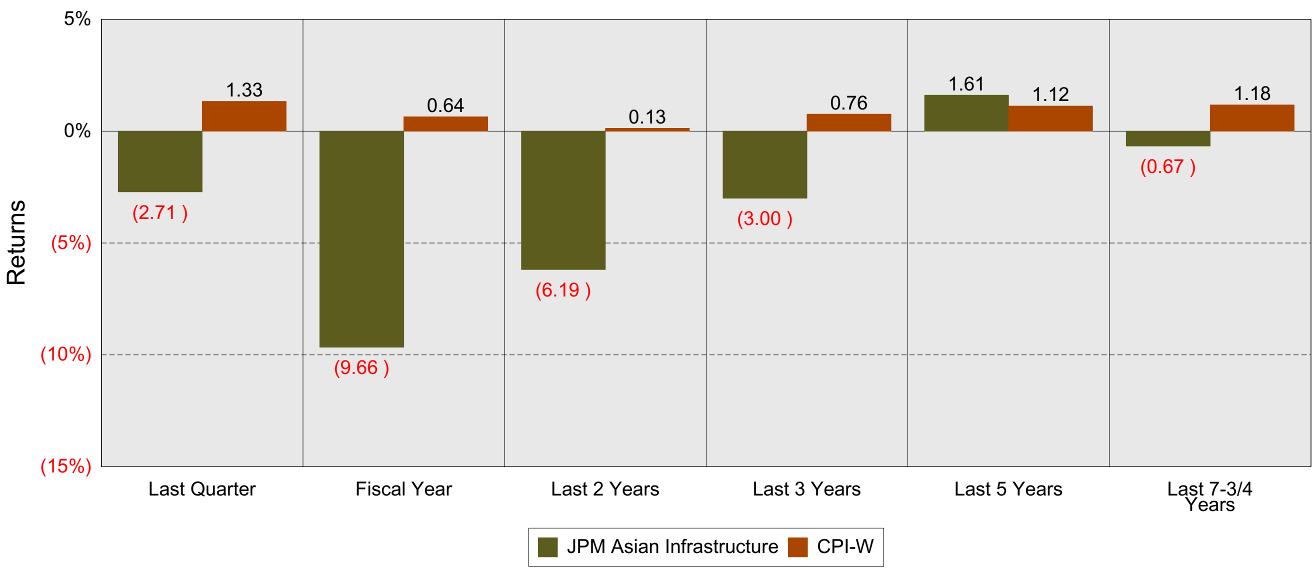
The JPMorgan Asian Infrastructure & Related Resources Opportunity ("AIRRO") Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional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

Quarterly Summary and Highlights

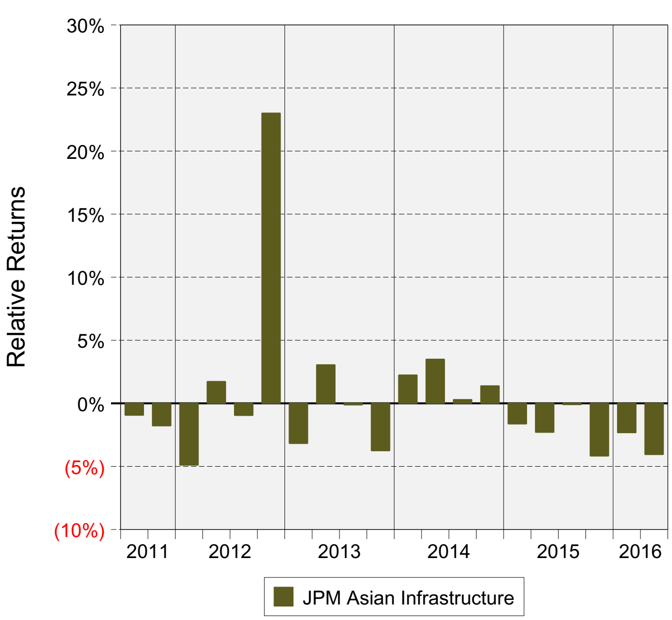
- JPM Asian Infrastructure's portfolio underperformed the CPI-W by 4.05% for the quarter and underperformed the CPI-W for the year by 10.30%.

Quarterly Asset Growth

Beginning Market Value	$28,668,764
Net New Investment	$152,517
Investment Gains/(Losses)	$-782,278
Ending Market Value	$28,039,002



Relative Return vs CPI-W



Annualized Five Year Risk vs Return

JPM Infrastructure Fund
Period Ended June 30, 2016

Investment Philosophy

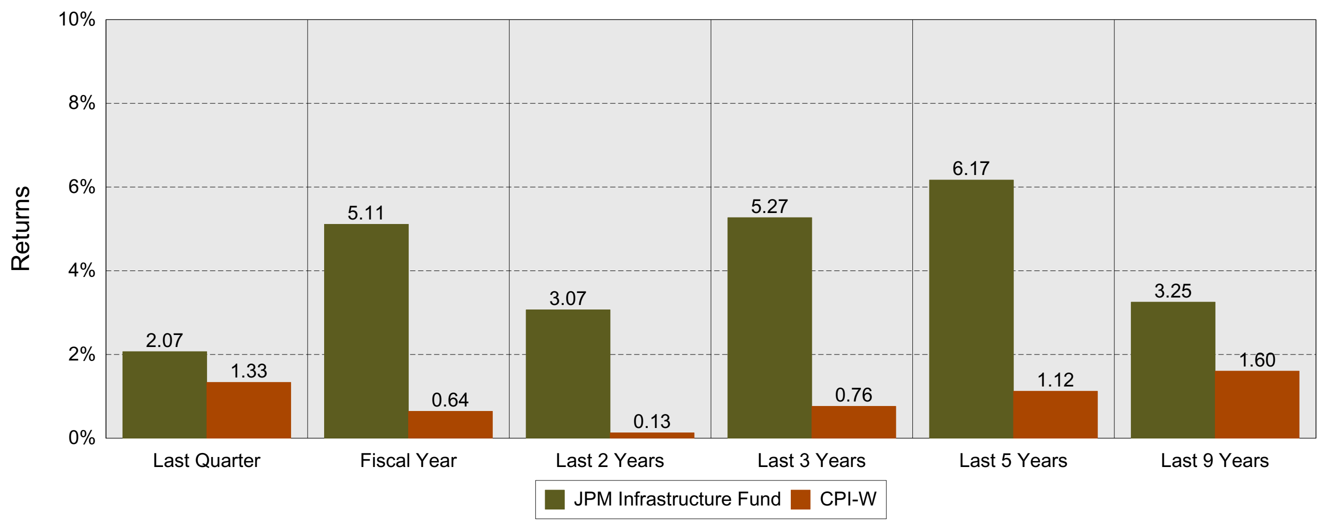
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas 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

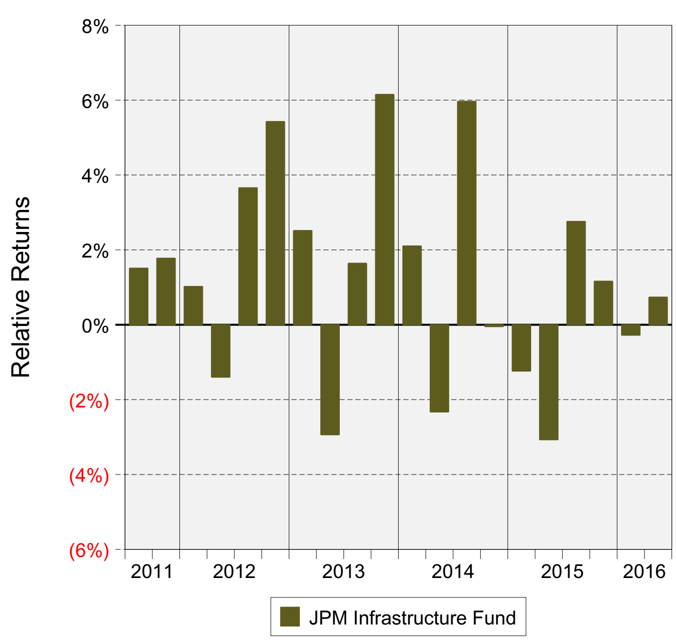
- JPM Infrastructure Fund's portfolio outperformed the CPI-W by 0.74% for the quarter and outperformed the CPI-W for the year by 4.47%.

Quarterly Asset Growth

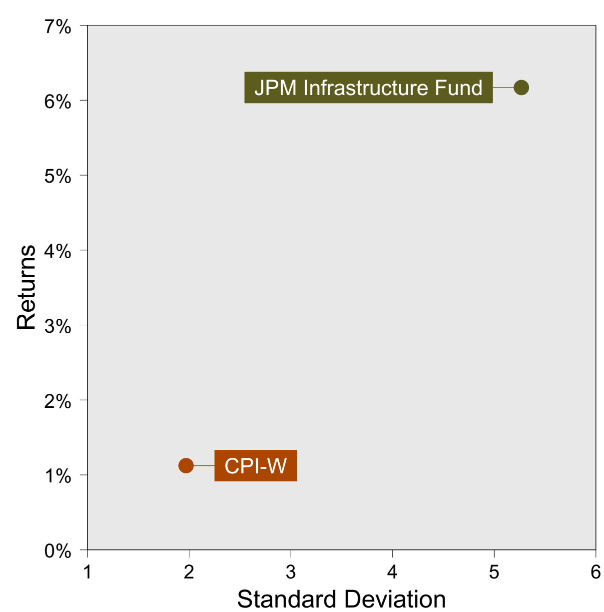
Beginning Market Value	$140,059,358
Net New Investment	$-764,732
Investment Gains/(Losses)	$2,901,019
Ending Market Value	$142,195,646



Relative Return vs CPI-W



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure
Period Ended June 30, 2016

Investment Philosophy

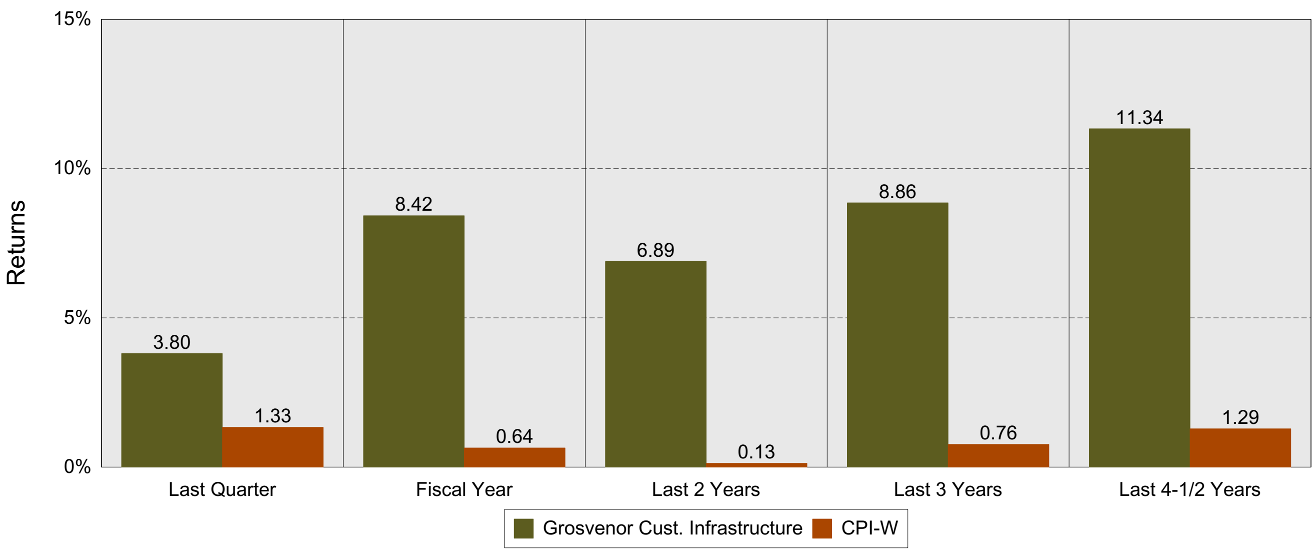
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified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

Quarterly Summary and Highlights

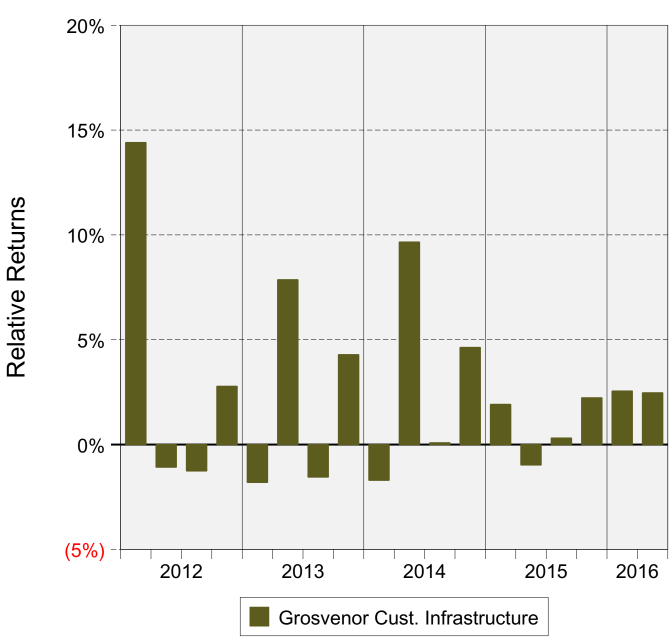
- Grosvenor Cust. Infrastructure's portfolio outperformed the CPI-W by 2.47% for the quarter and outperformed the CPI-W for the year by 7.78%.

Quarterly Asset Growth

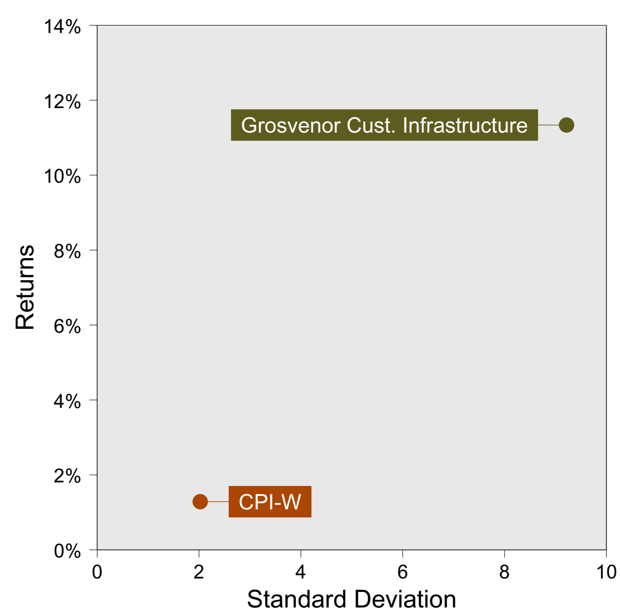
Beginning Market Value	$40,481,892
Net New Investment	$-627,599
Investment Gains/(Losses)	$1,512,842
Ending Market Value	$41,367,135



Relative Return vs CPI-W



Annualized Four and One-Half Year Risk vs Return



Grosvenor Cust. Infrastructure II
Period Ended June 30, 2016

Investment Philosophy

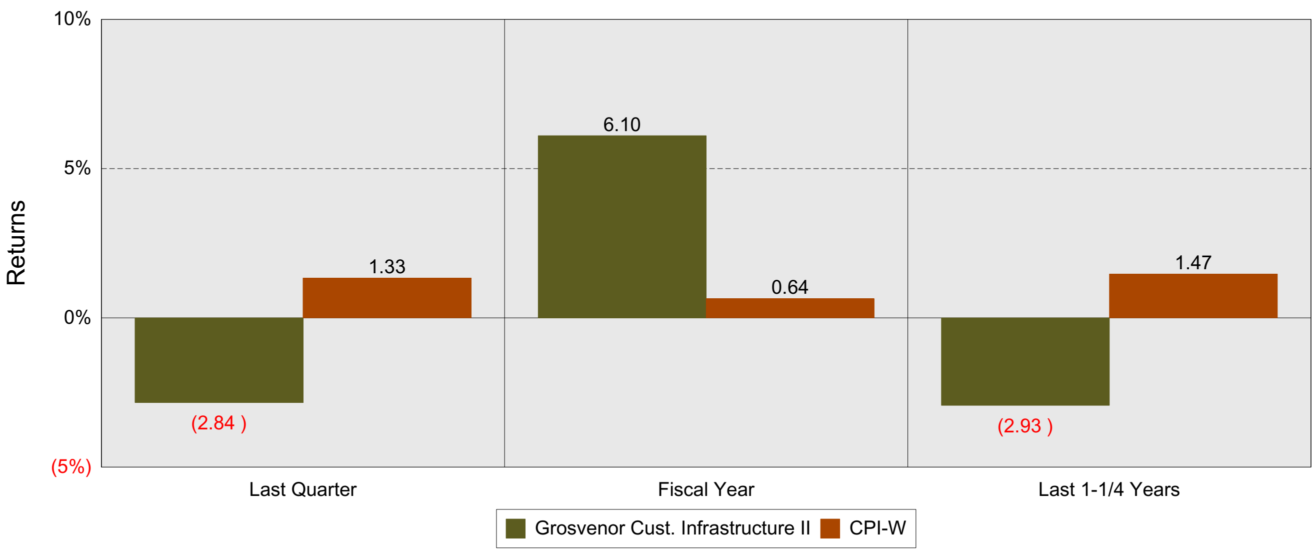
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified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

Quarterly Summary and Highlights

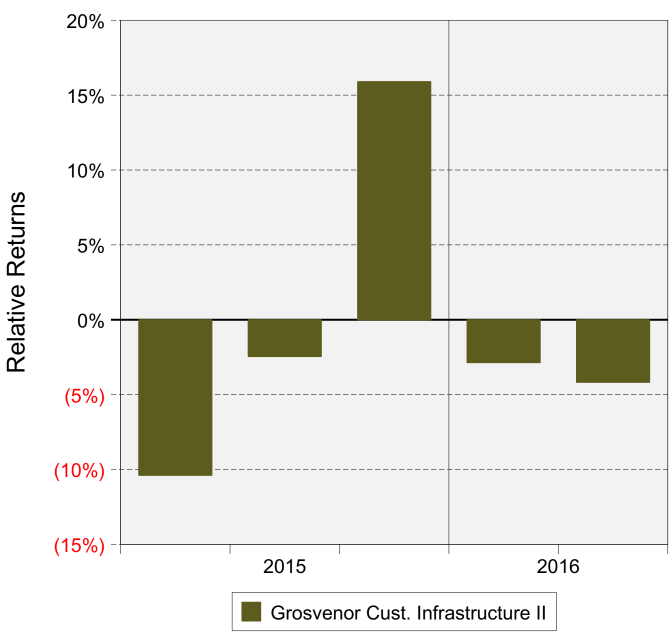
- Grosvenor Cust. Infrastructure II's portfolio underperformed the CPI-W by 4.17% for the quarter and outperformed the CPI-W for the year by 5.46%.

Quarterly Asset Growth

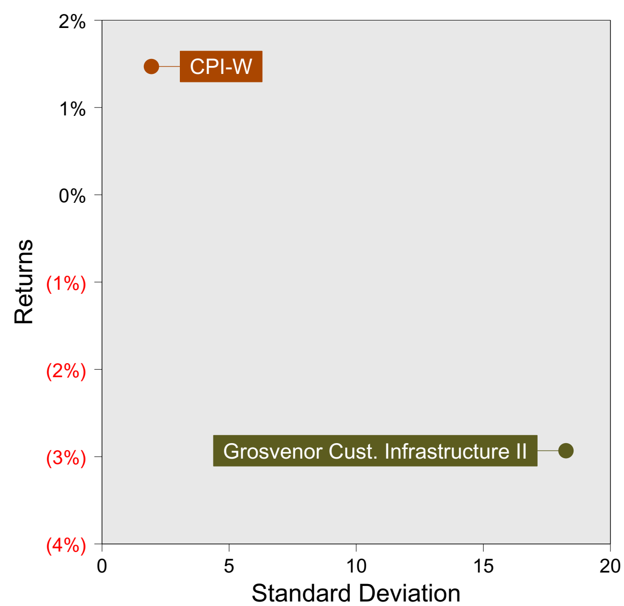
Beginning Market Value	$5,812,085
Net New Investment	$-1,878,208
Investment Gains/(Losses)	$-85,143
Ending Market Value	$3,848,734



Relative Return vs CPI-W



Annualized One and One-Quarter Year Risk vs Return



Research and Educational Programs

The Callan Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit www.callan.com/research to see all of our publications, or for more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

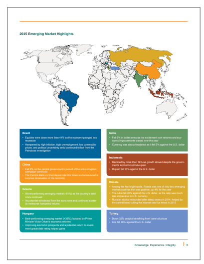
Aspiring Managers: Negotiating the Dual Realities Facing Diverse and Emerging Managers | Callan Chairman and CEO Ron Peyton and Callan Connects Manager Lauren Mathias, CFA, provide perspective on the diverse and emerging manager arenas and offer thoughts on how these managers can succeed.

Asset Managers and ESG: Sensing Opportunity, Bigger Firms Lead the Charge | In Callan's ESG survey of asset managers, author Mark Wood, CFA, reveals that the majority of large asset management firms have formal ESG policies, while smaller firms have yet to exhibit widespread adoption. Around one-third of managers with a formal ESG policy expect it will help them achieve higher risk-adjusted returns and improved risk profiles over the long term.

Video: Sustainability in Real Estate Investing | Sarah Angus, CAIA, a consultant in Callan's Real Assets Consulting group, discusses the benefits in using sustainable practices in managing real estate buildings, including higher tenant satisfaction and retention, greater occupancy, and increased values.

Considering Currency Hedging in an Equity Portfolio: 10 Charts to Help Frame a Policy | Callan recommends a measured approach to managing currency, including creating a policy to ensure short-term decisions made during painful times are in line with the long-term strategic goals of the plan. These 10 charts provide context for currency hedging discussions.

Video: The Costs of Closing: Nuclear Decommissioning Trusts | Julia Moriarty, CFA, of Callan's Capital Markets Research group discusses hedging costs, the impact of license extension, and more.



Emerging Markets: Opportunities and Challenges in Public Equity Investing | Callan's global equity investment experts (Andy Iseri, CFA, Ho Hwang, and Lyman Jung) write that despite risks, emerging market equities still can play an important role in well-diversified institutional portfolios.

Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle? | Callan's Real Assets Consulting group identifies seven indicators that have helped signal when the institutional real estate market is overheated or has cooled down.

Periodicals

Private Markets Trends, Spring 2016 | The latest on private equity.

DC Observer, 1st Quarter 2016 | The PPA, 10 years later: DC assets have grown and target date funds have skyrocketed.

Hedge Fund Monitor, 1st Quarter 2016 | The latest on these funds, plus the challenges in the search for above-average managers.

Market Pulse Flipbook, 1st Quarter 2016 | A guide covering investment and fund sponsor trends, the U.S. economy, the capital markets, and Callan's proprietary DC Index.

Capital Market Review, 1st Quarter 2016 | Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

Inside Callan's Database, 1st Quarter 2016 | A look at performance and risk data from Callan's proprietary database and relevant market indices.

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/

Mark your calendars for our fall **Regional Workshop**, October 25 in New York and October 26 in Chicago, and our **National Conference**, January 23–25, 2017, at the Palace Hotel in San Francisco.

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 session is:

Introduction to Investments

Chicago, October 18–19, 2016

This session 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 asset-management oversight and/or support responsibilities. Tuition for the Introductory "Callan College" session is $2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Customized Sessions

The "Callan College" is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at 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

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Manager Name
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Aberdeen Asset Management PLC
Acadian Asset Management LLC
AEGON USA Investment Management
Affiliated Managers Group, Inc.
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investment Management
Amundi Smith Breeden LLC
Analytic Investors
Angelo, Gordon & Co.
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artisan Holdings
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Babson Capital Management
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Asset Management, Corp.
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC

Manager Name
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investment Advisers, LLC
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cornerstone Capital Management
Cramer Rosenthal McGlynn, LLC
Crawford Investment Counsel, Inc.
Credit Suisse Asset Management
Crestline Investors, Inc.
DE Shaw Investment Management, LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt. Co.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Global Asset Management
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
Fisher Investments
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management, Inc.
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GE Asset Management

Manager Name
GMO
Goldman Sachs Asset Management
Grand-Jean Capital Management
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Institutional Capital LLC
INTECH Investment Management, LLC
Invesco
Investec Asset Management
Janus Capital Management, LLC
Jensen Investment Management
J.P. Morgan Asset Management
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
Martin Currie Inc.
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
Nuveen Investments, Inc.
OFI Global Asset Management
Old Mutual Asset Management
Opus Capital Management Inc.
Pacific Investment Management Company

Manager Name
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PGIM
PineBridge Investments
Pinnacle Asset Management L.P.
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
RidgeWorth Capital Management, Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
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.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
The Boston Company Asset Management, LLC
The Hartford
The London Company
The TCW Group, 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)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
William Blair & Company

Callan

June 30, 2016

North Dakota State Investment Board Insurance Trust

Investment Measurement Service Quarterly Review

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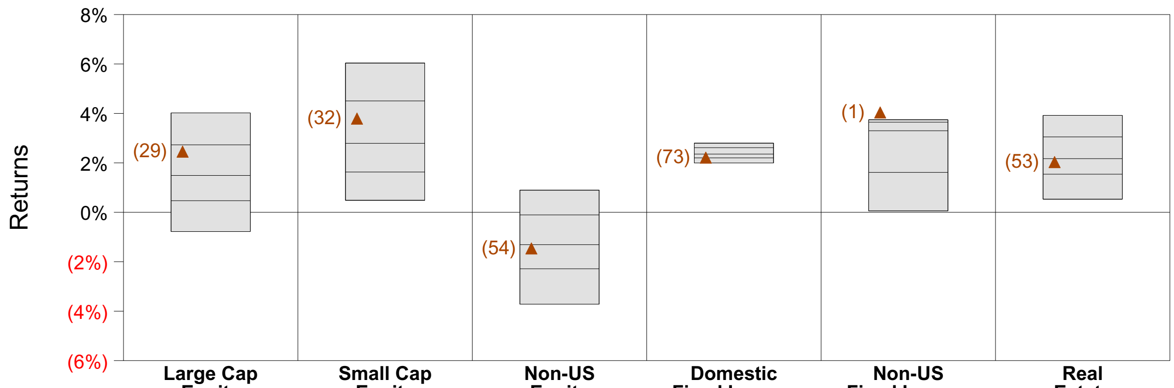
Market Overview
Active Management vs Index Returns

Market Overview

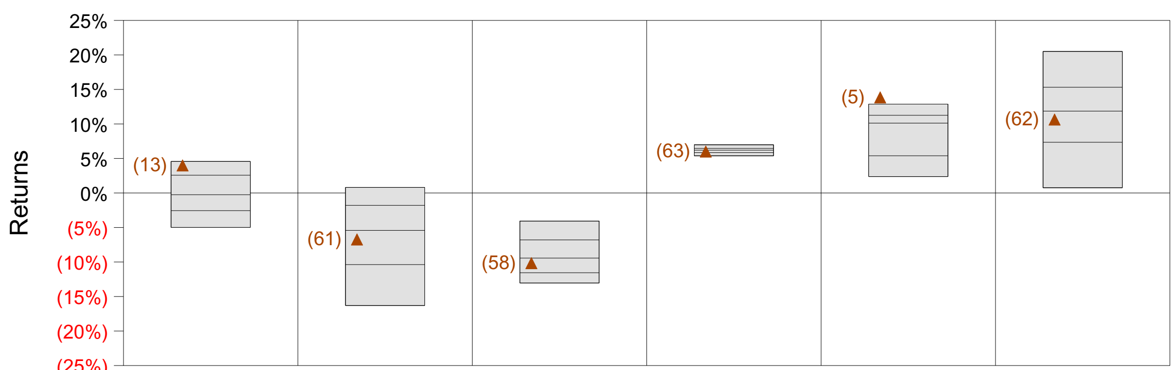
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also 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 June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.02	6.04	0.90	2.80	3.74	3.92
25th Percentile	2.73	4.51	(0.10)	2.62	3.64	3.05
Median	1.49	2.79	(1.31)	2.36	3.30	2.17
75th Percentile	0.47	1.63	(2.29)	2.20	1.62	1.54
90th Percentile	(0.78)	0.48	(3.72)	2.00	0.06	0.53
Index ▲	2.46	3.79	(1.46)	2.21	4.04	2.03

Range of Separate Account Manager Returns by Asset Class
One Year Ended June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.57	0.80	(4.07)	6.98	12.87	20.51
25th Percentile	2.57	(1.79)	(6.80)	6.46	11.25	15.32
Median	(0.25)	(5.42)	(9.43)	6.20	10.12	11.86
75th Percentile	(2.56)	(10.37)	(11.56)	5.85	5.39	7.35
90th Percentile	(4.99)	(16.30)	(13.04)	5.39	2.38	0.75
Index ▲	3.99	(6.73)	(10.16)	6.00	13.85	10.64

Callan

Second Quarter 2016

Keep Calm and Carry On

ECONOMY

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Despite global turmoil, all indicators of the U.S. economy pointed toward the strongest growth in consumption in a decade. But a disappointing first read on GDP for the second quarter is likely to give the Fed enough reason to delay a much-anticipated September rate hike.

Any Relief in Sight?

FUND SPONSOR

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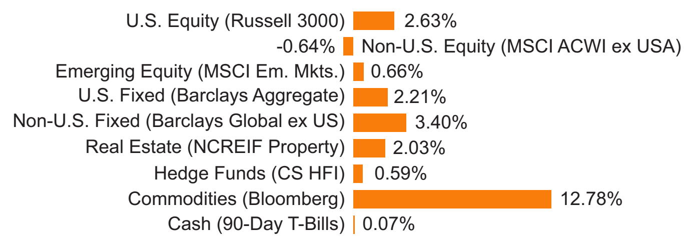
Corporate funds outperformed all others during the quarter because of their higher exposure to U.S. fixed income investments. But that brought little relief for their funding status, which fell by more than 3 percentage points.

Broad Market Quarterly Returns



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

Greener Grass

U.S. EQUITY

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The **S&P 500** ended the quarter only 1.5% below its all-time high achieved in May 2015, indicating that for investors wary of the turbulence around the world, the grass does appear to be greener in the United States.

Fasten Your Seat Belts

NON-U.S. EQUITY

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Markets around the world ended the quarter relatively stable despite the Brexit vote, with the **MSCI ACWI ex USA Index** down only slightly (-0.64%), and the **MSCI Pacific Index** up a bit (+0.87%). The **MSCI Europe Index**, not surprisingly, finished down more 2.69%.

Rally Across the Board

U.S. FIXED INCOME

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All sectors rallied during the quarter and produced positive returns, with investment-grade corporates leading the way, as investors assessed the broad strength of the U.S. economy and relatively attractive opportunities with the U.S. fixed income markets in the wake of Brexit.

How Low Can Rates Go?

NON-U.S. FIXED INCOME

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Major global bond indices showed positive returns for the quarter, as sovereign yields fell. Most major global currencies weakened against the U.S. dollar; the British pound was hit hardest. Emerging market bonds continued to rebound despite a bumpy ride.

It Really Is Location, Location, Location

REAL ESTATE

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The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, Brexit uncertainties, and concerns about China's slowing growth.

Sticker Shock

PRIVATE EQUITY

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Fundraising surged in the second quarter, with a large jump in venture capital. The investment pace by funds into companies slowed, but the amount invested into VC companies increased. And IPOs by both buyout-backed and VC-backed firms increased in the quarter.

Caution as Britannia Waives the Rule

HEDGE FUNDS

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Hedge funds eked out modest gains in the second quarter, with convertible arb funds performing best and short bias the worst. Emerging market and fixed income arb funds showed positive returns, making up for losses in the first quarter.

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION

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As usual, target date funds attracted most of the assets during the first quarter, and now command more than a quarter of total DC assets. But the **Callan DC Index** lagged the Age 45 Target Date Fund by 42 bps in the quarter.

Keep Calm and Carry On

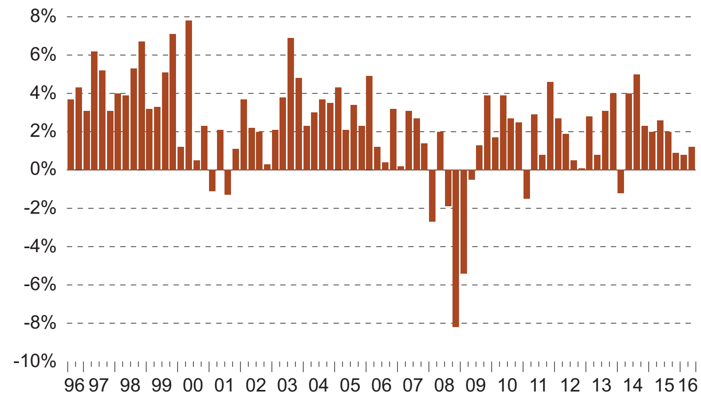
ECONOMY | Jay Kloepfer

Voters in the United Kingdom narrowly approved a referendum to leave the European Union on June 23, and this unexpected result completely overshadowed everything else that happened in the global economy during the second quarter. Global bond yields fell to record lows, the British pound hit a 31-year low versus the U.S. dollar, and global equity markets plunged before quickly bouncing back to regain much of what they lost over a period of just a week.

In the background, the U.S. economy seemed to be calmly carrying on, as all indicators pointed toward the strongest growth in consumption in a decade. The first read of second-quarter gross domestic product (GDP) growth was therefore clearly disappointing at just 1.2%, dashing consensus expectations (or maybe just hopes) for a rate of 2% or higher. The revision to the first-quarter result was disappointing as well, pulled down from 1.1% to just 0.8%. The U.S. economy has now expanded by just 1.2% over the past year, the weakest 12-month gain since the reduction in Federal fiscal stimulus during 2013. Second-quarter growth was fueled by the standout strength in consumer spending, which increased at a robust rate of 4.2%. Gains in employment, disposable income, and home asset values (boosting household wealth)—along with low energy prices, modest inflation, and low interest rates—are providing the tailwind for consumers. Weighing down overall GDP growth is continued retrenchment in non-residential fixed investment, a blip downward in residential investment, and the fourth consecutive quarter of inventory reduction, which subtracted more than 1% from overall GDP growth. This weak GDP growth is likely to give the Federal Reserve sufficient reason to delay a much-anticipated September rate hike.

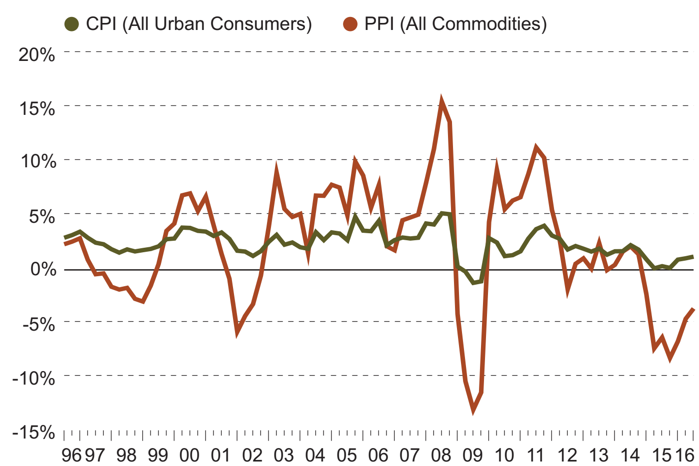
The job market gave quite a scare during the second quarter and was likely a primary factor in derailing what looked to be a certain Fed rate hike in June. April job gains slowed to 144,000 after averaging close to 200,000 during the first quarter, and then plummeted to just 11,000 in May, before recovering to an impressive 287,000 gain in June. The April and May jobs reports spurred fears that the economy was stalling, but the June gain may dispel some of those fears. As the U.S. economy approaches full employment, payroll gains can't grow at 200,000 per month indefinitely, let alone the 250,000 rate achieved in much of 2015. The unemployment rate remains below 5%, although it actually bounced up in June from 4.7% to 4.9% as more people rejoined the workforce. The biggest challenge for the labor market is the mismatch between the strong demand for skilled labor and the ample supply of relatively lower-skilled workers.

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

The conundrum holding back stronger economic growth is the decline in company capital investment in a period of very low interest rates. Non-residential fixed investment fell in both the first and second quarters of 2016, dragged down by the collapse in drilling activity for oil and natural gas. The strong dollar has also hit exports and domestic sales of manufacturing industries exposed to international competition, and weak global growth has suppressed prices for agricultural goods. On a more positive note, the impact of these forces suppressing capital spending has peaked and is fading relative to last year. The Institute for Supply Management's index of manufacturing activity rose back above 50—the line between expansion and contraction—and reached a 16-month high in June, suggesting that manufacturing may have bottomed in the first quarter of the year. Another anomaly impacting GDP growth is the inventory buildup caused by last winter's warm weather. A huge buildup in natural gas stocks was to be expected, but oddly enough, the warm weather spurred excess inventories in wholesalers and retailers, and the correction has slowed demand from manufacturers.

The Brexit vote will likely be a small bump in the road for U.S. trade. U.S. exports of goods and services to the U.K. and the EU constitute just 1% and 3% of GDP, respectively. The damage to U.S. GDP will likely be limited to a few tenths of one percent. The larger impact may come from Brexit's potential to dampen consumer and business confidence and to complicate central governments' attempts to address global economic stagnation.

The European Central Bank (ECB) continued its efforts to stimulate euro-zone economies, where unemployment remains at 10%. The ECB began buying corporate bonds in June, reaching nearly 5 billion euros by the end of the month. The average yield on investment-grade European corporate debt dropped to a record low of less than 1%. Negative-yielding government debt in the euro zone surged to nearly $12 trillion. By comparison, U.S. yields look high, suggesting further downward pressure on seemingly rock-bottom U.S. interest rates is possible. The decline in U.S. rates since the start of the year caught most market participants by surprise. The consensus was for the U.S. to embark on a path to gradually higher rates, starting this year. As expectations for rising rates fade, the fear is that the optimism for growth which would have justified higher rates will fade, too.

The Long-Term View

Index	2016 2nd Qtr	Periods ended December 31, 2015 Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	2.63	0.48	12.18	7.35	10.03
S&P 500	2.46	1.38	12.57	7.31	9.82
Russell 2000	3.79	-4.41	9.19	6.80	10.50
Non-U.S. Equity					
MSCI EAFE	-1.46	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	0.66	-14.92	-4.80	3.61	–
S&P ex-U.S. Small Cap	-1.30	5.92	5.51	5.33	6.80
Fixed Income					
Barclays Aggregate	2.21	0.55	3.25	4.51	6.15
90-Day T-Bill	0.07	0.05	0.07	1.24	2.93
Barclays Long G/C	6.55	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	3.40	-5.54	-1.30	3.05	5.37
Real Estate					
NCREIF Property	2.03	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	6.96	3.20	11.96	7.41	12.13
Alternatives					
CS Hedge Fund	0.59	-0.71	3.55	4.97	–
Cambridge PE*	–	6.69	13.08	11.18	15.74
Bloomberg Commodity	12.78	-24.66	-13.47	-6.43	–
Gold Spot Price	6.88	-10.46	-5.70	7.41	4.02
Inflation – CPI-U	1.22	0.73	1.53	1.86	2.30

*Private equity data is time-weighted return for period. Most recent quarterly data not available.
Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14
Employment Cost–Total Compensation Growth	2.3%	1.9%	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%
Nonfarm Business–Productivity Growth	1.9%*	-0.6%	-1.7%	2.0%	3.1%	-0.8%	-1.7%	3.1%
GDP Growth	1.2%	0.8%	0.9%	2.0%	2.6%	2.0%	2.3%	5.0%
Manufacturing Capacity Utilization	75.0%	75.3%	75.4%	75.6%	75.5%	75.5%	76.0%	75.7%
Consumer Sentiment Index (1966=100)	92.4	91.5	91.3	90.8	94.2	95.5	89.8	83.0

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

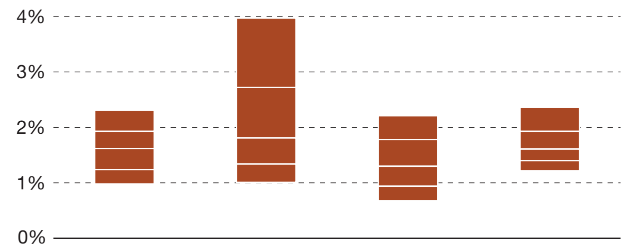
Any Relief in Sight?

FUND SPONSOR | Rufash Lama

A closer look at returns for the quarter from the Callan Fund Sponsor Databases reveals that the median corporate fund bested all other fund types. Corporate funds also had the widest dispersion of returns, and the highest total return as shown by results for funds in the 10th percentile. However, some Taft-Hartley funds outperformed the lowest-performing corporate funds, as shown by returns in the 90th percentile.

The outperformance of corporate funds during the quarter stemmed from their higher exposure to U.S. fixed income, particularly those funds with long duration. At the other end of the spectrum, endowments/foundations lagged all other fund types given their minimal exposure to U.S. fixed income. Higher allocations to non-U.S. equity and hedge funds also dragged down relative performance for endowments/foundations. Over longer time periods (5 and 10 years), compound returns for all fund sponsors have been in the range of 5% to 7%, with endowments/foundations lagging over short- and long-term periods.

Callan Fund Sponsor Returns for the Quarter



	Public	Corporate	Endow/Fndn	Taft-Hartley
10th Percentile	2.31	3.97	2.21	2.36
25th Percentile	1.93	2.72	1.78	1.93
Median	1.62	1.81	1.30	1.61
75th Percentile	1.24	1.34	0.94	1.40
90th Percentile	0.98	1.01	0.68	1.22

Source: Callan

The median funded status of corporate defined benefit plans declined for the quarter, primarily due to the dramatic fall in interest rates. Based on data from actuaries and asset managers, the median and average funded ratio fell by more than 3 percentage points in the quarter, to 76.0% and 76.4%, respectively. Year to date, the median funded status has declined by more than 6 percentage points.

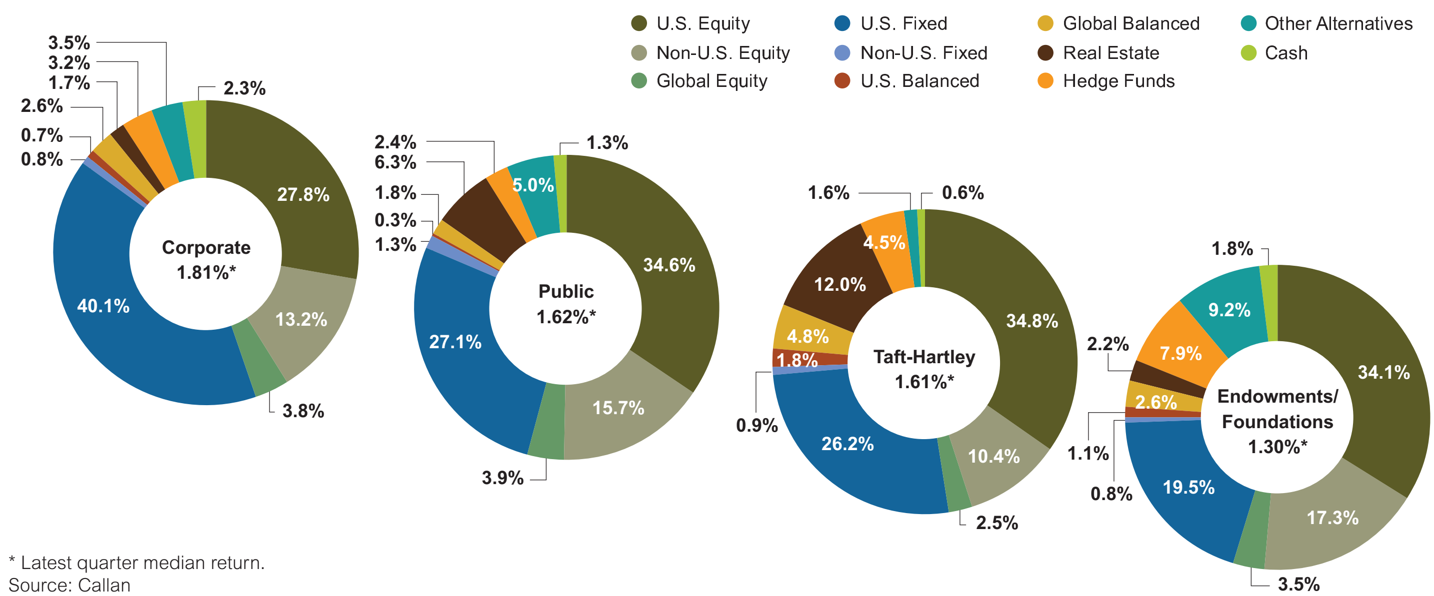
Callan Database Median Returns* for Periods ended June 30, 2016

Fund Sponsor	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Public Funds	**1.62**	**2.98**	**0.54**	**6.39**	**6.42**	**5.65**	**5.94**
Corporate Funds	**1.81**	**3.88**	**1.66**	**6.59**	**6.62**	**5.85**	**6.00**
Endowments/Foundations	**1.30**	**2.05**	**-1.55**	**5.24**	**5.53**	**5.34**	**5.69**
Taft-Hartley	**1.61**	**2.69**	**0.97**	**7.12**	**6.97**	**5.54**	**5.68**

*Returns less than one year are not annualized.

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.

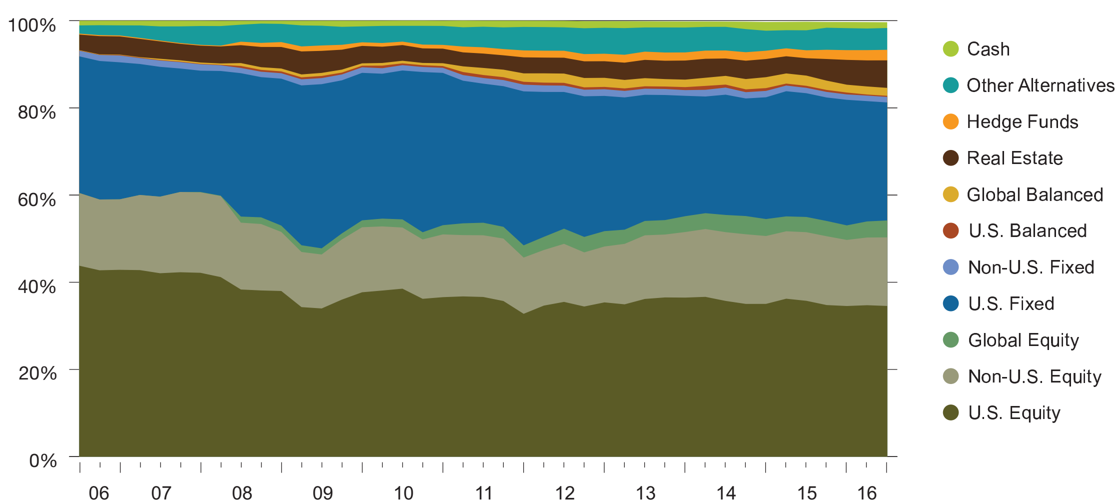
Callan Fund Sponsor Average Asset Allocation



* Latest quarter median return.
Source: Callan

Callan Public Fund Database Average Asset Allocation

(10 Years)



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.

Greener Grass

U.S. EQUITY | Lauren Mathias, CFA

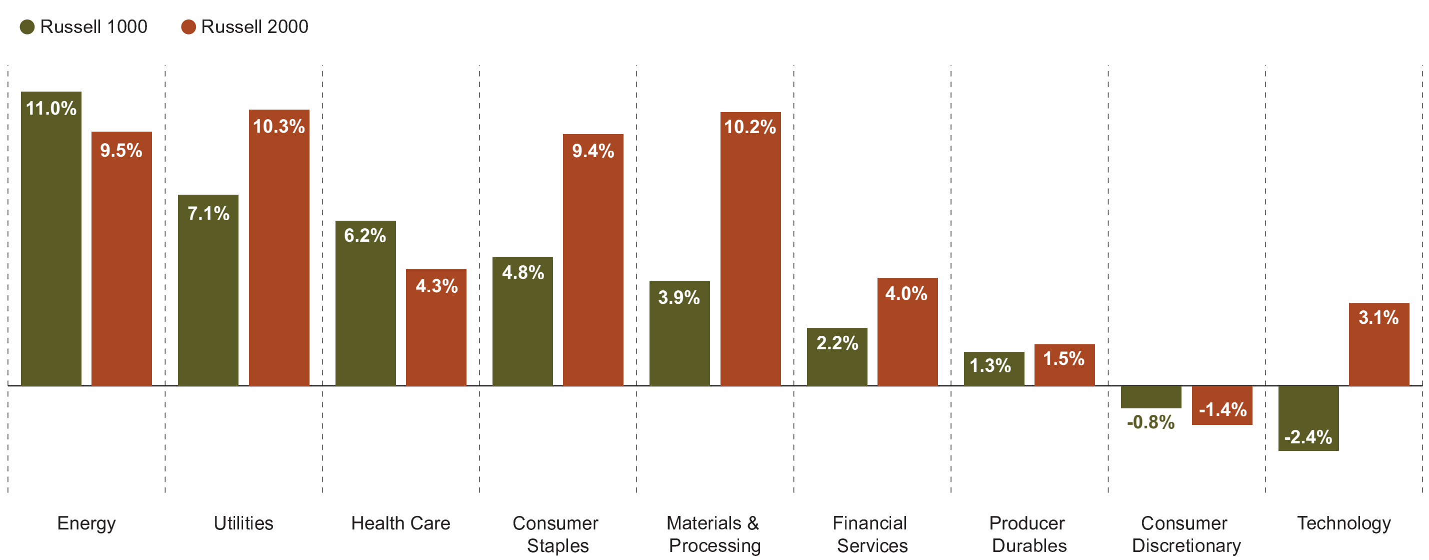
Though the **S&P 500 Index** ended in positive territory (+2.46%), it was subject to substantial volatility during the quarter. The U.K.'s vote to leave the European Union sent global markets reeling in late June; the S&P 500 fell 5.3% in the first two trading days after the vote. Volatility, as measured by VIX, spiked but remained below values posted in January. Despite uncertainty abroad and the steep drop after Brexit, the S&P 500 ended the quarter only 1.5% below its all-time high achieved in May 2015. Amid the global turmoil, it appears the grass is greener in the U.S.

Global markets did not appear to affect domestic production either: Manufacturing activity increased (the ISM Composite Index hit a 16-month high); existing home sales were up 4.5% in May; and retail sales showed strength. But disappointing unemployment figures—4.7% due to a lower labor force participation rate of 62.6%—and low first-quarter GDP prompted the Fed to keep interest rates at current levels.

After another strong quarter, value remained ahead of growth in all capitalizations (**Russell 2000 Value Index:** +4.31% and **Russell 2000 Growth Index:** +3.24%); the difference was most significant within large capitalizations (**Russell 1000 Value Index:** +4.58% and **Russell 1000 Growth Index:** +0.61%). Smaller was better: micro-, small-, and mid-capitalization companies outpaced large-capitalization stocks (**Russell Microcap Index:** +3.97%, **Russell 2000 Index:** +3.79%, **Russell Midcap Index:** +3.18%, and **Russell 1000 Index:** +2.54%).

With economic uncertainty and lower interest rates in the foreseeable future, defensive and yielding areas of the mar-

Economic Sector Quarterly Performance



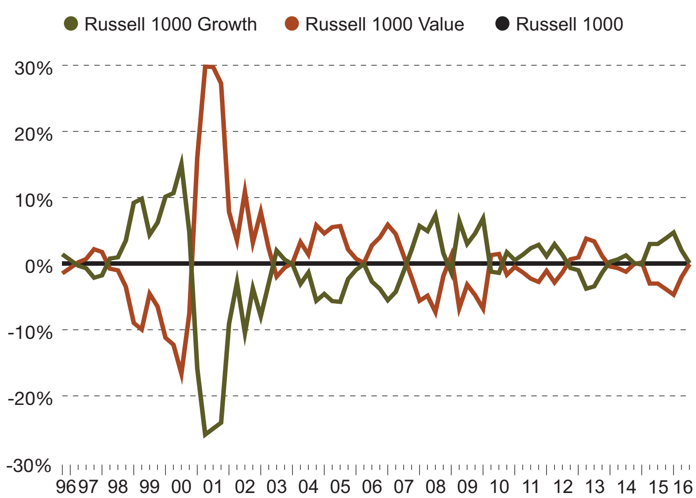
Source: Russell Investment Group

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 10 sectors.

ket did well: Utilities, Telecommunications, Health Care, and Consumer Staples. Factors like low beta and high dividend yield were in favor and boosted the performance of these sectors. After a long period of poor performance, Energy was by far the leading sector, buoyed by an almost 30% increase in oil prices. Financials lagged, mostly due to a tough June—both the Brexit crisis and absent interest rate hike were the culprits. Health Care and Technology, large sectors in the growth benchmark, were dragged down by the pharmaceuticals/biotechnology and hardware and equipment industries, respectively. Stock correlations elevated in June, making it challenging for active management; however, levels remain below those experienced in 2015.

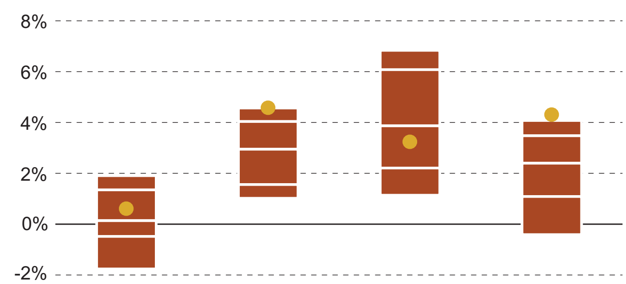
The U.S. equity market managed to escape a tumultuous June with positive results in the full quarter. However, active funds have found it challenging to outpace their respective benchmarks this year—fewer than 50% were able to do so.

Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns



	Large Cap Growth Style	Large Cap Value Style	Small Cap Growth Style	Small Cap Value Style
10th Percentile	1.91	4.57	6.84	4.08
25th Percentile	1.35	4.04	6.08	3.48
Median	0.14	2.95	3.87	2.40
75th Percentile	-0.48	1.56	2.21	1.09
90th Percentile	-1.76	1.02	1.14	-0.41
	R1000 Growth	**R1000 Value**	**R2000 Growth**	**R2000 Value**
Benchmark	0.61	4.58	3.24	4.31

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of June 30, 2016

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	506	3,007	1,000	800	2,507	2,006
% of Russell 3000	82%	100%	92%	27%	17%	7%
Wtd Avg Mkt Cap ($bn)	127.80	106.54	114.81	12.03	3.79	1.70
Price/Book Ratio	2.7	2.6	2.7	2.4	2.1	1.9
Forward P/E Ratio	16.6	17.1	17	18.5	18.4	18.7
Dividend Yield	2.2%	2.1%	2.1%	1.8%	1.7%	1.6%
5-Yr Earnings (forecasted)	11.9%	12.0%	12.0%	10.2%	11.7%	12.9%

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

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Large Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Large Cap Core Style	**1.73**	**1.44**	**0.33**	**11.02**	**11.74**	**7.68**	**6.31**
Russell 3000	**2.63**	**3.62**	**2.14**	**11.13**	**11.60**	**7.40**	**6.09**
Russell 1000	**2.54**	**3.74**	**2.93**	**11.48**	**11.88**	**7.51**	**6.02**
S&P 500	**2.46**	**3.84**	**3.99**	**11.66**	**12.10**	**7.42**	**5.75**
Large Cap Growth Style	0.14	-1.72	-0.14	12.60	11.60	8.68	5.75
Russell 1000 Growth	0.61	1.36	3.02	13.07	12.35	8.78	5.50
Large Cap Value Style	2.95	3.34	-0.81	9.20	10.97	6.52	7.07
Russell 1000 Value	4.58	6.30	2.86	9.87	11.35	6.13	6.38
Mid Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Mid Cap Core Style	**1.67**	**3.33**	**-1.67**	**10.90**	**10.64**	**8.25**	**9.24**
Russell Midcap	3.18	5.50	0.56	10.80	10.90	8.07	8.68
Mid Cap Growth Style	**2.31**	**-0.02**	**-5.69**	**9.24**	**8.94**	**8.17**	**7.86**
Russell Midcap Growth	1.56	2.15	-2.14	10.52	9.98	8.12	6.99
Mid Cap Value Style	**3.29**	**4.90**	**-0.82**	**10.13**	**10.67**	**8.17**	**9.91**
Russell Midcap Value	4.77	8.87	3.25	11.00	11.70	7.79	9.50
Small Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Small Cap Core Style	**2.85**	**2.80**	**-4.76**	**9.34**	**10.24**	**7.92**	**9.43**
Russell 2000	3.79	2.22	-6.73	7.09	8.35	6.20	6.96
Small Cap Growth Style	**3.87**	**-1.57**	**-12.40**	**7.18**	**8.37**	**7.55**	**7.39**
Russell 2000 Growth	3.24	-1.59	-10.75	7.74	8.51	7.14	5.91
Small Cap Value Style	**2.40**	**4.64**	**-2.44**	**8.63**	**9.94**	**7.61**	**10.00**
Russell 2000 Value	4.31	6.08	-2.58	6.36	8.15	5.15	7.73
Smid Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Smid Cap Broad Style	**2.21**	**2.85**	**-4.23**	**8.86**	**10.29**	**9.49**	**–**
Russell 2500	3.57	3.98	-3.67	8.61	9.48	7.32	8.09
Smid Cap Growth Style	**3.25**	**-0.46**	**-8.43**	**8.00**	**8.70**	**8.35**	**8.01**
Russell 2500 Growth	2.70	-0.03	-7.69	9.06	9.27	7.96	6.76
Smid Cap Value Style	**2.39**	**5.38**	**-4.11**	**8.27**	**9.86**	**7.95**	**10.08**
Russell 2500 Value	4.37	7.84	0.22	8.14	9.59	6.52	8.77
Russell 3000 Sectors	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Consumer Discretionary	-0.88	0.98	0.99	11.18	14.59	9.98	–
Consumer Staples	4.94	10.42	18.31	15.50	15.49	12.63	–
Energy	10.94	14.41	-8.17	-3.18	-0.85	3.18	–
Financial Services	2.35	-1.03	-1.30	9.00	11.42	0.99	–
Health Care	6.04	-1.44	-5.23	16.22	17.08	11.43	–
Materials & Processing	4.70	10.67	1.01	8.70	6.88	6.17	–
Producer Durables	1.28	6.10	4.35	11.33	10.81	6.76	–
Technology	-2.06	-0.37	2.44	14.67	11.81	9.83	–
Utilities	7.34	23.69	28.37	13.60	12.63	8.50	–

*Returns less than one year are not annualized.
Sources: Callan, Russell Investment Group, Standard & Poor's.

Fasten Your Seat Belts

NON-U.S. EQUITY | Lyman Jung

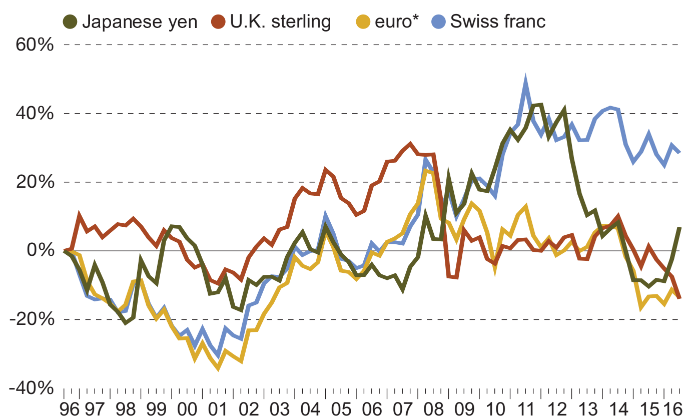
For the second consecutive quarter, non-U.S. equity markets endured a bout of extreme volatility. After a tepid start to the quarter, markets reacted to the surprise June 23 Brexit referendum to leave the European Union. Global markets lost $2 trillion the day after, but quickly stabilized. In this uncertain environment, we expect volatility to continue.

Despite the vote, the **MSCI ACWI ex USA Index** ended the quarter down only slightly (-0.64%), buoyed by accommodative central bank policies and a strong rebound in commodity prices. Energy (+8.05%) led the charge followed by Health Care (+4.29%), as investors favored defensive, dividend-paying stocks amid the turmoil. Economic and interest-rate-sensitive sectors fared worst, with Consumer Discretionary (-6.87%) and Financials (-4.31%) leading the plunge.

Around the broader markets, the **MSCI Emerging Markets Index** (+0.66%) bested its developed counterpart in the **MSCI World ex USA Index** (-1.05%). Without Canada (+3.40%), one of the best-performing countries in developed markets, the **MSCI EAFE Index** was even more depressed (-1.46%). The **MSCI ACWI ex USA Growth Index** continued an eight-quarter trend of outperforming the Value Index. Moreover, the **MSCI ACWI ex USA Small Cap** (-0.87%) topped its developed cousin, the **MSCI World ex USA Small Cap Index** (-1.28%).

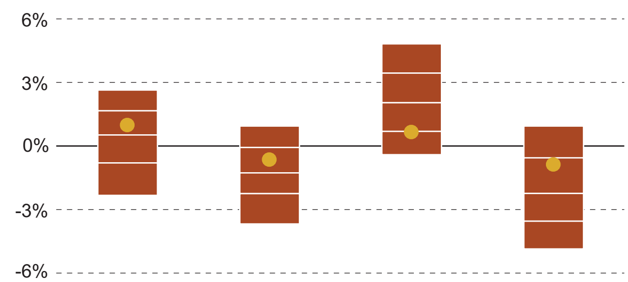
As Brexit dominated the headlines, European equity markets fell sharply only to rally in the final few days of the quarter. The **MSCI Europe Index** finished down 2.69%. Amid a general move to safe-haven countries, Switzerland (+2.03%) was a top-performer. Italy (-10.45%) and Spain (-7.67%) were among the worst mainly due to double-digit declines in banks burdened by souring loans and the potential loss of the U.K. as the financial center. Regionally, European sectors performed in line with the rest of the developed world. Energy stocks contributed 12.51% thanks to oil at nearly $50. Conversely, Consumer Discretionary and Financials tumbled 11.10% and 10.82%, respectively,

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



*German mark returns before 1Q99
Source: MSCI

Callan Style Group Quarterly Returns



	Global Eq Style	Non-U.S. Eq Style	Emg Mkt Style	Non-U.S. Small Cap Style
10th Percentile	2.60	0.90	4.78	0.90
25th Percentile	1.62	-0.11	3.40	-0.60
Median	0.48	-1.31	2.00	-2.28
75th Percentile	-0.84	-2.29	0.65	-3.59
90th Percentile	-2.37	-3.72	-0.45	-4.90
	MSCI ACWI	**MSCI ACWI ex USA**	**MSCI Emg Mkts**	**MSCI ACWI ex USA SC**
Benchmark ●	0.99	-0.64	0.66	-0.87

Sources: Callan, MSCI

weighed down by recession fears and concerns about a slowdown in finance and investment activity.

In contrast to Europe, the **MSCI Pacific Index** (+0.87%) fared much better, boosted by Japan (+1.01%) and New Zealand (+5.85%). While Japan was positive on a U.S. dollar-return basis, on a local-return basis it fell 7.80% because the yen

surged 10% in the quarter—despite operating in a negative interest rate environment. The yen has been bolstered by its re-emergence as a haven currency with an uncertain Europe and also by the dollar's recent weakness after the Federal Reserve pared back expectations of U.S. interest rate increases. New Zealand gained on improved sentiment partly due to a reported trade surplus that was more than double analysts' forecasts.

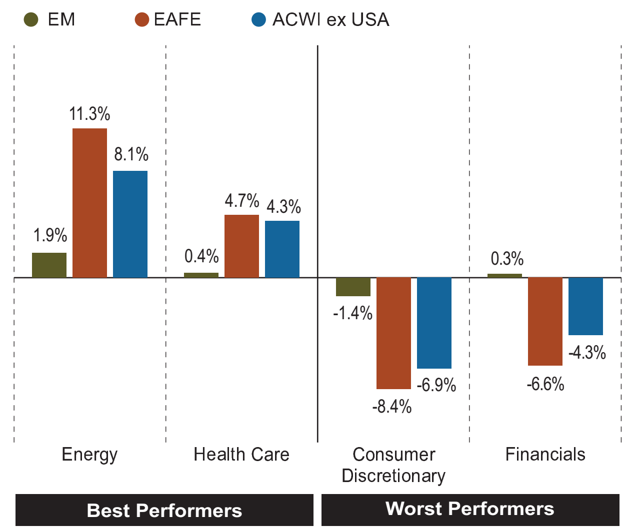
Emerging market countries produced a wide spectrum of returns, but closed out the quarter slightly ahead (MSCI Emerging Market Index: +0.66%). Commodity producers such as Brazil (+13.90%) and Russia (+4.05%) benefited from the rebound in oil prices, continuing their first-quarter rally. The former was also propped up by an impeachment motion against President Dilma Rousseff that sent the equity market into a frenzied rally. Stocks in China ended the quarter nearly flat (+0.11%) thanks to a slower predicted growth of 6.6%, the weakest since the Global Financial Crisis. Further, concerns about the amount of debt on corporate balance sheets and recent policy changes led to questions on how much stimulus the government would provide to sustain growth. Elsewhere, stocks in India (+3.72%) advanced on faster-than-expected growth and earnings of some of its biggest companies, bolstered by optimism about the nation's economic recovery.

Quarterly Return Attribution for Non-U.S. Developed Countries (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	0.46%	3.79%	-3.20%	5.13%
Austria	-9.99%	-7.67%	-2.51%	0.12%
Belgium	2.29%	4.92%	-2.51%	1.05%
Canada	3.40%	3.82%	-0.40%	6.82%
Denmark	-0.58%	1.84%	-2.37%	1.40%
Finland	-2.12%	0.40%	-2.51%	0.69%
France	-4.31%	-1.85%	-2.51%	6.79%
Germany	-5.57%	-3.14%	-2.51%	6.11%
Hong Kong	0.94%	0.96%	-0.02%	2.34%
Ireland	-9.87%	-7.55%	-2.51%	0.33%
Israel	-3.80%	-1.72%	-2.38%	0.55%
Italy	-10.45%	-8.14%	-2.51%	1.38%
Japan	1.01%	-7.80%	9.56%	16.43%
Netherlands	-5.06%	-2.72%	-2.51%	2.24%
New Zealand	5.85%	3.19%	2.58%	0.13%
Norway	2.35%	3.55%	-1.16%	0.45%
Portugal	-2.76%	-0.25%	-2.51%	0.11%
Singapore	0.35%	0.29%	0.05%	0.96%
Spain	-7.67%	-5.29%	-2.51%	2.08%
Sweden	-5.38%	-1.11%	-4.32%	1.95%
Switzerland	2.03%	3.80%	-1.70%	6.55%
U.K.	-0.73%	6.73%	-6.99%	13.83%

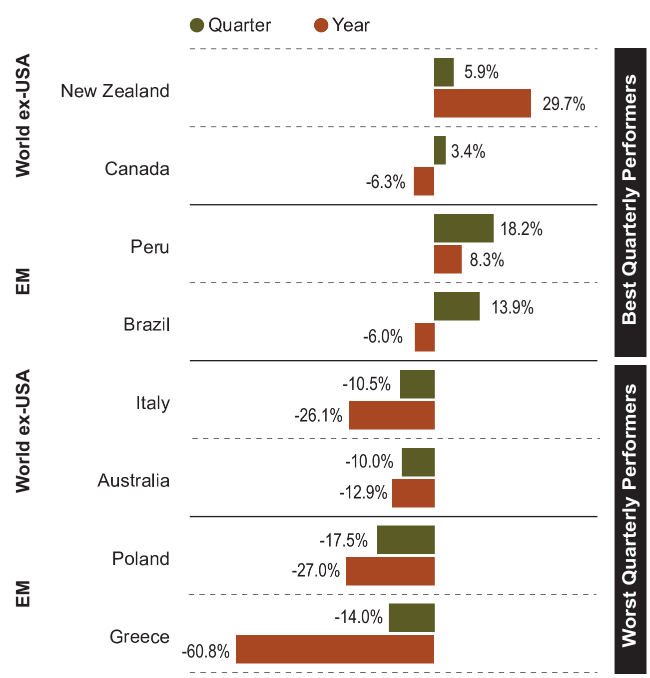
Sources: MSCI, Russell Investment Group, Standard & Poor's.

Quarterly Returns: Strong and Struggling Sectors



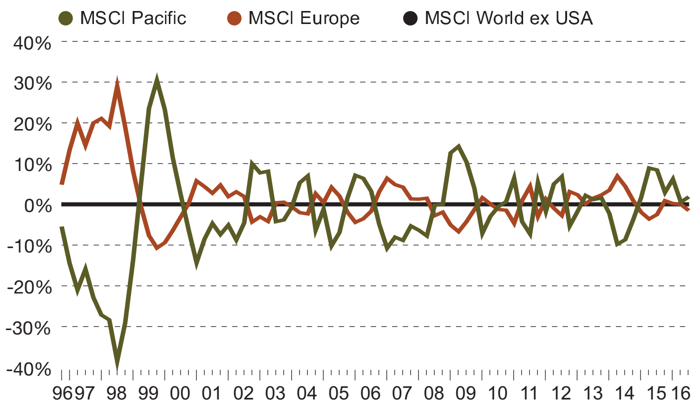
Source: MSCI

Quarterly and Annual Country Performance Snapshot



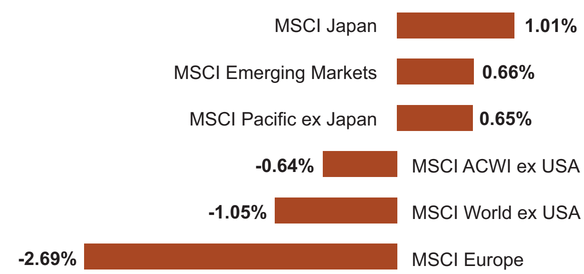
Source: MSCI

Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI

Style Median and Index Returns* for Periods ended June 30, 2016

Global Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Equity Style	**0.48**	**-0.92**	**-4.47**	**7.16**	**7.08**	**5.37**	**6.31**
MSCI World	1.01	0.66	-2.78	6.95	6.63	4.43	4.86
MSCI ACWI	0.99	1.23	-3.73	6.03	5.38	4.26	4.98
Non-U.S. Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Style	**-1.31**	**-3.49**	**-9.43**	**3.27**	**2.83**	**2.91**	**6.25**
MSCI World ex USA	-1.05	-2.98	-9.84	1.88	1.23	1.63	4.47
MSCI ACWI ex USA	-0.64	-1.02	-10.24	1.16	0.10	1.87	4.96
Regional Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
MSCI Europe ex UK	-3.53	-6.02	-10.80	2.58	0.66	1.56	4.52
MSCI Japan	1.01	-5.58	-8.94	2.71	4.21	0.14	2.32
MSCI Japan (local)	-7.80	-19.47	-23.66	3.82	9.31	-0.93	1.00
MSCI Pacific	0.87	-2.94	-8.19	2.16	2.98	1.72	4.10
MSCI Pacific (local)	-4.29	-13.22	-17.85	4.25	7.59	0.59	2.38
MSCI Pacific ex Japan	0.65	2.47	-6.75	1.08	0.86	5.43	8.89
MSCI Pacific ex Japan (local)	2.64	0.47	-5.02	5.64	5.69	5.01	6.69
MSCI United Kingdom	-0.73	-3.05	-12.14	0.67	1.71	1.43	4.22
MSCI United Kingdom (local)	6.73	6.89	3.36	5.00	5.50	4.78	4.57
Emerging/Frontier Markets	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Market Style	**2.00**	**6.57**	**-8.83**	**-0.07**	**-2.06**	**4.88**	**10.67**
MSCI Emerging Markets	0.66	6.41	-12.05	-1.56	-3.78	3.54	9.12
MSCI Emerging Markets (local)	0.70	3.45	-7.70	3.70	2.02	5.72	9.92
MSCI Frontier Markets	0.47	-0.47	-12.09	1.00	1.45	0.18	–
Global/Non-U.S. Small Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Small Cap Style	**-2.28**	**-3.11**	**-3.61**	**7.82**	**6.35**	**5.52**	**10.28**
MSCI World Small Cap	1.61	2.29	-3.76	7.60	6.80	5.58	8.51
MSCI ACWI Small Cap	1.51	2.22	-4.72	6.79	5.83	6.00	8.60
MSCI World ex USA Small Cap	-1.28	-0.69	-3.35	6.34	3.61	3.33	8.17
MSCI ACWI ex USA Small Cap	-0.87	-0.20	-5.46	4.93	2.28	4.08	8.71

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

Rally Across the Board

U.S. FIXED INCOME | Nate Wong, CFA

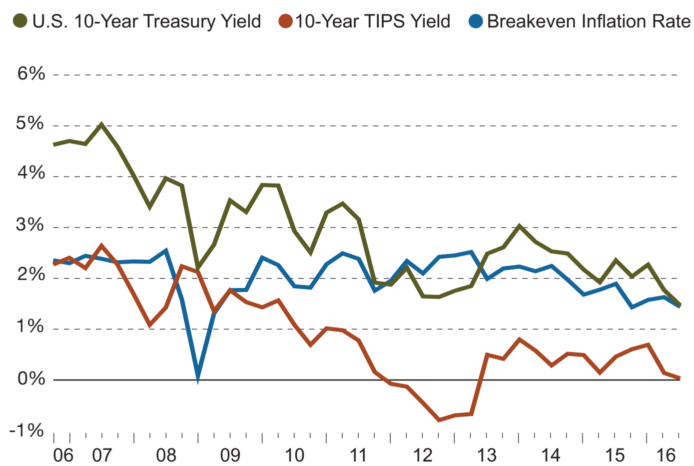
Treasuries rallied in a flight to quality during the second quarter as U.S. economic data and trepidation surrounding the U.K.'s Brexit dominated activity. The Fed changed to a more dovish tone as the quarter ended. The **Barclays U.S. Aggregate Index** increased 2.21% while the **Barclays High Yield Corporate Index** again outpaced it with a 5.52% gain.

The surprising vote in the U.K. to exit the European Union triggered an immediate run on risk assets. The panic was short-lived and credit spreads ended the quarter marginally tighter as more-rational investors assessed the broader strength of the U.S. economy and the relatively attractive opportunities within the U.S. fixed income markets.

Following the Brexit vote, the Fed elected not to make any changes at its June meeting. Its forward-looking dot plot now implies a reduced number of rate hikes from four to three, while the long-term projection for the short-term rate was lowered from 3.25% to 3.0%.

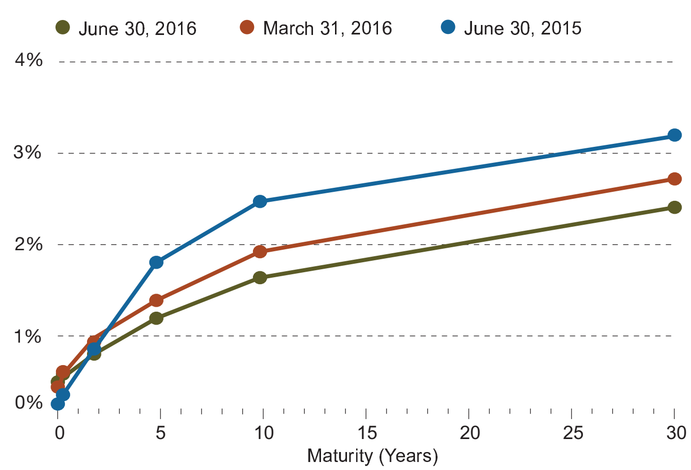
Yields declined across the maturity spectrum with the 10-year yield closing the quarter at 1.47%, its lowest level in nearly three years. Weak economic data and the negative yield environment around the globe contributed to downward pressure on U.S. yields. The 2- to 30-year spread tightened to 170 bps by the end of the quarter. Treasury returns were strong, particularly on the

Historical 10-Year Yields



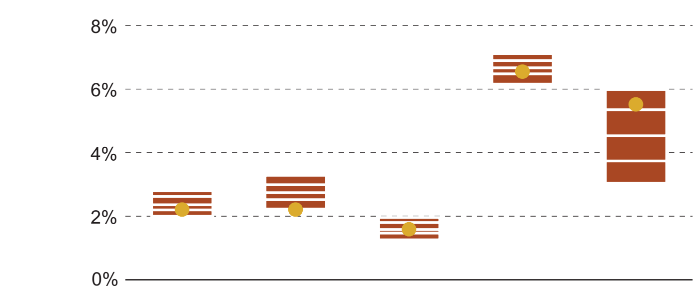
Source: Bloomberg

U.S. Treasury Yield Curves



Source: Bloomberg

Callan Style Group Quarterly Returns



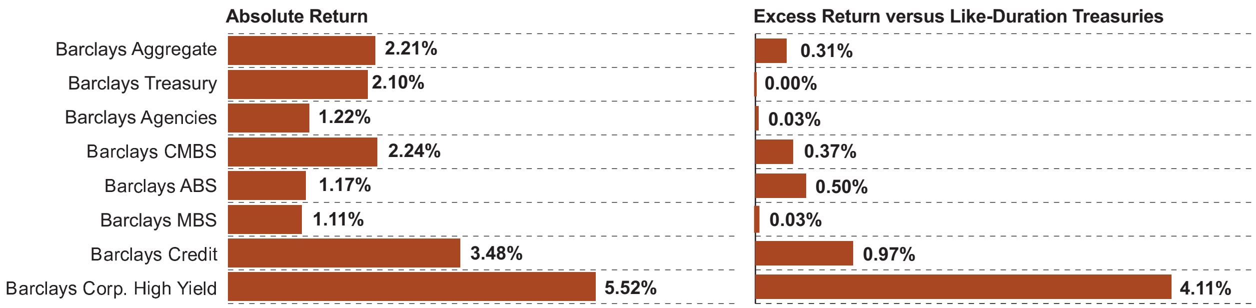
	Core Bond Style	Core Plus Style	Interm Style	Ext Mat G/C Style	High Yld Style
10th Percentile	2.80	3.29	1.96	7.12	5.99
25th Percentile	2.62	2.99	1.80	6.90	5.35
Median	2.36	2.74	1.58	6.67	4.53
75th Percentile	2.20	2.52	1.47	6.48	3.74
90th Percentile	2.00	2.23	1.26	6.16	3.04
	Barclays Agg	Barclays Agg	Barclays Interm	Barclays Long G/C	Barclays High Yld
Benchmark	2.21	2.21	1.59	6.55	5.52

Sources: Barclays, Callan

long end of the curve, with 30-year Treasuries gaining 7.24%. All sectors rallied and produced positive returns, with investment-grade corporates leading the way. Inflation-protected securities trailed their nominal counterparts but continued their strong performance for the year.

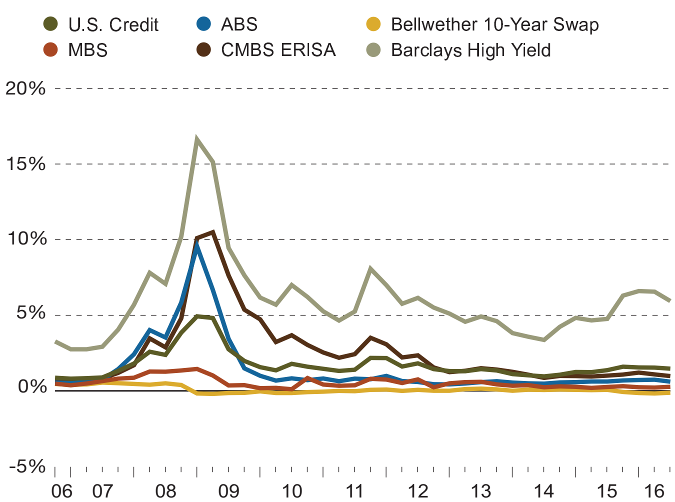
Corporate credit performed well across the quality spectrum, gaining 3.48% and outperforming Treasuries by 97 bps on a duration-adjusted basis. Companies took advantage of low rates, with new issuance of $350 billion during the quarter. On a duration-adjusted basis, industrials outperformed utilities and financials. Corporate spreads were generally flat before experiencing some widening in reaction to the Brexit and ended the quarter at 156 bps. MBS gained 1.11%, outperforming like-duration Treasuries by 3 bps. MBS spreads also widened as the quarter closed on prepayment fears. High-yield bonds continued to rebound, gaining 5.52% and outperforming like-duration Treasuries by 411 bps. New issuance amounted to $84 billion, returning to more normal levels and more than doubling the amount in the prior quarter.

Fixed Income Index Quarterly Returns



Source: Barclays

Effective Yield Over Treasuries



Source: Barclays

U.S. Fixed Income Index Characteristics as of June 30, 2016

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Barclays Aggregate	1.91	5.47	7.77
Barclays Universal	2.42	5.36	7.63
Barclays Govt/Credit	1.85	6.69	8.96
1-3 Year	0.89	1.91	1.98
Intermediate	1.41	4.08	4.44
Long-Term	3.36	15.59	24.36
Barclays Long Credit	4.16	13.99	23.99
Barclays Corp High Yield	7.27	4.26	6.30
Barclays TIPS	1.47	5.26	8.71
Barclays Muni Bond 1-5 Year	0.94	2.67	3.16
Barclays Muni 1-10 Year	1.20	3.97	5.81
Barclays Municipal	1.61	5.55	13.06

Source: Barclays

U.S. FIXED INCOME (Continued)

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Broad Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Core Bond Style	**2.36**	**5.39**	**6.20**	**4.37**	**4.25**	**5.62**	**5.54**
Core Bond Plus Style	**2.74**	**5.68**	**5.45**	**4.48**	**4.62**	**6.00**	**6.09**
Barclays Aggregate	2.21	5.31	6.00	4.06	3.76	5.13	5.08
Barclays Universal	2.53	5.68	5.82	4.19	4.01	5.30	5.33
Long-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Extended Maturity Credit Style	**6.77**	**14.26**	**14.09**	**9.26**	**9.15**	**8.65**	**--**
Barclays Long Credit	6.65	13.92	13.76	8.70	8.45	8.14	7.78
Extended Maturity Gov/Credit Style	**6.67**	**14.56**	**15.48**	**9.46**	**9.61**	**9.00**	**8.22**
Barclays Long Gov/Credit	6.55	14.33	15.72	9.33	9.18	8.42	7.88
Intermediate-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Intermediate Style	**1.58**	**3.95**	**4.44**	**3.19**	**3.23**	**4.92**	**4.92**
Barclays Intermediate Gov/Credit	1.59	4.07	4.33	2.95	2.90	4.48	4.52
Short-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Defensive Style	**0.72**	**1.76**	**1.95**	**1.57**	**1.49**	**3.13**	**3.30**
Barclays Gov/Credit 1-3 Year	0.67	1.65	1.59	1.22	1.10	2.80	3.03
Bank Loans	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Bank Loan Style	**2.43**	**4.11**	**2.01**	**3.28**	**4.28**	**4.61**	**4.85**
Credit Suisse Leveraged Loans	2.86	4.23	0.93	3.03	3.87	4.10	4.51
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
High Yield Style	**4.53**	**7.34**	**1.10**	**4.37**	**5.97**	**7.52**	**7.95**
Barclays Corp High Yield	5.52	9.06	1.62	4.18	5.84	7.56	7.93
Unconstrained	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Unconstrained Fixed Style	**1.50**	**1.74**	**0.92**	**2.11**	**2.77**	**4.68**	**6.31**
90 Day T-Bill + 3%	0.81	1.63	3.19	3.09	3.09	4.04	4.44
Stable Value	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Stable Value Style	**0.45**	**0.91**	**1.81**	**1.79**	**2.14**	**3.03**	**3.82**
iMoneyNet Mutual Fund Avg	0.03	0.05	0.06	0.03	0.03	0.94	–
TIPS	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Inflation-Linked Style	**1.74**	**6.35**	**4.30**	**2.27**	**2.70**	**4.82**	**5.60**
Barclays TIPS	1.71	6.24	4.35	2.31	2.63	4.75	5.49
Municipal	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Short Municipal Style	**0.43**	**0.82**	**1.17**	**0.94**	**1.02**	**1.95**	**2.07**
Barclays Municipal 1-5 Year	0.75	1.55	2.60	2.03	1.93	3.30	3.26
Intermediate Municipal Style	**2.06**	**3.54**	**6.19**	**4.29**	**4.10**	**4.23**	**4.21**
Barclays Municipal 1-10 Year	1.44	2.70	4.88	3.62	3.45	4.33	4.21
Long Municipal Style	**2.63**	**4.42**	**8.10**	**5.93**	**5.76**	**5.43**	**5.42**
Barclays Municipal	2.61	4.33	7.65	5.58	5.33	5.13	5.10

*Returns for less than one year are not annualized.

Sources: Barclays, Callan, Citigroup, Merrill Lynch.

How Low Can Rates Go?

NON-U.S. FIXED INCOME | Kevin Machiz, CFA, FRM

Sovereign yields fell in the second quarter, driven largely by a knee-jerk reaction to Brexit, sentiment to reduce risk, and globally loose monetary policy. That led major global bond indices to show positive returns for the quarter.

In addition, most major global currencies weakened against the U.S. dollar during the quarter. The British pound was hit hardest, plummeting 7% versus the U.S. dollar. While the U.S. dollar broadly strengthened immediately following Brexit, some of those gains were quickly erased over the remainder of the quarter. The Japanese yen took an opposite tack among global currencies during the quarter and soared 10% versus the U.S. dollar by the end of the period. The yen's tendency to strengthen in risk-off environments proved a tailwind to unhedged foreign bond returns for the quarter. The euro was weaker versus the dollar (-2.51%). The ECB maintained its dovish stance, keeping interest rates negative and proceeding with asset purchases announced in March. Interest rates fell across developed markets, leading to strong bond returns. The **Barclays Global Aggregate** gained 2.89% (+2.51% hedged).

In Germany, 10-year yields fell 28 bps and joined the rapidly growing universe of negative-yielding bonds. Similarly, 10-year yields in Japan, which were already negative, fell a further 19 bps as the Bank of Japan maintained its easy monetary policy stance. The 10-year yield in the U.K. led the pack following Brexit, falling 55 bps, though it remained in positive territory by the end of the quarter. Market expectations moved firmly toward relatively easier monetary policy in the U.K.

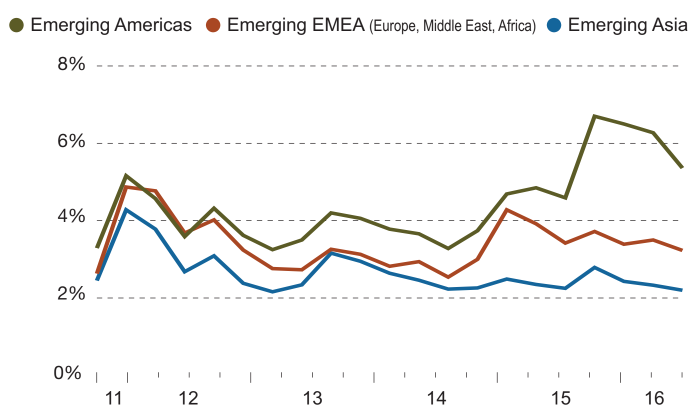
Emerging market bonds continued to rebound in the second quarter despite a bumpy ride. Falling bond yields were a tailwind and narrowing sovereign credit spreads further contributed to returns. The hard currency **JPM EMBI Global Diversified Index** gained 5.02%. Hard currency returns in most countries were positive, led by Venezuela. Bonds there have suffered extreme volatility as markets speculate on the timing of the country's default. The local currency **JPM GBI-EM Global Diversified** returned 2.96%, as local yields in emerging markets generally followed those in developed markets lower. Brazil was the leader for returns in local markets as yields fell and

Quarterly Return Attribution for Non-U.S. Gov't Indices
(U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	0.19%	3.51%	-3.20%	2.17%
Austria	-0.02%	2.56%	-2.51%	1.76%
Belgium	0.81%	3.40%	-2.51%	2.90%
Canada	1.58%	1.99%	-0.40%	2.29%
Denmark	1.51%	3.97%	-2.37%	0.79%
Finland	-0.18%	2.39%	-2.51%	0.70%
France	0.32%	2.90%	-2.51%	11.31%
Germany	0.27%	2.85%	-2.51%	8.49%
Ireland	-0.92%	1.63%	-2.51%	0.91%
Italy	-2.08%	0.45%	-2.51%	10.81%
Japan	12.91%	3.06%	9.56%	35.77%
Malaysia	-1.89%	1.38%	-3.22%	0.54%
Mexico	-5.45%	1.79%	-7.11%	0.99%
Netherlands	0.42%	3.01%	-2.51%	2.76%
Norway	-0.08%	1.08%	-1.16%	0.29%
Poland	-5.79%	0.27%	-6.04%	0.67%
Singapore	0.56%	0.51%	0.05%	0.42%
South Africa	5.03%	4.58%	0.43%	0.53%
Spain	-0.33%	2.23%	-2.51%	6.22%
Sweden	-1.65%	2.79%	-4.32%	0.57%
Switzerland	-0.83%	0.88%	-1.70%	0.27%
U.K.	-0.73%	6.74%	-6.99%	8.83%

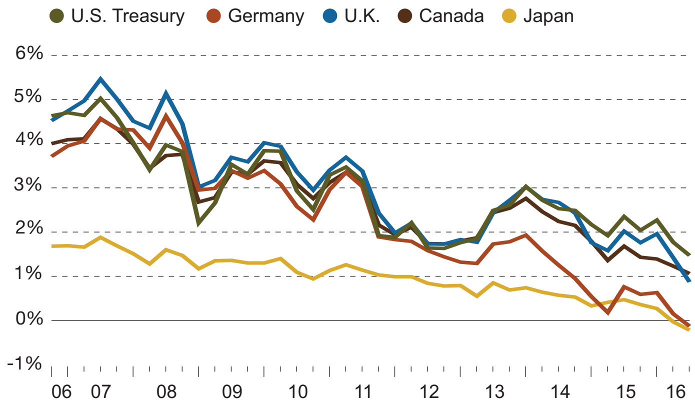
Source: Citigroup

Emerging Spreads Over Developed (By Region)

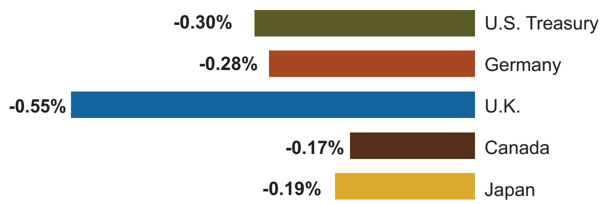


Source: Barclays

10-Year Global Government Bond Yields



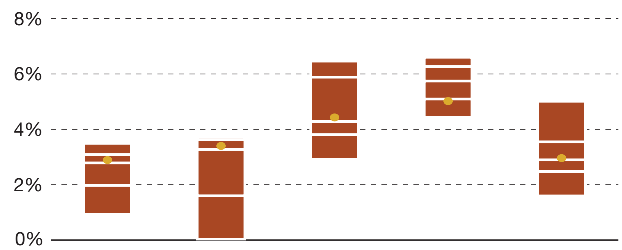
Change in 10-Year Yields from 1Q16 to 2Q16



Source: Bloomberg

the currency strengthened. During the quarter, Brazil's President Dilma Rousseff was suspended from the presidency during her impeachment trial. The market in Brazil has experienced volatility as the political future of the country is being determined.

Callan Style Group Quarterly Returns



	Global Fixed Style	Non-U.S. Fixed Style	Global High Yld	Em Debt USD DB	Em Debt Local
10th Percentile	3.52	3.75	6.49	6.63	5.04
25th Percentile	3.11	3.65	5.91	6.29	3.57
Median	2.81	3.30	4.31	5.77	2.92
75th Percentile	2.00	1.62	3.83	5.12	2.50
90th Percentile	0.96	0.06	2.94	4.46	1.62
	Barclays Gl Agg	Barclays Gl Agg ex US	Barclays High Yld	JPM EMBI Gl Div	JPM GBI-EM Gl Div
Benchmark ●	2.89	3.40	4.43	5.02	2.96

Sources: Callan, JPMorgan Chase

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Global Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Fixed Income Style	**2.81**	**8.34**	**7.56**	**2.84**	**2.20**	**4.89**	**6.54**
Barclays Global Aggregate	2.89	8.96	8.87	2.80	1.77	4.40	5.50
Global Fixed Income Style (hedged)	**2.67**	**5.87**	**7.22**	**5.49**	**5.29**	**5.60**	**5.83**
Barclays Global Aggregate (hedged)	2.51	5.87	7.37	5.15	4.76	5.03	4.92
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Global High Yield Style	**4.31**	**7.39**	**1.29**	**3.03**	**4.96**	**7.20**	**9.08**
Barclays Global High Yield	4.43	8.73	3.76	4.35	5.71	7.80	8.70
Non-U.S. Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Fixed Income Style	**3.30**	**11.49**	**10.12**	**2.17**	**1.04**	**4.39**	**6.71**
Barclays Global Agg ex US	3.40	11.94	11.24	1.85	0.34	3.83	5.85
Emerging Markets Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Debt Style (US$)	**5.77**	**11.06**	**8.44**	**5.62**	**5.99**	**8.35**	**10.42**
JPM EMBI Global Diversified	5.02	10.31	9.79	7.20	6.46	7.97	9.16
Emerging Debt Style (local)	**2.92**	**13.64**	**1.62**	**-3.12**	**-2.10**	**5.04**	**7.18**
JPM GBI-EM Global Diversified	2.96	14.30	2.24	-3.49	-2.19	5.74	--
Emerging Debt Blend Style	**4.03**	**11.28**	**4.99**	**1.14**	**2.77**	**8.01**	**11.56**
JPM EMBI Gl Div/JPM GBI-EM Gl Div	3.99	12.34	6.11	1.82	2.14	6.94	--
Emerging Debt Corporate Style	**4.45**	**8.60**	**4.93**	**5.71**	**5.32**	**--**	**--**
JPM CEMBI	4.27	9.02	5.78	5.72	5.45	7.45	--

*Returns less than one year are not annualized.
Sources: Barclays, Callan, JPMorgan Chase.

It Really Is Location, Location, Location

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** gained 2.03% during the second quarter, the lowest return since the first quarter of 2010, recording a 1.19% income return and a 0.84% appreciation return. Industrial (+2.90%) and retail (+2.17%) topped property sector performance for the quarter while hotels (+1.46%) brought up the rear. The West region was the strongest performer, up 2.46%, while the East was the worst at 1.73%. Transaction volume hit $9 billion, which represents a 25% increase over the second quarter of 2015. Appraisal capitalization rates increased to 4.60%, up from an all-time low of 4.55% last quarter. Occupancy rates also increased and hit a 15-year high at 93.2%. All property types have seen occupancy increase for the year, though retail was down 20 bps for the quarter.

The preliminary return for the **NFI-ODCE Index** was 1.91%, comprising a 0.90% income return and a 1.01% appreciation return. This marks a decrease of 5 bps from last quarter's return and a new low since 2010. The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, uncertainty caused by the Brexit vote in late June, and concerns about China's slowing growth. According to Preqin, which provides data on the alternative assets industry, the amount of dry powder for real estate investing globally increased to $234 billion in the quarter, up 11.4% from year-end 2015.

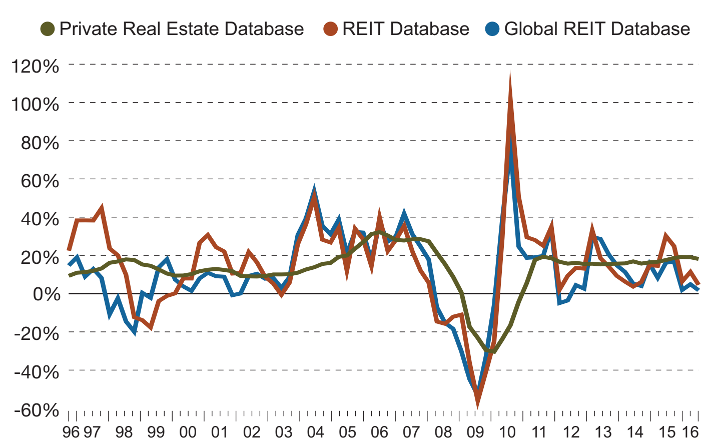
The **FTSE EPRA/NAREIT Developed REIT Index** (USD) overcame the shock of Brexit and gained 3.74%, while U.S. REITs tracked by the **FTSE NAREIT Equity Index** surged ahead 6.96%.

In the U.S., the strong performance of REITs was attributed to investors in search of yield. After the Brexit vote cast doubt on a Fed rate increase, global bond yields compressed 25 bps, making high-yielding REITs more attractive. Data centers (+20.59%), industrial (+15.38%), and infrastructure (+15.33%) were the best-performing sectors. Self-storage (-5.76%) suffered a sharp fall from grace and was the worst performer in the second quarter after being the strongest performer in the first. Strong data center performance was driven by robust tenant demand and less economic sensitivity. Conversely, self-storage assets with more acute economic sensitivity struggled due to fears of slowing growth. As of June 30, U.S. REITs were trading at a 7.1% premium to net asset value (NAV), contrasting sharply with U.K. REITs, which were trading at a 21.6% discount to NAV.

Uncertainty over the Brexit vote—and its surprising result—had a tremendous effect on real estate in the U.K. compared to continental Europe. According to Cushman & Wakefield, investment volume in the U.K. was down 25% year-to-date compared to 2015, versus a 10% increase in the rest of the EU.

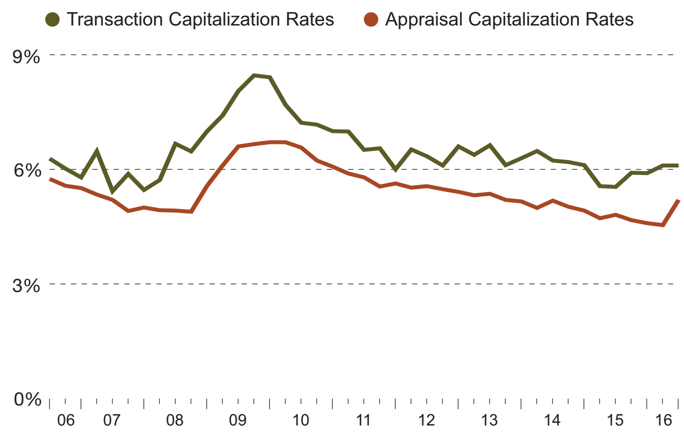
CMBS issuance for the quarter was $10.8 billion, down sharply from the second quarter of 2015 ($26.0 billion) and first quarter of 2016 ($19.3 billion). The decline was attributed to continued concerns over economic instability, including the Brexit vote; only $800 million in CMBS was issued in June.

Rolling One-Year Returns



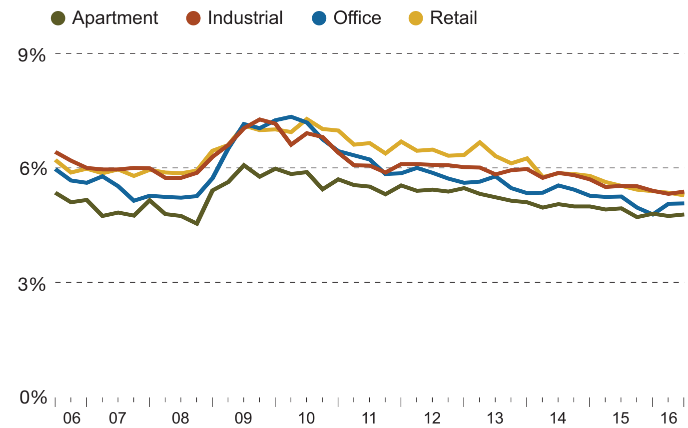
Source: Callan

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF
Note: Transaction capitalization rate is equal-weighted.

NCREIF Capitalization Rates by Property Type



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

Callan Database Median and Index Returns* for Periods ended June 30, 2016

Private Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Real Estate Database (net of fees)	**2.17**	**4.38**	**11.86**	**13.09**	**12.23**	**4.89**	**7.36**
NCREIF Property	2.03	4.29	10.64	11.61	11.51	7.40	8.91
NFI-ODCE (value wtd. net)	1.91	3.89	10.80	11.97	11.66	5.19	6.95
Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
REIT Database	**5.87**	**11.19**	**23.14**	**13.97**	**13.00**	**8.24**	**12.57**
FTSE NAREIT Equity	6.96	13.38	24.04	13.58	12.60	7.45	11.29
Global Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global REIT Database	**2.96**	**7.74**	**10.87**	**9.50**	**9.24**	**5.56**	**10.14**
FTSE EPRA/NAREIT Developed REIT	3.74	9.38	12.57	8.95	8.63	5.00	9.81
Global ex U.S. Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global ex-U.S. REIT Database	**0.46**	**4.08**	**0.47**	**4.98**	**5.41**	**3.12**	**--**
EPRA/NAREIT Dev REITs ex-U.S.	0.68	5.91	1.40	4.26	4.97	3.12	9.31

*Returns for less than one year are not annualized.
All REIT returns are reported gross in USD.
Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

Sticker Shock

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that second-quarter commitments totaled $102.2 billion with 196 new partnerships formed. The number of funds raised increased by only 11% from 177 in the first quarter, but the dollar volume rocketed 92% from $53.2 billion. Distressed debt surged to $13.3 billion from only $2.4 billion in the first quarter of 2016. Venture capital also saw a large jump of $14.6 billion from only $8.9 billion in the first quarter.

According to *Buyouts* newsletter, the investment pace by funds into companies totaled 356 transactions, bringing the first-half total to 816. The deal count is down by 86 transactions (19%) from the first quarter, and 216 transactions (21%) from the first half of 2015. The announced aggregate dollar volume in the second quarter was $37.6 billion, and $95.8 billion for the first half. The announced volume is down by $20.6 billion (35%) from the first quarter, but up $26 billion (27%) year-to-date. Only six deals with announced values of $1 billion or more closed in the second quarter, down from 12 in the first quarter.

According to the National Venture Capital Association, new investments in venture capital companies totaled 961 rounds and $15.3 billion in announced volume. The number of rounds decreased from 1,011 in the first quarter, but the dollar volume jumped from $12.7 billion, primarily due to a $3.5 billion expansion investment in Uber.

Funds Closed January 1 to June 30, 2016

Strategy	No. of Funds	Amt ($mm)	Percent*
Venture Capital	201	23,441	15%
Buyouts	119	102,687	66%
Subordinated Debt	9	2,397	2%
Distressed Debt	11	15,568	10%
Secondary and Other	10	5,513	4%
Fund-of-funds	23	5,767	4%
Totals	**373**	**155,373**	**100%**

Source: Private Equity Analyst
*Totals more than 100% due to rounding.

Regarding exits, *Buyouts* reports that there were 118 private M&A exits of buyout-backed companies, with 35 deals disclosing values totaling $24.6 billion. The M&A exits count was down from 140 in the first quarter, but the announced value increased from $15.6 billion. There were three buyout-backed IPOs floating an aggregate $1.6 billion—a recovery from no IPOs in the first quarter.

Venture-backed M&A exits totaled 64 transactions, with 11 disclosing a total dollar volume of $9.0 billion. The number of private sale exits declined from 91 in the first quarter, but the announced dollar volume increased from the first quarter's $5.2 billion, driven by a single $5.8 billion biotechnology exit. There were 12 VC-backed IPOs in the second quarter with a combined float of $893.9 million. For comparison, the first quarter of 2016 had 6 IPOs and total issuance of $574.5 million.

Private Equity Performance Database (%) (Pooled Horizon IRRs through December 31, 2015*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	2.1	13.8	22.0	16.5	11.1	4.7	24.3
Growth Equity	3.3	9.2	13.6	11.3	11.8	9.8	14.3
All Buyouts	2.4	8.5	13.3	12.3	11.2	11.8	12.8
Mezzanine	0.5	5.2	9.5	10.7	9.6	7.8	9.5
Distressed	-0.1	1.8	9.2	9.4	9.6	10.7	10.8
All Private Equity	**2.1**	**8.6**	**14.1**	**12.4**	**11.0**	**9.6**	**13.8**
S&P 500 Index	7.0	1.4	15.1	12.6	7.3	5.0	8.2
Russell 3000	6.3	0.5	14.7	12.2	7.4	5.4	8.3

Private equity returns are net of fees.
Sources: Standard & Poor's, Thomson/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.

Caution as Britannia Waives the Rule

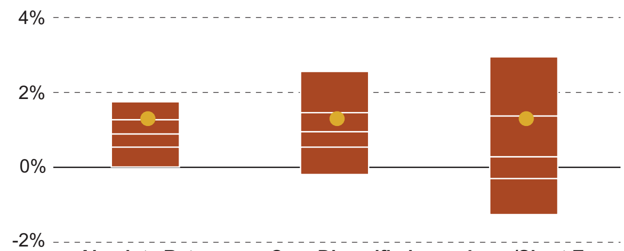
HEDGE FUNDS | Jim McKee

Amid the sudden disorder caused by Brexit, already cautious hedge funds mistrustful of the first quarter's skittishness were relatively unaffected and eked out modest gains, on average. Representing a paper portfolio of hedge fund interests without implementation costs, the **Credit Suisse Hedge Fund Index** (CS HFI) gained 0.59%. The median manager in the **Callan Hedge Fund-of-Funds Database** edged ahead 0.78%, net of all fees.

Returns across underlying strategies, however, were varied. The strongest performers were *Convertible Arb* (+2.65%), *Event-Driven Multi-Strategy* (+2.24%), and *Distressed* (+1.95%), as their credit exposures mended strongly from weakness in the prior quarter. *Emerging Markets* (+1.77%) and *Fixed Income Arb* (+1.02%) also regained ground from first-quarter losses.

Aside from the endangered species of *Short Bias* managers (-6.32%), the quarter's most notable loser was *Equity Market Neutral* (-3.17%), caught flat-footed by shifting risk appetites surrounding Brexit. Suffering from range-bound markets earlier in the quarter, *Managed Futures* lost 2.22% while *Global Macro* salvaged a 0.71% gain. The average *Long/Short Equity* fell 1.21%, trailing the S&P 500 (+2.46%) for the third consecutive quarter.

Callan Style Group Quarterly Returns



	Absolute Return FOF Style	Core Diversified FOF Style	Long/Short Eq FOF Style
10th Percentile	1.75	2.56	2.95
25th Percentile	1.27	1.46	1.37
Median	0.89	0.95	0.28
75th Percentile	0.54	0.54	-0.30
90th Percentile	0.01	-0.19	-1.26
T-Bills + 5% ●	1.30	1.30	1.30

Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market movements only marginally affected investment styles in the second quarter. For instance, despite the stock rally at quarter end, the median *Callan Long/Short Equity FOF* (+0.28%) trailed the *Callan Absolute Return FOF* (+0.89%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 0.95%.

Callan Database Median and Index Returns* for Periods ended June 30, 2016

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	**0.78**	**-2.18**	**-5.26**	**2.32**	**2.94**	**3.43**	**4.56**
CS Hedge Fund Index	0.59	-1.62	-4.23	2.49	2.88	4.17	5.69
CS Equity Market Neutral	-3.17	-3.52	-1.49	1.02	1.13	-2.43	0.72
CS Convertible Arbitrage	2.65	2.24	0.10	1.16	2.48	3.90	4.52
CS Fixed Income Arbitrage	1.02	-0.21	-0.37	2.37	4.07	3.25	4.17
CS Multi-Strategy	1.24	0.65	1.23	5.90	5.99	5.51	6.68
CS Distressed	1.95	-0.04	-5.25	1.41	3.17	4.08	6.93
CS Risk Arbitrage	0.58	2.71	0.73	1.55	1.46	3.46	3.49
CS Event-Driven Multi-Strategy	2.24	-3.46	-12.43	-0.49	0.32	3.98	5.92
CS Long/Short Equity	-1.21	-5.01	-5.00	4.53	4.00	4.73	5.86
CS Dedicated Short Bias	-6.32	-7.16	4.31	-8.41	-10.15	-9.89	-7.63
CS Global Macro	0.71	-1.54	-3.86	1.54	3.11	5.75	8.15
CS Managed Futures	-2.22	2.03	5.37	6.54	2.34	4.20	5.59
CS Emerging Markets	1.77	0.52	-2.43	2.39	2.21	4.50	7.85

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

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION | Tom Szkwarla

In a tumultuous first quarter, the Callan DC Index™ earned just 0.38%, lagging the Age 45 Target Date Fund, which gained nearly 1%. Over the past three years the Index has performed in line with the Age 45 fund; however, since inception, it has trailed with just 5.09% annually versus the Age 45 fund's 5.70% return.

For the quarter, DC plan balances grew 0.85%. Inflows—participant and plan sponsor contributions—added slightly more to total growth (+0.475%) than market performance (+0.375%).

As usual, target date funds attracted the majority of assets during the quarter, approximately 72 cents of every dollar that flowed into DC funds. Target date funds grew to their largest allocation yet, commanding 26.1% of total DC assets in the quarter. The growth seems to be at the expense of U.S. equity, which contracted to 23.4% of total assets.

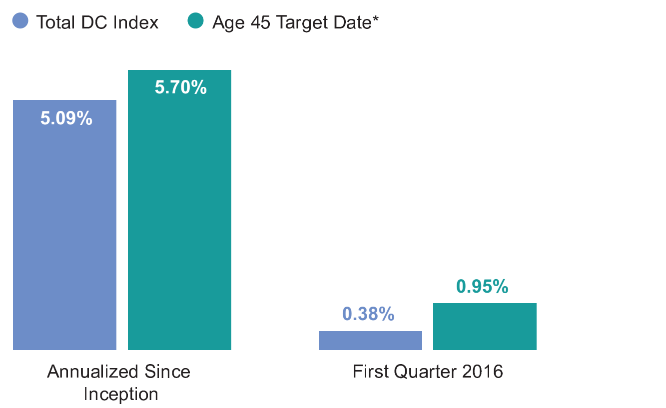
Stable value was the only other asset class with sizable inflows; this asset class typically attracts flows when markets are weak or particularly volatile. Several DC investments saw material net outflows, including U.S. equities (large and small/mid cap), U.S./global balanced, U.S. fixed income, non-U.S. equities, and company stock.

Overall turnover (i.e., net transfer activity levels within DC plans) was on par with last quarter (0.46%) at 0.44%. Turnover has been well below the historical average of 0.64% since mid-2014.

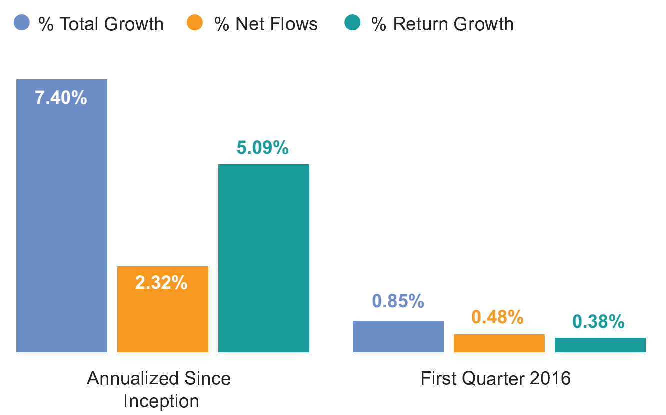
The Callan DC Index's overall equity allocation ended the quarter at 69%. Overall equity allocation has remained fairly static over the past few quarters, modestly above the Index's historical average (67%).

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 (First Quarter 2016)*
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	71.60%
Stable Value	15.57%
U.S. Small/Mid Cap	-23.49%
U.S. Large Cap	-29.02%
Total Turnover**	**0.44%**

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

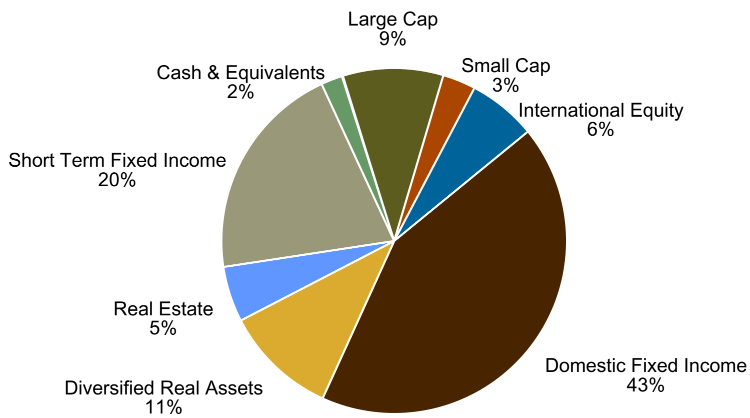
* DC Index inception date is January 2006.

**Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

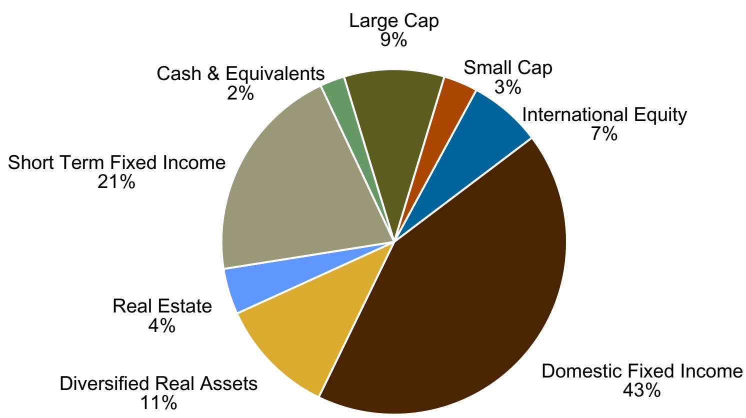
Actual vs Target Asset Allocation
As of June 30, 2016

The first chart below shows the Fund's asset allocation as of June 30, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



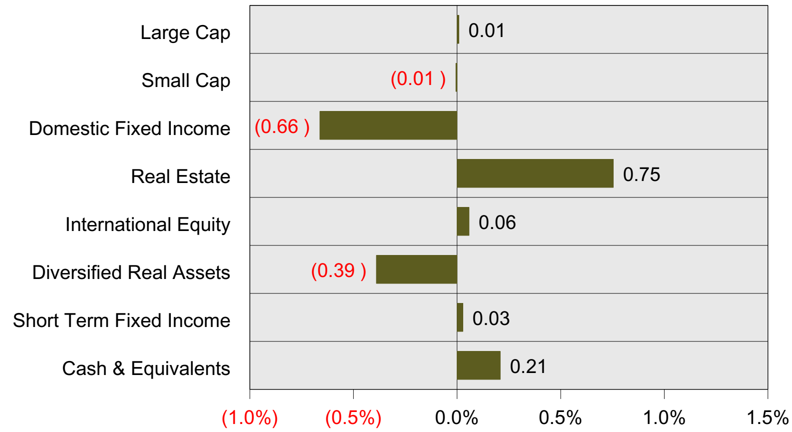
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	239,350	9.4%	9.4%	0.0%	728
Small Cap	79,585	3.1%	3.2%	(0.1%)	(1,649)
International Equity	162,877	6.4%	6.8%	(0.4%)	(9,744)
Domestic Fixed Income	1,084,806	42.7%	42.5%	0.2%	5,927
Diversified Real Assets	268,751	10.6%	11.0%	(0.4%)	(10,488)
Real Estate	131,285	5.2%	4.3%	0.9%	22,127
Short Term Fixed Income	520,366	20.5%	20.5%	0.0%	(35)
Cash & Equivalents	51,519	2.0%	2.3%	(0.3%)	(6,867)
Total	2,538,538	100.0%	100.0%		

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

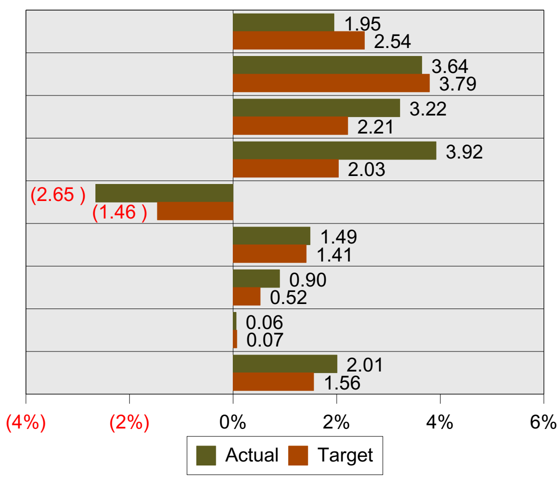
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

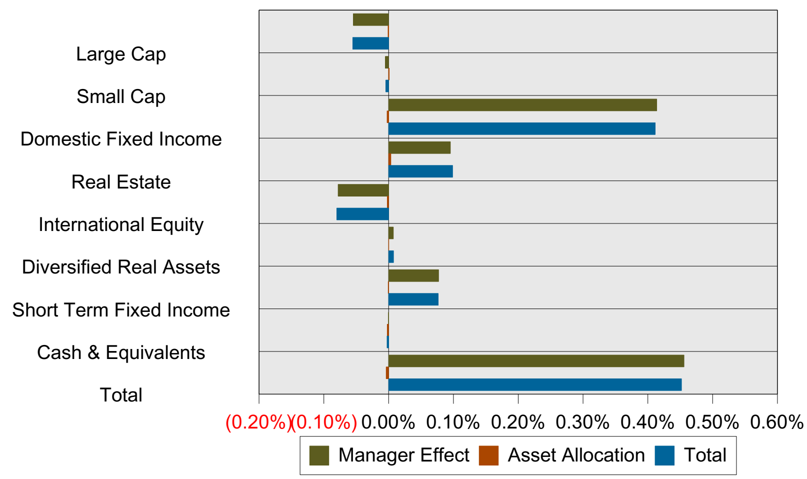
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

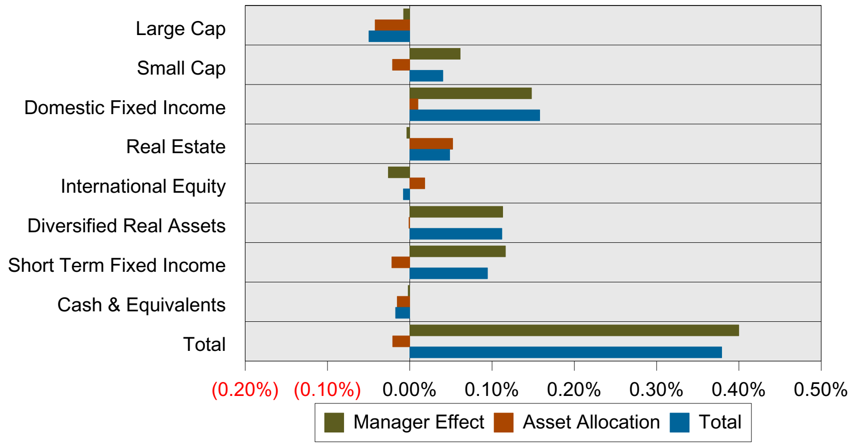
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	9%	9%	1.95%	2.54%	(0.05%)	(0.00%)	(0.06%)
Small Cap	3%	3%	3.64%	3.79%	(0.01%)	0.00%	(0.00%)
Domestic Fixed Income	42%	42%	3.22%	2.21%	0.41%	(0.00%)	0.41%
Real Estate	5%	4%	3.92%	2.03%	0.10%	0.00%	0.10%
International Equity	7%	7%	(2.65%)	(1.46%)	(0.08%)	(0.00%)	(0.08%)
Diversified Real Assets	11%	11%	1.49%	1.41%	0.01%	0.00%	0.01%
Short Term Fixed Income	20%	20%	0.90%	0.52%	0.08%	(0.00%)	0.08%
Cash & Equivalents	3%	3%	0.06%	0.07%	(0.00%)	(0.00%)	(0.00%)
Total			**2.01% =**	**1.56% +**	**0.46% +**	**(0.00%)**	**0.45%**

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

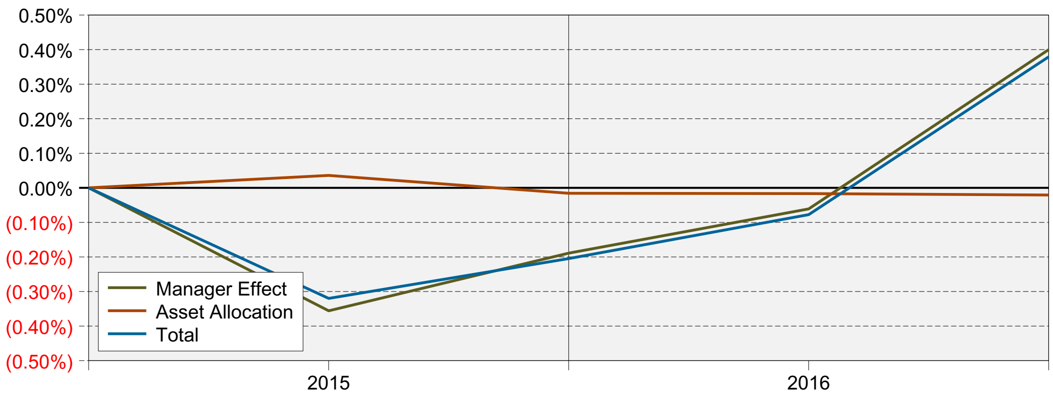
Cumulative Total Fund Relative Attribution - June 30, 2016

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	9%	9%	2.91%	2.93%	(0.01%)	(0.04%)	(0.05%)
Small Cap	3%	3%	(4.85%)	(6.73%)	0.06%	(0.02%)	0.04%
Domestic Fixed Income	42%	42%	6.42%	6.00%	0.15%	0.01%	0.16%
Real Estate	5%	4%	10.51%	10.64%	(0.00%)	0.05%	0.05%
International Equity	7%	7%	(10.44%)	(10.16%)	(0.03%)	0.02%	(0.01%)
Diversified Real Assets	11%	11%	3.13%	2.08%	0.11%	(0.00%)	0.11%
Short Term Fixed Income	20%	20%	1.87%	1.31%	0.12%	(0.02%)	0.09%
Cash & Equivalents	3%	3%	0.12%	0.19%	(0.00%)	(0.02%)	(0.02%)
Total			**3.34% =**	**2.96% +**	**0.40% +**	**(0.02%)**	**0.38%**

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

Cumulative Total Fund Relative Attribution - June 30, 2016

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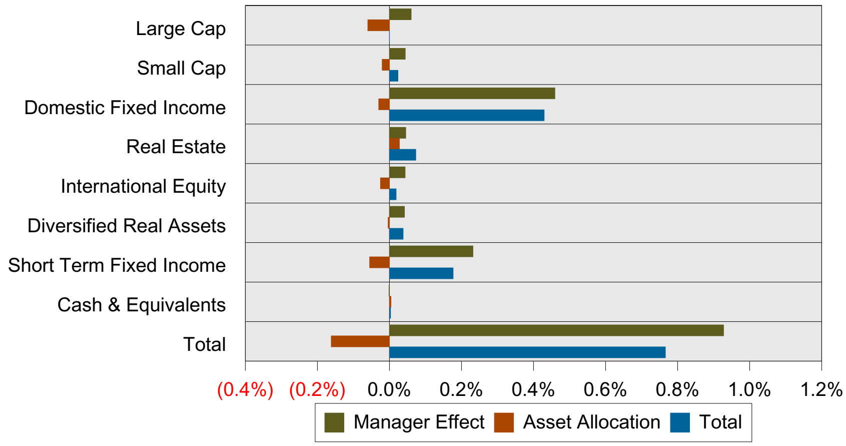
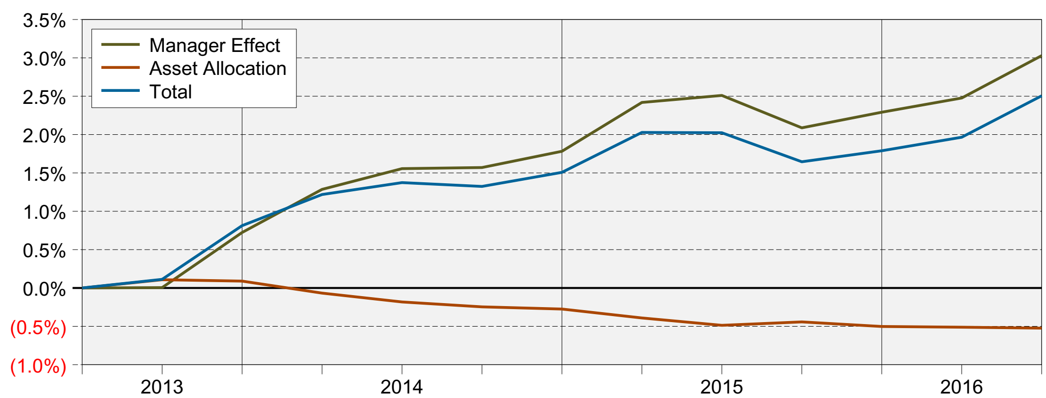
Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

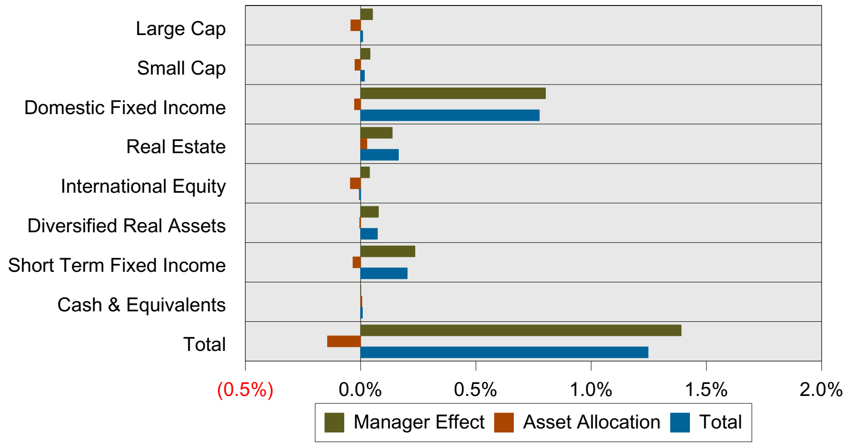
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	12%	12.25%	11.48%	0.06%	(0.06%)	0.00%
Small Cap	4%	4%	8.46%	7.09%	0.04%	(0.02%)	0.02%
Domestic Fixed Income	36%	37%	5.50%	4.06%	0.46%	(0.03%)	0.43%
Real Estate	5%	4%	12.41%	11.61%	0.05%	0.03%	0.07%
International Equity	8%	8%	3.31%	2.06%	0.04%	(0.02%)	0.02%
Diversified Real Assets	9%	10%	4.16%	3.65%	0.04%	(0.00%)	0.04%
Short Term Fixed Income	24%	23%	1.89%	1.00%	0.23%	(0.06%)	0.18%
Cash & Equivalents	3%	3%	0.05%	0.09%	(0.00%)	0.00%	0.00%
Total			**4.79% =**	**4.03% +**	**0.93% +**	**(0.16%)**	**0.77%**

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

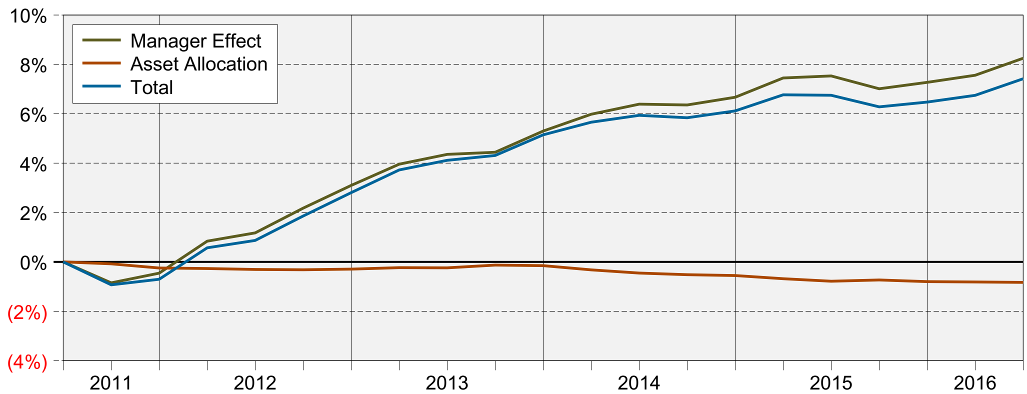
Cumulative Total Fund Relative Attribution - June 30, 2016

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

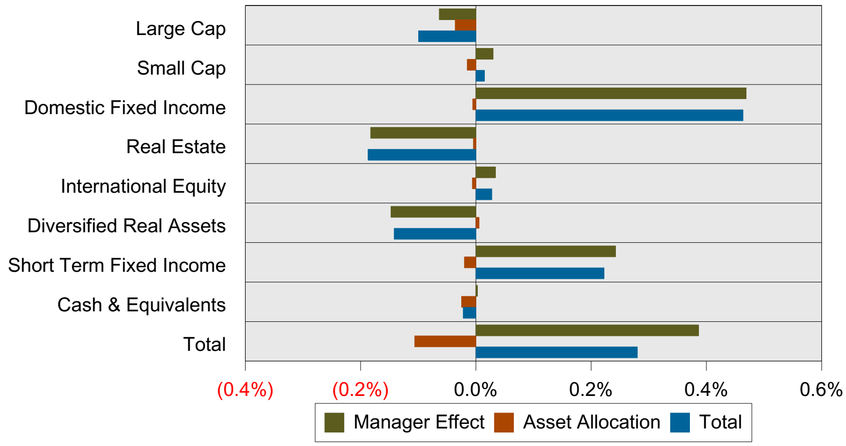
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	12.86%	12.09%	0.05%	(0.04%)	0.01%
Small Cap	3%	3%	9.86%	8.35%	0.04%	(0.02%)	0.02%
Domestic Fixed Income	36%	36%	6.23%	3.76%	0.80%	(0.03%)	0.78%
Real Estate	4%	4%	14.93%	11.51%	0.14%	0.03%	0.16%
International Equity	7%	7%	2.74%	1.68%	0.04%	(0.04%)	(0.01%)
Diversified Real Assets	11%	12%	3.62%	2.81%	0.08%	(0.00%)	0.07%
Short Term Fixed Income	26%	26%	1.44%	0.75%	0.24%	(0.03%)	0.20%
Cash & Equivalents	3%	3%	0.13%	0.09%	0.00%	0.01%	0.01%
Total			**5.06% =**	**3.81% +**	**1.39% +**	**(0.14%)**	**1.25%**

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

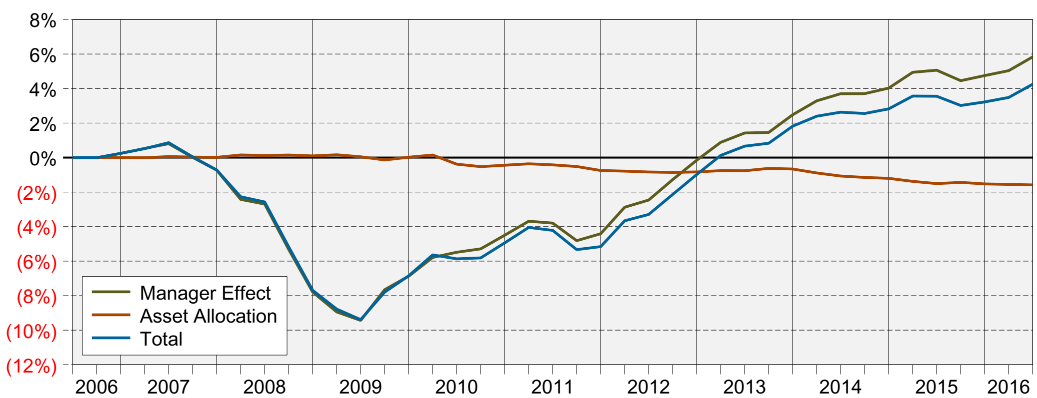
Cumulative Total Fund Relative Attribution - June 30, 2016

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

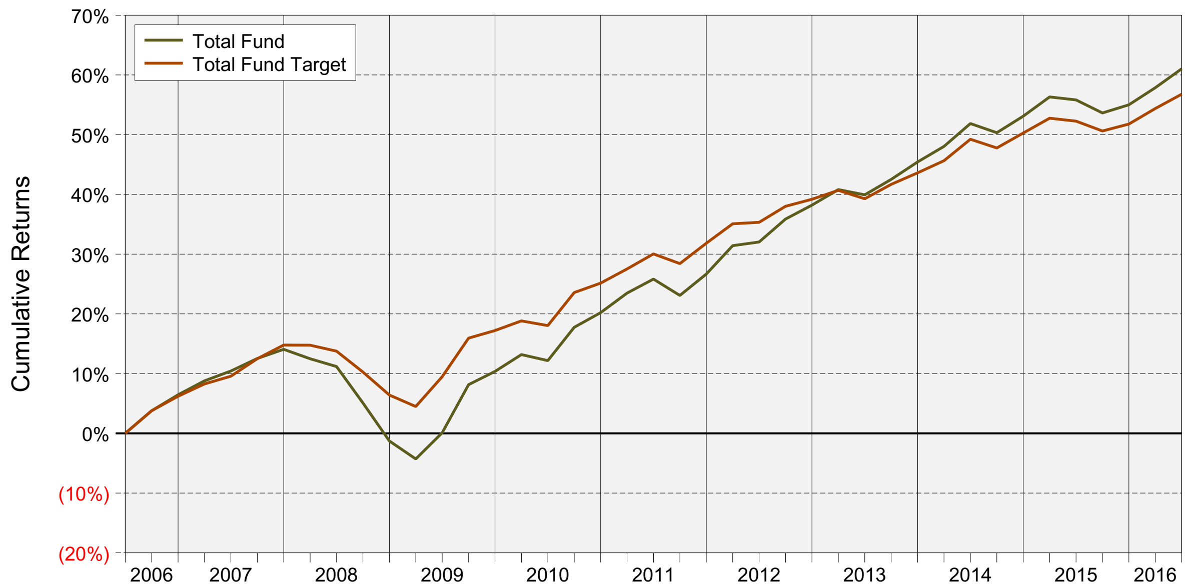
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	6.95%	7.42%	(0.06%)	(0.04%)	(0.10%)
Small Cap	3%	3%	7.07%	6.20%	0.03%	(0.02%)	0.01%
Domestic Fixed Income	41%	41%	6.67%	5.13%	0.47%	(0.01%)	0.46%
Real Estate	5%	5%	3.16%	7.40%	(0.18%)	(0.00%)	(0.19%)
International Equity	7%	7%	1.99%	1.32%	0.03%	(0.01%)	0.03%
Diversified Real Assets	15%	15%	4.20%	4.70%	(0.15%)	0.01%	(0.14%)
Short Term Fixed Income	15%	15%	-	-	0.24%	(0.02%)	0.22%
Cash & Equivalents	4%	3%	1.11%	1.04%	0.00%	(0.02%)	(0.02%)
Total			**4.88% =**	**4.60% +**	**0.39% +**	**(0.11%)**	**0.28%**

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

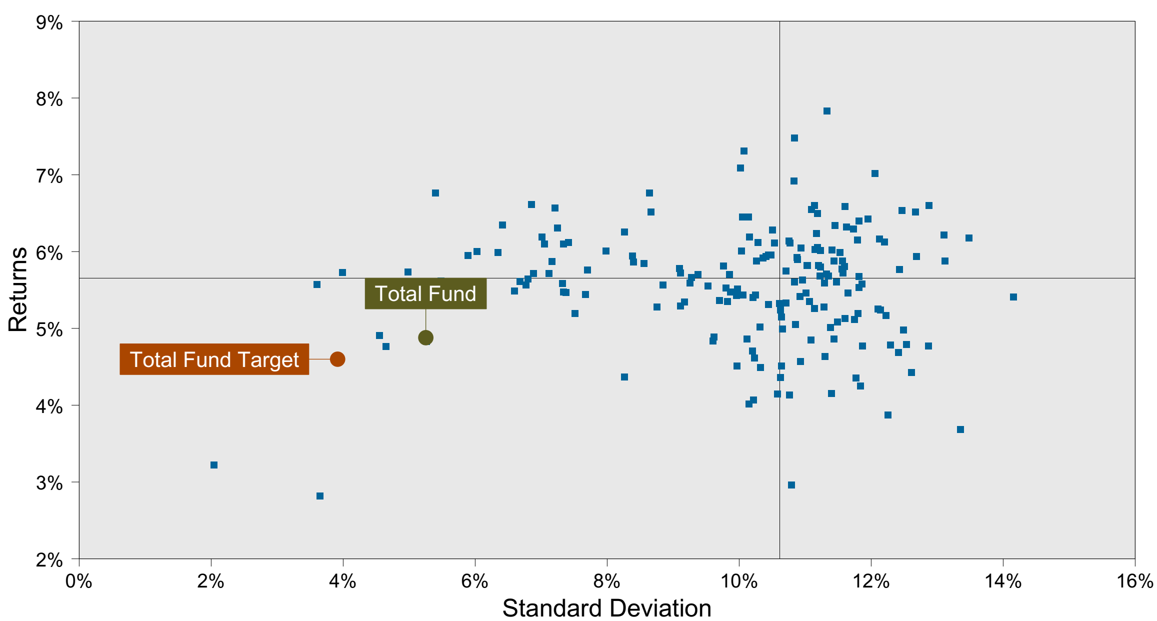
Cumulative Performance Relative to Target

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



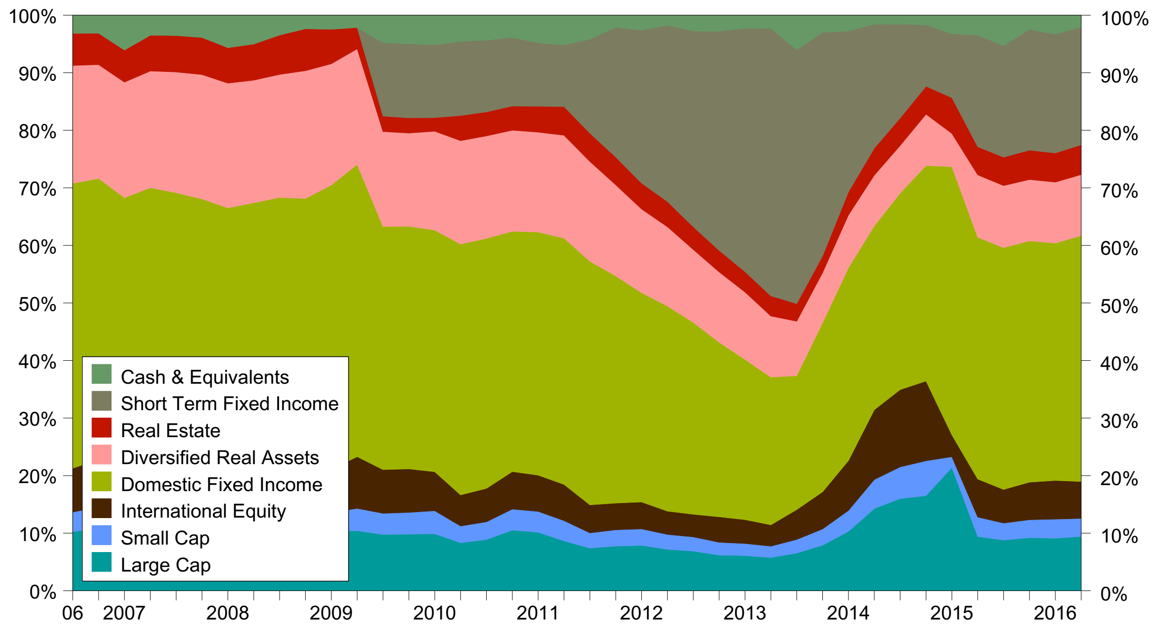
Squares represent membership of the CAI Public Fund Sponsor Database

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

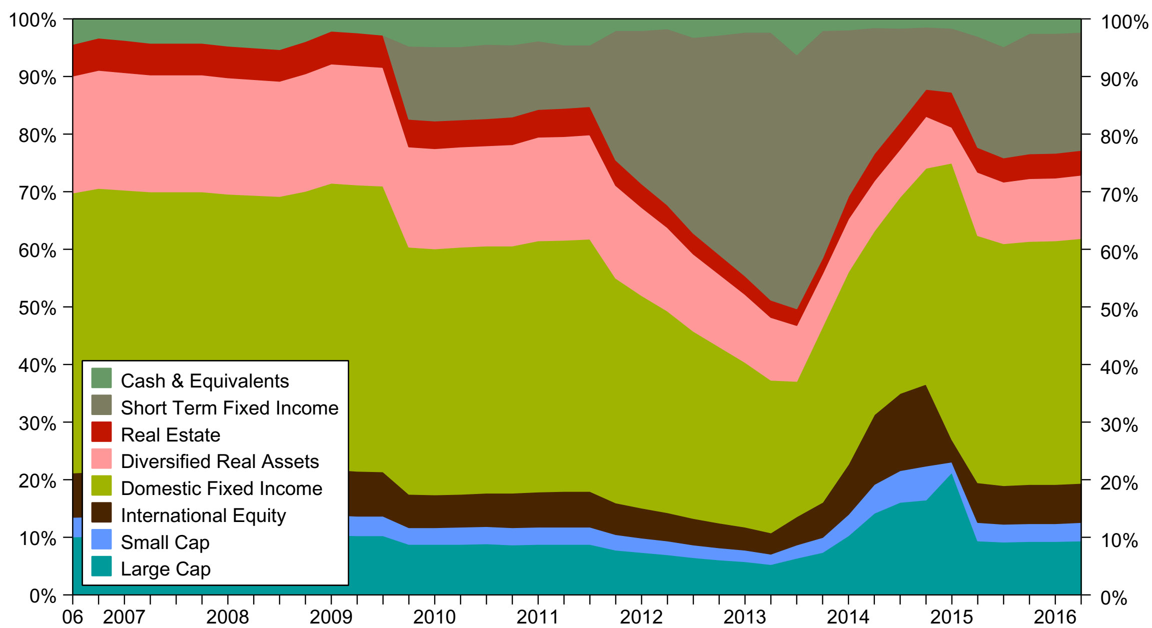
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

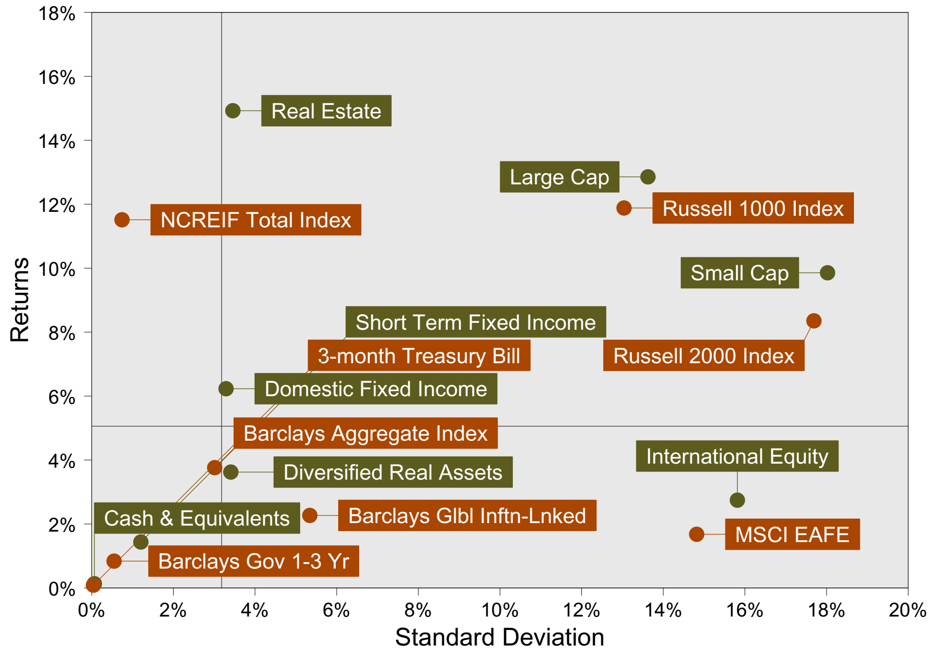


* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

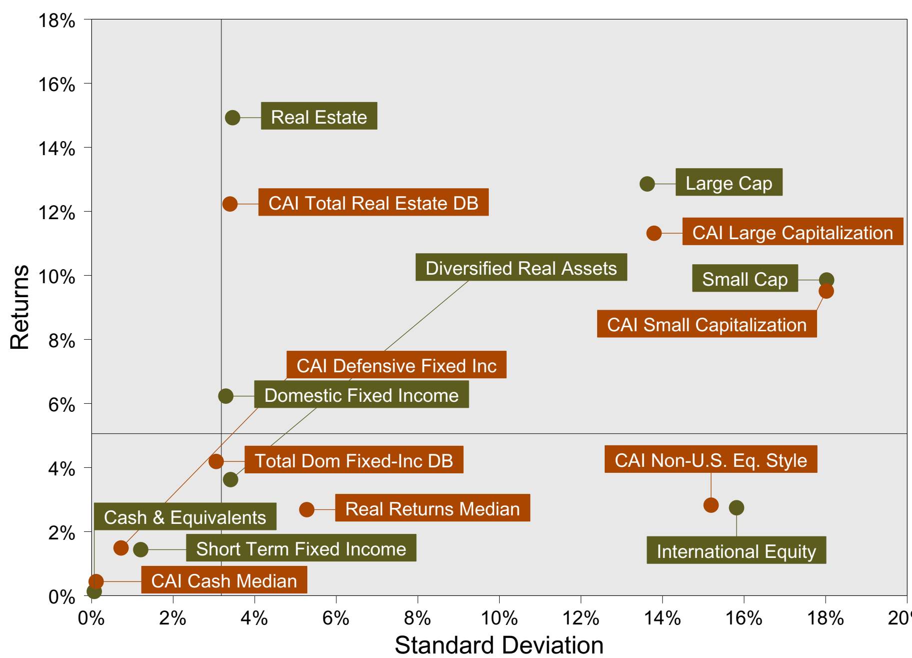
Asset Class Risk and Return

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



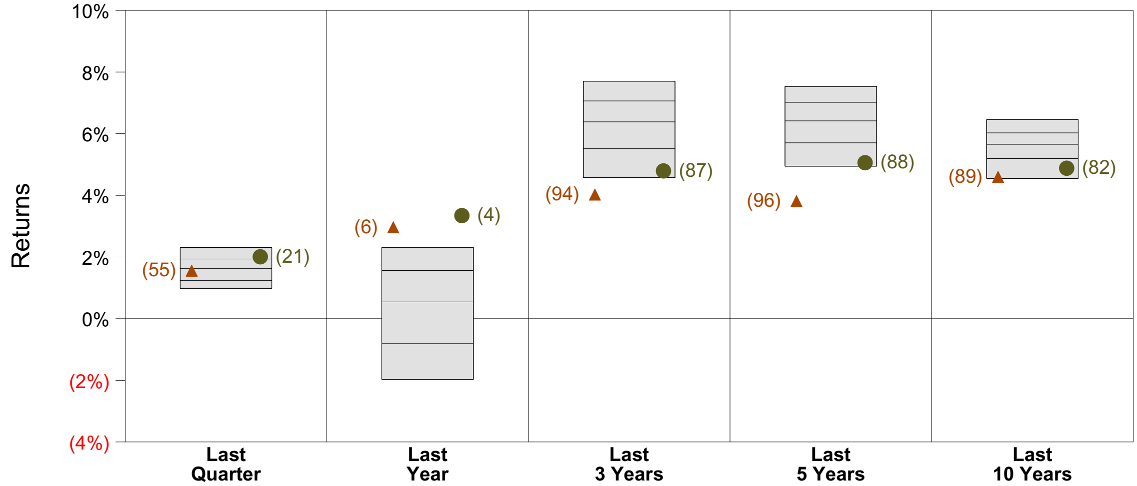
Five Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

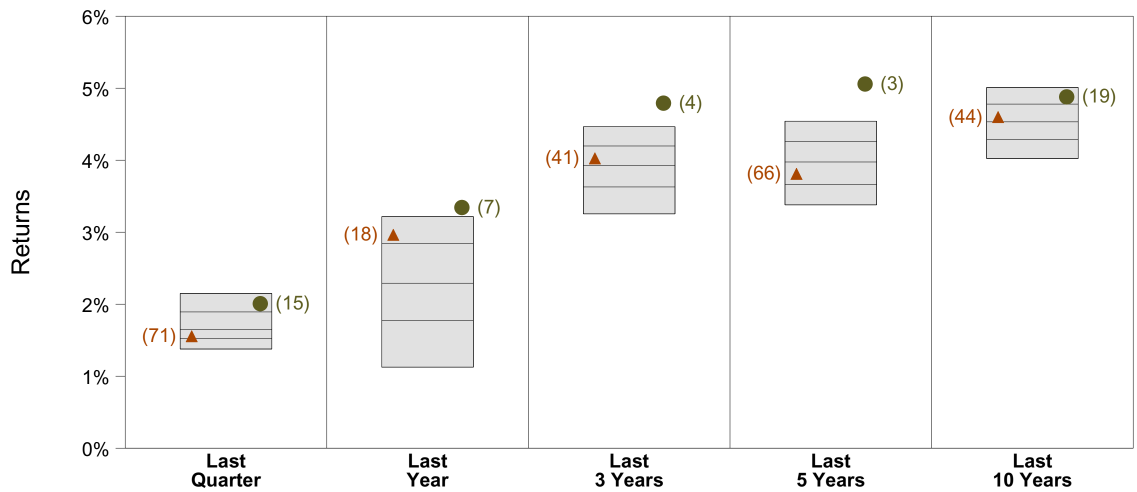
The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended June 30, 2016. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

CAI Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.31	2.31	7.70	7.53	6.46
25th Percentile	1.93	1.56	7.06	7.02	6.03
Median	1.62	0.54	6.39	6.42	5.65
75th Percentile	1.24	(0.81)	5.51	5.70	5.19
90th Percentile	0.98	(1.97)	4.57	4.94	4.55
Total Fund ●	2.01	3.34	4.79	5.06	4.88
Policy Target ▲	1.56	2.96	4.03	3.81	4.60

Asset Allocation Adjusted Ranking



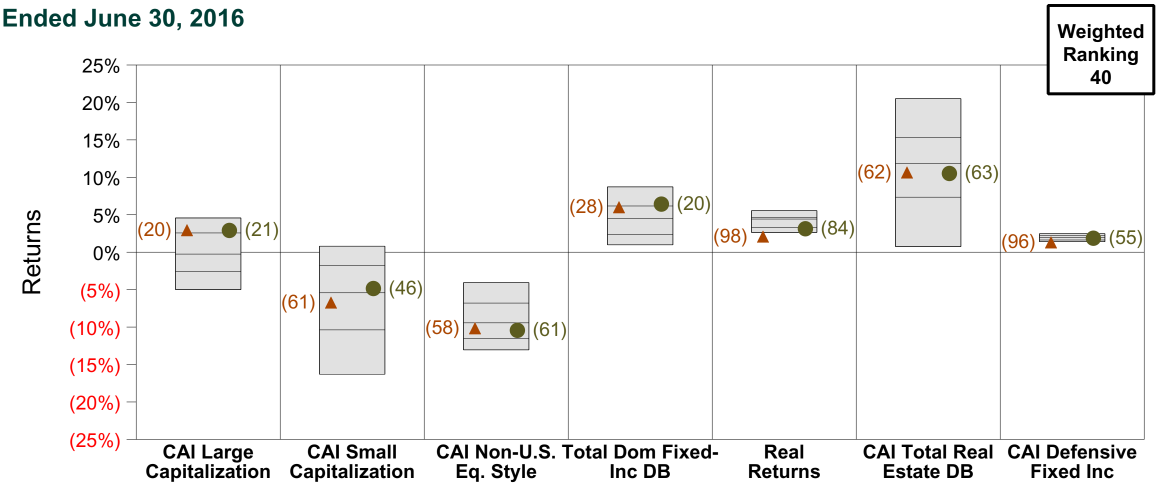
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.15	3.22	4.47	4.54	5.01
25th Percentile	1.89	2.85	4.20	4.26	4.78
Median	1.65	2.29	3.93	3.98	4.53
75th Percentile	1.52	1.78	3.63	3.66	4.28
90th Percentile	1.38	1.13	3.25	3.38	4.02
Total Fund ●	2.01	3.34	4.79	5.06	4.88
Policy Target ▲	1.56	2.96	4.03	3.81	4.60

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

Asset Class Rankings

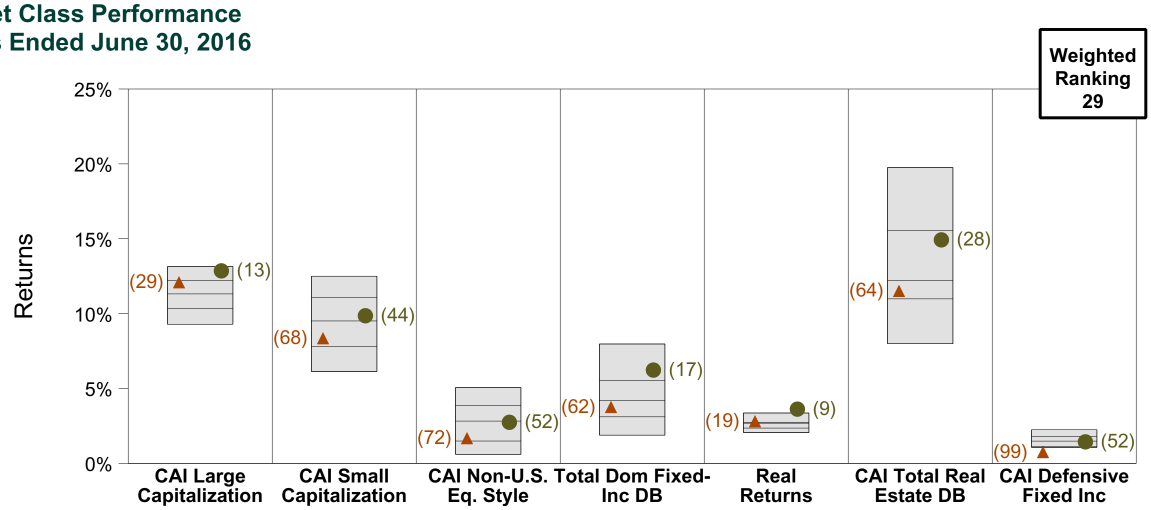
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Year Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Defensive Fixed Inc
10th Percentile	4.57	0.80	(4.07)	8.72	5.55	20.51	2.48
25th Percentile	2.57	(1.79)	(6.80)	6.17	4.63	15.32	2.20
Median	(0.25)	(5.42)	(9.43)	4.48	4.43	11.86	1.95
75th Percentile	(2.56)	(10.37)	(11.56)	2.34	3.32	7.35	1.63
90th Percentile	(4.99)	(16.30)	(13.04)	0.99	2.64	0.75	1.40
Asset Class Composite ●	2.91	(4.85)	(10.44)	6.42	3.13	10.51	1.87
Composite Benchmark ▲	2.93	(6.73)	(10.16)	6.00	2.08	10.64	1.31

Total Asset Class Performance
Five Years Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Defensive Fixed Inc
10th Percentile	13.14	12.50	5.06	7.97	3.37	19.75	2.25
25th Percentile	12.20	11.07	3.86	5.53	2.75	15.54	1.81
Median	11.32	9.51	2.83	4.19	2.69	12.23	1.49
75th Percentile	10.33	7.82	1.49	3.11	2.36	10.99	1.14
90th Percentile	9.29	6.14	0.60	1.88	2.06	7.99	1.07
Asset Class Composite ●	12.86	9.86	2.74	6.23	3.62	14.93	1.44
Composite Benchmark ▲	12.09	8.35	1.68	3.76	2.81	11.51	0.75

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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 Distribution Across Investment Managers

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	**$318,934,917**	**12.56%**	**$(419,007)**	**$7,475,587**	**$311,878,337**	**12.45%**
Large Cap	**$239,350,240**	**9.43%**	**$6,600,468**	**$4,497,045**	**$228,252,727**	**9.11%**
Parametric Clifton Large Cap	48,117,929	1.90%	700,000	1,154,579	46,263,350	1.85%
L.A. Capital Large Cap Growth	72,676,244	2.86%	2,965,886	1,465,016	68,245,342	2.72%
L.A. Capital Enhanced	48,689,003	1.92%	584,523	1,385,755	46,718,726	1.86%
LSV Large Cap Value	69,867,064	2.75%	2,350,059	491,696	67,025,309	2.67%
Small Cap	**$79,584,677**	**3.14%**	**$(7,019,475)**	**$2,978,542**	**$83,625,610**	**3.34%**
Parametric Clifton Small Cap	46,373,876	1.83%	(7,000,000)	2,084,687	51,289,190	2.05%
PIMCO RAE	33,210,801	1.31%	(19,475)	893,856	32,336,420	1.29%
International Equity	**$162,876,732**	**6.42%**	**$(857,339)**	**$(4,400,975)**	**$168,135,047**	**6.71%**
Capital Group	108,399	0.00%	(60,980,019)	1,048,755	60,039,664	2.40%
DFA Int'l Small Cap Value	16,873,372	0.66%	0	(550,452)	17,423,824	0.70%
LSV Intl Value	69,353,781	2.73%	(565,922)	(2,743,843)	72,663,546	2.90%
Vanguard Intl Explorer Fund	17,368,355	0.68%	0	(639,659)	18,008,014	0.72%
William Blair	59,172,826	2.33%	60,688,602	(1,515,776)	-	-
Domestic Fixed Income	**$1,084,805,848**	**42.73%**	**$17,654,809**	**$33,663,976**	**$1,033,487,064**	**41.24%**
Declaration Total Return	80,036,248	3.15%	(28,096)	1,597,443	78,466,901	3.13%
PIMCO DiSCO II	82,450,671	3.25%	0	1,888,725	80,561,946	3.21%
PIMCO Bravo II Fund	47,082,300	1.85%	0	959,697	46,122,603	1.84%
Prudential	110,445,990	4.35%	7,432,136	3,533,786	99,480,067	3.97%
SSgA US Govt Credit Bd Idx	143,350,650	5.65%	2,988,167	3,723,422	136,639,062	5.45%
Wells Capital	312,412,735	12.31%	(135,325)	13,227,869	299,320,190	11.94%
Western Asset Management	309,027,255	12.17%	7,397,927	8,733,034	292,896,294	11.69%
Diversified Real Assets	**$268,751,199**	**10.59%**	**$(757,487)**	**$3,944,850**	**$265,563,836**	**10.60%**
Western Asset Management	113,103,474	4.46%	(38,536)	1,248,944	111,893,066	4.47%
JP Morgan Infrastructure	75,325,819	2.97%	(405,151)	1,536,767	74,194,203	2.96%
Eastern Timber Opportunities	59,638,348	2.35%	0	402,717	59,235,631	2.36%
Grosvenor Cust. Infrastructure	20,683,558	0.81%	(313,799)	756,421	20,240,936	0.81%
Real Estate	**$131,284,626**	**5.17%**	**$(482,306)**	**$4,963,817**	**$126,803,116**	**5.06%**
Invesco Core Real Estate	61,898,343	2.44%	(54,597)	2,163,572	59,789,368	2.39%
JP Morgan RE	69,386,283	2.73%	(427,709)	2,800,245	67,013,748	2.67%
Short Term Fixed Income	**$520,365,807**	**20.50%**	**$(1,680,675)**	**$4,634,185**	**$517,412,297**	**20.65%**
JP Morgan Short Term Bonds	276,949,790	10.91%	(1,577,842)	2,005,328	276,522,303	11.04%
Babson Short Term Bonds	243,416,017	9.59%	(102,833)	2,628,857	240,889,993	9.61%
Cash & Equivalents	**$51,519,120**	**2.03%**	**$(31,092,454)**	**$47,675**	**$82,563,899**	**3.29%**
Cash Account	51,519,120	2.03%	(31,092,454)	47,675	82,563,899	3.29%
Securities Lending Income	**$0**	**0.00%**	**$(92,089)**	**$92,089**	**-**	**-**
Total Fund	**$2,538,538,251**	**100.0%**	**$(17,726,548)**	**$50,421,203**	**$2,505,843,595**	**100.0%**

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity					
Gross	2.39%	0.90%	11.25%	12.04%	7.00%
Net	2.35%	0.64%	11.01%	11.75%	6.63%
Large Cap Equity					
Gross	1.95%	2.91%	12.25%	12.86%	6.95%
Net	1.91%	2.72%	12.05%	12.63%	6.63%
Benchmark(1)	2.54%	2.93%	11.48%	12.09%	7.42%
Parametric Clifton Large Cap - Gross	2.42%	5.29%	12.07%	12.52%	-
Parametric Clifton Large Cap - Net	2.42%	5.22%	11.99%	12.34%	-
S&P 500 Index	2.46%	3.99%	11.66%	12.10%	7.42%
L.A. Capital - Gross	2.09%	5.44%	14.28%	13.79%	9.35%
L.A. Capital - Net	2.04%	5.24%	14.07%	13.57%	9.15%
Russell 1000 Growth Index	0.61%	3.02%	13.07%	12.35%	8.78%
L.A. Capital Enhanced - Gross	2.94%	5.96%	12.61%	13.05%	8.78%
L.A. Capital Enhanced - Net	2.90%	5.82%	12.48%	12.91%	8.62%
Russell 1000 Index	2.54%	2.93%	11.48%	11.88%	7.51%
LSV Asset Management - Gross	0.85%	(3.01%)	10.08%	11.91%	6.87%
LSV Asset Management - Net	0.78%	(3.30%)	9.77%	11.59%	6.56%
Russell 1000 Value Index	4.58%	2.86%	9.87%	11.35%	6.13%
Small Cap Equity					
Gross	3.64%	(4.85%)	8.46%	9.86%	7.07%
Net	3.62%	(5.27%)	8.09%	9.42%	6.58%
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	6.20%
Parametric Clifton Small Cap - Gross	4.19%	(5.52%)	8.43%	9.67%	-
Parametric Clifton SmallCap - Net	4.19%	(5.98%)	8.04%	9.21%	-
Russell 2000 Index	3.79%	(6.73%)	7.09%	8.35%	6.20%
PIMCO RAE - Gross	2.77%	(3.86%)	8.14%	9.82%	-
PIMCO RAE - Net	2.70%	(4.14%)	7.81%	9.41%	-
Russell 2000	3.79%	(6.73%)	7.09%	8.35%	6.20%
International Equity					
Gross	(2.65%)	(10.44%)	3.31%	2.74%	1.99%
Net	(2.73%)	(10.74%)	2.94%	2.38%	1.71%
Benchmark(2)	(1.46%)	(10.16%)	2.06%	1.68%	1.32%
DFA Intl Small Cap Value - Net	(3.16%)	(9.28%)	6.01%	4.04%	-
World ex US SC Va	(1.88%)	(6.05%)	4.76%	3.03%	3.50%
LSV Asset Management - Gross	(3.82%)	(11.21%)	2.99%	2.44%	0.99%
LSV Asset Management - Net	(3.90%)	(11.55%)	2.58%	2.00%	0.68%
Benchmark(2)	(1.46%)	(10.16%)	2.06%	1.68%	1.32%
Vanguard Intl Explorer Fund - Net	(3.55%)	(7.27%)	6.48%	3.81%	3.80%
BMI, EPAC, <$2 B	(0.63%)	(3.38%)	7.29%	4.37%	3.51%

(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 and 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Fixed Income					
Gross	3.22%	6.42%	5.50%	6.23%	6.67%
Net	3.19%	6.29%	5.36%	6.07%	6.49%
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	5.13%
Declaration Total Return - Net	2.04%	2.60%	-	-	-
Libor-3 Month	0.16%	0.49%	0.33%	0.36%	1.44%
PIMCO DiSCO II - Net	2.34%	4.39%	6.85%	-	-
PIMCO Bravo II Fund - Net	2.08%	7.02%	-	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	5.13%
Prudential - Gross	3.37%	7.12%	5.36%	5.51%	-
Prudential - Net	3.30%	6.83%	5.08%	5.29%	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.76%	5.13%
Wells Capital - Gross	4.42%	7.19%	5.98%	6.22%	7.72%
Wells Capital - Net	4.37%	6.99%	5.79%	6.01%	7.49%
Barclays Baa Credit 3%	4.33%	6.90%	5.39%	5.62%	6.89%
Western Asset - Gross	2.93%	6.79%	5.21%	5.32%	6.10%
Western Asset - Net	2.89%	6.64%	5.07%	5.15%	5.91%
Barclays Aggregate	2.21%	6.00%	4.06%	3.76%	5.13%
SSgA US Govt Cr Bd Idx - Gross	2.67%	6.71%	4.20%	-	-
SSgA US Govt Cr Bd Idx - Net	2.66%	6.68%	4.17%	-	-
Barclays Govt/Credit Bd	2.67%	6.70%	4.20%	4.11%	5.22%
Diversified Real Assets					
Gross	1.49%	3.13%	4.16%	3.62%	4.20%
Net	1.33%	2.75%	3.84%	3.29%	3.90%
Weighted Benchmark	1.41%	2.08%	3.65%	2.81%	4.70%
Western TIPS - Gross	1.12%	2.72%	3.16%	2.16%	3.94%
Western TIPS - Net	1.08%	2.58%	3.02%	2.00%	3.78%
Barclays Glbl Inftn-Linked(1)	1.65%	2.55%	2.74%	2.27%	4.42%
JP Morgan Infrastructure - Gross	2.07%	5.17%	4.92%	5.96%	-
JP Morgan Infrastructure - Net	1.57%	3.99%	3.87%	4.81%	-
CPI-W	1.33%	0.64%	0.76%	1.12%	1.71%
Eastern Timber Opportunities - Net	0.68%	(0.25%)	4.60%	4.22%	-
NCREIF Timberland Index	1.09%	3.49%	7.77%	6.72%	6.40%
Grosvenor Cust. Infrastructure - Net	3.80%	8.42%	8.86%	-	-
CPI-W	1.33%	0.64%	0.76%	1.12%	1.71%

(1) Barclays US TIPS through 12/31/2009 and Barclays 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 June 30, 2016. 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.

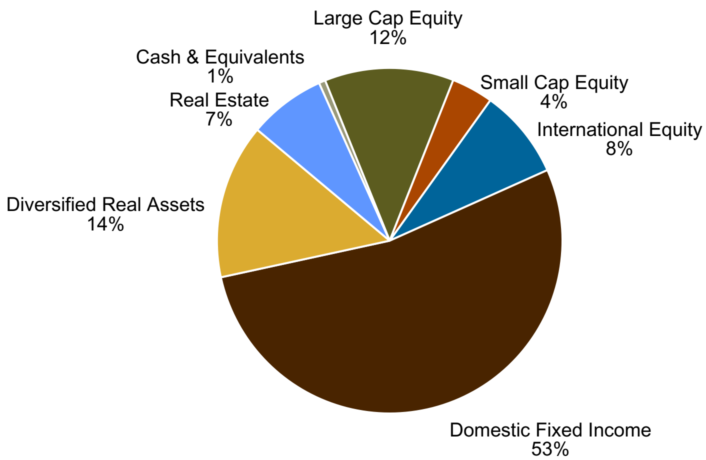
Returns for Periods Ended June 30, 2016

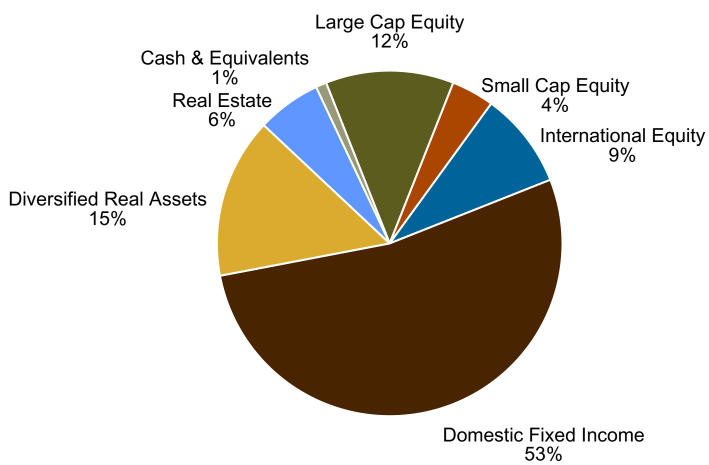
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Real Estate					
Gross	3.92%	10.51%	12.41%	14.93%	3.16%
Net	3.56%	9.75%	11.51%	13.93%	2.06%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	7.40%
Invesco Core Real Estate - Gross	3.62%	10.96%	12.73%	-	-
Invesco Core Real Estate - Net	3.53%	10.58%	12.28%	-	-
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	7.40%
JP Morgan - Gross	4.18%	10.11%	12.26%	15.64%	3.48%
JP Morgan - Net	3.60%	9.03%	11.03%	14.34%	2.24%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	7.40%
Short Term Fixed Income					
Gross	0.90%	1.87%	1.89%	1.44%	-
Net	0.86%	1.68%	1.73%	1.32%	-
Barclays Gov 1-3 Yr	0.52%	1.31%	1.00%	0.84%	2.54%
Babson Short Term Bonds - Gross	1.09%	1.95%	2.30%	-	-
Babson Short Term Bonds - Net	1.05%	1.73%	2.14%	-	-
Barclays Gov 1-3 Yr	0.52%	1.31%	1.00%	0.84%	2.54%
JP Morgan Short Term Bds - Gross	0.73%	1.82%	1.45%	-	-
JP Morgan Short Term Bds - Net	0.70%	1.67%	1.33%	-	-
Barclays Gov/Credit 1-3 Y	0.67%	1.59%	1.22%	1.10%	2.80%
Cash & Equivalents - Net	**0.06%**	**0.12%**	**0.05%**	**0.13%**	**1.11%**
Cash Account- Net	0.06%	0.12%	0.05%	0.13%	1.11%
90 Day Treasury Bills	0.07%	0.19%	0.09%	0.09%	1.04%
Total Fund					
Gross	2.01%	3.34%	4.79%	5.06%	4.88%
Net	1.94%	3.12%	4.57%	4.83%	4.63%
Target*	1.56%	2.96%	4.03%	3.81%	4.60%

* Current Quarter Target = 42.5% Barclays Aggregate Index, 20.5% Barclays Gov 1-3 Yr, 11.0% NDSIB INS DRA Weighted Benchmark, 9.4% Russell 1000 Index, 6.8% MSCI EAFE, 4.3% NCREIF Total Index, 3.2% Russell 2000 Index and 2.3% 3-month Treasury Bill.

Actual vs Target Asset Allocation
As of June 30, 2016

The first chart below shows the Fund's asset allocation as of June 30, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



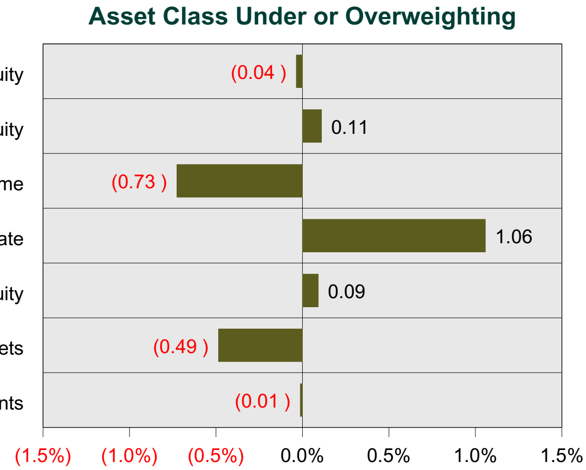


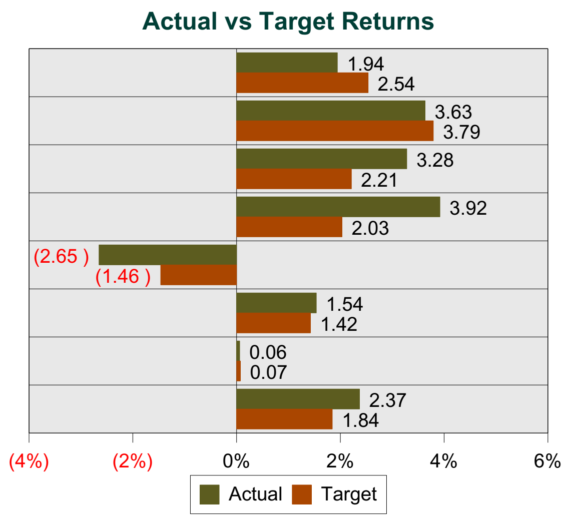
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap Equity	221,627	12.1%	12.0%	0.1%	1,775
Small Cap Equity	71,992	3.9%	4.0%	(0.1%)	(1,292)
International Equity	154,030	8.4%	9.0%	(0.6%)	(10,860)
Domestic Fixed Income	976,544	53.3%	53.0%	0.3%	5,529
Diversified Real Assets	264,886	14.5%	15.0%	(0.5%)	(9,930)
Real Estate	131,219	7.2%	6.0%	1.2%	21,293
Cash & Equivalents	11,805	0.6%	1.0%	(0.4%)	(6,516)
Total	1,832,104	100.0%	100.0%		

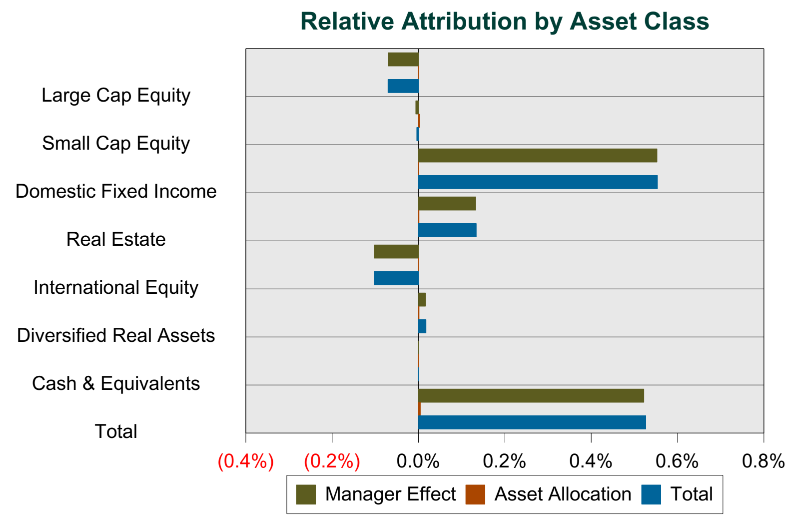
* Current Quarter Target = 53.0% Barclays Aggregate Index, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI EAFE, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

Quarterly Total Fund Relative Attribution - June 30, 2016

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.







Relative Attribution Effects for Quarter ended June 30, 2016

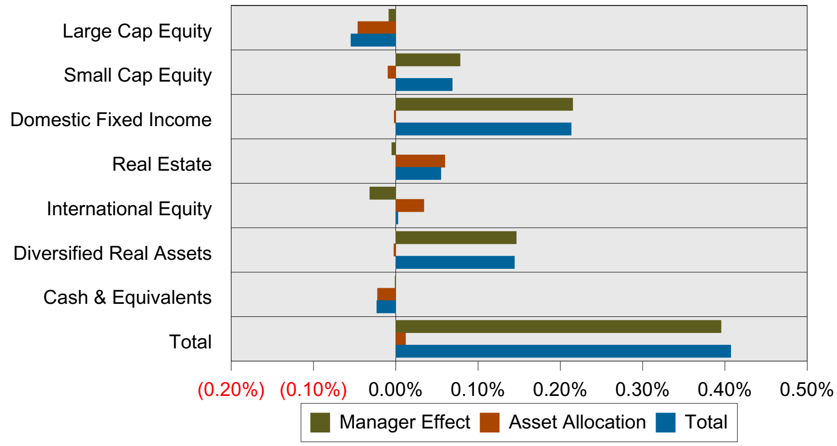
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	1.94%	2.54%	(0.07%)	(0.00%)	(0.07%)
Small Cap Equity	4%	4%	3.63%	3.79%	(0.01%)	0.00%	(0.00%)
Domestic Fixed Income	52%	53%	3.28%	2.21%	0.55%	0.00%	0.55%
Real Estate	7%	6%	3.92%	2.03%	0.13%	0.00%	0.13%
International Equity	9%	9%	(2.65%)	(1.46%)	(0.10%)	(0.00%)	(0.10%)
Diversified Real Assets	15%	15%	1.54%	1.42%	0.02%	0.00%	0.02%
Cash & Equivalents	1%	1%	0.06%	0.07%	(0.00%)	(0.00%)	(0.00%)
Total			**2.37% =**	**1.84% +**	**0.52% +**	**0.00%**	**0.53%**

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

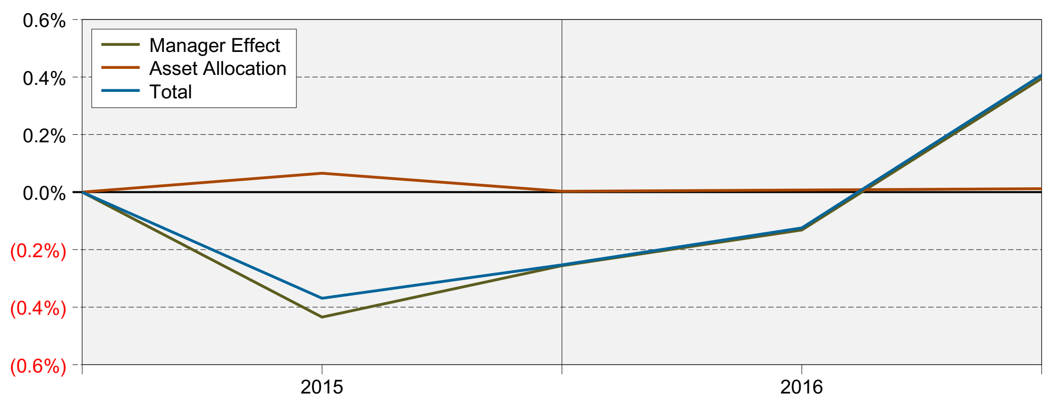
Cumulative Total Fund Relative Attribution - June 30, 2016

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

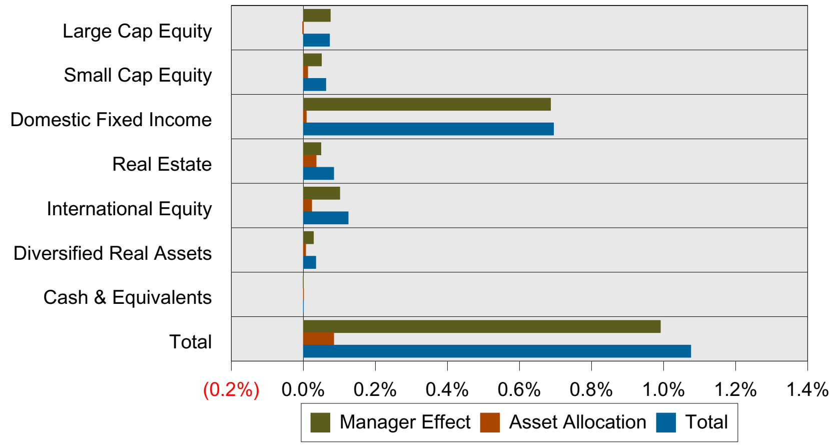
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	2.91%	2.93%	(0.01%)	(0.05%)	(0.05%)
Small Cap Equity	4%	4%	(4.86%)	(6.73%)	0.08%	(0.01%)	0.07%
Domestic Fixed Income	53%	53%	6.49%	6.00%	0.22%	(0.00%)	0.21%
Real Estate	7%	6%	10.51%	10.64%	(0.00%)	0.06%	0.05%
International Equity	9%	9%	(10.43%)	(10.16%)	(0.03%)	0.03%	0.00%
Diversified Real Assets	15%	15%	3.19%	2.19%	0.15%	(0.00%)	0.14%
Cash & Equivalents	1%	1%	0.12%	0.19%	(0.00%)	(0.02%)	(0.02%)
Total			**3.83% =**	**3.42% +**	**0.40% +**	**0.01%**	**0.41%**

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

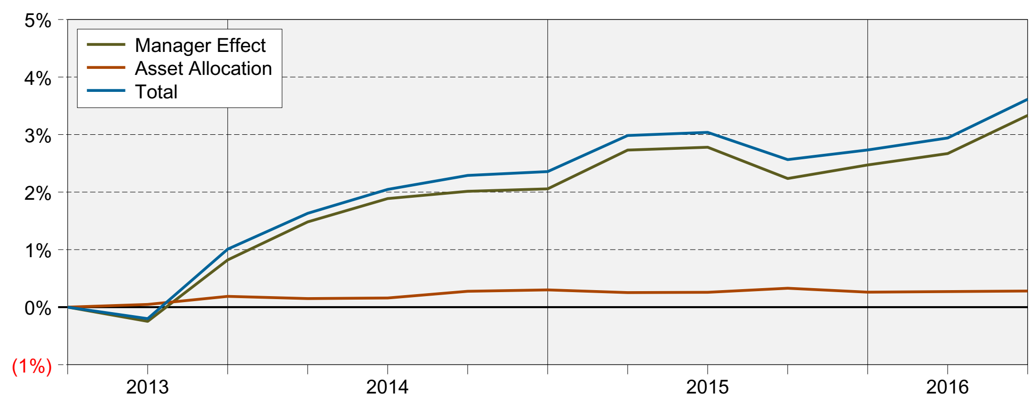
Cumulative Total Fund Relative Attribution - June 30, 2016

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

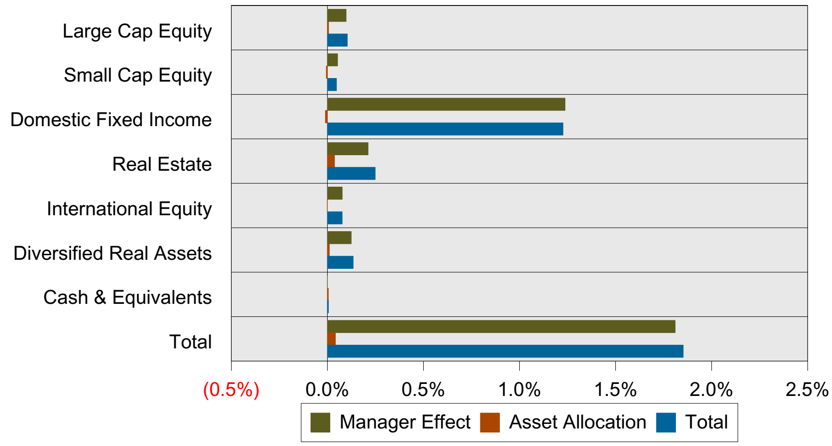
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	11%	11%	12.19%	11.48%	0.07%	(0.00%)	0.07%
Small Cap Equity	4%	4%	8.48%	7.09%	0.05%	0.01%	0.06%
Domestic Fixed Income	52%	52%	5.43%	4.06%	0.69%	0.01%	0.69%
Real Estate	7%	6%	12.40%	11.61%	0.05%	0.04%	0.08%
International Equity	8%	8%	3.24%	2.06%	0.10%	0.02%	0.12%
Diversified Real Assets	17%	17%	4.47%	4.28%	0.03%	0.01%	0.03%
Cash & Equivalents	1%	1%	0.05%	0.09%	(0.00%)	0.00%	0.00%
Total			**6.37% =**	**5.29% +**	**0.99% +**	**0.08%**	**1.08%**

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

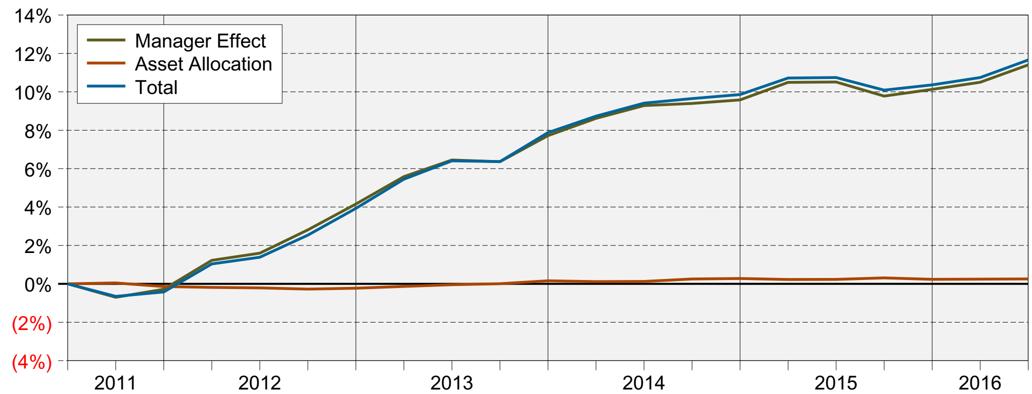
Cumulative Total Fund Relative Attribution - June 30, 2016

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

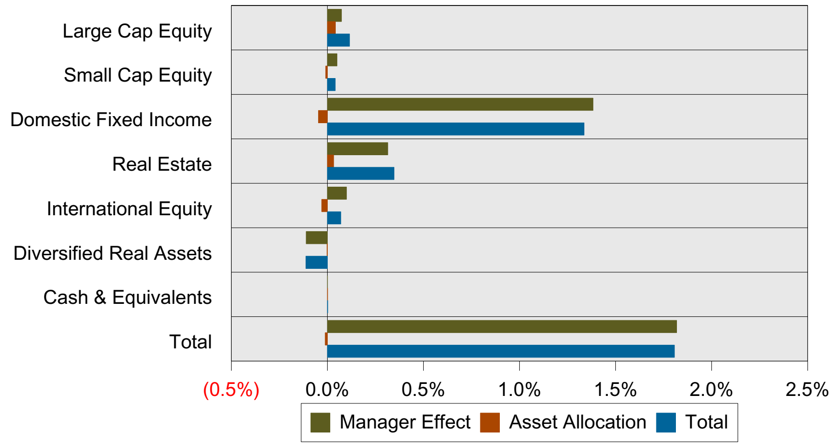
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return		Target Return		Manager Effect		Asset Allocation	Total Relative Return
Large Cap Equity	11%	11%	12.83%		11.88%		0.10%		0.01%	0.10%
Small Cap Equity	4%	4%	9.87%		8.35%		0.05%		(0.01%)	0.05%
Domestic Fixed Income	52%	52%	6.19%		3.76%		1.24%		(0.01%)	1.23%
Real Estate	7%	6%	14.91%		11.51%		0.21%		0.04%	0.25%
International Equity	8%	8%	2.63%		1.68%		0.08%		(0.00%)	0.08%
Diversified Real Assets	19%	19%	3.81%		3.19%		0.12%		0.01%	0.13%
Cash & Equivalents	1%	1%	0.13%		0.09%		0.00%		0.00%	0.01%
Total			**6.84%**	**=**	**4.99%**	**+**	**1.81%**	**+**	**0.04%**	**1.85%**

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

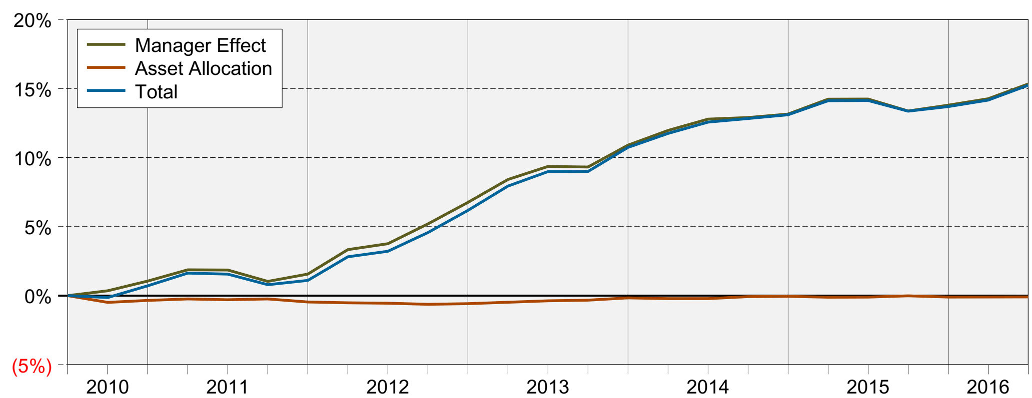
Cumulative Total Fund Relative Attribution - June 30, 2016

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 Year Annualized Relative Attribution Effects



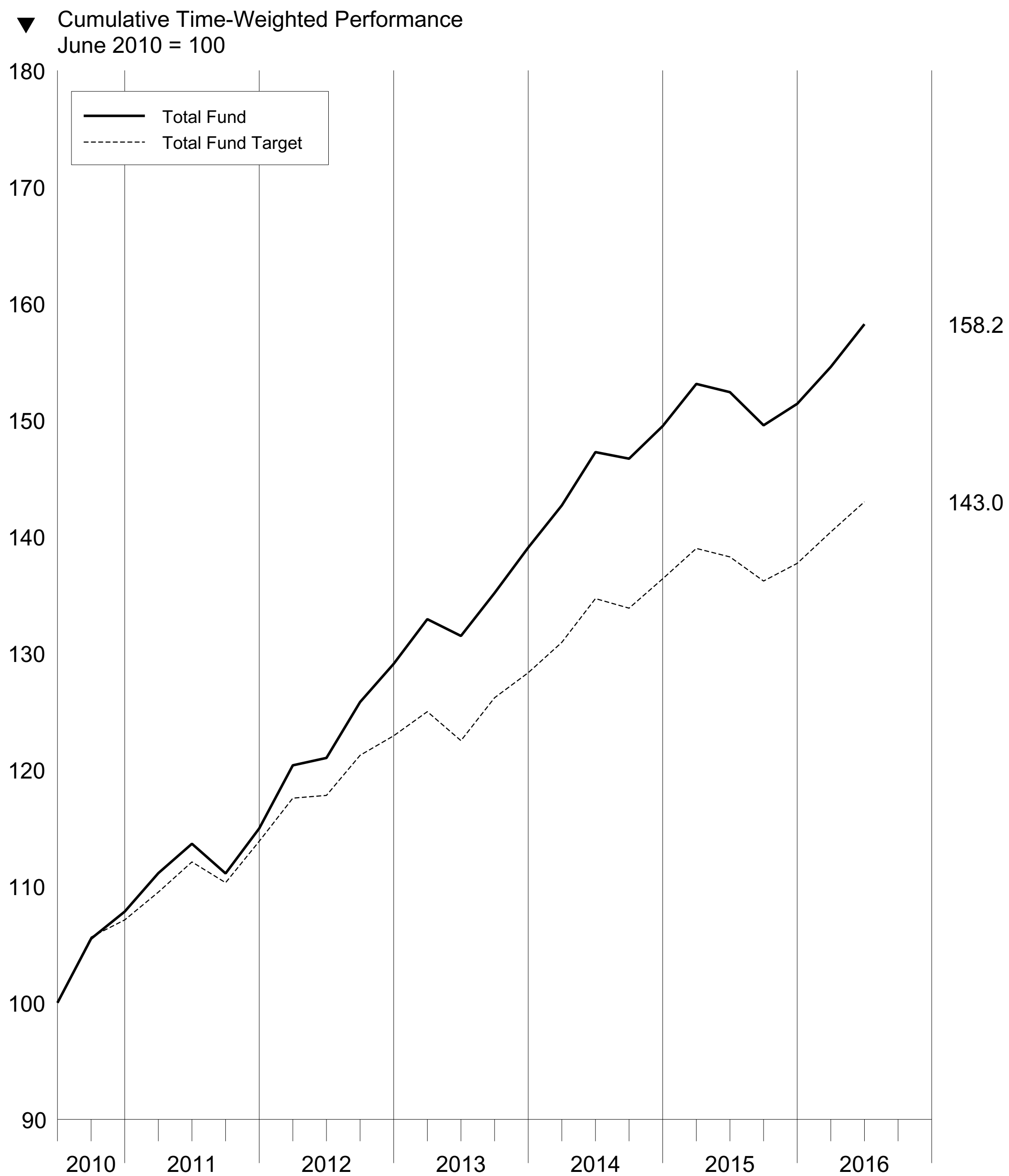
Cumulative Relative Attribution Effects



Six 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%	10%	15.71%	15.00%	0.07%	0.04%	0.12%
Small Cap Equity	4%	4%	14.22%	12.73%	0.05%	(0.01%)	0.04%
Domestic Fixed Income	52%	52%	6.45%	3.79%	1.38%	(0.05%)	1.34%
Real Estate	6%	6%	17.74%	12.37%	0.31%	0.03%	0.35%
International Equity	7%	8%	6.35%	5.04%	0.10%	(0.03%)	0.07%
Diversified Real Assets	19%	20%	4.51%	5.08%	(0.11%)	(0.00%)	(0.11%)
Cash & Equivalents	1%	1%	0.16%	0.10%	0.00%	0.00%	0.00%
Total			**7.95% =**	**6.14% +**	**1.82% +**	**(0.01%)**	**1.81%**

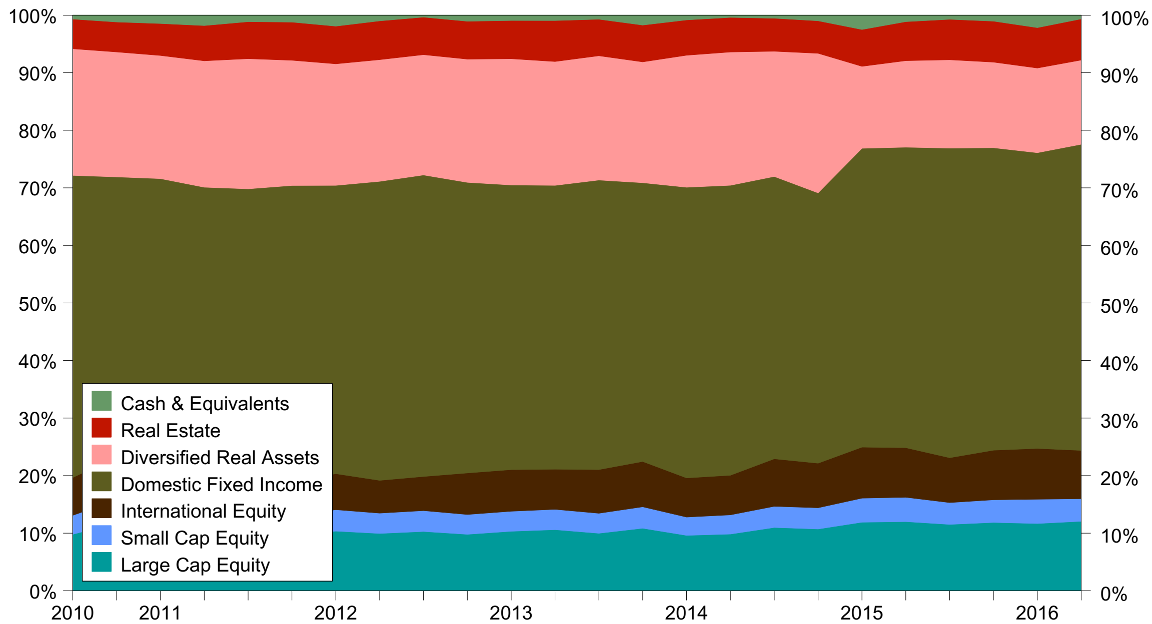
* Current Quarter Target = 53.0% Barclays Aggregate Index, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI EAFE, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.


Cumulative Time-Weighted Performance
June 2010 = 100
180
170
160
150
140
130
120
110
100
90
Total Fund
Total Fund Target
158.2
143.0
2010
2011
2012
2013
2014
2015
2016

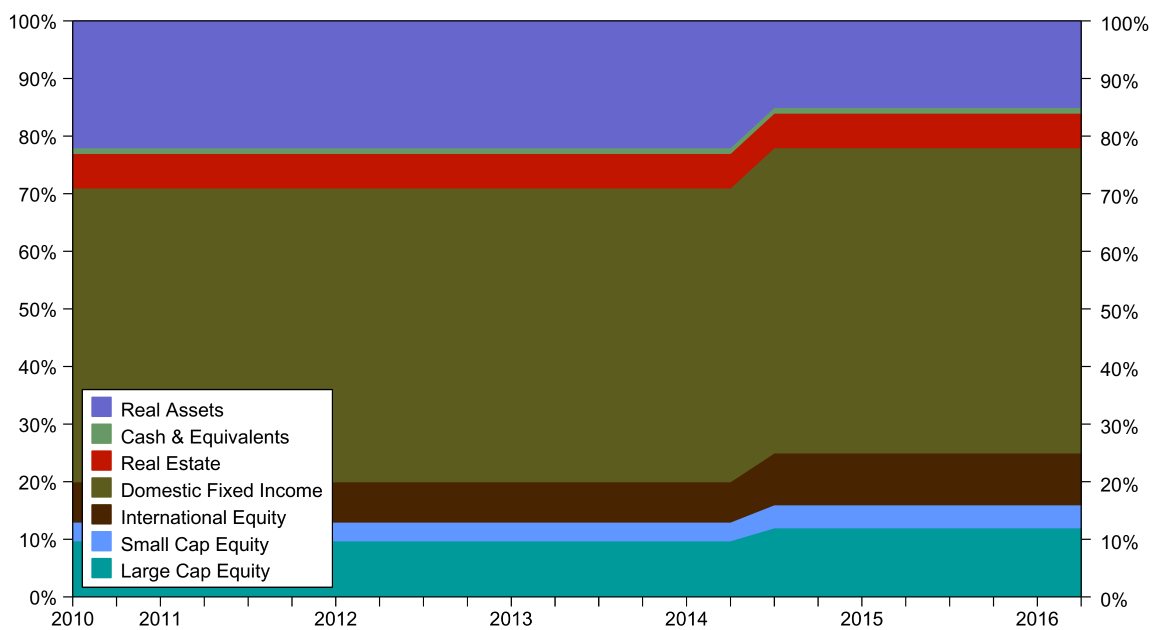
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

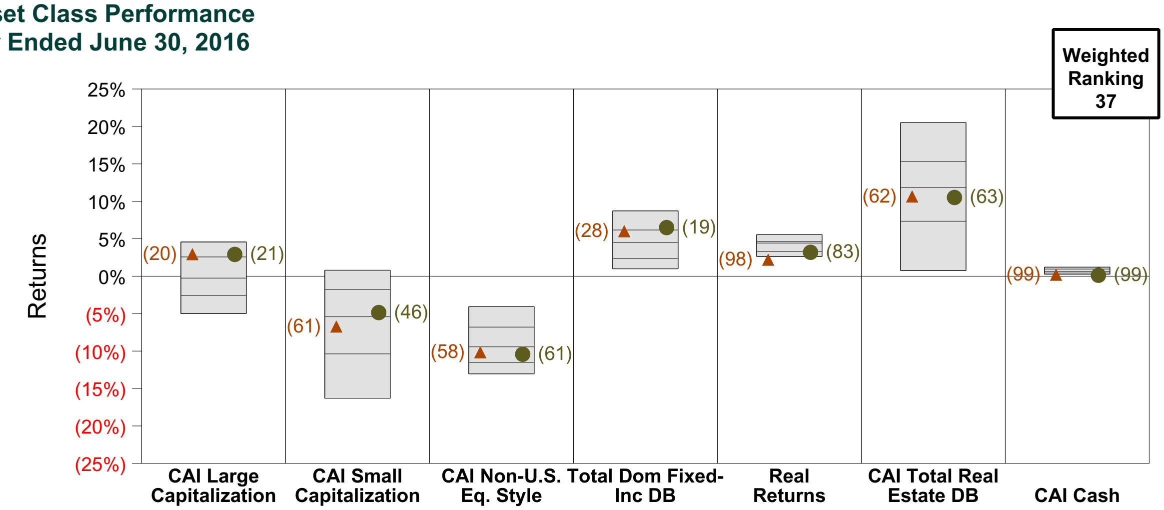


* Current Quarter Target = 53.0% Barclays Aggregate Index, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI EAFE, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

Asset Class Rankings

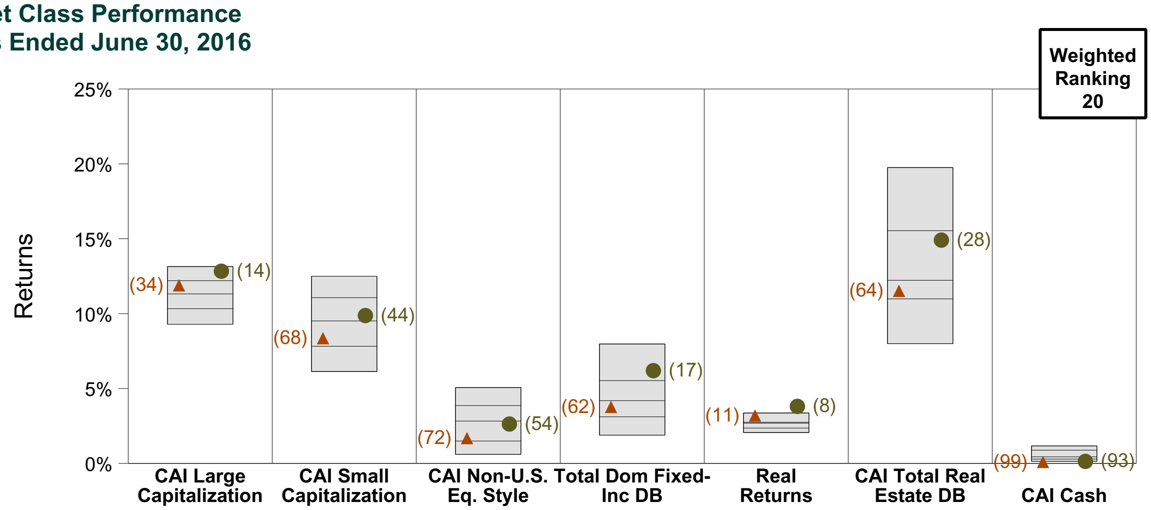
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Year Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Cash
10th Percentile	4.57	0.80	(4.07)	8.72	5.55	20.51	1.21
25th Percentile	2.57	(1.79)	(6.80)	6.17	4.63	15.32	0.96
Median	(0.25)	(5.42)	(9.43)	4.48	4.43	11.86	0.60
75th Percentile	(2.56)	(10.37)	(11.56)	2.34	3.32	7.35	0.42
90th Percentile	(4.99)	(16.30)	(13.04)	0.99	2.64	0.75	0.26
Asset Class Composite ●	2.91	(4.86)	(10.43)	6.49	3.19	10.51	0.12
Composite Benchmark ▲	2.93	(6.73)	(10.16)	6.00	2.19	10.64	0.19

Total Asset Class Performance
Five Years Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Cash
10th Percentile	13.14	12.50	5.06	7.97	3.37	19.75	1.17
25th Percentile	12.20	11.07	3.86	5.53	2.75	15.54	0.88
Median	11.32	9.51	2.83	4.19	2.69	12.23	0.44
75th Percentile	10.33	7.82	1.49	3.11	2.36	10.99	0.29
90th Percentile	9.29	6.14	0.60	1.88	2.06	7.99	0.14
Asset Class Composite ●	12.83	9.87	2.63	6.19	3.81	14.91	0.13
Composite Benchmark ▲	11.88	8.35	1.68	3.76	3.19	11.51	0.09

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

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Large Cap Equity	$221,627,405	12.10%	$6,600,956	$4,168,016	$210,858,433	11.71%
Small Cap Equity	$71,992,360	3.93%	$(6,884,154)	$2,704,501	$76,172,012	4.23%
International Equity	$154,029,804	8.41%	$(1,093,328)	$(4,164,379)	$159,287,511	8.84%
Domestic Fixed Income	$976,544,222	53.30%	$18,459,871	$30,819,401	$927,264,950	51.48%
Diversified Real Assets	$264,886,004	14.46%	$(875,586)	$4,018,296	$261,743,294	14.53%
Real Estate	$131,218,750	7.16%	$(482,064)	$4,961,326	$126,739,488	7.04%
Cash & Equivalents	$11,805,431	0.64%	$(27,186,981)	$11,053	$38,981,359	2.16%
Securities Lending Income	$0	0.00%	$(83,719)	$83,719	-	-
Total Fund	$1,832,103,976	100.0%	$(11,545,004)	$42,601,933	$1,801,047,047	100.0%

PLEASE REFER TO PAGE 36 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Large Cap Equity					
Gross	1.94%	2.91%	12.19%	12.83%	15.71%
Net	1.90%	2.71%	11.99%	12.60%	15.45%
Benchmark(1)	2.54%	2.93%	11.48%	12.09%	15.00%
Small Cap Equity					
Gross	3.63%	(4.86%)	8.48%	9.87%	14.22%
Net	3.61%	(5.28%)	8.11%	9.43%	13.62%
Russell 2000	3.79%	(6.73%)	7.09%	8.35%	12.73%
International Equity					
Gross	(2.65%)	(10.43%)	3.24%	2.63%	6.35%
Net	(2.73%)	(10.74%)	2.91%	2.26%	5.95%
Benchmark(2)	(1.46%)	(10.16%)	2.06%	1.68%	5.04%
Domestic Fixed Income					
Gross	3.28%	6.49%	5.43%	6.19%	6.45%
Net	3.25%	6.35%	5.29%	6.02%	6.27%
Barclays Aggregate	2.21%	6.00%	4.06%	3.76%	3.79%
Diversified Real Assets					
Gross	1.54%	3.19%	4.47%	3.81%	4.51%
Net	1.38%	2.80%	4.12%	3.46%	4.14%
Weighted Benchmark	1.42%	2.19%	4.28%	3.19%	5.08%
Real Estate					
Gross	3.92%	10.51%	12.40%	14.91%	17.74%
Net	3.56%	9.75%	11.52%	13.93%	16.66%
NCREIF Total Index	2.03%	10.64%	11.61%	11.51%	12.37%
Cash & Equivalents - Net	**0.06%**	**0.12%**	**0.05%**	**0.13%**	**0.16%**
90 Day Treasury Bills	0.07%	0.19%	0.09%	0.09%	0.10%
Total Fund					
Gross	2.37%	3.83%	6.37%	6.84%	7.95%
Net	2.29%	3.58%	6.11%	6.56%	7.64%
Target*	1.84%	3.42%	5.29%	4.99%	6.14%

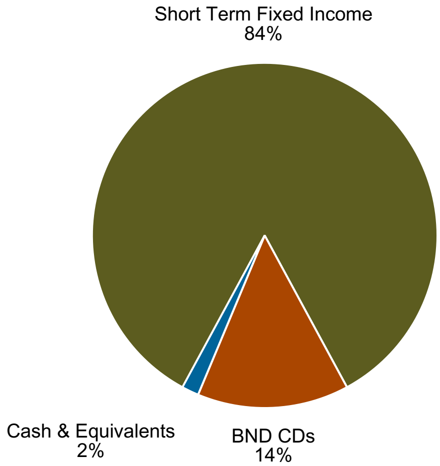
* Current Quarter Target = 53.0% Barclays Aggregate Index, 15.0% NDSIB WSI DRA Weighted Benchmark, 12.0% Russell 1000 Index, 9.0% MSCI EAFE, 6.0% NCREIF Total Index, 4.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.
(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.
(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011 and MSCI EAFE again thereafter.

PLEASE REFER TO PAGE 37-39 FOR INVESTMENT MANAGER LEVEL RETURNS.

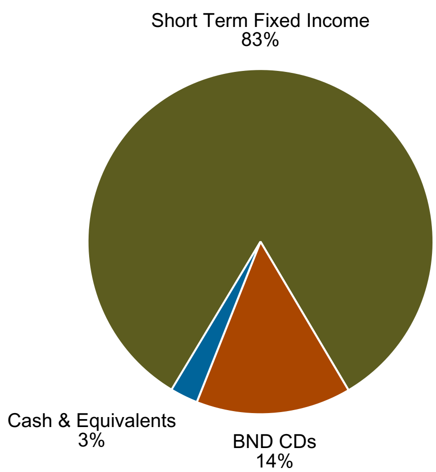
Actual vs Target Asset Allocation
As of June 30, 2016

The first chart below shows the Fund's asset allocation as of June 30, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



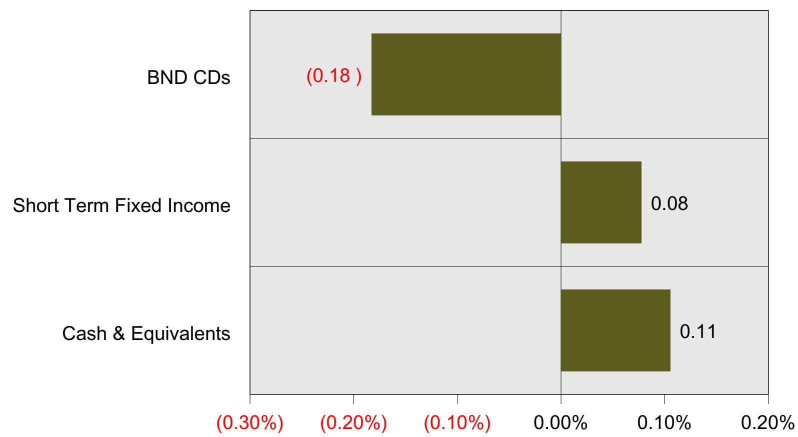
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Short Term Fixed Income	485,318	84.3%	83.0%	1.3%	7,479
BND CDs	81,604	14.2%	14.5%	(0.3%)	(1,674)
Cash & Equivalents	8,997	1.6%	2.6%	(1.0%)	(5,805)
Total	575,918	100.0%	100.0%		

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

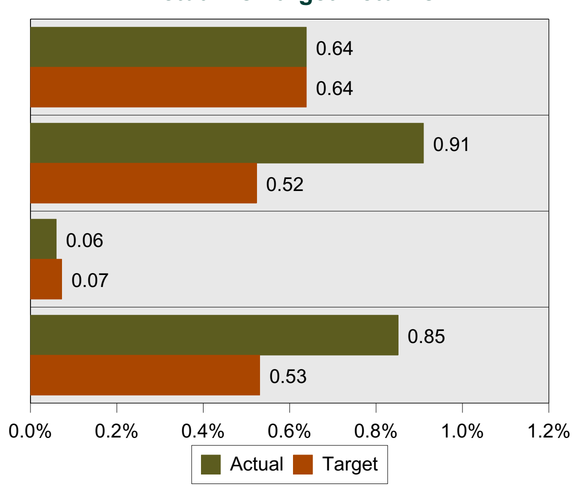
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

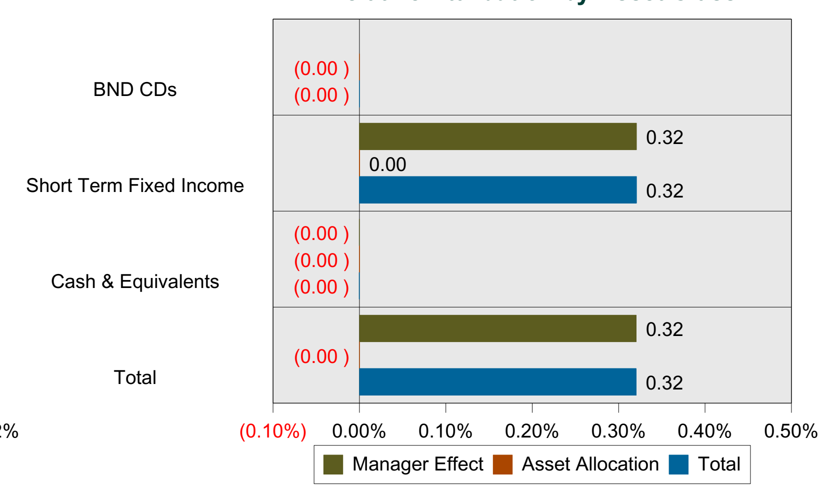
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

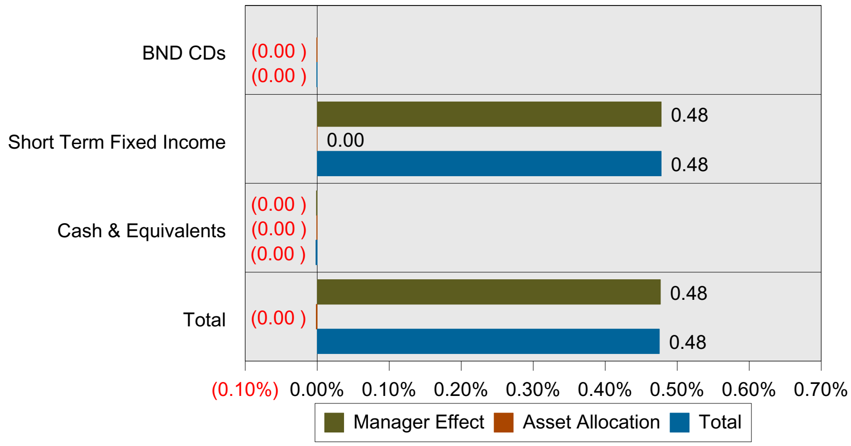
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	15%	15%	0.64%	0.64%	0.00%	(0.00%)	(0.00%)
Short Term Fixed Income	83%	83%	0.91%	0.52%	0.32%	0.00%	0.32%
Cash & Equivalents	2%	2%	0.06%	0.07%	(0.00%)	(0.00%)	(0.00%)
Total			**0.85% =**	**0.53% +**	**0.32% +**	**(0.00%)**	**0.32%**

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

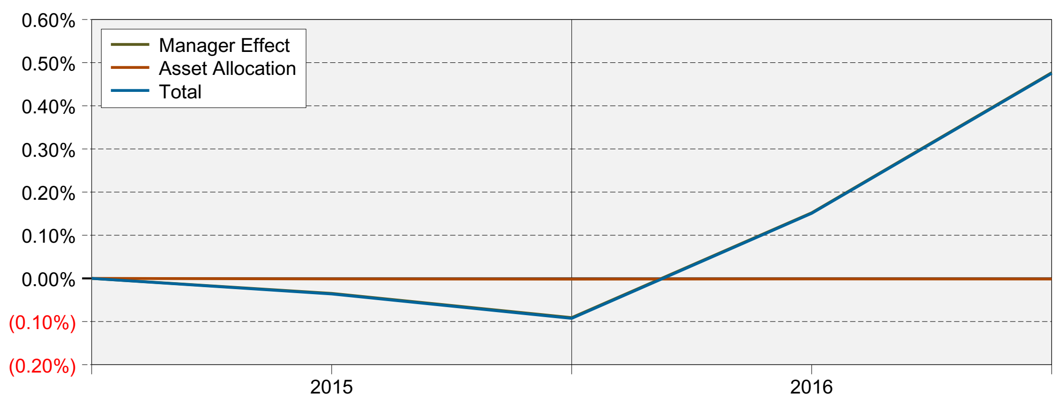
Cumulative Total Fund Relative Attribution - June 30, 2016

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

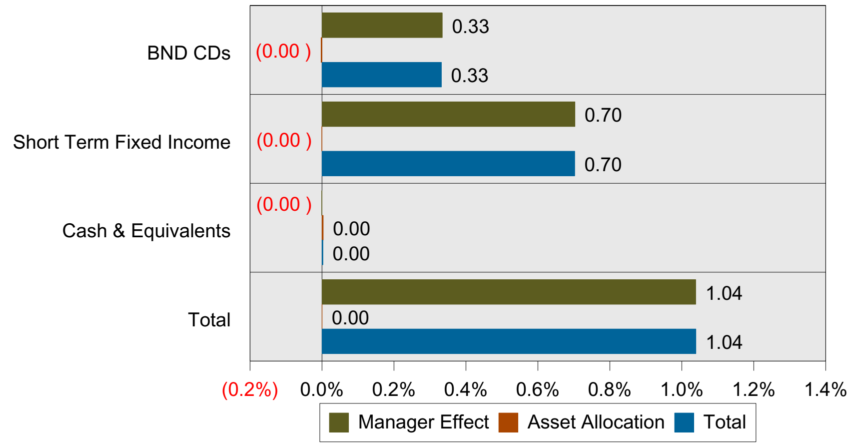
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	15%	16%	2.61%	2.61%	0.00%	(0.00%)	(0.00%)
Short Term Fixed Income	83%	83%	1.88%	1.31%	0.48%	0.00%	0.48%
Cash & Equivalents	2%	2%	0.12%	0.19%	(0.00%)	(0.00%)	(0.00%)
Total			**1.97% =**	**1.49% +**	**0.48% +**	**(0.00%)**	**0.48%**

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

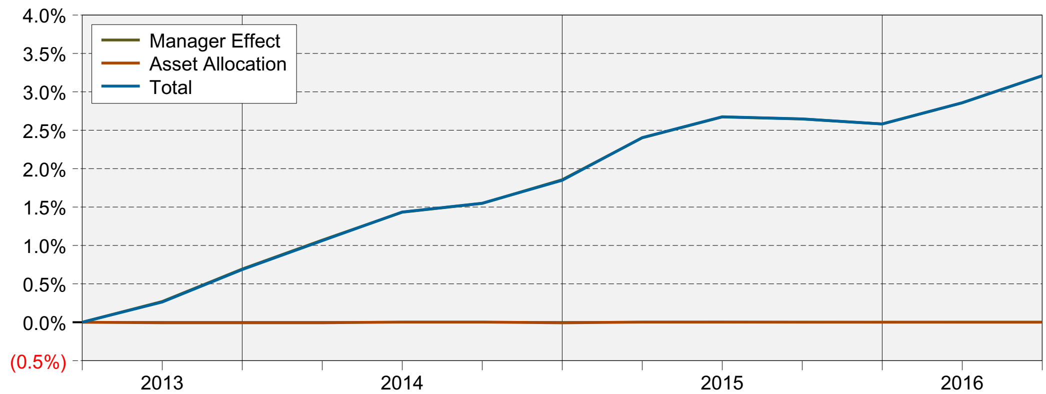
Cumulative Total Fund Relative Attribution - June 30, 2016

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

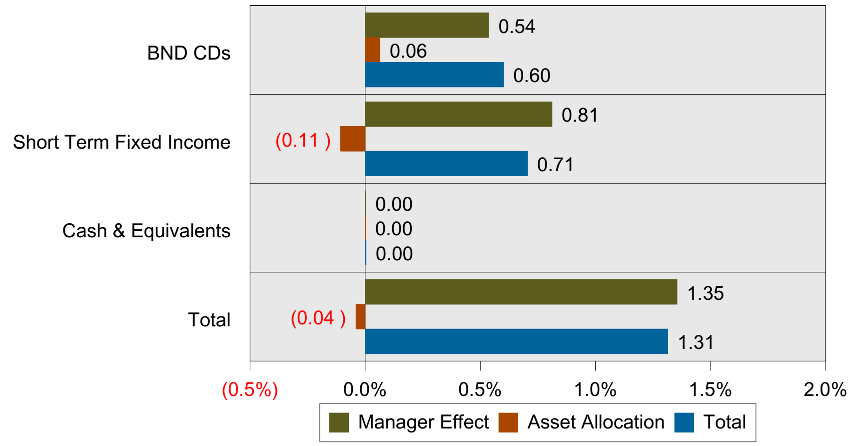
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	18%	18%	2.70%	0.89%	0.33%	(0.00%)	0.33%
Short Term Fixed Income	81%	80%	1.88%	1.00%	0.70%	(0.00%)	0.70%
Cash & Equivalents	2%	2%	0.05%	0.09%	(0.00%)	0.00%	0.00%
Total			**1.99% =**	**0.95% +**	**1.04% +**	**0.00%**	**1.04%**

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

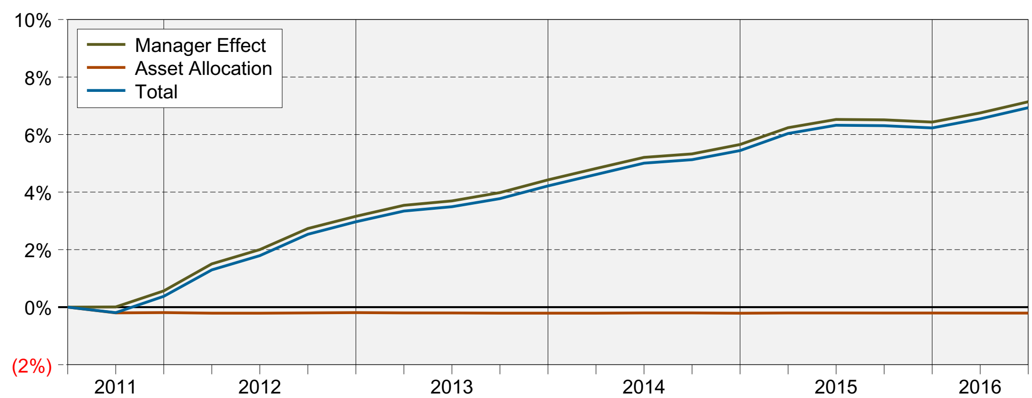
Cumulative Total Fund Relative Attribution - June 30, 2016

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

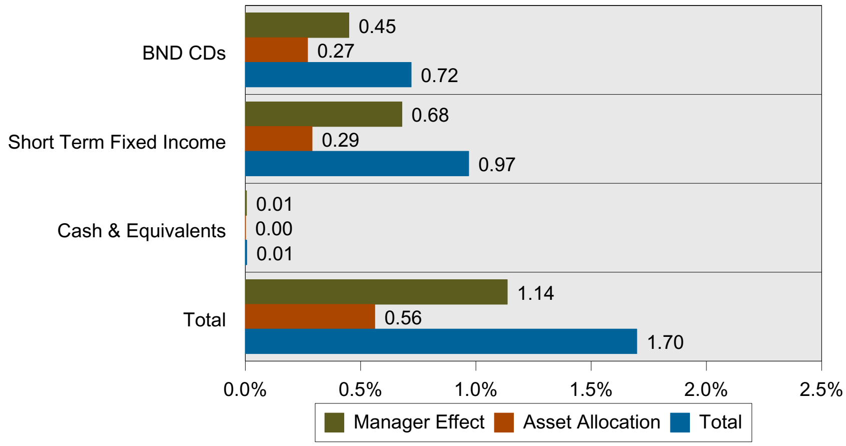
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	21%	19%	3.23%	0.78%	0.54%	0.06%	0.60%
Short Term Fixed Income	77%	74%	1.61%	0.55%	0.81%	(0.11%)	0.71%
Cash & Equivalents	2%	7%	0.13%	0.09%	0.00%	0.00%	0.00%
Total			**2.00%** =	**0.69%** +	**1.35%** +	**(0.04%)**	**1.31%**

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

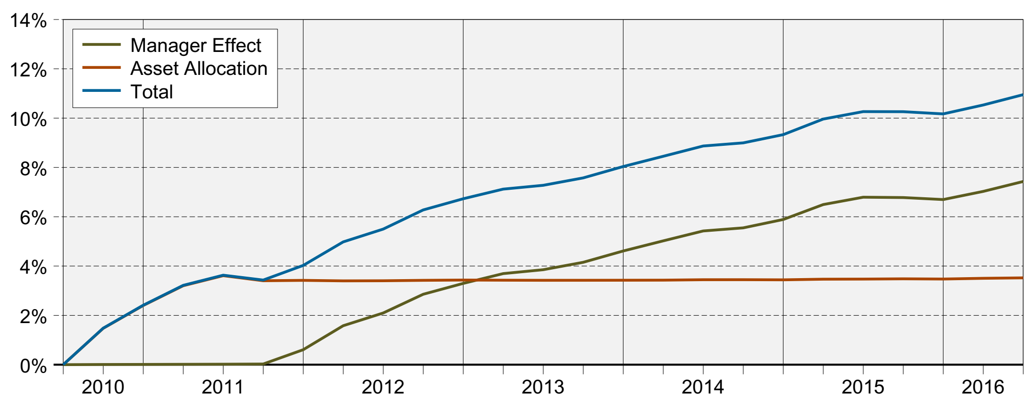
Cumulative Total Fund Relative Attribution - June 30, 2016

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 Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

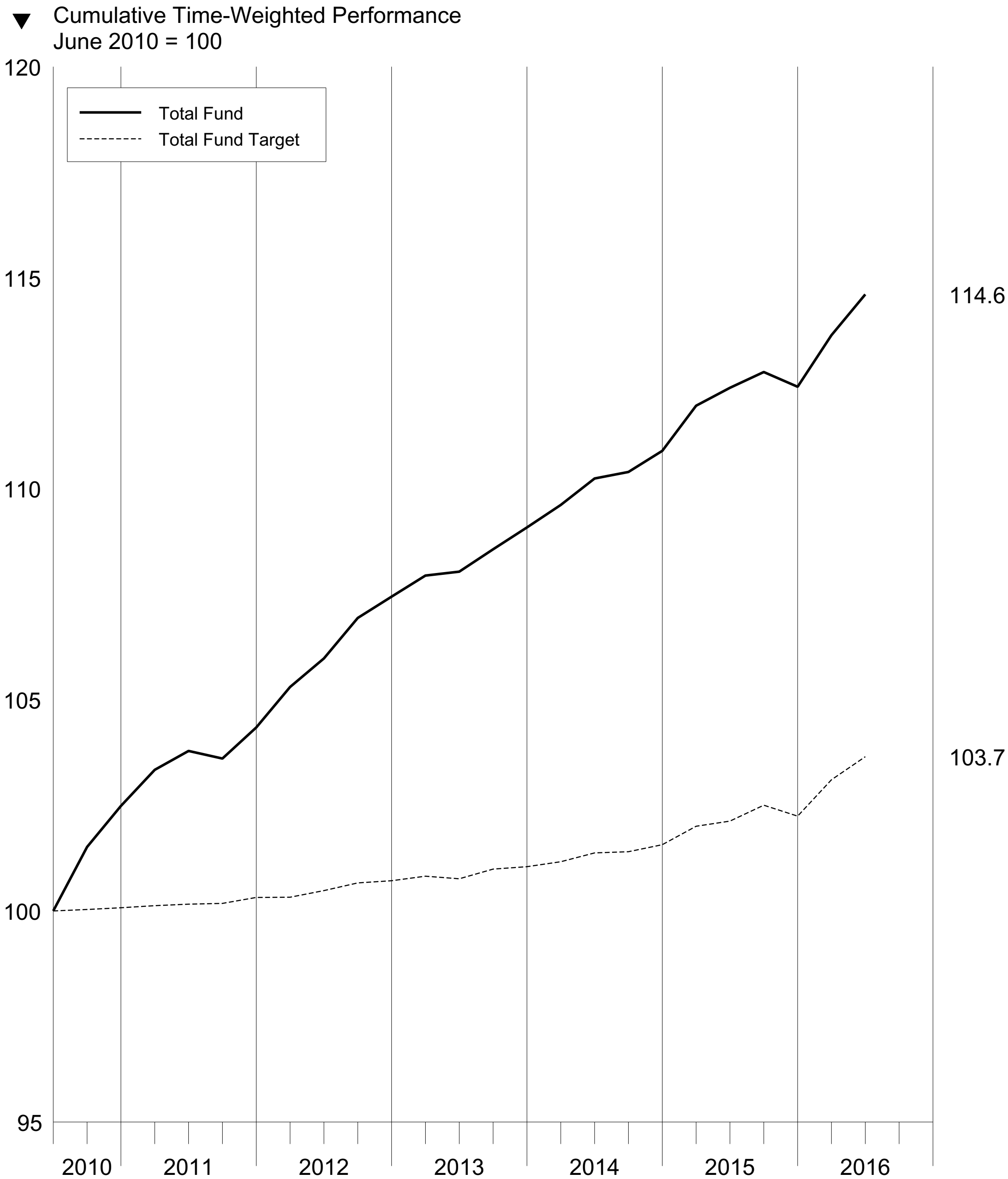


Six Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	22%	16%	3.43%	1.38%	0.45%	0.27%	0.72%
Short Term Fixed Income	73%	62%	2.02%	1.14%	0.68%	0.29%	0.97%
Cash & Equivalents	4%	22%	0.16%	0.10%	0.01%	0.00%	0.01%
Total			**2.30% =**	**0.60% +**	**1.14% +**	**0.56%**	**1.70%**

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

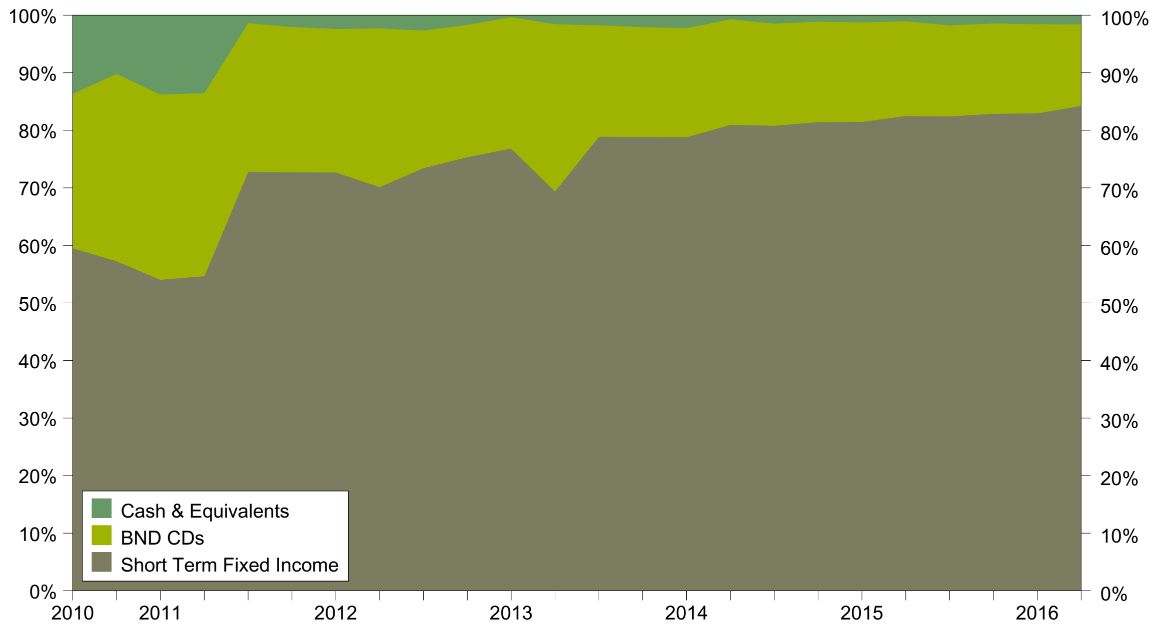
NDSIB - Budget Stabilization Fund
Cumulative Results



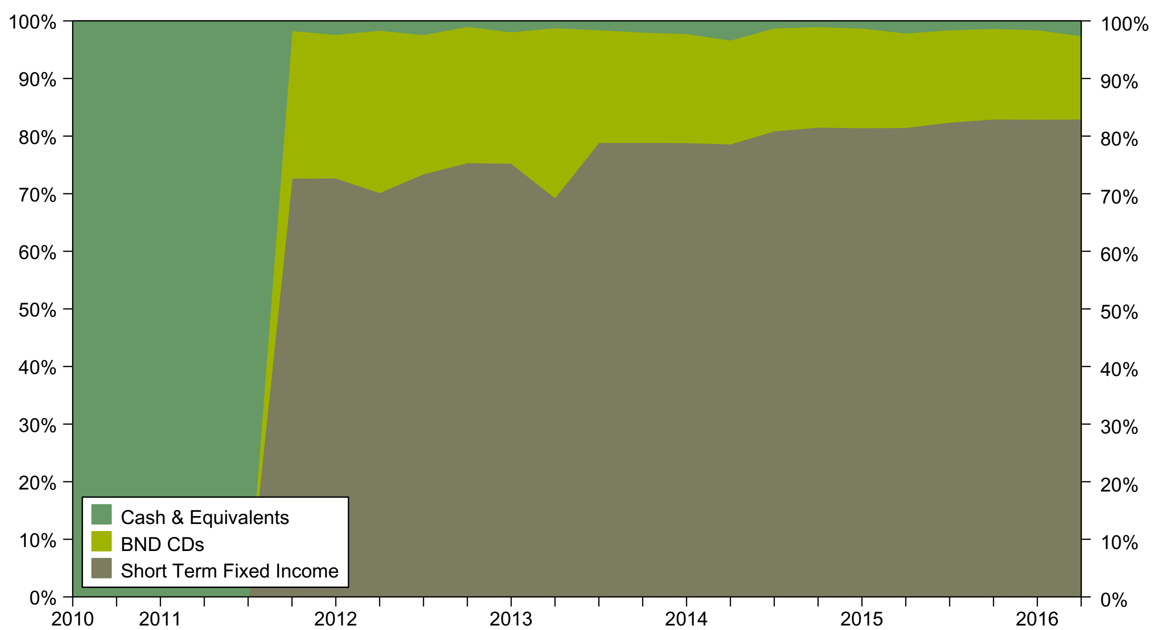
Actual vs Target Historical Asset Allocation

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.

Actual Historical Asset Allocation



Target Historical Asset Allocation



* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Short Term Fixed Income	$485,318,235	84.27%	$(178,717)	$4,376,793	$481,120,159	82.98%
BND CDs	$81,603,633	14.17%	$(8,753,120)	$542,559	$89,814,194	15.49%
Cash & Equivalents	$8,996,513	1.56%	$113,051	$8,071	$8,875,391	1.53%
Securities Lending Income	$0	0.00%	$(2,615)	$2,615	-	-
Total Fund	$575,918,381	100.0%	$(8,821,401)	$4,930,038	$579,809,745	100.0%

PLEASE REFER TO PAGE 36 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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6 Years
Short Term Fixed Income					
Gross	0.91%	1.88%	1.88%	1.61%	2.02%
Net	0.87%	1.70%	1.74%	1.48%	1.90%
Barclays Gov 1-3 Yr	0.52%	1.31%	1.00%	0.84%	0.93%
BND CDs - Net	**0.64%**	**2.61%**	**2.70%**	**3.23%**	**3.43%**
Cash & Equivalents - Net	**0.06%**	**0.12%**	**0.05%**	**0.13%**	**0.16%**
3-month Treasury Bill	0.07%	0.19%	0.09%	0.09%	0.10%
Total Fund					
Gross	0.85%	1.97%	1.99%	2.00%	2.30%
Net	0.82%	1.82%	1.88%	1.91%	2.21%
Target*	0.53%	1.49%	0.95%	0.69%	0.60%

* Current Quarter Target = 83.0% Barclays Gov 1-3 Yr, 14.5% NDSIB Budget - Bond CDs and 2.6% 3-month Treasury Bill.

PLEASE REFER TO PAGES 37-39 FOR INVESTMENT MANAGER LEVEL RETURNS.

Parametric Clifton Large Cap
Period Ended June 30, 2016

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.

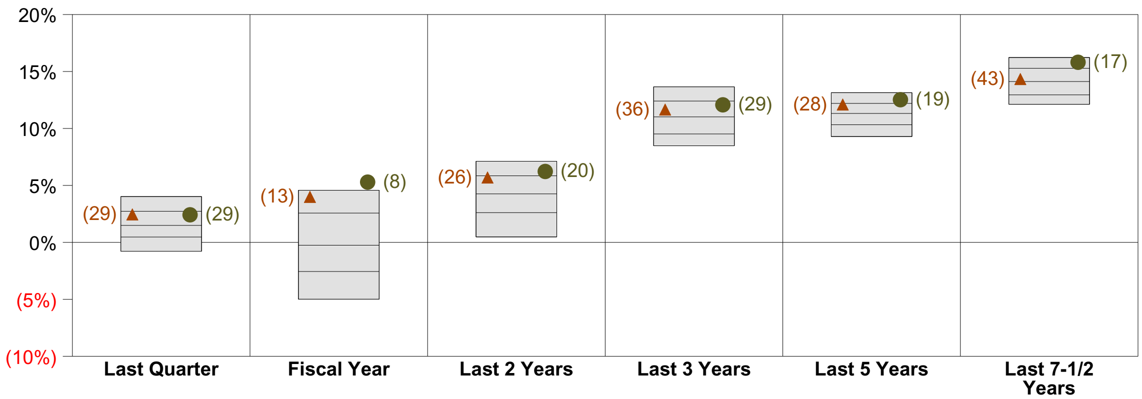
Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a 2.42% return for the quarter placing it in the 29 percentile of the CAI Large Capitalization group for the quarter and in the 8 percentile for the last year.
- Parametric Clifton Large Cap's portfolio underperformed the S&P 500 Index by 0.03% for the quarter and outperformed the S&P 500 Index for the year by 1.30%.

Quarterly Asset Growth

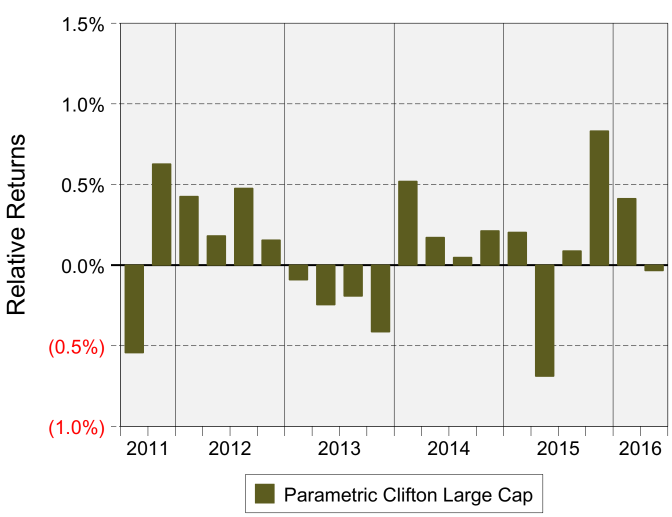
Beginning Market Value	$46,263,350
Net New Investment	$700,000
Investment Gains/(Losses)	$1,154,579
Ending Market Value	$48,117,929

Performance vs CAI Large Capitalization (Gross)

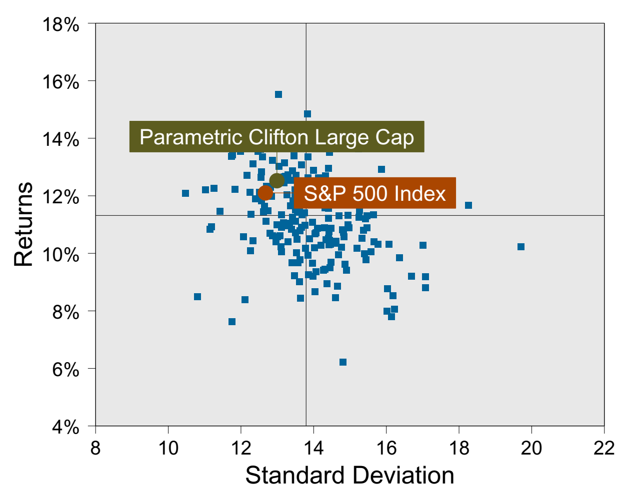


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/2 Years
10th Percentile	4.02	4.57	7.12	13.66	13.14	16.23
25th Percentile	2.73	2.57	5.85	12.41	12.20	15.28
Median	1.49	(0.25)	4.26	11.02	11.32	14.12
75th Percentile	0.47	(2.56)	2.61	9.52	10.33	12.95
90th Percentile	(0.78)	(4.99)	0.48	8.48	9.29	12.12
Parametric Clifton Large Cap ●	2.42	5.29	6.23	12.07	12.52	15.81
S&P 500 Index ▲	2.46	3.99	5.69	11.66	12.10	14.33

Relative Return vs S&P 500 Index



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



L.A. Capital
Period Ended June 30, 2016

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.

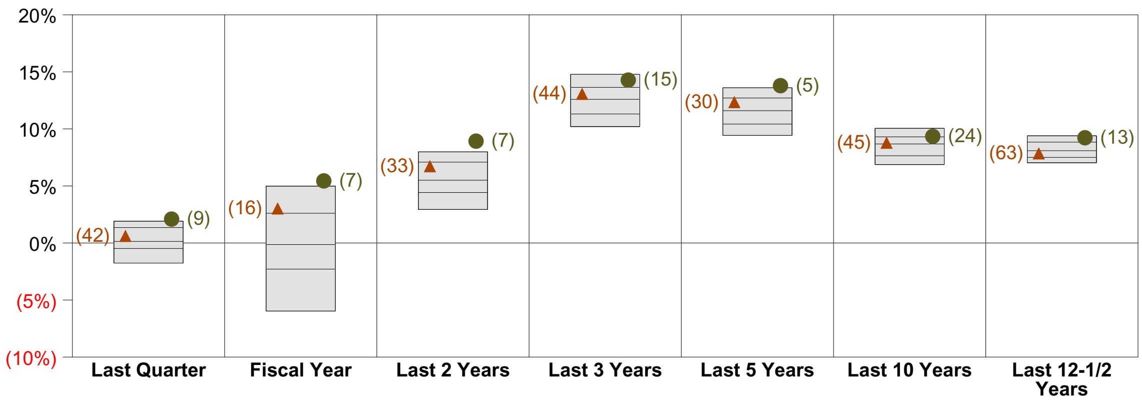
Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 2.09% return for the quarter placing it in the 9 percentile of the CAI Large Cap Growth group for the quarter and in the 7 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 1.48% for the quarter and outperformed the Russell 1000 Growth Index for the year by 2.42%.

Quarterly Asset Growth

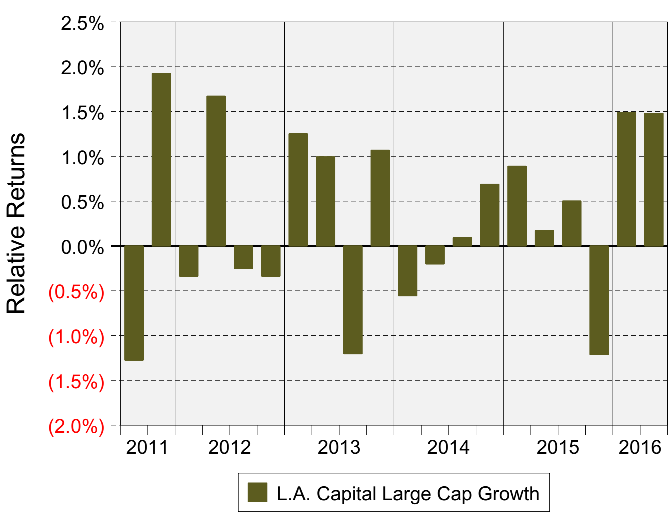
Beginning Market Value	$68,245,342
Net New Investment	$2,965,886
Investment Gains/(Losses)	$1,465,016
Ending Market Value	$72,676,244

Performance vs CAI Large Cap Growth (Gross)

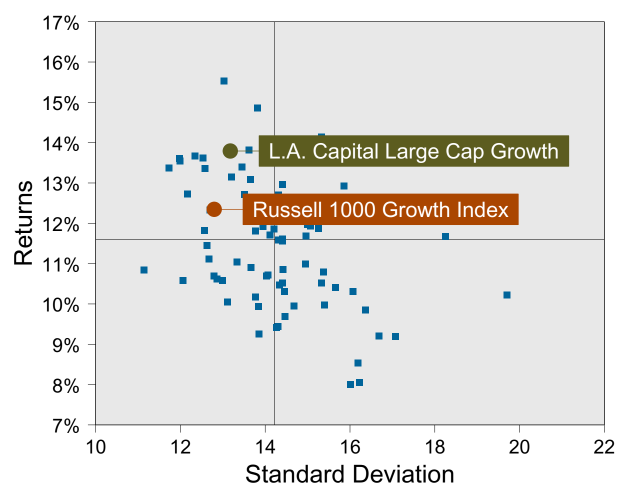


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 12-1/2 Years
10th Percentile	1.91	4.98	7.99	14.79	13.61	10.05	9.40
25th Percentile	1.35	2.60	7.09	13.64	12.71	9.30	8.84
Median	0.14	(0.14)	5.50	12.60	11.60	8.68	8.09
75th Percentile	(0.48)	(2.29)	4.42	11.31	10.42	7.65	7.51
90th Percentile	(1.76)	(5.97)	2.94	10.20	9.43	6.88	7.03
L.A. Capital Large Cap Growth ●	2.09	5.44	8.93	14.28	13.79	9.35	9.22
Russell 1000 Growth Index ▲	0.61	3.02	6.72	13.07	12.35	8.78	7.85

Relative Return vs Russell 1000 Growth Index



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



L.A. Capital Enhanced
Period Ended June 30, 2016

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.

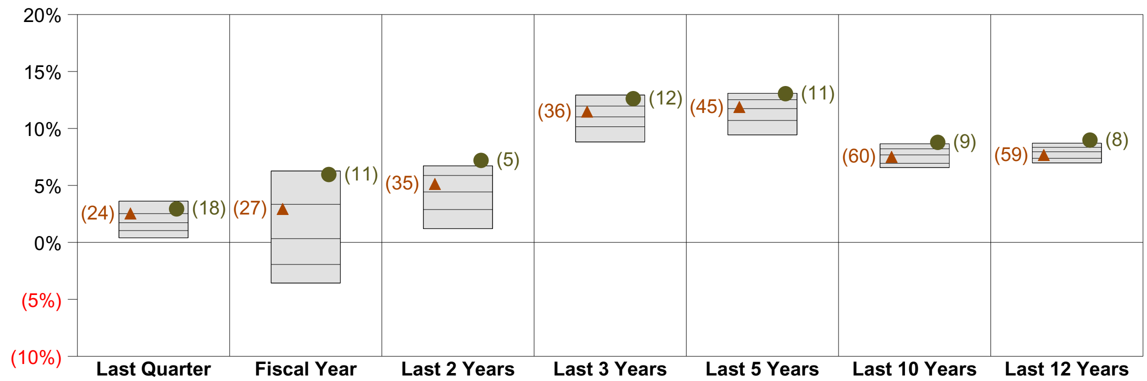
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 2.94% return for the quarter placing it in the 18 percentile of the CAI Large Cap Core group for the quarter and in the 11 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 0.40% for the quarter and outperformed the Russell 1000 Index for the year by 3.02%.

Quarterly Asset Growth

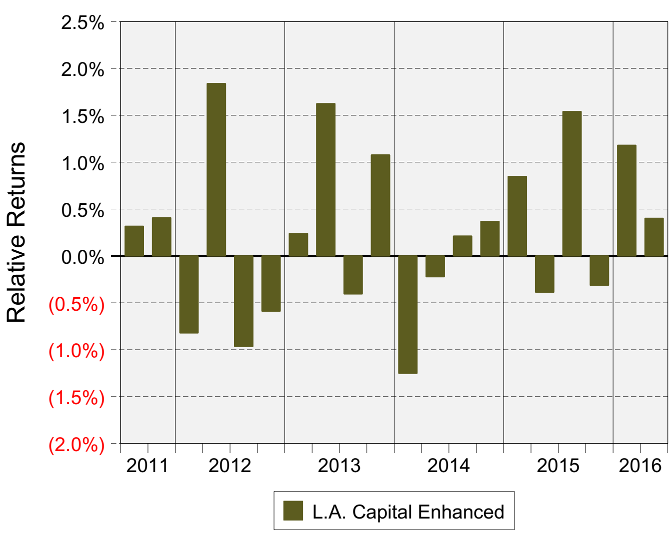
Beginning Market Value	$46,718,726
Net New Investment	$584,523
Investment Gains/(Losses)	$1,385,755
Ending Market Value	$48,689,003

Performance vs CAI Large Cap Core (Gross)

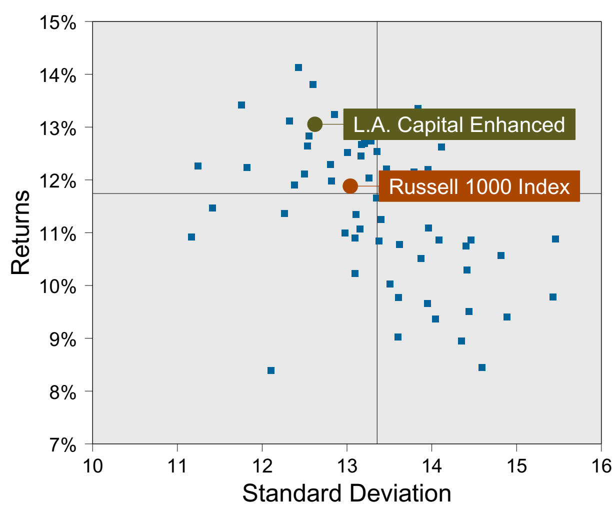


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 12 Years
10th Percentile	3.62	6.27	6.72	12.94	13.09	8.65	8.71
25th Percentile	2.52	3.34	5.87	11.97	12.52	8.21	8.34
Median	1.73	0.33	4.43	11.02	11.74	7.68	7.95
75th Percentile	1.03	(1.94)	2.88	10.15	10.70	6.94	7.38
90th Percentile	0.40	(3.57)	1.20	8.82	9.44	6.56	6.98
L.A. Capital Enhanced ●	2.94	5.96	7.20	12.61	13.05	8.78	8.98
Russell 1000 Index ▲	2.54	2.93	5.13	11.48	11.88	7.51	7.67

Relative Return vs Russell 1000 Index



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



LSV Asset Management
Period Ended June 30, 2016

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.

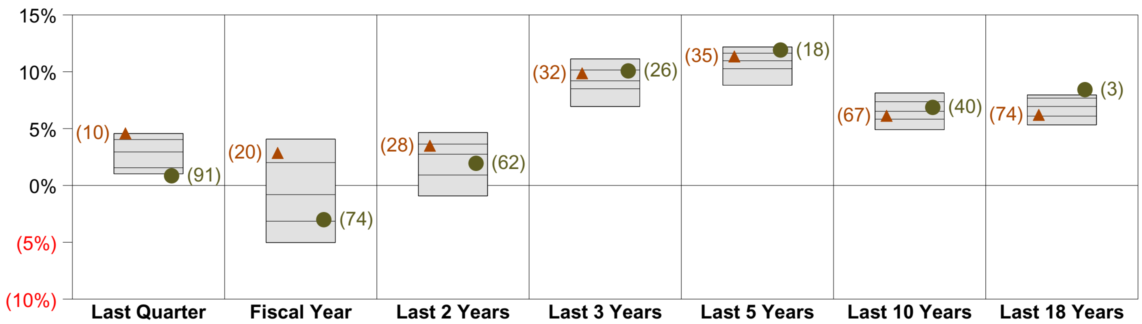
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 0.85% return for the quarter placing it in the 91 percentile of the CAI Large Cap Value group for the quarter and in the 74 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 3.73% for the quarter and underperformed the Russell 1000 Value Index for the year by 5.87%.

Quarterly Asset Growth

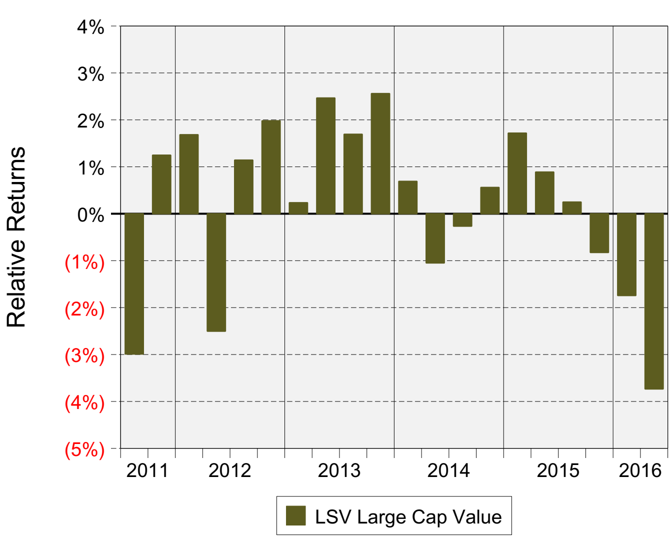
Beginning Market Value	$67,025,309
Net New Investment	$2,350,059
Investment Gains/(Losses)	$491,696
Ending Market Value	$69,867,064

Performance vs CAI Large Cap Value (Gross)

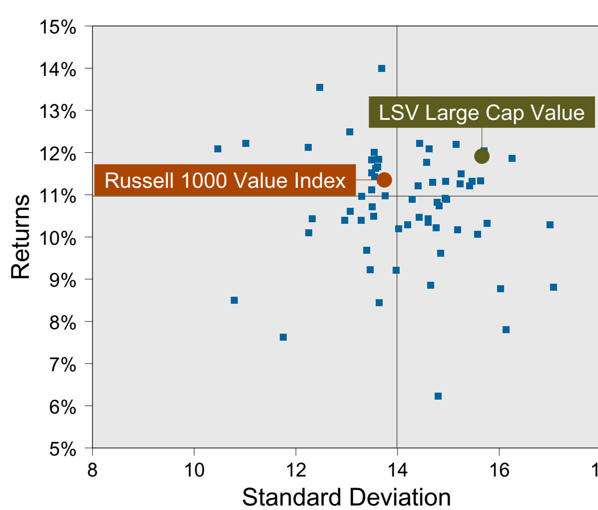


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 18 Years
10th Percentile	4.57	4.08	4.65	11.13	12.18	8.13	7.96
25th Percentile	4.04	2.01	3.64	10.16	11.64	7.37	7.68
Median	2.94	(0.81)	2.75	9.20	10.97	6.52	6.95
75th Percentile	1.55	(3.15)	0.92	8.50	10.27	5.83	6.10
90th Percentile	1.02	(5.03)	(0.92)	6.94	8.82	4.90	5.33
LSV Large Cap Value ●	0.85	(3.01)	1.95	10.08	11.91	6.87	8.43
Russell 1000 Value Index ▲	4.58	2.86	3.49	9.87	11.35	6.13	6.21

Relative Return vs Russell 1000 Value Index



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



Parametric Clifton SmallCap
Period Ended June 30, 2016

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.

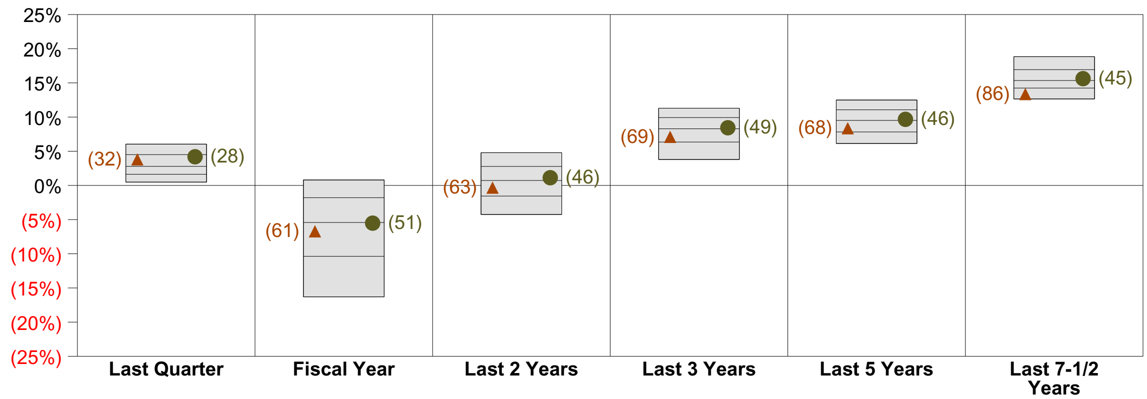
Quarterly Summary and Highlights

- Parametric Clifton SmallCap's portfolio posted a 4.19% return for the quarter placing it in the 28 percentile of the CAI Small Capitalization group for the quarter and in the 51 percentile for the last year.
- Parametric Clifton SmallCap's portfolio outperformed the Russell 2000 Index by 0.40% for the quarter and outperformed the Russell 2000 Index for the year by 1.21%.

Quarterly Asset Growth

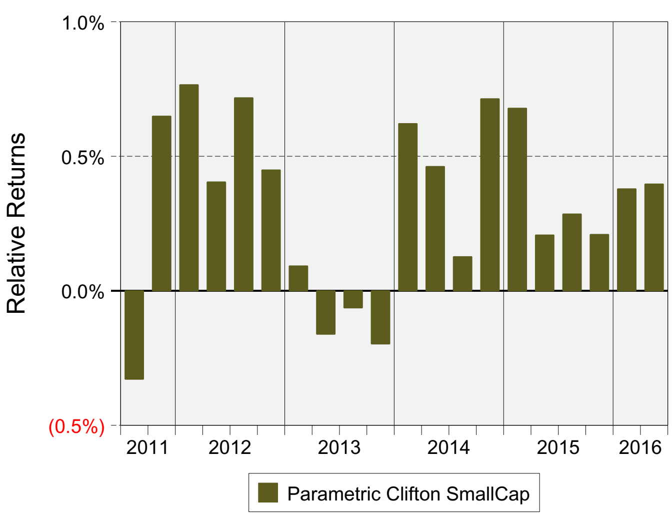
Beginning Market Value	$51,289,190
Net New Investment	$-7,000,000
Investment Gains/(Losses)	$2,084,687
Ending Market Value	$46,373,876

Performance vs CAI Small Capitalization (Gross)

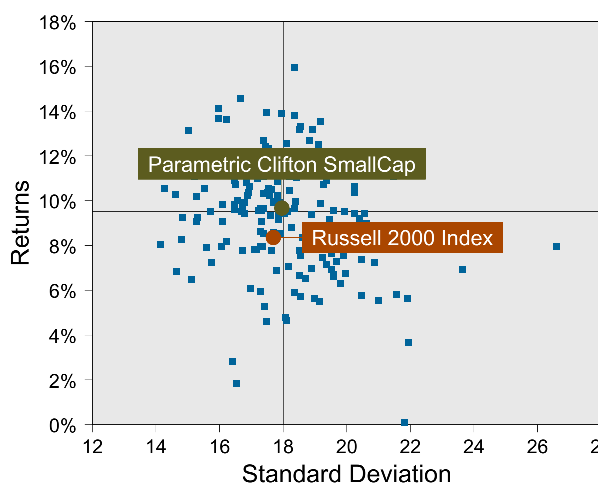


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/2 Years
10th Percentile	6.04	0.80	4.79	11.30	12.50	18.84
25th Percentile	4.51	(1.79)	2.78	9.92	11.07	16.94
Median	2.79	(5.42)	0.72	8.29	9.51	15.35
75th Percentile	1.63	(10.37)	(1.56)	6.35	7.82	14.24
90th Percentile	0.48	(16.30)	(4.25)	3.79	6.14	12.65
Parametric Clifton SmallCap ●	4.19	(5.52)	1.13	8.43	9.67	15.62
Russell 2000 Index ▲	3.79	(6.73)	(0.34)	7.09	8.35	13.35

Relative Return vs Russell 2000 Index



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



PIMCO RAE
Period Ended June 30, 2016

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.

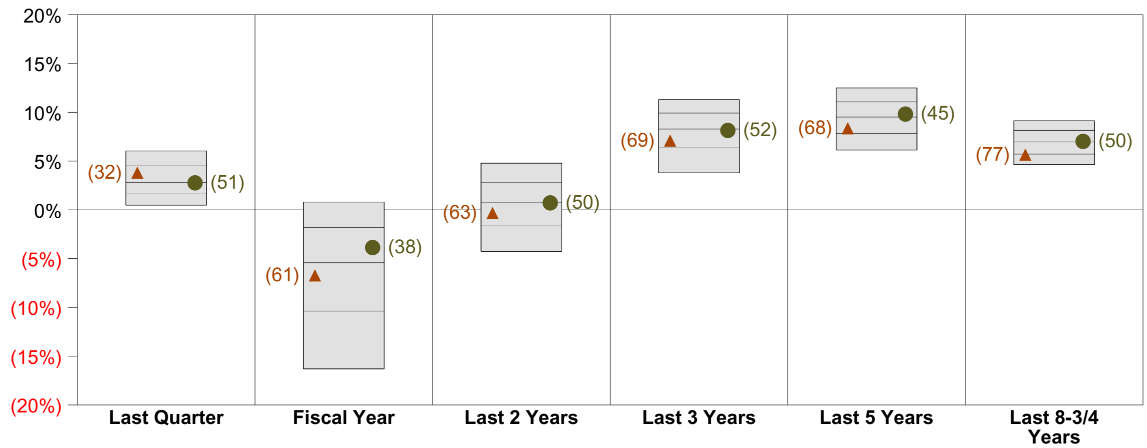
Quarterly Summary and Highlights

- PIMCO RAE's portfolio posted a 2.77% return for the quarter placing it in the 51 percentile of the CAI Small Capitalization group for the quarter and in the 38 percentile for the last year.
- PIMCO RAE's portfolio underperformed the Russell 2000 Index by 1.03% for the quarter and outperformed the Russell 2000 Index for the year by 2.87%.

Quarterly Asset Growth

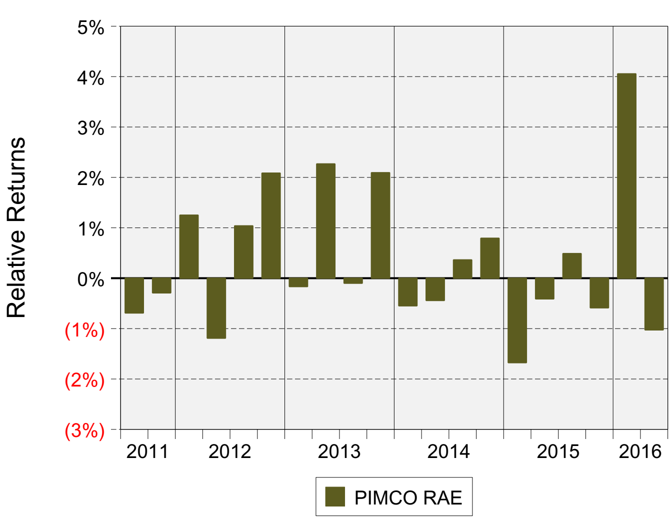
Beginning Market Value	$32,336,420
Net New Investment	$-19,475
Investment Gains/(Losses)	$893,856
Ending Market Value	$33,210,801

Performance vs CAI Small Capitalization (Gross)

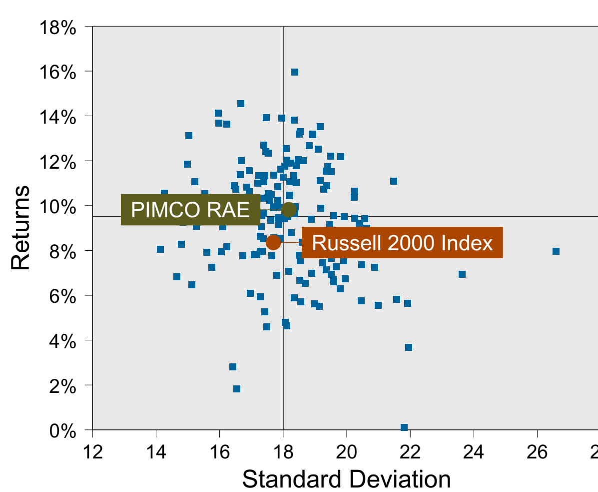


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-3/4 Years
10th Percentile	6.04	0.80	4.79	11.30	12.50	9.13
25th Percentile	4.51	(1.79)	2.78	9.92	11.07	8.15
Median	2.79	(5.42)	0.72	8.29	9.51	6.96
75th Percentile	1.63	(10.37)	(1.56)	6.35	7.82	5.72
90th Percentile	0.48	(16.30)	(4.25)	3.79	6.14	4.64
PIMCO RAE ●	2.77	(3.86)	0.71	8.14	9.82	7.02
Russell 2000 Index ▲	3.79	(6.73)	(0.34)	7.09	8.35	5.64

Relative Return vs Russell 2000 Index



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



DFA Intl Small Cap Value
Period Ended June 30, 2016

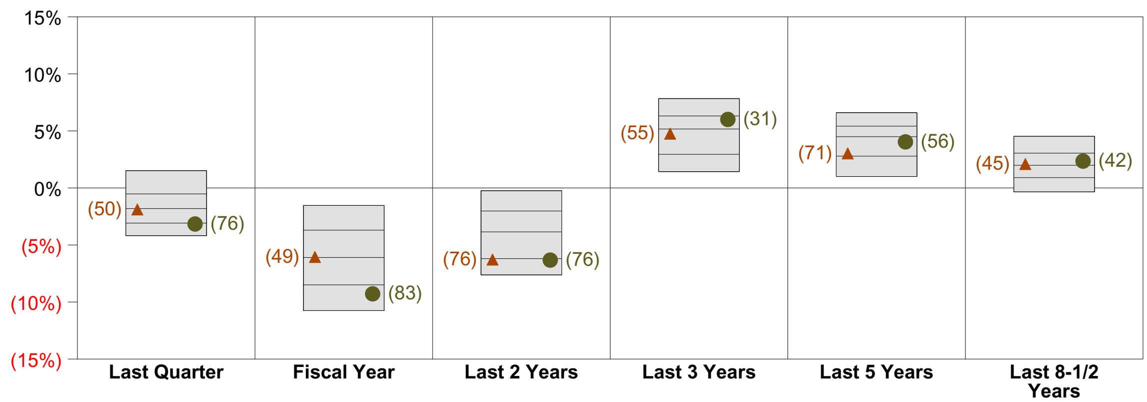
Investment Philosophy
The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, 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 (3.16)% return for the quarter placing it in the 76 percentile of the Lipper International Small Cap Funds group for the quarter and in the 83 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 1.28% for the quarter and underperformed the World ex US SC Value for the year by 3.23%.

Quarterly Asset Growth

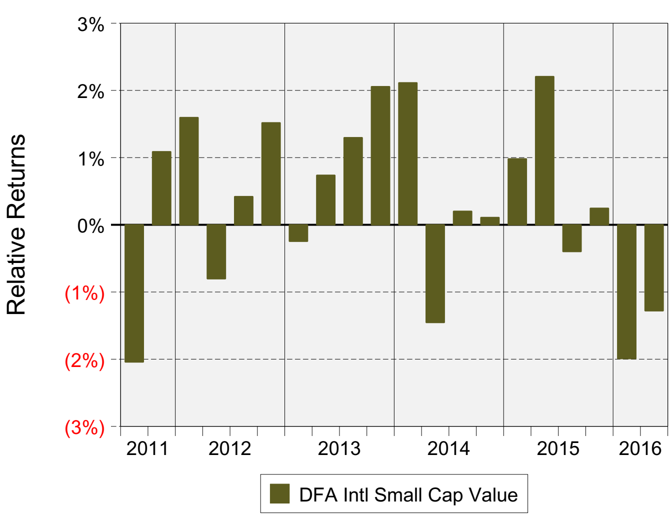
Beginning Market Value	$17,423,824
Net New Investment	$0
Investment Gains/(Losses)	$-550,452
Ending Market Value	$16,873,372

Performance vs Lipper International Small Cap Funds (Net)

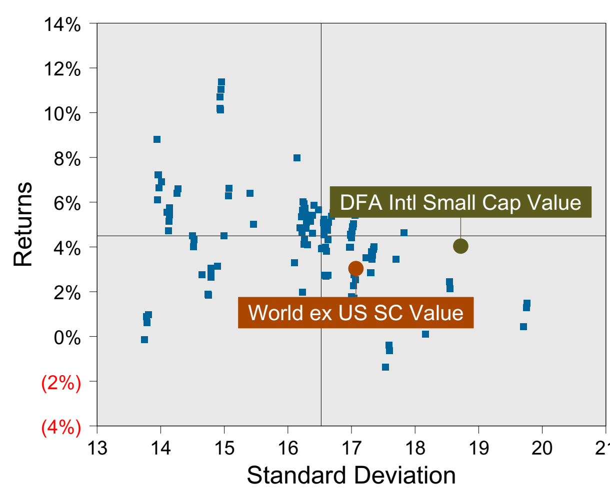


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-1/2 Years
10th Percentile	1.52	(1.53)	(0.24)	7.84	6.60	4.53
25th Percentile	(0.52)	(3.70)	(2.02)	6.31	5.42	3.05
Median	(1.81)	(6.10)	(3.85)	5.17	4.50	1.99
75th Percentile	(3.08)	(8.49)	(6.20)	2.95	2.79	0.91
90th Percentile	(4.18)	(10.75)	(7.63)	1.43	1.00	(0.34)
DFA Intl Small Cap Value ●	(3.16)	(9.28)	(6.33)	6.01	4.04	2.35
World ex US SC Value ▲	(1.88)	(6.05)	(6.28)	4.76	3.03	2.10

Relative Return vs World ex US SC Value



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



LSV Intl Value
Period Ended June 30, 2016

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.**

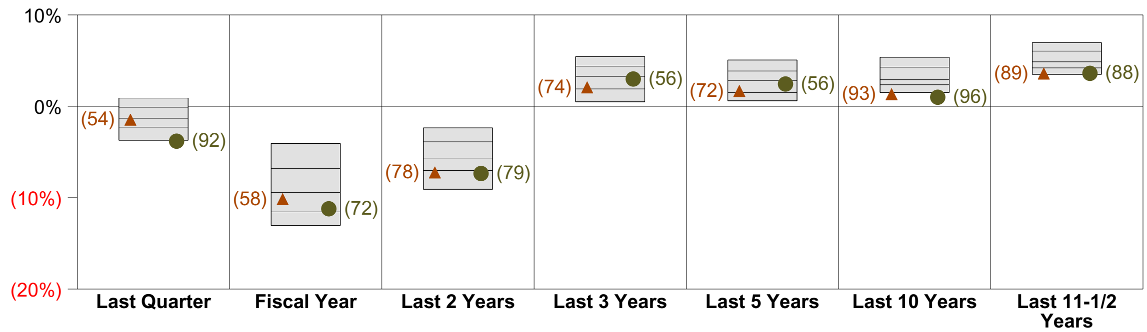
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a (3.82)% return for the quarter placing it in the 92 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 72 percentile for the last year.
- LSV Intl Value's portfolio underperformed the Benchmark by 2.36% for the quarter and underperformed the Benchmark for the year by 1.05%.

Quarterly Asset Growth

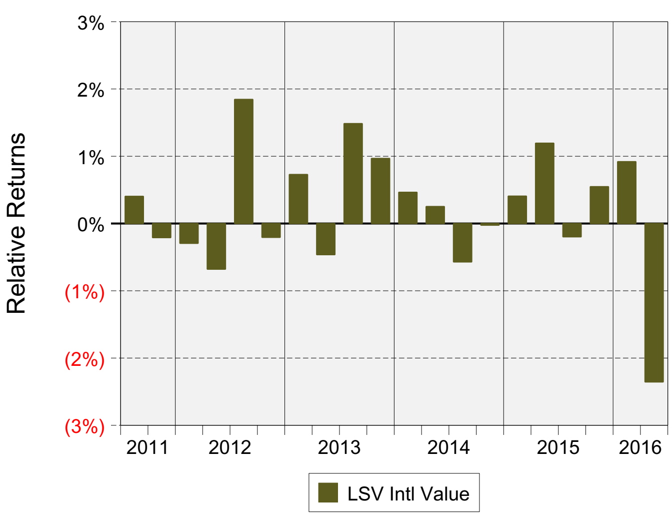
Beginning Market Value	$72,663,546
Net New Investment	$-565,922
Investment Gains/(Losses)	$-2,743,843
Ending Market Value	$69,353,781

Performance vs CAI Non-U.S. Equity Style (Gross)

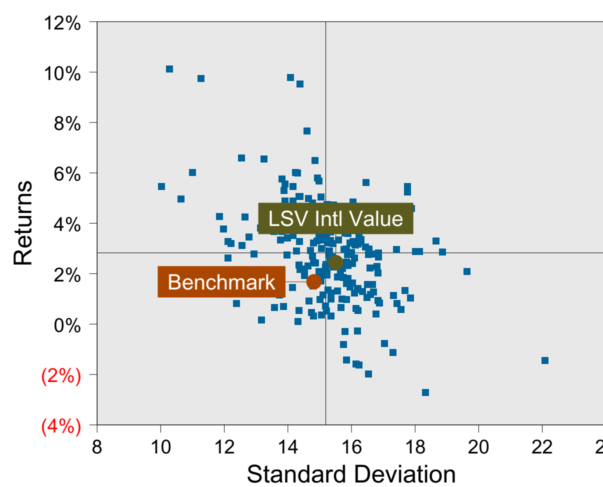


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 11-1/2 Years
10th Percentile	0.90	(4.07)	(2.36)	5.44	5.06	5.37	6.97
25th Percentile	(0.10)	(6.80)	(3.88)	4.39	3.86	4.28	6.04
Median	(1.31)	(9.43)	(5.67)	3.27	2.83	2.91	4.87
75th Percentile	(2.29)	(11.56)	(7.03)	1.90	1.49	2.36	4.21
90th Percentile	(3.72)	(13.04)	(9.08)	0.49	0.60	1.52	3.50
LSV Intl Value ●	(3.82)	(11.21)	(7.35)	2.99	2.44	0.99	3.61
Benchmark ▲	(1.46)	(10.16)	(7.24)	2.06	1.68	1.32	3.58

Relative Return vs Benchmark



CAI Non-U.S. Equity Style (Gross)
Annualized Five Year Risk vs Return



Vanguard Intl Explorer Fund
Period Ended June 30, 2016

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.

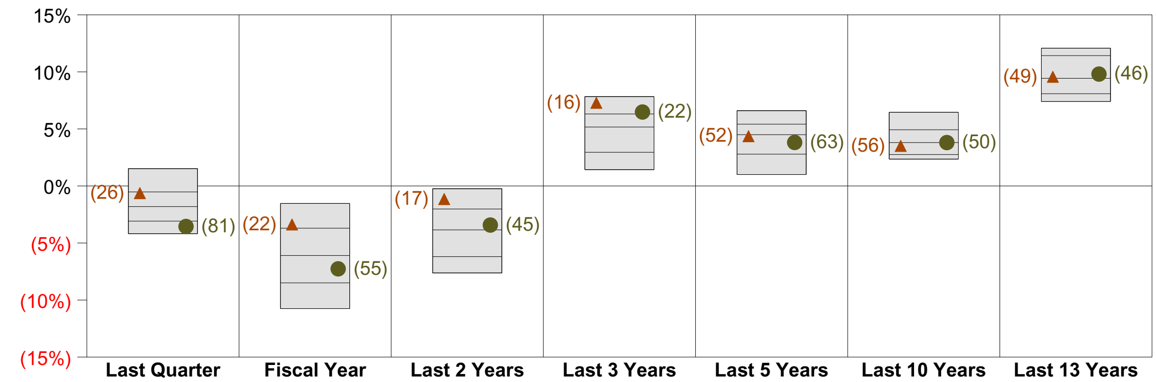
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a (3.55)% return for the quarter placing it in the 81 percentile of the Lipper International Small Cap Funds group for the quarter and in the 55 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio underperformed the S&P BMI EPAC <$2 B by 2.93% for the quarter and underperformed the S&P BMI EPAC <$2 B for the year by 3.89%.

Quarterly Asset Growth

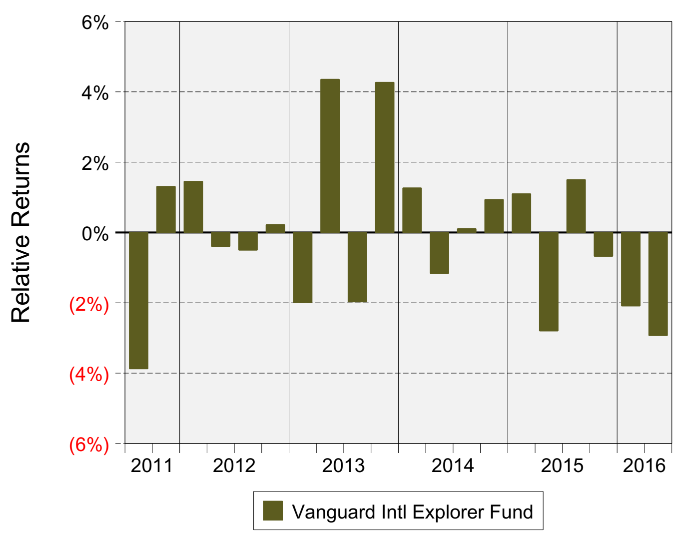
Beginning Market Value	$18,008,014
Net New Investment	$0
Investment Gains/(Losses)	$-639,659
Ending Market Value	$17,368,355

Performance vs Lipper International Small Cap Funds (Net)

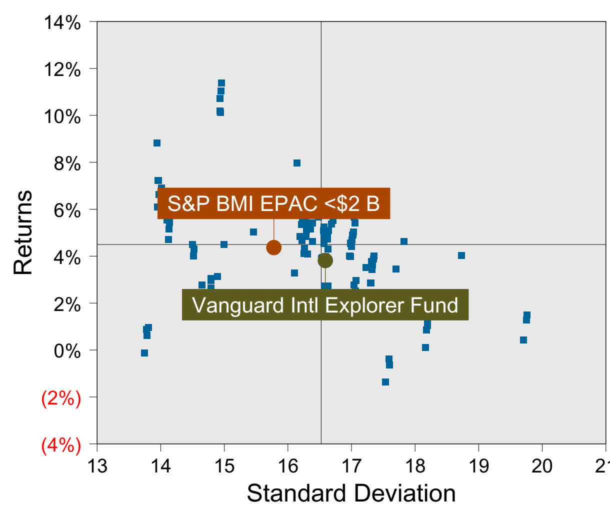


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 13 Years
10th Percentile	1.52	(1.53)	(0.24)	7.84	6.60	6.46	12.08
25th Percentile	(0.52)	(3.70)	(2.02)	6.31	5.42	4.93	11.43
Median	(1.81)	(6.10)	(3.85)	5.17	4.50	3.80	9.44
75th Percentile	(3.08)	(8.49)	(6.20)	2.95	2.79	2.75	8.09
90th Percentile	(4.18)	(10.75)	(7.63)	1.43	1.00	2.36	7.41
Vanguard Intl Explorer Fund ●	(3.55)	(7.27)	(3.43)	6.48	3.81	3.80	9.81
S&P BMI EPAC <$2 B ▲	(0.63)	(3.38)	(1.14)	7.29	4.37	3.51	9.57

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



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



Declaration Total Return
Period Ended June 30, 2016

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.

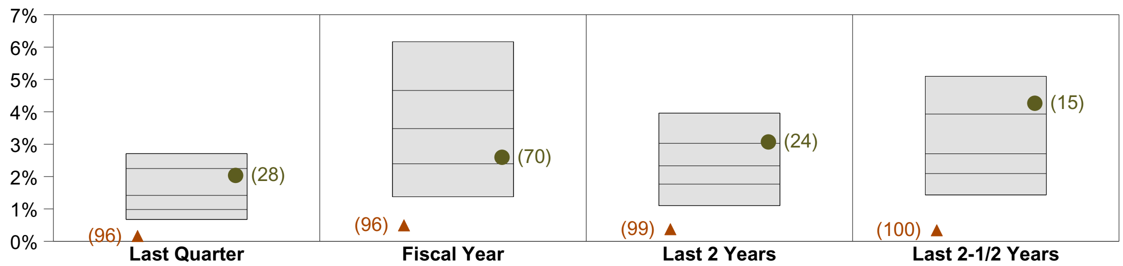
Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 2.04% return for the quarter placing it in the 28 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 70 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.87% for the quarter and outperformed the Libor-3 Month for the year by 2.10%.

Quarterly Asset Growth

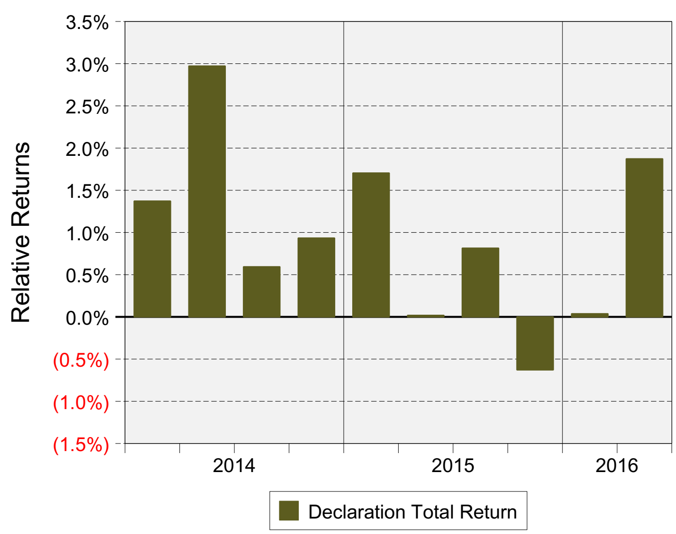
Beginning Market Value	$78,466,901
Net New Investment	$-28,096
Investment Gains/(Losses)	$1,597,443
Ending Market Value	$80,036,248

Performance vs CAI Intermediate Fixed Income Mut Funds (Net)

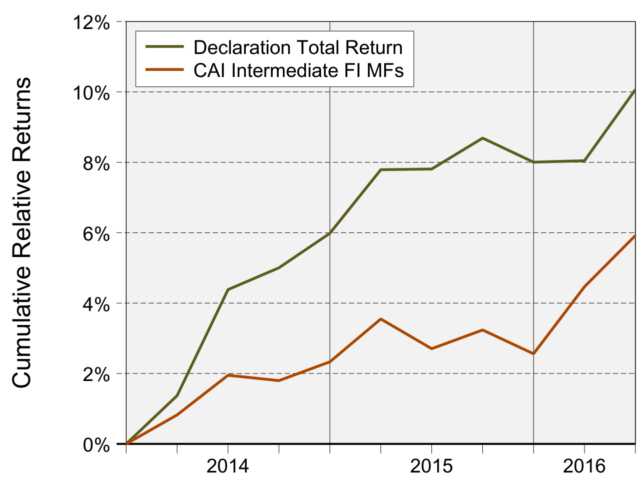


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.71	6.17	3.96	5.10
25th Percentile	2.25	4.66	3.03	3.93
Median	1.42	3.48	2.33	2.70
75th Percentile	0.98	2.39	1.77	2.09
90th Percentile	0.67	1.38	1.10	1.43
Declaration Total Return ●	2.04	2.60	3.07	4.27
Libor-3 Month ▲	0.16	0.49	0.37	0.34

Relative Return vs Libor-3 Month



Cumulative Returns vs Libor-3 Month



PIMCO DiSCO II
Period Ended June 30, 2016

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.

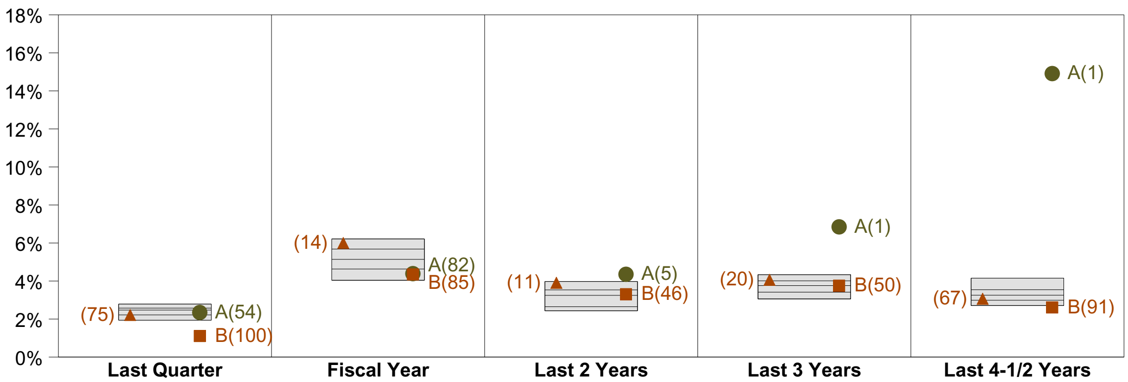
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 2.34% return for the quarter placing it in the 54 percentile of the CAI Core Bond Mutual Funds group for the quarter and in the 82 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Barclays Aggregate Index by 0.13% for the quarter and underperformed the Barclays Aggregate Index for the year by 1.61%.

Quarterly Asset Growth

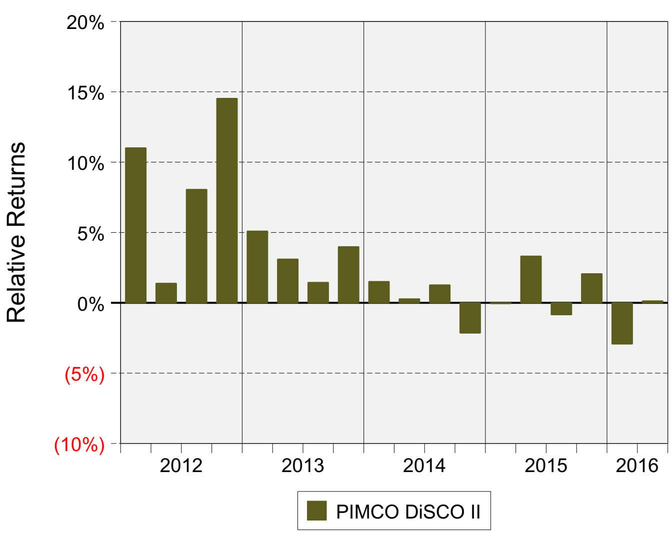
Beginning Market Value	$80,561,946
Net New Investment	$0
Investment Gains/(Losses)	$1,888,725
Ending Market Value	$82,450,671

Performance vs CAI Core Bond Mutual Funds (Net)

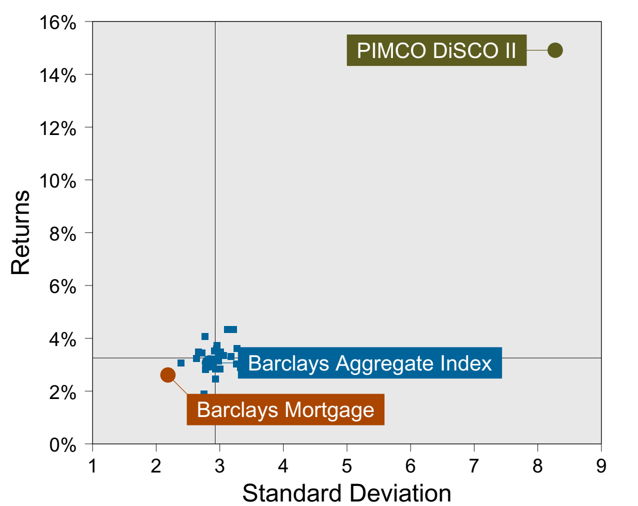


		Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile		2.79	6.21	3.97	4.33	4.15
25th Percentile		2.58	5.68	3.53	4.01	3.54
Median		2.47	5.14	3.25	3.76	3.25
75th Percentile		2.22	4.63	2.65	3.41	2.99
90th Percentile		1.94	4.04	2.44	3.06	2.71
PIMCO DiSCO II	● A	2.34	4.39	4.35	6.85	14.91
Barclays Mortgage	■ B	1.11	4.34	3.31	3.76	2.61
Barclays Aggregate Index	▲	2.21	6.00	3.91	4.06	3.07

Relative Return vs Barclays Aggregate Index



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



PIMCO Bravo II Fund
Period Ended June 30, 2016

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.

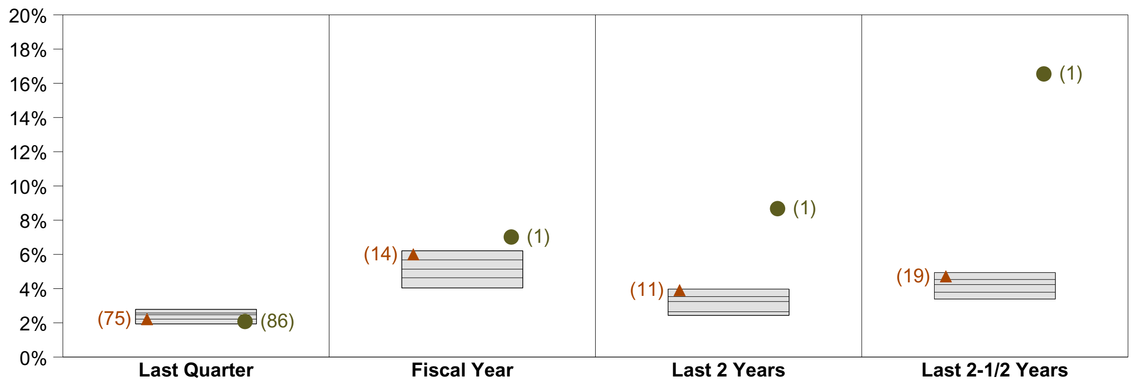
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 2.08% return for the quarter placing it in the 86 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 underperformed the Barclays Aggregate Index by 0.13% for the quarter and outperformed the Barclays Aggregate Index for the year by 1.02%.

Quarterly Asset Growth

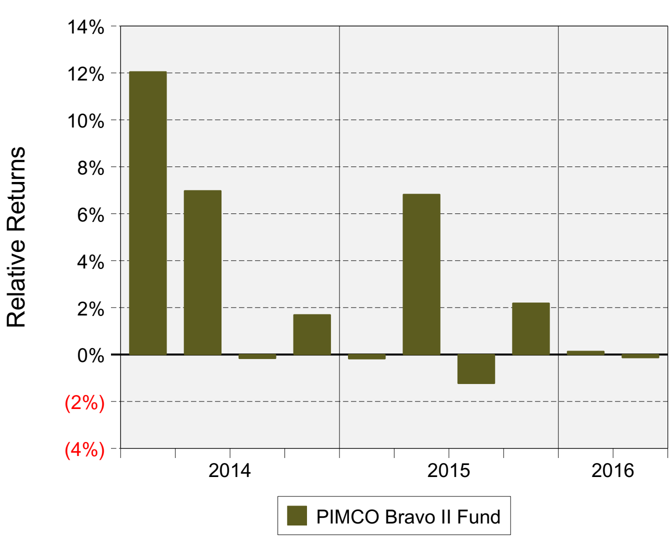
Beginning Market Value	$46,122,603
Net New Investment	$0
Investment Gains/(Losses)	$959,697
Ending Market Value	$47,082,300

Performance vs CAI Core Bond Mutual Funds (Net)

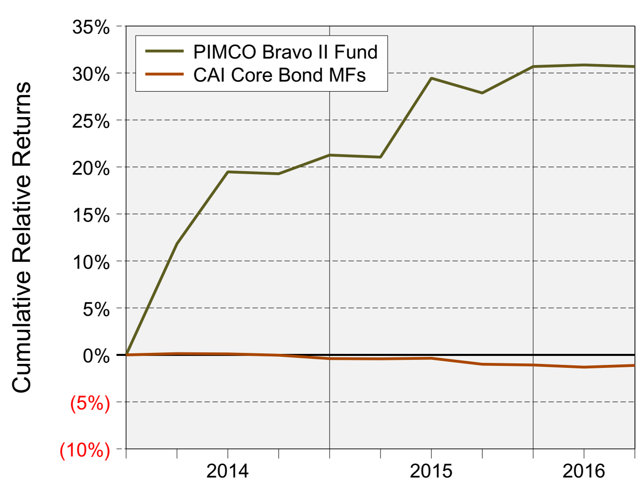


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.79	6.21	3.97	4.94
25th Percentile	2.58	5.68	3.53	4.53
Median	2.47	5.14	3.25	4.24
75th Percentile	2.22	4.63	2.65	3.79
90th Percentile	1.94	4.04	2.44	3.39
PIMCO Bravo II Fund ●	2.08	7.02	8.67	16.55
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.72

Relative Return vs Barclays Aggregate Index



Cumulative Returns vs Barclays Aggregate Index



Prudential
Period Ended June 30, 2016

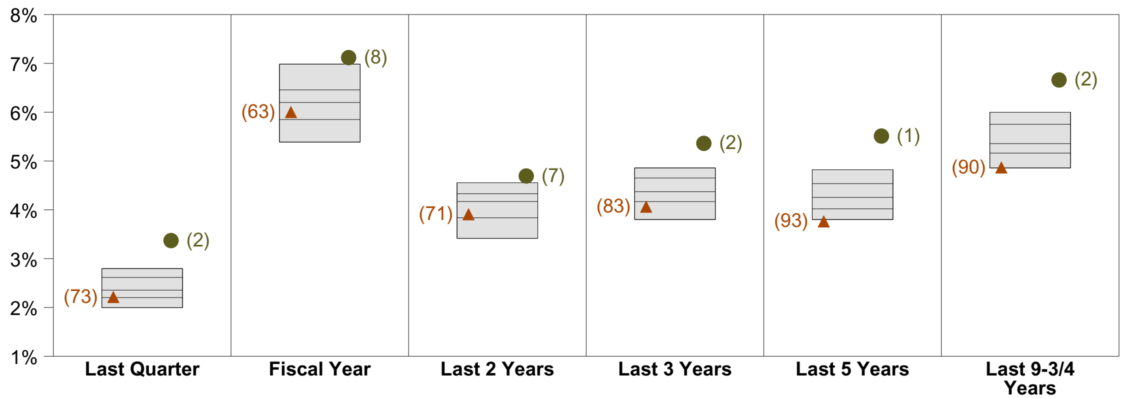
Investment Philosophy
The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment 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 3.37% return for the quarter placing it in the 2 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 8 percentile for the last year.
- Prudential's portfolio outperformed the Barclays Aggregate Index by 1.16% for the quarter and outperformed the Barclays Aggregate Index for the year by 1.12%.

Quarterly Asset Growth

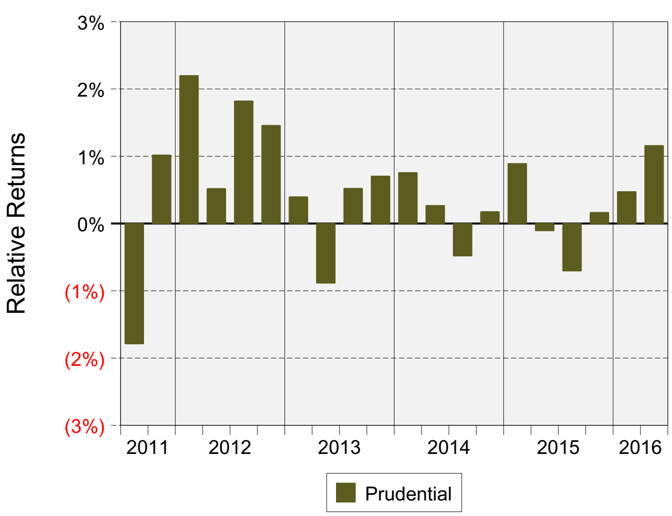
Beginning Market Value	$99,480,067
Net New Investment	$7,432,136
Investment Gains/(Losses)	$3,533,786
Ending Market Value	$110,445,990

Performance vs CAI Core Bond Fixed Income (Gross)

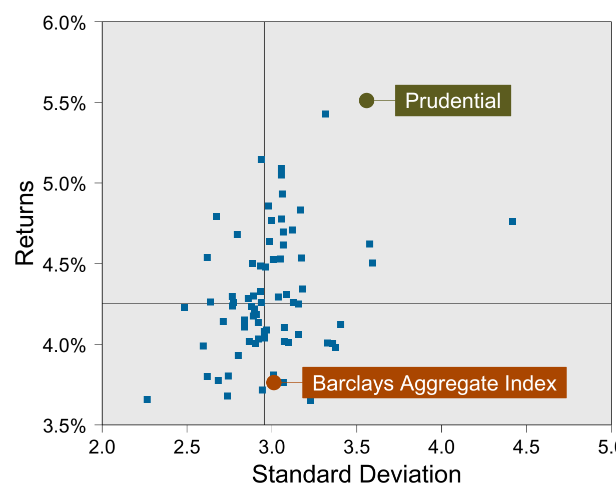


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 9-3/4 Years
10th Percentile	2.80	6.98	4.55	4.86	4.82	6.00
25th Percentile	2.62	6.46	4.33	4.65	4.54	5.75
Median	2.36	6.20	4.17	4.37	4.25	5.36
75th Percentile	2.20	5.85	3.84	4.17	4.02	5.16
90th Percentile	2.00	5.39	3.42	3.80	3.80	4.86
Prudential ●	3.37	7.12	4.69	5.36	5.51	6.66
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.06	3.76	4.87

Relative Return vs Barclays Aggregate Index



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



SSgA US Govt Cr Bd Index
Period Ended June 30, 2016

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.

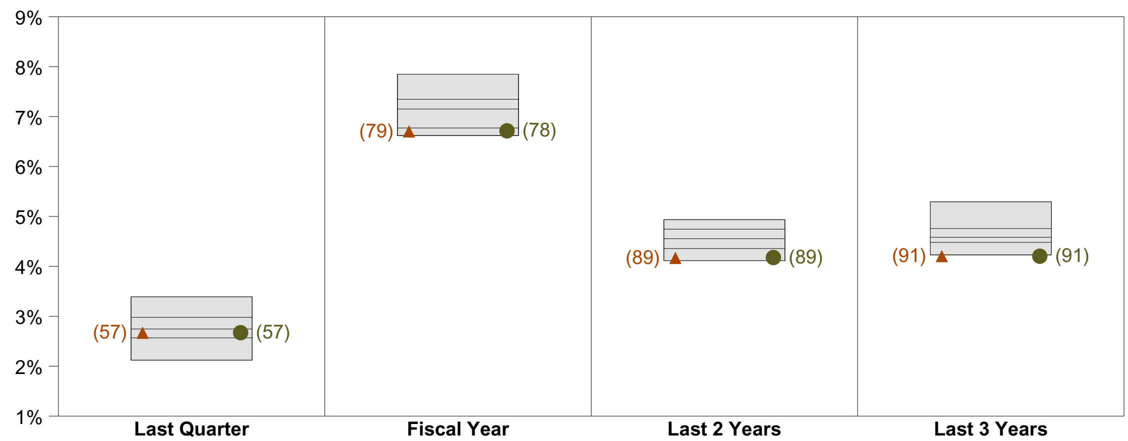
Quarterly Summary and Highlights

- SSgA US Govt Cr Bd Index's portfolio posted a 2.67% return for the quarter placing it in the 57 percentile of the CAI Government/Credit group for the quarter and in the 78 percentile for the last year.
- SSgA US Govt Cr Bd Index's portfolio outperformed the Barclays Govt/Credit Bd by 0.00% for the quarter and outperformed the Barclays Govt/Credit Bd for the year by 0.01%.

Quarterly Asset Growth

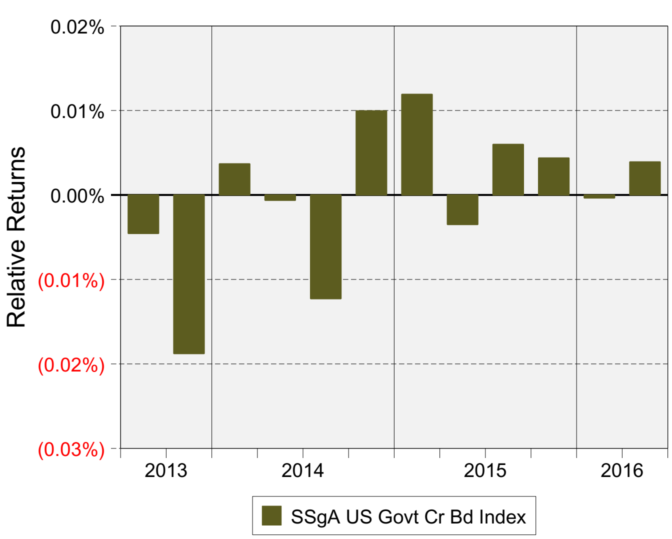
Beginning Market Value	$136,639,062
Net New Investment	$2,988,167
Investment Gains/(Losses)	$3,723,422
Ending Market Value	$143,350,650

Performance vs CAI Government/Credit (Gross)

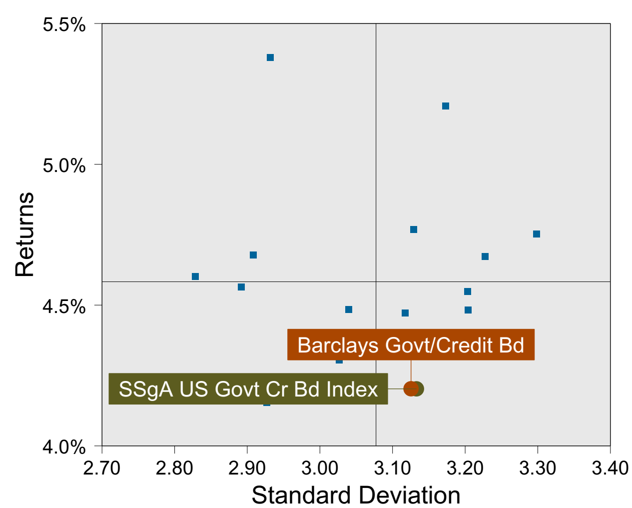


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years
10th Percentile	3.39	7.85	4.93	5.29
25th Percentile	2.98	7.35	4.74	4.76
Median	2.74	7.15	4.55	4.58
75th Percentile	2.57	6.77	4.36	4.48
90th Percentile	2.12	6.62	4.11	4.23
SSgA US Govt Cr Bd Index ●	2.67	6.71	4.18	4.20
Barclays Govt/Credit Bd ▲	2.67	6.70	4.17	4.20

Relative Return vs Barclays Govt/Credit Bd



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



Wells Capital
Period Ended June 30, 2016

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.

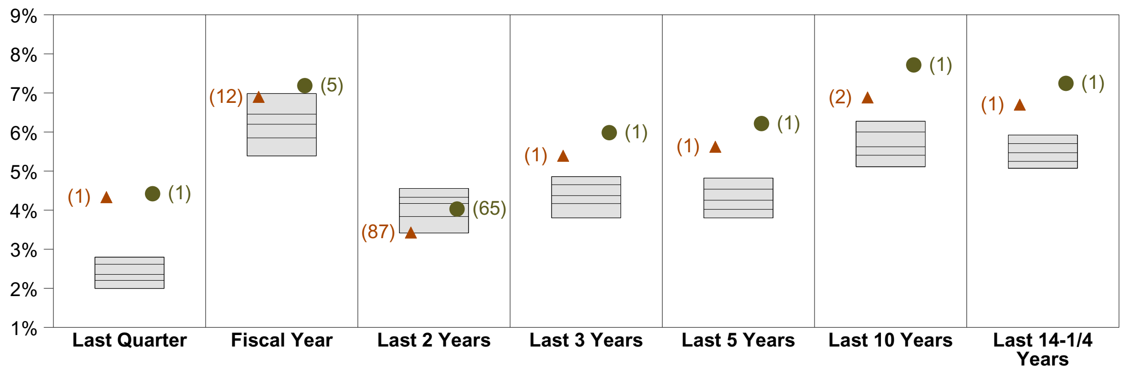
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 4.42% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 5 percentile for the last year.
- Wells Capital's portfolio outperformed the Barclays Baa Credit 3% In by 0.09% for the quarter and outperformed the Barclays Baa Credit 3% In for the year by 0.29%.

Quarterly Asset Growth

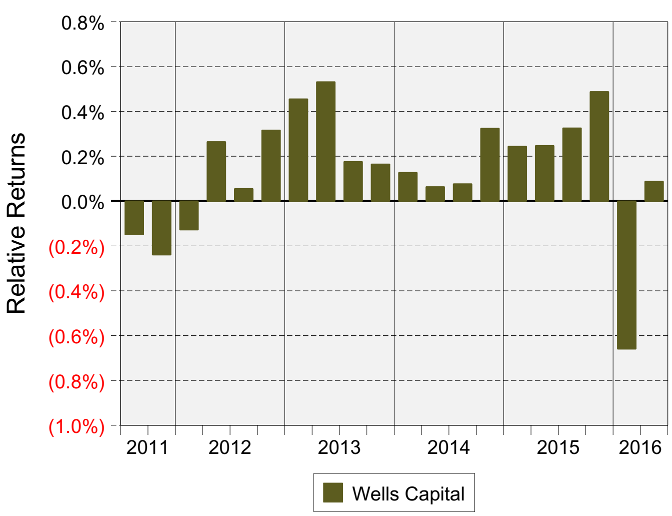
Beginning Market Value	$299,320,190
Net New Investment	$-135,325
Investment Gains/(Losses)	$13,227,869
Ending Market Value	$312,412,735

Performance vs CAI Core Bond Fixed Income (Gross)

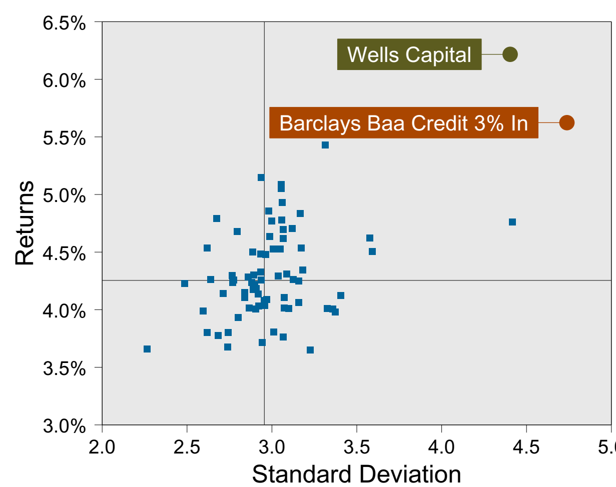


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 14-1/4 Years
10th Percentile	2.80	6.98	4.55	4.86	4.82	6.28	5.92
25th Percentile	2.62	6.46	4.33	4.65	4.54	6.00	5.70
Median	2.36	6.20	4.17	4.37	4.25	5.62	5.47
75th Percentile	2.20	5.85	3.84	4.17	4.02	5.41	5.25
90th Percentile	2.00	5.39	3.42	3.80	3.80	5.11	5.07
Wells Capital ●	4.42	7.19	4.03	5.98	6.22	7.72	7.25
Barclays Baa Credit 3% In ▲	4.33	6.90	3.43	5.39	5.62	6.89	6.70

Relative Return vs Barclays Baa Credit 3% In



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



Western Asset Management Company
Period Ended June 30, 2016

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.

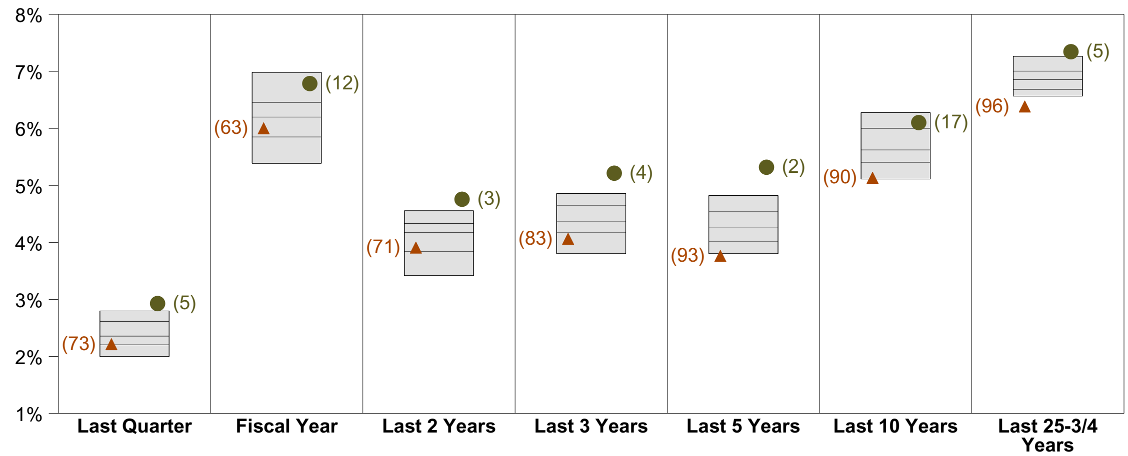
Quarterly Summary and Highlights

- Western Asset's portfolio posted a 2.93% return for the quarter placing it in the 5 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 12 percentile for the last year.
- Western Asset's portfolio outperformed the Barclays Aggregate Index by 0.71% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.79%.

Quarterly Asset Growth

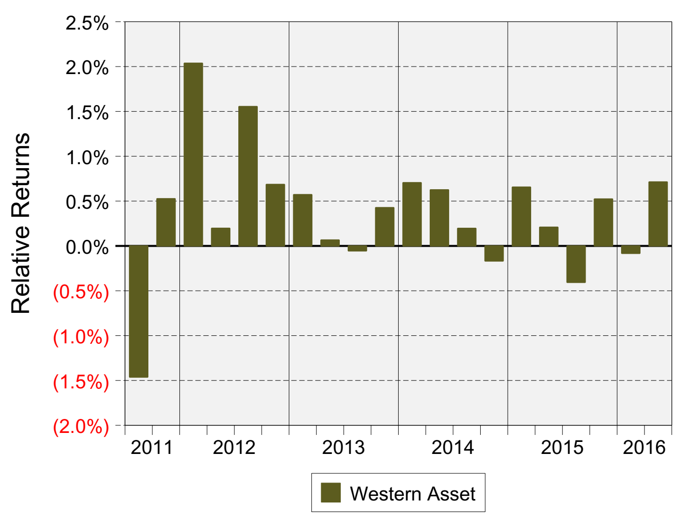
Beginning Market Value	$292,896,294
Net New Investment	$7,397,927
Investment Gains/(Losses)	$8,733,034
Ending Market Value	$309,027,255

Performance vs CAI Core Bond Fixed Income (Gross)

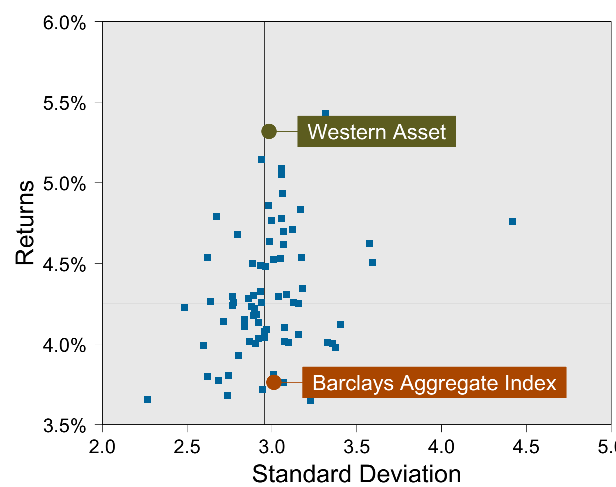


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 25-3/4 Years
10th Percentile	2.80	6.98	4.55	4.86	4.82	6.28	7.27
25th Percentile	2.62	6.46	4.33	4.65	4.54	6.00	7.01
Median	2.36	6.20	4.17	4.37	4.25	5.62	6.86
75th Percentile	2.20	5.85	3.84	4.17	4.02	5.41	6.68
90th Percentile	2.00	5.39	3.42	3.80	3.80	5.11	6.57
Western Asset ●	2.93	6.79	4.76	5.21	5.32	6.10	7.35
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.06	3.76	5.13	6.38

Relative Return vs Barclays Aggregate Index



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



Western TIPS
Period Ended June 30, 2016

Investment Philosophy

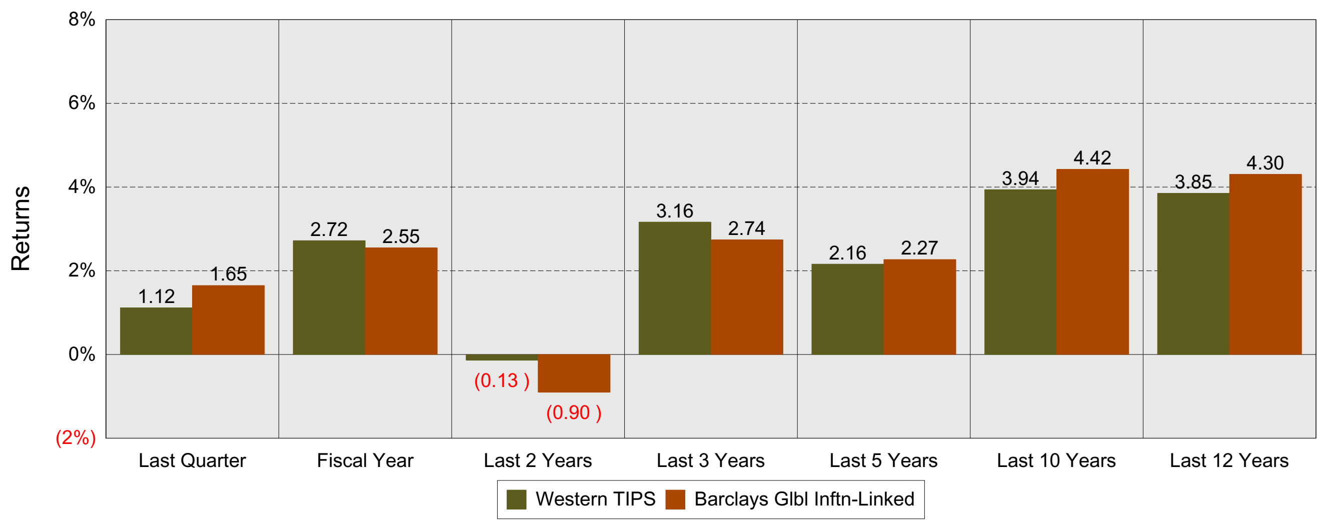
Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add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

Quarterly Summary and Highlights

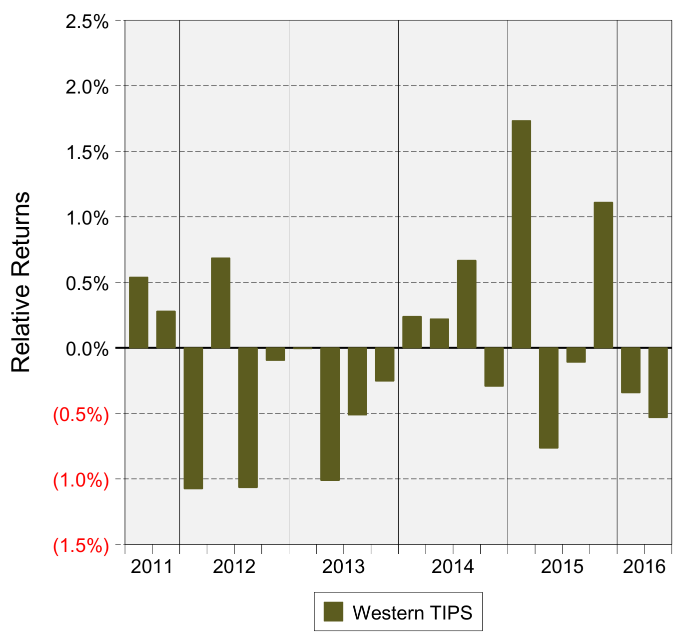
- Western TIPS's portfolio underperformed the Barclays Glbl Inftn-Linked by 0.53% for the quarter and outperformed the Barclays Glbl Inftn-Linked for the year by 0.17%.

Quarterly Asset Growth

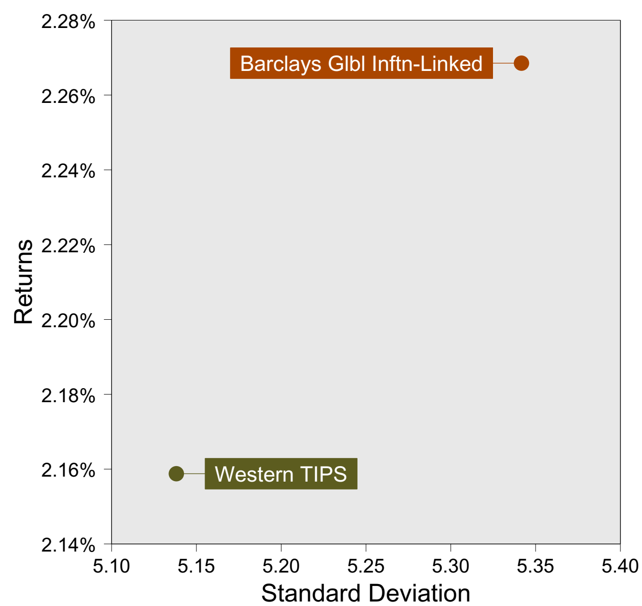
Beginning Market Value	$111,893,066
Net New Investment	$-38,536
Investment Gains/(Losses)	$1,248,944
Ending Market Value	$113,103,474



Relative Return vs Barclays Glbl Inftn-Linked



Annualized Five Year Risk vs Return



Eastern Timber Opportunities
Period Ended June 30, 2016

Investment Philosophy

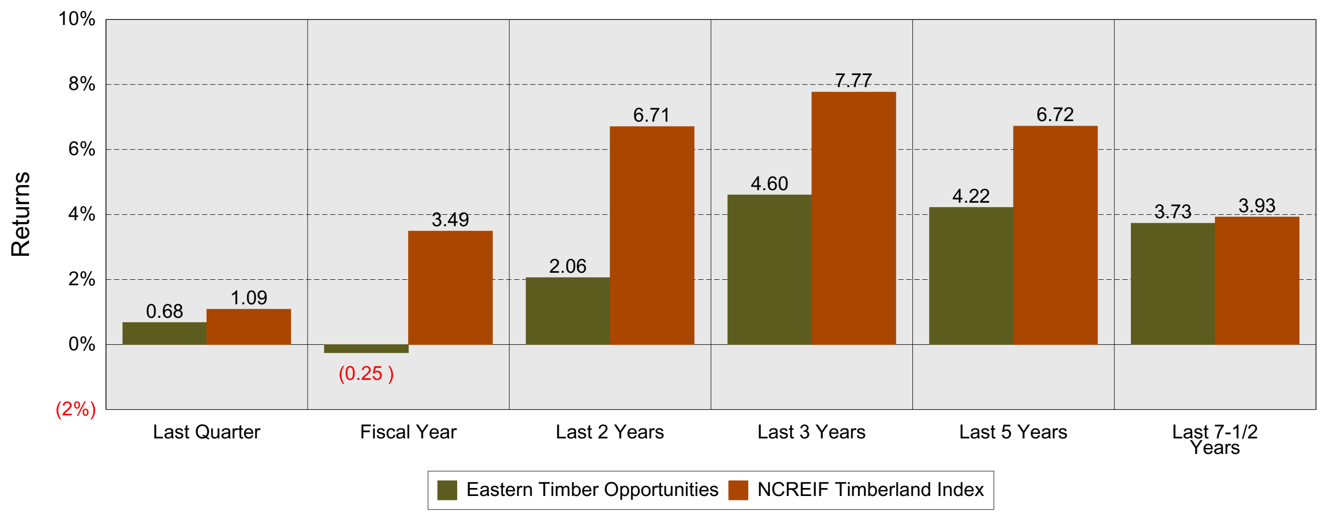
The investment objective of the Eastern Timberland Opportunities fund is to provide competitive timberland investment returns from Eastern US timberland investments by pursuing management strategies to increase timber production and land values through the investment term. TIR will maximize timber values 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

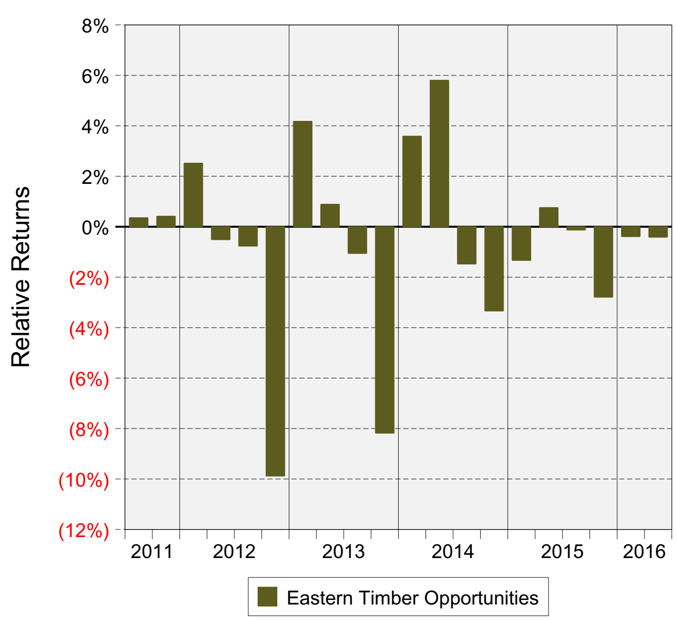
- Eastern Timber Opportunities's portfolio underperformed the NCREIF Timberland Index by 0.41% for the quarter and underperformed the NCREIF Timberland Index for the year by 3.74%.

Quarterly Asset Growth

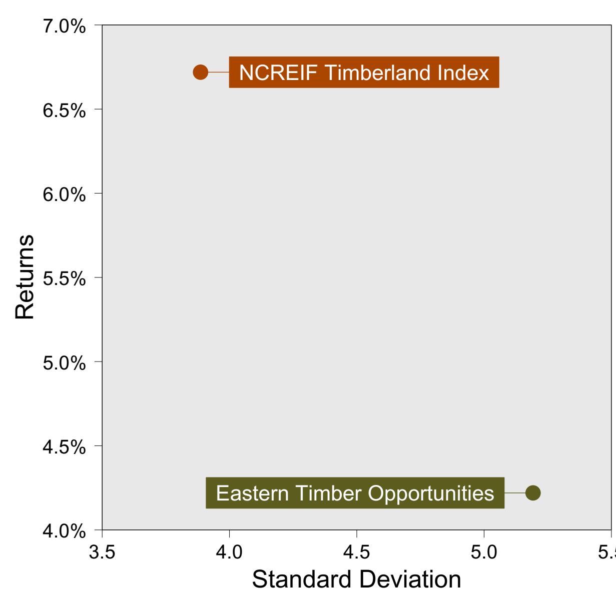
Beginning Market Value	$59,235,631
Net New Investment	$-1
Investment Gains/(Losses)	$402,718
Ending Market Value	$59,638,348



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



JP Morgan Infrastructure
Period Ended June 30, 2016

Investment Philosophy

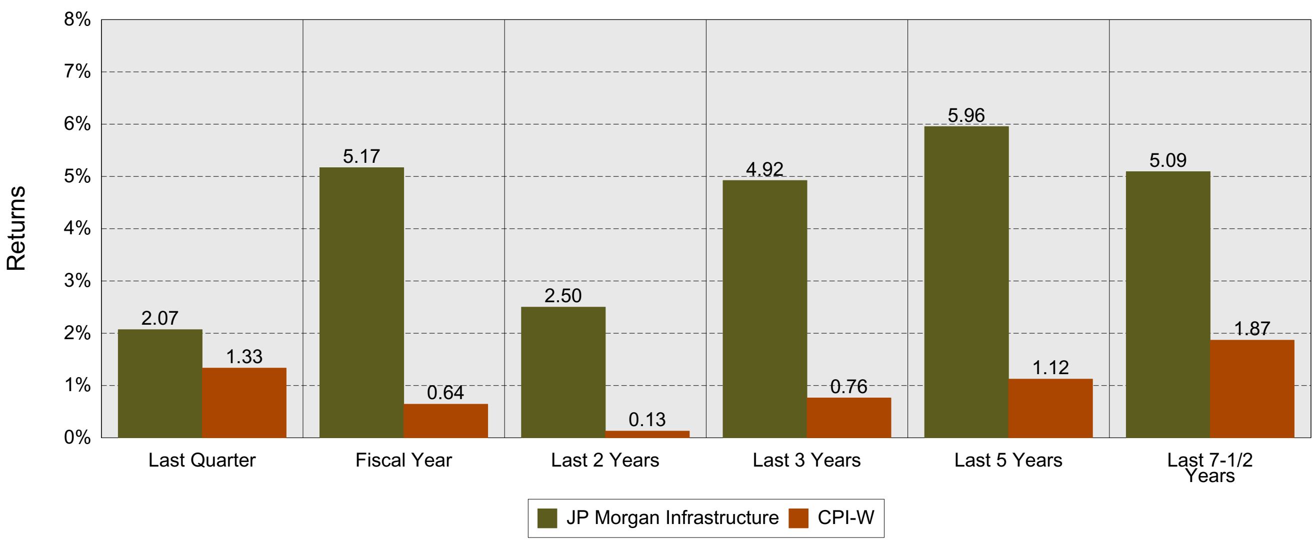
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas 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

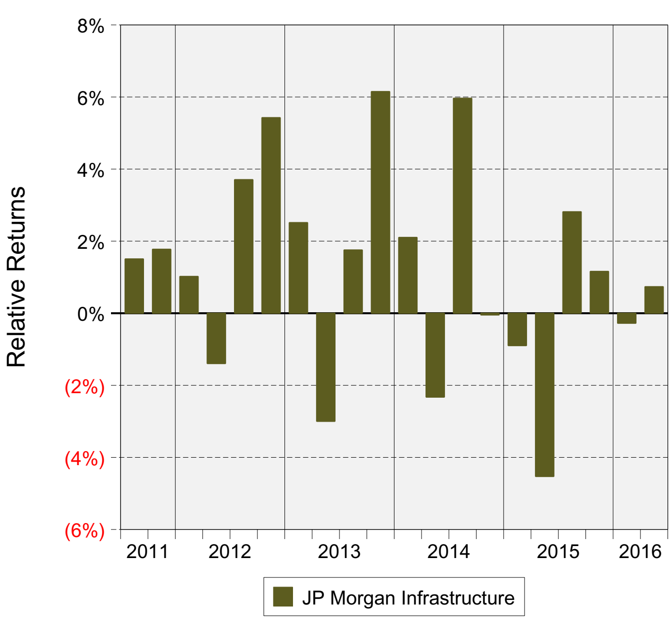
- JP Morgan Infrastructure's portfolio outperformed the CPI-W by 0.74% for the quarter and outperformed the CPI-W for the year by 4.53%.

Quarterly Asset Growth

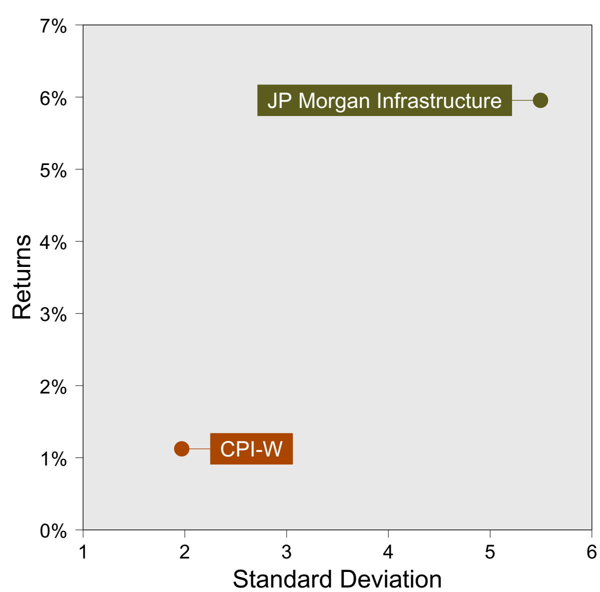
Beginning Market Value	$74,194,203
Net New Investment	$-405,151
Investment Gains/(Losses)	$1,536,767
Ending Market Value	$75,325,819



Relative Return vs CPI-W



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure
Period Ended June 30, 2016

Investment Philosophy

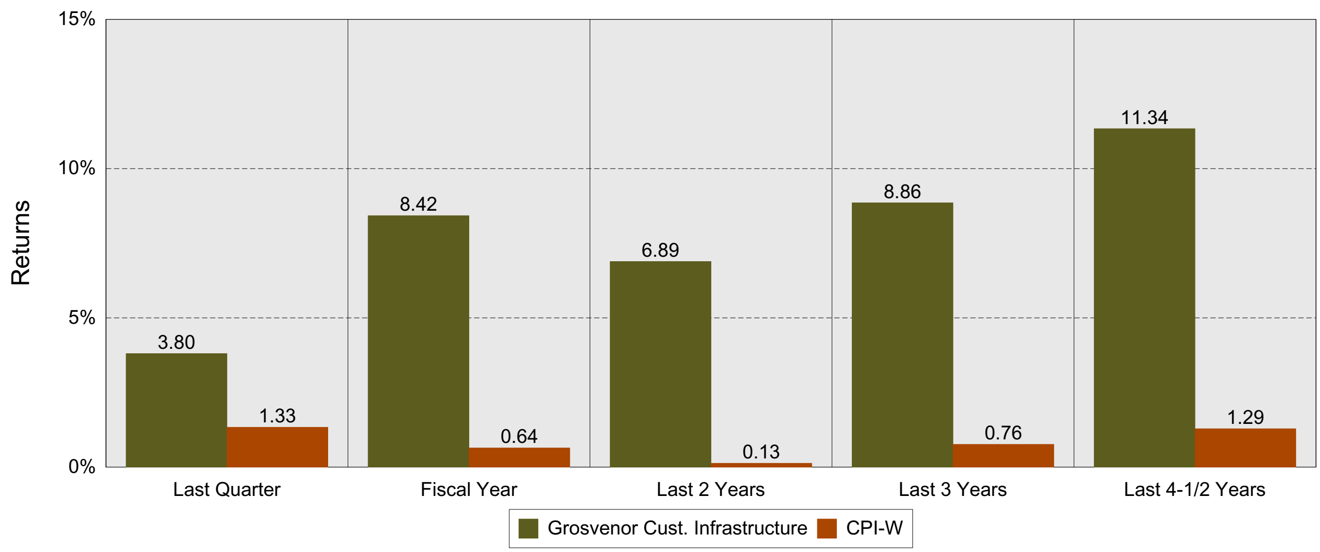
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified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

Quarterly Summary and Highlights

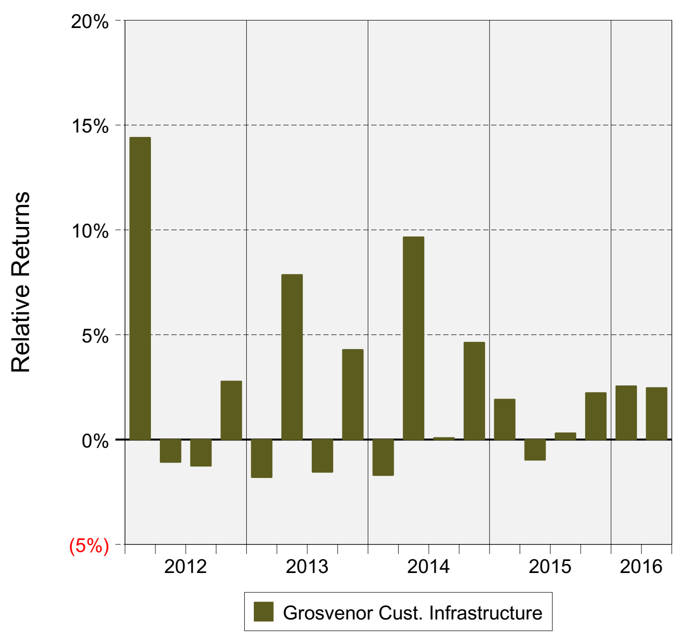
- Grosvenor Cust. Infrastructure's portfolio outperformed the CPI-W by 2.47% for the quarter and outperformed the CPI-W for the year by 7.78%.

Quarterly Asset Growth

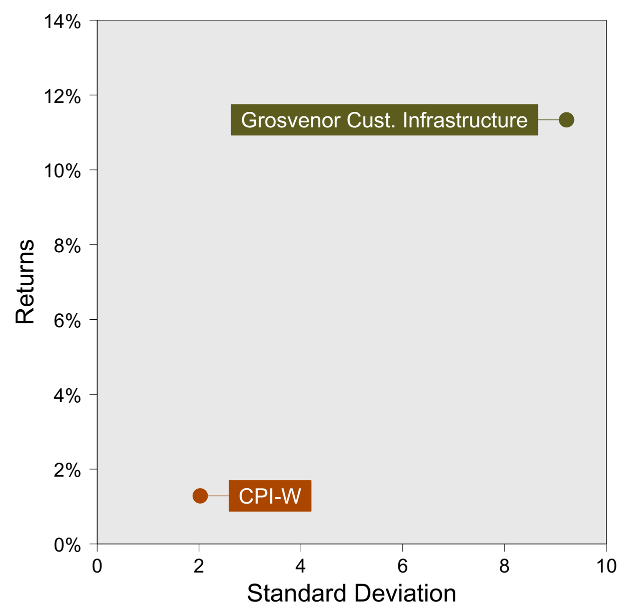
Beginning Market Value	$20,240,936
Net New Investment	$-313,799
Investment Gains/(Losses)	$756,421
Ending Market Value	$20,683,558



Relative Return vs CPI-W



Annualized Four and One-Half Year Risk vs Return



Invesco Core Real Estate
Period Ended June 30, 2016

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.

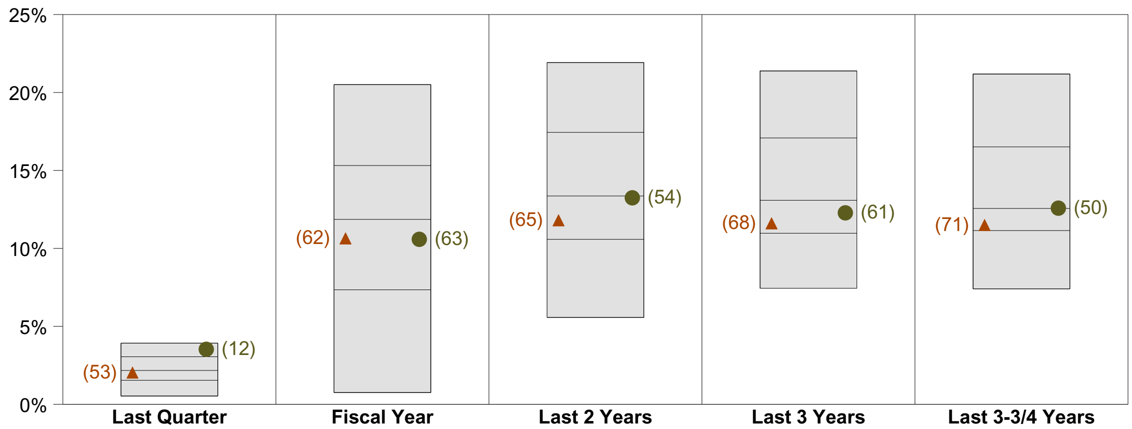
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 3.53% return for the quarter placing it in the 12 percentile of the CAI Total Domestic Real Estate Database group for the quarter and in the 63 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF Total Index by 1.49% for the quarter and underperformed the NCREIF Total Index for the year by 0.06%.

Quarterly Asset Growth

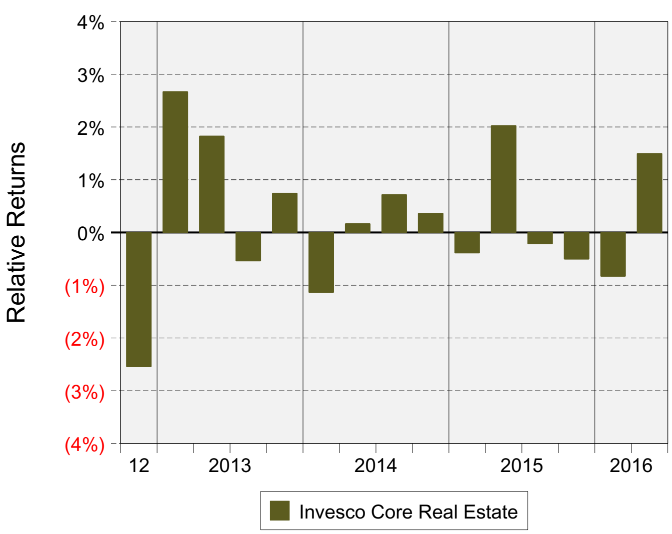
Beginning Market Value	$59,789,368
Net New Investment	$-54,597
Investment Gains/(Losses)	$2,163,572
Ending Market Value	$61,898,343

Performance vs CAI Total Domestic Real Estate Database (Net)

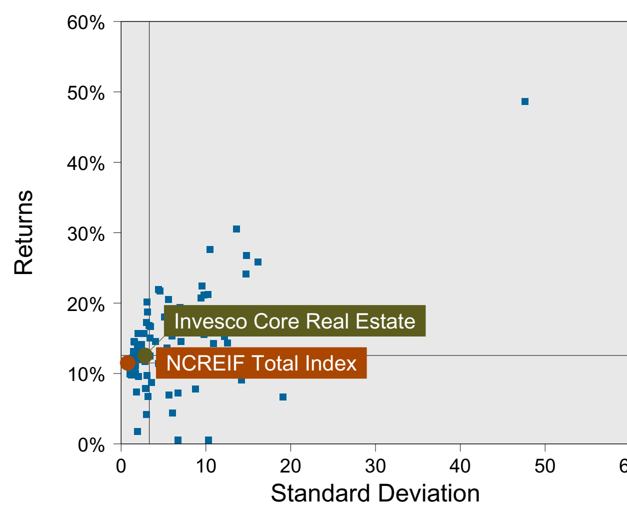


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 3-3/4 Years
10th Percentile	3.92	20.51	21.92	21.38	21.18
25th Percentile	3.05	15.32	17.44	17.08	16.51
Median	2.17	11.86	13.36	13.09	12.56
75th Percentile	1.54	7.35	10.58	10.97	11.14
90th Percentile	0.53	0.75	5.57	7.44	7.40
Invesco Core Real Estate ●	3.53	10.58	13.24	12.28	12.58
NCREIF Total Index ▲	2.03	10.64	11.80	11.61	11.50

Relative Return vs NCREIF Total Index



CAI Total Domestic Real Estate Database (Net)
Annualized Three and Three-Quarter Year Risk vs Return



JP Morgan Real Estate
Period Ended June 30, 2016

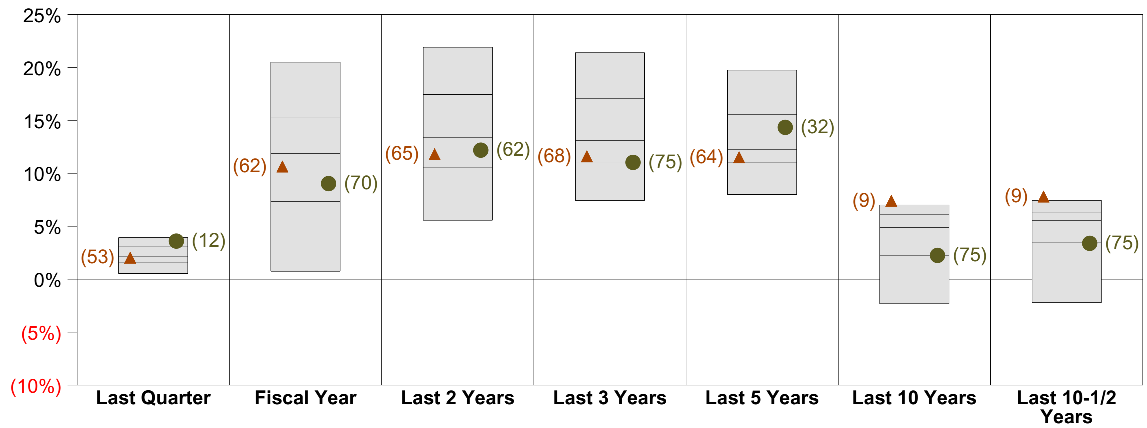
Investment Philosophy
The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy 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 3.60% return for the quarter placing it in the 12 percentile of the CAI Total Domestic Real Estate Database group for the quarter and in the 70 percentile for the last year.
- JP Morgan Real Estate's portfolio outperformed the NCREIF Total Index by 1.56% for the quarter and underperformed the NCREIF Total Index for the year by 1.61%.

Quarterly Asset Growth

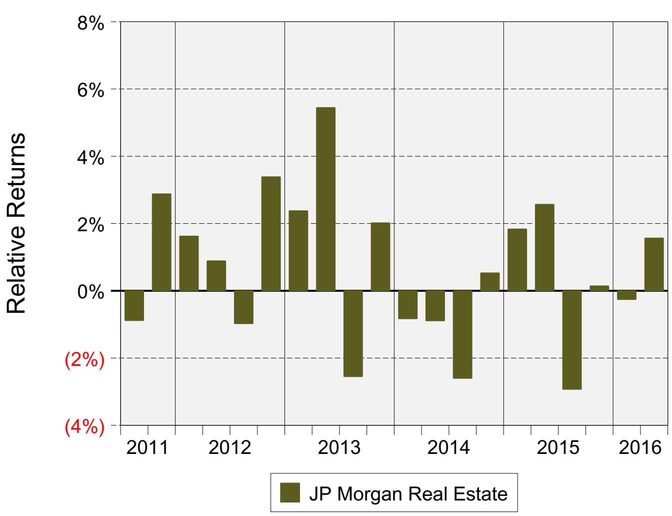
Beginning Market Value	$67,013,748
Net New Investment	$-36,536
Investment Gains/(Losses)	$2,409,072
Ending Market Value	$69,386,283

Performance vs CAI Total Domestic Real Estate Database (Net)

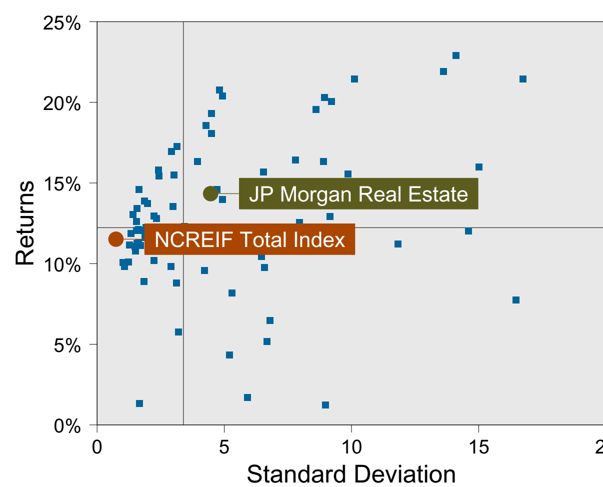


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 10-1/2 Years
10th Percentile	3.92	20.51	21.92	21.38	19.75	7.01	7.45
25th Percentile	3.05	15.32	17.44	17.08	15.54	6.13	6.34
Median	2.17	11.86	13.36	13.09	12.23	4.89	5.53
75th Percentile	1.54	7.35	10.58	10.97	10.99	2.26	3.50
90th Percentile	0.53	0.75	5.57	7.44	7.99	(2.33)	(2.22)
JP Morgan Real Estate ●	3.60	9.03	12.19	11.03	14.34	2.24	3.38
NCREIF Total Index ▲	2.03	10.64	11.80	11.61	11.51	7.40	7.80

Relative Return vs NCREIF Total Index



CAI Total Domestic Real Estate Database (Net)
Annualized Five Year Risk vs Return



JP Morgan Short Term Bonds
Period Ended June 30, 2016

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.

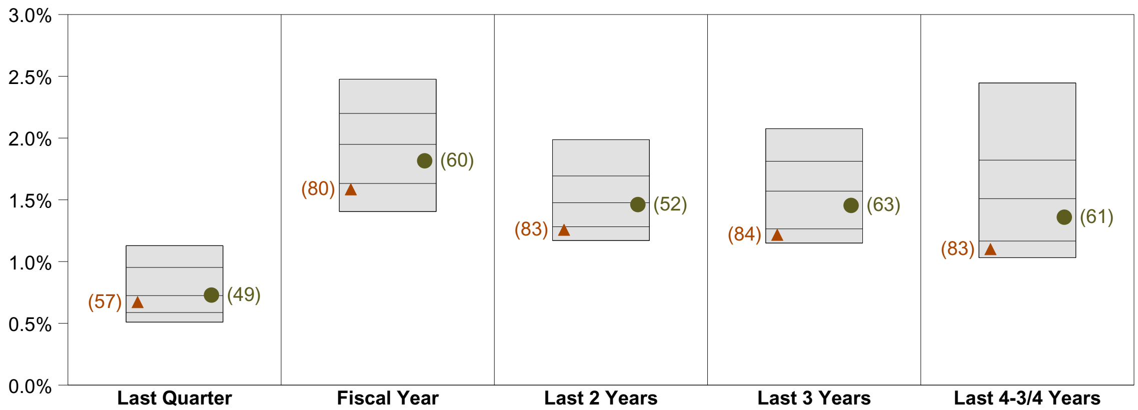
Quarterly Summary and Highlights

- JP Morgan Short Term Bonds's portfolio posted a 0.73% return for the quarter placing it in the 49 percentile of the CAI Defensive Fixed Income group for the quarter and in the 60 percentile for the last year.
- JP Morgan Short Term Bonds's portfolio outperformed the Barclays Gov/Credit 1-3 Yr by 0.06% for the quarter and outperformed the Barclays Gov/Credit 1-3 Yr for the year by 0.23%.

Quarterly Asset Growth

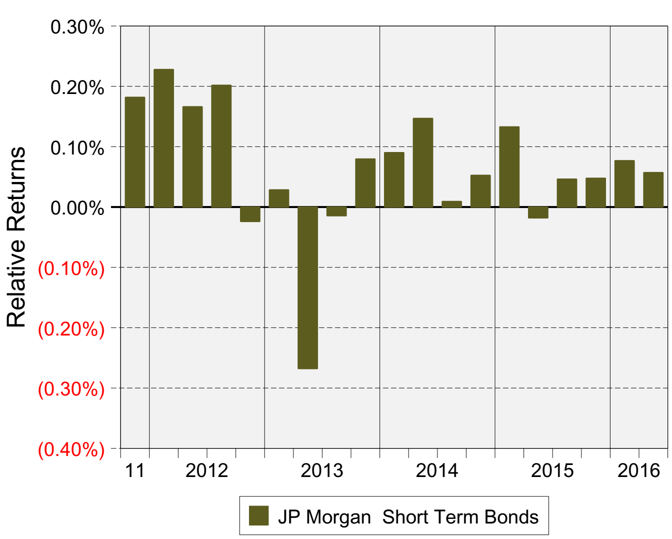
Beginning Market Value	$276,522,303
Net New Investment	$-1,577,842
Investment Gains/(Losses)	$2,005,328
Ending Market Value	$276,949,790

Performance vs CAI Defensive Fixed Income (Gross)

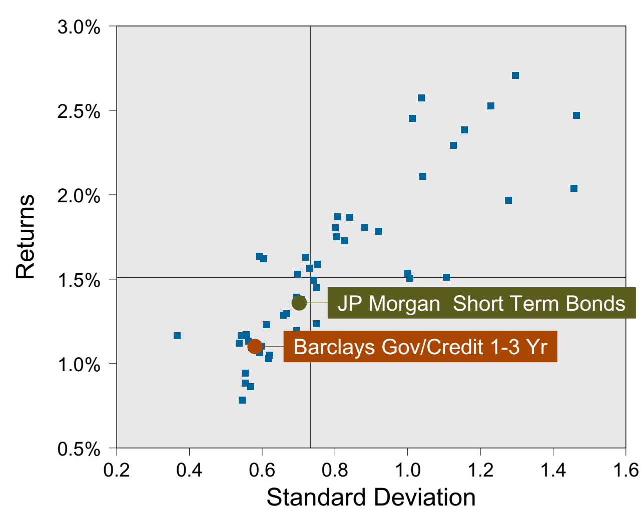


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-3/4 Years
10th Percentile	1.13	2.48	1.99	2.08	2.45
25th Percentile	0.95	2.20	1.69	1.81	1.82
Median	0.72	1.95	1.48	1.57	1.51
75th Percentile	0.59	1.63	1.28	1.26	1.17
90th Percentile	0.51	1.40	1.17	1.15	1.03
JP Morgan Short Term Bonds ●	0.73	1.82	1.46	1.45	1.36
Barclays Gov/Credit 1-3 Yr ▲	0.67	1.59	1.26	1.22	1.10

Relative Return vs Barclays Gov/Credit 1-3 Yr



CAI Defensive Fixed Income (Gross)
Annualized Four and Three-Quarter Year Risk vs Return



Babson Short Term Bonds
Period Ended June 30, 2016

Investment Philosophy

The investment objective of this account is to outperform the total return of the Barclays Capital 1-3 year US Government Index while minimizing fluctuations in capital value and providing sufficient liquidity to fund withdrawals.

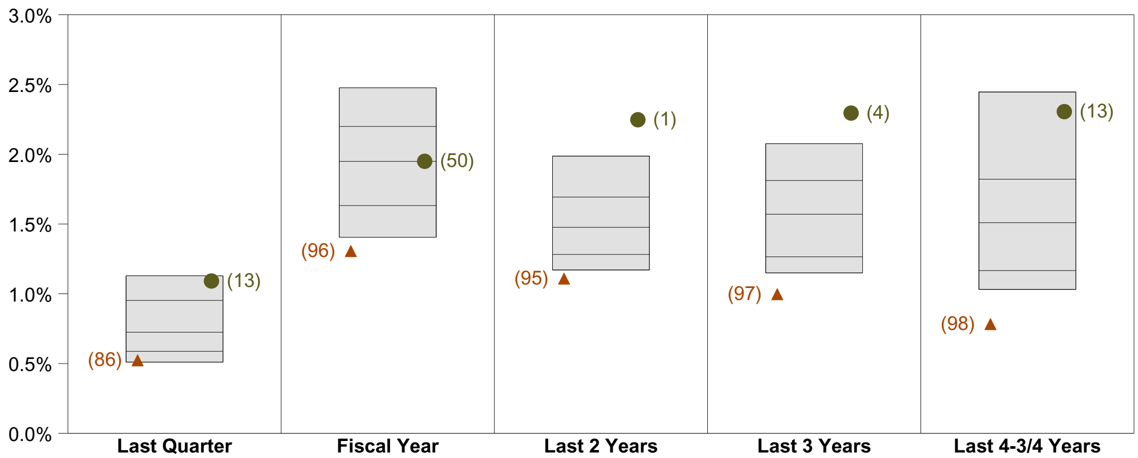
Quarterly Summary and Highlights

- Babson Short Term Bonds's portfolio posted a 1.09% return for the quarter placing it in the 13 percentile of the CAI Defensive Fixed Income group for the quarter and in the 50 percentile for the last year.
- Babson Short Term Bonds's portfolio outperformed the Barclays Gov 1-3 Yr by 0.57% for the quarter and outperformed the Barclays Gov 1-3 Yr for the year by 0.64%.

Quarterly Asset Growth

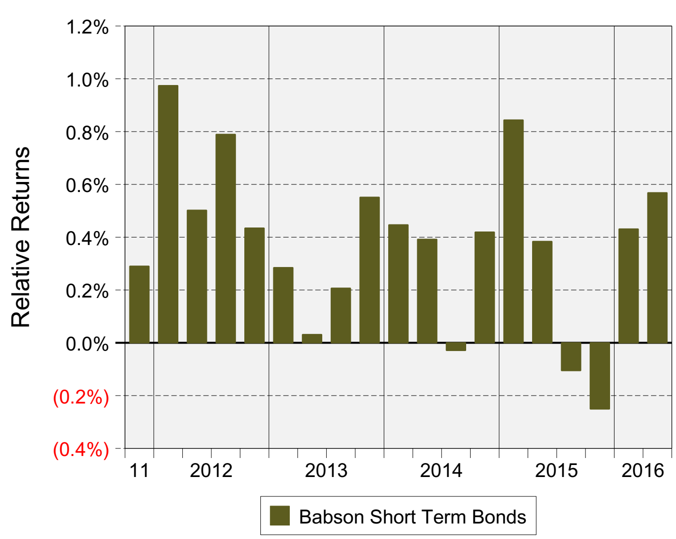
Beginning Market Value	$240,889,993
Net New Investment	$-102,833
Investment Gains/(Losses)	$2,628,857
Ending Market Value	$243,416,017

Performance vs CAI Defensive Fixed Income (Gross)

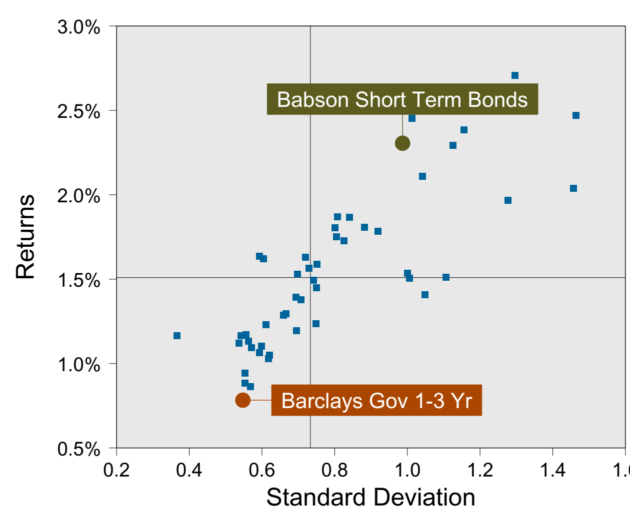


	Last Quarter	Fiscal Year	Last 2 Years	Last 3 Years	Last 4-3/4 Years
10th Percentile	1.13	2.48	1.99	2.08	2.45
25th Percentile	0.95	2.20	1.69	1.81	1.82
Median	0.72	1.95	1.48	1.57	1.51
75th Percentile	0.59	1.63	1.28	1.26	1.17
90th Percentile	0.51	1.40	1.17	1.15	1.03
Babson Short Term Bonds ●	1.09	1.95	2.25	2.30	2.31
Barclays Gov 1-3 Yr ▲	0.52	1.31	1.11	1.00	0.78

Relative Return vs Barclays Gov 1-3 Yr



CAI Defensive Fixed Income (Gross)
Annualized Four and Three-Quarter Year Risk vs Return



Callan

CALLAN
INSTITUTE

2nd Quarter 2016

Education

Research and Educational Programs

The Callan Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit www.callan.com/research to see all of our publications, or for more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

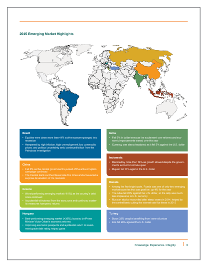
Aspiring Managers: Negotiating the Dual Realities Facing Diverse and Emerging Managers | Callan Chairman and CEO Ron Peyton and Callan Connects Manager Lauren Mathias, CFA, provide perspective on the diverse and emerging manager arenas and offer thoughts on how these managers can succeed.

Asset Managers and ESG: Sensing Opportunity, Bigger Firms Lead the Charge | In Callan's ESG survey of asset managers, author Mark Wood, CFA, reveals that the majority of large asset management firms have formal ESG policies, while smaller firms have yet to exhibit widespread adoption. Around one-third of managers with a formal ESG policy expect it will help them achieve higher risk-adjusted returns and improved risk profiles over the long term.

Video: Sustainability in Real Estate Investing | Sarah Angus, CAIA, a consultant in Callan's Real Assets Consulting group, discusses the benefits in using sustainable practices in managing real estate buildings, including higher tenant satisfaction and retention, greater occupancy, and increased values.

Considering Currency Hedging in an Equity Portfolio: 10 Charts to Help Frame a Policy | Callan recommends a measured approach to managing currency, including creating a policy to ensure short-term decisions made during painful times are in line with the long-term strategic goals of the plan. These 10 charts provide context for currency hedging discussions.

Video: The Costs of Closing: Nuclear Decommissioning Trusts | Julia Moriarty, CFA, of Callan's Capital Markets Research group discusses hedging costs, the impact of license extension, and more.



Emerging Markets: Opportunities and Challenges in Public Equity Investing | Callan's global equity investment experts (Andy Iseri, CFA, Ho Hwang, and Lyman Jung) write that despite risks, emerging market equities still can play an important role in well-diversified institutional portfolios.

Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle? | Callan's Real Assets Consulting group identifies seven indicators that have helped signal when the institutional real estate market is overheated or has cooled down.

Periodicals

Private Markets Trends, Spring 2016 | The latest on private equity.

DC Observer, 1st Quarter 2016 | The PPA, 10 years later: DC assets have grown and target date funds have skyrocketed.

Hedge Fund Monitor, 1st Quarter 2016 | The latest on these funds, plus the challenges in the search for above-average managers.

Market Pulse Flipbook, 1st Quarter 2016 | A guide covering investment and fund sponsor trends, the U.S. economy, the capital markets, and Callan's proprietary DC Index.

Capital Market Review, 1st Quarter 2016 | Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

Inside Callan's Database, 1st Quarter 2016 | A look at performance and risk data from Callan's proprietary database and relevant market indices.

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/

Mark your calendars for our fall **Regional Workshop**, October 25 in New York and October 26 in Chicago, and our **National Conference**, January 23–25, 2017, at the Palace Hotel in San Francisco.

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 session is:

Introduction to Investments

Chicago, October 18–19, 2016

This session 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 asset-management oversight and/or support responsibilities. Tuition for the Introductory "Callan College" session is $2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Customized Sessions

The "Callan College" is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at 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

Callan

Quarterly List as of
June 30, 2016

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please 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
1607 Capital Partners, LLC
Aberdeen Asset Management PLC
Acadian Asset Management LLC
AEGON USA Investment Management
Affiliated Managers Group, Inc.
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investment Management
Amundi Smith Breeden LLC
Analytic Investors
Angelo, Gordon & Co.
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artisan Holdings
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Babson Capital Management
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Asset Management, Corp.
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC

Manager Name
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investment Advisers, LLC
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cornerstone Capital Management
Cramer Rosenthal McGlynn, LLC
Crawford Investment Counsel, Inc.
Credit Suisse Asset Management
Crestline Investors, Inc.
DE Shaw Investment Management, LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt. Co.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Global Asset Management
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
Fisher Investments
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management, Inc.
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GE Asset Management

Manager Name
GMO
Goldman Sachs Asset Management
Grand-Jean Capital Management
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Institutional Capital LLC
INTECH Investment Management, LLC
Invesco
Investec Asset Management
Janus Capital Management, LLC
Jensen Investment Management
J.P. Morgan Asset Management
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
Martin Currie Inc.
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
Nuveen Investments, Inc.
OFI Global Asset Management
Old Mutual Asset Management
Opus Capital Management Inc.
Pacific Investment Management Company

Manager Name
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PGIM
PineBridge Investments
Pinnacle Asset Management L.P.
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
RidgeWorth Capital Management, Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
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.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
The Boston Company Asset Management, LLC
The Hartford
The London Company
The TCW Group, 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)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
William Blair & Company

Callan

June 30, 2016

North Dakota State Investment Board Legacy Fund

Investment Measurement Service Quarterly Review

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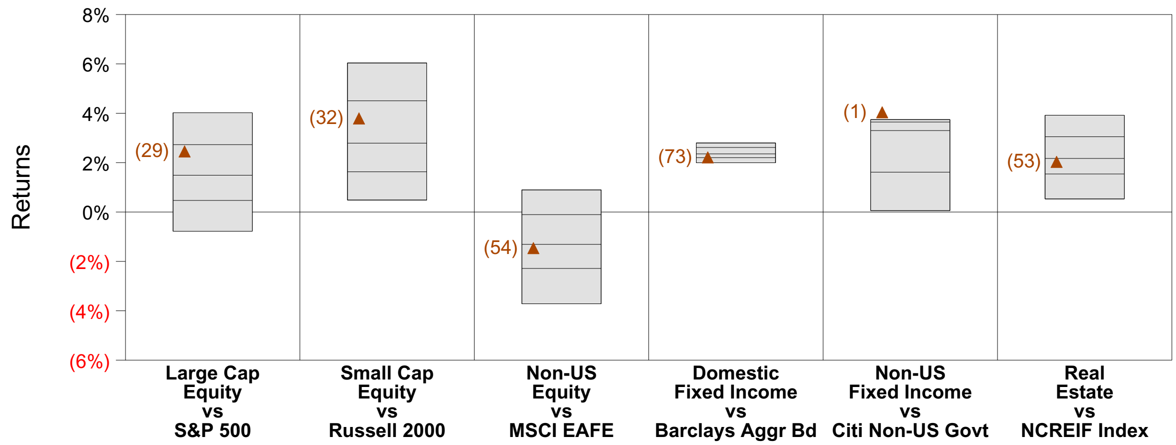
June 30, 2016

Market Overview
Active Management vs Index Returns

Market Overview

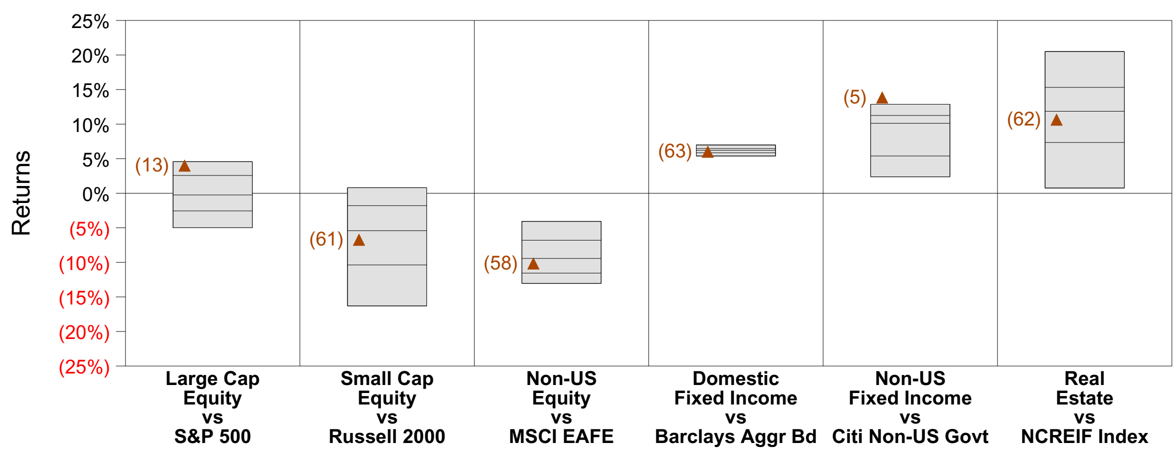
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also 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 June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.02	6.04	0.90	2.80	3.74	3.92
25th Percentile	2.73	4.51	(0.10)	2.62	3.64	3.05
Median	1.49	2.79	(1.31)	2.36	3.30	2.17
75th Percentile	0.47	1.63	(2.29)	2.20	1.62	1.54
90th Percentile	(0.78)	0.48	(3.72)	2.00	0.06	0.53
Index ▲	2.46	3.79	(1.46)	2.21	4.04	2.03

Range of Separate Account Manager Returns by Asset Class
One Year Ended June 30, 2016



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Barclays Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	4.57	0.80	(4.07)	6.98	12.87	20.51
25th Percentile	2.57	(1.79)	(6.80)	6.46	11.25	15.32
Median	(0.25)	(5.42)	(9.43)	6.20	10.12	11.86
75th Percentile	(2.56)	(10.37)	(11.56)	5.85	5.39	7.35
90th Percentile	(4.99)	(16.30)	(13.04)	5.39	2.38	0.75
Index ▲	3.99	(6.73)	(10.16)	6.00	13.85	10.64

Callan

Second Quarter 2016

Keep Calm and Carry On

ECONOMY

2 PAGE

Despite global turmoil, all indicators of the U.S. economy pointed toward the strongest growth in consumption in a decade. But a disappointing first read on GDP for the second quarter is likely to give the Fed enough reason to delay a much-anticipated September rate hike.

Any Relief in Sight?

FUND SPONSOR

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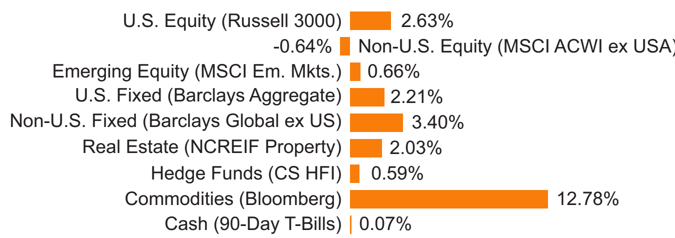
Corporate funds outperformed all others during the quarter because of their higher exposure to U.S. fixed income investments. But that brought little relief for their funding status, which fell by more than 3 percentage points.

Broad Market Quarterly Returns



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

Greener Grass

U.S. EQUITY

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The **S&P 500** ended the quarter only 1.5% below its all-time high achieved in May 2015, indicating that for investors wary of the turbulence around the world, the grass does appear to be greener in the United States.

Fasten Your Seat Belts

NON-U.S. EQUITY

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Markets around the world ended the quarter relatively stable despite the Brexit vote, with the **MSCI ACWI ex USA Index** down only slightly (-0.64%), and the **MSCI Pacific Index** up a bit (+0.87%). The **MSCI Europe Index**, not surprisingly, finished down more 2.69%.

Rally Across the Board

U.S. FIXED INCOME

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All sectors rallied during the quarter and produced positive returns, with investment-grade corporates leading the way, as investors assessed the broad strength of the U.S. economy and relatively attractive opportunities with the U.S. fixed income markets in the wake of Brexit.

How Low Can Rates Go?

NON-U.S. FIXED INCOME

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Major global bond indices showed positive returns for the quarter, as sovereign yields fell. Most major global currencies weakened against the U.S. dollar; the British pound was hit hardest. Emerging market bonds continued to rebound despite a bumpy ride.

It Really Is Location, Location, Location

REAL ESTATE

17 PAGE

The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, Brexit uncertainties, and concerns about China's slowing growth.

Sticker Shock

PRIVATE EQUITY

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Fundraising surged in the second quarter, with a large jump in venture capital. The investment pace by funds into companies slowed, but the amount invested into VC companies increased. And IPOs by both buyout-backed and VC-backed firms increased in the quarter.

Caution as Britannia Waives the Rule

HEDGE FUNDS

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Hedge funds eked out modest gains in the second quarter, with convertible arb funds performing best and short bias the worst. Emerging market and fixed income arb funds showed positive returns, making up for losses in the first quarter.

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION

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As usual, target date funds attracted most of the assets during the first quarter, and now command more than a quarter of total DC assets. But the **Callan DC Index** lagged the Age 45 Target Date Fund by 42 bps in the quarter.

Keep Calm and Carry On

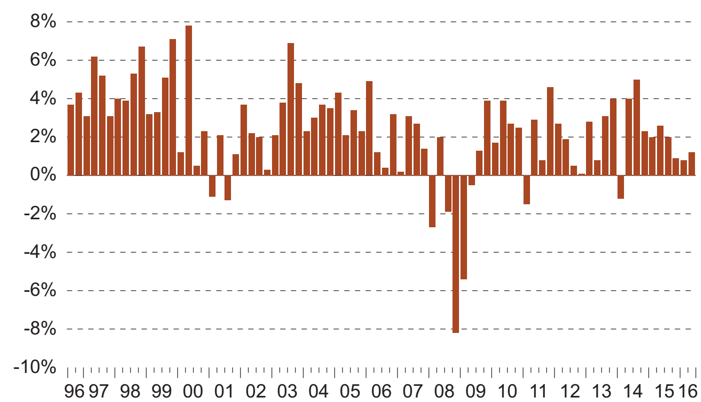
ECONOMY | Jay Kloepfer

Voters in the United Kingdom narrowly approved a referendum to leave the European Union on June 23, and this unexpected result completely overshadowed everything else that happened in the global economy during the second quarter. Global bond yields fell to record lows, the British pound hit a 31-year low versus the U.S. dollar, and global equity markets plunged before quickly bouncing back to regain much of what they lost over a period of just a week.

In the background, the U.S. economy seemed to be calmly carrying on, as all indicators pointed toward the strongest growth in consumption in a decade. The first read of second-quarter gross domestic product (GDP) growth was therefore clearly disappointing at just 1.2%, dashing consensus expectations (or maybe just hopes) for a rate of 2% or higher. The revision to the first-quarter result was disappointing as well, pulled down from 1.1% to just 0.8%. The U.S. economy has now expanded by just 1.2% over the past year, the weakest 12-month gain since the reduction in Federal fiscal stimulus during 2013. Second-quarter growth was fueled by the standout strength in consumer spending, which increased at a robust rate of 4.2%. Gains in employment, disposable income, and home asset values (boosting household wealth)—along with low energy prices, modest inflation, and low interest rates—are providing the tailwind for consumers. Weighing down overall GDP growth is continued retrenchment in non-residential fixed investment, a blip downward in residential investment, and the fourth consecutive quarter of inventory reduction, which subtracted more than 1% from overall GDP growth. This weak GDP growth is likely to give the Federal Reserve sufficient reason to delay a much-anticipated September rate hike.

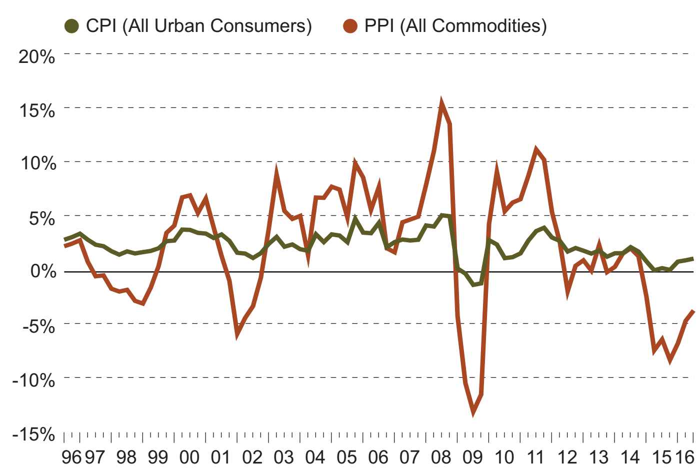
The job market gave quite a scare during the second quarter and was likely a primary factor in derailing what looked to be a certain Fed rate hike in June. April job gains slowed to 144,000 after averaging close to 200,000 during the first quarter, and then plummeted to just 11,000 in May, before recovering to an impressive 287,000 gain in June. The April and May jobs reports spurred fears that the economy was stalling, but the June gain may dispel some of those fears. As the U.S. economy approaches full employment, payroll gains can't grow at 200,000 per month indefinitely, let alone the 250,000 rate achieved in much of 2015. The unemployment rate remains below 5%, although it actually bounced up in June from 4.7% to 4.9% as more people rejoined the workforce. The biggest challenge for the labor market is the mismatch between the strong demand for skilled labor and the ample supply of relatively lower-skilled workers.

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

The conundrum holding back stronger economic growth is the decline in company capital investment in a period of very low interest rates. Non-residential fixed investment fell in both the first and second quarters of 2016, dragged down by the collapse in drilling activity for oil and natural gas. The strong dollar has also hit exports and domestic sales of manufacturing industries exposed to international competition, and weak global growth has suppressed prices for agricultural goods. On a more positive note, the impact of these forces suppressing capital spending has peaked and is fading relative to last year. The Institute for Supply Management's index of manufacturing activity rose back above 50—the line between expansion and contraction—and reached a 16-month high in June, suggesting that manufacturing may have bottomed in the first quarter of the year. Another anomaly impacting GDP growth is the inventory buildup caused by last winter's warm weather. A huge buildup in natural gas stocks was to be expected, but oddly enough, the warm weather spurred excess inventories in wholesalers and retailers, and the correction has slowed demand from manufacturers.

The Brexit vote will likely be a small bump in the road for U.S. trade. U.S. exports of goods and services to the U.K. and the EU constitute just 1% and 3% of GDP, respectively. The damage to U.S. GDP will likely be limited to a few tenths of one percent. The larger impact may come from Brexit's potential to dampen consumer and business confidence and to complicate central governments' attempts to address global economic stagnation.

The European Central Bank (ECB) continued its efforts to stimulate euro-zone economies, where unemployment remains at 10%. The ECB began buying corporate bonds in June, reaching nearly 5 billion euros by the end of the month. The average yield on investment-grade European corporate debt dropped to a record low of less than 1%. Negative-yielding government debt in the euro zone surged to nearly $12 trillion. By comparison, U.S. yields look high, suggesting further downward pressure on seemingly rock-bottom U.S. interest rates is possible. The decline in U.S. rates since the start of the year caught most market participants by surprise. The consensus was for the U.S. to embark on a path to gradually higher rates, starting this year. As expectations for rising rates fade, the fear is that the optimism for growth which would have justified higher rates will fade, too.

The Long-Term View

Index	2016 2nd Qtr	Periods ended December 31, 2015 Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	2.63	0.48	12.18	7.35	10.03
S&P 500	2.46	1.38	12.57	7.31	9.82
Russell 2000	3.79	-4.41	9.19	6.80	10.50
Non-U.S. Equity					
MSCI EAFE	-1.46	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	0.66	-14.92	-4.80	3.61	–
S&P ex-U.S. Small Cap	-1.30	5.92	5.51	5.33	6.80
Fixed Income					
Barclays Aggregate	2.21	0.55	3.25	4.51	6.15
90-Day T-Bill	0.07	0.05	0.07	1.24	2.93
Barclays Long G/C	6.55	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	3.40	-5.54	-1.30	3.05	5.37
Real Estate					
NCREIF Property	2.03	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	6.96	3.20	11.96	7.41	12.13
Alternatives					
CS Hedge Fund	0.59	-0.71	3.55	4.97	–
Cambridge PE*	–	6.69	13.08	11.18	15.74
Bloomberg Commodity	12.78	-24.66	-13.47	-6.43	–
Gold Spot Price	6.88	-10.46	-5.70	7.41	4.02
Inflation – CPI-U	1.22	0.73	1.53	1.86	2.30

*Private equity data is time-weighted return for period. Most recent quarterly data not available.
Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

Recent Quarterly Economic Indicators

	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14
Employment Cost–Total Compensation Growth	2.3%	1.9%	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%
Nonfarm Business–Productivity Growth	1.9%*	-0.6%	-1.7%	2.0%	3.1%	-0.8%	-1.7%	3.1%
GDP Growth	1.2%	0.8%	0.9%	2.0%	2.6%	2.0%	2.3%	5.0%
Manufacturing Capacity Utilization	75.0%	75.3%	75.4%	75.6%	75.5%	75.5%	76.0%	75.7%
Consumer Sentiment Index (1966=100)	92.4	91.5	91.3	90.8	94.2	95.5	89.8	83.0

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

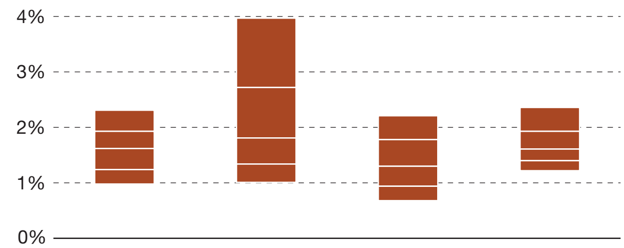
Any Relief in Sight?

FUND SPONSOR | Rufash Lama

A closer look at returns for the quarter from the Callan Fund Sponsor Databases reveals that the median corporate fund bested all other fund types. Corporate funds also had the widest dispersion of returns, and the highest total return as shown by results for funds in the 10th percentile. However, some Taft-Hartley funds outperformed the lowest-performing corporate funds, as shown by returns in the 90th percentile.

The outperformance of corporate funds during the quarter stemmed from their higher exposure to U.S. fixed income, particularly those funds with long duration. At the other end of the spectrum, endowments/foundations lagged all other fund types given their minimal exposure to U.S. fixed income. Higher allocations to non-U.S. equity and hedge funds also dragged down relative performance for endowments/foundations. Over longer time periods (5 and 10 years), compound returns for all fund sponsors have been in the range of 5% to 7%, with endowments/foundations lagging over short- and long-term periods.

Callan Fund Sponsor Returns for the Quarter



	Public	Corporate	Endow/Fndn	Taft-Hartley
10th Percentile	2.31	3.97	2.21	2.36
25th Percentile	1.93	2.72	1.78	1.93
Median	1.62	1.81	1.30	1.61
75th Percentile	1.24	1.34	0.94	1.40
90th Percentile	0.98	1.01	0.68	1.22

Source: Callan

The median funded status of corporate defined benefit plans declined for the quarter, primarily due to the dramatic fall in interest rates. Based on data from actuaries and asset managers, the median and average funded ratio fell by more than 3 percentage points in the quarter, to 76.0% and 76.4%, respectively. Year to date, the median funded status has declined by more than 6 percentage points.

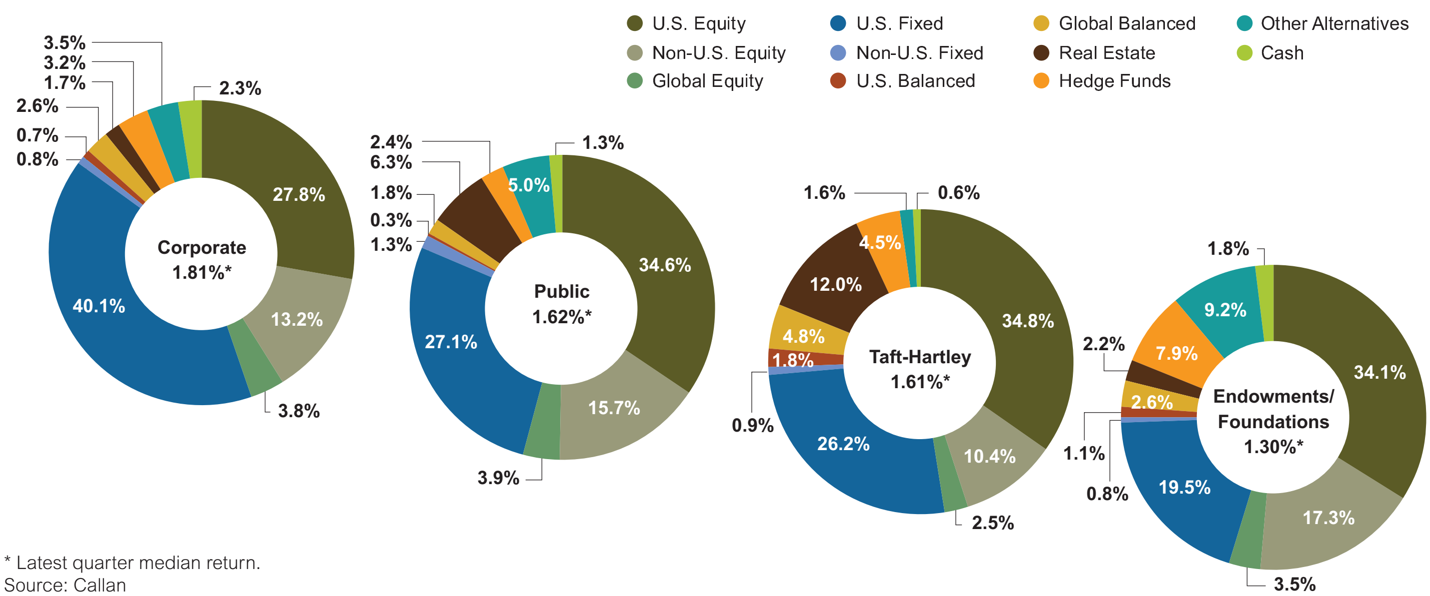
Callan Database Median Returns* for Periods ended June 30, 2016

Fund Sponsor	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Public Funds	**1.62**	**2.98**	**0.54**	**6.39**	**6.42**	**5.65**	**5.94**
Corporate Funds	**1.81**	**3.88**	**1.66**	**6.59**	**6.62**	**5.85**	**6.00**
Endowments/Foundations	**1.30**	**2.05**	**-1.55**	**5.24**	**5.53**	**5.34**	**5.69**
Taft-Hartley	**1.61**	**2.69**	**0.97**	**7.12**	**6.97**	**5.54**	**5.68**

*Returns less than one year are not annualized.

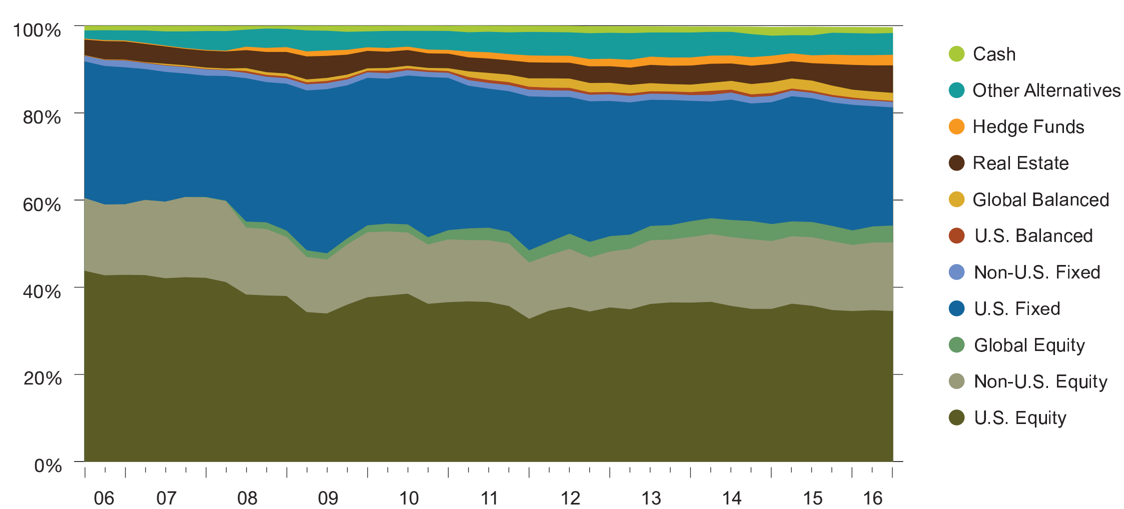
Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance 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.

Callan Fund Sponsor Average Asset Allocation



* Latest quarter median return.
Source: Callan

Callan Public Fund Database Average Asset Allocation (10 Years)



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.

Greener Grass

U.S. EQUITY | Lauren Mathias, CFA

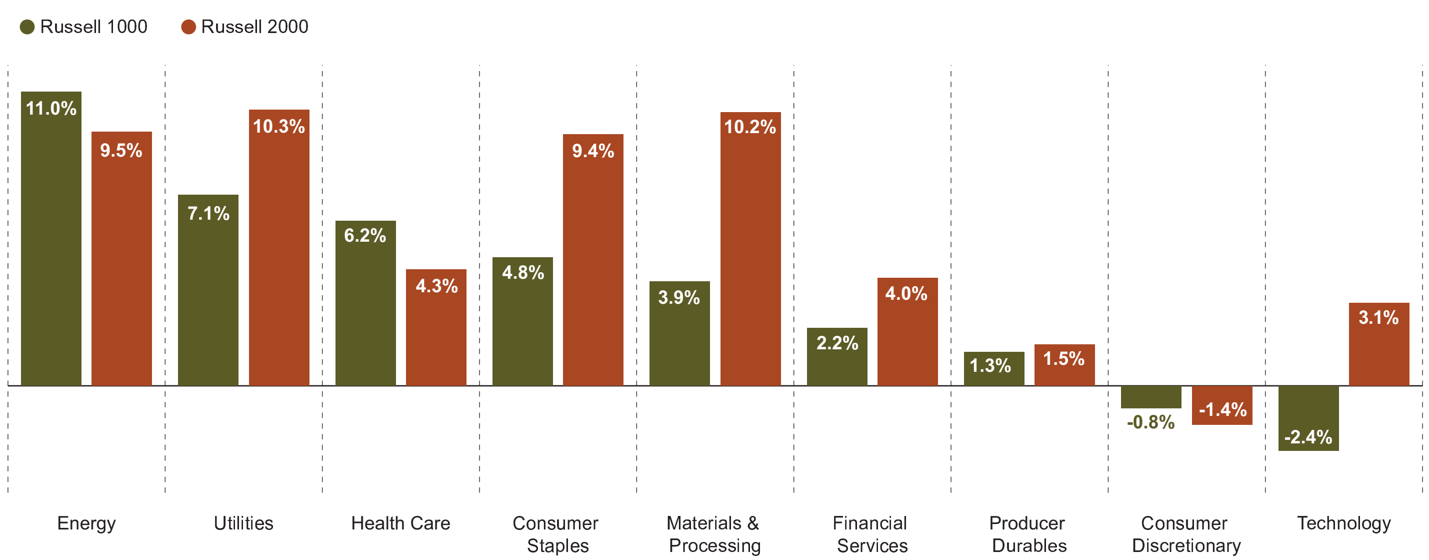
Though the **S&P 500 Index** ended in positive territory (+2.46%), it was subject to substantial volatility during the quarter. The U.K.'s vote to leave the European Union sent global markets reeling in late June; the S&P 500 fell 5.3% in the first two trading days after the vote. Volatility, as measured by VIX, spiked but remained below values posted in January. Despite uncertainty abroad and the steep drop after Brexit, the S&P 500 ended the quarter only 1.5% below its all-time high achieved in May 2015. Amid the global turmoil, it appears the grass is greener in the U.S.

Global markets did not appear to affect domestic production either: Manufacturing activity increased (the ISM Composite Index hit a 16-month high); existing home sales were up 4.5% in May; and retail sales showed strength. But disappointing unemployment figures—4.7% due to a lower labor force participation rate of 62.6%—and low first-quarter GDP prompted the Fed to keep interest rates at current levels.

After another strong quarter, value remained ahead of growth in all capitalizations (**Russell 2000 Value Index:** +4.31% and **Russell 2000 Growth Index:** +3.24%); the difference was most significant within large capitalizations (**Russell 1000 Value Index:** +4.58% and **Russell 1000 Growth Index:** +0.61%). Smaller was better: micro-, small-, and mid-capitalization companies outpaced large-capitalization stocks (**Russell Microcap Index:** +3.97%, **Russell 2000 Index:** +3.79%, **Russell Midcap Index:** +3.18%, and **Russell 1000 Index:** +2.54%).

With economic uncertainty and lower interest rates in the foreseeable future, defensive and yielding areas of the mar-

Economic Sector Quarterly Performance



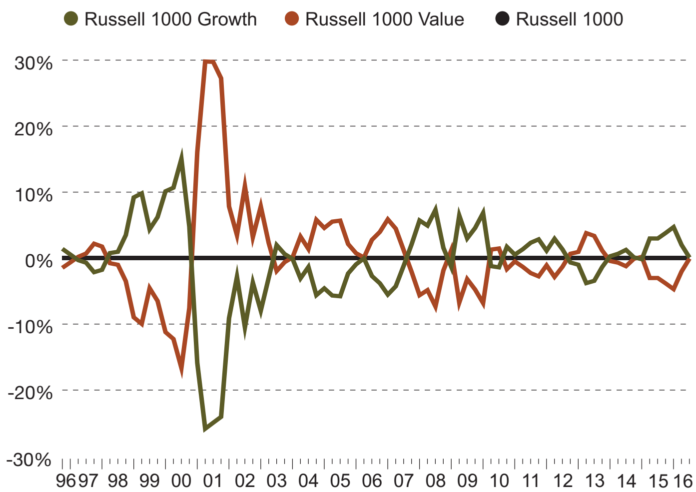
Source: Russell Investment Group

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 10 sectors.

ket did well: Utilities, Telecommunications, Health Care, and Consumer Staples. Factors like low beta and high dividend yield were in favor and boosted the performance of these sectors. After a long period of poor performance, Energy was by far the leading sector, buoyed by an almost 30% increase in oil prices. Financials lagged, mostly due to a tough June—both the Brexit crisis and absent interest rate hike were the culprits. Health Care and Technology, large sectors in the growth benchmark, were dragged down by the pharmaceuticals/biotechnology and hardware and equipment industries, respectively. Stock correlations elevated in June, making it challenging for active management; however, levels remain below those experienced in 2015.

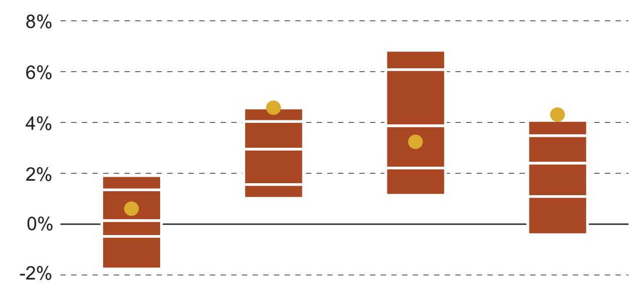
The U.S. equity market managed to escape a tumultuous June with positive results in the full quarter. However, active funds have found it challenging to outpace their respective benchmarks this year—fewer than 50% were able to do so.

Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

Callan Style Group Quarterly Returns



	Large Cap Growth Style	Large Cap Value Style	Small Cap Growth Style	Small Cap Value Style
10th Percentile	1.91	4.57	6.84	4.08
25th Percentile	1.35	4.04	6.08	3.48
Median	0.14	2.95	3.87	2.40
75th Percentile	-0.48	1.56	2.21	1.09
90th Percentile	-1.76	1.02	1.14	-0.41
	R1000 Growth	**R1000 Value**	**R2000 Growth**	**R2000 Value**
Benchmark	0.61	4.58	3.24	4.31

Sources: Callan, Russell Investment Group

U.S. Equity Index Characteristics as of June 30, 2016

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	506	3,007	1,000	800	2,507	2,006
% of Russell 3000	82%	100%	92%	27%	17%	7%
Wtd Avg Mkt Cap ($bn)	127.80	106.54	114.81	12.03	3.79	1.70
Price/Book Ratio	2.7	2.6	2.7	2.4	2.1	1.9
Forward P/E Ratio	16.6	17.1	17	18.5	18.4	18.7
Dividend Yield	2.2%	2.1%	2.1%	1.8%	1.7%	1.6%
5-Yr Earnings (forecasted)	11.9%	12.0%	12.0%	10.2%	11.7%	12.9%

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

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Large Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Large Cap Core Style	**1.73**	**1.44**	**0.33**	**11.02**	**11.74**	**7.68**	**6.31**
Russell 3000	**2.63**	**3.62**	**2.14**	**11.13**	**11.60**	**7.40**	**6.09**
Russell 1000	**2.54**	**3.74**	**2.93**	**11.48**	**11.88**	**7.51**	**6.02**
S&P 500	**2.46**	**3.84**	**3.99**	**11.66**	**12.10**	**7.42**	**5.75**
Large Cap Growth Style	0.14	-1.72	-0.14	12.60	11.60	8.68	5.75
Russell 1000 Growth	0.61	1.36	3.02	13.07	12.35	8.78	5.50
Large Cap Value Style	2.95	3.34	-0.81	9.20	10.97	6.52	7.07
Russell 1000 Value	4.58	6.30	2.86	9.87	11.35	6.13	6.38

Mid Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Mid Cap Core Style	**1.67**	**3.33**	**-1.67**	**10.90**	**10.64**	**8.25**	**9.24**
Russell Midcap	3.18	5.50	0.56	10.80	10.90	8.07	8.68
Mid Cap Growth Style	**2.31**	**-0.02**	**-5.69**	**9.24**	**8.94**	**8.17**	**7.86**
Russell Midcap Growth	1.56	2.15	-2.14	10.52	9.98	8.12	6.99
Mid Cap Value Style	**3.29**	**4.90**	**-0.82**	**10.13**	**10.67**	**8.17**	**9.91**
Russell Midcap Value	4.77	8.87	3.25	11.00	11.70	7.79	9.50

Small Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Small Cap Core Style	**2.85**	**2.80**	**-4.76**	**9.34**	**10.24**	**7.92**	**9.43**
Russell 2000	3.79	2.22	-6.73	7.09	8.35	6.20	6.96
Small Cap Growth Style	**3.87**	**-1.57**	**-12.40**	**7.18**	**8.37**	**7.55**	**7.39**
Russell 2000 Growth	3.24	-1.59	-10.75	7.74	8.51	7.14	5.91
Small Cap Value Style	**2.40**	**4.64**	**-2.44**	**8.63**	**9.94**	**7.61**	**10.00**
Russell 2000 Value	4.31	6.08	-2.58	6.36	8.15	5.15	7.73

Smid Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Smid Cap Broad Style	**2.21**	**2.85**	**-4.23**	**8.86**	**10.29**	**9.49**	**–**
Russell 2500	3.57	3.98	-3.67	8.61	9.48	7.32	8.09
Smid Cap Growth Style	**3.25**	**-0.46**	**-8.43**	**8.00**	**8.70**	**8.35**	**8.01**
Russell 2500 Growth	2.70	-0.03	-7.69	9.06	9.27	7.96	6.76
Smid Cap Value Style	**2.39**	**5.38**	**-4.11**	**8.27**	**9.86**	**7.95**	**10.08**
Russell 2500 Value	4.37	7.84	0.22	8.14	9.59	6.52	8.77

Russell 3000 Sectors	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Consumer Discretionary	-0.88	0.98	0.99	11.18	14.59	9.98	–
Consumer Staples	4.94	10.42	18.31	15.50	15.49	12.63	–
Energy	10.94	14.41	-8.17	-3.18	-0.85	3.18	–
Financial Services	2.35	-1.03	-1.30	9.00	11.42	0.99	–
Health Care	6.04	-1.44	-5.23	16.22	17.08	11.43	–
Materials & Processing	4.70	10.67	1.01	8.70	6.88	6.17	–
Producer Durables	1.28	6.10	4.35	11.33	10.81	6.76	–
Technology	-2.06	-0.37	2.44	14.67	11.81	9.83	–
Utilities	7.34	23.69	28.37	13.60	12.63	8.50	–

*Returns less than one year are not annualized.
Sources: Callan, Russell Investment Group, Standard & Poor's.

Fasten Your Seat Belts

NON-U.S. EQUITY | Lyman Jung

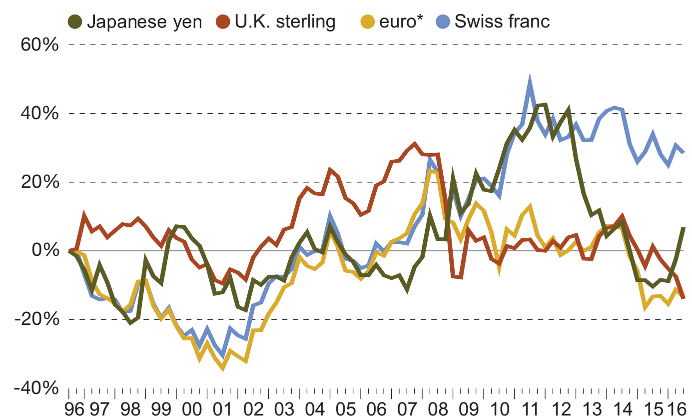
For the second consecutive quarter, non-U.S. equity markets endured a bout of extreme volatility. After a tepid start to the quarter, markets reacted to the surprise June 23 Brexit referendum to leave the European Union. Global markets lost $2 trillion the day after, but quickly stabilized. In this uncertain environment, we expect volatility to continue.

Despite the vote, the **MSCI ACWI ex USA Index** ended the quarter down only slightly (-0.64%), buoyed by accommodative central bank policies and a strong rebound in commodity prices. Energy (+8.05%) led the charge followed by Health Care (+4.29%), as investors favored defensive, dividend-paying stocks amid the turmoil. Economic and interest-rate-sensitive sectors fared worst, with Consumer Discretionary (-6.87%) and Financials (-4.31%) leading the plunge.

Around the broader markets, the **MSCI Emerging Markets Index** (+0.66%) bested its developed counterpart in the **MSCI World ex USA Index** (-1.05%). Without Canada (+3.40%), one of the best-performing countries in developed markets, the **MSCI EAFE Index** was even more depressed (-1.46%). The **MSCI ACWI ex USA Growth Index** continued an eight-quarter trend of outperforming the Value Index. Moreover, the **MSCI ACWI ex USA Small Cap** (-0.87%) topped its developed cousin, the **MSCI World ex USA Small Cap Index** (-1.28%).

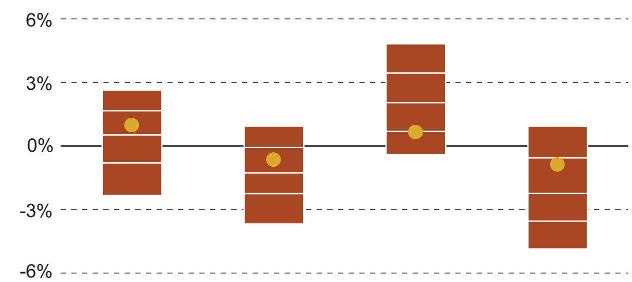
As Brexit dominated the headlines, European equity markets fell sharply only to rally in the final few days of the quarter. The **MSCI Europe Index** finished down 2.69%. Amid a general move to safe-haven countries, Switzerland (+2.03%) was a top-performer. Italy (-10.45%) and Spain (-7.67%) were among the worst mainly due to double-digit declines in banks burdened by souring loans and the potential loss of the U.K. as the financial center. Regionally, European sectors performed in line with the rest of the developed world. Energy stocks contributed 12.51% thanks to oil at nearly $50. Conversely, Consumer Discretionary and Financials tumbled 11.10% and 10.82%, respectively,

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



*German mark returns before 1Q99
Source: MSCI

Callan Style Group Quarterly Returns



	Global Eq Style	Non-U.S. Eq Style	Emg Mkt Style	Non-U.S. Small Cap Style
10th Percentile	2.60	0.90	4.78	0.90
25th Percentile	1.62	-0.11	3.40	-0.60
Median	0.48	-1.31	2.00	-2.28
75th Percentile	-0.84	-2.29	0.65	-3.59
90th Percentile	-2.37	-3.72	-0.45	-4.90
	MSCI ACWI	MSCI ACWI ex USA	MSCI Emg Mkts	MSCI ACWI ex USA SC
Benchmark ●	0.99	-0.64	0.66	-0.87

Sources: Callan, MSCI

weighed down by recession fears and concerns about a slowdown in finance and investment activity.

In contrast to Europe, the **MSCI Pacific Index** (+0.87%) fared much better, boosted by Japan (+1.01%) and New Zealand (+5.85%). While Japan was positive on a U.S. dollar-return basis, on a local-return basis it fell 7.80% because the yen

surged 10% in the quarter—despite operating in a negative interest rate environment. The yen has been bolstered by its re-emergence as a haven currency with an uncertain Europe and also by the dollar's recent weakness after the Federal Reserve pared back expectations of U.S. interest rate increases. New Zealand gained on improved sentiment partly due to a reported trade surplus that was more than double analysts' forecasts.

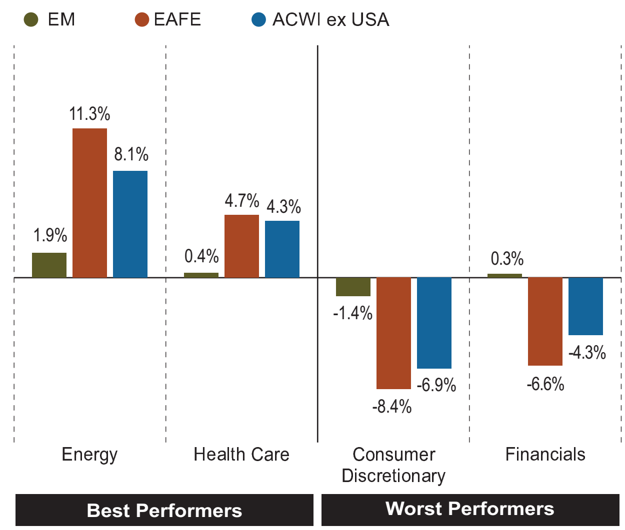
Emerging market countries produced a wide spectrum of returns, but closed out the quarter slightly ahead (MSCI Emerging Market Index: +0.66%). Commodity producers such as Brazil (+13.90%) and Russia (+4.05%) benefited from the rebound in oil prices, continuing their first-quarter rally. The former was also propped up by an impeachment motion against President Dilma Rousseff that sent the equity market into a frenzied rally. Stocks in China ended the quarter nearly flat (+0.11%) thanks to a slower predicted growth of 6.6%, the weakest since the Global Financial Crisis. Further, concerns about the amount of debt on corporate balance sheets and recent policy changes led to questions on how much stimulus the government would provide to sustain growth. Elsewhere, stocks in India (+3.72%) advanced on faster-than-expected growth and earnings of some of its biggest companies, bolstered by optimism about the nation's economic recovery.

Quarterly Return Attribution for Non-U.S. Developed Countries (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	0.46%	3.79%	-3.20%	5.13%
Austria	-9.99%	-7.67%	-2.51%	0.12%
Belgium	2.29%	4.92%	-2.51%	1.05%
Canada	3.40%	3.82%	-0.40%	6.82%
Denmark	-0.58%	1.84%	-2.37%	1.40%
Finland	-2.12%	0.40%	-2.51%	0.69%
France	-4.31%	-1.85%	-2.51%	6.79%
Germany	-5.57%	-3.14%	-2.51%	6.11%
Hong Kong	0.94%	0.96%	-0.02%	2.34%
Ireland	-9.87%	-7.55%	-2.51%	0.33%
Israel	-3.80%	-1.72%	-2.38%	0.55%
Italy	-10.45%	-8.14%	-2.51%	1.38%
Japan	1.01%	-7.80%	9.56%	16.43%
Netherlands	-5.06%	-2.72%	-2.51%	2.24%
New Zealand	5.85%	3.19%	2.58%	0.13%
Norway	2.35%	3.55%	-1.16%	0.45%
Portugal	-2.76%	-0.25%	-2.51%	0.11%
Singapore	0.35%	0.29%	0.05%	0.96%
Spain	-7.67%	-5.29%	-2.51%	2.08%
Sweden	-5.38%	-1.11%	-4.32%	1.95%
Switzerland	2.03%	3.80%	-1.70%	6.55%
U.K.	-0.73%	6.73%	-6.99%	13.83%

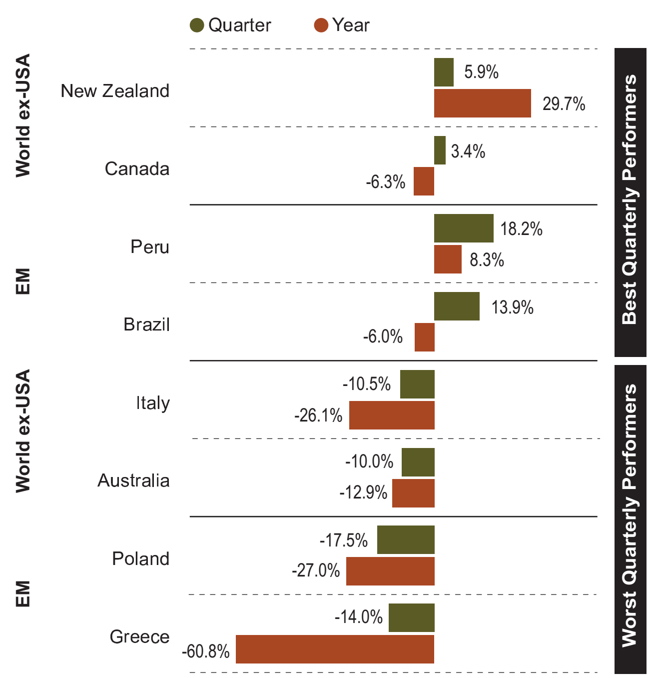
Sources: MSCI, Russell Investment Group, Standard & Poor's.

Quarterly Returns: Strong and Struggling Sectors



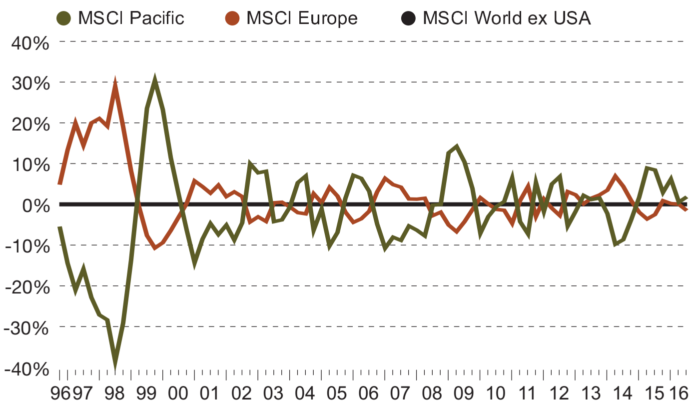
Source: MSCI

Quarterly and Annual Country Performance Snapshot



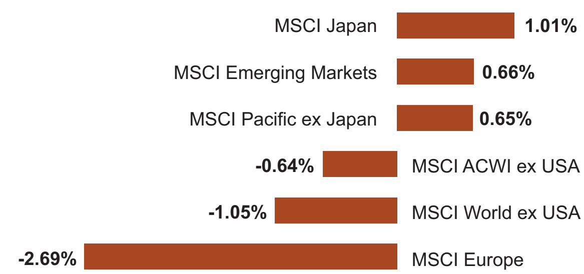
Source: MSCI

Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI

Style Median and Index Returns* for Periods ended June 30, 2016

Global Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Equity Style	**0.48**	**-0.92**	**-4.47**	**7.16**	**7.08**	**5.37**	**6.31**
MSCI World	1.01	0.66	-2.78	6.95	6.63	4.43	4.86
MSCI ACWI	0.99	1.23	-3.73	6.03	5.38	4.26	4.98
Non-U.S. Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Style	**-1.31**	**-3.49**	**-9.43**	**3.27**	**2.83**	**2.91**	**6.25**
MSCI World ex USA	-1.05	-2.98	-9.84	1.88	1.23	1.63	4.47
MSCI ACWI ex USA	-0.64	-1.02	-10.24	1.16	0.10	1.87	4.96
Regional Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
MSCI Europe ex UK	-3.53	-6.02	-10.80	2.58	0.66	1.56	4.52
MSCI Japan	1.01	-5.58	-8.94	2.71	4.21	0.14	2.32
MSCI Japan (local)	-7.80	-19.47	-23.66	3.82	9.31	-0.93	1.00
MSCI Pacific	0.87	-2.94	-8.19	2.16	2.98	1.72	4.10
MSCI Pacific (local)	-4.29	-13.22	-17.85	4.25	7.59	0.59	2.38
MSCI Pacific ex Japan	0.65	2.47	-6.75	1.08	0.86	5.43	8.89
MSCI Pacific ex Japan (local)	2.64	0.47	-5.02	5.64	5.69	5.01	6.69
MSCI United Kingdom	-0.73	-3.05	-12.14	0.67	1.71	1.43	4.22
MSCI United Kingdom (local)	6.73	6.89	3.36	5.00	5.50	4.78	4.57
Emerging/Frontier Markets	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Market Style	**2.00**	**6.57**	**-8.83**	**-0.07**	**-2.06**	**4.88**	**10.67**
MSCI Emerging Markets	0.66	6.41	-12.05	-1.56	-3.78	3.54	9.12
MSCI Emerging Markets (local)	0.70	3.45	-7.70	3.70	2.02	5.72	9.92
MSCI Frontier Markets	0.47	-0.47	-12.09	1.00	1.45	0.18	–
Global/Non-U.S. Small Cap Equity	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Small Cap Style	**-2.28**	**-3.11**	**-3.61**	**7.82**	**6.35**	**5.52**	**10.28**
MSCI World Small Cap	1.61	2.29	-3.76	7.60	6.80	5.58	8.51
MSCI ACWI Small Cap	1.51	2.22	-4.72	6.79	5.83	6.00	8.60
MSCI World ex USA Small Cap	-1.28	-0.69	-3.35	6.34	3.61	3.33	8.17
MSCI ACWI ex USA Small Cap	-0.87	-0.20	-5.46	4.93	2.28	4.08	8.71

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

Rally Across the Board

U.S. FIXED INCOME | Nate Wong, CFA

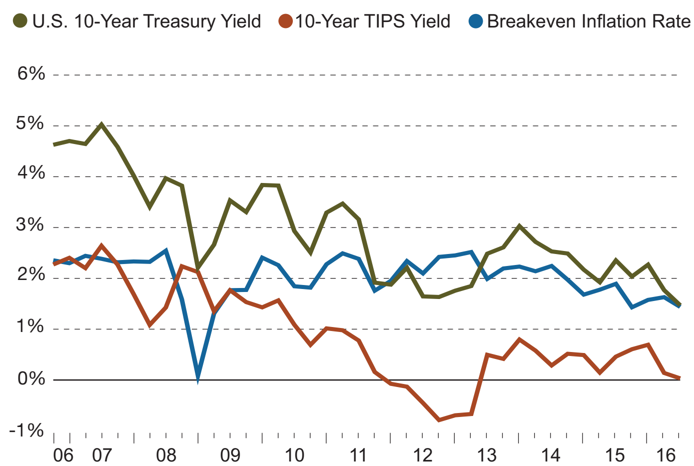
Treasuries rallied in a flight to quality during the second quarter as U.S. economic data and trepidation surrounding the U.K.'s Brexit dominated activity. The Fed changed to a more dovish tone as the quarter ended. The **Barclays U.S. Aggregate Index** increased 2.21% while the **Barclays High Yield Corporate Index** again outpaced it with a 5.52% gain.

The surprising vote in the U.K. to exit the European Union triggered an immediate run on risk assets. The panic was short-lived and credit spreads ended the quarter marginally tighter as more-rational investors assessed the broader strength of the U.S. economy and the relatively attractive opportunities within the U.S. fixed income markets.

Following the Brexit vote, the Fed elected not to make any changes at its June meeting. Its forward-looking dot plot now implies a reduced number of rate hikes from four to three, while the long-term projection for the short-term rate was lowered from 3.25% to 3.0%.

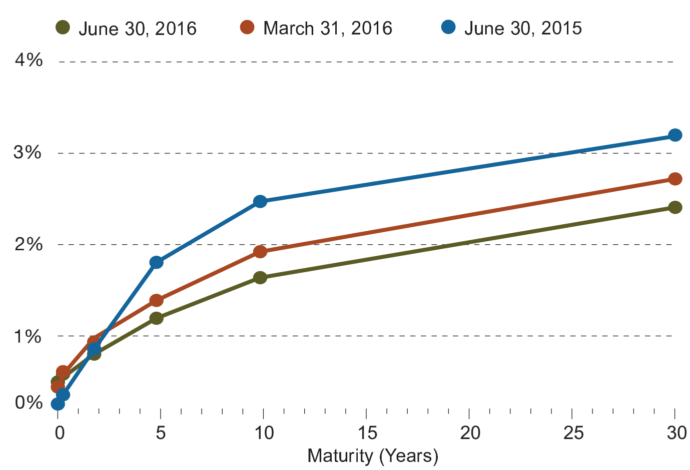
Yields declined across the maturity spectrum with the 10-year yield closing the quarter at 1.47%, its lowest level in nearly three years. Weak economic data and the negative yield environment around the globe contributed to downward pressure on U.S. yields. The 2- to 30-year spread tightened to 170 bps by the end of the quarter. Treasury returns were strong, particularly on the

Historical 10-Year Yields



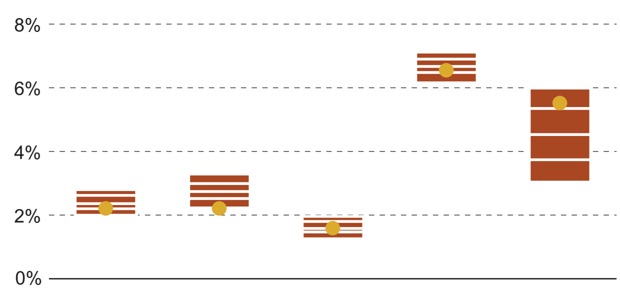
Source: Bloomberg

U.S. Treasury Yield Curves



Source: Bloomberg

Callan Style Group Quarterly Returns



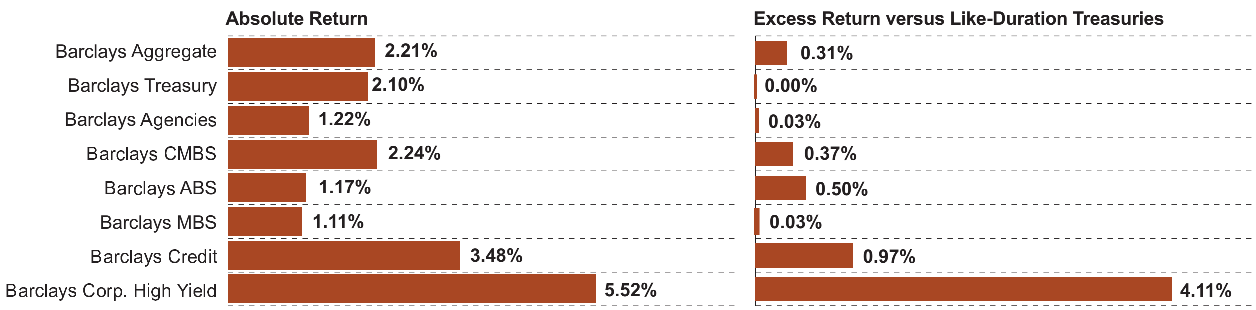
	Core Bond Style	Core Plus Style	Interm Style	Ext Mat G/C Style	High Yld Style
10th Percentile	2.80	3.29	1.96	7.12	5.99
25th Percentile	2.62	2.99	1.80	6.90	5.35
Median	2.36	2.74	1.58	6.67	4.53
75th Percentile	2.20	2.52	1.47	6.48	3.74
90th Percentile	2.00	2.23	1.26	6.16	3.04
	Barclays Agg	Barclays Agg	Barclays Interm	Barclays Long G/C	Barclays High Yld
Benchmark ●	2.21	2.21	1.59	6.55	5.52

Sources: Barclays, Callan

long end of the curve, with 30-year Treasuries gaining 7.24%. All sectors rallied and produced positive returns, with investment-grade corporates leading the way. Inflation-protected securities trailed their nominal counterparts but continued their strong performance for the year.

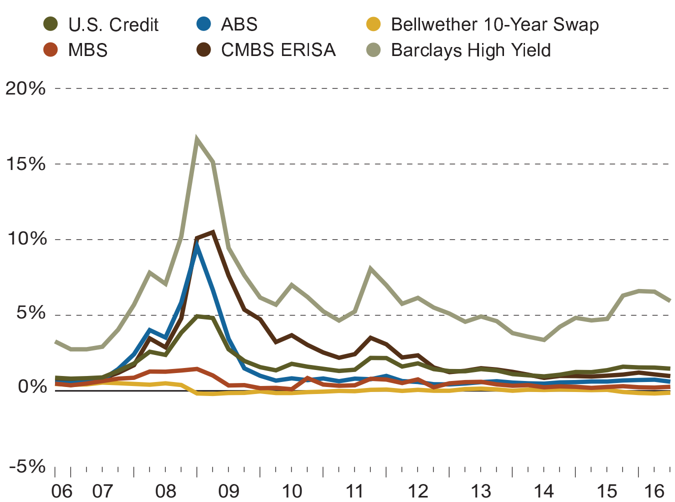
Corporate credit performed well across the quality spectrum, gaining 3.48% and outperforming Treasuries by 97 bps on a duration-adjusted basis. Companies took advantage of low rates, with new issuance of $350 billion during the quarter. On a duration-adjusted basis, industrials outperformed utilities and financials. Corporate spreads were generally flat before experiencing some widening in reaction to the Brexit and ended the quarter at 156 bps. MBS gained 1.11%, outperforming like-duration Treasuries by 3 bps. MBS spreads also widened as the quarter closed on prepayment fears. High-yield bonds continued to rebound, gaining 5.52% and outperforming like-duration Treasuries by 411 bps. New issuance amounted to $84 billion, returning to more normal levels and more than doubling the amount in the prior quarter.

Fixed Income Index Quarterly Returns



Source: Barclays

Effective Yield Over Treasuries



Source: Barclays

U.S. Fixed Income Index Characteristics as of June 30, 2016

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Barclays Aggregate	1.91	5.47	7.77
Barclays Universal	2.42	5.36	7.63
Barclays Govt/Credit	1.85	6.69	8.96
1-3 Year	0.89	1.91	1.98
Intermediate	1.41	4.08	4.44
Long-Term	3.36	15.59	24.36
Barclays Long Credit	4.16	13.99	23.99
Barclays Corp High Yield	7.27	4.26	6.30
Barclays TIPS	1.47	5.26	8.71
Barclays Muni Bond 1-5 Year	0.94	2.67	3.16
Barclays Muni 1-10 Year	1.20	3.97	5.81
Barclays Municipal	1.61	5.55	13.06

Source: Barclays

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Broad Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Core Bond Style	**2.36**	**5.39**	**6.20**	**4.37**	**4.25**	**5.62**	**5.54**
Core Bond Plus Style	**2.74**	**5.68**	**5.45**	**4.48**	**4.62**	**6.00**	**6.09**
Barclays Aggregate	2.21	5.31	6.00	4.06	3.76	5.13	5.08
Barclays Universal	2.53	5.68	5.82	4.19	4.01	5.30	5.33
Long-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Extended Maturity Credit Style	**6.77**	**14.26**	**14.09**	**9.26**	**9.15**	**8.65**	**--**
Barclays Long Credit	6.65	13.92	13.76	8.70	8.45	8.14	7.78
Extended Maturity Gov/Credit Style	**6.67**	**14.56**	**15.48**	**9.46**	**9.61**	**9.00**	**8.22**
Barclays Long Gov/Credit	6.55	14.33	15.72	9.33	9.18	8.42	7.88
Intermediate-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Intermediate Style	**1.58**	**3.95**	**4.44**	**3.19**	**3.23**	**4.92**	**4.92**
Barclays Intermediate Gov/Credit	1.59	4.07	4.33	2.95	2.90	4.48	4.52
Short-Term	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Defensive Style	**0.72**	**1.76**	**1.95**	**1.57**	**1.49**	**3.13**	**3.30**
Barclays Gov/Credit 1-3 Year	0.67	1.65	1.59	1.22	1.10	2.80	3.03
Bank Loans	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Bank Loan Style	**2.43**	**4.11**	**2.01**	**3.28**	**4.28**	**4.61**	**4.85**
Credit Suisse Leveraged Loans	2.86	4.23	0.93	3.03	3.87	4.10	4.51
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
High Yield Style	**4.53**	**7.34**	**1.10**	**4.37**	**5.97**	**7.52**	**7.95**
Barclays Corp High Yield	5.52	9.06	1.62	4.18	5.84	7.56	7.93
Unconstrained	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Unconstrained Fixed Style	**1.50**	**1.74**	**0.92**	**2.11**	**2.77**	**4.68**	**6.31**
90 Day T-Bill + 3%	0.81	1.63	3.19	3.09	3.09	4.04	4.44
Stable Value	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Stable Value Style	**0.45**	**0.91**	**1.81**	**1.79**	**2.14**	**3.03**	**3.82**
iMoneyNet Mutual Fund Avg	0.03	0.05	0.06	0.03	0.03	0.94	–
TIPS	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Inflation-Linked Style	**1.74**	**6.35**	**4.30**	**2.27**	**2.70**	**4.82**	**5.60**
Barclays TIPS	1.71	6.24	4.35	2.31	2.63	4.75	5.49
Municipal	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Short Municipal Style	**0.43**	**0.82**	**1.17**	**0.94**	**1.02**	**1.95**	**2.07**
Barclays Municipal 1-5 Year	0.75	1.55	2.60	2.03	1.93	3.30	3.26
Intermediate Municipal Style	**2.06**	**3.54**	**6.19**	**4.29**	**4.10**	**4.23**	**4.21**
Barclays Municipal 1-10 Year	1.44	2.70	4.88	3.62	3.45	4.33	4.21
Long Municipal Style	**2.63**	**4.42**	**8.10**	**5.93**	**5.76**	**5.43**	**5.42**
Barclays Municipal	2.61	4.33	7.65	5.58	5.33	5.13	5.10

*Returns for less than one year are not annualized.

Sources: Barclays, Callan, Citigroup, Merrill Lynch.

How Low Can Rates Go?

NON-U.S. FIXED INCOME | Kevin Machiz, CFA, FRM

Sovereign yields fell in the second quarter, driven largely by a knee-jerk reaction to Brexit, sentiment to reduce risk, and globally loose monetary policy. That led major global bond indices to show positive returns for the quarter.

In addition, most major global currencies weakened against the U.S. dollar during the quarter. The British pound was hit hardest, plummeting 7% versus the U.S. dollar. While the U.S. dollar broadly strengthened immediately following Brexit, some of those gains were quickly erased over the remainder of the quarter. The Japanese yen took an opposite tack among global currencies during the quarter and soared 10% versus the U.S. dollar by the end of the period. The yen's tendency to strengthen in risk-off environments proved a tailwind to unhedged foreign bond returns for the quarter. The euro was weaker versus the dollar (-2.51%). The ECB maintained its dovish stance, keeping interest rates negative and proceeding with asset purchases announced in March. Interest rates fell across developed markets, leading to strong bond returns. The **Barclays Global Aggregate** gained 2.89% (+2.51% hedged).

Quarterly Return Attribution for Non-U.S. Gov't Indices (U.S. Dollar)

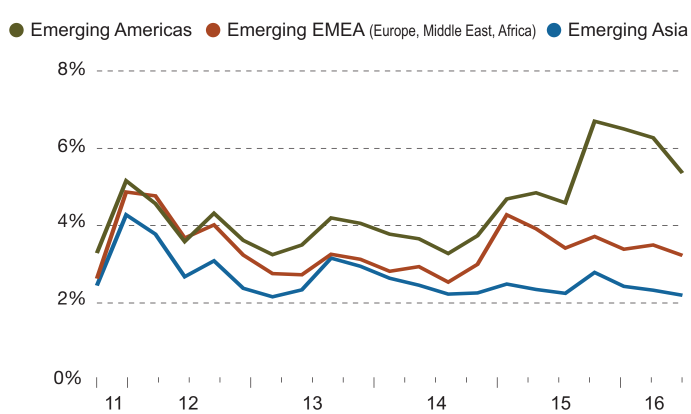
Country	Total	Local	Currency	Wtg
Australia	0.19%	3.51%	-3.20%	2.17%
Austria	-0.02%	2.56%	-2.51%	1.76%
Belgium	0.81%	3.40%	-2.51%	2.90%
Canada	1.58%	1.99%	-0.40%	2.29%
Denmark	1.51%	3.97%	-2.37%	0.79%
Finland	-0.18%	2.39%	-2.51%	0.70%
France	0.32%	2.90%	-2.51%	11.31%
Germany	0.27%	2.85%	-2.51%	8.49%
Ireland	-0.92%	1.63%	-2.51%	0.91%
Italy	-2.08%	0.45%	-2.51%	10.81%
Japan	12.91%	3.06%	9.56%	35.77%
Malaysia	-1.89%	1.38%	-3.22%	0.54%
Mexico	-5.45%	1.79%	-7.11%	0.99%
Netherlands	0.42%	3.01%	-2.51%	2.76%
Norway	-0.08%	1.08%	-1.16%	0.29%
Poland	-5.79%	0.27%	-6.04%	0.67%
Singapore	0.56%	0.51%	0.05%	0.42%
South Africa	5.03%	4.58%	0.43%	0.53%
Spain	-0.33%	2.23%	-2.51%	6.22%
Sweden	-1.65%	2.79%	-4.32%	0.57%
Switzerland	-0.83%	0.88%	-1.70%	0.27%
U.K.	-0.73%	6.74%	-6.99%	8.83%

Source: Citigroup

In Germany, 10-year yields fell 28 bps and joined the rapidly growing universe of negative-yielding bonds. Similarly, 10-year yields in Japan, which were already negative, fell a further 19 bps as the Bank of Japan maintained its easy monetary policy stance. The 10-year yield in the U.K. led the pack following Brexit, falling 55 bps, though it remained in positive territory by the end of the quarter. Market expectations moved firmly toward relatively easier monetary policy in the U.K.

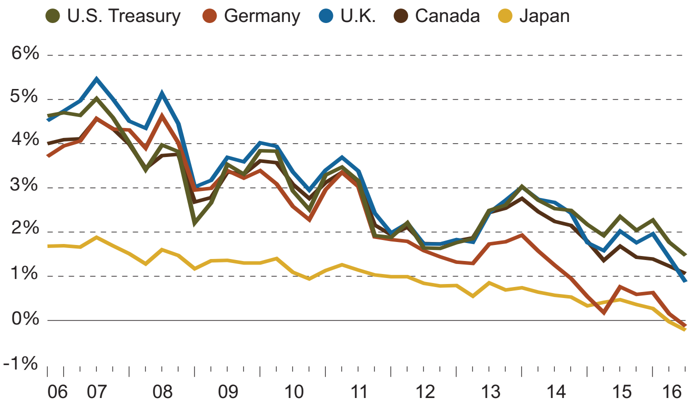
Emerging market bonds continued to rebound in the second quarter despite a bumpy ride. Falling bond yields were a tailwind and narrowing sovereign credit spreads further contributed to returns. The hard currency **JPM EMBI Global Diversified Index** gained 5.02%. Hard currency returns in most countries were positive, led by Venezuela. Bonds there have suffered extreme volatility as markets speculate on the timing of the country's default. The local currency **JPM GBI-EM Global Diversified** returned 2.96%, as local yields in emerging markets generally followed those in developed markets lower. Brazil was the leader for returns in local markets as yields fell and

Emerging Spreads Over Developed (By Region)

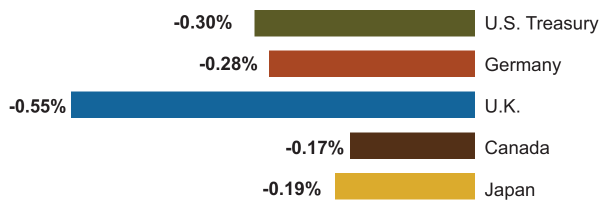


Source: Barclays

10-Year Global Government Bond Yields



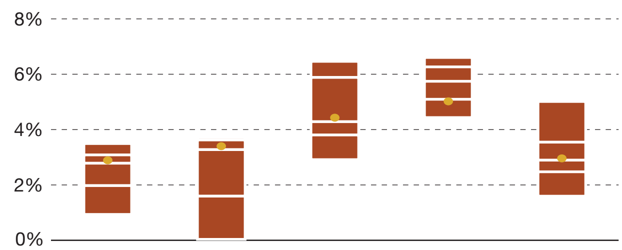
Change in 10-Year Yields from 1Q16 to 2Q16



Source: Bloomberg

the currency strengthened. During the quarter, Brazil's President Dilma Rousseff was suspended from the presidency during her impeachment trial. The market in Brazil has experienced volatility as the political future of the country is being determined.

Callan Style Group Quarterly Returns



	Global Fixed Style	Non-U.S. Fixed Style	Global High Yld	Em Debt USD DB	Em Debt Local
10th Percentile	3.52	3.75	6.49	6.63	5.04
25th Percentile	3.11	3.65	5.91	6.29	3.57
Median	2.81	3.30	4.31	5.77	2.92
75th Percentile	2.00	1.62	3.83	5.12	2.50
90th Percentile	0.96	0.06	2.94	4.46	1.62
	Barclays Gl Agg	Barclays Gl Agg ex US	Barclays High Yld	JPM EMBI Gl Div	JPM GBI-EM Gl Div
Benchmark ●	2.89	3.40	4.43	5.02	2.96

Sources: Callan, JPMorgan Chase

Callan Style Median and Index Returns* for Periods ended June 30, 2016

Global Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Fixed Income Style	**2.81**	**8.34**	**7.56**	**2.84**	**2.20**	**4.89**	**6.54**
Barclays Global Aggregate	2.89	8.96	8.87	2.80	1.77	4.40	5.50
Global Fixed Income Style (hedged)	**2.67**	**5.87**	**7.22**	**5.49**	**5.29**	**5.60**	**5.83**
Barclays Global Aggregate (hedged)	2.51	5.87	7.37	5.15	4.76	5.03	4.92
High Yield	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Global High Yield Style	**4.31**	**7.39**	**1.29**	**3.03**	**4.96**	**7.20**	**9.08**
Barclays Global High Yield	4.43	8.73	3.76	4.35	5.71	7.80	8.70
Non-U.S. Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Non-U.S. Fixed Income Style	**3.30**	**11.49**	**10.12**	**2.17**	**1.04**	**4.39**	**6.71**
Barclays Global Agg ex US	3.40	11.94	11.24	1.85	0.34	3.83	5.85
Emerging Markets Fixed Income	**Quarter**	**YTD**	**Year**	**3 Years**	**5 Years**	**10 Years**	**15 Years**
Emerging Debt Style (US$)	**5.77**	**11.06**	**8.44**	**5.62**	**5.99**	**8.35**	**10.42**
JPM EMBI Global Diversified	5.02	10.31	9.79	7.20	6.46	7.97	9.16
Emerging Debt Style (local)	**2.92**	**13.64**	**1.62**	**-3.12**	**-2.10**	**5.04**	**7.18**
JPM GBI-EM Global Diversified	2.96	14.30	2.24	-3.49	-2.19	5.74	--
Emerging Debt Blend Style	**4.03**	**11.28**	**4.99**	**1.14**	**2.77**	**8.01**	**11.56**
JPM EMBI Gl Div/JPM GBI-EM Gl Div	3.99	12.34	6.11	1.82	2.14	6.94	--
Emerging Debt Corporate Style	**4.45**	**8.60**	**4.93**	**5.71**	**5.32**	**--**	**--**
JPM CEMBI	4.27	9.02	5.78	5.72	5.45	7.45	--

*Returns less than one year are not annualized.
Sources: Barclays, Callan, JPMorgan Chase.

It Really Is Location, Location, Location

REAL ESTATE | Kevin Nagy

The **NCREIF Property Index** gained 2.03% during the second quarter, the lowest return since the first quarter of 2010, recording a 1.19% income return and a 0.84% appreciation return. Industrial (+2.90%) and retail (+2.17%) topped property sector performance for the quarter while hotels (+1.46%) brought up the rear. The West region was the strongest performer, up 2.46%, while the East was the worst at 1.73%. Transaction volume hit $9 billion, which represents a 25% increase over the second quarter of 2015. Appraisal capitalization rates increased to 4.60%, up from an all-time low of 4.55% last quarter. Occupancy rates also increased and hit a 15-year high at 93.2%. All property types have seen occupancy increase for the year, though retail was down 20 bps for the quarter.

The preliminary return for the **NFI-ODCE Index** was 1.91%, comprising a 0.90% income return and a 1.01% appreciation return. This marks a decrease of 5 bps from last quarter's return and a new low since 2010. The U.S. real estate market has become increasingly attractive and has captured nearly 30% of global capital allocations in 2016. Investors are flooding into the U.S. due to low government bond yields globally, uncertainty caused by the Brexit vote in late June, and concerns about China's slowing growth. According to Preqin, which provides data on the alternative assets industry, the amount of dry powder for real estate investing globally increased to $234 billion in the quarter, up 11.4% from year-end 2015.

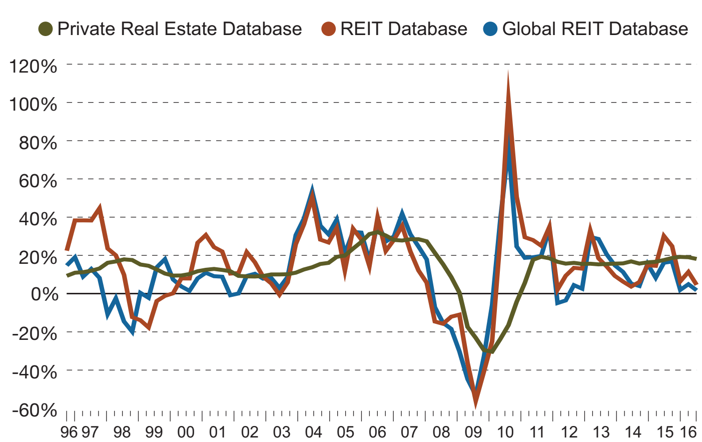
The **FTSE EPRA/NAREIT Developed REIT Index** (USD) overcame the shock of Brexit and gained 3.74%, while U.S. REITs tracked by the **FTSE NAREIT Equity Index** surged ahead 6.96%.

In the U.S., the strong performance of REITs was attributed to investors in search of yield. After the Brexit vote cast doubt on a Fed rate increase, global bond yields compressed 25 bps, making high-yielding REITs more attractive. Data centers (+20.59%), industrial (+15.38%), and infrastructure (+15.33%) were the best-performing sectors. Self-storage (-5.76%) suffered a sharp fall from grace and was the worst performer in the second quarter after being the strongest performer in the first. Strong data center performance was driven by robust tenant demand and less economic sensitivity. Conversely, self-storage assets with more acute economic sensitivity struggled due to fears of slowing growth. As of June 30, U.S. REITs were trading at a 7.1% premium to net asset value (NAV), contrasting sharply with U.K. REITs, which were trading at a 21.6% discount to NAV.

Uncertainty over the Brexit vote—and its surprising result—had a tremendous effect on real estate in the U.K. compared to continental Europe. According to Cushman & Wakefield, investment volume in the U.K. was down 25% year-to-date compared to 2015, versus a 10% increase in the rest of the EU.

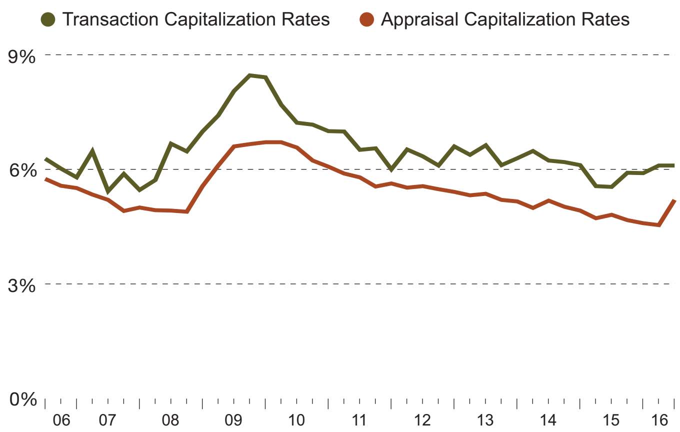
CMBS issuance for the quarter was $10.8 billion, down sharply from the second quarter of 2015 ($26.0 billion) and first quarter of 2016 ($19.3 billion). The decline was attributed to continued concerns over economic instability, including the Brexit vote; only $800 million in CMBS was issued in June.

Rolling One-Year Returns



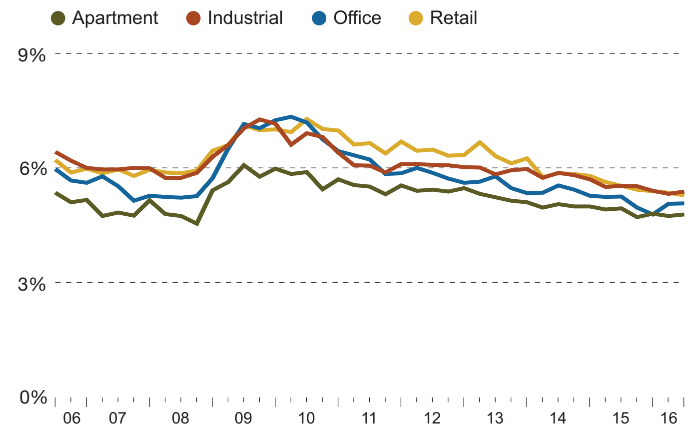
Source: Callan

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF
Note: Transaction capitalization rate is equal-weighted.

NCREIF Capitalization Rates by Property Type



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

Callan Database Median and Index Returns* for Periods ended June 30, 2016

Private Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Real Estate Database (net of fees)	**2.17**	**4.38**	**11.86**	**13.09**	**12.23**	**4.89**	**7.36**
NCREIF Property	2.03	4.29	10.64	11.61	11.51	7.40	8.91
NFI-ODCE (value wtd. net)	1.91	3.89	10.80	11.97	11.66	5.19	6.95
Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
REIT Database	**5.87**	**11.19**	**23.14**	**13.97**	**13.00**	**8.24**	**12.57**
FTSE NAREIT Equity	6.96	13.38	24.04	13.58	12.60	7.45	11.29
Global Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global REIT Database	**2.96**	**7.74**	**10.87**	**9.50**	**9.24**	**5.56**	**10.14**
FTSE EPRA/NAREIT Developed REIT	3.74	9.38	12.57	8.95	8.63	5.00	9.81
Global ex U.S. Public Real Estate	**Quarter**	**YTD**	**Year**	**3 years**	**5 Years**	**10 Years**	**15 Years**
Global ex-U.S. REIT Database	**0.46**	**4.08**	**0.47**	**4.98**	**5.41**	**3.12**	**--**
EPRA/NAREIT Dev REITs ex-U.S.	0.68	5.91	1.40	4.26	4.97	3.12	9.31

*Returns for less than one year are not annualized.
All REIT returns are reported gross in USD.
Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

Sticker Shock

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that second-quarter commitments totaled $102.2 billion with 196 new partnerships formed. The number of funds raised increased by only 11% from 177 in the first quarter, but the dollar volume rocketed 92% from $53.2 billion. Distressed debt surged to $13.3 billion from only $2.4 billion in the first quarter of 2016. Venture capital also saw a large jump of $14.6 billion from only $8.9 billion in the first quarter.

According to *Buyouts* newsletter, the investment pace by funds into companies totaled 356 transactions, bringing the first-half total to 816. The deal count is down by 86 transactions (19%) from the first quarter, and 216 transactions (21%) from the first half of 2015. The announced aggregate dollar volume in the second quarter was $37.6 billion, and $95.8 billion for the first half. The announced volume is down by $20.6 billion (35%) from the first quarter, but up $26 billion (27%) year-to-date. Only six deals with announced values of $1 billion or more closed in the second quarter, down from 12 in the first quarter.

According to the National Venture Capital Association, new investments in venture capital companies totaled 961 rounds and $15.3 billion in announced volume. The number of rounds decreased from 1,011 in the first quarter, but the dollar volume jumped from $12.7 billion, primarily due to a $3.5 billion expansion investment in Uber.

Funds Closed January 1 to June 30, 2016

Strategy	No. of Funds	Amt ($mm)	Percent*
Venture Capital	201	23,441	15%
Buyouts	119	102,687	66%
Subordinated Debt	9	2,397	2%
Distressed Debt	11	15,568	10%
Secondary and Other	10	5,513	4%
Fund-of-funds	23	5,767	4%
Totals	**373**	**155,373**	**100%**

Source: Private Equity Analyst
*Totals more than 100% due to rounding.

Regarding exits, *Buyouts* reports that there were 118 private M&A exits of buyout-backed companies, with 35 deals disclosing values totaling $24.6 billion. The M&A exits count was down from 140 in the first quarter, but the announced value increased from $15.6 billion. There were three buyout-backed IPOs floating an aggregate $1.6 billion—a recovery from no IPOs in the first quarter.

Venture-backed M&A exits totaled 64 transactions, with 11 disclosing a total dollar volume of $9.0 billion. The number of private sale exits declined from 91 in the first quarter, but the announced dollar volume increased from the first quarter's $5.2 billion, driven by a single $5.8 billion biotechnology exit. There were 12 VC-backed IPOs in the second quarter with a combined float of $893.9 million. For comparison, the first quarter of 2016 had 6 IPOs and total issuance of $574.5 million.

Private Equity Performance Database (%) (Pooled Horizon IRRs through December 31, 2015*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	2.1	13.8	22.0	16.5	11.1	4.7	24.3
Growth Equity	3.3	9.2	13.6	11.3	11.8	9.8	14.3
All Buyouts	2.4	8.5	13.3	12.3	11.2	11.8	12.8
Mezzanine	0.5	5.2	9.5	10.7	9.6	7.8	9.5
Distressed	-0.1	1.8	9.2	9.4	9.6	10.7	10.8
All Private Equity	**2.1**	**8.6**	**14.1**	**12.4**	**11.0**	**9.6**	**13.8**
S&P 500 Index	7.0	1.4	15.1	12.6	7.3	5.0	8.2
Russell 3000	6.3	0.5	14.7	12.2	7.4	5.4	8.3

Private equity returns are net of fees.
Sources: Standard & Poor's, Thomson/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.

Caution as Britannia Waives the Rule

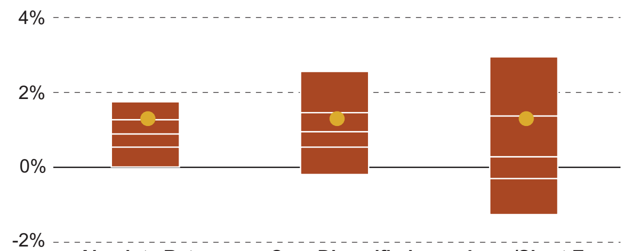
HEDGE FUNDS | Jim McKee

Amid the sudden disorder caused by Brexit, already cautious hedge funds mistrustful of the first quarter's skittishness were relatively unaffected and eked out modest gains, on average. Representing a paper portfolio of hedge fund interests without implementation costs, the **Credit Suisse Hedge Fund Index** (CS HFI) gained 0.59%. The median manager in the **Callan Hedge Fund-of-Funds Database** edged ahead 0.78%, net of all fees.

Returns across underlying strategies, however, were varied. The strongest performers were *Convertible Arb* (+2.65%), *Event-Driven Multi-Strategy* (+2.24%), and *Distressed* (+1.95%), as their credit exposures mended strongly from weakness in the prior quarter. *Emerging Markets* (+1.77%) and *Fixed Income Arb* (+1.02%) also regained ground from first-quarter losses.

Aside from the endangered species of *Short Bias* managers (-6.32%), the quarter's most notable loser was *Equity Market Neutral* (-3.17%), caught flat-footed by shifting risk appetites surrounding Brexit. Suffering from range-bound markets earlier in the quarter, *Managed Futures* lost 2.22% while *Global Macro* salvaged a 0.71% gain. The average *Long/Short Equity* fell 1.21%, trailing the S&P 500 (+2.46%) for the third consecutive quarter.

Callan Style Group Quarterly Returns



	Absolute Return FOF Style	Core Diversified FOF Style	Long/Short Eq FOF Style
10th Percentile	1.75	2.56	2.95
25th Percentile	1.27	1.46	1.37
Median	0.89	0.95	0.28
75th Percentile	0.54	0.54	-0.30
90th Percentile	0.01	-0.19	-1.26
T-Bills + 5% ●	1.30	1.30	1.30

Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market movements only marginally affected investment styles in the second quarter. For instance, despite the stock rally at quarter end, the median *Callan Long/Short Equity FOF* (+0.28%) trailed the *Callan Absolute Return FOF* (+0.89%). With exposures to both non-directional and directional styles, the *Core Diversified FOF* gained 0.95%.

Callan Database Median and Index Returns* for Periods ended June 30, 2016

	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Hedge Fund-of-Funds Database	**0.78**	**-2.18**	**-5.26**	**2.32**	**2.94**	**3.43**	**4.56**
CS Hedge Fund Index	0.59	-1.62	-4.23	2.49	2.88	4.17	5.69
CS Equity Market Neutral	-3.17	-3.52	-1.49	1.02	1.13	-2.43	0.72
CS Convertible Arbitrage	2.65	2.24	0.10	1.16	2.48	3.90	4.52
CS Fixed Income Arbitrage	1.02	-0.21	-0.37	2.37	4.07	3.25	4.17
CS Multi-Strategy	1.24	0.65	1.23	5.90	5.99	5.51	6.68
CS Distressed	1.95	-0.04	-5.25	1.41	3.17	4.08	6.93
CS Risk Arbitrage	0.58	2.71	0.73	1.55	1.46	3.46	3.49
CS Event-Driven Multi-Strategy	2.24	-3.46	-12.43	-0.49	0.32	3.98	5.92
CS Long/Short Equity	-1.21	-5.01	-5.00	4.53	4.00	4.73	5.86
CS Dedicated Short Bias	-6.32	-7.16	4.31	-8.41	-10.15	-9.89	-7.63
CS Global Macro	0.71	-1.54	-3.86	1.54	3.11	5.75	8.15
CS Managed Futures	-2.22	2.03	5.37	6.54	2.34	4.20	5.59
CS Emerging Markets	1.77	0.52	-2.43	2.39	2.21	4.50	7.85

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

Target Date Funds Continue to Rule

DEFINED CONTRIBUTION | Tom Szkwarla

In a tumultuous first quarter, the Callan DC Index™ earned just 0.38%, lagging the Age 45 Target Date Fund, which gained nearly 1%. Over the past three years the Index has performed in line with the Age 45 fund; however, since inception, it has trailed with just 5.09% annually versus the Age 45 fund's 5.70% return.

For the quarter, DC plan balances grew 0.85%. Inflows—participant and plan sponsor contributions—added slightly more to total growth (+0.475%) than market performance (+0.375%).

As usual, target date funds attracted the majority of assets during the quarter, approximately 72 cents of every dollar that flowed into DC funds. Target date funds grew to their largest allocation yet, commanding 26.1% of total DC assets in the quarter. The growth seems to be at the expense of U.S. equity, which contracted to 23.4% of total assets.

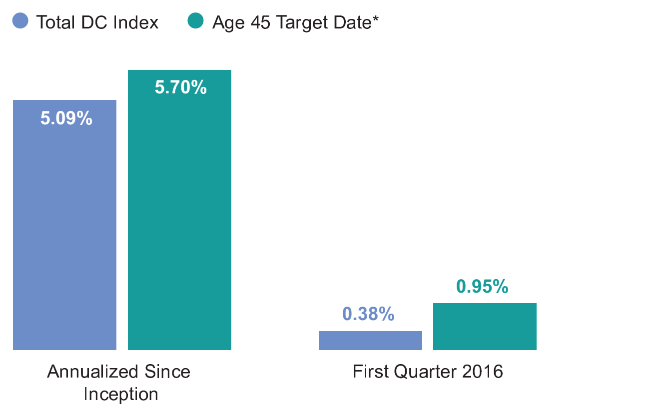
Stable value was the only other asset class with sizable inflows; this asset class typically attracts flows when markets are weak or particularly volatile. Several DC investments saw material net outflows, including U.S. equities (large and small/mid cap), U.S./global balanced, U.S. fixed income, non-U.S. equities, and company stock.

Overall turnover (i.e., net transfer activity levels within DC plans) was on par with last quarter (0.46%) at 0.44%. Turnover has been well below the historical average of 0.64% since mid-2014.

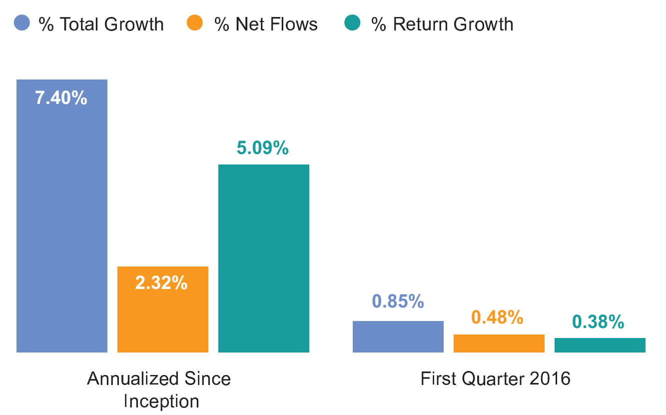
The Callan DC Index's overall equity allocation ended the quarter at 69%. Overall equity allocation has remained fairly static over the past few quarters, modestly above the Index's historical average (67%).

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 (First Quarter 2016)*
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	71.60%
Stable Value	15.57%
U.S. Small/Mid Cap	-23.49%
U.S. Large Cap	-29.02%
Total Turnover**	**0.44%**

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

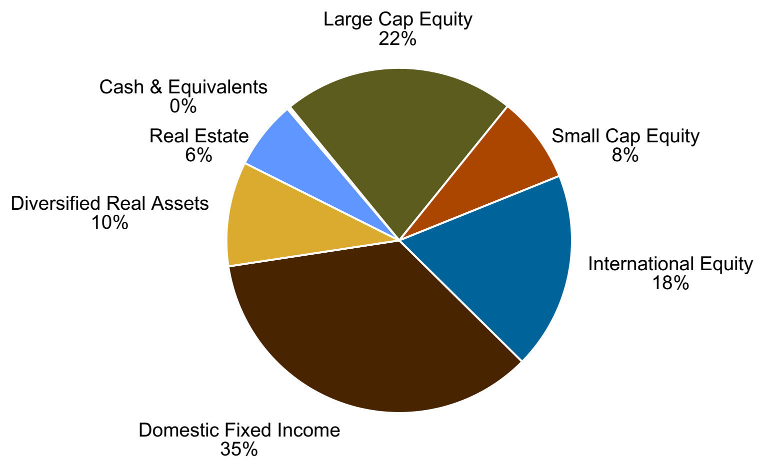
* DC Index inception date is January 2006.

**Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

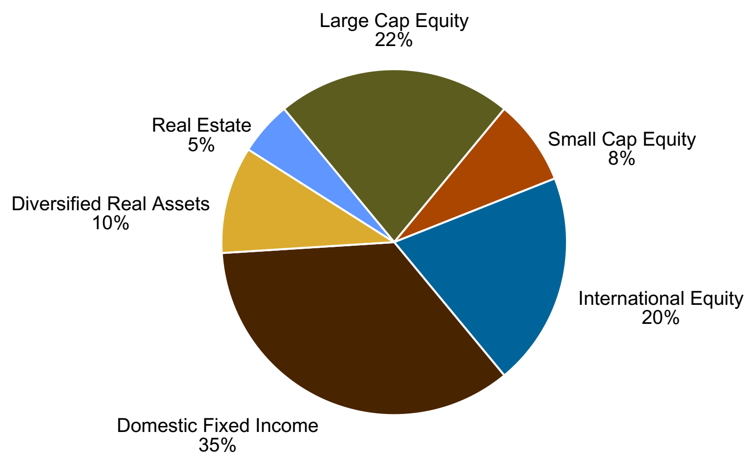
Actual vs Target Asset Allocation
As of June 30, 2016

The first chart below shows the Fund's asset allocation as of June 30, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



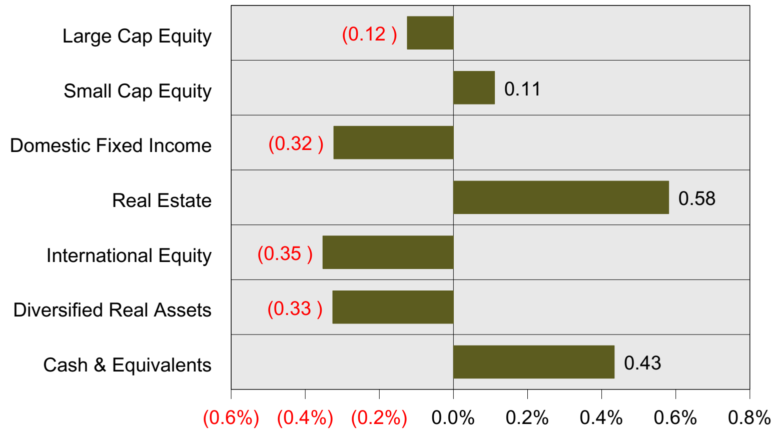
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap Equity	828,297	21.7%	22.0%	(0.3%)	(9,789)
Small Cap Equity	308,761	8.1%	8.0%	0.1%	4,002
International Equity	703,294	18.5%	20.0%	(1.5%)	(58,603)
Domestic Fixed Income	1,340,865	35.2%	35.0%	0.2%	7,545
Diversified Real Assets	374,417	9.8%	10.0%	(0.2%)	(6,531)
Real Estate	244,647	6.4%	5.0%	1.4%	54,173
Cash & Equivalents	9,202	0.2%	0.0%	0.2%	9,202
Total	3,809,483	100.0%	100.0%		

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

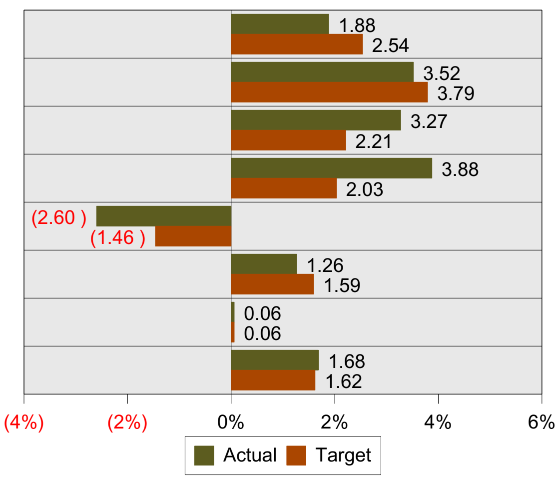
Quarterly Total Fund Relative Attribution - June 30, 2016

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.

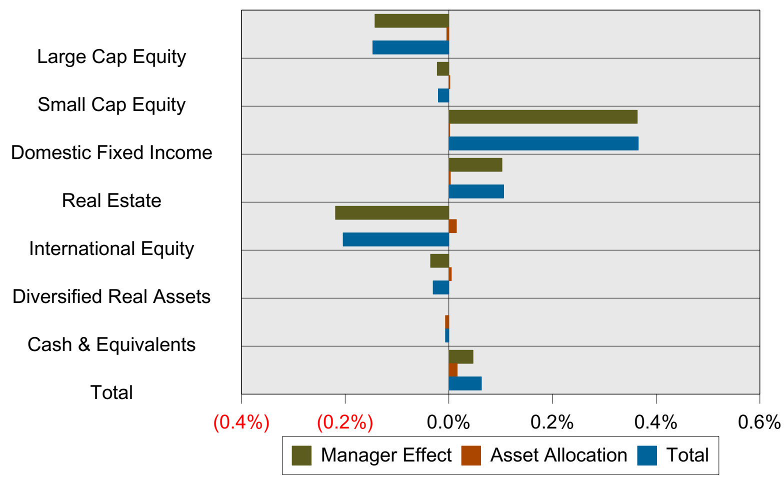
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2016

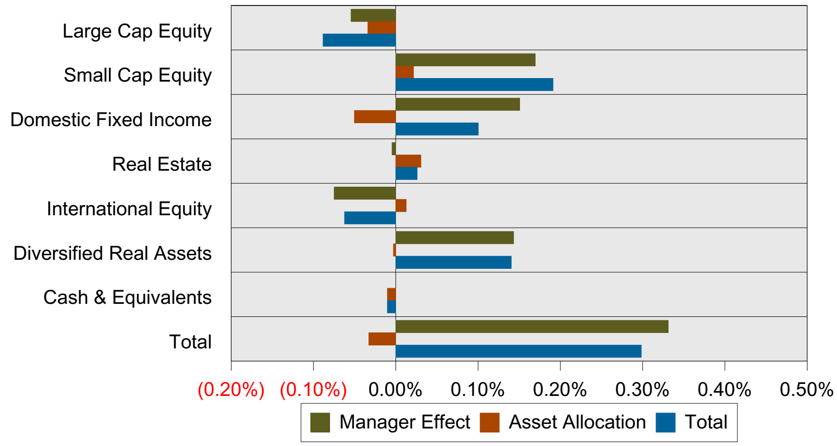
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	1.88%	2.54%	(0.14%)	(0.00%)	(0.15%)
Small Cap Equity	8%	8%	3.52%	3.79%	(0.02%)	0.00%	(0.02%)
Domestic Fixed Income	35%	35%	3.27%	2.21%	0.36%	0.00%	0.37%
Real Estate	6%	5%	3.88%	2.03%	0.10%	0.00%	0.11%
International Equity	20%	20%	(2.60%)	(1.46%)	(0.22%)	0.01%	(0.20%)
Diversified Real Assets	10%	10%	1.26%	1.59%	(0.04%)	0.00%	(0.03%)
Cash & Equivalents	0%	0%	0.06%	0.06%	0.00%	(0.01%)	(0.01%)
Total			**1.68% =**	**1.62% +**	**0.05% +**	**0.02%**	**0.06%**

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

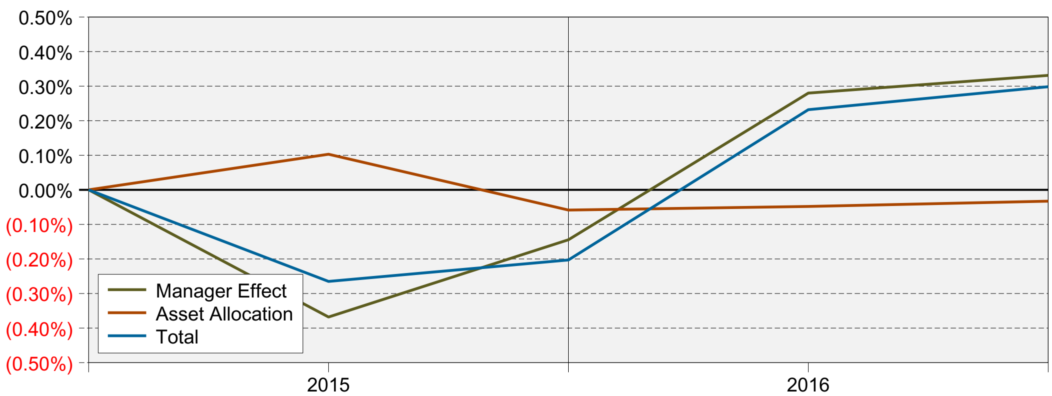
Cumulative Total Fund Relative Attribution - June 30, 2016

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

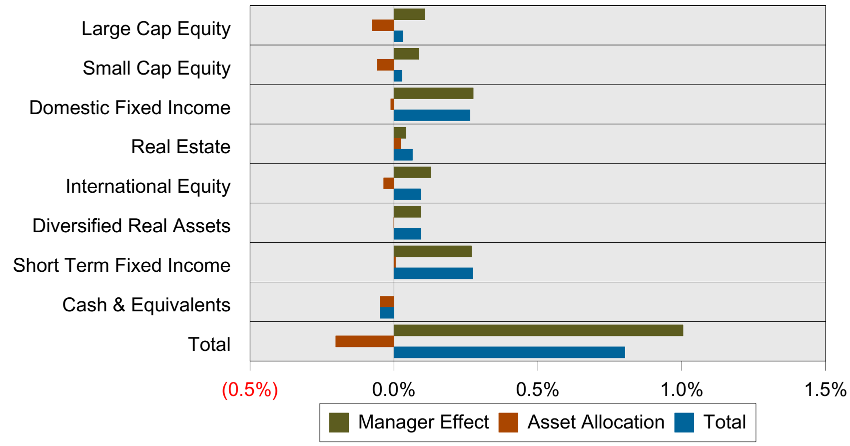
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	2.71%	2.93%	(0.05%)	(0.03%)	(0.09%)
Small Cap Equity	8%	8%	(4.58%)	(6.73%)	0.17%	0.02%	0.19%
Domestic Fixed Income	35%	35%	6.54%	6.00%	0.15%	(0.05%)	0.10%
Real Estate	6%	5%	10.51%	10.64%	(0.00%)	0.03%	0.03%
International Equity	19%	20%	(10.46%)	(10.16%)	(0.07%)	0.01%	(0.06%)
Diversified Real Assets	10%	10%	3.51%	2.00%	0.14%	(0.00%)	0.14%
Cash & Equivalents	0%	0%	0.12%	0.12%	0.00%	(0.01%)	(0.01%)
Total			**1.31% =**	**1.01% +**	**0.33% +**	**(0.03%)**	**0.30%**

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

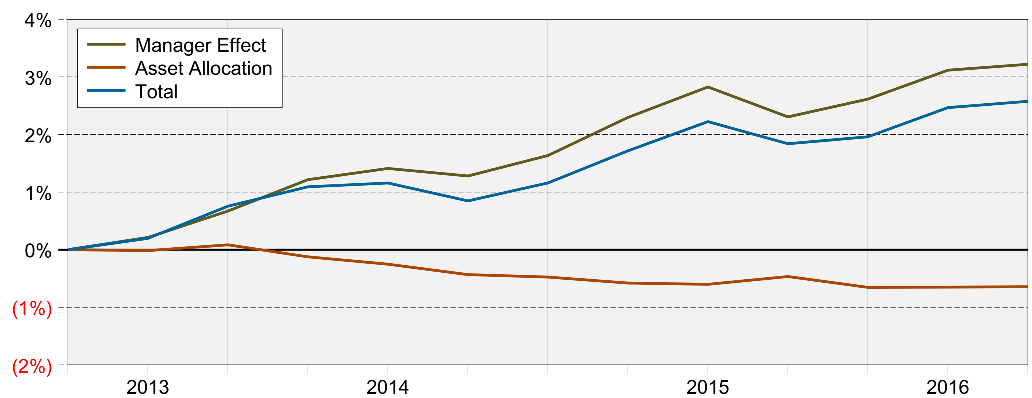
Cumulative Total Fund Relative Attribution - June 30, 2016

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

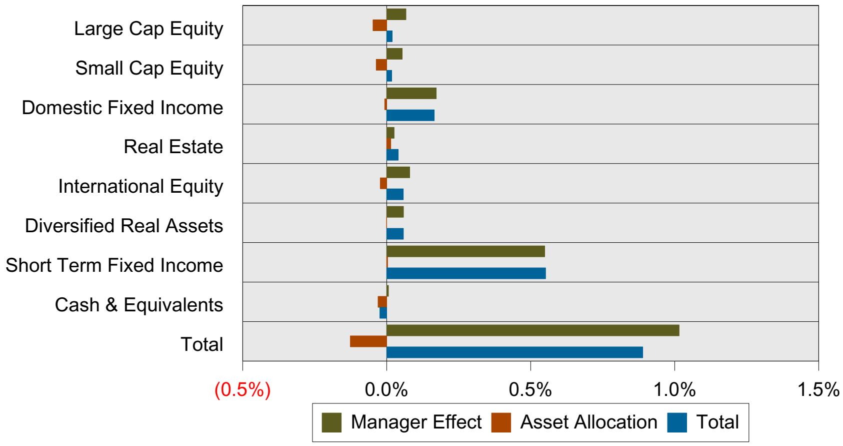
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	17%	17%	11.22%	10.51%	0.11%	(0.08%)	0.03%
Small Cap Equity	6%	6%	7.24%	5.75%	0.09%	(0.06%)	0.03%
Domestic Fixed Income	27%	27%	-	-	0.28%	(0.01%)	0.26%
Real Estate	4%	4%	12.32%	10.99%	0.04%	0.02%	0.06%
International Equity	16%	16%	1.61%	0.75%	0.13%	(0.04%)	0.09%
Diversified Real Assets	6%	6%	-	-	0.09%	(0.00%)	0.09%
Short Term Fixed Income	22%	23%	-	-	0.27%	0.01%	0.27%
Cash & Equivalents	1%	0%	0.05%	0.05%	0.00%	(0.05%)	(0.05%)
Total			**3.87% =**	**3.06% +**	**1.00% +**	**(0.20%)**	**0.80%**

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

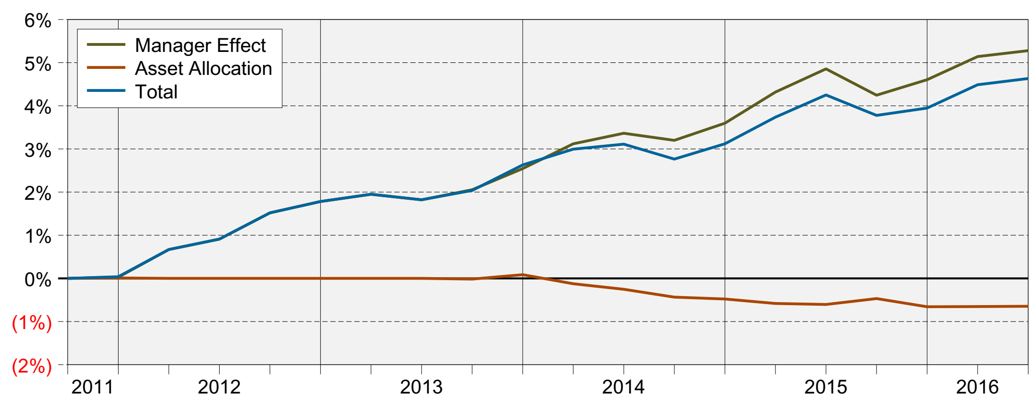
Cumulative Total Fund Relative Attribution - June 30, 2016

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.

Four and Three-Quarter Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Four and Three-Quarter Year Annualized Relative Attribution Effects

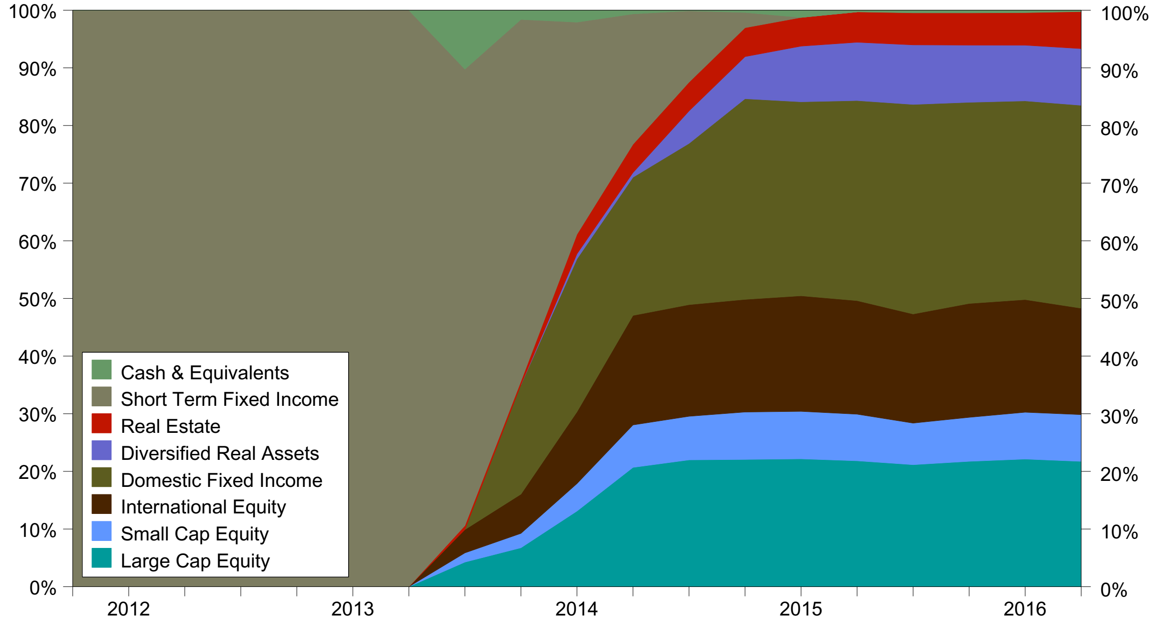
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	11%	11%	-	-	0.07%	(0.05%)	0.02%
Small Cap Equity	4%	4%	-	-	0.05%	(0.04%)	0.02%
Domestic Fixed Income	17%	17%	-	-	0.17%	(0.01%)	0.17%
Real Estate	3%	3%	-	-	0.03%	0.01%	0.04%
International Equity	10%	10%	-	-	0.08%	(0.02%)	0.06%
Diversified Real Assets	4%	4%	-	-	0.06%	(0.00%)	0.06%
Short Term Fixed Income	47%	48%	-	-	0.55%	0.00%	0.55%
Cash & Equivalents	4%	4%	0.11%	0.10%	0.01%	(0.03%)	(0.02%)
Total			**2.94% =**	**2.05% +**	**1.02% +**	**(0.13%)**	**0.89%**

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

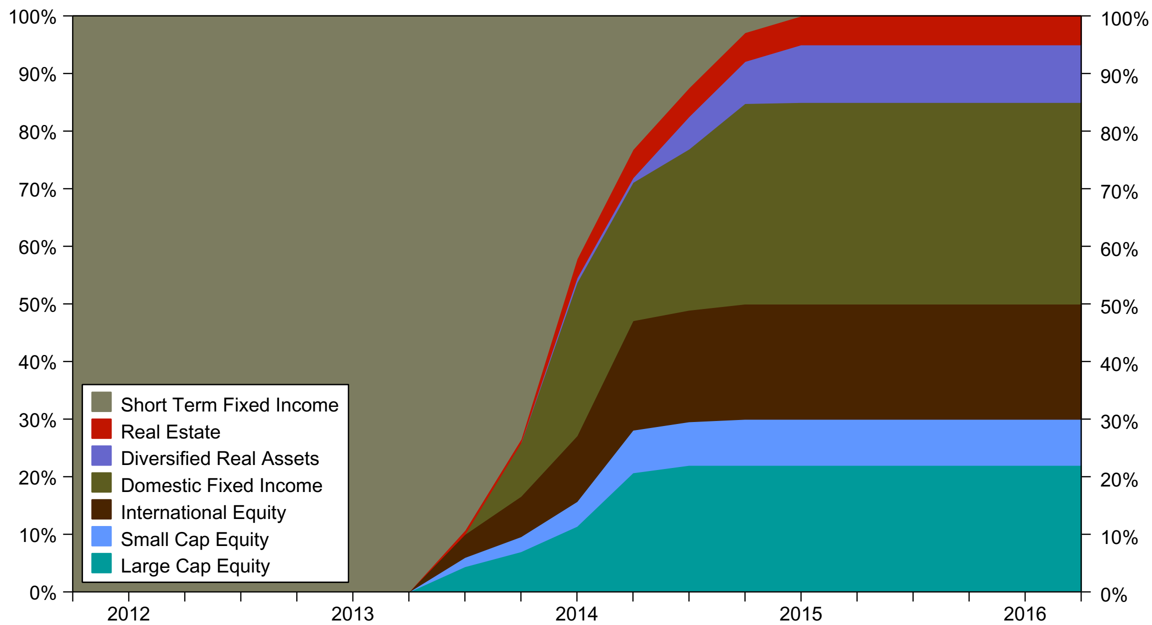
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

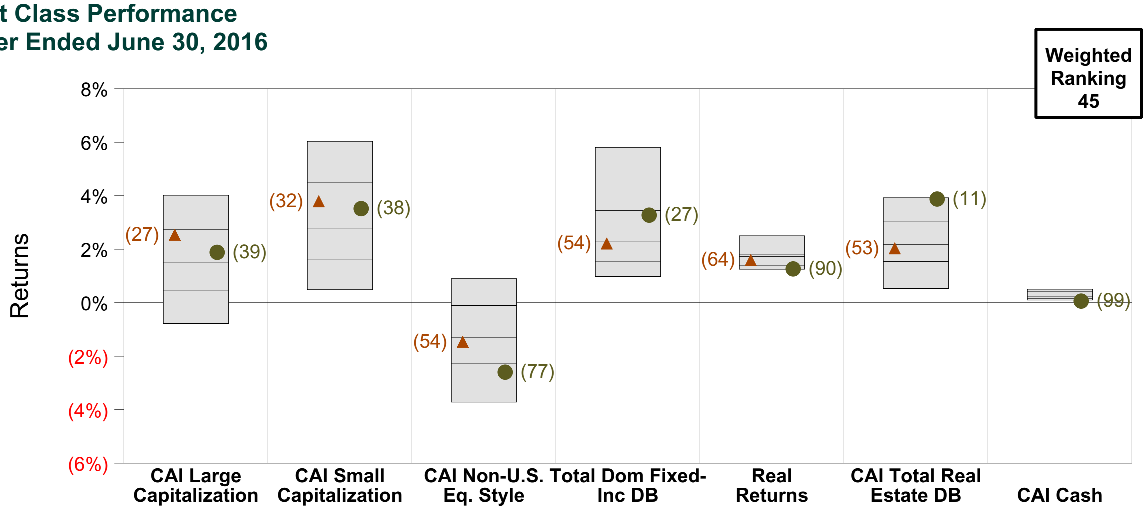


* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

Asset Class Rankings

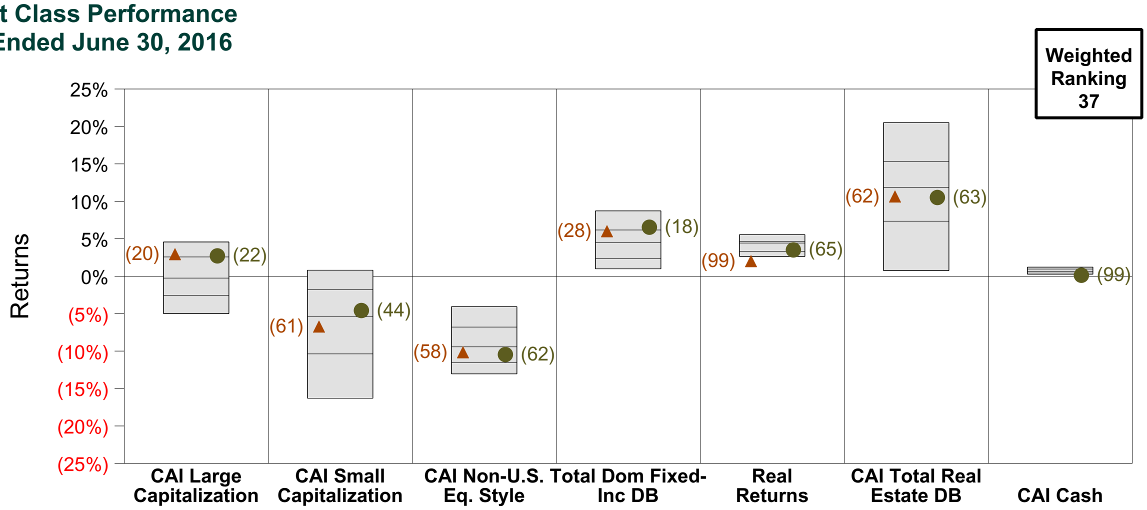
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used 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
One Quarter Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Cash
10th Percentile	4.02	6.04	0.90	5.81	2.50	3.92	0.51
25th Percentile	2.73	4.51	(0.10)	3.45	1.79	3.05	0.41
Median	1.49	2.79	(1.31)	2.30	1.73	2.17	0.22
75th Percentile	0.47	1.63	(2.29)	1.55	1.40	1.54	0.15
90th Percentile	(0.78)	0.48	(3.72)	0.98	1.25	0.53	0.10
Asset Class Composite ●	1.88	3.52	(2.60)	3.27	1.26	3.88	0.06
Composite Benchmark ▲	2.54	3.79	(1.46)	2.21	1.59	2.03	-

Total Asset Class Performance
One Year Ended June 30, 2016



	CAI Large Capitalization	CAI Small Capitalization	CAI Non-U.S. Eq. Style	Total Dom Fixed-Inc DB	Real Returns	CAI Total Real Estate DB	CAI Cash
10th Percentile	4.57	0.80	(4.07)	8.72	5.55	20.51	1.21
25th Percentile	2.57	(1.79)	(6.80)	6.17	4.63	15.32	0.96
Median	(0.25)	(5.42)	(9.43)	4.48	4.43	11.86	0.60
75th Percentile	(2.56)	(10.37)	(11.56)	2.34	3.32	7.35	0.42
90th Percentile	(4.99)	(16.30)	(13.04)	0.99	2.64	0.75	0.26
Asset Class Composite ●	2.71	(4.58)	(10.46)	6.54	3.51	10.51	0.12
Composite Benchmark ▲	2.93	(6.73)	(10.16)	6.00	2.00	10.64	-

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2016, with the distribution as of March 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

	June 30, 2016				March 31, 2016	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	**$1,137,057,855**	**29.85%**	**$(437,450)**	**$25,804,963**	**$1,111,690,341**	**30.26%**
Large Cap Equity	**$828,297,043**	**21.74%**	**$(353,243)**	**$15,311,107**	**$813,339,179**	**22.14%**
L.A. Capital Enhanced	167,753,055	4.40%	(55,163)	4,733,773	163,074,445	4.44%
L.A. Capital Large Cap Growth	250,748,315	6.58%	(122,161)	4,096,809	246,773,667	6.72%
Parametric Clifton Large Cap	166,373,425	4.37%	0	4,115,286	162,258,139	4.42%
LSV Large Cap Value	243,422,247	6.39%	(175,919)	2,365,238	241,232,928	6.57%
Small Cap Equity	**$308,760,812**	**8.11%**	**$(84,207)**	**$10,493,857**	**$298,351,163**	**8.12%**
Parametric Clifton SmallCap	167,472,856	4.40%	0	6,591,426	160,881,430	4.38%
PIMCO RAE	141,287,957	3.71%	(84,207)	3,902,431	137,469,733	3.74%
International Equity	**$703,293,842**	**18.46%**	**$4,085,847**	**$(18,883,841)**	**$718,091,837**	**19.55%**
Capital Group	206,548	0.01%	(267,132,071)	4,503,434	262,835,185	7.15%
DFA Intl SmallCap Value	70,871,353	1.86%	3,000,000	(2,395,776)	70,267,128	1.91%
LSV Intl Value	302,553,643	7.94%	(285,315)	(11,711,490)	314,550,448	8.56%
Vanguard Intl Explorer Fund	70,319,535	1.85%	2,500,000	(2,619,540)	70,439,075	1.92%
William Blair	259,342,764	6.81%	266,003,233	(6,660,470)	-	-
Domestic Fixed Income	**$1,340,864,597**	**35.20%**	**$32,539,969**	**$42,162,997**	**$1,266,161,631**	**34.47%**
Declaration Total Return	103,118,967	2.71%	(36,199)	2,058,151	101,097,015	2.75%
Prudential	145,580,832	3.82%	(96,169)	4,704,979	140,972,022	3.84%
SSgA US Govt Credit Bd Idx	188,285,306	4.94%	5,984,766	4,886,070	177,414,470	4.83%
Wells Capital	419,644,961	11.02%	10,822,971	17,258,770	391,563,219	10.66%
Western Asset Management	420,879,632	11.05%	15,864,599	11,861,856	393,153,177	10.70%
Pooled Fixed Income(1)	63,354,900	1.66%	0	1,393,170	61,961,730	1.69%
Diversified Real Assets	**$374,417,388**	**9.83%**	**$14,786,029**	**$4,627,732**	**$355,003,627**	**9.66%**
Western TIPS	284,527,063	7.47%	19,909,323	3,202,916	261,414,825	7.12%
JP Morgan Infrastructure	80,265,971	2.11%	(427,775)	1,637,450	79,056,295	2.15%
Grosvenor Cust. Infrastructure	9,624,354	0.25%	(4,695,519)	(212,634)	14,532,507	0.40%
Real Estate	**$244,647,251**	**6.42%**	**$29,297,303**	**$8,028,794**	**$207,321,154**	**5.64%**
Invesco Core Real Estate	117,458,354	3.08%	(103,600)	4,106,341	113,455,613	3.09%
JP Morgan RE Inc & Growth	127,188,897	3.34%	29,400,903	3,922,453	93,865,541	2.56%
Cash & Equivalents	**$9,202,374**	**0.24%**	**$(6,257,937)**	**$11,630**	**$15,448,681**	**0.42%**
Securities Lending Income	**$0**	**0.00%**	**$(327,374)**	**$327,374**	**-**	**-**
Total Fund	**$3,809,483,307**	**100.0%**	**$73,686,387**	**$62,079,649**	**$3,673,717,271**	**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 June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 4-3/4 Years
Domestic Equity				
Gross	2.32%	0.77%	-	-
Net	2.28%	0.52%	-	-
Large Cap Equity				
Gross	1.88%	2.71%	-	-
Net	1.84%	2.52%	-	-
Russell 1000 Index	2.54%	2.93%	11.48%	16.37%
L.A. Capital Enhanced - Gross	2.90%	5.83%	-	-
L.A. Capital Enhanced - Net	2.87%	5.67%	-	-
Russell 1000 Index	2.54%	2.93%	11.48%	16.37%
L.A. Capital LargeCap Growth - Gross	1.66%	4.96%	-	-
L.A. Capital LargeCap Growth - Net	1.61%	4.73%	-	-
Russell 1000 Growth Index	0.61%	3.02%	13.07%	16.44%
Parametric Clifton Large Cap - Gross	2.54%	4.77%	-	-
Parametric Clifton Large Cap - Net	2.54%	4.70%	-	-
S&P 500 Index	2.46%	3.99%	11.66%	16.38%
LSV Large Cap Value - Gross	0.98%	(2.89%)	-	-
LSV Large Cap Value - Net	0.91%	(3.17%)	-	-
Russell 1000 Value Index	4.58%	2.86%	9.87%	16.23%
Small Cap Equity				
Gross	3.52%	(4.58%)	-	-
Net	3.49%	(4.99%)	-	-
Russell 2000 Index	3.79%	(6.73%)	7.09%	14.61%
Parametric Clifton Small Cap - Gross	4.10%	(5.30%)	-	-
Parametric Clifton Small Cap - Net	4.10%	(5.76%)	-	-
Russell 2000 Index	3.79%	(6.73%)	7.09%	14.61%
PIMCO RAE - Gross	2.84%	(3.71%)	-	-
PIMCO RAE - Net	2.78%	(3.98%)	-	-
Russell 2000 Index	3.79%	(6.73%)	7.09%	14.61%
International Equity				
Gross	(2.60%)	(10.46%)	-	-
Net	(2.67%)	(10.73%)	-	-
MSCI EAFE Index	(1.46%)	(10.16%)	2.06%	6.39%
DFA Intl Small Cap Value	(3.16%)	(9.28%)	-	-
World ex US SC Va	(1.88%)	(6.05%)	4.76%	8.07%
LSV Intl Value - Gross	(3.73%)	(10.97%)	-	-
LSV Intl Value - Net	(3.81%)	(11.30%)	-	-
MSCI EAFE Index	(1.46%)	(10.16%)	2.06%	6.39%
Vanguard Intl Explorer Fund	(3.55%)	(7.27%)	-	-
BMI, EPAC, <$2 B	(0.63%)	(3.38%)	7.29%	8.99%

Investment Manager Returns

The table below details the rates of return for the Fund’s investment managers over various time periods ended June 30, 2016. 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 June 30, 2016

	Last Quarter	Last Year	Last 3 Years	Last 4-3/4 Years
Domestic Fixed Income				
Gross	3.27%	6.54%	-	-
Net	3.24%	6.40%	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.15%
Declaration Total Return - Net	2.04%	2.59%	-	-
Libor-3 Month	0.16%	0.49%	0.33%	0.36%
Prudential - Gross	3.34%	7.53%	-	-
Prudential - Net	3.27%	7.24%	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.15%
Wells Capital - Gross	4.33%	7.16%	-	-
Wells Capital - Net	4.29%	6.97%	-	-
Barclays Baa Credit 3% In	4.33%	6.90%	5.39%	5.39%
Western Asset - Gross	2.94%	6.70%	-	-
Western Asset - Net	2.90%	6.56%	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.15%
SSgA US Govt Credit Bd Idx - Gross	2.67%	6.71%	-	-
SSgA US Govt Credit Bd Idx - Net	2.66%	6.68%	-	-
Barclays Govt/Credit Bd	2.67%	6.70%	4.20%	3.32%
Pooled Fixed Income - Net(1)	2.25%	5.32%	-	-
Barclays Aggregate Index	2.21%	6.00%	4.06%	3.15%
Diversified Real Assets				
Gross	1.26%	3.51%	-	-
Net	1.13%	3.14%	-	-
Weighted Benchmark	1.59%	2.00%	-	-
Western Asset TIPS - Gross	1.12%	2.72%	-	-
Western Asset TIPS - Net	1.09%	2.58%	-	-
Barclays Glbl Inftn-Lnked	1.65%	2.55%	2.74%	2.42%
JP Morgan Infrastructure - Gross	2.07%	5.17%	-	-
JP Morgan Infrastructure - Net	1.58%	3.97%	-	-
CPI-W	1.33%	0.64%	0.76%	1.07%
Grosvenor Cust. Infrastructure - Net	(2.83%)	6.11%	-	-
CPI-W	1.33%	0.64%	0.76%	1.07%
Real Estate				
Gross	3.88%	10.51%	-	-
Net	3.56%	9.79%	-	-
NCREIF Total Index	2.03%	10.64%	11.61%	11.39%
Invesco Core Real Estate - Gross	3.62%	10.95%	-	-
Invesco Core Real Estate - Net	3.53%	10.59%	-	-
NCREIF Total Index	2.03%	10.64%	11.61%	11.39%
JP Morgan RE Inc & Growth - Gross	4.18%	10.16%	-	-
JP Morgan RE Inc & Growth - Net	3.60%	9.03%	-	-
NCREIF Total Index	2.03%	10.64%	11.61%	11.39%
Cash & Equivalents - Net	**0.06%**	**0.12%**	**0.05%**	**0.11%**
90 Day Treasury Bills	0.07%	0.19%	0.09%	0.09%
Total Fund				
Gross	1.68%	1.31%	3.87%	2.94%
Net	1.62%	1.06%	3.65%	2.78%
Target*	1.62%	1.01%	3.06%	2.05%

* Current Quarter Target = 35.0% Barclays Aggregate Index, 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.
(1) Comprised of PIMCO DiSCO II and PIMCO Bravo II.

Parametric Clifton Large Cap
Period Ended June 30, 2016

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.

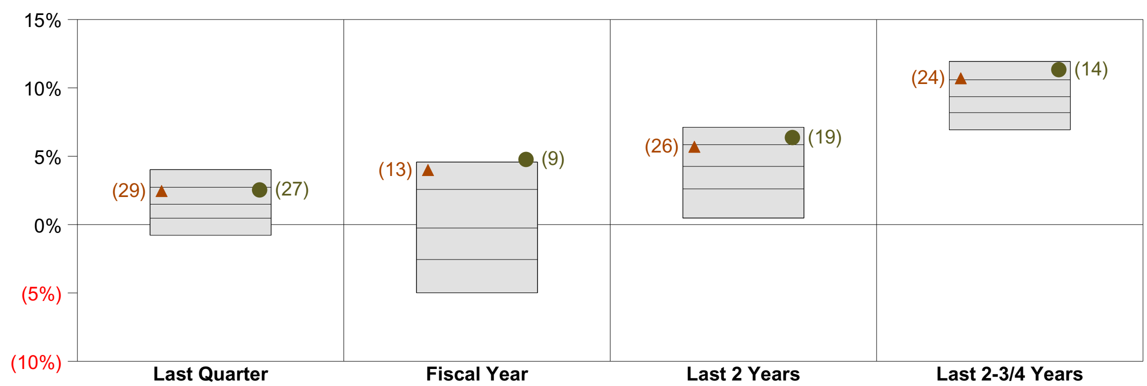
Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a 2.54% return for the quarter placing it in the 27 percentile of the CAI Large Capitalization group for the quarter and in the 9 percentile for the last year.
- Parametric Clifton Large Cap's portfolio outperformed the S&P 500 Index by 0.08% for the quarter and outperformed the S&P 500 Index for the year by 0.77%.

Quarterly Asset Growth

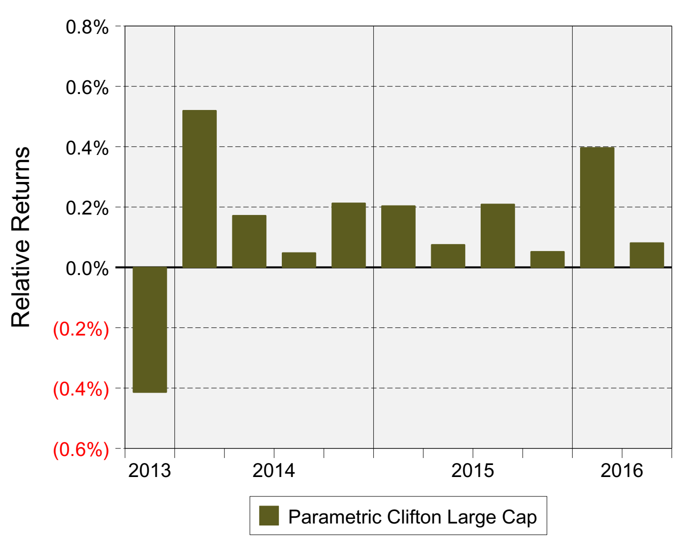
Beginning Market Value	$162,258,139
Net New Investment	$0
Investment Gains/(Losses)	$4,115,286
Ending Market Value	$166,373,425

Performance vs CAI Large Capitalization (Gross)

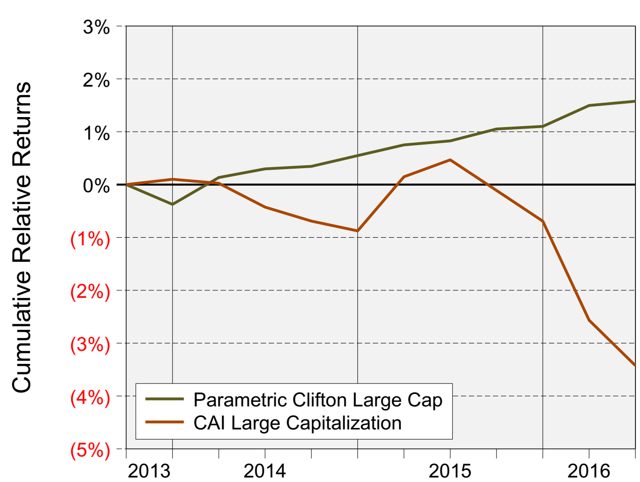


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	4.02	4.57	7.12	11.94
25th Percentile	2.73	2.57	5.85	10.59
Median	1.49	(0.25)	4.26	9.36
75th Percentile	0.47	(2.56)	2.61	8.19
90th Percentile	(0.78)	(4.99)	0.48	6.93
Parametric Clifton Large Cap ●	2.54	4.77	6.37	11.34
S&P 500 Index ▲	2.46	3.99	5.69	10.70

Relative Return vs S&P 500 Index



Cumulative Returns vs S&P 500 Index



L.A. Capital
Period Ended June 30, 2016

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.

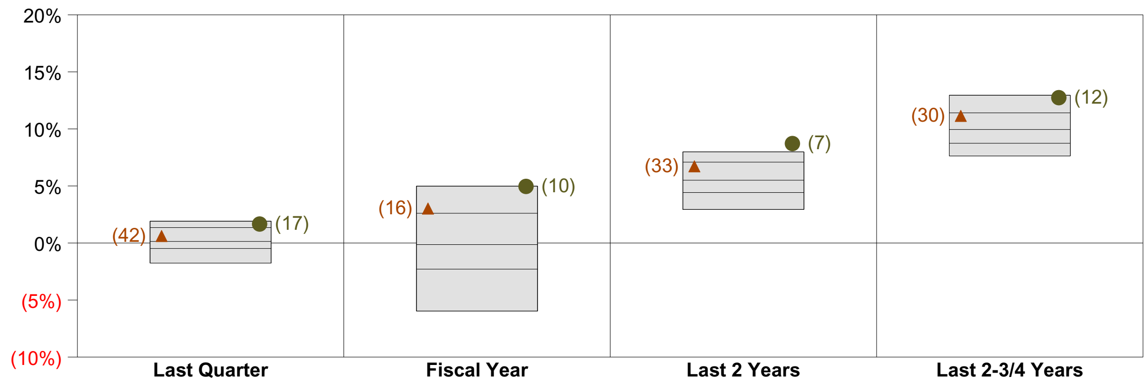
Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 1.66% return for the quarter placing it in the 17 percentile of the CAI Large Cap Growth group for the quarter and in the 10 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 1.05% for the quarter and outperformed the Russell 1000 Growth Index for the year by 1.94%.

Quarterly Asset Growth

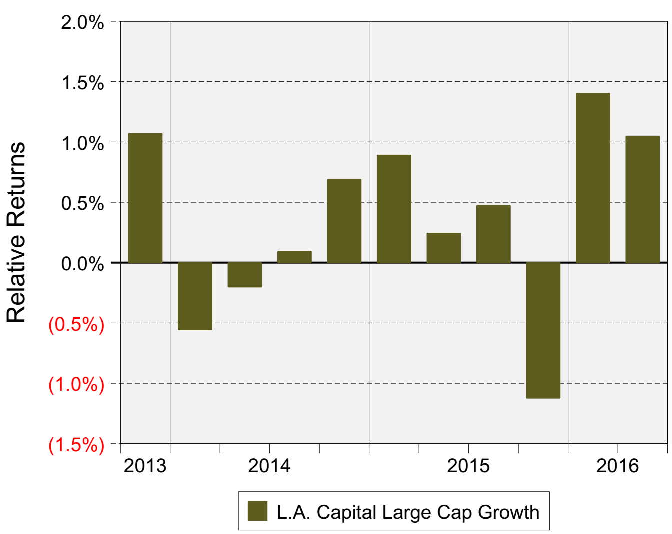
Beginning Market Value	$246,773,667
Net New Investment	$-122,161
Investment Gains/(Losses)	$4,096,809
Ending Market Value	$250,748,315

Performance vs CAI Large Cap Growth (Gross)

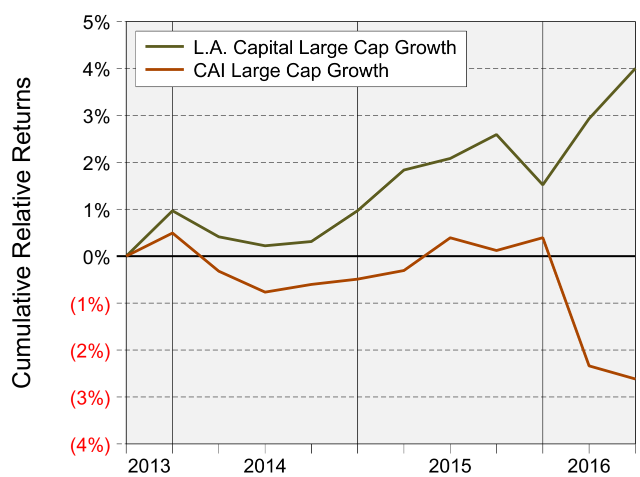


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	1.91	4.98	7.99	12.95
25th Percentile	1.35	2.60	7.09	11.41
Median	0.14	(0.14)	5.50	9.95
75th Percentile	(0.48)	(2.29)	4.42	8.74
90th Percentile	(1.76)	(5.97)	2.94	7.63
L.A. Capital Large Cap Growth ●	1.66	4.96	8.72	12.74
Russell 1000 Growth Index ▲	0.61	3.02	6.72	11.14

Relative Return vs Russell 1000 Growth Index



Cumulative Returns vs Russell 1000 Growth Index



L.A. Capital Enhanced
Period Ended June 30, 2016

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.

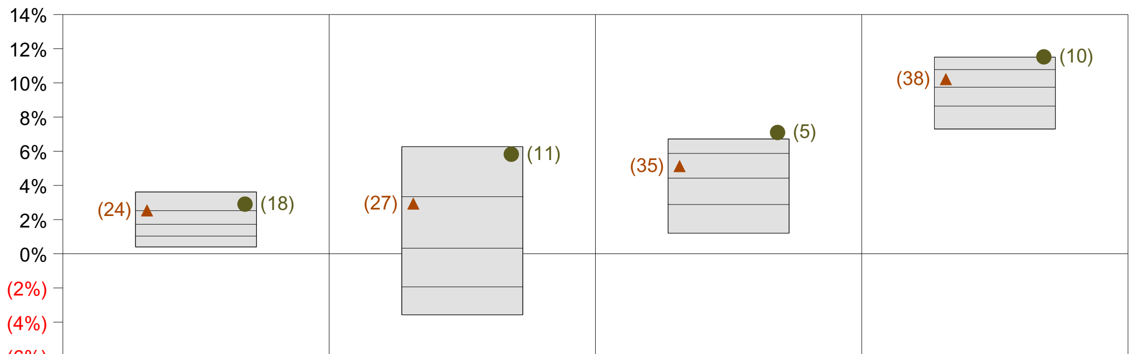
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 2.90% return for the quarter placing it in the 18 percentile of the CAI Large Cap Core group for the quarter and in the 11 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 0.37% for the quarter and outperformed the Russell 1000 Index for the year by 2.89%.

Quarterly Asset Growth

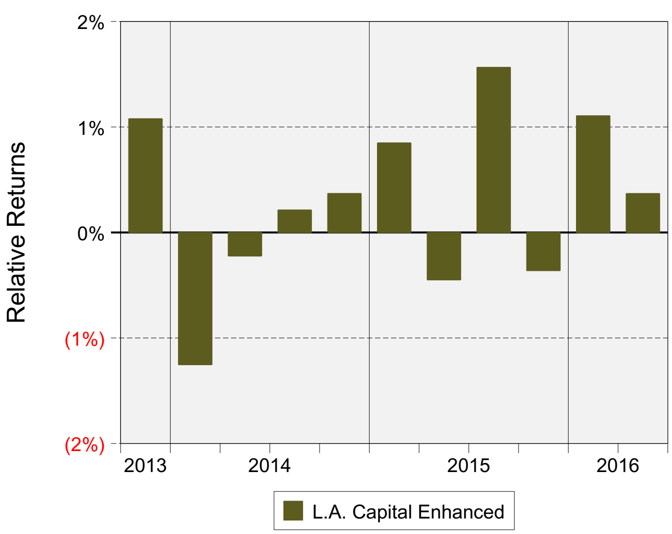
Beginning Market Value	$163,074,445
Net New Investment	$-55,163
Investment Gains/(Losses)	$4,733,773
Ending Market Value	$167,753,055

Performance vs CAI Large Cap Core (Gross)

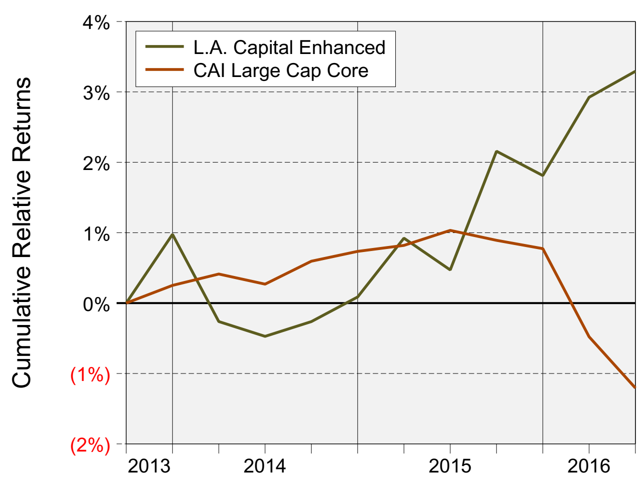


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	3.62	6.27	6.72	11.51
25th Percentile	2.52	3.34	5.87	10.78
Median	1.73	0.33	4.43	9.75
75th Percentile	1.03	(1.94)	2.88	8.64
90th Percentile	0.40	(3.57)	1.20	7.30
L.A. Capital Enhanced ●	2.90	5.83	7.10	11.52
Russell 1000 Index ▲	2.54	2.93	5.13	10.22

Relative Return vs Russell 1000 Index



Cumulative Returns vs Russell 1000 Index



LSV Asset Management
Period Ended June 30, 2016

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.

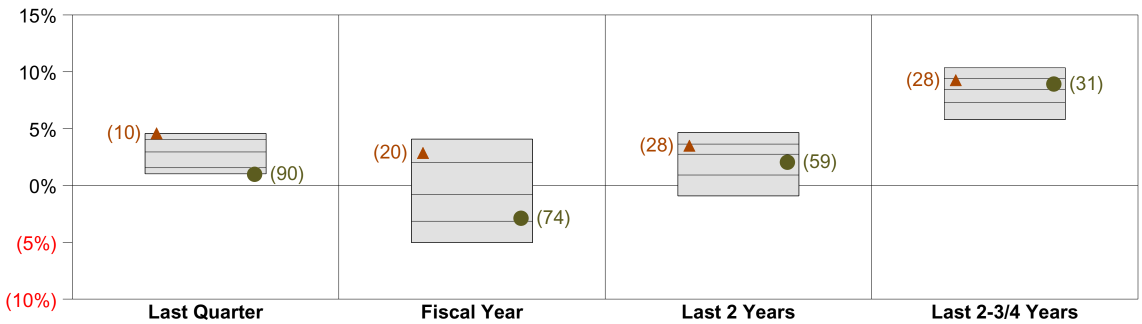
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 0.98% return for the quarter placing it in the 90 percentile of the CAI Large Cap Value group for the quarter and in the 74 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 3.60% for the quarter and underperformed the Russell 1000 Value Index for the year by 5.75%.

Quarterly Asset Growth

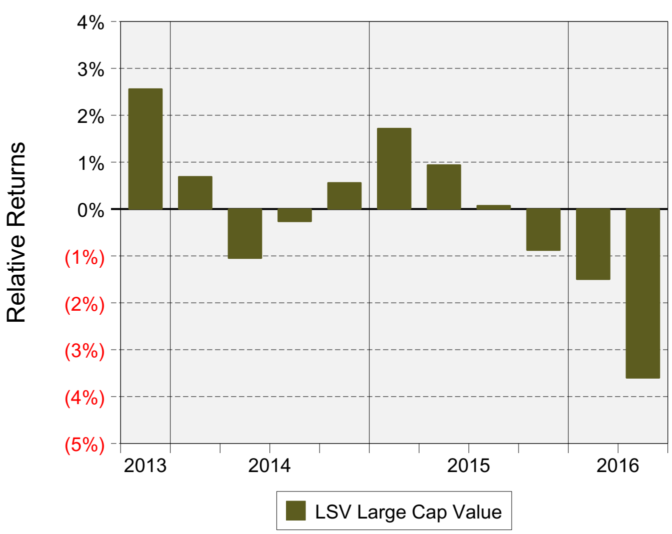
Beginning Market Value	$241,232,928
Net New Investment	$-175,919
Investment Gains/(Losses)	$2,365,238
Ending Market Value	$243,422,247

Performance vs CAI Large Cap Value (Gross)

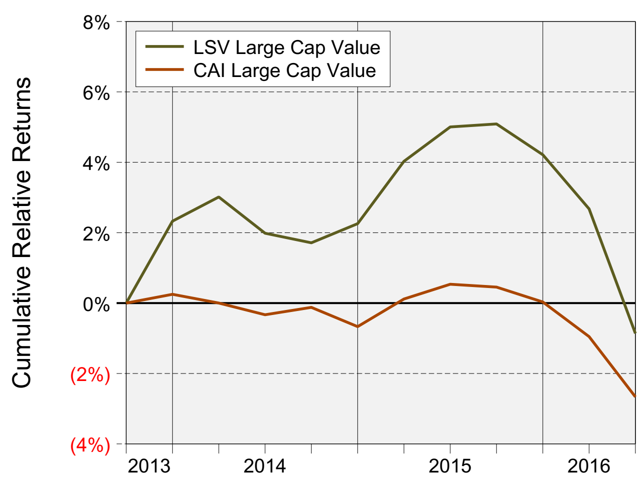


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	4.57	4.08	4.65	10.35
25th Percentile	4.04	2.01	3.64	9.41
Median	2.94	(0.81)	2.75	8.45
75th Percentile	1.55	(3.15)	0.92	7.27
90th Percentile	1.02	(5.03)	(0.92)	5.79
LSV Large Cap Value ●	0.98	(2.89)	2.04	8.92
Russell 1000 Value Index ▲	4.58	2.86	3.49	9.26

Relative Return vs Russell 1000 Value Index



Cumulative Returns vs Russell 1000 Value Index



Parametric Clifton Small Cap
Period Ended June 30, 2016

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.

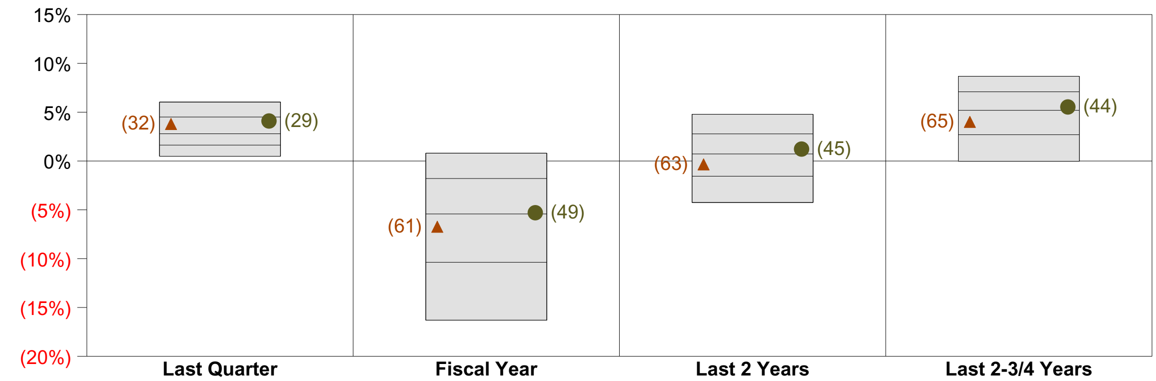
Quarterly Summary and Highlights

- Parametric Clifton Small Cap's portfolio posted a 4.10% return for the quarter placing it in the 29 percentile of the CAI Small Capitalization group for the quarter and in the 49 percentile for the last year.
- Parametric Clifton Small Cap's portfolio outperformed the Russell 2000 Index by 0.31% for the quarter and outperformed the Russell 2000 Index for the year by 1.43%.

Quarterly Asset Growth

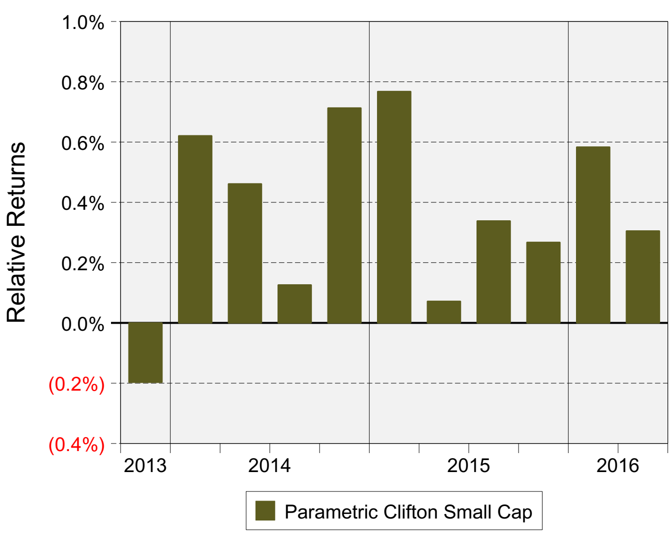
Beginning Market Value	$160,881,430
Net New Investment	$0
Investment Gains/(Losses)	$6,591,426
Ending Market Value	$167,472,856

Performance vs CAI Small Capitalization (Gross)

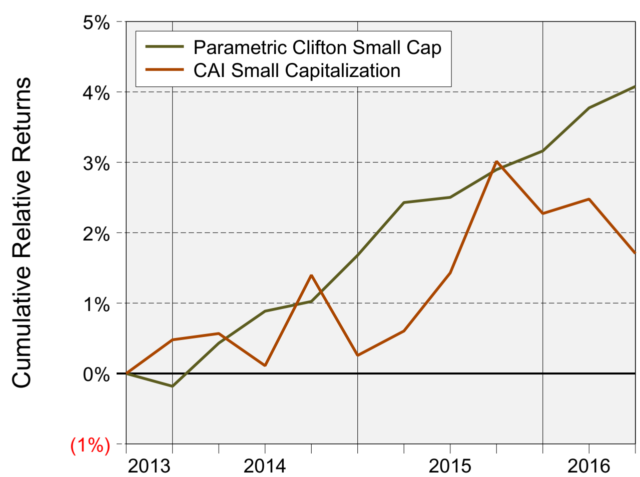


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	6.04	0.80	4.79	8.68
25th Percentile	4.51	(1.79)	2.78	7.09
Median	2.79	(5.42)	0.72	5.19
75th Percentile	1.63	(10.37)	(1.56)	2.70
90th Percentile	0.48	(16.30)	(4.25)	(0.03)
Parametric Clifton Small Cap ●	4.10	(5.30)	1.22	5.53
Russell 2000 Index ▲	3.79	(6.73)	(0.34)	4.01

Relative Return vs Russell 2000 Index



Cumulative Returns vs Russell 2000 Index



PIMCO RAE
Period Ended June 30, 2016

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.

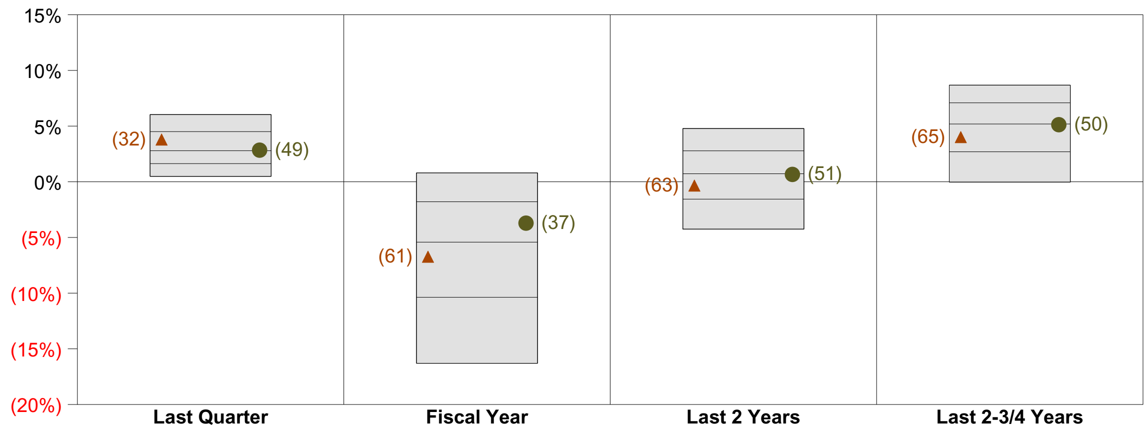
Quarterly Summary and Highlights

- PIMCO RAE's portfolio posted a 2.84% return for the quarter placing it in the 49 percentile of the CAI Small Capitalization group for the quarter and in the 37 percentile for the last year.
- PIMCO RAE's portfolio underperformed the Russell 2000 Index by 0.95% for the quarter and outperformed the Russell 2000 Index for the year by 3.02%.

Quarterly Asset Growth

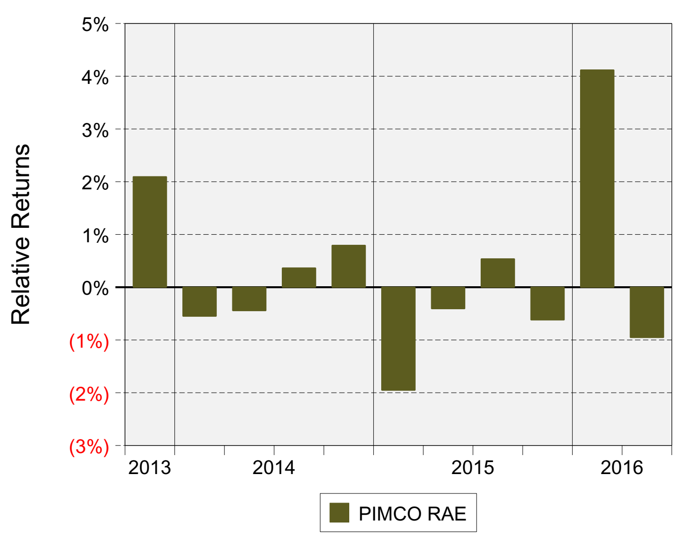
Beginning Market Value	$137,469,733
Net New Investment	$-84,207
Investment Gains/(Losses)	$3,902,431
Ending Market Value	$141,287,957

Performance vs CAI Small Capitalization (Gross)

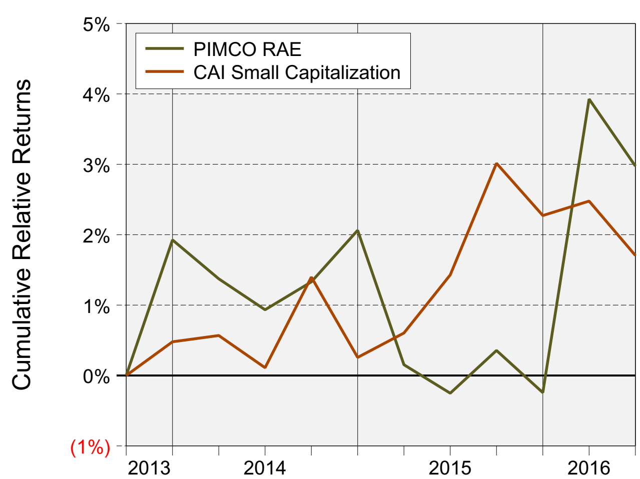


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	6.04	0.80	4.79	8.68
25th Percentile	4.51	(1.79)	2.78	7.09
Median	2.79	(5.42)	0.72	5.19
75th Percentile	1.63	(10.37)	(1.56)	2.70
90th Percentile	0.48	(16.30)	(4.25)	(0.03)
PIMCO RAE ●	2.84	(3.71)	0.66	5.13
Russell 2000 Index ▲	3.79	(6.73)	(0.34)	4.01

Relative Return vs Russell 2000 Index



Cumulative Returns vs Russell 2000 Index



DFA Intl Small Cap Value
Period Ended June 30, 2016

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.

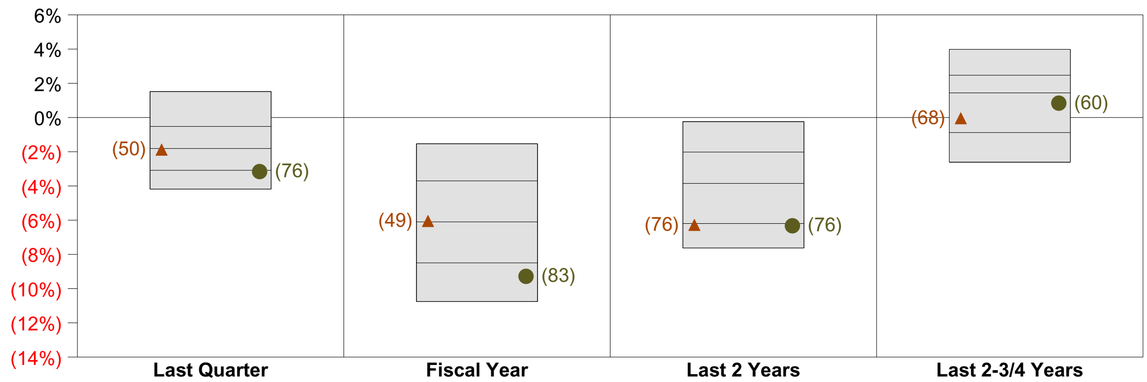
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a (3.16)% return for the quarter placing it in the 76 percentile of the Lipper International Small Cap Funds group for the quarter and in the 83 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 1.28% for the quarter and underperformed the World ex US SC Value for the year by 3.23%.

Quarterly Asset Growth

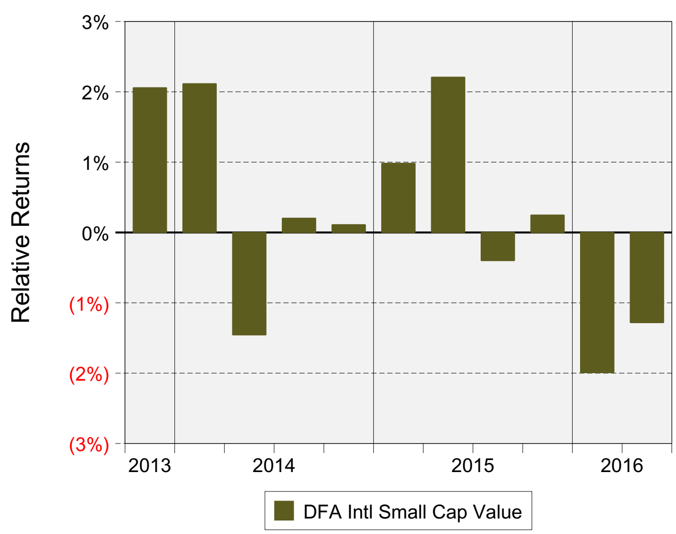
Beginning Market Value	$70,267,128
Net New Investment	$3,000,000
Investment Gains/(Losses)	$-2,395,776
Ending Market Value	$70,871,353

Performance vs Lipper International Small Cap Funds (Net)

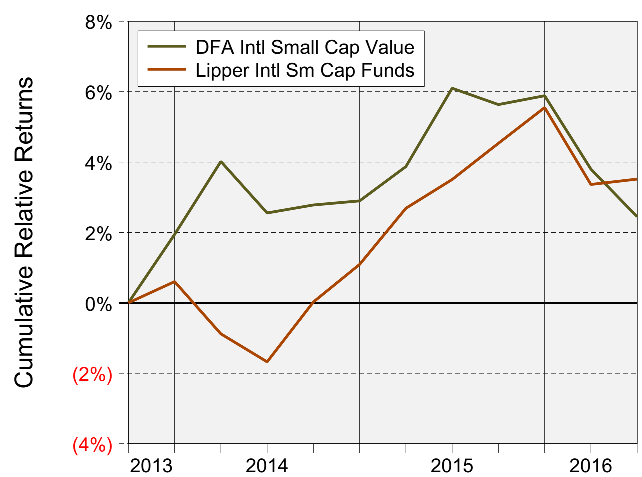


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	1.52	(1.53)	(0.24)	3.98
25th Percentile	(0.52)	(3.70)	(2.02)	2.47
Median	(1.81)	(6.10)	(3.85)	1.44
75th Percentile	(3.08)	(8.49)	(6.20)	(0.88)
90th Percentile	(4.18)	(10.75)	(7.63)	(2.61)
DFA Intl Small Cap Value ●	(3.16)	(9.28)	(6.33)	0.84
World ex US SC Value ▲	(1.88)	(6.05)	(6.28)	(0.04)

Relative Return vs World ex US SC Value



Cumulative Returns vs World ex US SC Value



LSV Intl Value
Period Ended June 30, 2016

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.

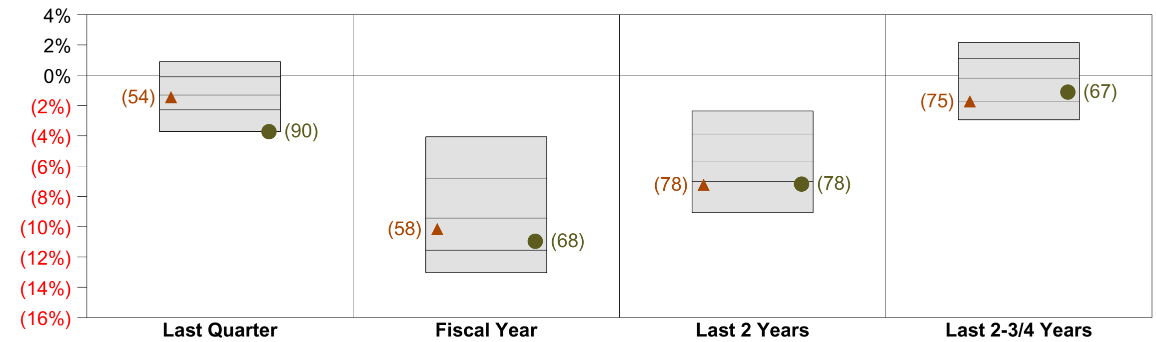
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a (3.73)% return for the quarter placing it in the 90 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 68 percentile for the last year.
- LSV Intl Value's portfolio underperformed the MSCI EAFE by 2.27% for the quarter and underperformed the MSCI EAFE for the year by 0.80%.

Quarterly Asset Growth

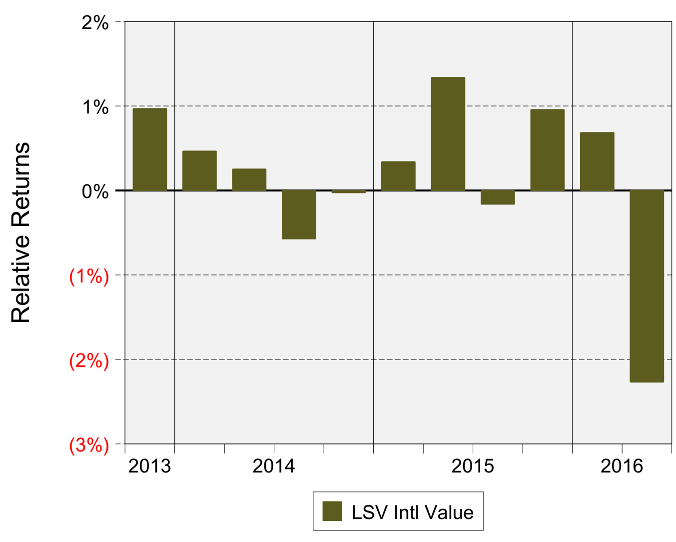
Beginning Market Value	$314,550,448
Net New Investment	$-285,315
Investment Gains/(Losses)	$-11,711,490
Ending Market Value	$302,553,643

Performance vs CAI Non-U.S. Equity Style (Gross)

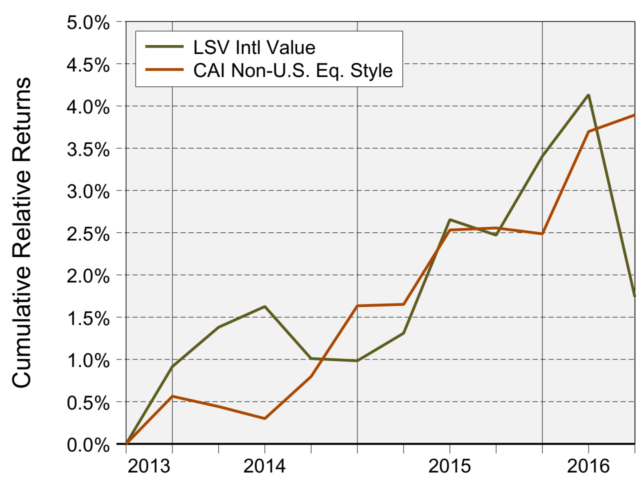


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	0.90	(4.07)	(2.36)	2.16
25th Percentile	(0.10)	(6.80)	(3.88)	1.10
Median	(1.31)	(9.43)	(5.67)	(0.19)
75th Percentile	(2.29)	(11.56)	(7.03)	(1.71)
90th Percentile	(3.72)	(13.04)	(9.08)	(2.95)
LSV Intl Value ●	(3.73)	(10.97)	(7.19)	(1.12)
MSCI EAFE ▲	(1.46)	(10.16)	(7.24)	(1.73)

Relative Return vs MSCI EAFE



Cumulative Returns vs MSCI EAFE



Vanguard Intl Explorer Fund
Period Ended June 30, 2016

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.

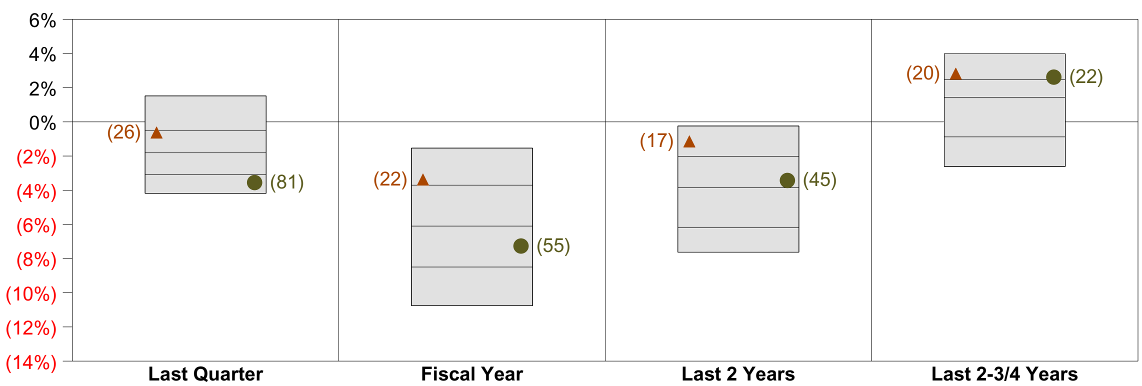
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a (3.55)% return for the quarter placing it in the 81 percentile of the Lipper International Small Cap Funds group for the quarter and in the 55 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio underperformed the S&P BMI EPAC <$2 B by 2.93% for the quarter and underperformed the S&P BMI EPAC <$2 B for the year by 3.89%.

Quarterly Asset Growth

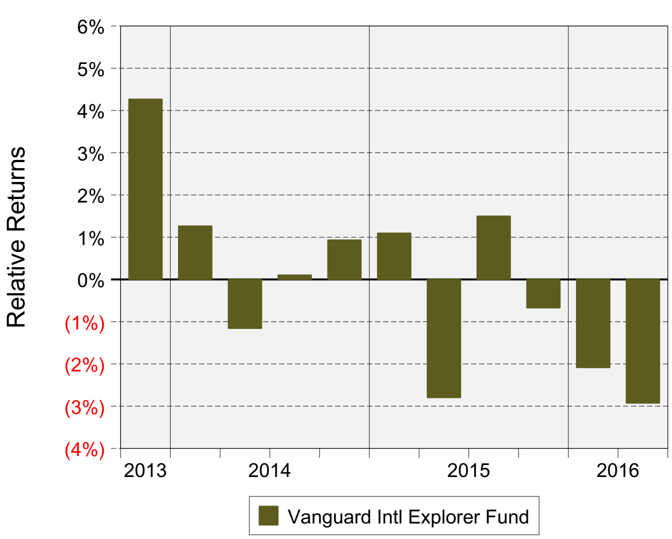
Beginning Market Value	$70,439,075
Net New Investment	$2,500,000
Investment Gains/(Losses)	$-2,619,540
Ending Market Value	$70,319,535

Performance vs Lipper International Small Cap Funds (Net)

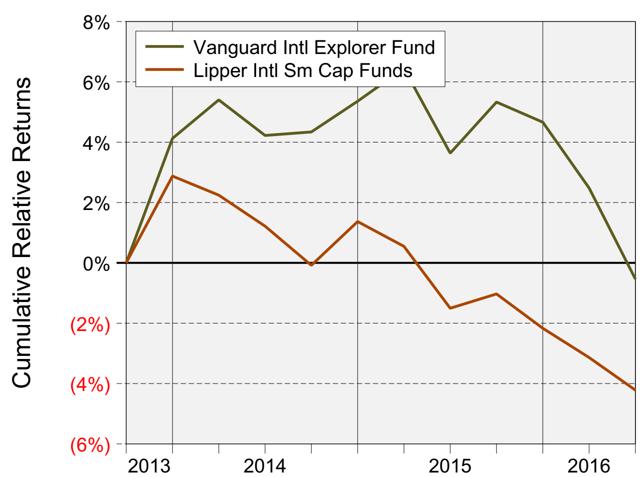


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	1.52	(1.53)	(0.24)	3.98
25th Percentile	(0.52)	(3.70)	(2.02)	2.47
Median	(1.81)	(6.10)	(3.85)	1.44
75th Percentile	(3.08)	(8.49)	(6.20)	(0.88)
90th Percentile	(4.18)	(10.75)	(7.63)	(2.61)
Vanguard Intl Explorer Fund ●	(3.55)	(7.27)	(3.43)	2.62
S&P BMI EPAC <$2 B ▲	(0.63)	(3.38)	(1.14)	2.82

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



Cumulative Returns vs S&P BMI EPAC <$2 B



Declaration Total Return
Period Ended June 30, 2016

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.

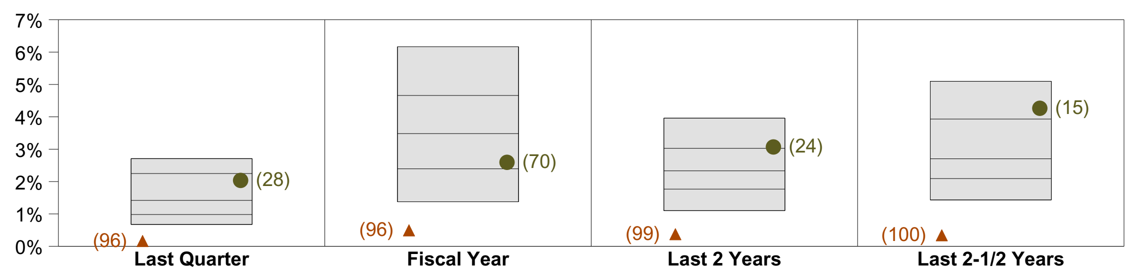
Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 2.04% return for the quarter placing it in the 28 percentile of the CAI Intermediate Fixed Income Mut Funds group for the quarter and in the 70 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 1.87% for the quarter and outperformed the Libor-3 Month for the year by 2.10%.

Quarterly Asset Growth

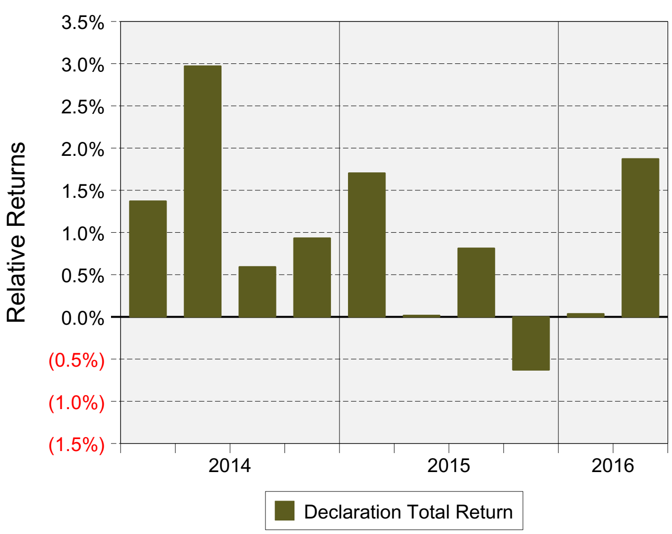
Beginning Market Value	$101,097,015
Net New Investment	$-36,199
Investment Gains/(Losses)	$2,058,151
Ending Market Value	$103,118,967

Performance vs CAI Intermediate Fixed Income Mut Funds (Net)

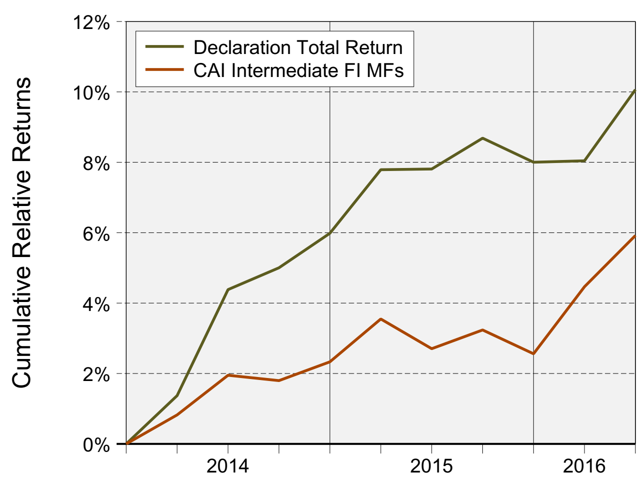


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.71	6.17	3.96	5.10
25th Percentile	2.25	4.66	3.03	3.93
Median	1.42	3.48	2.33	2.70
75th Percentile	0.98	2.39	1.77	2.09
90th Percentile	0.67	1.38	1.10	1.43
Declaration Total Return ●	2.04	2.59	3.07	4.26
Libor-3 Month ▲	0.16	0.49	0.37	0.34

Relative Return vs Libor-3 Month



Cumulative Returns vs Libor-3 Month



Prudential
Period Ended June 30, 2016

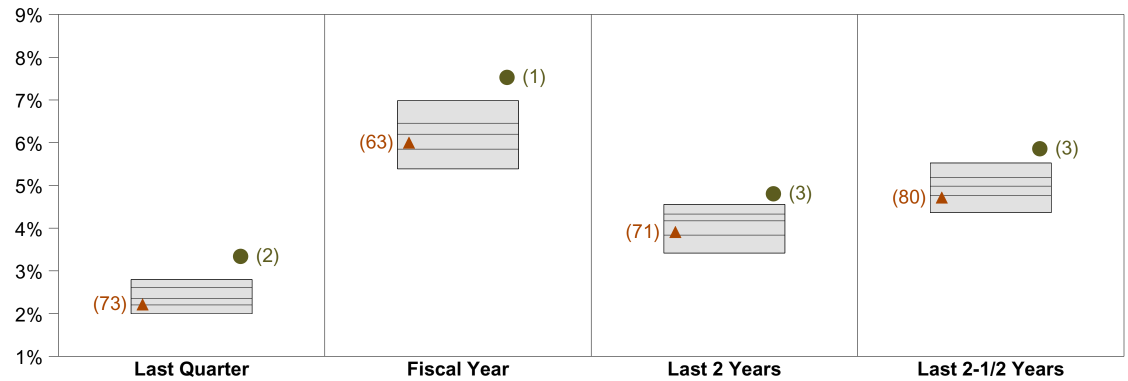
Investment Philosophy
The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment 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 3.34% return for the quarter placing it in the 2 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 1 percentile for the last year.
- Prudential's portfolio outperformed the Barclays Aggregate Index by 1.13% for the quarter and outperformed the Barclays Aggregate Index for the year by 1.53%.

Quarterly Asset Growth

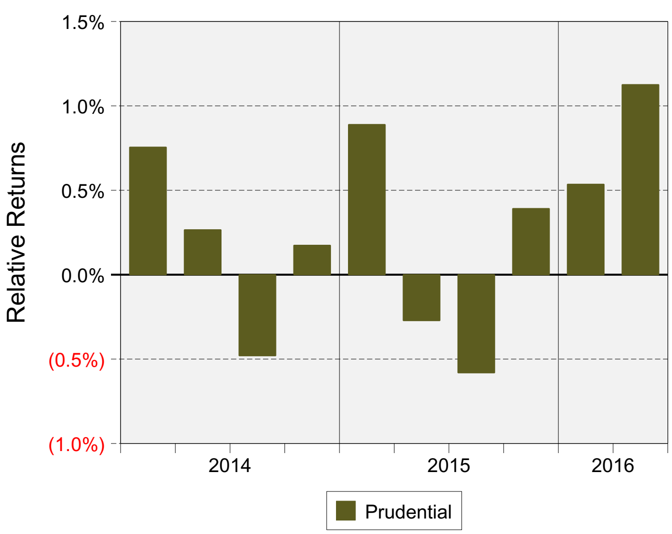
Beginning Market Value	$140,972,022
Net New Investment	$-96,169
Investment Gains/(Losses)	$4,704,979
Ending Market Value	$145,580,832

Performance vs CAI Core Bond Fixed Income (Gross)

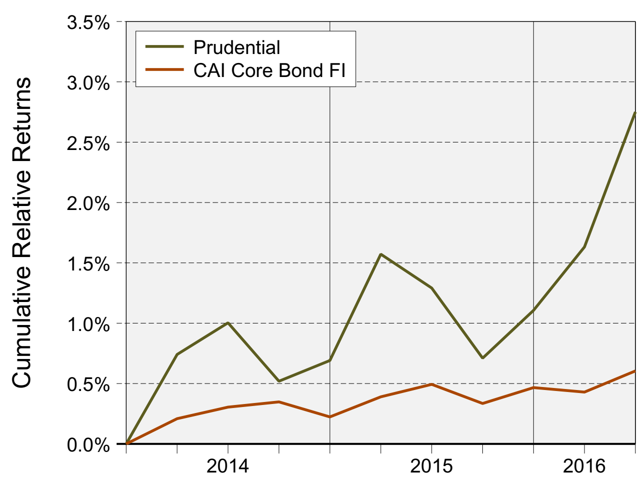


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.80	6.98	4.55	5.53
25th Percentile	2.62	6.46	4.33	5.19
Median	2.36	6.20	4.17	4.98
75th Percentile	2.20	5.85	3.84	4.76
90th Percentile	2.00	5.39	3.42	4.36
Prudential ●	3.34	7.53	4.80	5.86
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.72

Relative Return vs Barclays Aggregate Index



Cumulative Returns vs Barclays Aggregate Index



SSgA US Govt Credit Bd Idx
Period Ended June 30, 2016

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.

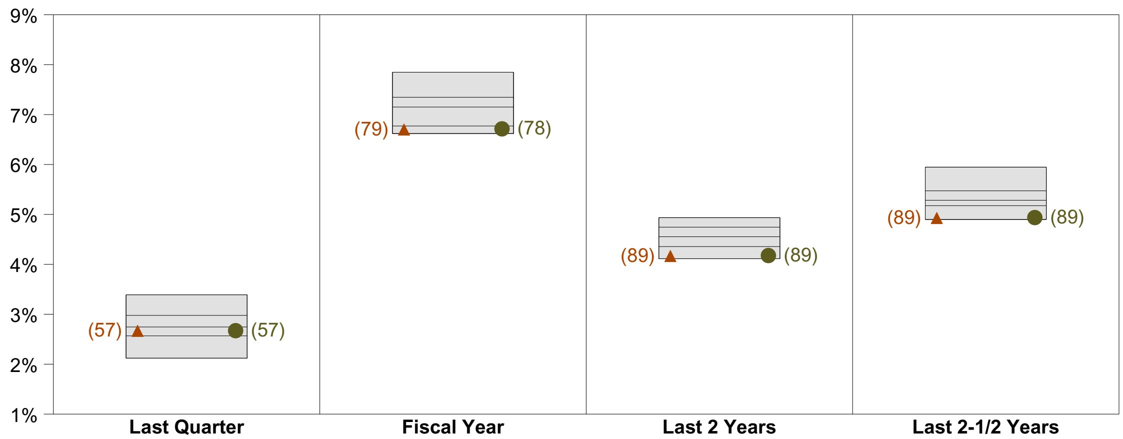
Quarterly Summary and Highlights

- SSgA US Govt Credit Bd Idx's portfolio posted a 2.67% return for the quarter placing it in the 57 percentile of the CAI Government/Credit group for the quarter and in the 78 percentile for the last year.
- SSgA US Govt Credit Bd Idx's portfolio outperformed the Barclays Govt/Credit Bd by 0.00% for the quarter and outperformed the Barclays Govt/Credit Bd for the year by 0.01%.

Quarterly Asset Growth

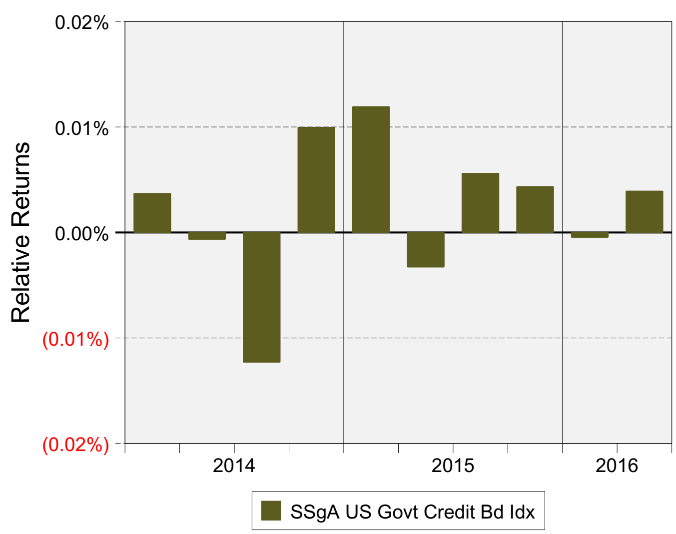
Beginning Market Value	$177,414,470
Net New Investment	$5,984,766
Investment Gains/(Losses)	$4,886,070
Ending Market Value	$188,285,306

Performance vs CAI Government/Credit (Gross)

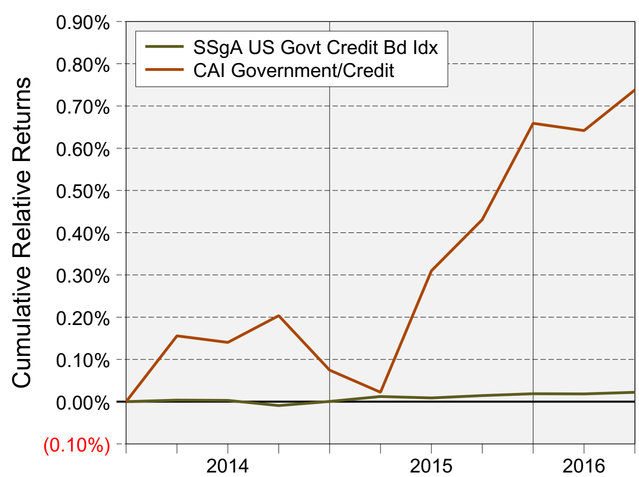


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	3.39	7.85	4.93	5.95
25th Percentile	2.98	7.35	4.74	5.47
Median	2.74	7.15	4.55	5.28
75th Percentile	2.57	6.77	4.36	5.18
90th Percentile	2.12	6.62	4.11	4.90
SSgA US Govt Credit Bd Idx ●	2.67	6.71	4.18	4.94
Barclays Govt/Credit Bd ▲	2.67	6.70	4.17	4.93

Relative Return vs Barclays Govt/Credit Bd



Cumulative Returns vs Barclays Govt/Credit Bd



Wells Capital
Period Ended June 30, 2016

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.

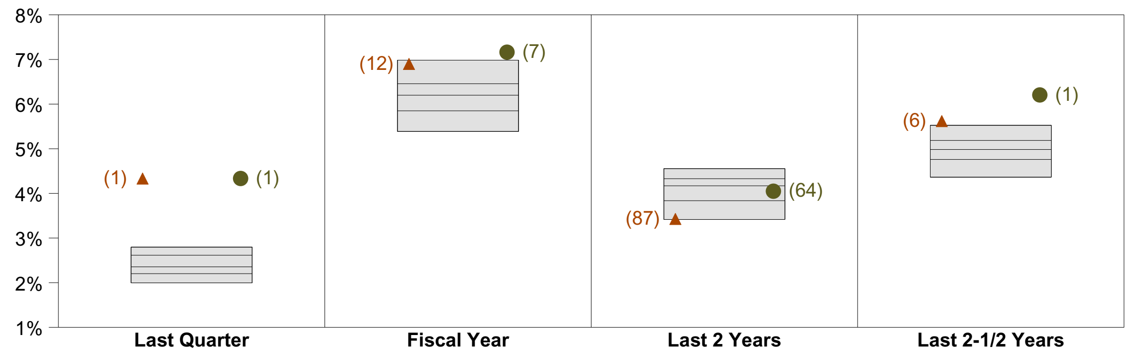
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 4.33% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 7 percentile for the last year.
- Wells Capital's portfolio outperformed the Barclays Baa Credit 3% In by 0.00% for the quarter and outperformed the Barclays Baa Credit 3% In for the year by 0.26%.

Quarterly Asset Growth

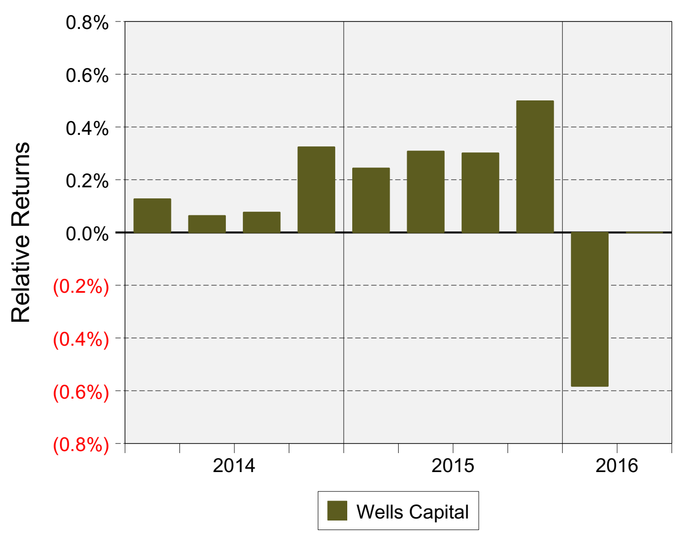
Beginning Market Value	$391,563,219
Net New Investment	$10,822,971
Investment Gains/(Losses)	$17,258,770
Ending Market Value	$419,644,961

Performance vs CAI Core Bond Fixed Income (Gross)

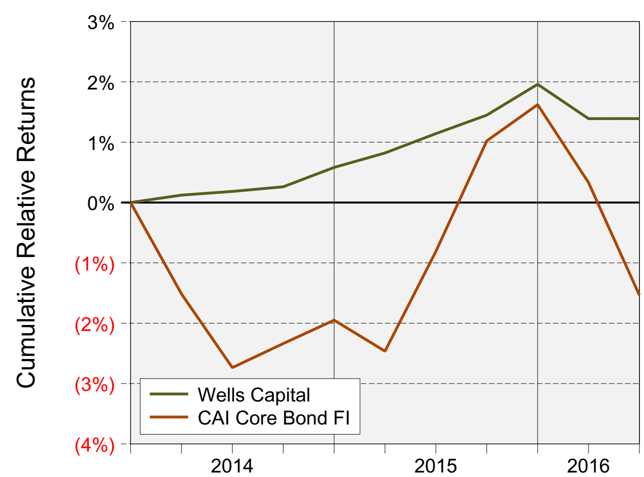


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.80	6.98	4.55	5.53
25th Percentile	2.62	6.46	4.33	5.19
Median	2.36	6.20	4.17	4.98
75th Percentile	2.20	5.85	3.84	4.76
90th Percentile	2.00	5.39	3.42	4.36
Wells Capital ●	4.33	7.16	4.05	6.21
Barclays Baa Credit 3% In ▲	4.33	6.90	3.43	5.62

Relative Return vs Barclays Baa Credit 3% In



Cumulative Returns vs Barclays Baa Credit 3% In



Western Asset Management Company
Period Ended June 30, 2016

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.

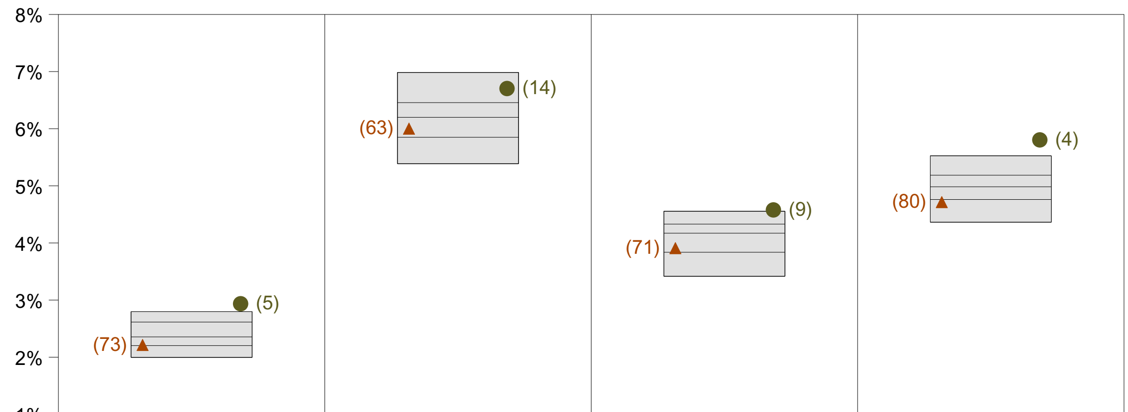
Quarterly Summary and Highlights

- Western Asset's portfolio posted a 2.94% return for the quarter placing it in the 5 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 14 percentile for the last year.
- Western Asset's portfolio outperformed the Barclays Aggregate Index by 0.72% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.70%.

Quarterly Asset Growth

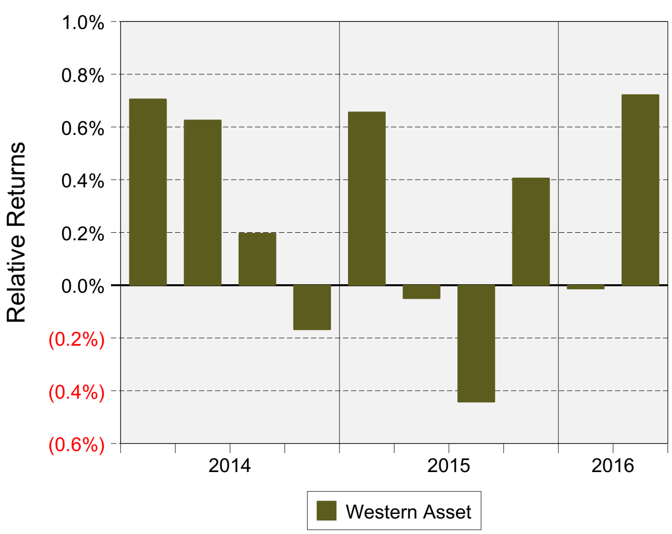
Beginning Market Value	$393,153,177
Net New Investment	$15,864,599
Investment Gains/(Losses)	$11,861,856
Ending Market Value	$420,879,632

Performance vs CAI Core Bond Fixed Income (Gross)

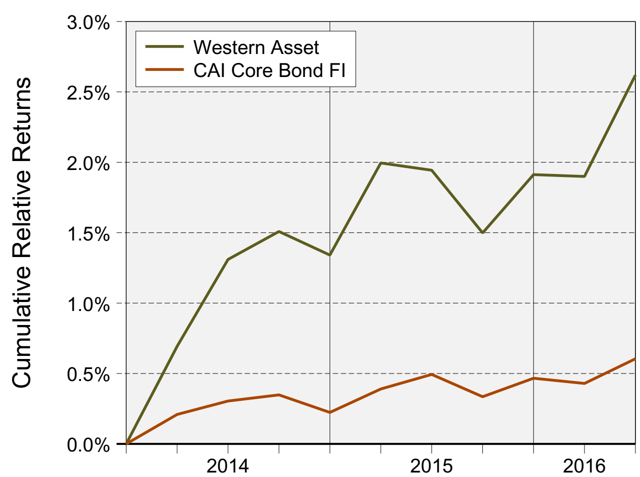


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.80	6.98	4.55	5.53
25th Percentile	2.62	6.46	4.33	5.19
Median	2.36	6.20	4.17	4.98
75th Percentile	2.20	5.85	3.84	4.76
90th Percentile	2.00	5.39	3.42	4.36
Western Asset ●	2.94	6.70	4.58	5.80
Barclays Aggregate Index ▲	2.21	6.00	3.91	4.72

Relative Return vs Barclays Aggregate Index



Cumulative Returns vs Barclays Aggregate Index



Callan

Western Asset TIPS
Period Ended June 30, 2016

Investment Philosophy

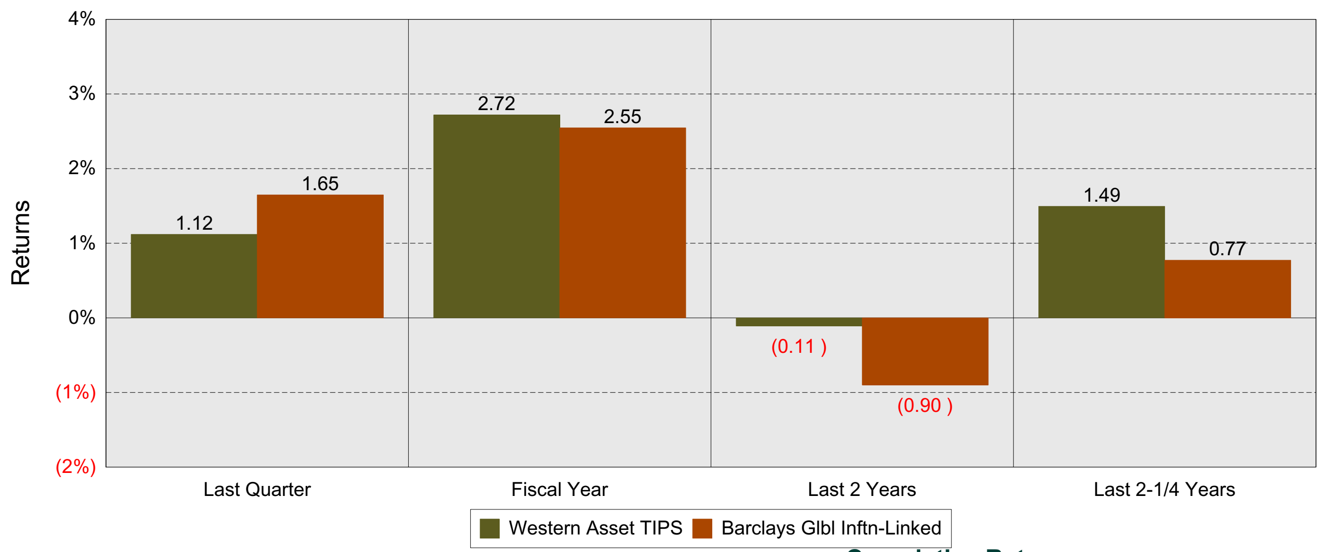
Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add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

Quarterly Summary and Highlights

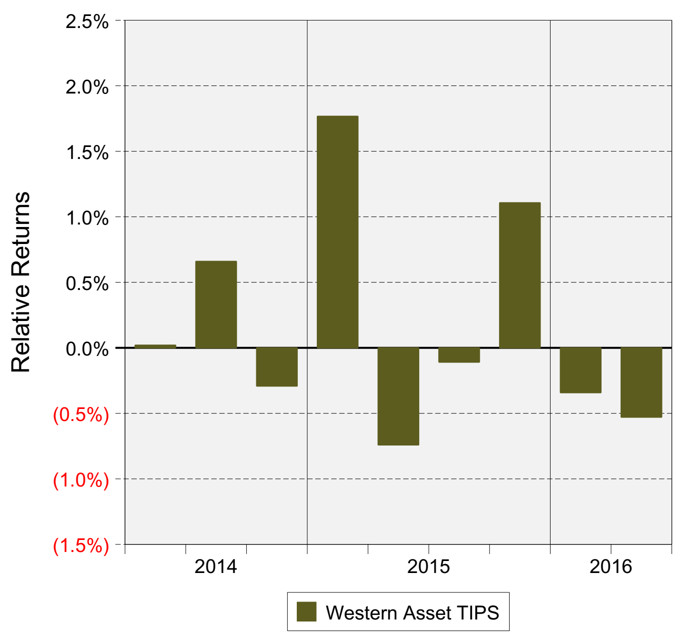
- Western Asset TIPS's portfolio underperformed the Barclays Glbl Inftn-Linked by 0.53% for the quarter and outperformed the Barclays Glbl Inftn-Linked for the year by 0.17%.

Quarterly Asset Growth

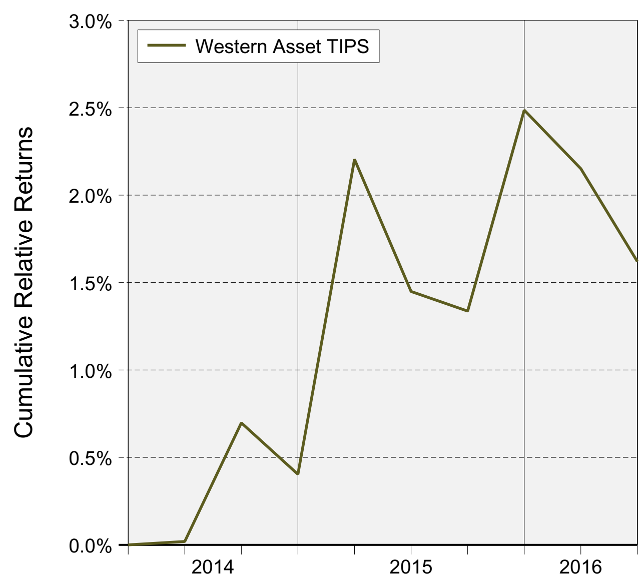
Beginning Market Value	$261,414,825
Net New Investment	$19,909,323
Investment Gains/(Losses)	$3,202,916
Ending Market Value	$284,527,063



Relative Return vs Barclays Glbl Inftn-Linked



Cumulative Returns vs Barclays Glbl Inftn-Linked



JP Morgan Infrastructure
Period Ended June 30, 2016

Investment Philosophy

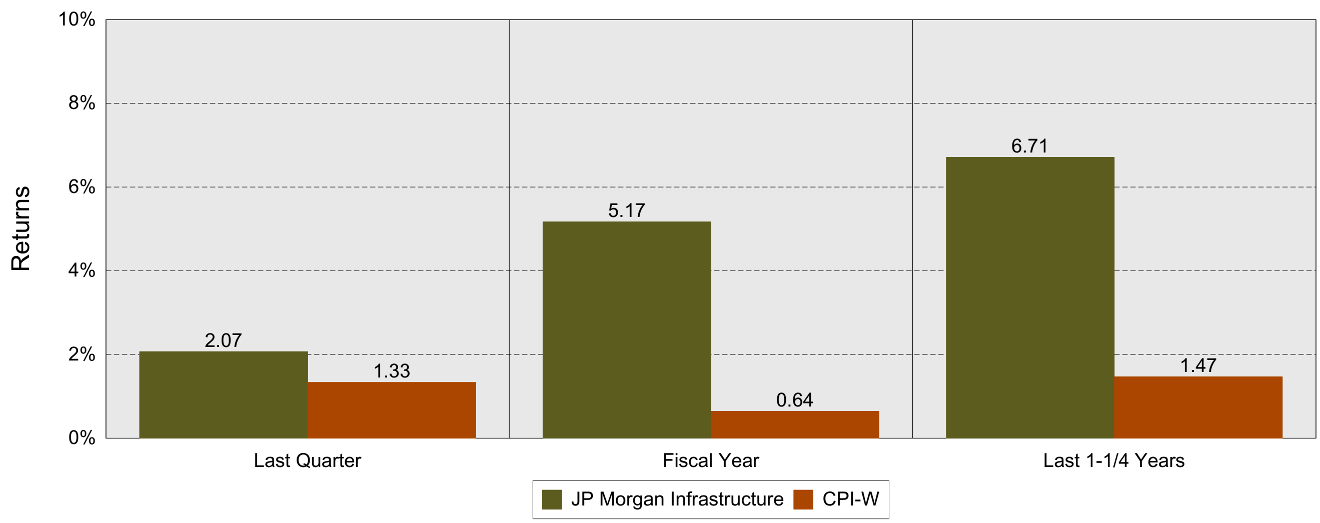
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas 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

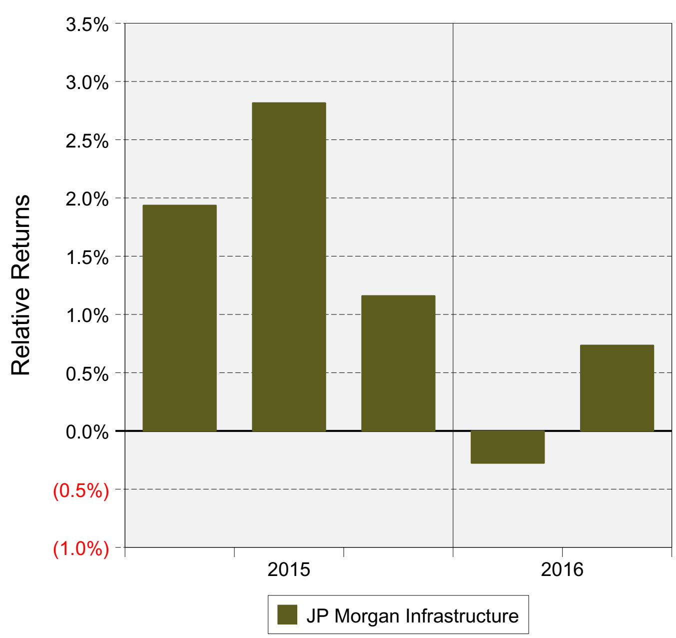
- JP Morgan Infrastructure's portfolio outperformed the CPI-W by 0.74% for the quarter and outperformed the CPI-W for the year by 4.53%.

Quarterly Asset Growth

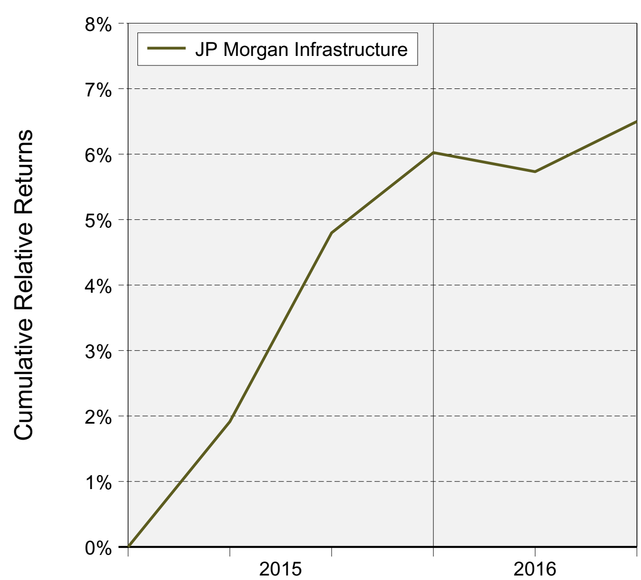
Beginning Market Value	$79,056,295
Net New Investment	$-427,775
Investment Gains/(Losses)	$1,637,450
Ending Market Value	$80,265,971



Relative Return vs CPI-W



Cumulative Returns vs CPI-W



Grosvenor Cust. Infrastructure
Period Ended June 30, 2016

Investment Philosophy

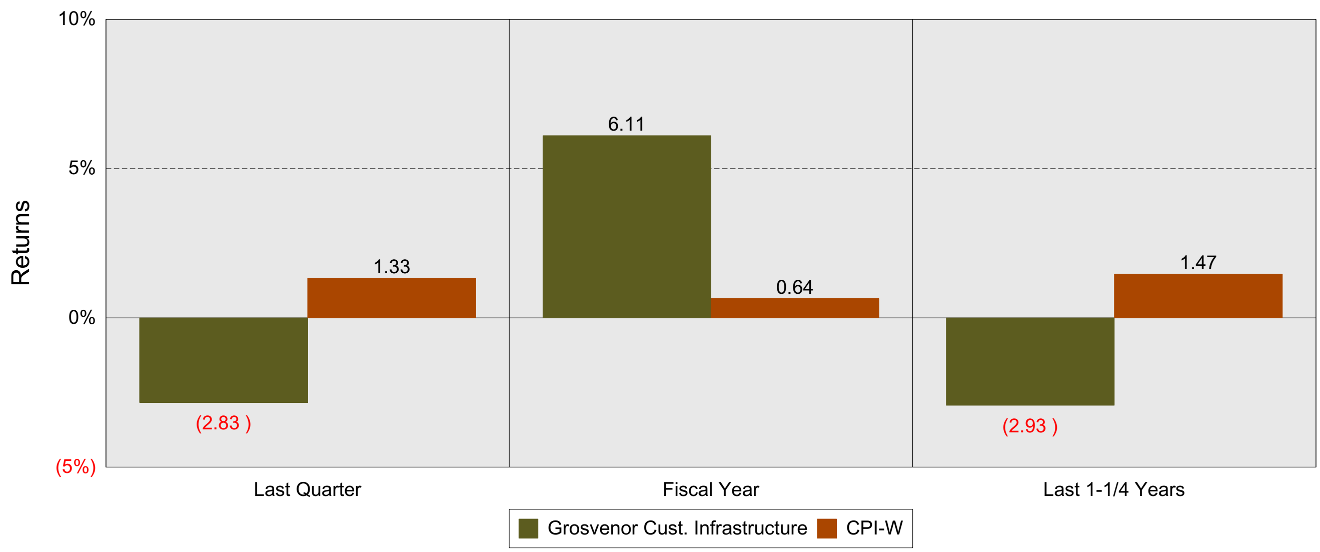
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified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

Quarterly Summary and Highlights

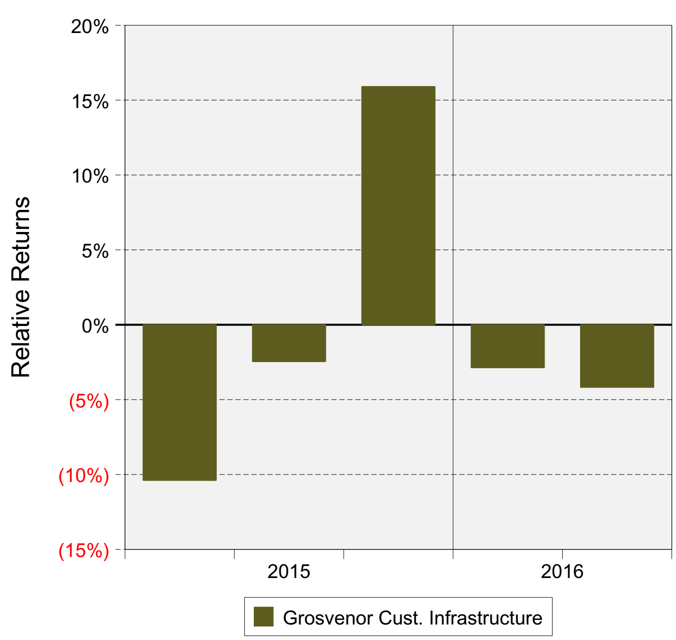
- Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 4.17% for the quarter and outperformed the CPI-W for the year by 5.46%.

Quarterly Asset Growth

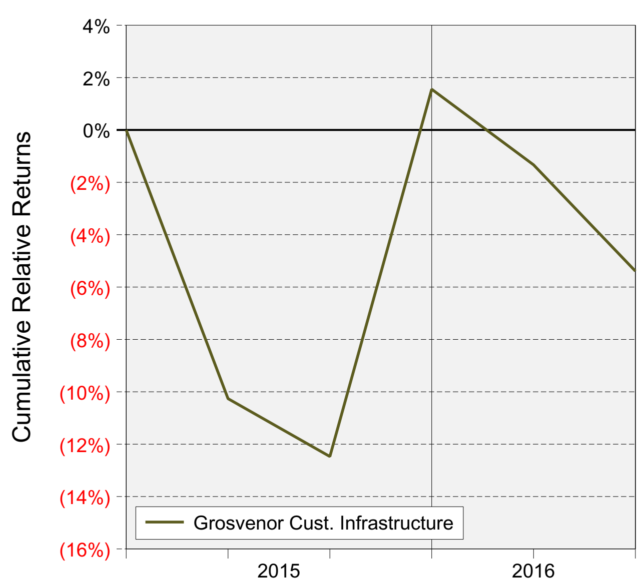
Beginning Market Value	$14,532,507
Net New Investment	$-4,695,519
Investment Gains/(Losses)	$-212,634
Ending Market Value	$9,624,354



Relative Return vs CPI-W



Cumulative Returns vs CPI-W



Invesco Core Real Estate
Period Ended June 30, 2016

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.

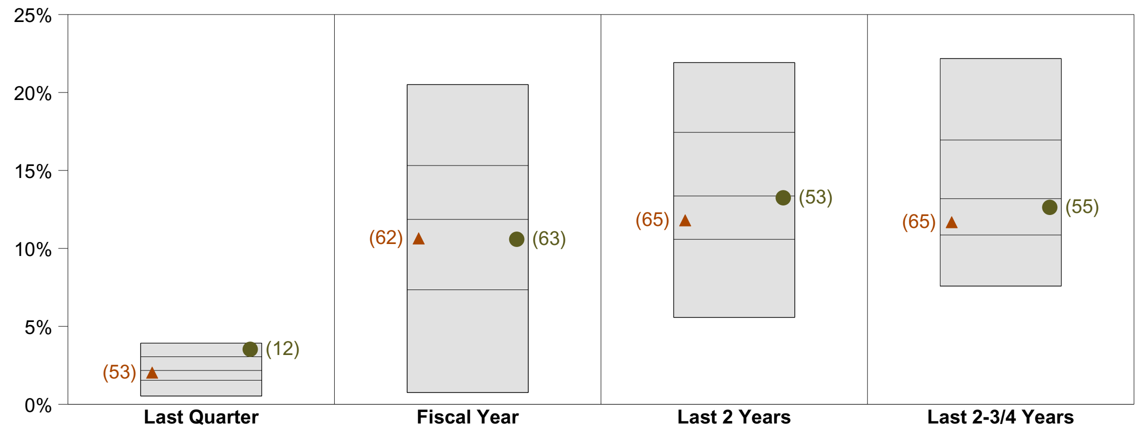
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 3.53% return for the quarter placing it in the 12 percentile of the CAI Total Domestic Real Estate Database group for the quarter and in the 63 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF Total Index by 1.50% for the quarter and underperformed the NCREIF Total Index for the year by 0.05%.

Quarterly Asset Growth

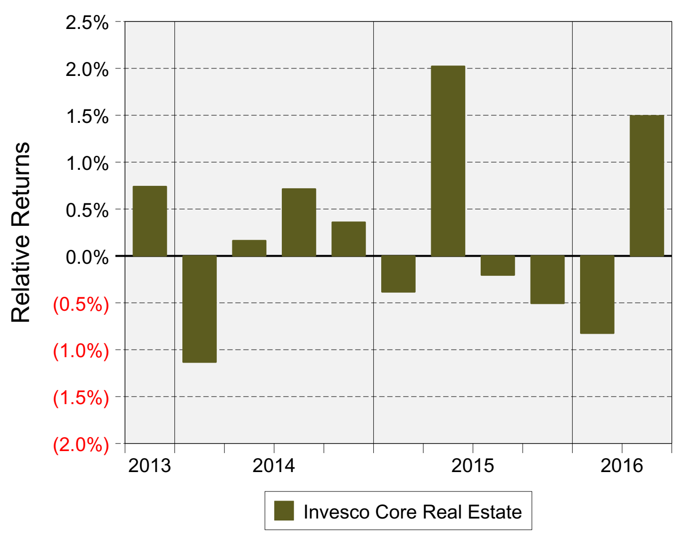
Beginning Market Value	$113,455,613
Net New Investment	$-103,600
Investment Gains/(Losses)	$4,106,341
Ending Market Value	$117,458,354

Performance vs CAI Total Domestic Real Estate Database (Net)

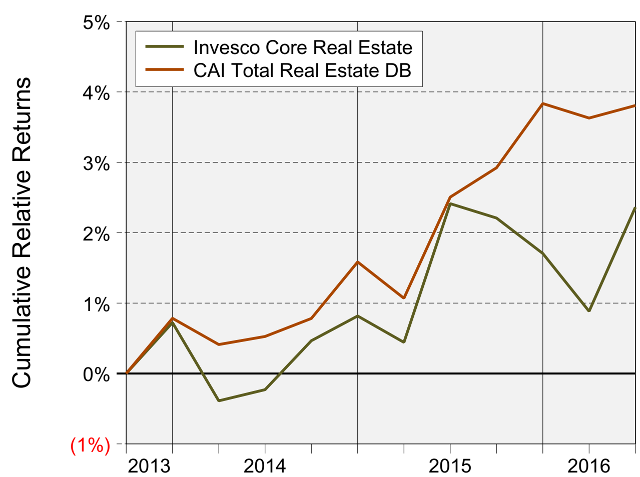


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	3.92	20.51	21.92	22.18
25th Percentile	3.05	15.32	17.44	16.95
Median	2.17	11.86	13.36	13.19
75th Percentile	1.54	7.35	10.58	10.86
90th Percentile	0.53	0.75	5.57	7.58
Invesco Core Real Estate ●	3.53	10.59	13.25	12.63
NCREIF Total Index ▲	2.03	10.64	11.80	11.68

Relative Return vs NCREIF Total Index



Cumulative Returns vs NCREIF Total Index



JP Morgan RE Inc & Growth
Period Ended June 30, 2016

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.

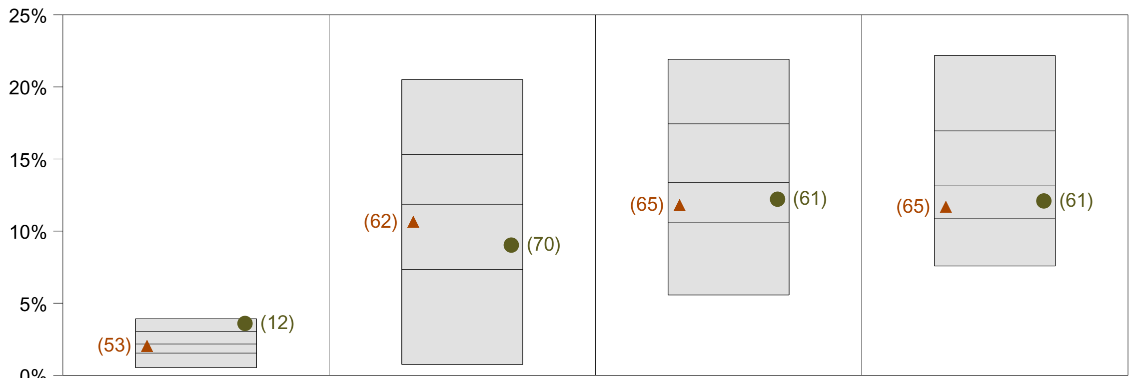
Quarterly Summary and Highlights

- JP Morgan RE Inc & Growth's portfolio posted a 3.60% return for the quarter placing it in the 12 percentile of the CAI Total Domestic Real Estate Database group for the quarter and in the 70 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio outperformed the NCREIF Total Index by 1.56% for the quarter and underperformed the NCREIF Total Index for the year by 1.61%.

Quarterly Asset Growth

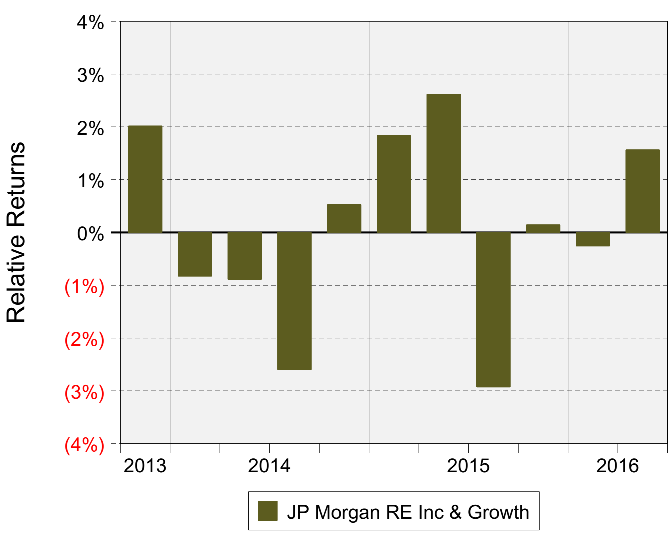
Beginning Market Value	$93,865,541
Net New Investment	$29,948,823
Investment Gains/(Losses)	$3,374,533
Ending Market Value	$127,188,897

Performance vs CAI Total Domestic Real Estate Database (Net)

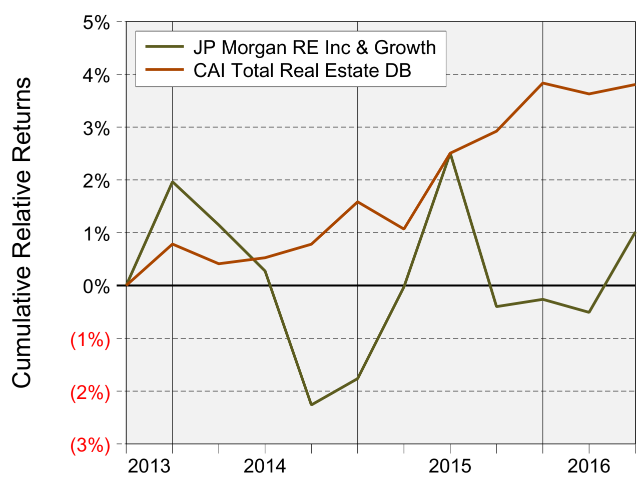


	Last Quarter	Fiscal Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	3.92	20.51	21.92	22.18
25th Percentile	3.05	15.32	17.44	16.95
Median	2.17	11.86	13.36	13.19
75th Percentile	1.54	7.35	10.58	10.86
90th Percentile	0.53	0.75	5.57	7.58
JP Morgan RE Inc & Growth ●	3.60	9.03	12.21	12.09
NCREIF Total Index ▲	2.03	10.64	11.80	11.68

Relative Return vs NCREIF Total Index



Cumulative Returns vs NCREIF Total Index



Callan

CALLAN
INSTITUTE

2nd Quarter 2016

Education

Research and Educational Programs

The Callan Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit www.callan.com/research to see all of our publications, or for more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

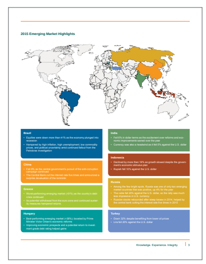
Aspiring Managers: Negotiating the Dual Realities Facing Diverse and Emerging Managers | Callan Chairman and CEO Ron Peyton and Callan Connects Manager Lauren Mathias, CFA, provide perspective on the diverse and emerging manager arenas and offer thoughts on how these managers can succeed.

Asset Managers and ESG: Sensing Opportunity, Bigger Firms Lead the Charge | In Callan's ESG survey of asset managers, author Mark Wood, CFA, reveals that the majority of large asset management firms have formal ESG policies, while smaller firms have yet to exhibit widespread adoption. Around one-third of managers with a formal ESG policy expect it will help them achieve higher risk-adjusted returns and improved risk profiles over the long term.

Video: Sustainability in Real Estate Investing | Sarah Angus, CAIA, a consultant in Callan's Real Assets Consulting group, discusses the benefits in using sustainable practices in managing real estate buildings, including higher tenant satisfaction and retention, greater occupancy, and increased values.

Considering Currency Hedging in an Equity Portfolio: 10 Charts to Help Frame a Policy | Callan recommends a measured approach to managing currency, including creating a policy to ensure short-term decisions made during painful times are in line with the long-term strategic goals of the plan. These 10 charts provide context for currency hedging discussions.

Video: The Costs of Closing: Nuclear Decommissioning Trusts | Julia Moriarty, CFA, of Callan's Capital Markets Research group discusses hedging costs, the impact of license extension, and more.



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Market Pulse Flipbook, 1st Quarter 2016 | A guide covering investment and fund sponsor trends, the U.S. economy, the capital markets, and Callan's proprietary DC Index.

Capital Market Review, 1st Quarter 2016 | Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

Inside Callan's Database, 1st Quarter 2016 | A look at performance and risk data from Callan's proprietary database and relevant market indices.

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/

Mark your calendars for our fall **Regional Workshop**, October 25 in New York and October 26 in Chicago, and our **National Conference**, January 23–25, 2017, at the Palace Hotel in San Francisco.

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 session is:

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"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

Callan

Quarterly List as of
June 30, 2016

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please 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
1607 Capital Partners, LLC
Aberdeen Asset Management PLC
Acadian Asset Management LLC
AEGON USA Investment Management
Affiliated Managers Group, Inc.
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investment Management
Amundi Smith Breeden LLC
Analytic Investors
Angelo, Gordon & Co.
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artisan Holdings
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Babson Capital Management
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Asset Management, Corp.
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC

Manager Name
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investment Advisers, LLC
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cornerstone Capital Management
Cramer Rosenthal McGlynn, LLC
Crawford Investment Counsel, Inc.
Credit Suisse Asset Management
Crestline Investors, Inc.
DE Shaw Investment Management, LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt. Co.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Global Asset Management
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
Fisher Investments
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management, Inc.
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GE Asset Management

Manager Name
GMO
Goldman Sachs Asset Management
Grand-Jean Capital Management
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Institutional Capital LLC
INTECH Investment Management, LLC
Invesco
Investec Asset Management
Janus Capital Management, LLC
Jensen Investment Management
J.P. Morgan Asset Management
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
Martin Currie Inc.
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
Nuveen Investments, Inc.
OFI Global Asset Management
Old Mutual Asset Management
Opus Capital Management Inc.
Pacific Investment Management Company

Manager Name
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PGIM
PineBridge Investments
Pinnacle Asset Management L.P.
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
RidgeWorth Capital Management, Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
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.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
The Boston Company Asset Management, LLC
The Hartford
The London Company
The TCW Group, 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)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
William Blair & Company

Board Education: Governance Meeting Review

August 26, 2016

Dave Hunter, Executive Director / CIO
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)

What is Governance?

- Governance is the framework by which an organization exercises authority or control over the decision making process (including the process by which decisions are implemented or not implemented).

What are Some Essential Elements of "Good" Governance?

- Accountability
- Transparency
- Accurate documentation
- Fairness
- Effectiveness and efficiency
- A participatory process (Inclusiveness)
- Consensus oriented
- Adherence to rules (applicable law(s) and policies)
- Responsiveness (designed to serve best interest of beneficiaries and participants)

Empower Results®

Why is Good Governance Important?

"Good governance helps to ensure better organizational performance, fewer conflicts of interest, higher probability that goals and objectives will be attained, and less opportunity for misuse of corporate or fund assets."

The Stanford Institutional Investors' Forum
Peter Clapman, Chair, May 31, 2007

KEY: Good governance does not guarantee positive investment results, but good governance improves the probability of goals being achieved.

"Good Governance Adds Value" by Increasing Fiduciary Control, Reducing Risk and Building Stakeholder Confidence

- Good governance helps boards to meet their fiduciary responsibilities
- Good governance helps to prevent fiduciary breaches and minimize risk
- Good governance fosters stakeholder confidence
- Good governance adds tangible value*
  - Studies show that good governance is associated with increased returns

Aon Empower Results®

* "Good Governance Adds Value", a study published by Rotman International Journal of Pension Management, found that better governed pension funds outperformed poorly governed funds by 2.4% per annum during the 4-year period ending 12/2003. A similar study for the period 1993-1996 found a 1% annual good governance performance dividend. Capelle, Ronald, Lunn, Hubert and Ambachtsheer, Keith, "The Pension Governance Deficit: Still with Us" (October, 2008), Rotman International Journal of Pension management, Vol. 1, 2008, at SSRN: http://ssrn.com/abstract=1280907.

<u>RIO Commentary</u>: SIB client returns have benefitted from "good governance", including the prudent use of active management in recent years. RIO estimates that "good governance" has enhanced SIB client net returns by over 0.50% or $200+ million for the 5-years ended June 30, 2016.

Does the current governance model meets the SIB's needs?

<u>Director's Commentary</u>:

Board members generally agreed that the current governance model (which is based on Carver, but incorporates components of other widely used models), <u>meets the overall needs and desires of the SIB</u>.

<u>Developmental Areas</u>:

There was <u>a desire to enhance stakeholder confidence</u> and the SIB and RIO team will work to develop a plan to foster greater stakeholder confidence with regards to our investment processes and results.

<u>Board Member Discussion</u>:

The following one page slide is intended to highlight five key points which RIO deems to be important. Board member discussion is encouraged to help us to continue to foster greater stakeholder confidence.

"Fostering Stakeholder Confidence" by Increasing Public Awareness of SIB Activities

Increasing Investment Returns By Over $200 million in the Last Five-Years - The SIB has a fundamental investment belief that the prudent use of active investment management can help our clients achieve their long term goals (noting that asset allocation decisions are the primary driver of long-term investment success). For the five years ended June 30, 2016, SIB client investment returns have been increased by over $200 million (or 0.50%) as a result of selecting investment firms which outperformed passive benchmarks, after paying all investment fees.

Reducing Investment Fees by Over $20 million/year - SIB cost savings efforts have reduced investment management fees from 0.65% in fiscal 2013 to approximately 0.45% in fiscal 2016 – this translates into over $20 million of annual savings based on current asset levels.

Noteworthy Achievements - RIO has received the Certificate of Achievement for Excellence in Financial Reporting for 18 consecutive years from the Government Finance Officers Association. TFFR has also received the Public Pension Standards Award for Funding and/or Administration for eight consecutive years from the Public Pension Coordinating Council.

SIB Client Investment Income Approximated $2.2 billion the Last Five-Years - SIB client assets have doubled in the last 5-years going from $5.6 billion at June 30, 2011, to $11.3 billion as of June 30, 2016. This growth has resulted from $3.5 billion in client contributions and $2.2 billion of investment income (including $200+ million of excess return), while maintaining strong client satisfaction ratings.

Supporting North Dakota Business Development - The SIB approved the transfer of the $200 million BND Match Loan CD program from the Budget Stabilization Fund to the Legacy Fund, as recommended by the Advisory, in order to preserve this important program which raised a billion of financing to support businesses desiring to establish significant operations in North Dakota.

Governance Model Alignment with our Strategic Beliefs

- **Reaffirm organizational commitment to our current governance structure.**
  - **Annual governance training provided by leading industry experts serve as the focal point of our July board meetings the last two years. (Keith Ambachtsheer of KPA Advisory Services in 2015 and Jeanna Cullins of Aon Hewitt in 2016)**

- **Maintain a persistent awareness to the importance of continuing board education.**
  - **Emphasize continuing board education at SIB meetings and promote the attendance of educationally focused industry conferences.**

Callan

CALLAN INSTITUTE

2nd Quarter 2016

Education

Research and Educational Programs

The Callan Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit www.callan.com/research to see all of our publications, or for more information contact Anna West at 415.974.5060 / institute@callan.com.

New Research from Callan's Experts

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NDRIO 2015-17 Strategic Investment Plan

Fundamental Investment Beliefs

Asset allocation decisions are the primary driver of investment returns, but the prudent use of active investment management is an important contributor towards ensuring our clients attain their stated investment objectives. SIB clients generated over $200 million of incremental income via the prudent use of active investment management over the past five years including over $120 million during the last three years (net of fees).

Strategic Investment Plan

1. Reaffirm the organizational commitment to our current governance structure including a persistent awareness to the importance of continuing board education.

2. Enhance transparency and understanding of our core goals and beliefs.
   a. Remain steadfast in our commitment to the prudent use of active investment management.
   b. Expand awareness to downside risk management which is essential to achieving our long term investment goals.
   c. Given actual and projected growth of SIB client assets and the heightened public awareness of the Legacy Fund, align our investment platforms to promote greater clarity and efficiency in reporting and implementing client investment policies.

3. Expand RIO's influence and ability to create positive and sustainable change by developing relationships with existing clients, organizations and legislative leaders.
   a. Enhance community outreach to build upon public awareness and confidence.
   b. Develop concise presentations which highlight our overall risk, return and cost control framework including our progress towards attaining our long-term goals.

4. Heighten employee engagement by promoting an open and collaborative work environment while encouraging employee participation in staff meetings, offer more opportunities to impact RIO's change initiatives and improve overall compensation levels.
   a. RIO's ability to continue to deliver strong results is dependent on the combined efforts of our highly valuable team members.

5. Enhance our existing risk management tools and processes by developing a more robust risk management framework utilizing proven risk management solutions with a focus on portfolio construction and downside risk management (or "stress test" scenarios).
   a. A robust risk management framework provides a foundation to understand downside risks and our ability to withstand market corrections in varying stress test scenarios.

6. Evaluate and expand the efficient use of technology in our investment program activities including risk management, compliance monitoring, client satisfaction surveys, website design and communications in order to increase overall efficiency and effectiveness.

RIO's Mission Statement

RIO's "Mission" is defined in SIB Governance Policy D-1 on "Ends".

The Retirement and Investment Office serves the SIB and exists in order that:

1) SIB clients receive investment returns, consistent with their written investment policies and market variables, in a cost effective investment manner and under the Prudent Investor Rule. **D-3**
2) Potential SIB clients have access to information regarding SIB's investment services. **D-4**
3) TFFR benefit recipients receive their retirement benefits in a cost effective and timely manner. **D-5**
4) TFFR members have access to information which will allow them to become knowledgeable about the issues and process of retirement. **D-6**
5) SIB clients and TFFR benefit recipients receive satisfactory services from the boards and staff. **D-7**

Mission Accomplishments:

1) Every SIB client generated positive excess returns for the 5-years ended June 30, 2016, with one exception (PERS Retiree Health) while adhering to approved investment guidelines and noting that management fees have declined from 0.65% to 0.45% in the last three fiscal years (2013 to 2016).
2) RIO implemented a transparency enhancement initiative in late-2015 which enhanced public access to our website by adding new hyperlinks for our governance manual, audit charter and meeting materials (including our quarterly investment performance reviews).
3) RIO's internal audit team conducted reviews which provide reasonable assurance that TFFR benefit recipients receive their retirement benefits in a cost effective and timely manner.
4) TFFR member surveys support management's belief that members have access to information which will allow them to become knowledgeable about retirement issues and processes.
5) SIB and TFFR client surveys confirm that the boards and staff provide satisfactory services.

SIB Gov. Policy D-2 RIO clients are those which are statutorily defined and those which have been contracted for services under statutory authority.

Annual Board Planning Cycle – Biennial Agenda

Approved by the SIB on April 24, 2016

Annual Board Planning Cycle
Biennial Agenda

Fiscal 2015-16	July 2015	August	September	October	November	December	January 2016	February	March	April	May	June
	Gov. Offsite - Election of Officers, - Appoint Audit Comm. - Plan Annual Agenda - Plan Board Education	**Annual Investment Performance Review** - Establish Investment Work Plan - Add Invest. Education	**Annual Review of Gov. Manual** *(Done)* - New Board Member Orientation Complete	**Annual Evaluation of RIO vs. *Ends* policies** - Annual Board Evaluation	**Investment Director Report on Investment Work Plan**	No Meeting Scheduled		**Investment Director Report on Investment Work Plan** - Executive Limitations Review	**Review Budget Guidelines for next Biennium**	**Review "Ends" Policies, Biennial Agenda, Strategic Plan and Budget Guidelines**	**Investment Director Report on Investment Work Plan** **ED/CIO Review** - Investment Guidelines	No Meeting Scheduled

Fiscal 2016-17	July 2016	August	September	October	November	December	January 2017	February	March	April	May	June
The SIB Meeting Agenda has not been establised for Fiscal 2016-17	**Gov. Offsite** - Election of Officers, - Appoint Audit Comm. - Plan Annual Agenda - Plan Board Education	**Annual Investment Performance Review** - Establish Investment Work Plan - Add Invest. Education	**Annual Review of Gov. Manual** - New Board Member Orientation Complete	**Annual Evaluation of RIO vs. *Ends* policies** - Annual Board Evaluation	**Investment Director Report on Investment Work Plan**	No Meeting Planned	- Legislative Update	**Investment Director Report on Investment Work Plan** - Executive Limitations Review	**Confirm Budget Guidelines** - Legislative Update	**Review Biennial Agenda, End Policies, Strategic Investment Plan and Budget Guidelines**	**Investment Director Report on Investment Work Plan** **ED/CIO Review** - Investment Guidelines	No Meeting Planned

1.) SIB Governance Policy B-7 on Governance Process states that "the Board will follow a biennial agenda which (a) completes a re-exploration of Ends policies annually (April) (which is also referred to as "RIO's Mission Statement") and (b) continually improves its performance through attention to board education and to enriched input and deliberation."

2.) "In the first three months of the new cycle, the Board will develop its agenda for the ensuing year. Scheduled monitoring will be used to evaluate and adjust the annual agenda as needed."

3.) "The Board will identify areas of education and input needed to increase the level of wisdom forethought it can give to subsequent choices. A board education plan will be developed during July and August of each year."

4.) Budget Guidelines: RIO will prepare and submit a biennial budget pursuant to OMB guidelines as established by the Governor which will not reduce the level of service provided by RIO. Expenditures for budget items will not exceed the appropriation without approval of the State Investment Board.

Date: April 14, 2016

ND RETIREMENT AND INVESTMENT OFFICE
ND STATE INVESTMENT BOARD
INVESTMENT PERFORMANCE SUMMARY
AS OF JUNE 30, 2016

		Investment Performance (net of fees)																
		Quarter Ended					Fiscal Years ended June 30					Periods ended 6/30/16 (annualized)						
Fund Name	Market Values as of 6/30/16	9/30/15	12/31/15	3/31/16	6/30/16	FYTD 2016	2015	2014	2013	2012	2011	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
Pension Trust Fund																		
Teachers' Fund for Retirement (TFFR)	2,082,183,640	-4.98%	2.72%	1.31%	1.41%	0.28%	3.52%	16.53%	13.57%	-1.12%	24.05%	6.55%	6.32%	4.45%	5.51%	6.48%	7.48%	7.73%
Public Employees Retirement System (PERS)	2,459,388,086	-5.04%	2.71%	1.33%	1.47%	0.28%	3.53%	16.38%	13.44%	-0.12%	21.27%	6.51%	6.48%	4.81%	5.84%	6.88%	7.86%	7.89%
City of Bismarck Employees Pension	82,441,003	-4.25%	2.17%	1.34%	1.70%	0.82%	3.69%	14.56%	12.41%	1.57%	20.32%	6.20%	6.46%	5.16%	5.84%	6.86%	7.79%	*
City of Bismarck Police Pension	33,983,598	-4.76%	2.34%	1.25%	1.66%	0.32%	3.56%	15.27%	13.03%	1.31%	21.10%	6.19%	6.52%	5.02%	5.73%	6.71%	7.68%	*
Job Service of North Dakota Pension	96,588,333	-3.12%	3.38%	2.95%	2.27%	5.45%	3.30%	13.54%	11.71%	3.09%	16.39%	7.34%	7.33%	6.00%	6.11%	7.57%	*	*
City of Grand Forks Employees Pension	57,975,758	-5.32%	2.80%	1.26%	1.58%	0.11%	3.53%	16.33%	14.01%	1.09%	21.64%	6.43%	6.80%	*	*	*	*	*
Park District of the City of Grand Forks Pension	5,720,245	-4.89%	3.32%	0.88%	1.24%	0.36%	4.22%	16.44%	14.43%	0.86%	20.98%	6.80%	7.05%	*	*	*	*	*
Subtotal Pension Trust Fund	4,818,280,663																	
Insurance Trust Fund																		
Workforce Safety & Insurance (WSI)	1,832,104,203	-1.92%	1.18%	2.04%	2.29%	3.58%	3.26%	11.71%	8.31%	6.17%	13.23%	6.11%	6.56%	5.66%	5.58%	6.78%	7.39%	*
State Fire and Tornado Fund	24,091,203	-2.89%	1.76%	1.79%	2.07%	2.67%	3.16%	12.78%	10.59%	4.93%	14.52%	6.10%	6.75%	5.87%	5.65%	6.43%	6.58%	*
State Bonding Fund	3,296,372	0.21%	-0.11%	1.57%	1.78%	3.48%	1.25%	4.06%	2.96%	5.31%	5.01%	2.92%	3.40%	2.07%	3.24%	4.60%	5.17%	*
Petroleum Tank Release Compensation Fund	7,149,512	0.20%	-0.10%	1.43%	1.62%	3.17%	1.13%	3.68%	2.47%	4.84%	4.97%	2.65%	3.05%	1.82%	2.97%	4.47%	*	*
Insurance Regulatory Trust Fund	1,085,836	-2.58%	1.53%	1.22%	1.33%	1.46%	2.04%	9.88%	8.49%	2.82%	11.61%	4.39%	4.88%	4.63%	4.75%	5.67%	5.68%	*
State Risk Management Fund	6,534,801	-2.08%	1.50%	2.26%	2.78%	4.46%	4.08%	12.29%	10.19%	7.63%	14.36%	6.88%	7.68%	6.59%	5.86%	*	*	*
State Risk Management Workers Comp Fund	5,516,177	-2.65%	1.90%	2.20%	2.78%	4.21%	4.57%	13.68%	11.61%	7.40%	16.23%	7.40%	8.23%	6.74%	*	*	*	*
Cultural Endowment Fund	386,452	-4.39%	3.00%	1.59%	2.14%	2.18%	5.22%	16.94%	15.58%	4.65%	21.33%	7.93%	8.75%	6.33%	*	*	*	*
Budget Stabilization Fund	575,918,381	0.27%	-0.34%	1.06%	0.82%	1.82%	1.86%	1.94%	1.87%	2.03%	3.73%	1.88%	1.91%	2.11%	*	*	*	*
ND Association of Counties (NDACo) Fund	4,048,863	-2.50%	1.49%	1.79%	2.02%	2.76%	2.77%	11.61%	9.46%	1.69%	17.73%	5.63%	5.58%	4.73%	4.97%	*	*	*
Bismarck Deferred Sick Leave Account	642,265	-2.48%	1.47%	2.04%	2.27%	3.26%	2.95%	12.32%	9.83%	5.69%	13.80%	6.09%	6.75%	6.08%	5.86%	*	*	*
City of Fargo FargoDome Permanent Fund	38,782,721	-4.50%	2.40%	1.60%	1.84%	1.19%	3.38%	16.34%	13.46%	3.14%	19.16%	6.76%	7.33%	5.97%	*	*	*	*
State Board of Medicine Fund	2,208,667	-1.66%	0.88%	1.26%	1.16%	1.63%	2.70%	*	*	*	*	*	*	*	*	*	*	*
PERS Group Insurance Account	37,715,356	0.00%	-0.08%	0.94%	0.62%	1.49%	0.01%	0.06%	0.27%	0.24%	0.31%	0.52%	0.41%	1.25%	1.64%	*	*	*
Subtotal Insurance Trust Fund	2,539,480,809																	
Legacy Fund	3,809,485,177	-4.42%	2.46%	1.55%	1.62%	1.06%	3.31%	6.64%	1.15%	*	*	3.65%	*	*	*	*	*	*
Tobacco Control and Prevention Fund	54,366,538	*	*	*	0.65%	*	*	*	*	*	*	*	*	*	*	*	*	*
PERS Retiree Insurance Credit Fund	101,623,224	-5.59%	2.82%	1.56%	2.17%	0.72%	3.06%	16.53%	12.71%	2.62%	21.65%	6.55%	6.95%	5.13%	5.23%	6.40%	7.17%	*
Total Assets Under SIB Management	11,323,236,410																	

* These funds do not have the specified periods of history under SIB management.

Note: Asset allocation largely drives investment performance. Each fund has a unique allocation that takes into consideration return objectives, risk tolerance, liquidity constraints, and unique circumstances. Such considerations must be taken into account when comparing investment returns. **All figures are preliminary and subject to revision.**

AGENDA ITEM IV. B.

TO: State Investment Board

FROM: Dave Hunter and Darren Schulz

DATE: August 22, 2016

SUBJECT: Recommended Education – Callan College and Callan National Conference

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Based on SIB member discussion at our last board meeting, RIO will schedule a Callan College education session on March 27, 2017. This board education session will take the place of our regularly scheduled board meeting.

Callan College Investment Onsite – Bismarck (March 27, 2017):

This session is designed to enhance board member knowledge of investment theory, terminology and practices. It is designed for individuals with less than three years of experience in asset management oversight and/or fund sponsor responsibilities. Proposed topics will include:

- A description of the different parties involved in the investment management process, including their roles and responsibilities;
- A brief outline of the types and characteristics of different plans from a public pension place perspective (i.e. defined benefit, defined contribution, intergenerational wealth funds, reserve funds and operating funds);
- An introduction to fiduciary issues as they pertain to public fund management and oversight;
- An overview of capital markets theory, asset allocation; characteristics of various asset classes, and the processes by which fiduciaries implement their investment decisions;
- An overview of manager structure within U.S. public pension plans, performance measurement processes and current trends.

Callan National Conference – San Francisco (January 23-25, 2017):

Callan's National Conference consists of general sessions with presentations by world, political, arts, science, and investment industry speakers. The general sessions are followed by smaller break-out sessions on timely industry topics led by Callan specialist. Attendees include fund sponsors from the public and private sectors, investment managers and Callan associates. It is well suited for all board members, particularly those with three or more years of experience.

Topics from last year included a global economic update by Richard Fisher, former President and CEO of the Federal Reserve Bank of Dallas, along with a capital markets panel moderated by Dawn Fitzpatrick of UBS and Jal Kloepfer of Callan. Olivia Mitchel, named one of the top 10 woman economists by the World Economic Forum talked about the risk global aging, while Tali Sharot, a leading expert on human decision making, spoke about how people make decisions and how beliefs about future risks affect today's action. Nader Mousavizadeh, a highly regarded global thinker, discussed geopolitical issues and globalization. There were also numerous workshops on Environmental, Social and Governance (ESG) issues, plan sponsor trends and multi-asset class strategies among others.

AGENDA ITEM IV.C.

TO: State Investment Board

FROM: Dave Hunter and Darren Schulz

DATE: August 22, 2016

SUBJECT: Asset Class Definitions and Callan Glossary of Investment Terms

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An "Overview of Asset Class Definitions" is attached along with Callan's latest "Glossary of Investment Terms". These reference materials are provided for informational purposes only.

Overview of Asset Class Definitions

There are three major asset classes:

1. **Equity**
2. **Debt**
3. **Real Assets** (or Other)

Alternative Investments are often cited as the fourth major asset class, but can frequently be re-classified into one of the other three categories with some exceptions (i.e. total return strategies using debt and equity).

Equity investments represent an ownership claim on the residual assets of a company after paying off debt.

Equities should be segregated into two major sectors, Public and Private, given major differences in liquidity:

1. Public equities are generally highly liquid and *valued on a daily basis* in the financial markets. Examples include common stock (Apple, Coca-Cola or McDonalds), options and futures.
2. Private equities are generally less liquid and often *valued on a less frequent basis* (monthly or quarterly). Major private equity firms include Adams Street Partners, Apollo, Bain, BlackRock, Blackstone, Carlyle, KKR, Pantheon, Pathway and TPG.

Public equity markets are often sub-classified by geographic region (U.S., International or Global), market capitalization (Large, Medium or Small), investment style (core, growth or value) and level of economic development (developed or emerging markets). The top U.S. and global equity benchmarks are discussed below.

Five major U.S. equity benchmarks include the **S&P 500, Russell 1000, 2000 and 3000,** and **Dow Jones Industrial Average ("Dow")**. The **S&P 500** is based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The **Russell 1000** represents the highest-ranking 1,000 stocks in the Russell 3000 Index, and represents about 90% of the total market capitalization of that index. The Russell 1000 has a weighted average market capitalization of over $100 billion with a median of approximately $8 billion. The **Russell 2000 Index** is a small-cap index and represents the bottom 2,000 stocks in the Russell 3000 Index. The Russell 2000 has a weighted average market capitalization of less than $2 billion with a median of less than $1 billion. The Russell 2000 is the most common benchmark for funds that identify themselves as "small-cap", while the **S&P 500** index is used primarily for large capitalization stocks. The **Dow** is a price-weighted measure of 30 U.S. blue-chip companies. **The Dow** covers all industries with the exception of transportation and utilities, which are covered by the Dow Jones Transportation Average and Dow Jones Utility Average. While stock selection is not governed by quantitative rules, a stock typically is added to The Dow only if the company has an excellent reputation, demonstrates sustained growth and is of interest to a large number of investors. Maintaining adequate sector representation within the indices is also a consideration in the selection process.

The **MSCI All Country World Index** (or "ACWI") measures the equity market performance of developed and emerging markets and consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market countries are listed below. The **MSCI EAFE Index (Europe, Australasia, Far East)** measures the equity market performance of the developed market countries, excluding the US & Canada. The **MSCI Emerging Markets Index** measures equity market performance of emerging markets and consists of the following 24 countries: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

Public equity has historically provided **high investment returns with high volatility and high liquidity when compared to Bonds or Real Assets**. Currently, many investment consultants believe that Private Equity will provide an even higher investment return than Public Equity, albeit with higher volatility and less liquidity.

Debt represents a legal obligation between a borrower and a lender for a stated period of time and rate.

Debt or "Bonds" are classified as fixed or floating depending upon whether the interest rate is derived using a fixed rate (i.e. 5%) or a floating rate (i.e. Prime + 1.00%). Duration risk within fixed income is a major driver of investment risk and return particularly for longer term securities, including U.S. Treasury bonds.

Debt is often sub-classified into investment grade (rated BBB- or better) or non-investment grade (rated less than BBB- or non-rated) or by geographic region (U.S., International, Developed Markets or Emerging Markets). Debt can be issued by governments, agencies or companies and represent general obligations of the issuer or be backed by a specified pool of assets (i.e. mortgage backed securities). Bonds serve to diversify a portfolio by offering **lower volatility** than equities along with a **lower expected return and generally high liquidity**.

Real Assets represent an ownership interest in physical assets such as real estate, infrastructure (airports, toll roads), timberland and commodities (gold, oil, wheat). Real assets are expected to provide inflation hedging characteristics in periods of unanticipated inflation and diversify a portfolio consisting of debt and equity.

Alternative Investments can include precious metals, art, antiques, and financial assets such as derivatives, commodities, private equity, distressed debt and hedge funds. Real estate and forestry are also often termed alternative. Alternatives are sometimes used as a tool to reduce overall investment risk through diversification and may offer lower correlation with traditional financial investments such as stocks and bonds, although it may be difficult to determine the current market value of the asset, may be illiquid, purchase and sales costs may be high, and there may be limited historical risk and return data, all of which makes analysis complex.

Callan's 2016 Capital Markets Expectations for Return and Risk by major asset class and sector are summarized below and helpful when comparing the projected benefits and risks of each investment class.

Summary of Callan's Long-Term Capital Market Projections (2016 - 2025)

Asset Class	Index	Projected Return*	Projected Risk
Equities			
Broad Domestic Equity	Russell 3000	7.35%	18.70%
Large Cap	S&P 500	7.25%	17.95%
Small/Mid Cap	Russell 2500	7.55%	22.75%
Global ex-US Equity	MSCI ACWI ex USA	7.55%	21.30%
International Equity	MSCI World ex USA	7.25%	20.05%
Emerging Markets Equity	MSCI Emerging Markets	7.60%	27.85%
Fixed Income			
Domestic Fixed	Barclays Aggregate	3.00%	3.75%
TIPS	Barclays TIPS	3.00%	5.30%
High Yield	Barclays High Yield	5.00%	10.50%
Non-US Fixed	Barclays Global Aggregate ex-USD	1.40%	9.20%
Emerging Market Debt	EMBI Global Diversified	4.60%	9.90%
Other			
Real Estate	Callan Real Estate Database	6.00%	16.45%
Timberland	NCREIF Timberland	6.20%	17.50%
Infrastructure	S&P Global Infr / JPM Infr	6.60%	19.00%
Private Equity	TR Post Venture Capital	8.15%	32.80%
Hedge Funds	Callan Hedge FoF Database	5.25%	9.30%
Commodities	Bloomberg Commodity	2.75%	18.50%
Cash Equivalents	90-Day T-Bill	2.25%	0.90%
Inflation	CPI-U	2.25%	1.50%

** Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).*

The Callan Periodic Table of Investment Returns

Annual Returns for Key Indices Ranked in Order of Performance (1996–2015)

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
S&P 500 Growth 23.97%	S&P 500 Growth 36.52%	S&P 500 Growth 42.16%	MSCI Emerging Markets 66.42%	Russell 2000 Value 22.83%	Russell 2000 Value 14.02%	Barclays Agg 10.26%	MSCI Emerging Markets 56.28%	MSCI Emerging Markets 25.95%	MSCI Emerging Markets 34.54%	MSCI Emerging Markets 32.59%	MSCI Emerging Markets 39.78%	Barclays Agg 5.24%	MSCI Emerging Markets 79.02%	Russell 2000 Growth 29.09%	Barclays Agg 7.84%	MSCI Emerging Markets 18.63%	Russell 2000 Growth 43.30%	S&P 500 Growth 14.89%	S&P 500 Growth 5.52%
S&P 500 22.96%	S&P 500 33.36%	S&P 500 28.58%	Russell 2000 Growth 43.09%	Barclays Agg 11.63%	Barclays Agg 8.43%	Barclays Corp High Yield -1.41%	Russell 2000 Growth 48.54%	Russell 2000 Value 22.25%	MSCI EAFE 13.54%	MSCI EAFE 26.34%	MSCI EAFE 11.17%	Barclays Corp High Yield -26.16%	Barclays Corp High Yield 58.21%	Russell 2000 26.85%	Barclays Corp High Yield 4.98%	Russell 2000 Value 18.05%	Russell 2000 38.82%	S&P 500 13.69%	S&P 500 1.38%
S&P 500 Value 22.00%	Russell 2000 Value 31.78%	MSCI EAFE 20.00%	S&P 500 Growth 28.24%	S&P 500 Value 6.08%	Barclays Corp High Yield 5.28%	MSCI Emerging Markets -6.00%	Russell 2000 47.25%	MSCI EAFE 20.25%	S&P 500 Value 5.82%	Russell 2000 Value 23.48%	S&P 500 Growth 9.13%	Russell 2000 Value -28.92%	Russell 2000 Growth 34.47%	Russell 2000 Value 24.50%	S&P 500 Growth 4.65%	S&P 500 Value 17.68%	Russell 2000 Value 34.52%	S&P 500 Value 12.36%	Barclays Agg 0.55%
Russell 2000 Value 21.37%	S&P 500 Value 29.98%	S&P 500 Value 14.69%	MSCI EAFE 26.96%	Russell 2000 -3.02%	Russell 2000 2.49%	Russell 2000 Value -11.43%	Russell 2000 Value 46.03%	Russell 2000 18.33%	S&P 500 4.91%	S&P 500 Value 20.81%	Russell 2000 Growth 7.05%	Russell 2000 -33.79%	MSCI EAFE 31.78%	MSCI Emerging Markets 19.20%	S&P 500 2.11%	MSCI EAFE 17.32%	S&P 500 Growth 32.75%	Barclays Agg 5.97%	MSCI EAFE -0.81%
Russell 2000 16.49%	Russell 2000 22.36%	Barclays Agg 8.70%	Russell 2000 21.26%	Barclays Corp High Yield -5.86%	MSCI Emerging Markets -2.37%	MSCI EAFE -15.94%	MSCI EAFE 38.59%	S&P 500 Value 15.71%	Russell 2000 Value 4.71%	Russell 2000 18.37%	Barclays Agg 6.97%	S&P 500 Growth -34.92%	S&P 500 Growth 31.57%	Barclays Corp High Yield 15.12%	S&P 500 Value -0.48%	Russell 2000 16.35%	S&P 500 32.39%	Russell 2000 Growth 5.60%	Russell 2000 Growth -1.38%
Barclays Corp High Yield 11.35%	Russell 2000 Growth 12.95%	Barclays Corp High Yield 1.87%	S&P 500 21.04%	S&P 500 -9.11%	Russell 2000 Growth -9.23%	Russell 2000 -20.48%	S&P 500 Value 31.79%	Russell 2000 Growth 14.31%	Russell 2000 4.55%	S&P 500 15.79%	S&P 500 5.49%	S&P 500 -37.00%	Russell 2000 27.17%	S&P 500 Value 15.10%	Russell 2000 Growth -2.91%	S&P 500 16.00%	S&P 500 Value 31.99%	Russell 2000 4.89%	S&P 500 Value -3.13%
Russell 2000 Growth 11.26%	Barclays Corp High Yield 12.76%	Russell 2000 Growth 1.23%	S&P 500 Value 12.73%	MSCI EAFE -14.17%	S&P 500 Value -11.71%	S&P 500 Value -20.85%	Barclays Corp High Yield 28.97%	Barclays Corp High Yield 11.13%	Russell 2000 Growth 4.15%	Russell 2000 Growth 13.35%	S&P 500 Value 1.99%	Russell 2000 Growth -38.54%	S&P 500 26.47%	S&P 500 15.06%	Russell 2000 -4.18%	Barclays Corp High Yield 15.81%	MSCI EAFE 22.78%	Russell 2000 Value 4.22%	Russell 2000 -4.41%
MSCI EAFE 6.05%	Barclays Agg 9.64%	Russell 2000 -2.55%	Barclays Corp High Yield 2.39%	S&P 500 Growth -22.08%	S&P 500 -11.89%	S&P 500 -22.10%	S&P 500 28.68%	S&P 500 10.88%	S&P 500 Growth 4.00%	Barclays Corp High Yield 11.85%	Barclays Corp High Yield 1.87%	S&P 500 Value -39.22%	S&P 500 Value 21.17%	S&P 500 Growth 15.05%	Russell 2000 Value -5.50%	S&P 500 Growth 14.61%	Barclays Corp High Yield 7.44%	Barclays Corp High Yield 2.45%	Barclays Corp High Yield -4.47%
MSCI Emerging Markets 6.03%	MSCI EAFE 1.78%	Russell 2000 Value -6.45%	Barclays Agg -0.82%	Russell 2000 Growth -22.43%	S&P 500 Growth -12.73%	S&P 500 Growth -23.59%	S&P 500 Growth 25.66%	S&P 500 Growth 6.13%	Barclays Corp High Yield 2.74%	S&P 500 Growth 11.01%	Russell 2000 -1.57%	MSCI EAFE -43.38%	Russell 2000 Value 20.58%	MSCI EAFE 7.75%	MSCI EAFE -12.14%	Russell 2000 Growth 14.59%	Barclays Agg -2.02%	MSCI Emerging Markets -1.82%	Russell 2000 Value -7.47%
Barclays Agg 3.64%	MSCI Emerging Markets -11.59%	MSCI Emerging Markets -25.34%	Russell 2000 Value -1.49%	MSCI Emerging Markets -30.61%	MSCI EAFE -21.44%	Russell 2000 Growth -30.26%	Barclays Agg 4.10%	Barclays Agg 4.34%	Barclays Agg 2.43%	Barclays Agg 4.33%	Russell 2000 Value -9.78%	MSCI Emerging Markets -53.18%	Barclays Agg 5.93%	Barclays Agg 6.54%	MSCI Emerging Markets -18.17%	Barclays Agg 4.21%	MSCI Emerging Markets -2.27%	MSCI EAFE -4.90%	MSCI Emerging Markets -14.60%

The Callan Periodic Table of Investment Returns conveys the strong *case for diversification* across asset classes (stocks vs. bonds), investment styles (growth vs. value), capitalizations (large vs. small), and equity markets (U.S. vs. non-U.S.). The Table highlights the uncertainty inherent in all capital markets. Rankings change every year. Also noteworthy is the difference between absolute and relative performance, as returns for the top-performing asset class span a wide range over the past 20 years.

A printable copy of The Callan Periodic Table of Investment Returns is available on our website at www.callan.com.

Callan | Knowledge. Experience. Integrity.

The Callan Periodic Table of Investment Returns 1996–2015

Callan's Periodic Table of Investment Returns depicts annual returns for 10 asset classes, ranked from best to worst performance for each calendar year. The asset classes are color-coded to enable easy tracking over time. We describe the well-known, industry-standard market indices that we use as proxies for each asset class in the text below.

- **Barclays Aggregate Bond Index** includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year.

- **Barclays High Yield Bond Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

- **MSCI EAFE** is a Morgan Stanley Capital International Index that is designed to measure the performance of the developed stock markets of Europe, Australasia, and the Far East.

- **MSCI Emerging Markets** is a Morgan Stanley Capital International Index that is designed to measure the performance of equity markets in 23 emerging countries around the world.

- **Russell 2000** measures the performance of small capitalization U.S. stocks. The Russell 2000 is a market-value-weighted index of the 2,000 smallest stocks in the broad-market Russell 3000 Index.

- **Russell 2000 Value and** **Russell 2000 Growth** measure the performance of the growth and value styles of investing in small cap U.S. stocks. The indices are constructed by dividing the market capitalization of the Russell 2000 Index into Growth and Value indices, using style "factors" to make the assignment. The Value Index contains those Russell 2000 securities with a greater-than-average value orientation, while the Growth Index contains those securities with a greater-than-average growth orientation. Securities in the Value Index generally have lower price-to-book and price-earnings ratios than those in the Growth Index. The indices are market-capitalization-weighted. The constituent securities are not mutually exclusive.

- **S&P 500** measures the performance of large capitalization U.S. stocks. The S&P 500 is a market-value-weighted index of 500 stocks. The weightings make each company's influence on the Index performance directly proportional to that company's market value.

- **S&P 500 Growth and** **S&P 500 Value** measure the performance of the growth and value styles of investing in large cap U.S. stocks. The indices are constructed by dividing the market capitalization of the S&P 500 Index into Growth and Value indices, using style "factors" to make the assignment. The Value Index contains those S&P 500 securities with a greater-than-average value orientation, while the Growth Index contains those securities with a greater-than-average growth orientation. The indices are market-capitalization-weighted. The constituent securities are not mutually exclusive.

Asset Class Definitions

Global Equity

Definition
Investment represents an ownership claim on the residual assets of a company after the discharge of all senior claims such as secured and unsecured debt.

Public Equity
Public equity is traded on a national exchange. Includes common stock, preferred stock, convertible to stock, options, warrants, futures and other derivatives on equities or composites of equities, exchange-traded funds and equity-linked notes, units and partnership shares representing ownership interests in an underlying equity investment.

Private Equity
Private equity represents equity or equity linked securities in operating companies that are not publicly traded on a stock exchange.

Types of investment strategies
- *Leveraged buyout (LBO)* – Acquisition of a company with the use of financial leverage
- *Growth capital* – Investment in mature companies looking for capital to expand, restructure, enter new markets
- *Venture capital* – Investment in typically less mature companies, for launch, early development, or expansion
- *Mezzanine* – Subordinated debt/preferred equity used to reduce amount of equity capital required to finance LBOs
- *Distressed* – Equity securities of financially stressed companies
- *Secondaries* – Investment in existing private equity assets

Types of structures
- *Direct investment* – Direct purchase of equity securities of a private company
- *Co-investments* – Investments in equity securities of a private company alongside
- the manager of a direct fund
- *Direct fund* – Pool of capital formed to make direct investments
- *Fund-of-funds* – Pool of capital formed to make investments in direct funds

Strategic Role
- High long-term real returns
- Hedge against active (pre-retirement) liabilities
- Private equity enhances total portfolio return as a tradeoff for illiquidity

Characteristics

Public Developed Markets

- Relatively high returns (long-term) as compared to fixed income and real assets
- Relatively high volatility (standard deviation of returns) as compared to fixed income and real assets
- Relatively high liquidity
- Diversification
- Historically, public developed equities exhibit high correlation with private equity and high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- Currency adds to volatility but can be hedged, which mutes the diversification benefits

Public Emerging Markets

- Higher expected returns due to economic growth potential
- Liquidity risk is significant, particularly in frontier markets
- High volatility, particularly in frontier markets
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- FX markets not sufficiently developed to hedge currency risk
- Limited access to markets
- Market information less abundant than for developed markets
- Counterparty risk and settlement delays pronounced in frontier markets

Private Equity

- Illiquid, long-term time horizon (7-12 year closed-end partnerships)
- Quality of the managers selected is the key determinant of success
- High volatility of returns compensated by higher expected returns
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- Encompasses three stages: fundraising, portfolio construction and investment, exit and return realization

Risks

Public Equity

- *Absolute risk* – Possible magnitude of price decline
- *Liability hedging risk* – Risk that assets will not increase when liabilities increase
- *Regulatory risk* – Changes may adversely affect markets

- *Tax risk* – Changes may adversely affect markets
- *Liquidity risk* – Difficulty trading securities under adverse market conditions
- *Firm specific risk* – Unique risks associated with a specific firm
- *Tracking risk* – Magnitude of performance deterioration from a benchmark
- *Time horizon* – Horizon too short to weather cycles
- *Benchmark risk* – Benchmark not appropriate proxy
- *Market risks* – Price decline
- *Currency risk* – Unanticipated changes in exchange rate between two currencies
- *Counterparty risk* – Counterparty does not live up to its contractual obligations

Private Equity

- *Liquidity risk* – Absence of liquidity and appropriate exits could significantly increase time horizon
- *Firm specific risk* – Unique risks associated with a specific firm
- *Leverage risk* – Historical excess use of leverage and current inability to secure financing may adversely affect LBOs
- *Manager selection risk* – Selecting managers that fail to deliver top performance results
- *Diversification risk* – Inability to properly diversify the portfolio by vintage year, industry groups, geography
- *Tax risk* – Changes may adversely affect markets
- *Regulatory risk* – Changes may adversely affect markets
- *Strategy risk* – Continuing applicability of investment strategy in context of capital flows
- *Market risks* – Price decline

Global Fixed Income

Definition

Investment represents a legal obligation between a borrower and the lender with a maturity in excess of one year. Evidence of indebtedness and securities that evidence an ownership interest in debt obligations that are issued, insured, guaranteed by, or based on the credit of the following: companies, governmental entities or agencies, banks and insurance companies. Includes agency and non-agency mortgage-backed securities, collateralized mortgage obligations, commercial mortgage-backed securities, asset-backed securities, private placements, and options, futures or other derivatives on fixed income securities or components of fixed income.

Strategic Role

- Diversification within a multi-asset class, total return portfolio
- Hedge against a long duration accrued liability
- Current income
- Non-U.S. provides hedge against unanticipated domestic inflation and diversification to U.S. assets

Characteristics

- Medium volatility asset class
- Relatively high liquidity
- Broadly diversified by market sector, quality, and maturity
- Historically, developed sovereign debt exhibits low to negative correlation with real assets and negative correlation with equities; investment grade corporate bonds exhibit moderate correlation with equities and low correlation with real assets; high yield exhibits high correlation with equities and moderate correlation with real assets.
- A large currency component exists within international fixed income returns
- Developed markets are extremely liquid. Many issues of less developed markets are also relatively liquid.

Risks

- *Duration risk* – Price volatility from a change in overall interest rates
- *Convexity risk* – Negative convexity is the risk of price declines being greater than the price increase due to interest rates moving equally up versus down
- *Default or credit risk* – The uncertainty surrounding the borrower's ability to repay its obligations
- *Structure risk* – Risk that arises from the options implicit in bonds (like call ability and sinking funds) or the rules that govern cash flow differ from expectations
- *Sector risk* – Risk of holding sectors that are in different proportions than the benchmark
- *Liquidity risk* – Cost of trading in a security which is reflected in the bid-ask spread or the cost of selling due to cash flow needs
- *Reinvestment risk* – The uncertainty surrounding future yield opportunities to invest funds which come available due to call, maturities, or coupon payments
- *Benchmark risk* – Risk of the benchmark being inappropriate
- *Yield curve risk* – Price changes induced by changes in the slope of the yield curve
- *Currency risk* – The risk of currency movements vs. the dollar for each market. Currency may contribute greatly to return and lower correlation.

Global Real Assets

Definition

Investment represents an ownership interest in real return assets that provide inflation hedging characteristics in periods of unanticipated inflation. Includes inflation-linked securities, private or public real estate equity or equity-linked investments, private or public real estate debt, infrastructure, timber, real asset mezzanine debt or equity, non-fixed assets and other opportunistic investments in real assets.

Strategic Role

- Reduces risk of composite multi-asset portfolios through diversification
- Relatively low correlations to traditional asset classes
- Can serve as a possible inflation hedge during periods of high inflation
- Provides an attractive return relative to fixed income asset class in periods of low to moderate inflation
- Infrastructure provides inflation protection as he revenues of the underlying assets are typically linked to CPI
- Potential for high returns in niche opportunities

Characteristics

Real Estate

- *Risk* – Volatility of private real estate falls between publicly-traded debt and publicly-traded equities
- *Returns* – Nominal returns are expected to fall between equities and fixed income
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Illiquidity* – Transactions require a significantly longer period to execute than other asset classes
- *Inefficient Market* – Information affecting real estate asset valuation and market trading is not rapidly, accurately, or efficiently reflected or interpreted in its pricing

Infrastructure

- *Long life assets* – Capital intensive assets with 25 to 99 year concessions, match for liability duration
- *Inflation protection* – Revenues typically linked to CPI
- *Monopoly or quasi monopoly* – High barriers to entry due to scale and capital cost
- *Steady and predictable cash flow* – Produce strong and predictable yields
- *Low correlation* – Provides portfolio diversification, low beta; expected to exhibit low to no correlation with fixed income and equities
- *Inelastic demand* – Predictable demand with little volatility, less susceptibility to economic downturns
- *Limited commodity risk* – Not subject to commodity pricing
- *Insensitive to changes in technology* – Low risk of redundancy or technology obsolescence
- Investments are usually illiquid and involve a long (10 to 20 year) holding period

Timberland

- *Return* – Low correlation with other asset classes, returns stem from four distinct sources: biological growth, timber prices, land values and management strategy
- *Income* – Driven almost entirely by the sale of harvested mature trees
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Appreciation* – Driven by increased volume and value on timber and appreciation of underlying land
- Categorized by type of land (e.g. plantation, natural forest), type of tree (e.g., hardwood, softwood), country and region

Commodities

- *Real assets* – Raw materials that are the physical inputs of production, relatively homogenous in nature, lending itself to be traded via contracts with standardized terms
- *Inflation protection* – Storable commodities (such as energy) directly related to the intensity of economic activity exhibit positive correlation with unexpected inflation

- *Insurance risk premium* – Commodity futures prices tend to be priced at a discount to spot prices in order to induce speculators to bear volatile commodity price risk that inventory holders and producers wish to lay off
- *Positive event risk* – Surprises that occur in the commodities markets tend to be those that unexpectedly reduce the supply of the commodity to the market, resulting in price spikes
- *Negatively correlated with financial assets* – Unlike stocks and bonds, commodities are not as directly impacted by changes in discount rates as they are by the current supply and demand of the underlying commodity, thus they should be expected to have little or even negative correlation with capital assets.

Risks

Real Estate

- *Property type risks* – Negative changes in demand/supply conditions by property type (e.g., office, industrial, retail, lodging, mixed-use, multi-family)
- *Location risks* – Local market condition relative to the adverse changes surrounding a property, or in discovery of hazardous underlying conditions, such as toxic waste
- *Tenant credit risks* – Failure by a tenant to pay what is contractually owed
- *Physical/functional obsolescence* – Negative influences on buildings due to technological changes, outdated layout and design features, and physical depreciation
- *Interest rate risk* – Higher rates can negatively impact both sales strategies and leveraged properties at refinancing
- *Reinvestment risk* – In a declining rental rate market, cash flow received may not be reinvested at the same level
- *Business cycle risk* – As economies slow down, there may be less demand for space
- *Inflationary risk* – Rent levels may not always keep up with rising operating expense levels
- *Illiquidity* – Inability to effectively liquidate a property into cash
- *Natural disaster risk* – Weather, floods, earthquake
- Regulatory concerns are critical, especially in emerging markets
- Capital and managerial intensive

Infrastructure

- *Leverage* – Deals with leverage between 40% and 80% can transform low risk assets into risky investments. Changes in the credit environment alter refinancing risk.
- *Market inefficiencies* – Competitive auctions lead to overpaying. There is a limited history and track record in the U.S. infrastructure space.
- *Political and headline risk* – Public acceptance and understanding of infrastructure needs to expand. In addition, the political landscape in every state and municipality differs.
- *Regulatory risk* – Regulated assets are subject to government changes
- *Construction and development* – Project overruns and delays should be shared with construction partners. Volume/demand risk for new developments can vary.
- *Labor issues* – Greenfield projects could generate new jobs while the privatization of brownfield assets could eliminate skilled labor members
- *Asset control* – Stipulations via concession agreements limit some management control (pricing, growth, decision approvals, etc.). Asset control needs to be appropriately priced.
- *Firm specific risk* – Unique risks are associated with specific firm

Timberland

- *Liquidity risk* – Liquidity is thin, marketplace characterized by few buyers and sellers, transactions are complicated and can take many months to execute
- *Valuation risk* – Annual appraisal process can lead to disparities between carrying value and realized sales prices during downturns
- *Physical risk* – Subject to losses from natural and human-caused events such as fire, insect and vermin infestations, disease, inclement weather, and theft
- *Political and regulatory risk* – Environmental regulations can restrain or prohibit timberland management activities
- *Leverage* – Can amplify volatility and potentially lead to an inability to refinance properties or lead to a distressed sale, requires a minimum level of generated income
- *Location risks* – Real estate dispositions may also be impacted by weakness in local residential real estate markets

Commodities

- *Price risk – C*ommodities with difficult or non-existent storage situations (heating oil, live cattle, live hogs, copper) coupled with a long-lead time between the production decision and the actual production of the commodity can lead to very volatile spot prices
- *Negative futures roll* – When the future contract's price is at a premium to the spot price, the cost to roll contracts forward is negative: an investor continuously locks in losses from the futures contracts converging to a lower spot price
- *Regulatory risk* – Concerns about the role played by investors in commodity markets could lead to new regulations impacting available investment opportunities, ultimately affecting investors' "license to invest".
- *Leverage* – A commodity futures program that is not fully collateralized (for every desired $1 in commodity futures exposure, an investor sets aside $1 in cash) can amplify volatility and potentially lead to greater losses
- *Implementation* – Because futures contracts are levered, cash management for the collateral is an important consideration due to the value

Global Alternatives

Definition

Investment has a distinct return/risk factor profile as compared to other specified broad asset class groupings. Examples: Low market exposure/absolute return strategies such as market neutral, and other niche strategies with low asset class beta such as insurance-linked investments, volatility, intellectual property, healthcare royalty, shipping, litigation finance and fine art.

Strategic Role

- More robust diversification achieved through the introduction of non-traditional return drivers/risk factors
- Low or negative correlations to other asset classes
- Return profile less dependent on economic growth and interest rates
- Potential for attractive risk-adjusted returns

Characteristics

- *Returns* – Exhibits lower correlations to broader equity and credit markets in periods of market distress

- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Inefficient Market* – Information affecting asset valuation and market trading may not be accurately or efficiently reflected or interpreted in its pricing

Risks

- *Market risk* – Cost of carry on being long volatility
- *Natural disaster risk* – Weather, floods, earthquake affect natural catastrophe-based insurance-linked products
- *Due diligence* – Complicated to evaluate and monitor
- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Implementation* – Complexity of implementation may be an impediment

Callan

Glossary of Investment Terms

The following Glossary of Investment Terms was prepared by Callan Associates.

A

Absolute Return Strategy – An absolute return strategy aims to produce positive returns in any market environment, primarily through the use of various hedge fund strategies.

Accumulated Benefit Obligation (ABO) – The ABO is an approximate measure of the liability of a retirement plan assuming immediate termination.

Active Duration Strategy – Active duration refers to a style of fixed income investing that actively manages portfolio duration to reflect expected changes in interest rates. Managers that employ this strategy/style are sometimes called "interest rate anticipators."

Active Management – Active management is a form of investment management that involves actively managing investment securities with the objective of earning positive risk-adjusted returns.

Actuary – A specialist in the application of mathematics, probability, statistics and risk theory to financial problems involving future uncertainty. These uncertainties are usually associated with life insurance, property and casualty insurance, annuities, pension or other employee benefit plans and investments.

ADV Part I, II – A disclosure document that all Registered Investment Advisors are required to file (and update annually) with the Securities and Exchange Commission. Part II of the ADV is required to be delivered to a client prior to or in conjunction with entering into a contract with an advisor.

All Cap Strategy – All cap managers invest in small, mid and large cap equity securities.

Alpha – Alpha is a coefficient used to measure risk-adjusted performance. As such, alpha measures the excess return associated with a security or portfolio over the market return. Alpha can be used to measure a manager's contribution to performance due to active management. A positive alpha indicates that the investment manager was able to earn incremental return over the market return.

Alternative Investments – The term "alternative investments" refers broadly to non-traditional investment strategies such as hedge funds, private equity, distressed debt, commodities and futures.

American Depository Receipt (ADR) – A financial asset (receipt) issued by U.S. banks as a substitute for actual ownership of shares of foreign stocks. ADRs are traded on U.S. stock exchanges.

Annuity – A financial product sold by financial institutions and designed to provide payments to the holder at specified intervals.

Arbitrage – A strategy that attempts to exploit price inefficiencies of identical or similar financial securities.

Arithmetic Return – The arithmetic return is the sum of periodic returns divided by the number of periods. This is also called the simple average return and can be contrasted with **Geometric Return**.

Adjustable Rate Mortgage (ARM) – A real estate mortgage agreement between a lending institution and a borrower in which the interest rate is not fixed but changes over the life of the loan at predetermined intervals.

Asset Allocation – The distribution of assets across cash equivalents, and real estate. An asset allocation plan is an integral part of an institution's investment strategy. Importantly, it determines an optimal allocation of assets to achieve the maximum risk-adjusted performance while taking into consideration the institution's risk tolerance and investment horizon.

Asset Backed Security (ABS) – A bond or note that is backed by a basket of assets. These assets are pooled to reduce risk through the diversification of the underlying assets. Securitization also makes these assets available for investment to a broader set of investors. These asset pools can be comprised of credit card receivables, home equity loans, auto loans or esoteric investments such as aircraft leases.

Asset Class – An asset class is a grouping of similar investments or assets, such as stocks, that have a distinguishable risk and return pattern.

Asset Liability Modeling – The process of projecting future changes in assets and liabilities. In relation to pension plans, it is used to provide an insight into the likely effect of different asset allocation strategies on a plan's future financial position.

Auditor's Report – Often called the "accountant's opinion". It is the statement of the accounting firm's opinion of the corporation's financial statements. A "clean" opinion indicates that the reports conform to the normal and generally accepted practices of accountancy.

Automatic Reinvestment – An automatic reinvestment plan means that an investor has authorized the purchase of additional shares of a mutual fund or stock with dividends and capital gain distributions.

B

Backwardation – A market condition in which a futures price is lower in the distant delivery months than in the near delivery months.

Balanced Fund – A balanced fund is an investment product that combines equities and bonds. Balanced funds typically exhibit less volatility than equity funds, but more volatility than bond funds.

Barbell Strategy – A "barbell" is a fixed income investment strategy in which short-term and long-term securities are overweighted in a portfolio while intermediate securities are underweighted. Compare to **Bullet Strategy.**

Basis Point (bp) – A basis point is equal to 1/100 of 1% and is generally used to describe changes in interest rates or yields and absolute yield spreads. It is also used in reference to investment fees.

Bear Market – A prolonged period of declining asset prices accompanied by widespread pessimism.

Benchmark – A proxy against which the investment performance of a manager is compared to determine whether the manager has added value.

Beneficiary – A pension fund beneficiary is one who is entitled to receive benefits from a pension plan.

Beta – Beta is a quantitative measure of the "systematic risk" or "market risk" of an equity security or portfolio. Beta measures the volatility of a security or portfolio relative to the overall market, where the beta of the market is equal to 1.0. A security or portfolio with a beta greater than 1.0 would be more volatile than the market, whereas a security or portfolio with a beta less than 1.0 would be less volatile than the overall market. More specifically, if the beta of a portfolio is 1.3, a 1 percent increase in the market would imply a rise of 1.3% for the portfolio. Conversely, a portfolio with beta of 0.9 would imply an increase of only 0.9% for a market increase of 1.0%.

Blue Chip Stocks – Equity shares of older, established companies such as General Motors or IBM. Most blue chip companies pay regular dividends.

Bond – A bond is a debt instrument issued by entities such as corporations, municipalities, federal, state and local government agencies for the purpose of raising capital through borrowing. Bonds typically pay interest periodically while repaying the principal, or par value, at maturity. Bonds with maturities of five years or less are often called notes.

Bond Discount – The amount by which a bond's face or par value exceeds its market value.

Bond Maturity – The date on which a bond's principal becomes due and payable.

Bond Quality Ratings – A system, typically ranging from AAA to D, for measuring the relative investment qualities of bonds. The highest investment quality and least investment risk is generally AAA-rated, while the lowest investment quality and greatest investment risk bonds bear a rating of D. Several agencies provide the rating systems for companies' credit: Standard & Poor's, Moody's Investor Services and Fitch are used most commonly.

Bottom Up Analysis – A process of investing that focuses foremost on security analysis. Industry and economic analyses are of secondary consideration. The opposite of **Top Down Analysis.**

BRIC Countries – "BRIC" countries refer to the rapidly developing countries of Brazil, Russia, India and China.

Bridge Loan – A short-term loan provided while longer-term financing is being finalized, thus allowing for business to proceed uninterrupted.

Broker – An agent who acts as an intermediary between a buyer and a seller and usually charges a commission. Investment brokers need a license to act as a broker.

Broker/Dealer – A broker/dealer is any individual or firm in the business of buying and selling securities for itself and others. Broker/dealers must register with the SEC. A broker executes orders on behalf of his/her clients. A dealer executes trades for his/her firm's own account. Securities bought for the firm's own account may be sold to clients or other firms or become a part of the firm's holdings.

Brokerage Window – A brokerage window allows an individual to self-direct trading within a brokerage's offering through a retirement plan such as a 401(k). As opposed to being limited to the investment options within a sponsored 401(k), investors have the option to set up a "window," which allows them to trade most listed stocks, mutual funds and exchange-traded funds. May also be known as a "self-directed account" (SDA) or "self-directed brokerage account" (SDBA).

Bull Market – A prolonged period in which asset prices rise faster than their historical average.

Bullet Strategy – A fixed income strategy in which intermediate maturity fixed income securities are overweighted in a portfolio and short- and long-term fixed income securities are underweighted. It is the opposite of a **Barbell Strategy.**

Business Cycle – A business cycle refers to a predictable, long-term pattern of alternating periods of economic growth (recovery) and decline (recession), characterized by changing employment, industrial productivity and interest rates.

Buy-Side – The portion of the securities business in which securities are purchased and sold for money management purposes, rather than for underwriting. The opposite of **Sell-Side.**

C

Call Option – An option contract that gives the holder the right to buy a certain quantity of an underlying security from the writer of the option at a specified price (the strike price) and up to a specified date (the expiration date).

Cap Rate – Short for "capitalization rate," the cap rate is used mainly in real estate investing. It is a real estate asset's first year of net operating income divided by the asset's purchase price.

Capital Appreciation Return – A measure of the gain or loss of a security or portfolio due only to the change in the value of the asset or assets (does not include earned income). The capital appreciation-only portion of the total return is calculated by finding the percentage gain or loss in the market value of the assets over a time period, taking into account any asset purchases or sales during the period.

Capital Asset Pricing Model (CAPM) – An economic model for valuing stocks based upon the theory that investors demand higher returns for taking on more risk. It can be used to price an individual security (asset) or a portfolio. The CAPM evaluates a security's relationship with expected return and systematic risk (beta) to predict how the market will price a security in relation to its risk.

Capital Stock – All equity shares representing ownership of a business, including preferred and common stock.

Capitalization – The total amount of the various securities issued by a corporation. Capitalization includes debt, stock and retained earnings. It is not the same as **Market Capitalization.**

Capitalization Weighted Market Index – In a capitalization weighted market index, each security affects the value of the index in proportion to its market capitalization. Examples include the Nasdaq Index and the S&P 500 Index. See **Equal Weighted Index** as a comparison.

Cash Equivalent – This term includes all cash investments and investments that can be readily converted into cash.

Cash Sweep Accounts – A cash sweep account is used to "hold" all contributions and income from a portfolio, which are generally swept into a money market fund.

Certificate of Deposit (CD) – A bank certificate of deposit is a FDIC-insured security issued by banks or savings and loans for a specified time period, generally between 30 days and six years.

CFA (Chartered Financial Analyst) – A designation awarded by the CFA Institute to experienced financial analysts. CFA's must pass a set of rigorous examinations, as well as meet specific work experience requirements and agree to uphold a standards-of-conduct agreement.

CFP (Certified Financial Planner) – A designation granted by the College for Financial Planning to individuals who complete a series of educational requirements, courses and examinations in the areas of personal financial and retirement planning and who pledge to a code of ethical standards and continuing education.

Closed-End Fund – A closed-end fund has a fixed number of shares outstanding and trades on an exchange like a stock. Closed-end funds issue a fixed number of shares to the public in an initial public offering, after which time the shares are bought and sold on a stock exchange. The share price in a closed-end fund is determined entirely by market demand, so shares can either trade above (at a premium) or below (at a discount) the net asset value, which is the market value of the assets in the fund.

Collateralized Debt Obligation (CDO) – An investment grade security backed by a pool of bonds, loans and/or other assets. It is similar to a CMO in that it is issued in tranches with differing return/risk profiles.

Collateralized Loan Obligation (CLO) – A CDO that is backed by a portfolio of corporate loans rather than other types of debt.

Collateralized Mortgage Obligation (CMO) – An investment grade fixed income security backed by a pool of mortgages and structured to include several classes of maturities called tranches. Each tranche offers a different risk/return profile.

Commercial Mortgage-Backed Securities (CMBS) – CMBS are publicly traded bond-like products that are based on underlying pools of commercial mortgages.

Commercial Paper – Commercial paper refers to short-term debt instruments issued by corporations. Maturities of commercial paper are generally between 1 day and 270 days. The debt is usually issued at a discount to reflect prevailing market interest rates and is rated by the major rating agencies.

Commingled Fund – An investment fund that is similar to a mutual fund in that investors purchase and redeem units that represent ownership in a pool of securities. Investments are pooled in commingled funds to reduce management and administrative costs.

Commission – The fee paid to a broker to execute a trade or facilitate a transaction.

Commission Recapture – An agreement by which a plan sponsor earns credits based upon the amount of brokerage commissions paid. These credits can be used for services that will benefit the plan, such as consulting services, custodian fees, or hardware and software expenses.

Commodity – A commodity is a basic good, usually a raw product used in commerce, which is interchangeable with other commodities of the same type and is generally traded via futures contracts. Examples include oil, gold and wheat.

Common Stock – Securities representing equity ownership in a corporation, providing voting rights and entitling the holder to a share of the company's success through dividends and/or capital appreciation. In the event of liquidation, common stockholders have rights to a company's assets only after bondholders, other debt holders and preferred stockholders have been satisfied.

Compounding – The term used to describe an exponential increase in the value of an investment due to interest earned on interest.

Consumer Price Index (CPI) – The U.S. Department of Labor's measure of change in the U.S. cost of living to gauge the rate of inflation. A survey is conducted monthly to monitor the cost of various consumer goods such as food, housing and transportation. Costs are tracked over time to monitor overall living expenses.

Contango – A condition in which the distant delivery price for futures exceeds the current (spot) price, often due to the costs of storing and insuring the underlying commodity. The opposite of **Backwardation.**

Contingent Deferred Sales Charge (CDSC) – A CDSC is a type of sales charge levied on investors in a back-end load fund.

Contrarian Strategy – This term is used to describe an investment style in which managers select stocks that are out of favor or that have little current market interest on the premise that gains will be realized when the stocks return to favor.

Convertible Bond – A bond which may, at the holder's option, be exchanged for common stock. Convertible bonds provide investors with the downside price protection of a straight bond and potential upside from appreciation in the price of the underlying common stock.

Convexity – A measure which describes the degree to which the duration of a bond will change for a given change in interest rates. Positive convexity implies that duration will increase as interest rates fall, and, thus, a bond's price will rise at an increasing rate as rates decline. Conversely, negative convexity implies that prices will rise at a decreasing rate as interest rates fall.

Core Bond Strategy – A fixed income strategy that typically invests in investment grade bonds of various types and maturities.

Core Equity Strategy – An equity strategy where the portfolio's characteristics are similar to those of the S&P 500 Index but that has the objective of adding value over the index, typically from sector and/or security selection.

Core International Strategy – This is an international equity strategy that invests mostly in large capitalization stocks in developed countries with liquid markets, thus having characteristics similar to the Morgan Stanley Capital International (MSCI) EAFE Index.

Core Plus Bond Strategy – A fixed income strategy that permits managers to use out-of-index instruments such as high yield, global and emerging market debt to add value over the index.

Core Real Estate Strategy – This real estate strategy is the most conservative approach to real estate investing. Core real estate is defined as real estate investments that are well leased and are typically over 85% leased to high credit-quality tenants. The total return is driven more by income than by capital appreciation.

Corporate Credit – A corporate credit is term that refers to a debt security issued by a corporation.

Correlation – Correlation measures the degree to which two variables, such as asset classes, move in relation to each other. Correlation is a commonly used tool in asset allocation studies and in portfolio management.

Coupon Rate – The coupon rate is the stated interest rate paid on a fixed income security.

Credit Quality – Credit quality is a term used to refer to the creditworthiness of a fixed income security. See **Bond Quality Ratings.**

Cumulative Return – The cumulative return for a portfolio or an asset is its cumulative compound return over the full length of a specified time period. This measure is not annualized and as such, represents the actual total return of the portfolio or asset over the full period.

Currency Hedging – A process involving the purchase and sale of forward currency contracts to manage currency risk.

Currency Return – A rate of return calculated from the change in exchange rates between one currency and another.

Current Yield – A security or portfolio's current yield is computed as its coupon or dividend rate divided by its market value.

CUSIP Number – A cusip is a unique number given to each stock and bond by the Committee for Uniform Securities Identification Procedures (CUSIP) of the American Bankers Association. A CUSIP number consists of nine digits, the first six uniquely identify the issuer and are assigned to issuers in alphabetic sequence; the next two characters (alphabetic or numeric) identify the specific security. The ninth digit is a check digit.

Custodian – The organization (usually a bank) that keeps custody of securities and other assets for purposes of safekeeping. The bank collects income, processes trades, provides reporting and other functions. The bank does not have fiduciary responsibility. The fees charged for these services are known as custodial fees.

Cyclical Stocks – Cyclical stocks move directly with the business cycle; generally advancing as business conditions improve and declining when business slackens. Steel, chemical, textile, and machinery stocks are included in this category. To offset cyclical factors, many companies today are striving to diversify their operations among other fields and products.

D

Debenture – An unsecured bond backed by the general credit of the issuer. Debentures rank below secured debt. A subordinated debenture is an unsecured bond that ranks after secured debt and after regular debentures.

Debt Securities – A security representing a loan given to an investor by an issuer. Fixed income securities, or bonds, are debt securities.

Defensive Bond Strategy – A conservative fixed income investment strategy with the objective of minimizing interest rate risk by investing only in high quality short to intermediate maturity securities.

Defined Benefit Plan – A type of employee benefit plan in which benefit payments are predetermined by a formula. The employer is obligated to contribute funds into a defined benefit plan based on an actuarially determined formula that takes into consideration the age of the workforce, length of service and the investment earnings that are projected to be achieved. Defined Benefit Plans are overfunded if the present value of the future payment obligations to employees is less than the current value of the assets in the Plan and underfunded if the obligations exceed the current value of these Plan assets. The *Pension Benefit Guarantee Corporation* insures a specified percentage of these future pension benefit payments on a per employee basis.

Defined Contribution Plan – A type of employee benefit plan in which both the employee and the employer makes contributions. Each employee's account value is determined by the contribution made and the return on investment. A 401(k) Plan is a type of defined contribution Plan.

Deflation – A phase of the business cycle during which prices are declining. It is the opposite of inflation.

Derivative – An instrument whose price is determined by the price of an underlying asset. Examples include futures contracts, forward contracts, swaps and options.

Directed Brokerage – Circumstances in which a board of trustees or other fiduciary requests that the investment manager direct trades to a particular broker so that the commissions generated can be used for specific services or resources.

Directional Strategy – A directional strategy seeks to take advantage of the direction of the market. Market timing strategies fall into this category.

Disbursement – A cash or asset withdrawal from a portfolio.

Discount Rate – The discount rate is the rate charged to financial institutions that borrow funds directly from the Federal Reserve. It is also the term used to refer to the rate at which cash flows are discounted in a present value calculation.

Distressed Debt – Is an alternative asset class consisting of below-investment-grade bonds or bank debt securities of companies generally either in, or near bankruptcy protection or in the process of restructuring. Typically, these securities yield more than 1000 basis points over the risk-free rate as determined by the U.S. Treasury yield curve.

Diversification – The allocation of funds across different asset classes or securities within a portfolio.

Divestiture – The act of selling off an asset or business, typically because it is under-performing financially or no longer fits within a company's strategic plan.

Dividend Yield – The current annualized dividend paid on a share of common stock, expressed as a percentage of the stock's current market price.

Dollar Cost Averaging – A process of buying securities at regular intervals with a fixed dollar amount. At regular intervals, investors spend a specific dollar amount rather than purchase a specific number of shares. Thus, more shares are purchased when prices are low and fewer shares are purchased when prices are higher.

Dollar-Weighted Rate of Return – An investment's rate of return that equates the present value of its cash flows plus its final market value to its current price. It is also known as the Internal Rate of Return (IRR).

Downgrade – A negative change in the quality rating of an equity or fixed income security.

Duration – Duration is a measure of the price sensitivity of a bond to changes in interest rates. The longer the duration, the more sensitive the price of a bond will be to fluctuations in interest rates.

Dynamic Asset Allocation – An asset allocation strategy in which the asset mix is changed in response to changing market conditions.

E

Economically-Targeted Investment (ETI) – An ETI is an investment where the goal is to target a certain economic activity, sector or area in order to produce corollary benefits in addition to the main objective of earning a competitive risk-adjusted rate of return.

Effective Maturity – The effective maturity is the measure of years to expected maturity of a fixed income security. It takes into account any put or call options embedded in the security, expected sinking-fund payments and mortgage principal prepayments.

Effective Yield – The effective yield of a fixed income security is the actual total annualized return that would be realized if held to maturity.

Efficient Market Theory – A theory stating that a security's market price equals its true investment value at all times since all information is fully and immediately reflected in market prices.

Efficient Portfolio – An efficient portfolio is one that provides the maximum expected return for a given level of risk or, otherwise stated, as the minimum risk for a given level of expected return.

Emerging Markets – Emerging markets include markets in developing countries and economies. These markets are characterized by more aggressive risk/return profiles than their developed counterparts.

Employee Retirement Income Security Act (ERISA) – The Employee Retirement Income Security Act is a 1974 law governing the operation of most private pension and benefit plans. The law eased pension eligibility rules, set up the **Pension Benefit Guaranty Corporation**, and established guidelines for the management of pension funds.

Employee Stock Ownership Plan (ESOP) – A retirement savings program in which the employees own stock in the company for which they are employed.

End Point Sensitivity – The performance of a manager/fund varies depending on the ending point used to analyze performance. Therefore, it is important to look at performance for a number of market cycles or time periods to gain an accurate assessment of the manager or fund's performance.

Endowment Funds – Investment funds established for the support of institutions such as colleges, private schools, museums, hospitals, and foundations. The investment income may be used for the operation of the institution and for capital expenditures.

Enhanced Indexing – Enhanced Indexing combines elements of passive and active management. Enhanced managers typically have smaller deviations from the benchmark seeking to add value in a risk controlled fashion.

Equal-Weighted Composite – This term refers to a composite of returns for an investment manager that gives equal consideration to each portfolio's return regardless of the size of the portfolio.

Equal-Weighted Index – In an equal-weighted index, each security affects the value of the index equally. The Value Line Index is an example. Compare to **Capitalization Market Weighted Index**.

Equity – The ownership interest of common and preferred stockholders in a company.

Equity Market Neutral Strategy – A strategy in which the manager tries to profit from both increasing and decreasing prices by taking long and short positions of the same dollar amount but in different stocks. Thus, the overall strategy is neutral to market movements.

Equity Multiple – The total cash contributions divided by the initial equity.

Event Driven Strategy – A hedge fund strategy in which the manager takes significant positions in a certain number of companies with "special situations" such as mergers or acquisitions.

Excess Return – Excess return is a portfolio's return minus its benchmark return. In fixed income this measure is often adjusted for risk.

Exchange Traded Fund (ETF) – A fund that tracks an index, a commodity or a basket of assets like an index fund, but trades like a stock on an exchange, thus experiencing price changes throughout the day as it is bought and sold.

Expense Ratio – A mutual fund's cost of doing business, disclosed in the prospectus as a percent of assets. The ratio includes expenses such as management and advisory fees, overhead costs, distribution and advertising (12b-1) fees.

F

Face Value – See Par Value.

Federal Funds Rate – The interest rate charged on overnight loans between banks so that they maintain the minimum required level of reserves at the Federal Reserve.

Federal Reserve System – The Federal Reserve is the central bank for the United States and, as such, regulates the financial system. Its responsibilities include: conducting monetary policy, regulating banks, maintaining the stability of the U.S. financial system and providing financial services to the U.S. Government.

Fiduciary – A person legally appointed and authorized to hold assets in trust for another person/entity. Fiduciaries are legally obligated to manage assets for the benefit of the entity and not for his/her profit.

Financial Accounting Standards Board – A governing body established in 1973 to define and monitor the usage of generally accepted accounting principles called GAAP.

Financial Industry Regulatory Authority (FINRA) – A regulatory body created in July 2007 through the consolidation of the National Association of Securities Dealers and the New York Stock Exchange's regulation committee. The Financial Industry Regulatory Authority is responsible for regulating business between brokers, dealers and the investing public. By consolidating these two regulators, FINRA aims to eliminate regulatory overlap and cost inefficiencies.

"Flight to Quality" – "Flight to quality" is an expression used in reference to investor demand for high quality investment securities (generally U.S. Treasuries) in times of uncertainty, or real or perceived risk.

Fundamental Research (Fundamental Analysis) – An analysis of industries and companies based on such factors as sales, assets, earnings, products or services, markets and management. As applied to the economy, fundamental research includes consideration of gross national product, interest rates, unemployment, inventories, savings and other broad macroeconomic factors.

Funded Status – The status of a pension plan that has accumulated and set aside assets for the payment of retirement benefits to employees. Unfunded plans, also called pay-as-you-go arrangements, do not have assets set aside and retirement benefits are usually paid directly from employer contributions.

Funding Risk – The risk that anticipated contributions to a pension plan will not be made by the employer.

Futures Contracts – Futures contracts are financial contracts that obligate the buyer to purchase an asset (and the seller to sell an asset), such as a physical commodity or a financial instrument, at a predetermined future date and price. Futures can be used either to hedge or to speculate on the price movement of the underlying asset.

G

Generally Accepted Accounting Principles (GAAP) – Generally accepted accounting principles established by the Financial Accounting Standards Board in 1973.

Geometric Return – A method of calculating an investment return for a specified time period that takes into account compound growth. For example, suppose a $100 portfolio returned +25% in the first quarter (ending value is $125) but lost 20% in the second quarter (ending value is $100). Over the two quarters the return was 0%; this is the geometric return. The **return**, however, would simply average the two returns: (+25%) (.5) + (-20%) (.5) = +2.5%.

Glidepath – The path in which assets in a lifecycle fund gradually shift from an absolute return orientation to a capital preservation orientation as individuals move closer to retirement.

Global Industry Classification Standards (GICS) – A standardized classification system for equity sectors developed jointly by Morgan Stanley Capital International (MSCI) and Standard & Poor's. The GICS methodology is used by the MSCI indexes, which include domestic and international stocks, as well as by a large portion of the professional investment management community.

- **Consumer Discretionary Sector** – Includes those industries that tend to be the most sensitive to economic cycles. Examples include: automotive companies; manufacturers of textiles, apparel and leisure equipment; hotels; restaurants; media production companies; and consumer retailers.
- **Consumer Staples Sector** – Comprises companies whose businesses are less sensitive to economic cycles. These include: manufacturers and distributors of food, beverages and tobacco: producers of non-durable household goods and personal products; food and drug retailing companies; and hypermarkets and consumer super centers.
- **Energy Sector** – Encompasses companies whose businesses are dominated by construction or the provision of oil rigs, drilling equipment and other energy-related services and equipment. Also includes companies engaged in the exploration, production, marketing, refining and/or transportation of oil and gas products, as well as coal and other consumable fuels.

- **Financials Sector** – Includes companies across the financial spectrum: banking, mortgage finance, consumer finance, specialized finance, investment banking, brokerage, asset management and custody, corporate lending, insurance, and real estate, including REITs.
- **Health Care Sector** – This sector encompasses two main industry groups: companies that manufacture health care equipment and supplies or provide health care-related services. This includes distributors of health care facilities and organizations; companies involved in the research & development, production and marketing of pharmaceuticals and biotechnology products.
- **Industrials Sector** – Includes companies whose businesses are dominated by the manufacture and distribution of capital goods. These include: aerospace and defense; construction; engineering and building products; electrical equipment and industrial machinery; commercial services and supplies; and transportation services, including airlines, couriers and marine, road and rail transportation infrastructure.
- **Information Technology Sector** – Covers the following areas: technology software and services; information technology consulting; data processing and outsourced services; technology hardware and equipment, including manufacturers and distributors of communications equipment, computers and peripherals; electronic equipment and related instruments; semiconductors; and semiconductor equipment manufacturers.
- **Materials Sector** – Encompasses a wide range of commodity-related manufacturing industries. Included in this sector are companies that manufacture chemicals, construction materials, glass, paper, forest products and related packaging products, and metals, minerals and mining companies, including producers of steel.
- **Telecommunications Services Sector** – Contains companies that produce communications services primarily through a fixed-line, cellular, wireless, high bandwidth and/or fiber optic cable network.
- **Utilities Sector** – This includes electric, gas or water utilities, or companies that operate as independent producers and/or distributors of power.

Global Investment Performance Standards (GIPS) – GIPS are a set of ethical standards developed by the CFA Institute to establish a global standard for computing and reporting on investment management performance results. Adherence to GIPS ensures fair representation and full disclosure of all performance results.

Global Macro Strategy – This is a hedge fund strategy in which investments in stocks, bonds, and currencies are allocated across countries. These decisions are based upon macroeconomic forecasts such as economic outlooks and political views for various countries.

Global Strategies – Global investment strategies are those that invest in both foreign and domestic equity securities. Some invest in currency as well.

Government Bond – A bond issued by the U.S. Government or one of its agencies.

Growth Equity Managers – Managers that invest in companies that are expected to have above average prospects for long-term growth in earnings and profitability.

Guaranteed Investment Contract (GIC) – A contract between an insurance company and a corporate profit sharing or pension plan that guarantees a specific rate of return on the invested capital over the life of the contract. Although the insurance company takes all market, credit and interest rate risks on the investment portfolio, it can profit if its returns exceed the guaranteed amount. For pension and profit-sharing plans, guaranteed income contracts are a conservative way of assuring beneficiaries that their money will achieve a pre-determined rate of return.

H

Hard Dollars – Cash paid for services rendered. (See **Soft Dollars** as comparison.)

Hedge – A transaction or strategy designed to reduce investment risk and often involving derivative instruments such as futures contracts or options.

Hedge Fund of Funds – A hedge fund product which invests in other hedge fund strategies in order to diversify across hedge fund manager styles.

High Yield Strategy – Fixed income investment strategy that invests in below investment grade fixed income securities. As a result, security selection often involves intensive fundamental analysis of the company.

I

Immunization – A bond portfolio structured to achieve a target level of return in the face of changing interest rates. Immunization strategies combine short-term and long-term bonds to produce a predictable rate of return regardless of movements in interest rates.

Incentive Fee – Also called a Performance Fee, an incentive fee is a fee paid to an investment manager based upon the performance of the fund or portfolio. It is typically determined by a pre-specified formula and it can be in addition to a flat fee charged by the investment manager.

Income Return – A measure of the gain of a security or portfolio due only to income earned.

Indenture – An indenture is the written contract between a bondholder and an issuer that stipulates the terms of the bond.

Index – Indices are imaginary portfolios of securities that replicate a market or a portion of a market. An appropriate index can be used as a benchmark to evaluate an investment manager's performance.

Index Fund – A passively-managed investment in a diversified portfolio of financial assets designed to mimic the performance of a specific market index.

Inflation – A period in which the general level of prices for goods and services is increasing, and, thus, purchasing power is decreasing.

Information Ratio – The Information Ratio is a risk statistic that measures the excess return per unit of residual "non-market" risk in a portfolio. The ratio is the excess return per unit of risk that is due solely to the specific risks associated with the securities in the portfolio, rather than market risk. Non-market risk can be eliminated through diversification.

Initial Public Offering (IPO) – An IPO is a company's first sale of stock to the public. Securities offered in an IPO are often, but not always, those of young, small companies seeking outside equity capital and a public market for their stock.

Insider Trading – Illegal trading of securities based on non-public information.

Interest Rate Risk – Uncertainty in the return of a bond that is caused by changes in interest rates.

Internal Rate of Return (IRR) – See Dollar Weighted Return.

Investment Company – A corporation or trust that invests the capital of shareholders, generally through mutual funds. In the U.S., most investment companies are registered with and regulated by the Securities & Exchange Commission under the Investment Company Act of 1940.

Investment Grade – Investment grade bonds are those rated Baa or higher by Moody's and higher than BBB by Standard and Poor's.

Investment Management Consultant Association (IMCA) – The Investment Management Consultants Association is a Denver-based non-profit association that was founded in 1985. The association certifies consultants as Certified Investment Management Analysts (CIMA) after consultants attend its intensive program. IMCA holds the U.S. Patent office trademark for CIMA designation.

J

Junk Bonds – A term used in reference to high yield or below investment grade bonds.

J Curve – A theory stating that a country's trade deficit will initially worsen after a depreciation of its currency because higher prices of imports will more than offset the reduced volume of imports.

L

Laddered Strategy – A fixed income strategy in which a portfolio is structured with bonds maturing at regular intervals. The bonds are generally evenly distributed between short term, intermediate term, and long term maturities. As short term bonds mature, the funds received are reinvested in long term bonds.

Large Cap Strategy – Equity managers who invest primarily in large capitalization range companies. The average market capitalization of a security is $5 billion or higher.

Leverage – In finance, leverage is using given resources in such a way that the potential positive or negative outcome is magnified. It generally refers to using borrowed funds, or debt, to try to increase returns. In Real Estate, leverage is essentially the debt that is placed on a property in order to enhance return. For instance, if a property is 70% leveraged and the value is $10 million, then the amount of leverage is $7 million and the amount of equity is $3 million.

Leveraged Buy-Out (LBO) – An LBO is the acquisition of a company using a significant amount of borrowed money (bonds or loans) to meet the cost of acquisition. Generally, the assets of the company being acquired are used as collateral for the loans. The purpose of leveraged buyouts is to allow investors to make large acquisitions without having to commit a lot of equity capital. LBO's are done predominantly using private equity funds.

Lifecycle Funds – Lifecycle Funds refer to balanced investment vehicles, typically mutual funds, which match their asset allocation and risk level to an individual's retirement year. Also called Target **Maturity** Funds (or: target retirement funds?), these funds are designed to shift assets away from equity and into fixed income as an investor nears retirement.

Limited Partnership – A form of a partnership composed of a general manager responsible for the day-to-day management of the business, and several limited partners who invest money, but have limited involvement in the management of the firm, and, thus, limited liability for its financial obligations.

Liquidity – In general, liquidity refers to the ease by which a financial asset can be converted into cash. Liquidity is often more narrowly defined as the ability to sell an asset quickly without having to make a substantial price concession.

Liquidity Risk – Liquidity risk is the risk stemming from a lack of marketability of an investment, which makes it difficult to sell when desired.

Load – The percentage commission, or charge, on a mutual fund. The fee may be a one-time charge at the time of purchase (front-end load) when the fund is sold (back-end load), or an annual fee known as a 12b-1 fee.

London Interbank Overnight Rate (LIBOR) – LIBOR is an interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market. LIBOR is fixed on a daily basis by the British Bankers' Association and is derived from a filtered average of the world's most creditworthy banks' interbank deposit rates. It is the world's most widely used benchmark for short-term interest rates.

Long Position – Being "long" implies an ownership position in a security or derivative instrument.

Long/Short Strategy – A hedge fund strategy that holds long positions in undervalued companies and shorts stocks that are deemed to be overvalued.

Lump Sum Distribution – Payment of an entire amount due at one time rather than in installments.

M

Management Fee – A management fee is the fee charged by an investment management company for its investment advisory services.

Manager Search – A process used to identify and select appropriate investment managers. Manager searches are an important phase in the implementation of a strategic investment plan. A manager search process typically includes a detailed analysis of both quantitative and qualitative data about the prospective manager.

Manager Structure – A framework for various types of investment managers hired to manage investment funds.

Mark-to-Market – The process of adjusting the value of a portfolio or financial instrument to reflect daily changes in its market price.

Market Capitalization – The market value of all the shares of common stock issued by a company at a point in time.

Market Proxy – The benchmark used to represent either the broad market or a segment of the market. The selection of an appropriate market proxy is critical in the determination of a relevant alpha, beta, R-squared and standard error.

Market Risk – See **Systematic Risk**

Market Timing – A form of active management that attempts to add value by "timing" the market, allocating funds between asset classes based on short-term expectations of movements in the capital markets. OR: A form of active management that attempts to add value by "timing" the market. This is achieved by allocating funds between asset classes based on short-term expectations of movements in the capital markets.

Market Value – The market value is the current price of a security or portfolio.

Market Value Weighted Index – See **Capitalization Weighted Market Index.**

Master Trust – A pooling of a plan sponsor's assets, including multiple managers and multiple plans, under one trust agreement.

Maturity Date – The date at which a bond's principal value is repaid, along with any accrued income due.

Median – The middle value in a distribution, above and below which lie an equal number of values. The median value ranks in the 50^{th} percentile in a distribution.

Mezzanine Debt – Debt that is used to bridge the gap that may exist in an investment where the equity and senior debt (i.e. first mortgage) are not sufficient to close on a real estate investment. For example, if an investor were to put in 10% equity and the lender would only provide a 70% first mortgage, then mezzanine debt could be secured to fill in the 20% financing gap. Typically, mezzanine debt is short-term and has a much higher coupon rate than the senior debt.

Microcap Strategies – Microcap managers invest in very small companies, typically those with capitalizations of less than $500 million.

Middle Capitalization Strategies – Equity managers who invest primarily in middle capitalization range companies with market capitalizations between core equity companies and small capitalization companies. The average market capitalization of a security is approximately $3 billion, but the range can be from $1 billion to $5 billion.

Modern Portfolio Theory (MPT) – Modern portfolio theory (MPT) proposes that rational investors will use diversification to "optimize" their portfolios to earn the highest return for a given level of risk. Essential to this theory is the quantification of the relationship between risk and return, and the assumption that investors must be compensated for assuming additional risk.

Money Market Funds – Markets in which financial assets with a maturity of less than one year are traded. Money market funds are expected to invest in low-risk, highly liquid, short-term financial instruments. The net asset value is kept stable at $1 per share.

Mortgage-Backed Securities – Securities backed by a pool of mortgage loans.

Multi-Strategy – A hedge fund investment style that employs various strategies simultaneously. Managers generally overweight or underweight different strategies to capitalize on current investment opportunities.

Municipal Bond – A municipal bond is a debt instrument issued by a municipality such as a state or city. They are often called munis for short. Income paid on these bonds is exempt from federal, and sometimes state, income taxes.

Mutual Fund – A mutual fund is a professionally managed investment fund. Mutual funds are managed like large private accounts, but there are certain tax differences between an individually managed account and owning shares in a mutual fund.

N

NASD, Inc. (NASD) – Formerly known as the National Association of Securities Dealers, NASD, Inc. is an industry organization representing people and companies in the securities business. It is the primary self-regulatory organization with responsibility for regulating the industry with oversight from the SEC.

NASDAQ Stock Market – The largest U.S. electronic stock market with roughly 3200 companies listed.

National Association of Real Estate Investment Trusts (NAREIT) – NAREIT is the representative voice for U.S. real estate investment trusts (REITs) and publicly-traded real estate companies worldwide. Members are REITs and other businesses that own, operate, and finance income-producing real estate, as well as those firms and individuals who advise, study and service those businesses.

National Council of Real Estate Investment Fiduciaries (NCREIF) – NCREIF is made up of investment managers, plan sponsors, academicians, consultants, appraisers, CPA's, and other service providers that have a significant involvement in pension fund real estate investments. NCREIF serves the industry as an independent and non-partisan "Central Repository" of real estate performance information.

Net Absorption – Net absorption is the net change in occupied space in the real estate market.

Net Asset Value (NAV) – The value of one mutual fund share.

No Load Fund – A mutual fund which charges little or no commission (load) to the buyer of its shares.

Non-Directional Strategy – Non-directional hedge fund strategies aim to produce a positive return in any market environment by exploiting market inefficiencies. An example would be an/the **Equity Market Neutral Strategy.**

O

Opportunistic Real Estate Strategy – This strategy incorporates various tactics, such as taking public real estate companies, private or taking construction and leasing risk through ground-up development. Investments are highly leveraged (up to 90%) and the majority of the return, over two-thirds, is expected to come from appreciation.

Opportunity Cost – The difference between the performance of an actual investment and a desired investment adjusted for fixed costs and execution costs. The performance differential is a consequence of the inability to implement all desired trades.

Option – A contractual agreement that conveys the right, but not the obligation, to buy (receive) or sell (deliver) a specific security at a stipulated price and within a stated period of time. An option is part of a class of securities called derivatives, so named because these securities derive their value from the worth of an underlying security.

Over-the-Counter Market (OTC) – A market for securities not traded on a formal exchange, but rather through a dealer network. OTC stocks are often those of companies without sufficient shares, stockholders or earnings to warrant listing on an exchange. The OTC market is also the principal market for all types of bonds.

P

Par Value – In the case of a common stock, par is the dollar amount assigned to the share by the company's charter. In the case of preferred stocks, par is the dollar value upon which dividends are figured. With bonds, par value is the face amount or principal amount of the bond that will be repaid at maturity.

Passive Management – For a given asset class, the process of buying a diversified portfolio which mimics the overall performance of the asset class or relevant market index.

Pension Benefit Guaranty Corporation (PBGC) – The federal agency, established as a nonprofit corporation, charged with administering the plan termination provisions of ERISA Title IV and the Multi-employer Pension Plan Amendments Act of 1980. Employers pay premiums to the PBGC, which guarantees benefits for participants and beneficiaries when defined benefit plans terminate.

Pension Fund – An investment fund established by a corporation or organization to manage retirement benefits and investments for its employees.

Pension Protection Act of 2006 (PPA) – An act of legislation that made a large number of reforms to U.S. pension plan laws and regulations. This law made several pension provisions from the Economic Growth and Tax Relief Reconciliation Act of 2001 permanent, including the increased IRA contribution limits and the increased salary deferral contribution limits to a 401(k). It also attempted to strengthen the overall pension system and reduce the reliance on the federal pension system and the Pension Benefit Guaranty Corporation.

Performance Attribution – The process of evaluating the factors that contribute to the total rate of return of a portfolio.

Plan Sponsor – Any entity that establishes a pension plan, including private business entities acting for their employees, state and local entities operating on behalf of their employees, unions acting on behalf of their members and individuals representing themselves.

Preferred Stock – A class of stock with a higher rank than common stock. Holders of preferred stock have a claim on earnings before common stock shareholders.

Prepayment Risk – Prepayment risk refers to the risk associated with certain fixed income securities, namely mortgages, in which there exists an uncertainty as to whether and when unscheduled repayments of principal will occur. This is a "risk" in that prepayments can negatively affect the total return of the security.

Present Value – Present value is the value on a given date of a future payment/receipt or series of future payments/receipts, discounted to reflect the time value of money, usually by the current relevant market interest rate.

Price Spread – The difference between the bid price and the ask price of a security. For example, when a stock is quoted "50 bid, offered at 52," a two point spread is said to exist.

Primary Dealer – Primary dealers are banks or broker dealers who may trade directly with the Federal Reserve. They are required to make bids/offers when the Fed conducts its open market operations and to actively participate in U.S. Treasury auctions. These dealers purchase the majority of the U.S. Treasury securities sold at auctions and resell them to investors.

Prime Brokers – A prime broker offers a special group of services to certain clients. The services provided under prime brokering are securities lending, leveraged trade executions, and cash management, among other things. Prime brokerage services are provided by most large brokers.

Prime Rate – The lowest interest rate charged by commercial banks to their most credit-worthy customers. Other interest rates, such as personal, automobile, commercial and financing loans are often pegged to the prime.

Principal Value – See Par Value.

Private Equity – Equity capital that is made available to companies or investors but not quoted on a stock market. The funds raised through private equity can be used to develop new products and technologies, to expand working capital, to make acquisitions, or to strengthen a company's balance sheet.

Private Placement – A private placement involves the direct sale of a newly issued security to one or a small group of large institutional investors. Private placements are not traded on an exchange.

Probability Distribution – A distribution of all the values that a random variable can assume and the probability associated with each.

Profit Sharing Plan – A profit sharing plan is a retirement plan that receives contributions as a percentage of the sponsoring company's profits.

Projected Benefit Obligation (PBO) – A measure of a pension plan's liability at a specified date, assuming that the plan is ongoing and will not terminate in the foreseeable future.

Prospectus – A legal document stating the complete history and current status of a security issue. In accordance with the Securities Act of 1933, a prospectus must be made available to all interested purchasers in advance of a public offering. This formal written document must describe the plan for a proposed business enterprise, or the facts concerning an existing one that an investor needs in order to make an informed decision. Prospectuses are also used by mutual funds to describe the fund objectives, risks, fees and other essential information.

Prudent Man (Prudent Man Rule) – A concept born from the 1830 Massachusetts court decision of *Harvard College v Armory* that described the duty owed by a trustee to its beneficiaries: "All that can be required of a trustee to invest is, that he shall conduct himself faithfully and exercise sound discretion. He is to observe how men of prudence, discretion, and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested."

Prudent Expert Rule – As a revised version of ERISA's Prudent Man Rule, ERISA requires that a fiduciary manage a portfolio "with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims." The Prudent Expert Rule differs from the classic Prudent Man Rule in that managers must act with "familiarity" on such matters as money management rather than just simple prudence.

Purchasing Power Parity (PPP) – An economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order to equalize their purchasing power.

Purchasing Power Risk – Purchasing power risk is the risk that a portfolio or investment will earn a return less than the rate of inflation.

Put Option – An option contract that gives the holder the right to sell a certain quantity of an underlying security to the buyer of the option at a specified price (the strike price) up to a specified date (the expiration date).

Q

Qualified Default Investment Alternative (QDIA) – Default investment options in retirement plans that are granted safe harbor under ERISA according to the 2006 Pension Protection Act. QDIA's include balanced funds, target retirement funds (lifecycle funds) and managed accounts, but not stable value or money market funds, which have historically been used as the default option in retirement plans.

Qualified Retirement Plan or Trust – A plan that meets the requirements of Internal Revenue Code Section 401(a) and the Employee Retirement Income Security Act of 1974 (ERISA), and is thus eligible for favorable tax treatment. These plans offer several tax benefits: they allow employers to deduct annual allowable contributions for each participant; contributions and earnings on those contributions are tax-deferred until withdrawn for each participant; and some of the taxes can be deferred even further through a transfer into a different type of IRA.

R

Real Estate Investment Trust (REIT) – A corporation or trust that uses the pooled capital of many investors to purchase and manage income property and/or mortgage loans. REITs are traded on major exchanges. They are also granted special tax considerations.

Real Income – Income adjusted for inflation.

Real Rate of Return – A real rate of return is adjusted for inflation.

Recession – A recession is a period of general economic decline, officially marked by two consecutive quarters of a decline in GDP growth.

Refunding – Issuing a new bond to retire an existing bond. Refundings allow issuers to take advantage of lower interest rates by issuing new bonds at a lower rate and retiring older, higher rate bonds.

Rights – Rights give existing shareholders privilege to purchase a company's new securities, normally at a discount to the current market. Usually, the privilege must be exercised within a relatively short time span.

Risk-Adjusted Return – The return on an asset or portfolio, modified to explicitly account for the risk of the asset or portfolio.

Risk-Free Rate of Return – The risk-free return is the return on assets with zero risk. Rates on short-term U.S. Treasury bills are generally used to represent a risk-free rate.

Rollover – A tax-free reinvestment from a qualified retirement plan into an Individual Retirement Account (IRA) or other qualified plan, or from one IRA to another, as defined by the IRS.

R-squared (R^2) – R-squared measures the overall strength of "explanatory power" of a statistical relationship. In general, a higher R-squared means a stronger statistical relationship between two variables. An R-squared of 1 (100%) indicates that the statistical relationship has perfect explanatory power.

S

Safe Harbor Rules – A series of guidelines set forth by the Department of Labor that when fully complied, *may* limit a fiduciary's liabilities. Safe Harbor Rules require: the use of "prudent experts;" a due diligence process for selecting managers; that investment discretion be given to selected managers; that managers acknowledge a co-fiduciary status; and that these managers be monitored.

Secondary Market – The secondary market is the market in which securities are traded between investors rather than between the issuer and the investor.

Securities and Exchange Commission (SEC) – The SEC is the primary federal regulatory agency for the securities industry. Its responsibility is to promote full disclosure and to protect investors against fraudulent and manipulative practices in the securities markets.

Securities Lending – A loan of a security from one financial institution or dealer to another. The borrower provides the lender with collateral in the form of cash or securities and the interest earned on the collateral compensates the lender for loaning the securities to the borrower.

Securitization – The process of pooling together similar non-tradeable investments or assets and then issuing one tradeable security backed by those assets.

Sell Side – Sell side is used to describe the portion of the securities business whereby brokers or dealers sell securities to customers. The sell side includes retail brokers, institutional brokers and traders and their research departments. .

Separate Account – Money gathered from one source that is managed in a distinct and separate individual account.

Settlement Date Performance – A performance measurement methodology that bases calculations on the settlement date, rather than the trade date of transactions.

Sharpe Ratio – The Sharpe ratio is a commonly used measure of risk-adjusted return. It is calculated by subtracting the risk-free return (usually the 3 month Treasury bill) from a portfolio's return and then dividing this excess return by the portfolio's total standard deviation (a measure of portfolio volatility, or risk). The ratio thus represents the return gained per unit of risk taken.

Short Sale – A market transaction whereby an investor sells a borrowed security in anticipation of a decline in its price. The investor must then purchase the security to cover the loan by a pre-specified point in time. As a result, the investor has a short position.

Short-Term Investment Fund (STIF) – A bank fund that is invested in low-risk, highly liquid short-term financial instruments. The average portfolio maturity is generally 30 to 60 days.

Size-Weighted Composite – An investment manager's composite of portfolio returns that weights each portfolio's return based on the value of the account.

Small Capitalization Strategies – Small cap strategies invest in companies with relatively small market capitalizations. The cut-off point for small capitalization varies from manager to manager but on average includes firms with capitalization of $100 million - $1 billion.

Small/Mid Capitalization Strategies (SMID) – SMID managers invest in both small cap and mid cap companies and are generally benchmarked against an index such as the Russell 2500 or an S&P equivalent.

Socially-Targeted Investment – An investment which is made based upon social rather than financial guidelines. See also **Economically-Targeted Investment**.

Soft Dollars – Soft dollars are non-cash payments for services that are generated by institutional trading through a particular broker, often called a "Directed Broker." Soft dollars must be used to pay for goods or services that directly benefit the retirement plan.

Solvency – The ability of a corporation to meet its long term fixed expenses and to accomplish long term expansion and growth. (From "Investopedia")

Sortino Ratio – The Sortino ratio is a measure of risk-adjusted return. It measures a portfolio's return over a benchmark divided by downside risk, or the standard deviation of negative returns. It is similar to the Sharpe ratio, except that it differentiates between upside volatility ("good" volatility) and downside volatility ("bad" volatility).

Specific Risk – Specific risk is the risk attributable to an individual security and not related to market movements. This type of risk can be eliminated through diversification. It is also know as **unsystematic** risk.

Spot Price – The spot price is the current price at which a commodity can be traded.

Spot Rate – The yield-to-maturity of a 0% coupon Treasury for a given maturity.

Standard Deviation – Standard deviation is a statistical measure of portfolio risk. It reflects the average deviation of returns from their mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns has been.

Strategic Asset Allocation – Strategic asset allocation requires rebalancing back to a pre-determined policy allocation at specified time intervals or when established tolerance bands are violated.

Strip – Stripping is the process of removing (stripping) coupon payments from a bond and then selling these separate parts as a zero-coupon bond and disparate coupon payments. A **Treasury Strip** is a Treasury bond that has been stripped of its coupon payments and, thus, has a 0% coupon rate. It is also known as a Zero Coupon Bond.

Structured Investment Vehicle (SIV) - A structured investment vehicle (SIV) is an arbitrage fund that invests in a range of asset-backed securities and/or corporate bonds. An SIV is formed to profit from the difference between short-term borrowing rates and returns available on longer-term investments. The risk that arises from the transaction is twofold. First of all, the solvency of the SIV may be at risk if the value of investments falls below the amount borrowed to finance its investments. Secondly, there is a liquidity risk that, as the SIV borrows short term and invests long term, the amount owed will come due before the asset matures. Unless the borrower can refinance at favorable rates, they may be forced to sell the assets into a depressed market.

Structured Note – A structured note is a debt security with interest payments that are determined by a formula tied to the movement of an interest rate, stock, stock index, commodity, currency or other index.

Style – The description of the type of approach and strategy utilized by an investment manager. For example, an equity style is determined by portfolio characteristics such as: market capitalization of issues, price to earnings ratios and dividend yield. See Callan Style Groups in Appendix 1.

Swap – A contract between two parties in which the parties promise to exchange sets of payments on scheduled future dates. Swaps are not guaranteed by any clearinghouse and are, therefore, susceptible to default. Because of this, the contracting parties are sometimes required to post collateral. There are four primary classes of swaps defined by the type of their underlying instrument: interest rate, equity, currency, and commodity.

Systematic Risk – Systematic risk is the risk inherent to an entire market rather than an individual security. This type of risk cannot be eliminated through diversification. It is also known as "market risk."

T

Tactical Asset Allocation – Tactical Asset Allocation involves actively altering allocation among broad asset classes in an attempt to capture the highest returns. It is also referred to as "market timing."

Target Maturity Fund – A type of investment fund that is sometimes available in defined contribution plans where the investor selects a "maturity," typically the investor's retirement date. The fund is managed accordingly by investment professionals such that its asset allocation becomes more conservative over time in anticipation of funds being withdrawn at maturity.

Technical Analysis – Technical analysis involves studying market activity, primarily through the use of charts, to forecast future price movements.

10 K – An SEC-required annual report on a publicly-traded company that provides a comprehensive overview of the company's state of business. The 10-K must be filed within 90 days after the company's fiscal year end. A 10-Q report is filed quarterly.

Ticker – A group of letters assigned to a company when listed on an exchange.

Time Weighted Rate of Return – A method of computing investment performance that excludes the effect of cash flows by calculating sub-period returns. Because cash flows (contributions and withdrawals into a portfolio) are not controlled by an investment manager, it is inappropriate to measure performance net of the effect of these flows. Time weighted performance calculation is widely accepted as the appropriate method of performance measurement because it removes the impact of cash flows.

Top Down Analysis – A process of investing that focuses foremost on economic and industry analysis to structure portfolios. The opposite of **Bottom Up Analysis.**

Total Return – Total return is a standard measure of performance that includes capital appreciation or depreciation, realized gains and losses, and income.

Trade Date Performance – Performance measurement that bases all calculations of performance on the trade date of a transaction rather than the settlement date.

Trading Halt – A temporary suspension of the trading of a security on one or more exchanges, usually in anticipation of news or due to an order imbalance.

Transfer Agent – The organization employed by a bank or trust company to cancel and issue certificates, maintain records and process mailings to investors.

Transition Manager – A manager whose specific role is to transition one portfolio of assets to another while minimizing costs.

Treasury Bill – A U.S. Government security with a maturity of less than one year. It is often used as a measure of risk-free return.

Treasury Inflation-Protected Securities (TIPS) – TIPS are securities issued by the U.S. Treasury that offer inflation protection to investors. They have a fixed coupon rate but their principal value is adjusted at periodic intervals to reflect changes in the Consumer Price Index (CPI), the most commonly used index to measure inflation. For example, given a rise in the CPI, the principal value of the TIPS will be adjusted upward so that the amount of interest earned on the securities also increases.

Treasury Strip – See Strip.

Trustee – A person, bank or trust company that has responsibility over receipt, disbursement and investment of funds in a trust.

12b-1 Fee – The percent of a mutual fund's assets used to defray marketing and distribution expenses such as advertising and commissions paid to dealers. 12b-1 fees are named for the corresponding SEC rule, passed in 1980. A fund's prospectus outlines 12b-1 fees, if applicable. A true "no load" fund has neither a sales charge nor a 12b-1 fee.

U

Underfunded Pension Plan – An underfunded plan is a defined benefit plan that has liabilities that exceed its assets.

Underwriting – The process by which investment bankers raise investment capital from investors for corporations or governments by issuing debt or equity securities.

Unlisted Securities – Securities which are not listed on an organized stock exchange, such as those traded over-the-counter.

Unrelated Business Taxable Income (UBTI) – UBTI refers to income that may result in taxable income to an otherwise tax-exempt entity.

Unsystematic Risk – Unsystematic risk is the firm-specific risk of a security or portfolio. This type of risk can be eliminated through diversification. It is the portion of the total risk of a security or portfolio that is unique to the security or portfolio itself and is not related to the overall market.

Upgrade – A positive change in the quality rating of an equity or fixed income security.

V

Vacancy Rate – Vacancy rate refers to the percentage of stock in a real estate market that is not occupied.

Value-Added Real Estate Strategy – This type of strategy involves adding incremental value to a property in order to produce a higher return than a core strategy. Typically, half of the total return will come from income and half from appreciation.

Value at Risk (VaR) – Technique used to analyze variations in performance and to estimate the amount by which a portfolio could underperform.

Value Equity Managers – Investment managers who invest in companies believed to be undervalued or possessing lower than average price/earnings ratios based on their potential for capital appreciation.

Variable Annuity – A variable annuity is an insurance contract that guarantees a minimum payment after a specified amount of time. Future payments can vary as they depend upon the performance of the underlying managed portfolio.

Variance – Variance is a measure of risk which measures volatility around an average. For example, a range of prices for a stock will have a variance that reflects the amount that its price varies from its average. Variance is useful as a risk statistic because it gives an indication of how much the value of a portfolio might fluctuate from its average over a given time.

Venture Capital – Investment in a company that is at a relatively early stage of development and that is not listed on a stock exchange.

Vesting – Acquisition by a pension plan member of an absolute right to an immediate or deferred benefit by fulfilling prescribed conditions, especially length of employment requirements.

Volatility – The degree to which an investment's market value goes up and down over time.

W

Warrant – A certificate giving the holder the right to purchase shares of stock at a stipulated price within a specified time span.

Wrap Fee – A type of charge for an investment program that bundles or "wraps" a number of services (brokerage, advisory, research, consulting, management, and others) together and covers them with a single fee based on the value of assets under management.

Y

Yield Curve – A yield curve is a line that plots interest rates, at a specific point in time, of bonds with equal credit quality, but different maturity dates. The most frequently reported yield curve compares yields on U.S. Treasury securities; typically the 3-month, 2-year, 5-year and 30-year Treasuries. This yield curve is often used as a benchmark to compare yields on other fixed income securities, such as mortgages or corporate credits. The curve is also used by investors and economists to predict changes in economic output and growth.

Yield to Maturity – Yield to maturity is the rate of return an investor will receive if a bond is held to its maturity. Yield to expected maturity is calculated as the internal rate of return, incorporating the current market value and all expected future interest and principal flows.

Callan Terminology

A

Asset Allocation Effect – Measurement that illustrates the additional return produced by the difference between the target portfolio's asset class weights and the actual plan's asset class weights. This effect is seen when a return for an asset class target in the plan is greater than the total return of the plan's target benchmark as a whole and where the actual asset class weight was greater than the target asset class weight for the time period.

Average Coupon Rate – The market value weighted average coupon rate of all securities in a portfolio. The total portfolio coupon payments per year are divided by the total portfolio par value to get the average coupon rate.

Average Moody's Quality – A measure of the credit quality of a portfolio as determined by its individual security ratings. The Moody's ratings for each security are compiled into a composite rating for the whole portfolio.

Average Price – Equal to the portfolio market value divided by the number of securities in the portfolio. Portfolios with an average price above par will tend to generate more current income than those with an average price below par.

Average Years to Stated Maturity – The market value-weighted, average time to stated maturity for all securities in the portfolio. This term does not take into account embedded options such as sinking fund payments or mortgage prepayments.

C

Cash Flow/Sales – Cash flow divided by sales. Cash flow is the cash generated by a company after all cash expenses, including income taxes and minority interest, but before provision for dividends. Expenses do not include non-cash expenses such as depreciation. Sales represent gross sales reduced by cash discounts, returned sales, etc.

Cumulative Relative Return Ratio – The cumulative relative return for a portfolio or asset measures the cumulative return relative to a specified benchmark cumulative return. A period where the portfolio underperformed the benchmark would cause the return ratio for that period to be below zero. With examining the cumulative relative return ratio, values above zero represent total performance over the period above the benchmark, and values below zero represent total performance over the period below the benchmark.

Current Yield – The current yield is the current annual income generated by the total portfolio market value. It is equal to the total portfolio coupon payments per year divided by the current total portfolio market value.

D

Diversification Ratio – Diversification Ratio is the ratio of the number of issues in the top half of the portfolio's market value divided by the number of issues in the total portfolio. This value expresses to what extent a portfolio is equally weighted versus concentrated, given the number of names in the portfolio. This value can range from a high of 50% (equal weighted) to a low of 1% (half of the portfolio is in 1% of the names).

Dividends/Cash Flow – The Dividend/Cash Flow ratio is a measure of the sustainability or safety of a given dividend payment amount. The common stock dividends are the total dollar amount of dividends for a stock over the preceding twelve months. Cash flow is the cash generated by a company after all cash expenses, including income taxes and minority interest, but before provision for dividends.

Down Market Capture Ratio – Down Market Capture is determined by the index which has a Down-Capture ratio of 100% when the index is performing negatively. If a manager captures less than 100% of the declining market it is said to be "defensive". This statistic is not annualized.

Downside Risk – Downside Risk differentiates between "good" risk (upside volatility) and "bad" risk (downside volatility). Whereas standard deviation treats both upside and downside risk the same, downside risk measures only the standard deviation of returns that are below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

E

Earnings/Sales – This is a measure of a company's profitability, specifically measuring the relationship between the firm's costs and its sales. The value is equal to the earnings of a company divided by net sales. Earnings represent the income of a company after all expenses, income taxes, and minority interest, but before provisions for common and/or preferred stock dividends. Sales represent gross sales reduced by cash discounts, returned sales, etc.

Earnings Yield – The earnings per share of a share of a common stock for the preceding twelve months divided by the current closing price.

Effective Maturity – This is a measure of the market value weighted average of the years to expected maturity across all of the fixed income securities in the portfolio. Expected years to maturity takes into account any put or call options embedded in the security, any expected sinking-fund payments and any expected mortgage principal prepayments

Effective Yield – The effective yield is the actual total annualized return that would be realized if all securities in the portfolio were held to their expected maturities. Effective yield is calculated as the internal rate of return, using the current market value and all expected future interest and principal cash flows.

Excess Correlation – This is the correlation of one portfolio's excess return to another portfolio's excess return. Excess return is the return minus a benchmark's return. Excess Correlation is used to indicate whether different managers outperform a market index at the same time.

Excess Return Ratio – The Excess Return Ratio is a measure of risk-adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index). It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

F

Five Year Beta – Beta measures the sensitivity of rates of return on a fund to general market movements. As such, the beta for a portfolio is a reflection of the risk of the securities in the portfolio as compared to the broader market. This value is a composite of the individual beta values within a portfolio. The beta computation is based on the weighted average of the five year historical betas of each security in a portfolio.

Five Year Growth in Earnings – This value represents a weighted average five-year annual growth rate of earnings per common stock share.

Forecasted Earnings Yield – This yield is a forward-looking valuation measure of a company's common stock. It expresses the amount of earnings estimated for next year per dollar of current share price as a percentage of yield.

Forecasted Growth in Earnings – This growth rate is a measure of a company's expected long-term success in generating future year-over-year earnings growth. This growth rate is a market value weighted average of the consensus (mean) analysts' long-term earnings growth rate forecast for each company in the portfolio. The definition of long-term varies by analyst but is limited to a 3-8 year range. This value is expresses the expected annual growth of earnings as a percent in percent form.

G

Growth in Assets - NOT IN PEP – This value represents a weighted average five year annual growth rate of assets per common stock share. The rates of growth in assets for trailing twelve month periods are calculated using the assets-per-share values for each time period. The five-year growth in assets figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio. The number of shares in each time period is adjusted to reflect any splits, mergers, or other capital changes. Total Assets includes the sum of current, non-current, and intangible assets.

Growth in Book Value - NOT IN PEP – This value represents a weighted average five year annual growth rate of book value per common stock share. The rates of growth in book value for trailing twelve month periods are calculated using the book value-per-share figures for each time period. The five-year growth in book value figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio. The number of shares in each time period is adjusted to reflect any splits, mergers, or other capital changes. Total Book Value is the sum of the common stock outstanding, capital surplus, and retained earnings.

Growth in Cash Flows – This value represents a weighted average five year annual growth rate of cash flow per common stock share. The rates of growth in cash flow for trailing twelve month periods are calculated using the cash flow-per-share values for each time period. The five-year growth in cash flow figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio.

Growth in Dividends – This value represents a weighted average five year annual growth rate of dividends per common stock share. The rates of growth in dividends for trailing twelve month periods are calculated using the dividend-per-share values for each time period. The five-year growth in dividends figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio.

Growth in Earnings - NOT IN PEP – This value represents a weighted average five year annual growth rate of earnings per common stock share. The rates of growth in earnings for trailing twelve month periods are calculated using the earnings-per-share values for each time period. The five-year growth in earnings figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio. The number of shares in each time period is adjusted to reflect any splits, mergers, or other capital changes. In this case, the earnings per share are fully diluted and exclude extraordinary items and discontinued operations. Fully diluted earnings per share are earnings that are reduced, or diluted, by assuming the conversion of all securities that are convertible into equities.

Growth in Sales – This value represents a weighted average five year annual growth rate of sales per common stock share. The rates of growth in sales for trailing twelve month periods are calculated using the sales-per-share values for each time period. The five-year growth in sales figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio.

I

Indicated Dividend Yield – The total amount of dividends paid out for a stock over the preceding twelve months divided by the closing price of a share of the common stock

Industry Concentration Return - NOT IN PEP – This measure looks at the return attributable to the difference between a portfolio's industry sector weights and the benchmark's sector weights. If the benchmark sector return is greater than the return of the benchmark as a whole and the portfolio's sector weight was greater than the benchmark weight, the portfolio will show a positive Industry Concentration Return for the time period. If the benchmark sector return is less than the return of the benchmark as a whole and the portfolio's sector weight was less than the benchmark weight, the portfolio will show a negative Industry Concentration Return for the time period.

Interest/Pretax Earnings - NOT IN PEP – This value is used as a measure of the ability of a company to meet interest payments out of earnings. The ratio is equal to the interest expense divided by earnings. Earnings is the value before: 1) interest expense, the expense of securing both short and long-term debt; 2) state, federal, and foreign taxes; 3) extraordinary items and discontinued operations; 4) provision for common and preferred dividends; and 5) minority interests, which is that portion of the consolidated subsidiary income applicable to common stock not owned by the parent company.

Issue Diversification – The number of stocks (largest holdings) making up half the market value of a total portfolio

M

Manager Selection Effect (Asset Class) – This attribution return measures the additional return produced by the managers within a management style group in the asset class compared to the return of the target benchmark for that style. Each style of an asset class whose return is higher than the target benchmark return will show a positive Manager Selection Return. Each style of an asset class whose return falls short of the target benchmark return will show a negative Manager Selection Return.

Manager Selection Effect (Total Fund) – This attribution return measures the additional return produced by the managers within an asset class in the plan compared to the return of the target benchmark for that asset class. Each asset class of a plan whose return is higher than the target benchmark return will show a positive Manager Selection Return. Each asset class of a plan whose return falls short of the target benchmark return will show a negative Manager Selection Return. The Manager Selection Effect is the compounded factor of each single time period factor over the cumulative time period.

Market Capitalization (Weighted Median) - NOT IN PEP – The weighted median market cap is the point at which half of the market value of the portfolio is invested in stocks with a greater market cap, and consequently the other half is invested in stocks with a lower market cap.

N

Net New Investment – For a portfolio or security, Net New Investment (NNI) is a measure of the net contribution of cash or assets over a period of time. At the portfolio level, Net New Investment is the net amount of contributions to the manager for the purpose of management. For a particular time period, the sum of any cash or asset contributions subtracted by any cash or asset withdrawals is the net new investment. At an asset class or security level, the Net New Investment measures the net contribution to an asset class or security. In this case, the Net New Investment is the sum of any purchases, subtracted by any sales and income.

O

OA Convexity – Convexity is a measure of the portfolio's exposure to interest rate risk. It is a measure of how much the duration of the portfolio will change given a change in interest rates. Generally, securities with negative convexities are considered to be risky in that changes in interest rates will result in disadvantageous changes in duration. The option-adjusted convexity (OA Convexity) for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash flows for the security based on various interest rate scenarios. Expected cash flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns and any expected mortgage principal prepayments.

OA Duration – Duration is one measure of the portfolio's exposure to interest rate risk. In general, the higher a portfolio's duration, the more that its value will change in response to interest rate changes. The option-adjusted duration (OA Duration) for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash-flows for the security based on various interest rate scenarios. Expected cash-flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns and any expected mortgage principal prepayment.

P

Policy Return – The Policy Return is the portion of the Total Fund Return that is attributable to the historical policy weights and returns associated with the benchmarks used to define the target portfolio. This return is the return that would have been achieved if the plan had invested in a passive plan, replicating the target portfolio.

Price/Book Value – The Price to Book Value (P/B) is a measure of value for a company. It is equal to the market value of all the shares of common stock divided by the book value of the company. The book value is the sum of capital surplus, common stock, and retained earnings.

Price/Cash Flow – Price/Cash Flow is a measure of value for a company. It is equal to the current price per share divided by its annual cash flow per share.

Price/Earnings to Growth – Price/Earnings to Growth (or PEG) ratio is a ratio is used to determine the value of company stock while taking into account the earnings growth. The value is calculated by dividing the Price/Forecasted Earnings by the year-over-year forecasted earnings growth rate.

Price/Earnings Ratio – The Price to Earnings Ratio (P/E) is a measure of value for a company. It is equal to the price of a share of common stock divided by the earnings per share for a twelve-month period.

Price/Forecasted Earnings – This ratio is a forward looking valuation measure of a company's common stock. It encapsulates the amount of earnings estimated for next year per dollar of current share price. This value is calculated by dividing the present stock price by the consensus (mean) analysts' earnings forecasts for the next year. These earnings estimates are for recurring, non-extraordinary earnings per primary common share. The individual P/E stock ratios are then weighted by their respective portfolio market values in order to calculate a weighted average representative of the portfolio as a whole.

Price/Sales – The Price to Sales Ratio is a measure of value for a company. It is equal to the current price per share of common stock divided by its annual sales-per-share value. Sales represent gross sales reduced by cash discounts, return sales, etc.

Q

Quality Rating – A Standard and Poor's credit issue rating is a current opinion of the creditworthiness of an issuer. The S&P ratings for each security are compiled into a composite rating for the whole portfolio.

R

R&D/Sales - NOT IN PEP – Research and development expenditures divided by sales. Research and development expenses are costs that relate to the development of new products or services. Sales represent gross sales reduced by cash discounts, return sales, etc.

Real Return – Is a portfolio's return minus the risk-free rate.

Relative Cumulative Return – The relative cumulative return for a portfolio or asset measures the cumulative return relative to a specified benchmark cumulative return. A period where the portfolio underperformed the benchmark would cause the return ratio for that period to be below one. However, over the length of the entire time period, the portfolio may have a cumulative return above the benchmark. The relative return value is a ratio for which values above one represent total performance over the period above the benchmark and where values below one represent total performance over the period below the benchmark.

Relative Return Ratio – The relative return for a portfolio or asset measures the return relative to a specified benchmark return. The relative return value is a ratio for which values above zero represent a period where the portfolio outperformed the benchmark and values below zero represent a period where the portfolio underperformed the benchmark.

Relative Sector Variance – Relative Sector Variance is a measure that illustrates how aggressively the manager deviates from the sector weights of the index. This measure is simply the sum of the difference (absolute value) in the manager's sector weights from those of the index across all sectors. The higher the number the more aggressively the manager has deviated from the index sector weights.

Relative Standard Deviation – Is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A relative standard deviation of .80 would imply 20% less risk.

Residual Risk – Residual Risk is the "unsystematic", or firm-specific, risk of a security or portfolio. It is the portion of the total risk of a security or portfolio that is unique to the security or portfolio itself and is not related to the overall market. The level of residual risk in a portfolio is a reflection of the "bets" the manager places in a particular asset class or sector. Diversification can reduce or eliminate the residual risk of a portfolio.

Return on Assets (ROA) – A measure of a company's profitability, specifically relating profits to the total investment required to achieve the profit.

Return on Equity (ROE) - NOT IN PEP – Return on Equity is a measure of a company's profitability, specifically relating profits to the equity investment employed to achieve the profits. Return on Equity focuses on the returns accruing to the residual owners of a company, the equity holders. It is equal to income divided by total common equity. Income excludes all expenses, which include income taxes and minority interest, but is calculated before provision for dividends, extraordinary items, and discontinued operations. Common equity includes common stock outstanding, capital surplus, and retained earnings. The earnings per share of a firm divided by the firm's *Book Value* per share.

Return on Equity – Return on Equity is a measure of a company's profitability, specifically relating profits to the equity investment employed to achieve the profits. Return on Equity focuses on the returns accruing to the residual owners of a company, the equity holders. It is equal to income divided by total common equity. Income is after all expenses, including income taxes and minority interest, but before provision for dividends, extraordinary items, and discontinued operations. Common equity includes common stock outstanding, capital surplus, and retained earnings.

Return on Investment (ROI) - NOT IN PEP – Return on Investment is a widely used measure of business success that relates net income to invested capital (total assets). ROI provides a standard for evaluating how efficiently management uses the average dollar (or unit of currency) invested in assets, whether the investment came from owners or creditors. A higher ROI may result in a higher return on stockholder's equity (ROE).

Returns – A standard measure of performance that includes capital appreciation or depreciation as well as realized gains and losses and income.

Rising/Declining Periods – Rising/declining periods refer to the sub-asset cycles vis-à-vis the broader asset class. For example, to determine the growth equity cycle, the S&P 500 Growth Index performance is compared to the S&P 500.

S

Sector Concentration – Sector Concentration is a simple measure of diversification by sector. It illustrates how many sectors comprise half of the portfolio market value.

Stated Maturity – The average years to stated maturity is the market value weighted average time to stated maturity for all securities in the portfolio. This measure does not take into account embedded options, sinking fund payments, or prepayments.

Stock Selection Return – This attribution return measures the additional return produced by the manager's security selection within each industry sector. Each sector in a portfolio whose return exceeds the sector return of the benchmark will show a positive Stock Selection Return. Each sector of a portfolio whose return falls short of the benchmark sector return will show a negative Stock Selection Return.

Style Allocation Effect *CALL PERF MEAS TER* – This attribution return measures the additional return produced by the difference between the target management style weights in the asset class and the actual weights of the managers representing the management styles. For each time period where the return for one of the style targets in the plan is greater than the total return of the asset class target benchmark as a whole and where the actual style weight was greater than the target style weight, the style will show a positive Style Asset Allocation Effect.

Style Policy Return – The Style Policy Return is the portion of the Total Fund Return that is attributable to the historical policy weights and returns associated with the management style benchmarks used to define the target asset class mix. This return is the return that would have been achieved if the plan had invested in a passive plan replicating the target asset mix.

Style Structure Attribution – A type of performance attribution that provides historical insight into how and why actual investment plan performance has differed from the performance of a plan's target portfolio at the level of a single asset class. This analysis allows comparison of the contributions of different management styles to the Total Return of a particular asset class. The target portfolio consists of relevant benchmarks for each management style in an asset class, weighted by the planned allocation of that style to the total asset class. The Total Return of the plan is broken down into three components: Style Policy Return, Style Allocation Effect, and Manager Selection Effect.

T

Total Fund Attribution – This type of performance attribution provides historical insight into how and why actual investment plan performance has differed from the performance of a plan's target portfolio. The target portfolio consists of relevant benchmarks for each asset class in a portfolio, weighted by the planned allocation of that asset class in the investment plan. The premise of Total Fund Attribution is that actual plan performance is the result of two factors: the performance of the investment plan target asset mix, and the value added to the plan through the implementation and maintenance of the policy mix. The Total Return of the plan is broken down into three components: Policy Return, Asset Allocation Effect, and Manager Selection Effect.

Total Risk – ***CALLAN PERF MEAS TER*** – Total risk is a measure of the total volatility of the excess returns of an asset or portfolio. The total risk is comprised of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or firm-specific) risk.

Tracking Error - CAL RISK STAT – Tracking Error is the standard deviation of a portfolio's relative returns relative to a benchmark. Whereas the standard risk measure of standard deviation measures the absolute return volatility, tracking error measures the volatility of the return differences between the portfolio and the benchmark over time. A portfolio that is actively managed in an aggressive manner would have a large amount of tracking error versus its index, while a portfolio that is more constrained to look like its index (an index fund being the extreme) would have smaller amounts of tracking error.

Treynor Ratio – The Treynor Ratio is a risk statistic that measures the excess return per unit of systematic market risk taken in a portfolio. The excess return is the total excess return without adjustment for risk. The ratio is equal to the excess return of the portfolio divided by the beta of the portfolio.

U

Up Market Capture Ratio – The Up Market Capture ratio is determined by the index which has an Up-Capture ratio of 100% when the index is performing positively. If a manager captures more than 100% of the rising market it is said to be "offensive." This statistic is not annualized.

W

Weighted Average Market Capitalization – The market value of all the shares of common stock issued by a company at a point in time, computed as the product of the number of shares of common stock times the current price.

Weighted Median Market Capitalization – The weighted median market cap is the point at which half of the market value of a portfolio is invested in stocks with a greater market cap, and consequently the other half is invested in stocks with a lower market cap.

Z

Z Score, MSCI Growth – The MSCI Growth Z Score is a holdings-based measure of the "growthyness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Growth Z Score is an aggregate score based on the growth score of 5 separate financial fundamentals: Long Term Forward Earnings Growth, Short Term Forward Earnings Growth, Current Internal Growth (ROE * (1-payout ratio)), Long Term Historical Earnings Growth, and Long Term Historical Sales Growth. The Growth Z Score usually ranges between +3 and -3. A significant positive Growth Z-Score implies significant "growthyness" in the stock or portfolio. A Growth Z Score close to 0.0 (positive or negative) implies "core-like" style characteristics, and a significantly negative Growth Z Score implies more "valueyness" in the stock or portfolio (although MSCI Value Z Score should be used to confirm this).

Z Score, MSCI Value – The MSCI Value Z Score is a holdings-based measure of the "valueyness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Value Z Score is an aggregate score based on the value scores of 3 separate financial fundamentals: Price/Book value, Price/Forward Earnings, and Dividend Yield. The Value MSCI Z Score usually ranges from +3 and -3. A significant positive Value Z Score implies significant "valueyness" in the stock or portfolio. A Value Z Score close to 0.0 (positive or negative) implies "core-like" style characteristics, and a significantly negative Value Z Score implies more "growthyness" in the stock or portfolio (although the MSCI Growth Z Score should be used to confirm this).

Z Score, MSCI Combined – The MSCI Combined Z Score is a single holdings-based measure of the "growthyness" or "valueyness" of an individual stock, or a portfolio of stocks, based on fundamental financial ratio analysis. The MSCI Combined Z Score is simply the difference between the MSCI Growth Z Score and the MSCI Value Z Score (Growth - Value). The underlying Growth Z Score is an aggregate score based on the growth scores of 5 separate financial fundamentals: Long Term Forward Earnings Growth, Short Term Forward Earnings Growth, Current Internal Growth (ROE * (1-payout ratio)), Long Term Historical Earnings Growth and Long Term Historical Sales Growth. The underlying Value Z Score is an aggregate score based on the value scores of 3 separate financial fundamentals: Price/Book value, Price/Forward Earnings, and Dividend Yield. The

MSCI Combined Z Score usually ranges between +2 and -2. A significant positive Combined Z Score implies significant "growthyness" in the stock or portfolio. A Combined Z Score close to 0.00 (positive or negative) implies "core-like" style characteristics, and a significantly negative Combined Z Score implies more "valueyness" in the stock or portfolio.

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE

QUARTERLY MONITORING REPORT

Quarter Ended June 30, 2016

EXECUTIVE LIMITATIONS / STAFF RELATIONS

The Executive Limitation "Staff Relations" deals with the treatment of staff at RIO. The executive director "shall not cause or allow any condition or any communication which is unfair, undignified, or disrespectful." This Executive Limitation lists six specific limitations that range from personnel policies to exit interviews. All the limitations are intended to protect staff from unfair, undignified, or disrespectful treatment by management.

During the past quarter, there were no exceptions to this Executive Limitation.

The Executive Director/CIO conducted four office meetings with the full RIO team during the second calendar quarter of 2016 in order to promote an open and collaborative work environment while enhancing team member communication, awareness and engagement.

RIO is fully staffed as of June 30, 2016. In order to address increasing service needs in our audit and retirement benefit services area, RIO developed a new, 15-week internship program this summer.

AGENDA ITEM V.B.

BUDGETING / FINANCIAL CONDITION

AS OF JUNE 30, 2016

	2015-2017 BUDGET	ADJUSTED APPROPRIATION	EXPENDITURES BIENNIUM TO DATE ACTUAL	BUDGET AVAILABLE	% BUDGET AVAILABLE	% OF BIENNIUM REMAINING
SALARIES AND BENEFITS	$ 4,340,551.00	$ 4,342,801.00	$ 2,059,742.83	$ 2,283,058.17	52.57%	50.00%
OPERATING EXPENDITURES	990,874.00	990,874.00	340,221.85	650,652.15	65.66%	50.00%
CONTINGENCY	82,000.00	82,000.00	0.00	82,000.00	100.00%	50.00%
TOTAL	$ 5,413,425.00	$ 5,415,675.00	$ 2,399,964.68	3,015,710.32	55.68%	50.00%

EXPENDITURE REPORT

QUARTER ENDED JUNE 30, 2016

		INVESTMENT		RETIREMENT		QUARTERLY TOTALS		FISCAL YEAR TO - DATE		BIENNIUM TO - DATE
CONTINUING APPROPRIATIONS										
INVESTMENT EXPENDITURES (SEE ATTACHED DETAIL)	$	8,209,608.83	$	0.00	$	8,209,608.83	$	32,261,759.62	$	32,261,759.62
MEMBER CLAIMS										
1. ANNUITY PAYMENTS		0.00		45,120,157.06		45,120,157.06		179,703,776.20		179,703,776.20
2. REFUND PAYMENTS		0.00		1,183,254.19		1,183,254.19		6,252,569.50		6,252,569.50
TOTAL MEMBER CLAIMS		0.00		46,303,411.25		46,303,411.25		185,956,345.70		185,956,345.70
OTHER CONTINUING APPROPRIATIONS		67,249.51		78,058.70		145,308.21		477,364.39		477,364.39
TOTAL CONTINUING APPROPRIATIONS		8,276,858.34		46,381,469.95		54,658,328.29		218,695,469.71		218,695,469.71
BUDGETED EXPENDITURES										
1. SALARIES & BENEFITS										
SALARIES		194,606.70		198,932.30		393,539.00		1,522,531.33		1,522,531.33
OVERTIME/TEMPORARY		0.00		3,836.25		3,836.25		3,836.25		3,836.25
TERMINATION SALARY & BENEFITS		0.00		0.00		0.00		0.00		0.00
FRINGE BENEFITS		60,858.96		77,842.20		138,701.16		533,375.25		533,375.25
TOTAL SALARY & BENEFITS		255,465.66		280,610.75		536,076.41		2,059,742.83		2,059,742.83
2. OPERATING EXPENDITURES										
DATA PROCESSING		4,253.18		22,009.98		26,263.16		78,402.75		78,402.75
TELECOMMUNICATIONS - ISD		1,150.71		1,913.92		3,064.63		9,275.18		9,275.18
TRAVEL		2,367.36		4,873.19		7,240.55		40,276.56		40,276.56
IT - SOFTWARE/SUPPLIES		50.37		87.44		137.81		375.05		375.05
POSTAGE SERVICES		1,020.17		2,421.67		3,441.84		44,138.11		44,138.11
IT - CONTRACTUAL SERVICES		1,284.66		1,363.41		2,648.07		5,616.20		5,616.20
BUILDING/LAND RENT & LEASES		5,174.16		8,598.54		13,772.70		81,886.20		81,886.20
DUES & PROF. DEVELOPMENT		178.50		3,944.00		4,122.50		22,279.50		22,279.50
OPERATING FEES & SERVICES		4,674.25		7,405.27		12,079.52		23,374.61		23,374.61
REPAIR SERVICE		0.00		0.00		0.00		12.50		12.50
PROFESSIONAL SERVICES		743.37		1,691.63		2,435.00		10,781.00		10,781.00
INSURANCE		0.00		0.00		0.00		630.77		630.77
OFFICE SUPPLIES		297.92		725.52		1,023.44		2,024.90		2,024.90
PRINTING		269.72		2,401.94		2,671.66		15,508.61		15,508.61
PROFESSIONAL SUPPLIES & MATERIALS		0.00		0.00		0.00		647.34		647.34
MISCELLANEOUS SUPPLIES		32.18		344.20		376.38		780.19		780.19
IT EQUIPMENT UNDER $5000		431.19		431.19		862.38		2,182.38		2,182.38
OTHER EQUIPMENT UNDER $5000		172.28		299.72		472.00		472.00		472.00
OFFICE EQUIPMENT & FURNITURE UNDER $!		294.40		1,263.60		1,558.00		1,558.00		1,558.00
TOTAL OPERATING EXPENDITURES		22,394.42		59,775.22		82,169.64		340,221.85		340,221.85
3. CONTINGENCY		0.00		0.00		0.00		0.00		0.00
TOTAL BUDGETED EXPENDITURES		277,860.08		340,385.97		618,246.05		2,399,964.68		2,399,964.68
TOTAL EXPENDITURES	$	8,487,468.91	$	46,643,797.22	$	55,276,574.34	$	221,095,434.39	$	221,095,434.39

INVESTMENT EXPENDITURE DETAIL

FEES PAID DURING THE QUARTER ENDED JUNE 30, 2016

FOR QUARTER ENDED 12/31/15

PENSION PRIVATE EQUITY		
Adams Street Partners		9,033.00
CUSTODIAN		
Northern Trust		255,008.93
TOTAL FOR QUARTER ENDED 12/31/15		**264,041.93**

FOR QUARTER ENDED 3/31/16

PENSION DEVELOPED INTERNATIONAL EQUITY POOL		
Capital Guardian	124,179.29	
Northern Trust	19,722.74	
Wellington	183,538.95	
TOTAL PENSION INTERNATIONAL EQUITY		327,440.98
PENSION GLOBAL EQUITY POOL		
Epoch	545,670.66	
LSV	102,953.00	
TOTAL PENSION GLOBAL EQUITY		648,623.66
PENSION BELOW INVESTMENT GRADE FIXED		
Loomis Sayles		243,943.20
PENSION INVESTMENT GRADE FIXED INCOME POOL		
JP Morgan	61,067.43	
PIMCO	143,566.57	
State Street	6,294.48	
TOTAL PENSION INVESTMENT GRADE FIXED INCOME		210,928.48
PENSION INFRASTRUCTURE POOL		
JP Morgan		315,281.27
PENSION LARGE CAP EQUITY POOL		
LA Capital		200,729.14
PENSION REAL ESTATE		
JP Morgan (Special & Strategic)	432,712.29	
Invesco	188,129.59	
TOTAL PENSION REAL ESTATE		620,841.88
PENSION INTERNATIONAL FIXED INCOME		
Brandywine	126,493.65	
UBS	80,278.97	
TOTAL PENSION INTERNATIONAL FIXED INCOME		206,772.62
INSURANCE FIXED INCOME POOL		
Prudential	67,863.71	
State Street	11,833.45	
Wells	135,324.81	
Western Asset	102,073.11	
TOTAL INSURANCE FIXED INCOME		317,095.08

INVESTMENT EXPENDITURE DETAIL

FEES PAID DURING THE QUARTER ENDED JUNE 30, 2016

INSURANCE LARGE CAP EQUITY POOL		
LA Capital	49,590.86	
LSV	49,941.00	
TOTAL INSURANCE LARGE CAP		99,531.86
INSURANCE SMALL CAP EQUITY POOL		
PIMCO RAE		19,475.03
INSURANCE INT'L EQUITY		
Capital Guardian	71,545.59	
LSV	65,922.00	
TOTAL INSURANCE INT'L EQUITY		137,467.59
INSURANCE DIVERSIFIED REAL ASSETS		
JP Morgan	167,791.60	
Western Asset	38,535.62	
TOTAL INSURANCE DIVERSIFIED REAL ASSETS		206,327.22
INSURANCE REAL ESTATE		
Invesco	52,119.26	
JP Morgan	176,322.94	
TOTAL INSURANCE REAL ESTATE		228,442.20
INSURANCE SHORT TERM FIXED		
Babson	102,833.36	
JP Morgan	77,841.88	
TOTAL INSURANCE SHORT TERM FIXED		180,675.24
LEGACY FIXED INCOME		
Prudential	96,168.85	
State Street	15,233.86	
Wells	177,028.55	
Western Asset	135,400.72	
TOTAL INSURANCE FIXED INCOME		423,831.98
LEGACY LARGE CAP EQUITY		
LA Capital	177,323.59	
LSV	175,919.00	
TOTAL INSURANCE LARGE CAP		353,242.59
LEGACY SMALL CAP EQUITY		
PIMCO RAE		84,207.09
LEGACY INT'L EQUITY		
Capital Guardian	242,381.45	
LSV	285,315.00	
TOTAL INSURANCE INT'L EQUITY		527,696.45
LEGACY DIVERSIFIED REAL ASSETS		
JP Morgan	171,279.85	
Western Asset	90,030.44	
TOTAL INSURANCE DIVERSIFIED REAL ASSETS		261,310.29
LEGACY REAL ESTATE		
Invesco	98,898.63	
JP Morgan	246,977.04	
TOTAL INSURANCE REAL ESTATE		345,875.67
PERS RETIREE HEALTH INSURANCE CREDIT FUND		
SEI		67,512.87

INVESTMENT EXPENDITURE DETAIL

FEES PAID DURING THE QUARTER ENDED JUNE 30, 2016

JOB SERVICE FUND		
SEI		32,175.03
TOBACCO PREVENTION & CONTROL TRUST FUND		
STATE STREET		3,821.86
CUSTODIAN		
Northern Trust		247,755.16
CONSULTANT		
Adams Street	16,834.00	
Callan	138,199.80	
Novarca	17,147.00	
TOTAL CONSULTANT		172,180.80
TOTAL FOR QUARTER ENDED 3/31/16		**6,483,185.24**
FOR QUARTER ENDED 6/30/16		
PENSION INFRASTRUCTURE POOL		
JP Morgan		318,232.00
PENSION REAL ESTATE		
Invesco		197,072.90
PENSION CASH		
Northern Trust		11,194.86
INSURANCE DIVERSIFIED REAL ASSETS		
JP Morgan		168,843.65
INSURANCE REAL ESTATE		
Invesco	54,596.91	
JP Morgan	178,097.44	
TOTAL INSURANCE REAL ESTATE		232,694.35
LEGACY DIVERSIFIED REAL ASSETS		
JP Morgan		181,280.59
LEGACY REAL ESTATE		
Invesco	103,600.08	
JP Morgan	249,463.23	
TOTAL INSURANCE REAL ESTATE		353,063.31
TOTAL FOR QUARTER ENDED 6/30/16		**1,462,381.66**
TOTAL FEES PAID DURING QUARTER ENDED 6/30/2016		**8,209,608.83**

Quarterly Report on Ends
Q4:FY16

Investment Program

Continuing due diligence conducted on the following organizations:

Blackrock (private equity)
Brandywine (global fixed income)
Corsair (private equity)
DFA (international equity)
Invesco (real estate)
JPMorgan (MBS fixed income)
JPMorgan (real estate)
LSV (domestic, international and global equity)
Northern Trust (domestic equity)
Parametric (domestic equity)
PIMCO (fixed income)
Prudential (fixed income)
UBS (international fixed income)
Western (fixed income)

Initial due diligence conducted on the following organizations:

AllianceBernstein (fixed income)
Apollo (fixed income)
AQR (fixed income)
Ares (direct lending, opportunistic credit)
Baillie Gifford (international equity)
Blackrock (fixed income)
Cerberus (direct lending, private equity)
Crescent (direct lending)
Doubleline (fixed income)
Goldman Sachs (direct lending)
Golub (direct lending)
Graham (managed futures)
KKR (direct lending, opportunistic credit)
Morgan Stanley (global equity)
Oaktree (opportunistic credit)
Silver Creek (direct lending)
Standard Life (global equity)
TPG (direct lending)
UBS (real estate)
William Blair (international equity)

Following the Board's selection at the March SIB meeting of BlackRock Private Equity Partners to manage a fund-of-one private equity program to complement existing commitments made to Adams Street Partners, Staff commenced a legal contract review, which is near completion.

At the April SIB meeting, as part of a search conducted by Staff to replace the Capital Group, the Board awarded an international equity mandate to William Blair. Following a legal contract review, the transition of mandate assets was completed on June 1.

Due to the occurrence of personnel changes within JPMorgan's mortgage portfolio management team, the Board placed the firm on the Watchlist.

Following the approval of a new policy allocation on behalf of the Teachers Fund for Retirement at the February meeting, Staff complemented the implementation of the new policy mix in the second calendar quarter.

Staff attended meetings with the following entities: TFFR Board, NDPERS Investment Subcommittee, NDPERS Board and the Employee Benefits Programs Committee.

Staff is continuing its review of the current fixed income manager structure within the pension trust and recommended changes will be submitted to the Board at a Fall Board meeting.

Staff continues to conduct preliminary due diligence on possible managers/products for future consideration.

Staff continues to monitor each client's asset allocation monthly and makes rebalancing decisions based on rebalancing policy and cash flow requirements.

Quarterly Report on TFFR Ends

Quarter ended June 30, 2016

Retirement Program

This report highlights exceptions to normal operating conditions.

- Governor Dalrymple re-appointed Mike Gessner of Minot to represent active school teachers on the TFFR Board for a 5-year term from 7/1/16 – 6/30/21.

- Governor Dalrymple appointed Toni Gumeringer of Bismarck to the TFFR Board to complete the unexpired term of Kim Franz through 6/30/19. She will also represent active school teachers on the TFFR Board.

- Cavanaugh Macdonald Consulting continues work on the actuarial audit of TFFR's current actuary, Segal Company. Results delivered at July 2016 TFFR Board meeting.

NDSIB Watch List

Data as of 06/30/2016

PIMCO MBS (Pen.) *$183,187,244*

	Returns	Index[1]	Excess
1 Year	4.24	4.34	(0.10)
3 Year	3.42	3.76	(0.34)
Inception*	2.48	7.76	(0.15)

*Funded 3/31/2012

PIMCO Unconstrained (Pen.) *$61,676,161*

	Returns	Index[2]	Excess
1 Year	(0.95)	0.49	(1.45)
3 Year	0.45	0.33	0.12
Inception*	1.67	0.34	1.33

*Funded 3/12/2012

JP Morgan MBS (Pen.) *$113,899,252*

	Returns	Index[1]	Excess
1 Year	4.60	4.34	0.26
Inception*	3.89	3.68	0.21

*Funded 09/30/2014

UBS International Fixed (Pen.) *$110,367,673*

	Returns	Index[3]	Excess
1 Year	11.43	11.24	0.19
3 Year	1.52	1.85	(0.34)
Inception*	6.31	6.01	0.30

*Funded 07/01/1989

[1] Barclays Mortgage Index
[2] Libor 3-Month
[3] Barclays Global Aggregate ex-US

Note: Return for PIMCO is net of fees, JPM & UBS use gross due to data availability

BOARD LEADERSHIP

INNOVATIVE APPROACHES TO GOVERNANCE

NUMBER 146, JULY–AUG. 2016

www.boardleadershipnewsletter.com

New Ways of Looking at Democracy

by Brett Hennig

Dr. Brett Hennig is the cofounder and director of the Sortition Foundation (http://www.sortitionfoundation.org/). This is an edited extract from his new book, The End of Politicians, *to be published by Unbound in late 2016 (https://unbound.co.uk/books/the-end-of-politicians/).*

DEMOCRACY, IN MODERN TIMES, has become synonymous with elections. This was not always the case. In ancient Athens, and for almost two thousand years afterwards, it was synonymous with random selection, or *sortition*. Modern experiments with new ways of doing democracy, from Policy Juries to Citizens' Assemblies to Constitutional Councils are harking back to the days of ancient Athens and sortition is undergoing a revival of use and an explosion of interest.

Together with guardianship this gives three principal ways of selecting those who govern:

- Election
- Random selection (sortition)
- Guardianship (or meritocracy)

What are the pros and cons of these differing selection methods? What are their histories? Where do they derive their legitimacy from, and what might boards learn from understanding the differences? These are some of the questions addressed below.

The political appeal of sortition was so obvious, to ancient Greek men at least, that it was by far their most commonly used process for allocating political posts. While the ancient Athenian assemblies are surely the most famous of early legislatures, it is less well known that the proposals for debate were usually developed by a randomly selected Council of Five Hundred (the *boule*), each of whom served office for one year only.

An extensive system to fill the vast majority of the public offices used the drawing of lots and strictly limited terms of office to decide who was to be a magistrate, who was to serve on the courts and in the *boule*. Election was reserved for those few positions where narrow, specialist skills were deemed necessary, such as heads of finance and military leaders.

Key thinkers, from Aristotle (384–322 BC) all the way to Rousseau (1712-1778 AD) and Montesquieu (1689–1755 AD), consistently linked democratic government with selection

(continued on page 2)

ALSO IN THIS ISSUE

EVENTS

SEPTEMBER 17–20, 2016

National Association of Corporate Directors (NACD) 2016 Global Board Leaders' Summit

— Washington, DC, USA

For more information see: https://www.nacdonline.org/Conference/content.cfm?ItemNumber=4755

SEPTEMBER 28, 2016

How Policy Governance® Boards Can Best Ensure Healthy Organizational Culture

— By Video-Conference (12 noon – 2 p.m. Eastern)

A discussion for Policy Governance Consultants and board and staff members with extensive experience in using the system.

For more information, please contact: ceo@policygovernanceassociation.org

OCTOBER 11 2016

Getting to "One Voice"

— By Video-Conference (11:30 a.m. – 1 p.m. Eastern)

An interactive learning event with Craig Freshley of Good

(continued on page 4)

Democracy

(continued from front page)

by lot, and aristocratic government with selection through election. Aristotle, in *Politics*, states "it is thought to be democratic for the offices [of constitutional government] to be assigned by lot, for them to be elected oligarchic." From Montesquieu we have: "Selection by lot is in the nature of democracy, selection by choice is in the nature of aristocracy," and from Rousseau: "it will be seen why the drawing of lots is more in the nature of democracy. . . . In an aristocracy . . . voting is appropriate."[1] It was well understood that elections are aristocratic devices; elite and elect, after all, share the same etymological root.

Which perhaps explains the current malaise suffered by electoral democracy, with populist parties denouncing government as rule by elites thriving at both ends of the political spectrum.

This populism reflects an all-too-apparent general disaffection with, and cynicism toward, the modern representative system and its politicians. In survey after survey, politicians invariably rank among the least trustworthy and most dishonest of professions, along with car salesmen and real estate agents. Voter exit polls in 2014 in the United States found that "about 8 in 10 Americans disapprove of how Congress is handling its job."[2] Compared to the 1950s, membership of political parties has plummeted in most democratic states, and election turnout has, in general, also declined. This leaves the machinations of state to a small class of politicians, journalists, and lobbyists, who, at least until the rise of social media in the last decade, pandered to traditional media conglomerates as the best way to access and influence potential voters.

Somewhat paradoxically, this retreat of ordinary people from formal politics has made it even harder for politicians to make difficult decisions. Reduced public participation increases the sphere of influence of special interest groups, corporations and their paid lobbyists, the mainstream media, and the hard core of highly ideological party activists who determine which candidates can stand through their domination of preselection procedures. This capture of the political process derails any genuine attempt to tackle the problems, especially if they conflict with corporate, donor, or key-faction party interests.

Nevertheless, electoral democracy today has triumphed in approximately half of the world's nation-states. Elections are one of the modern answers to the ancient question of how to govern. The other common global alternative is some form of authoritarian guardianship.

> Electoral democracy today has triumphed in approximately half of the world's nation-states.

According to Robert Dahl, the doyen of democracy studies in the United States:

> *The claim that government should be turned over to experts deeply committed to rule for the general good and superior to others in their knowledge of the means to achieve it—Guardians, Plato called them—has always been the major rival to democratic ideas. Advocates of Guardianship attack democracy at a seemingly vulnerable point: they simply deny that ordinary people are competent to govern themselves.*[3]

Theoretically, supposedly "benign dictatorships" such as those in China are meant to be meritocratic. However, it is noteworthy that all these regimes strenuously promote the idea of their own legitimacy, through a varying combination of bribery, propaganda, censorship, and oppression. Even in authoritarian regimes it does matter what the people think: they must be made to understand that the rulers are ruling in the people's best interests, even if, according to the *New York Times*, the Chinese rulers and their families are getting very rich while doing so.[4] It is not surprising that Chinese autocracy is looked upon by a number of states, particularly in the developing world, with admiration.

It is the appeal to a necessary guardianship that authoritarian regimes such as China use to justify their control and monopoly of power. If people are too stupid to govern, then perhaps they're also too stupid to vote.

Political power in China is supposedly meritocratic, and exams play a large part in the process. However, meritocracies are well known to be susceptible to cronyism, nepotism, and corruption. Lyn Carson and Ron Lubensky highlight how in boardrooms the famous "tap on the shoulder" is often justified by claims to meritocracy,[5] yet this selection method, obviously reliant on social or professional networks, will more often than not reduce the diversity of those who govern and is highly susceptible to accusations of cronyism and nepotism.

The third selection method, sortition, is currently making a very strong comeback.

Since the 1990s citizens' summits and participatory governance structures involving everyday people have spread across the world and become increasingly common. Politicians and bureaucrats are choosing—or being forced—to open up the process of decision making whereby ordinary citizens deliberate political issues that are often complex and contentious. People are deciding together which issues should get priority, how government money should be spent, and how best to implement and monitor laws that affect their communities.

The participatory governance experiments range from the relatively small-scale examples of municipal participatory budgeting to large-scale summits such as the British Columbia Citizens' Assembly on Electoral

Reform in Canada in 2004, an Australian Citizens' Parliament in 2009, the Icelandic National Gathering on the Constitution in 2010, Ireland's National Citizens' Assembly in 2011, and Belgium's G1000 Citizens' Summit, also held in 2011. These latter assemblies relied on the legitimacy inherent in using a representative sample of people in an informed, deliberative process.

To ensure that the randomly selected sample is an accurate reflection of the community at large, and not, for example, overpopulated with older, more educated men, the selection is often stratified: once the number of men in the sample reaches 50 percent of the total, no more men are invited to participate. The same idea can be applied to age brackets, income, education level, and so forth.

Random selection increases the perceived legitimacy of such forums, as it avoids any potential takeover by well-organized special interests or political lobbies, and the process of stratification avoids a common problem of voluntary self-selection, whereby a forum "disproportionately attracts politically active, highly educated, high-income, and older participants."

Of these types of forums, policy juries are typically smaller than deliberative polls, which are usually smaller than assemblies. The aim, though, is broadly the same: to inform a representative sample of citizens on certain issues and facilitate deliberation leading to an understanding of the relative popularity of specific policy options. It is emphatically not an opinion poll or a referendum. Deliberation informed by balanced and accurate information are key elements: the outcome should measure not what people in general *do* think, but what they *would* think, given the time, information, and possibility to argue their point of view and be affected by the views of others in a facilitated and fair setting. John Dryzek from the University of Canberra calls this the "simulation claim"—a mini-public should give "a simulation of what the population as a whole would decide if everyone were allowed to deliberate."[6] Deliberation moves beyond public opinion to public judgment.

Random selection has many benefits when compared to elections or guardianship: for example, you can ensure gender balance, there is no need to appease donors or party factions, and media-driven popularity is of no consequence. Of course, it also has drawbacks, although one notable unfounded criticism is that people are incapable of making substantive, balanced, and considered judgments.

There is also considerable evidence that diversity trumps ability when solving problems and producing innovative ideas.

The assemblies conducted to date show that large numbers of people, combined with good processes, can produce a surfeit of engaged and thoughtful attendees: "The most obvious finding from mini-publics relevant to the larger public sphere is that, given the opportunity, ordinary citizens can make good deliberators. Moreover, issue complexity is no barrier to the development and exercise of that competence," says Dryzek.[7]

There is also considerable evidence that diversity trumps ability when solving problems and producing innovative ideas (see, for example, Scott Page, from the University of Michigan, in *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools and Societies*, 2008). So next time your board is looking for a highly legitimate, inclusive, diverse, and fair way to develop long-term vision, goals, or strategy, perhaps it will be time to draw a few names out of a hat. ❑

Brett Hennig can be contacted at bsh@sortitionfoundation.org.

Notes

1. Quoted in Manin, B. *The Principles of Representative Government* (Cambridge, UK: Cambridge University Press, 1997), 43, 70, 74, 77.

2. Diamond, J. "Exit polls: Majority of voters dissatisfied or angry with Washington." CNN Politics, November 4, 2014, http://edition.cnn.com/2014/11/04/politics/midterm-exit-polls-1/

3. Dahl, R. A. *On Democracy* (New Haven, CT: Yale University Press, 1998), 69.

4. Barboza, D. "Billions in Hidden Riches for Family of Chinese Leader," *New York Times*, October 25, 2012, http://www.nytimes.com/2012/10/26/business/global/family-of-wen-jiabao-holds-a-hidden-fortune-in-china.html?_r=0

5. Carson, L., and R. Lubensky. "Appointments to Boards and Committees via Lottery, a Pathway to Fairness and Diversity." *Journal of Public Affairs* 9, no. 2, (2009): 87–94.

6. Dryzek, J. S. *Foundations and Frontiers of Deliberative Governance* (Oxford, UK: Oxford University Press, 2010), 21.

7. Ibid., 158.

Events

(continued from front page)
Group Decisions, exploring why and how boards arrive at "one voice."

For more information, please contact: ceo@policygovernanceassociation.org

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FEBRUARY 24–25, 2017

IPGA Consultants' Forum

— *Las Vegas, USA*

This is the main opportunity for Policy Governance Consultants and board and staff members with extensive experience in using the system to get together to discuss a range of issues of mutual interest. This forum will include a particular focus on the meaning and implications of governance as "ownership one step down."

For more information, please contact: ceo@policygovernanceassociation.org

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BOARDSOURCE

Throughout the year, BoardSource organizes a range of webinars and training events for US nonprofit board leaders.

(continued on page 8)

FOOD FOR THOUGHT

"Plurality which is not reduced to unity is confusion; unity which does not depend on plurality is tyranny."

Blaise Pascal (1623–1662). Thoughts. XIV Appendix: Polemical Fragments. *The Harvard Classics*, Volume 48, Part 1, Translated by W. F. Trotter. New York: P. F. Collier & Son Company, 1909–1914. New York: Bartleby.com, 2001, http://www.bartleby.com/48/1/14.html

Evaluative Diversity and the Board

by Chris Santos-Lang

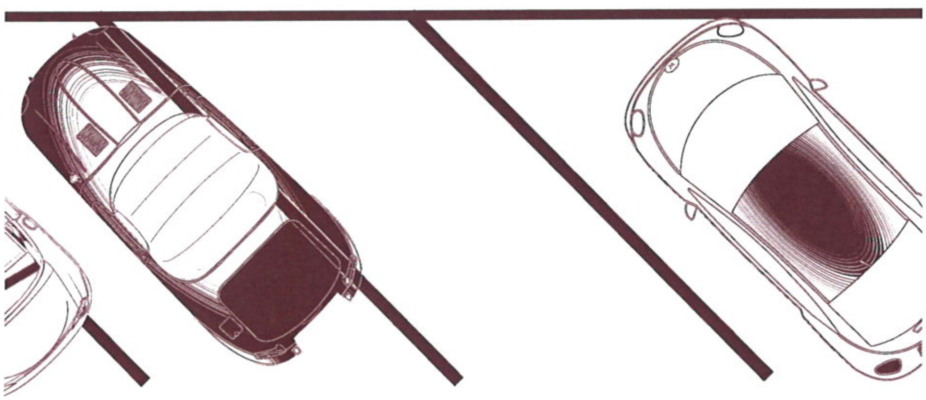
In the second article of this issue of Board Leadership *addressing the board's job of creating both plurality and unity, Chris Santos-Lang introduces the concept of evaluative diversity.*

WHY SHOULD A BOARD include more than one member?

"Evaluative diversity" is the kind of diversity that might improve decision making. Because it is the kind of diversity that predisposes people toward contrary choices even when they have the same information and goals, it is also at the heart of many disagreements, including the liberal/conservative divide. This article will first explain evaluative diversity using the GRIN model as an example, then discuss implications for board composition and organizational culture.

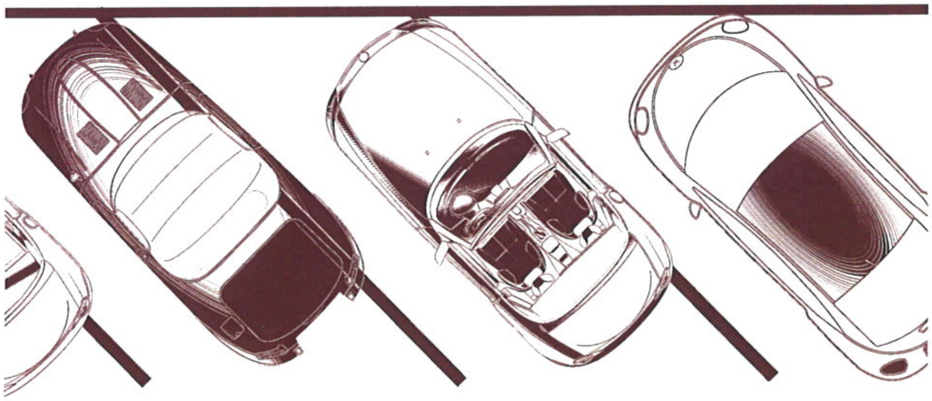
The GRIN Model of Evaluative Diversity

What follows is an analogy that I hope will help to explain the different approaches of the GRIN model diversity types. Suppose you are trying to park your car; you've found your spot, but the other cars are shifted to the right:

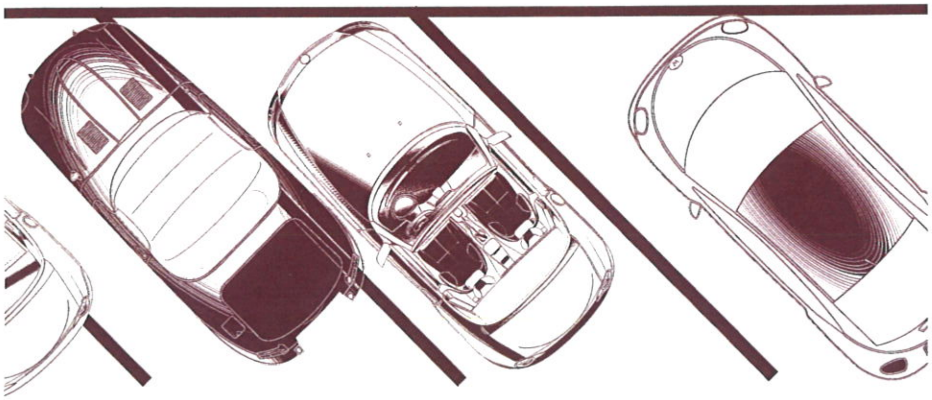


How you handle this situation will depend upon your GRIN type.

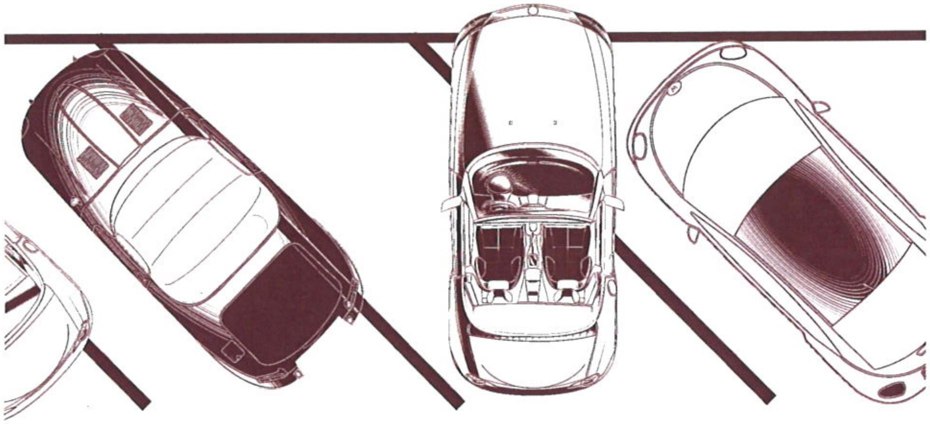
If you evaluate **relationally**, you will park midway between your nearest neighbors. You might do this automatically and might even call it "empathy":



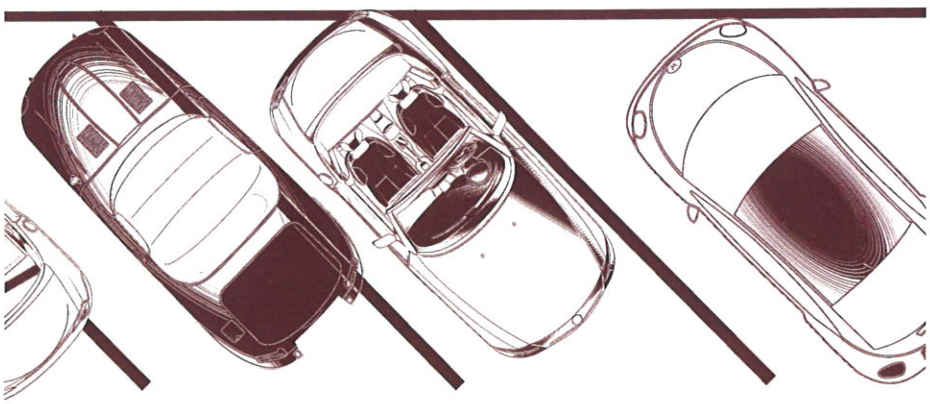
If you evaluate **institutionally**, however, then you will park midway between the *lines*. Again, this may be an automatic behavior, but you could reason that other cars come and go; assuming they park properly before you return, your position will be perfect. You are setting the standard—creating a trend!



If you evaluate as a **gadfly**, you will likewise try to set a trend, but each gadfly may have a different trend to set (and a different trend to set each day). For example, you might park on less of an angle, pointing out that the triangle in front of each angled car is wasted space. Are the cars too long to park straight? Maybe we should all buy Smartcars. . . .



If you evaluate as a **negotiator**, then you will aim to maximize the space available to open your driver-side door, so you may shift even further to the right (which is probably what created the dilemma in the first place) or, if you are clever, back into the space:



WHEN WE SAY ...

Board Leadership's mission is "to discover, explain, and discuss innovative approaches to board governance with the goal of helping organizations achieve effective, meaningful, and successful leadership to fulfill their missions."

Board Leadership aims to fulfill this mission by engaging its readers in a lively and illuminating inquiry into how board governance can be made more effective. This inquiry is based on three key assumptions:

- Boards exist to lead organizations; not merely monitor them.
- Effective board governance is not about either systems, structures, processes, theories, practices, culture, or behaviors—it is about all of them.
- Significant improvements are likely to come only through challenging the status quo and trying out new ideas in theory and in practice.

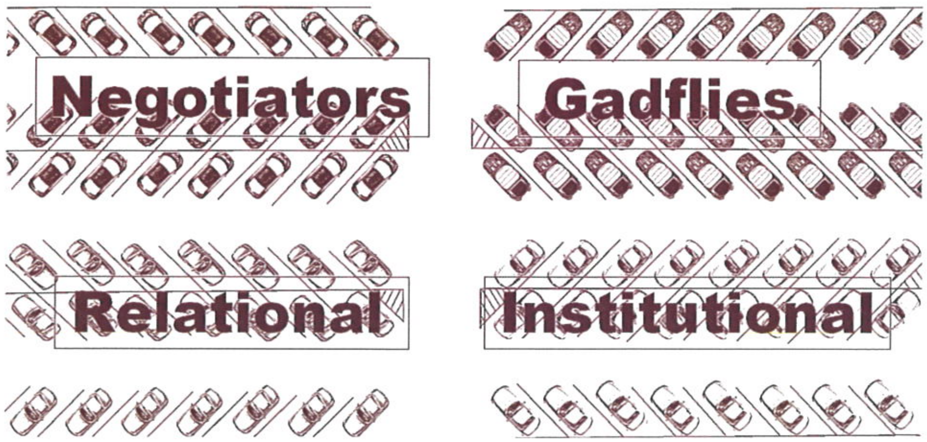
Uniquely among regular publications on board governance, *Board Leadership* primarily focuses on the job of board leadership as a whole, rather than on individual elements of practice within the overall job.

Over time, *Board Leadership* will provide a repository of different approaches to governance created through its regular "One Way to Govern" feature.

Here's what a few of the key terms we use mean to us:

- **Innovative:** Creating significant positive change.
- **Approaches to:** principles, theories, ideas, methodologies, and practices.
- **Board governance:** The job of governing whole organizations. ❑

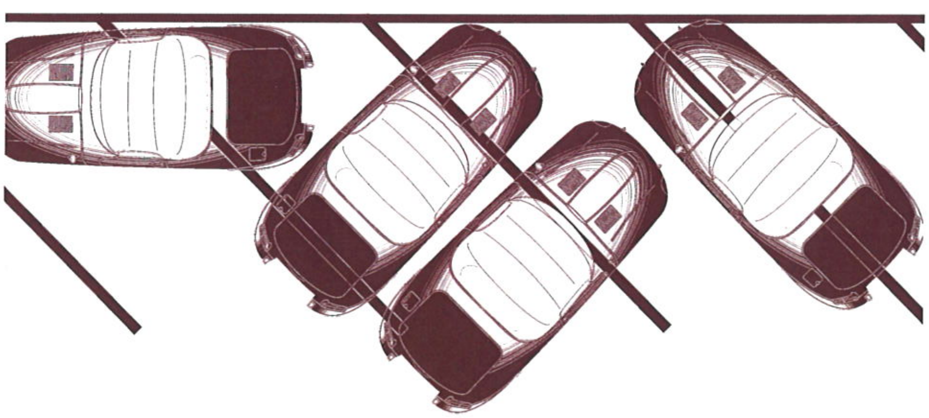
GRIN is an acronym for Gadfly-Relational-Institutional-Negotiator. Now suppose it is your job to assign spaces in the corporate parking lot. One option is to segregate the lot by GRIN type:



It might not be reliable to ask people to identify their GRIN types—they might pretend to be a different kind of person so as to avoid being judged—but you could monitor actual parking behavior averaged across many days to account for shifts in mood. Then you could assign each employee a space next to other employees who usually park in the same ways.

Segregation would rescue the naturally institutional employees from having to exit through their passenger side. They would probably appreciate the segregation very much:

The gadfly section would be a mess, of course, but natural gadflies might not mind:



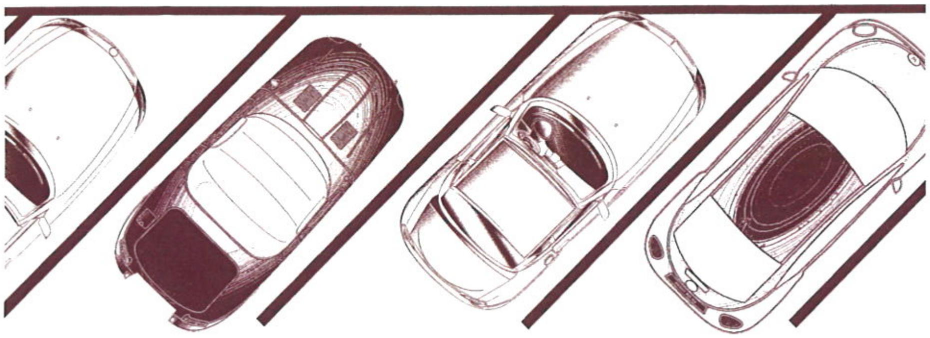
The more serious problem with messes is that they swallow up innovation. Gadflies are likely to innovate both the very worst and very best parking strategies, all of which would be lost in the black hole of gadflydom. This is especially a problem for natural negotiators because negotiation is competitive, and competition gets ugly when there is no supply of innovation to open new paths for competition.

Instead of segregating, suppose parking spaces were reassigned each day at random. Eventually, a natural gadfly with a better parking strategy would be surrounded by naturally relational parkers who would automatically imitate it. A natural negotiator driving by would notice the efficiency of the new pattern and arrange to have all the lines repainted for the entire lot. Then naturally institutional parkers would get (almost) everyone to adopt the new pattern, which would provide a better launching position for the next innovation (see image on page 7).

Of course, the GRIN model isn't just about parking—each GRIN type theoretically combats a different factor limiting adaptation:

- **Gadfly evaluation** produces novel configurations.
- **Relational evaluation** localizes reproductive networks.
- **Institutional evaluation** maintains fidelity in reproduction.
- **Negotiator evaluation** selects better configurations.

GRIN types have been found to correlate with personalities, political ideologies, and moral approaches.[1] Different scientists in the related fields attempt to establish different models,[2] but we are all studying the same thing. Much as humanity adds to the periodic table of elements over time, we should expect the number of known evaluative predispositions also to expand. Don't let the competition between models distract you from the big theme running through them all: no one can be all things.



Board Composition

Raising our understanding of evaluative diversity to at least the level of the GRIN model helps us to avoid the naïve assumption that evaluative diversity can be managed by recruiting a diverse board.

All negotiators aim to win, so they will converge on the same decisions, given the same information and goals. Likewise, an institutional member of the board will accurately represent all other institutional evaluators who affiliate with the same institution (though it would be a stretch to expect a conservative Christian to also represent conservative Muslims). However, the possibility of representative democracy for these types does not extend to the other diversity types. For example, since each gadfly aims in a different direction, no gadfly will represent another. A gadfly typically starts with a half-baked idea, and only relational evaluators will provide incubation, but relational evaluators promote the greater good only by accident (cronyism is their process), so a board that includes relational evaluators would need to have a sufficient amount of them to average out their inevitable biases.

Thus, it is possible to think about designing your board in terms of evaluative diversity. On the understanding that you view the board's job is to interpret the best interests of the WHOLE ownership, your ideal board might be made up almost exclusively of relational evaluators. Relational evaluators are just the right types to reach out to institutional evaluators and negotiators as expert witnesses and to connect with multiple gadflies to get the benefits of their particular innovative ideas and visions.

Interestingly, twice as many women as men are likely to be relational evaluators,[3] a reason for concern if the average board is low on female members.

Board and Organizational Culture

Achieving evaluative diversity, and thereby productive board and organizational culture, presents a challenge due to rising standardization of environments combined with the potential of some individuals to exhibit different evaluative types than those which are natural to them. The problem is that, without management, all those people capable of switching types will switch in the same direction—the direction matching the standardized environment—thus reducing diversity and degrading the organization. The challenge is for leaders to understand the consequences of diversity mixes well enough to assign different functions intelligently.

Very few experiments have objectively explored the consequences of different diversity mixes. What we know so far is that maximizing diversity of personality on a design team doubles wins compared to self-selected design teams.[4] In addition to exploring the specific consequences of omitting each specific type of person from the team, future research should explore the consequences of managing diversity surrounding the team, since diversity in the GRIN model builds an entire ecosystem.

Organizations have the potential to track and manage evaluative diversity in the same way as they track and manage finances. Has the organization become more creative? More consistent? More competitive? More unified? Changes in evaluative diversity impact culture, which ultimately impacts finances. Monitoring culture is like monitoring the pH of a lake—any big shift warns you that the diversity is changing and justifies reactionary initiatives.

(continued on page 8)

Events

(continued from page 4)

For more information, see http://bit.ly/BdSourceEvents

Harvard Business School

The HBS programs on governance can be seen here: http://www.exed.hbs.edu/programs/Pages/programfinder.aspx?HBSTopics=Governance

Haines Centre

The Haines Center for Strategic Management is a team of strategic management consultants, whose work is based in Systems Thinking. http://hainescentre.com/training/public-workshops/

HolacracyOne

Holacracy is not a system for the work of boards but does bring structure and discipline to a peer-to-peer workplace. HolacracyOne offers a range of events from free introductory webinars to advanced immersive trainings.

For more information see: http://events.holacracy.org/

National Coalition for Dialogue & Deliberation (NCDD)

NCDD also regularly provides useful training events.

For more information, see http://ncdd.org/events/ncdd2014

National Council for Voluntary Organisations (NCVO)

NCVO provides a range of programs across the UK and online. Topics relevant to boards include understanding financials, mentoring (for new board members) and outcome measurement.

For more information see: https://www.ncvo.org.uk/training-and-events/training

International Association of Facilitators (IAF)

IAF holds regular events and has a YouTube channel with content that is being expanded all the time.

For more information see: https://www.iaf-world.org/site/events/conference and https://www.youtube.com/user/iafworld.

Sociocracy/Dynamic Governance

This methodology for the operation of organizations was described in *Board Leadership* Issue 134 in the One Way To Govern feature.

More information and events can be found at: http://sociocracyconsulting.com/events/ ❑

Thinking of publishing in Board Leadership*? Contact managing editor Caroline Oliver for criteria at coliver@goodtogovern.com*

Diversity

(continued from page 7)

Conclusions

The GRIN model of evaluative diversity is like an early version of the periodic table of the elements—there are competing models (e.g., in political science and personality theory), and all of them are expected to grow as we become aware of additional evaluative types. At this stage, we understand diversity well enough to know that representative democracy does not work equally well for all types. If boards and their organizations are to reap the benefits of evaluative diversity, board members and managers need not only to understand evaluative diversity but also to track how they are changing in relation to it over time. ❑

Chris Santos-Lang can be contacted at chris@grinfree.com.

Notes

1. Santos-Lang, C. "Measuring evaluative computational differences in humans" (unpublished paper, November 14, 2015). http://grinfree.com/GRINSQ.pdf
2. Hibbing, J. R., K. B. Smith, and J. R. Alford. *Predisposed: Liberals, Conservatives, and the Biology of Political Differences* (New York: Routledge, 2013); Haidt, J. *The Righteous Mind: Why Good People Are Divided by Politics and Religion* (New York: Vintage, 2012); Wilde, D. J. *Teamology: The Construction and Organization of Effective Teams* (New York: Springer Science & Business Media, 2008).
3. See note 1 above.
4. See note 2, Wilde, *Teamology* ...

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The AMBACHTSHEER Letter
Sustainable Pension Design • Effective Pension Management

July 2016

INVESTMENT RETURNS IN A 'MATURE CAPITALISM' ERA: WHAT ARE 'REASONABLE EXPECTATIONS' TODAY?

"Emerging out of these legal opinions and judgments is a new 'reasonable expectations' standard for the exercise of fiduciary duty. This new emerging view contrasts sharply with the historical view that attention to fiduciary duty could be demonstrated by engaging in a standard box-checking exercise drawn up by legal counsel."

From Chapter 11, of my new book
"The Future of Pension Management"

Fiduciary Duty and the Einstein Test

Chapter 11 of my new book is titled "The Evolving Meaning of Fiduciary Duty". Following the writings of Hawley, Johnson, Waitzer, and Sarro, the chapter explains that pension trustees can no longer fulfill their fiduciary duty by following the 'box-checking' advice of legal counsel. Instead, a 'reasonable expectations' doctrine is taking hold. As a practical matter, it means board members of pension organizations have to demonstrate they have thought long and hard before approving the key policies that guide the organization's decision-making processes…..including its investment policies and return expectations. In short, it is reasonable for stakeholders in pension organizations to expect that their boards and managements think 'long and hard' before deciding on the organization's investment policies, and that they are able to clearly demonstrate they did so.

This in turn means that senior managements of pension organizations must structure their investment policy recommendations (and the analyses backing them) in a way that permits constructive board-management dialogue. Stated differently, if those policy recommendations and their rationales don't conform to Albert Einstein's test to "make things as simple as possible, but no simpler", the board is unable fulfill its fiduciary duty of asking hard, probing questions about management's recommendations on investment policies and their implementation.

The goal of this *Letter* is to construct a framework for 21st Century investment policy decision-making that meets the Einstein test, and thus to facilitate constructive board-management dialogue on investment policy and return expectations.

An 'As Simple as Possible but no Simpler' Investment Return Model

Prospective investment returns are central to establishing investment policies and their implementation. So to start, we need a return projection model that meets the Einstein test. Happily, the late Prof. Myron Gordon presented such a model in his 1959 article "Dividends, Earnings, and Stock Prices[i]:

RETURN = INCOME YIELD + INCOME GROWTH (R = Y + G)

It has come to be known as the Gordon Model, indicating that the long term return on any investment works out to be (within some limitations) the sum of its starting income yield plus the growth rate of that investment income over time.

As a test, let's apply the Gordon Model to the U.S. stock market over the 1871-2014 period. A recent FAJ article by Jeremy Siegel contains the following data[ii]:

Table 1 U.S. Stock Market Data 1871-2014

	Ave Dividend Yield (Y)	Real Dividend Growth (G)	Y+G	Real Equity Return (R)
1871-2014	4.27%	1.47%	5.74%	6.70%
1871-1945	5.04%	0.76%	5.80%	6.68%
1946-2014	3.25%	2.24%	5.49%	6.72%

SOURCE: Financial Analysts Journal

It turns out that the Gordon Model modestly underestimated real U.S. equity returns over the total 143-year period, and in the two sub-periods. Why? Because there was a third factor at work which the simple Gordon Model is not designed to capture: the secular decline in dividend yields from 8% to 2% over the 1871-2014 period. The resulting secular rise in equity valuations generated an additional 0.96%/yr. of equity returns.

So what is the Gordon Model telling us today about 'reasonable' equity return prospects? Well, we know the S&P500 yields 2.1% today and we know that in a lower GDP growth world, it will be tough for the corporate sector to grow its dividends at the 2.24% real rate achieved since 1946. A 1.5% real growth rate is now more realistic. So there we are: 2.1% + 1.5% = 3.6%....<u>materially lower than the historical 6.7%.</u>

What about Bond Returns?

What about bond returns? According to Siegel, the average real return on U.S. Treasury Bonds since 1871 was 3.0%. This means U.S. equities have earned a historical risk premium of 3.7%/yr. over Treasury Bonds (i.e., 6.7% - 3.0%). Today, the 30-year TIPS is yielding 0.6%, leading to a prospective equity risk premium of 3.0%/yr. (i.e., 3.6% - 0.6%), lower than the 3.7% historical realization. Is it possible that investors perceive the future to offer fewer risks and less uncertainty than the past? Not necessarily… more on this question below.

The current meagre 0.6% 30-yr. TIPS yield raises an obvious question: is this the 'new normal', or a temporary disequilibrium caused by aggressive central bank QE actions? Former Federal Reserve System Chair Ben Bernanke provides a clear answer in a recent blog: "Except in the short run, real interest rates are determined by a wide range of economic factors". A research report by the Bank of England confirms this view.[iii] It shows that the fall of real interest rates around the world correlates strongly with slowing GDP growth, aging populations, savings gluts in Saudi Arabia, China, and other developing countries, declines in infrastructure investing, rising income/wealth inequality, and falling capital goods prices. The report concludes that these secular trends are likely to persist, as will the current low real interest rates regime.

A History of 'Minsky Moments'

Of course, the 143-year equity return history set out in Table 1 did not occur in a straight line. There have been extended bull and bear markets along the way. MIT's Andrew Lo provides logic to these phenomena through his Adaptive Markets Hypothesis, or AMH for short. He explains it as taking a biological/evolutionary approach to understanding investment markets and the people in it (rather than a robotic 'physics' approach taken in the Efficient Markets Hypothesis). Often, it is fear and greed that drives these markets, more than sober, rational calculation.

In a similar vein, Washington University's Hyman Minsky posited the Financial Instability Hypothesis (FIH), arguing that financial stability in developed economies would naturally become a source of future instability through speculative risk-taking. His work was largely ignored until people acknowledged that the Global Financial Crisis offered a text book example (a 'Minsky Moment') of the FIH in action.

In the spirit of Lo's AMH and Minsky's FIH, readers will recognize Table 2 below. It has played a central role in my writings on investment policy and capital markets prospects for many years now, for three reasons:

1. The table reflects the FIH by reminding us that financial markets have mindsets that swing from extended periods of growing optimism to extended periods of growing pessimism.
2. It also reflects the AMH because these mindset swings impact pricing in the capital markets in predictable ways. Growing optimism leads to rising prices for risk assets, generous risk premium realizations, and hence falling prospective risk premiums. Conversely, growing pessimism leads to falling prices for risk assets, negative risk premium realizations, and hence rising prospective risk premiums.
3. The table facilitates board-management conversations about past investment eras, about the current one we are living through, and about periods during which one era transitions into another.

Our January 2014 *Letter* expressed the view that the *Double-Bubble Blues* era ended around 2010/2011, and that we have been transitioning into a new era which I called *Mature Capitalism*. Since then, I have been visualizing how a *Mature Capitalism* era might play out.

Table 2: The Eight Capital Markets Eras Since WW1

Investment Era	Investor Mindset	Approximate Time Span	Dividend Yield Change	Realized *ERP**
The WW I Decade	Pessimistic	10 years	5% → 7%	- 5%
Roaring Twenties	Optimistic	10 years	7% → 4%	+ 12%
Dirty Thirties/ Fateful Forties	Pessimistic	20 years	4% → 7%	0%
Pax Americana I	Optimistic	20 years	7% → 3%	+ 8%
Scary Seventies	Pessimistic	10 years	3% → 6%	- 3%
Pax Americana II	Optimistic	20 years	6% → 1%	+ 9%
Double-Bubble Blues	Pessimistic	10 years	1% → 2%	- 6% *
Mature Capitalism?	Optimistic?	20 years?	2% → ?%	?%

SOURCE: The Ambachtsheer Letter

* Stock returns come from *Triumph of the Optimists* by Dimson, Marsh, Staunton. Bond returns are based on a hypothetical CPI-linked bond with a real yield of 2.5%. If the actual LT TIPS return had been used for the *Double-Bubble Blues* era, the realized ERP would have been -10%.

Table 2 Insights

Three things stand out in Table 2:

1. <u>The secular decline in the dividend yield</u>: this decline was also apparent in Table 1. Repeating the earlier observation, this decline represents a steady upward revaluation of equity prices, especially in the post-WWII period. This revaluation phenomenon was worth about 1.0%/yr. of the realized total real return of 6.7%/yr. over the entire 1871-2014 period. In other words, without it, the total realized real return would only have been 5.7%/yr. Given the 3.0%/yr. Treasury Bond realization, a realized equity risk premium of 2.7%/yr. results without this revaluation. Against this benchmark, the prospective calculation of 3.0%/yr. made above suggests today's equity market is not overvalued by historical standards.

2. The material within-era valuation swings: these 10/20-yr. swings are consistent with the AMH and FIH views of the world. Take the end of the *Pax Americana II* era for example. Enthusiastic investors had bid the S&P500 yield down to 1%. If we add 2%/yr. for prospective real dividend growth, a real return expectation of 3% results. Long TIPS were yielding 4% at the time, resulting in a negative (i.e., -1%) equity risk premium expectation. A *Letter* written in 2000 concluded that equity investors had already earned the equity risk premium for the next 10 years, and to sit the decade out invested in long TIPS. Table 2 confirms that was good advice at the time, as the realized equity risk premium for the *Double Bubble Blues* era turned out to be -6%/yr.
3. No 'over-exuberance' evidence yet: if we say that the *Mature Capitalism* started in 2010 (i.e., with the severity of the Global Financial Crisis largely in the past), it is remarkable that over the course of 2011 to date, the S&P500 yield has not wandered far from 2% as yet. It is reasonable to take that as an indication that stock prices have not yet returned to the 'over-exuberance' levels of the late 1990s reflected by the 1% yield at the time. At the same time, the 'under-exuberance' opportunity reflected in the S&P500 3.5% yield in mid-2009 is also gone.

In short, by the historical framing set out in this *Letter*, S&P500 pricing seems abnormally normal today. However, there is an important caveat: this 'new normal' reflects the lower growth/lower return *Mature Capitalism* era we now live in. Today's real return expectations for stocks and bonds of 3.6%/0.6% are a long way from their historical 6.7%/3.0% realizations.[iv]

Reasonable Expectations?

Stating the obvious, the return expectations set out above are mine, not yours. I believe my numbers pass the 'reasonable expectations' test for the reasons set out in this *Letter*[v]. What are your numbers, and can they pass a similar 'reasonable expectations' test?

Keith Ambachtsheer

Endnotes:

i. *Myron moved to Toronto in 1970, and lived there until a few years before his death in 2010 at age 89. He taught finance and economics at the University of Toronto until 1985, retiring with the title of Professor Emeritus at the Rotman School of Management. Over his long, illustrious career, he wrote over 100 books and articles on a wide variety of topics. He was the President of the American Finance Association in 1975. While I did not know Myron well, we did have the occasional most interesting conversation. I attended his memorial service at Rotman in 2010.*

ii. *Siegel (2016), "The Shiller CAPE Ratio: A New Look", Financial Analysts Journal, May/June.*

iii. *Rachel and Smith (2015), "Secular Drivers of the Global Real Interest Rate", Bank of England.*

iv. *Long-time readers of this Letter will note that the investment return framing employed above reflects a material simplification from prior efforts. This reflects a judgment that prior efforts did not pass the Einstein test. Two examples: 1. Focus on earnings rather than dividends: prior Letters made valuation judgments based on earnings yields rather than dividend yields. The cited article by Jeremy Siegel questioned the comparability of Bob Shiller's CAPE (Cyclically-Adjusted Price Earnings) Ratios over time because of changes over time in how corporate earnings are computed. In contrast, the definition of what constitutes a divided payment has not changed over time, and 2. The role of share buy-backs in returning cash to investors: in an ideal world, we would monitor the behavior of corporate 'payout yield' which includes both dividend payments and net share -buy-backs. However, my friends at Research Affiliates convinced me that it is virtually impossible to calculate true net share buy-backs at the S&P500 level because there is no standard share issuance reporting protocol. Again, better to stick with dividend yield numbers you know, that with payout yield numbers you don't. So it would seem that the revised framing approach used in this Letter is not only simpler, but also better.*

v. *My 'reasonable expectation' here is for the equity market as a whole. See the April 2016 Letter "Focusing Capital on the Long -Term: From Walking to Talking" for my view on outperforming the market as a whole.*

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Ethics 101 for Investment Professionals

Callan Chairman and CEO Ron Peyton has long argued that implementing high ethical standards in the investment industry is not only the right thing to do, but also the best way to build a sustainable business. The recent introduction of new rules from the Department of Labor on the role of fiduciaries is a timely reminder of the importance of these standards. In this paper he outlines his thoughts on how to create, instill, and maintain ethical standards for investment professionals. His advice: the right culture creates the best environment to maintain these standards. Firms should develop ethical guidelines that are based on principles, not rules, since the former offer better guidance for employees across the organization.

This paper highlights what I have found to be practical resources, tools, and examples for keeping high ethical standards at the forefront of thought and behavior in our industry and with my fellow associates. I am passionate about the subject because research and my own experience show that the more ethics are promoted in a firm's daily culture, the more associates are "reminded" to conduct themselves with high moral standards and not rationalize anything less. In addition, ethically minded associates help create firm cultures more likely to do the right thing for clients, their fellow associates, and other stakeholders.

Ron Peyton serves as Chairman of the CFA Institute Asset Manager Code of Professional Conduct Advisory Committee.

"If associates have a mission and vision of doing something good for society over just financial incentives, they are more likely to make good moral and ethical decisions."

Ron Peyton, Callan's Chairman and CEO

Regrettably, all financial occupations receive a poor ethical rating from the public. (A recent survey from the CFA Institute conducted in partnership with the public relations firm Edelman on the perception of various industries found that financial services ranked near the bottom when judged on trust, for instance.) I won't speculate whether this perception is warranted or how it came about. There is not much the industry can do about it in the short run. What we can do is strive to be the best example of ethical behavior we can be by promoting ethics to our young associates and keeping ethical practices at the forefront of all decision-making and execution. (By the way, that same CFA Institute survey found that institutional investors said the most important attribute they wanted to see in the firms they worked with was that they act in an ethical manner.)

Tips from Ethical Mindfulness

Rationalizations: Beware of how easy it is to rationalize your own self-interest, setting a mental trap that can endanger your reputation and even your career.

The Race for Success: Don't become too caught up in the race for success—some of the traits of highly motivated individuals, like focus and intensity, can lead to ethical blindness.

The Slippery Slope: Keep in mind that the "slippery slope" is real: Seemingly innocent actions can ultimately lead to big problems one small step at a time.

Client Doubt: Never give your clients reason to doubt your integrity. If a client comes to doubt you, it will be the client's point of view, not your own, that determines whether you lose business and perhaps become the subject of a complaint.

The Family Test: Ask yourself whether you would be doing and saying exactly the same thing if your mother were the client, or someone else for whom you care deeply.

The perception and validation of ethical standards in investment professionals builds client trust in an advisor. If you think about it, the fundamental conclusion for all manager research is the development of trust for the people, philosophy, processes, and performance promise of an investment management firm. In the early 1970s, Callan's first manager research analyst was Ann Kingsland, a business education major who admitted she did not always follow the finer investment points of the many manager presentations she endured. What she did have was an uncanny ability to judge honesty and character. Ann would perceptively conclude if managers cared more about making money for themselves or for their clients. That conclusion is still the bottom line for all manager research and relationships of trust.

The best ethics primer for young professionals (and old ones too!) that I have ever read is the CFA Institute's *Ethical Mindfulness: A Guide for New Financial Services Professionals* by Donald C. Langevoort.[1] It is a brief, practical, and interesting read; it is very relevant to our industry with great examples on how gray-area ethical issues can arise and how to handle them. The best advice from this paper is to contemplate and address potential ethical scenarios before facing real-life situations. This may be the only way to avoid being caught flat-footed and realizing that the ethical line had already been crossed on the subtle slippery slope to impropriety. And as Warren Buffet has said, "It takes 20 years to build a reputation and five minutes to ruin it." There is also an excellent short reading list in the paper for those who want to study further.

From my experience, the acid test for ethical behavior towards a client is that the fee for a service should reasonably compensate the firm for every aspect of doing the best job it can for the client. In other words, the fee takes care of the self-interest part of the relationship. The bottom line for ethical behavior requires that every other consideration or action in the relationship be for the best interests of the client, and that no other advantage for the firm or any associate be sought at the client's disadvantage.

1 CFA Institute's *Ethical Mindfulness: A Guide for New Financial Services Professionals*

Most firms have a rules-based ethics policy. These statements can be very detailed and run scores of pages. Rules-based policies are necessary for regulatory and legal compliance issues but, in my opinion, and in the opinion of others I have collaborated with over the years,[2] are not as effective for the "ethical mindfulness" of non-compliance and non-legal professionals, the vast majority of associates.

Principles-based ethics policies are much more practical for daily guidance. If a professional follows the basic principles of ethical behavior, she will be able to make most decisions correctly without having to consult the policy manual. Consider the Ten Commandments. "Thou shalt not steal" is pretty hard to get around even with a good lawyer! And it wasn't until the Pharisees introduced what was essentially a rules-based ethics policy, writing hundreds of guidelines on how to obey the Ten Commandments, that people found ways around the basic principles. We see that hair-splitting behavior too often today.

Another principles-based ethics policy is the CFA Institute's Asset Manager Code of Professional Conduct (AMC). The AMC principles are easy to remember and serve as a ready reminder for ethical behavior. Research has shown that people tend to behave more ethically when they are regularly reminded to do so (Dan Ariely, Honor Code Experiment, MIT 2007: Those who signed an honor code before the experiment cheated much less than those who did not. The conclusion was that being reminded of moral issues is a key to encouraging ethical behavior).

Over 1,300 investment management firms have adopted the AMC principles in addition to their own rules-based codes of ethics. Adoption of the AMC for a large firm is not a trivial process, in many cases taking the firm's legal and compliance groups over a year to confirm alignment of the code with the firm's own policies, operations, and business practices. Investment managers know that if they adopt the AMC they must be able to demonstrate their compliance with it to clients and regulators. This should give fund sponsors more confidence in their documentation as they complete their own due diligence on managers that have adopted the code.

Six Key Principles for Asset Managers
(applied to all areas of firm operations)

Managers have the following responsibilities to their clients. They must:

1. Act in a professional and ethical manner at all times.
2. Act for the benefit of clients.
3. Act with independence and objectivity.
4. Act with skill, competence, and diligence.
5. Communicate with clients in a timely and accurate manner.
6. Uphold the applicable rules governing capital markets.

— CFA Institute's Asset Manager Code of Conduct

The new Department of Labor Fiduciary Rule accomplishes the same "reminder" for ethical behavior, with potentially severe legal consequences. While the Fiduciary Rule and associated clarifications cover hundreds of pages, the key for compliance is to remember the primary "commandment" of being a fiduciary: To act prudently only in the best interests of the client.

2 For instance, Brian Golob, Global General Counsel and Chief Compliance Officer of Russell Investments, and I have discussed this matter often.

I would also warn that new regulatory standards and the resulting perception of wrongdoing are often set retroactively; investment professionals who abide by the simple principles I have outlined will always be ahead of the curve.

A long time ago, when most consultants' fees were payable in brokerage commissions, Callan established the principle of brokerage recapture. If a client's directed brokerage exceeded the agreed-upon cash fee, we refunded the difference each year to our client rather than keep the money. We felt this was the right thing to do, and resulting industry practices and regulatory actions certainly proved us right. For an example of the wrong thing to do, consider the time when custody fees came under pressure in client negotiations. Some institutions made up the difference with high-margin securities lending practices and disadvantageous foreign exchange practices. These efforts eventually created many legal and regulatory headaches for the institutions as clients and regulators discovered the true nature of the risks and costs. I cite these two examples to illustrate how dramatically industry "best practices" can change over time and how important it is to fully disclose and explain how a firm makes its money. It is always better to focus on best outcomes than whatever happen to be the "best practices" of the day.[3]

Callan's Values

- Keeping client interests paramount
- Exercising independent thought
- Demanding quality and integrity in everything we do
- Honoring every commitment
- Pursuing innovation that matters
- Leading through practical research and education
- Collaborating and showing collegial respect
- Encouraging each associate's success

"Cultures that condone rule violations are more likely to be dishonest. Dishonesty is enabled by rationalization which makes lying seem less dishonest," wrote Simon Gächter of the University of Nottingham and Jonathan Schulz of Yale University.[4] Firm cultures are a creature of senior management. Culture is a composite of the firm's mission, vision, strategic plan, values, financial incentives, and client relationships, and the result of many leadership decisions over time. Continually educating and committing associates to a morally sound firm culture creates the ethical environment. If associates have a mission and vision of doing something good for society beyond financial incentives, they are more likely to make good moral and ethical decisions. For instance, at Callan we know that we are helping people to retire with some financial dignity or enabling the grant-making of an endowment or foundation for a critical social cause.

One of Callan's values, "keeping client interests paramount," is the driver of another value, "honoring every commitment." These values may seem trivial at first—everyone does this, right? However, this is not the case when one reflects on the full ramifications. How many times have we been tempted to abandon a social commitment because we were offered a better opportunity? How many times are we

3 Written Statement of Brian Golob, Global General Counsel and Chief Compliance Officer, Russell Investments, to ERISA Advisory Council, United States Department of Labor, Hearing on "Outsourcing Employee Benefit Plan Services," June 18, 2014.

4 Gächter, Schulz, *Nature* 531, March 24, 2016 (London, Nature Publishing Group) 496–499.

tempted to short-cut a complex client problem with an off-the-shelf solution? We discuss our values with our associates so they will appreciate the nuances and not be tempted to rationalize dishonest or just plain lazy behavior.

Callan is fortunate because most of our associates have direct contact with clients. This results in a real empathy that encourages behavior for the sole benefit of the client even at the expense of the firm. I have witnessed this empathy over the years and felt it strongly in my own client relationships. Some professionals aren't so fortunate to develop this empathy from direct client contact. Isolated traders, who often don't know the client, can be driven by other motivational factors to trade for the firm or their own competitive interests. Having witnessed many mishaps with traders, I see the problem as a bigger management and cultural issue for the organization rather than traders gone rogue.

Honoring our commitments means doing what we promise to do even if it is personally inconvenient or costs the firm money. When dealing with clients, it is always helpful to think about the good we are doing for them and not the burden they may place on us. All clients have unexpected situations: the loss of a key staff member; a public hearing where they need someone to stand up for them; unfavorable media attention; the need for a special report or to redo an old one. I have seen my associates drop weekend plans and spend far more time with a client than anticipated to honor our commitment of support within our existing retainer arrangement.

Thankfully, most firms in our industry share a vision of doing good things for their clients and society with the necessary values and culture for good ethical behavior. I remember the first formal set of values that I had ever seen at Brinson Partners in the early 1980s. They were inscribed in bronze and hung on the wall of the reception area. They made quite an impression. My favorites were "Execution supersedes intention" and "There are no higher ethical values than truth, honesty, and professionalism." Brinson Partners was acquired a long time ago, but hopefully its values lived on.

Certainly people will make mistakes, but hopefully the mistakes are ones of execution rather than amoral intent. Meanwhile it is important to keep promoting, discussing, and practicing ethical principles with our associates. If we spend time thinking about the principles over the rules, remembering to focus on the beneficial outcomes rather than what happen to be industry best practices at the time, we will get it right most of the time. Best practices change and the judgment of the marketplace can be retroactive and harsh.

In closing, I will leave you with one last great ethical principle: Ed Callan always said, "If there is any question at all about doing something, don't do it."

About the Author

Ronald D. Peyton is Chairman and Chief Executive Officer for Callan Associates Inc., an employee-owned firm whose mission is: "Collaborating with each client to build tailored and lasting investment solutions."

Ron provides firm-wide oversight by conferring with associates and clients to improve communications, process, and service quality. He regularly meets with senior industry professionals and actively engages in industry and community events to advocate for the institutional investment industry. Ron is Chairman of Callan's Management Committee and the Emerging and Minority, Women, or Disabled-owned Managers Committee. He is Chairman of Callan's Board of Directors and a shareholder of the firm.

He serves on the Board of the United Way of the Bay Area, for which he is the Development Committee Chair. He also serves as Chairman of CFA Institute Asset Manager Code of Professional Conduct Advisory Committee, and is a member of the Strategic Advisory Committee for the CFA Society San Francisco. Ron serves as "Counselor" for the Indiana University Kelley School of Business Dean's Council. He is also an advocate for the Vista Center for the Blind and Visually Impaired, which Callan has supported for more than 20 years.

Prior to joining Callan in 1974, in addition to other financial responsibilities, Ron worked with Marathon Oil Company's pension investments while serving as an officer in the U.S. Army Reserve. Ron earned an MBA degree in Finance and a BS degree in Accounting at Indiana University.

If you have any questions or comments, please email institute@callan.com.

About Callan

Callan was founded as an employee-owned investment consulting firm in 1973. Ever since, we have empowered institutional clients with creative, customized investment solutions that are uniquely backed by proprietary research, exclusive data, ongoing education and decision support. Today, Callan advises on more than $2 trillion in total assets, which makes us among the largest independently owned investment consulting firms in the U.S. We use a client-focused consulting model to serve public and private pension plan sponsors, endowments, foundations, operating funds, smaller investment consulting firms, investment managers, and financial intermediaries. For more information, please visit www.callan.com.

About the Callan Institute

The Callan Institute, established in 1980, is a source of continuing education for those in the institutional investment community. The Institute conducts conferences and workshops and provides published research, surveys, and newsletters. The Institute strives to present the most timely and relevant research and education available so our clients and our associates stay abreast of important trends in the investments industry.

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