

**MCERA INVESTMENT RETIREMENT BOARD AGENDA
THURSDAY, FEBRUARY 28, 2019
MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
3199 M STREET, MERCED, CA 95348**

Please turn your cell phone or other electronic device to non audible mode and please refrain from using them during the Board meeting.

CALL TO ORDER: 8:15 A.M.

- ROLL CALL.
- APPROVAL OF MINUTES – February 14, 2019

PUBLIC COMMENT

Members of the public may comment on any item under the Board's jurisdiction. Matters presented under this item will not be discussed or acted upon by the Board at this time. For agenda items, the public may make comments at the time the item comes up for Board consideration. Persons addressing the Board will be limited to a maximum of five (5) minutes in total. Please state your name for the record.

CLOSED SESSION

As provided in the Ralph M. Brown Act, Government Code sections 54950 et seq., the Board may meet in closed session with members of its staff, county employees and its attorneys. These sessions are not open to the public and may not be attended by members of the public. The matters the Board will meet on in closed session are identified below. Any public reports of action taken in the closed session will be made in accordance with Government Code sections 54957.1.

(1) DISCUSSION AND POSSIBLE ACTION REGARDING INVESTMENTS IN RECOMMENDED FUNDS, ROLL CALL VOTE REQUIRED.

(Govt. Code § 54956.81)

1. Discussion and possible adoption of private equity fund recommendation – Cliffwater.

RETURN TO OPEN SESSION

Report on any action taken in closed session.

BOARD ACTION¹/DISCUSSION

Pursuant to Govt. Code § 31594 and MCERA's Investment Objectives & Policy Statement due diligence analysis requirement:

1. Presentation and discussion of Quarterly Investment Performance Report for alternative investments – Cliffwater.
2. Presentation and discussion of the Quarterly Investment Performance Report with possible board action on any funds – Meketa Investment Group.

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3. Discussion and possible action on State Street Global Advisors Real Asset NL Fund (ZVBQ) – Meketa Investment Group.
4. Discussion and possible action to amend MCERA FY 18/19 Budget to pay CPAS for accrued service and support hours – Staff.
5. Discussion and possible action on Resolution for Trustee Sam Spangler – Chair.
6. Discussion on timeline for SACRS Officer Elections – Staff.
7. Review calendar of any training sessions and authorize expenditures for Trustees and Plan Administrator. Pursuant to Govt. Code § 31522.8 and MCERA’s Trustees Education and Training Policy requirements. Examples of upcoming training and educational sessions:
 - a. CALAPRS General Assembly, March 2–5, 2019, Monterey, CA.
 - b. Advanced Principles of Pension Management for Trustees, March 27–29, 2019, Los Angeles, CA.
 - c. Meketa Investment Conference April 9, 2019, San Diego, CA.
 - d. Pension Bridge Annual Conference, April 9-10, 2019, San Francisco, CA.
 - e. SACRS Spring Conference, May 7-10, 2019, Squaw Valley, CA.
 - f. NCPERS Annual Conference & Exhibition, May 19-22, 2019, Austin, TX.
 - g. Principles of Pension Management for Trustees, August 26-29, 2019 Malibu, CA.
 - h. SACRS Fall Conference, November 12-15, 2019, Monterey, CA.

INFORMATION ONLY

MCERA Upcoming Board Meetings:

Please note: The MCERA Board Meeting and/or Education Day times and dates may be changed in accordance with the Ralph M. Brown Act by the MCERA Board as required.

- March 14, 2019
- March 28, 2019
- April 11, 2019

ADJOURNMENT

All supporting documentation is available for public review in the office of the Merced County Employees’ Retirement Association, 3199 M Street, Merced, California, 95348 during regular business hours, 8:00 a.m. – 5:00 p.m., Monday through Friday.

The agenda is available online at www.co.merced.ca.us/retirement

Any material related to an item on this Agenda submitted to the Merced County Employees’ Retirement Association, after distribution of the Agenda packet is available for public inspection in the office of the Merced County Employees’ Retirement Association.

Persons who require accommodation for a disability in order to review an agenda, or to participate in a meeting of the Merced County Employees’ Retirement Association per the American Disabilities Act (ADA), may obtain assistance by requesting such accommodation in writing addressed to Merced County Employees’ Association, 3199 M Street, Merced, CA 95348 or telephonically by calling (209) 726-2724. Any such request for accommodation should be made at least 48 hours prior to the scheduled meeting for which assistance is requested.

**MCERA RETIREMENT BOARD MEETING MINUTES
THURSDAY, FEBRUARY 14, 2019
MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
3199 M STREET, MERCED, CA 95348**

ROLL CALL: 8:15 A.M.

Board Members Present: Darlene Ingersoll, Karen Adams, Scott Silveira, David Ness, Al Peterson, Janey Cabral, Ryan Paskin, Michael Rhodes (voting for vacant Retiree member seat), Jason Goins, Samuel Spangler. **Counsel:** Forrest Hansen. **Staff:** Kristie Santos, Angelo Lamas, Mark Harman, Michelle Lee, Sheri Villagrana and Brenda Mojica.

Absent:

APPROVAL OF MINUTES: January 24, 2019.

Motion to approve the January 24, 2019 meeting minutes.

Adams/Paskin U/A (9-0).

PUBLIC COMMENT

Board Chair Darlene Ingersoll welcomed new MCERA Trustee, Board of Supervisor Scott Silveira.

CLOSED SESSION

The meeting went into closed session.

RETURN TO OPEN SESSION

(1) DISABILITY RETIREMENT APPLICATIONS: PERSONNEL EXCEPTION

Disability update and possible action:

No action taken.

CONSENT CALENDAR

RETIREMENTS:

All items of earnable compensation for service or disability retirements listed below are in compliance with the pay code schedule approved by the Board of Retirement. The retirement is authorized; however, administrative adjustments may be necessary to alter the amount due to: audit, late arrival of data, court order, etc.

a. Feist, Robin	HSA	11 Yrs. Svc.	Eff. 02/01/2019
b. Patton, Connie	Probation	28 Yrs. Svc.	Eff. 01/19/2019
c. Hughes, Darren	HSA	7 Yrs. Svc.	Eff. 01/01/2019
d. Brandt, Ronald	Spring Fair	31 Yrs. Svc.	Eff. 02/02/2019

YTD fiscal year 2018/2019 retirees: 052

YTD fiscal year 2017/2018 retirees: 082

YTD fiscal year 2016/2017 retirees: 065

REFUND OF SERVICE PURCHASE: None.

DEATH BENEFIT: None.

MONTHLY BUDGET REPORT: Submitted.

Motion to approve Consent Calendar.

Rhodes/Peterson U/A (9-0).

REGULAR CALENDAR

BOARD ACTION¹/DISCUSSION

1. Discussion and possible action to approve the Cost of Living Adjustment (COLA) rate for MCERA Tier 1 retired members effective April 1, 2019 - Staff.
Motion to approve the recommended Cost of Living Adjustment (COLA) rate of 3.0% for MCERA Tier 1 retired members effective April 1, 2019.
Adams/Goins U/A (9-0).
2. Discussion and possible action to adopt new pay code as requested by the County of Merced for Board of Supervisor Board Chair differential as pensionable for Tiers 1 - 3R members and non-pensionable for Tier 4 members - Staff.
Trustee Scott Silveira recused himself during discussion and vote.
Motion to adopt a new pay code for Board of Supervisor Board Chair differential.
Cabral/Ness U/A (8-0).
3. Discussion and possible action to appoint Michael Rhodes currently the Alternate Retired member (Seat 8A) to Retired member (Seat 8) and appoint Ronald Scott Johnston, as recommended by REMCO, as Alternate Retired member (Seat 8A), per Government Section Code 31520.5 effective immediately until the term date for both seats of December 31, 2020 - Staff.
Motion to accept Michael Rhodes as the new Retired member (Seat 8) and appoint (Ronald) Scott Johnston as the Alternate Retired member (Seat 8A), per Remco Recommendation.
Paskin/Peterson U/A (9-0).
4. Discussion and possible action on Legislative Update - Staff.
Plan Administrator briefly addressed potential legislation impacting MCERA.
No action taken.
5. Review calendar of any training sessions and authorize expenditures for Trustees and Plan Administrator. Pursuant to Govt. Code § 31522.8 and MCERA's Trustees Education and Training Policy requirements. Examples of upcoming training and educational sessions:
 - a. CALAPRS General Assembly, March 2–5, 2019, Monterey, CA.
 - b. Advanced Principles of Pension Management for Trustees, March 27–29, 2019, Los Angeles, CA.
 - c. Pension Bridge Annual Conference, April 9-10, 2019, San Francisco, CA.
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 - g. Principles of Pension Management for Trustees, August 26-29, 2019, Malibu, CA.
 - h. SACRS Fall Conference, November 12-15, 2019, Monterey, CA.

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- **Approval for Trustee Adams to attend Pension Bridge Annual Conference in San Francisco, CA on April 9 – 10, 2019.**
- **Approval for Plan Administrator to attend SACRS Spring Conference in Squaw Valley, CA on May 7 - 10, 2019 and NCPERS Annual Conference and Exhibition May 19-22, 2019 in Austin, TX.**
- **Approval for Trustee Paskin to attend NCPERS Annual Conference & Exhibition in Austin, TX on May 19-22, 2019.**
- **Approval for Trustee Silveira to attend Principles of Pension Management for Trustees in Malibu, CA on August 26-29, 2019.**

Peterson/Ness U/A (9-0).

INFORMATION ONLY

Trustee Silveira expressed his interest and appreciation of being a member of the MCERA Board.

Trustee Goins congratulated Trustee Spangler on his upcoming retirement. Trustee Spangler's last meeting will be February 28, 2019.

Trustee Adams welcomed Trustee Silveira and updated the MCERA Board on a Pension & Investments article which included MCERA in Pension & Investments Pension Fund Returns Tracker. MCERA is one of two plans ranked with assets under management of under \$1Billion.

Plan Administrator informed the Board that she will not be attending the April 11, 2019 MCERA Board meeting.

ADJOURNMENT

The meeting adjourned at 8:51 a.m.

Respectfully submitted,

Darlene Ingersoll, Chair

Al Peterson, Secretary

Date

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I N V E S T M E N T A D V I S O R Y S E R V I C E S

Los Angeles • New York

Alternative Investment Performance
Merced County Employees' Retirement Association

February 28, 2019

MCERA Private Equity Capital Budget & Implementation Plan

15% fund level target

- Annual capital budget target of \$40 million, range of \$30-\$50 million
- Target 4-7 investments, range of \$5-\$15 million per inv; average size of \$8 million per

Performance comparisons:

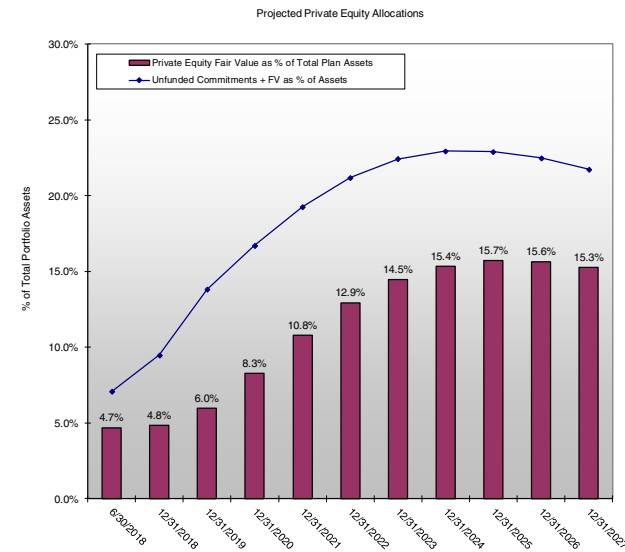
- *Long term investment objective:* Earn a return premium over public equity (Russell 3000 + 3%)
- *Recommended primary asset class benchmark:* Cambridge Associates Global Private Equity & VC Index
- *Recommended fund benchmarks:* Each fund will be compared to the Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to Cambridge Associates Global Private Equity & VC Index

MCERA CY 2018 commitments (\$5 mm each):

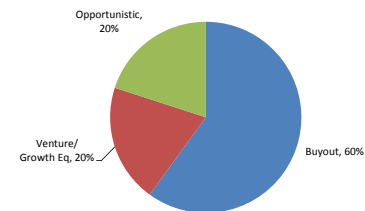
- Cressey VI –healthcare services buyout (VY 2018)
- Accel-KKR Growth III– software growth equity (VY 2019)
- TCV X – venture capital (VY 2019)

MCERA CY 2019 commitments (\$8 mm each):

- Summit X – growth capital (VY 2019)
- Genstar IX – mid market buyout (VY 2019)



Target Strategy Diversification



	Target	Ranges
Buyout	60%	40-80%
Venture/Growth Eq	20%	10-30%
Opportunistic	20%	10-30%
	100%	

Note: MCERA’s existing private equity portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical category averages. Total fund growth of 5.5%.

MCERA Private Equity Investment Structure & Portfolio Assessment

Investment structure (15% fund target; 4.7% invested as of Sep 2018):

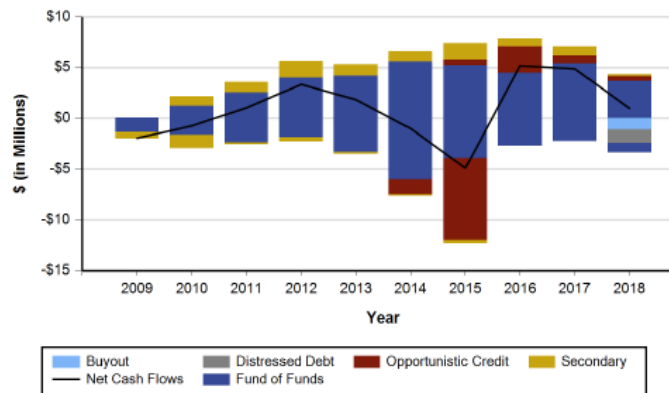
- Current portfolio is barbelled with half of commitments in 2007 & earlier FoFs and half in 2011 & later FoFs
 - Overall portfolio has not met performance expectations; 2011 & later portfolio is still in development with the funds in VY 2017 and 2018 beginning their investment period
 - Quarterly performance improvement due to VY 2007 FoFs; net distributions over the past year as the older FoFs are distributing capital
 - Portfolio is diversified by strategy but overall it is in a negative cash flow situation

Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2017	21	\$79,081	\$58,141	\$44,106	\$36,927	\$81,033	\$22,891	7.83%	10.40%
September 30, 2018	25	\$99,029	\$62,526	\$51,884	\$39,589	\$91,473	\$28,946	8.47%	10.98%
Annual Change	4	\$19,948	\$4,385	\$7,778	\$2,662	\$10,440	\$6,055		

Annual Cash Flow



Note: Net cash flow is the for the respective calendar year.

MCERA Private Equity Performance – as of Sep 30, 2018

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
Vintage Year 2004												
Invesco Partnership Fund IV, L.P.	Fund of Funds	10,000	2,417	7,898	76%	14,681	1,607	16,289	8,391	11.82%	7.32%	2.06
Vintage Year 2004 Total		10,000	2,417	7,898	76%	14,681	1,607	16,289	8,391	11.82%	7.64%	2.06
Vintage Year 2005												
ASP 2005 Non-US Fund	Fund of Funds	1,500	74	1,426	95%	1,569	399	1,969	543	5.07%	5.45%	1.38
ASP 2005 US Fund	Fund of Funds	3,500	177	3,323	95%	4,149	953	5,101	1,778	6.91%	7.89%	1.54
Pantheon Ventures Euro Fund IV	Fund of Funds	1,160	55	1,278	95%	1,505	175	1,680	402	4.85%	5.45%	1.31
Pantheon Ventures USA Fund VI	Fund of Funds	3,750	206	3,544	95%	4,573	949	5,522	1,978	7.00%	7.89%	1.56
Vintage Year 2005 Total		9,910	513	9,571	95%	11,796	2,476	14,272	4,701	6.44%	7.39%	1.49
Vintage Year 2006												
Pantheon Global Secondary Fund III "B"	Secondary	10,000	540	9,460	95%	9,260	1,423	10,683	1,223	2.22%	8.55%	1.13
Vintage Year 2006 Total		10,000	540	9,460	95%	9,260	1,423	10,683	1,223	2.22%	7.49%	1.13
Vintage Year 2007												
ASP 2007 Direct Fund	Fund of Funds	450	14	436	97%	704	313	1,017	581	12.29%	11.62%	2.33
ASP 2007 Non-US Fund	Fund of Funds	1,575	78	1,497	95%	1,413	916	2,329	832	8.20%	7.49%	1.56
ASP 2007 US Fund	Fund of Funds	2,475	115	2,360	95%	2,851	1,351	4,202	1,842	11.72%	11.62%	1.78
Vintage Year 2007 Total		4,500	207	4,293	95%	4,969	2,580	7,549	3,256	10.68%	9.19%	1.76
Vintage Year 2011												
ASP 2011 Direct Fund	Fund of Funds	500	44	456	91%	461	446	906	450	17.91%	15.69%	1.99
ASP 2011 Emerging Markets Fund	Fund of Funds	500	74	426	85%	131	566	697	271	13.43%	11.81%	1.64
ASP 2011 Non-US Developed Fund	Fund of Funds	1,500	322	1,178	79%	669	1,093	1,761	583	12.39%	11.81%	1.49
ASP 2011 US Fund	Fund of Funds	2,500	326	2,175	87%	1,098	2,320	3,418	1,243	14.35%	15.69%	1.57
Pantheon Asia Fund VI	Fund of Funds	1,000	201	800	80%	286	942	1,228	428	11.48%	11.81%	1.53
Pantheon Euro Fund VII	Fund of Funds	1,619	316	1,396	80%	647	1,349	1,996	600	9.70%	11.81%	1.43
Pantheon Ventures USA Fund IX	Fund of Funds	2,000	344	1,656	83%	744	1,927	2,670	1,014	13.22%	15.69%	1.61
Vintage Year 2011 Total		9,619	1,627	8,087	83%	4,035	8,642	12,677	4,590	12.94%	13.75%	1.57

Note: The benchmark represents the Cambridge Associates LLC median for the respective strategy and vintage year. At the vintage year level, the Cambridge Associates LLC Global Private Equity & VC[®] median is used for the respective vintage year.

MCERA Private Equity Performance – as of Sep 30, 2018

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
Vintage Year 2013												
Invesco Partnership Fund VI, L.P.	Fund of Funds	5,000	1,833	3,674	63%	526	6,440	6,966	3,292	19.41%	16.27%	1.90
Vintage Year 2013 Total		5,000	1,833	3,674	63%	526	6,440	6,966	3,292	19.41%	12.81%	1.90
Vintage Year 2014												
Ocean Avenue Fund II	Fund of Funds	10,000	2,400	7,600	76%	2,097	9,474	11,571	3,971	15.58%	14.07%	1.52
Raven Asset-Based Opportunity Fund II	Opportunistic Cr	10,000	474	9,526	95%	4,476	4,740	9,216	-310	-1.29%	9.65%	0.97
Vintage Year 2014 Total		20,000	2,874	17,126	86%	6,573	14,214	20,787	3,661	7.31%	14.65%	1.21
Vintage Year 2017												
GTCR XII	Buyout	5,000	4,742	258	5%	44	-1	43	-215	N/M	N/M	0.17
Vintage Year 2017 Total		5,000	4,742	258	5%	44	-1	43	-215	N/M	N/M	0.17
Vintage Year 2018												
Accel-KKR Growth Capital Partners III	Buyout	5,000	5,000	0	0%	0	0	0	0	N/M	N/M	0.00
Carrick Capital Partners III, L.P.	Buyout	5,000	4,141	859	17%	0	818	818	-41	N/M	N/M	0.95
Cressey & Company Fund VI LP	Buyout	5,000	5,000	0	0%	0	0	0	0	N/M	N/M	0.00
Davidson Kempner Long-Term Distressed Opportunit Distressed Debt		5,000	3,700	1,300	26%	0	1,390	1,390	90	N/M	N/M	1.07
TCV X, L.P.	Venture Capital	5,000	5,000	0	0%	0	0	0	0	N/M	N/M	0.00
Vintage Year 2018 Total		25,000	22,841	2,159	9%	0	2,208	2,208	49	N/M	N/M	1.02
Total Portfolio:		99,029	37,594	62,526	62%	51,884	39,589	91,473	28,947	8.47%	10.98%	1.46
Portfolio Strategy Totals												
Buyout		20,000	18,883	1,117	6%	44	817	861	-256	N/M		N/A
Distressed Debt		5,000	3,700	1,300	26%	0	1,390	1,390	90	N/M		1.07
Fund of Funds		40,175	7,876	33,122	80%	31,884	25,779	57,663	24,541	11.29%		1.74
Non-US		8,854	1,120	8,001	87%	6,220	5,440	11,660	3,659	7.62%		1.46
Opportunistic Credit		10,000	474	9,526	95%	4,476	4,740	9,216	-310	-1.29%		0.97
Secondary		10,000	540	9,460	95%	9,260	1,423	10,683	1,223	2.22%		1.13
Venture Capital		5,000	5,000	0	0%	0	0	0	0	N/M		N/A
Total Portfolio:		99,029	37,594	62,526	62%	51,884	39,589	91,473	28,947	8.47%	10.98%	1.46

Note: The benchmark represents the Cambridge Associates LLC median for the respective strategy and vintage year. At the vintage year level, the Cambridge Associates LLC Global Private Equity & VC[®] median is used for the respective vintage year.

MCERA Real Estate Capital Budget & Implementation Plan

8% fund level target

- Annual capital budget target of \$10 million, range of \$5-\$25 million
- Target 2-4 investments, range of \$4-\$7 million per inv
 - Average investment size of \$5 million
 - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising cycle
- Retain core real estate exposure but lower it to 25% of the portfolio due to current valuations; use it as a source of funding and substitute for private real estate investments (long term target of 75%)

Performance comparisons:

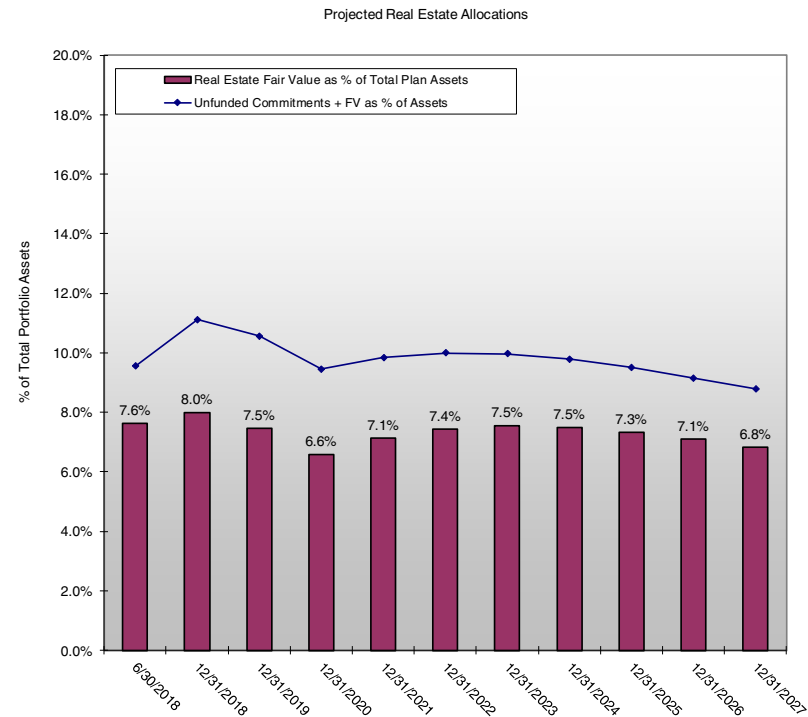
- *Long term investment objective:* Earn a return premium over inflation (CPI-U + 5%)
- *Recommended primary asset class benchmark:* NCREIF NFI-ODCE; revisit over time as the structure of the portfolio changes
- *Recommended fund benchmarks:* Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to Cambridge Associates Global Real Estate Index

MCERA CY 2018 commitments (\$5 mm):

- Taconic CRE II –opportunistic RE (VY 2018)
- AG Realty Value X – opportunistic RE (VY 2018)
- Carmel VIII – opportunistic RE (VY 2019)

MCERA CY 2019 commitments (\$5 mm):

- Rockpoint VI –opportunistic RE (VY 2019)



Note: MCERA’s existing real estate portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical averages. Total fund growth rate of 5.5%.

MCERA Real Estate Investment Structure & Portfolio Assessment

Real estate investment structure (8% target, 7.2% actual as of Sep 2018)

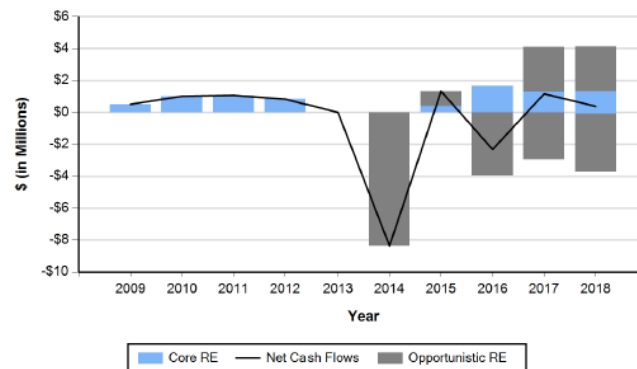
- MCERA invested in 1999 in a private core real estate fund; gains have been re-invested in the fund
- Contributions were similar to distributions over the past year as the newer funds are being built out

Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2017	4	\$49,066	\$30,121	\$21,364	\$55,651	\$77,015	\$46,894	9.30%	8.56%
September 30, 2018	5	\$53,810	\$35,136	\$26,745	\$60,895	\$87,640	\$52,504	9.33%	8.57%
Annual Change	1	\$4,744	\$5,015	\$5,381	\$5,244	\$10,625	\$5,610		

Annual Cash Flow



Note: Net cash flow is the for the respective calendar year.

MCERA Real Estate Performance – as of Sep 30, 2018

Real Estate Portfolio

- MCERA began investing in the UBS Trumbull core real estate fund in 1999 and this represents the bulk of the real estate portfolio
 - Opportunistic funds began being added in 2014 and they are in the early stages of development with the VY 2016 fund now out of its “j-curve”; VY 2014 fund is making distributions
- Overall performance has met objectives, driven by the core RE fund; opportunistic fund performance is not meaningful

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
(in thousands)												
Vintage Year 1999												
UBS Trumbull Property Fund	Core RE	17,000	0	17,098	100%	21,026	43,093	64,119	47,021	9.20%	10.20%	3.75
Vintage Year 1999 Total		17,000	0	17,098	100%	21,026	43,093	64,119	47,021	9.20%	12.76%	3.75
Vintage Year 2014												
Greenfield Acquisition Partners VII, L.P.	Opportunistic RE	13,000	1,876	12,662	86%	4,737	12,819	17,557	4,895	12.92%	13.05%	1.39
Vintage Year 2014 Total		13,000	1,876	12,662	86%	4,737	12,819	17,557	4,895	12.92%	10.75%	1.39
Vintage Year 2016												
Patron Capital Fund V	Opportunistic RE	13,810	8,827	5,002	36%	982	4,709	5,691	689	10.74%	12.83%	1.14
Vintage Year 2016 Total		13,810	8,827	5,002	36%	982	4,709	5,691	689	10.74%	11.55%	1.14
Vintage Year 2017												
Carlyle Realty Partners VIII, L.P.	Opportunistic RE	5,000	4,627	374	7%	0	273	273	-101	N/M	N/M	0.73
Vintage Year 2017 Total		5,000	4,627	374	7%	0	273	273	-101	N/M	N/M	0.73
Vintage Year 2018												
Taconic CRE Dislocation Fund II	Debt RE	5,000	5,000	0	0%	0	0	0	0	N/M	N/M	0.00
Vintage Year 2018 Total		5,000	5,000	0	0%	0	0	0	0	N/M	N/M	0.00
Total Portfolio:		53,810	20,329	35,136	62%	26,745	60,895	87,640	52,504	9.33%	8.57%	2.49

Note: The benchmark at the total portfolio level is NCREIF NFI-ODCE . Private real estate benchmark at the fund level is the Cambridge Value Add or Opportunistic RE Indices while the Cambridge Global Real Estate Index at the vintage year level.

MCERA Real Asset Capital Budget & Implementation Plan

5% fund level target

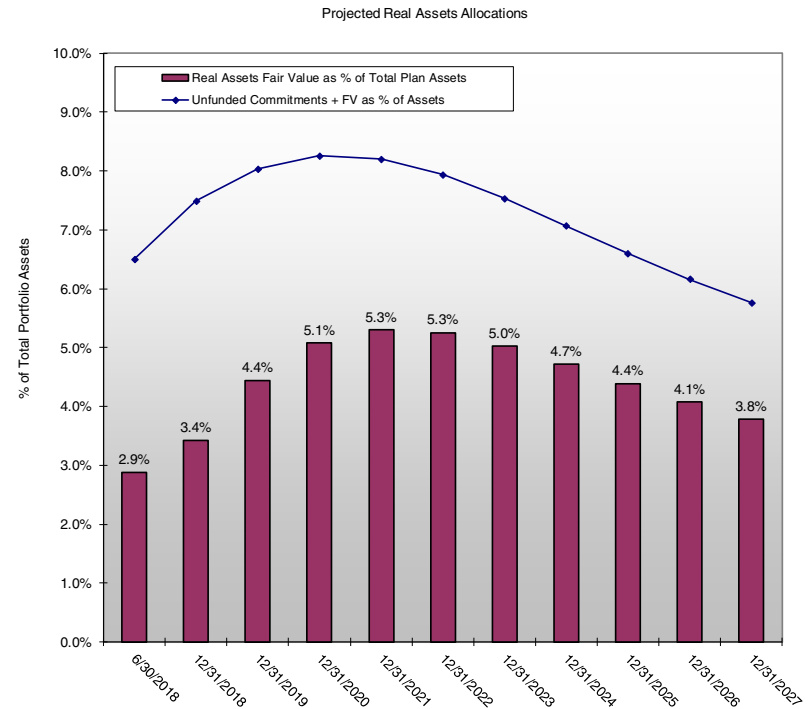
- Annual capital budget target of \$10 million, range of \$5-\$15 million
- Target 2-4 investments, range of \$3-\$7 million per inv
 - Average investment size of \$5 million
 - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising cycle
- Portfolio targeted to be equally split between infrastructure and energy/natural resource funds

Performance comparisons:

- *Long term investment objective:* Earn a return premium over inflation (CPI-U + 5%)
- *Recommended primary asset class benchmark:* 50/50 Cambridge Global Infrastructure/Cambridge Energy Upstream & Royalties and Private Energy Index
- *Recommended fund benchmarks:* Each fund will be compared to the Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to the 50/50 index

MCERA CY 2018 commitments (\$5 mm):

- KKR Infrastructure III- global infrastructure (VY 2018)
- Ardian Infrastructure V – global infrastructure (VY 2018)
- BlackRock Infrastructure III – energy & power (VY 2019)



Note: MCERA’s existing real asset portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical category averages. Total fund growth rate of 5.5%.

MCERA Real Assets Investment Structure & Portfolio Assessment

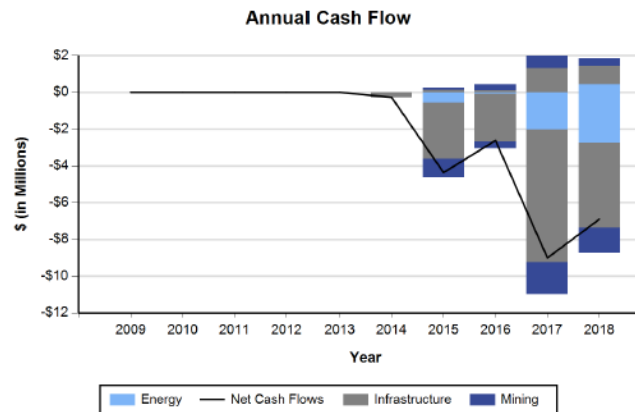
Real assets investment structure (5% target, 7% actual as of Sep 2018)

- Program is designed to be equally divided between private infrastructure and natural resource funds along with a public real asset component
- Private fund commitments began in 2014 to infrastructure and 2015 to natural resources
- The overall portfolio is immature with the funds in the early stage of development
 - Contributions exceed distributions by \$10 mm as the newer funds are being built out
 - Gains in the infrastructure funds, led by gains in the midstream energy investments

Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2017	6	\$42,500	\$13,881	\$1,821	\$14,425	\$16,247	\$2,366	15.04%	4.41%
September 30, 2018	9	\$55,500	\$27,666	\$4,517	\$27,599	\$32,117	\$4,451	12.65%	4.03%
Annual Change	3	\$13,000	\$13,785	\$2,696	\$13,174	\$15,870	\$2,085		



Note: As of Dec 31, 2017. Net cash flow is the for the respective calendar year.

MCERA Real Assets Performance – as of Sep 30, 2018

Real Asset Portfolio

- MCERA began allocating to real assets in 2014 via direct fund commitments
 - Portfolio is approximately equally divided between infrastructure & energy/mining
- Portfolio is in its early stages of development so performance is not meaningful; the 2014-16 funds are making distributions; the VY 2017 & 2018 funds have activated

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
<i>(in thousands)</i>												
Vintage Year 2014												
KKR Global Infrastructure II	Infrastructure	10,000	2,162	8,875	78%	987	9,555	10,542	1,667	11.86%	6.57%	1.19
Vintage Year 2014 Total		10,000	2,162	8,875	78%	987	9,555	10,542	1,667	11.86%		1.19
Vintage Year 2015												
GSO Energy Select Opportunities Fund	Energy	7,500	4,029	3,927	46%	438	4,355	4,793	866	16.21%	16.85%	1.22
North Haven Infrastructure Partners II LP	Infrastructure	10,000	2,851	8,511	71%	1,570	8,085	9,655	1,144	10.73%	6.52%	1.13
Taurus Mining Finance Fund	Mining	5,000	2,650	2,850	47%	1,118	2,348	3,466	616	16.41%	N/A	1.22
Vintage Year 2015 Total		22,500	9,530	15,287	58%	3,125	14,788	17,913	2,626	13.28%		1.17
Vintage Year 2016												
Taurus Mining Finance Annex Fund	Mining	5,000	3,553	1,643	29%	405	1,584	1,988	346	N/M	N/M	1.21
Vintage Year 2016 Total		5,000	3,553	1,643	29%	405	1,584	1,988	346	N/M		1.21
Vintage Year 2017												
EnCap Energy Capital Fund XI, L.P.	Energy	5,000	4,538	462	9%	0	361	361	-101	N/M	N/M	0.78
ISQ Global Infrastructure Fund II	Infrastructure	5,000	4,669	331	7%	0	295	295	-36	N/M	N/M	0.89
Vintage Year 2017 Total		10,000	9,207	793	8%	0	656	656	-138	N/M		0.83
Vintage Year 2018												
EnCap Flatrock Midstream IV, L.P.	Energy	3,000	1,932	1,068	36%	0	1,034	1,034	-33	N/M	N/M	0.97
KKR Global Infrastructure Investors III	Infrastructure	5,000	5,000	0	0%	0	-17	-17	-17	N/M	N/M	N/A
Vintage Year 2018 Total		8,000	6,932	1,068	13%	0	1,017	1,017	-50	N/M		0.95
Total Portfolio:		55,500	31,384	27,666	43%	4,517	27,599	32,117	4,451	12.65%	4.03%	1.16

Note: Benchmark is 50% S&P Natural Resources and 50% S&P Infrastructure. Benchmarks for individual funds are the respective Cambridge strategy benchmark.

MCERA Hedge Fund Performance – as of Jan 31, 2019

Market rebounded in January following the downturn in December

- Equity l/s and equity special situations drove performance for the month
- Managers are being upsized and Taconic was funded at the end of Nov

Fund	Market Value	Actual %	Jan	QTD	YTD	Returns 1 Year	3 Year	5 Year	Incep	Std Dev	Sharpe Ratio	Incep Date
Market Neutral												
KLS Diversified Fund LP	9,207,185	12.6%	1.45%	1.45%	1.45%	1.49%	-	-	2.60%	4.58%	0.10	Oct-17
Laurion Capital, Ltd. Class A 18-07	5,074,480	6.9%	-0.81%	-0.81%	-0.81%	-	-	-	1.49%	3.06%	-	Jul-18
Market Neutral - HF Total	14,281,665	19.5%	0.64%	0.64%	0.64%	3.50%	-	-	4.12%	3.15%	0.59	Oct-17
HFRI Relative Value (Total) Index			3.11%	3.11%	3.11%	1.68%	-	-	2.95%	3.68%	0.21	Oct-17
Credit/Distressed												
Silver Point Capital Fund, L.P.	11,943,126	16.3%	0.50%	0.50%	0.50%	-2.14%	-	-	-0.03%	4.54%	-0.49	Dec-17
Credit/Distressed - HF Total	11,943,126	16.3%	0.50%	0.50%	0.50%	-2.14%	-	-	-0.03%	4.54%	-0.49	Dec-17
HFRI ED: Distressed/Restructuring Index			2.78%	2.78%	2.78%	-0.36%	-	-	1.90%	5.16%	-0.06	Dec-17
Event Driven												
Taconic Opportunity Fund L.P.	9,994,488	13.6%	0.34%	0.34%	0.34%	-	-	-	-0.06%	1.80%	-	Dec-18
Event Driven - HF Total	9,994,488	13.6%	0.34%	0.34%	0.34%	-	-	-	-0.06%	1.80%	-	Dec-18
HFRI Event-Driven (Total) Index			3.52%	3.52%	3.52%	-	-	-	1.17%	14.19%	-	Dec-18
Equity Long/Short												
Archipelago Partners, L.P.	11,272,073	15.4%	4.52%	4.52%	4.52%	-2.26%	-	-	2.68%	8.11%	0.10	Sep-17
MW Eureka Fund Class B2	3,062,842	4.2%	1.59%	1.59%	1.59%	-2.31%	-	-	1.79%	6.09%	-0.06	Dec-17
Equity Long/Short - HF Total	14,334,915	19.5%	3.88%	3.88%	3.88%	-1.93%	-	-	3.00%	7.12%	0.15	Sep-17
HFRI Equity Hedge (Total) Index			5.46%	5.46%	5.46%	-4.59%	-	-	1.99%	7.99%	0.01	Sep-17
Global Macro-Discretionary												
Graham Absolute Return Trading Ltd. - Class A	7,233,928	9.9%	3.26%	3.26%	3.26%	-1.92%	-	-	2.48%	7.57%	0.07	Sep-17
Global Macro-Discretionary - HF Total	7,233,928	9.9%	3.26%	3.26%	3.26%	-1.92%	-	-	2.48%	7.57%	0.07	Sep-17
HFRI Macro (Total) Index			-0.34%	-0.34%	-0.34%	-6.88%	-	-	-2.03%	4.81%	-0.85	Sep-17
Global Macro-Systematic												
Winton Futures Fund Limited - Class B	5,912,575	8.1%	-2.41%	-2.41%	-2.41%	-7.10%	-	-	-0.40%	7.94%	-0.30	Nov-17
Global Macro-Systematic - HF Total	5,912,575	8.1%	-2.41%	-2.41%	-2.41%	-7.10%	-	-	-0.40%	7.94%	-0.30	Nov-17
HFRI Macro (Total) Index			-0.34%	-0.34%	-0.34%	-6.88%	-	-	-3.14%	4.70%	-1.13	Nov-17
Multi-Strategy												
OZ Domestic Partners II, LP	9,646,203	13.2%	4.10%	4.10%	4.10%	-1.90%	6.79%	-	4.88%	5.39%	0.71	Jul-14
Multi-Strategy - HF Total	9,646,203	13.2%	4.10%	4.10%	4.10%	-1.90%	6.79%	-	4.88%	5.39%	0.71	Jul-14
HFRI Relative Value (Total) Index			3.11%	3.11%	3.11%	1.68%	5.78%	-	3.14%	3.04%	0.67	Jul-14
MCERA Hedge Fund Portfolio	73,346,901	100.0%	1.64%	1.64%	1.64%	-1.64%	5.06%	-	3.38%	4.27%	0.54	Jul-14
Benchmarks												
HFRI Fund of Funds Composite Index			2.56%	2.56%	2.56%	-3.88%	3.06%	-	1.61%	3.73%	0.15	Jul-14
Market Indices												
Libor3Month			0.23%	0.23%	0.23%	2.44%	1.53%	-	1.11%	0.24%	-	Jul-14
Bloomberg Barclays US Aggregate Bond Index			1.06%	1.06%	1.06%	2.25%	1.95%	-	2.13%	2.82%	0.37	Jul-14
Bloomberg Barclays US High Yield Bond Index			4.52%	4.52%	4.52%	1.74%	9.42%	-	3.99%	5.62%	0.53	Jul-14
S&P 500 TR			8.01%	8.01%	8.01%	-2.31%	14.02%	-	9.50%	11.59%	0.75	Jul-14
MSCI AC World Index Free - Net			7.90%	7.90%	7.90%	-7.48%	11.62%	-	5.02%	11.47%	0.39	Jul-14
MSCI EAFE - Net			6.57%	6.57%	6.57%	-12.51%	7.74%	-	0.95%	12.22%	0.05	Jul-14
MSCI EMF (Emerging Markets Free) - Net			8.77%	8.77%	8.77%	-14.24%	14.89%	-	2.34%	15.83%	0.15	Jul-14

Cliffwater Disclosures

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MEETING MATERIALS

Merced County Employees' Retirement Association

February 28, 2019



M E K E T A I N V E S T M E N T G R O U P

BOSTON
MASSACHUSETTS

CHICAGO
ILLINOIS

MIAMI
FLORIDA

PORTLAND
OREGON

SAN DIEGO
CALIFORNIA

LONDON
UNITED KINGDOM

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- 1. Executive Summary**
- 2. The Return of Volatility**
- 3. Quarterly Review As of December 31, 2018**
- 4. Performance Highlights As of January 31, 2019**
- 5. Performance Report As of January 31, 2019**
- 6. Emerging Market Equity**
- 7. Disclaimer, Glossary, and Notes**

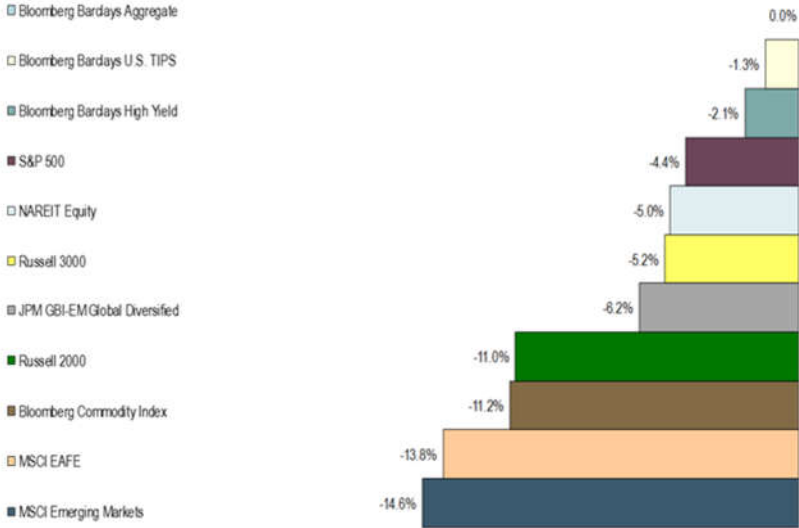
Executive Summary

2018 Market Themes

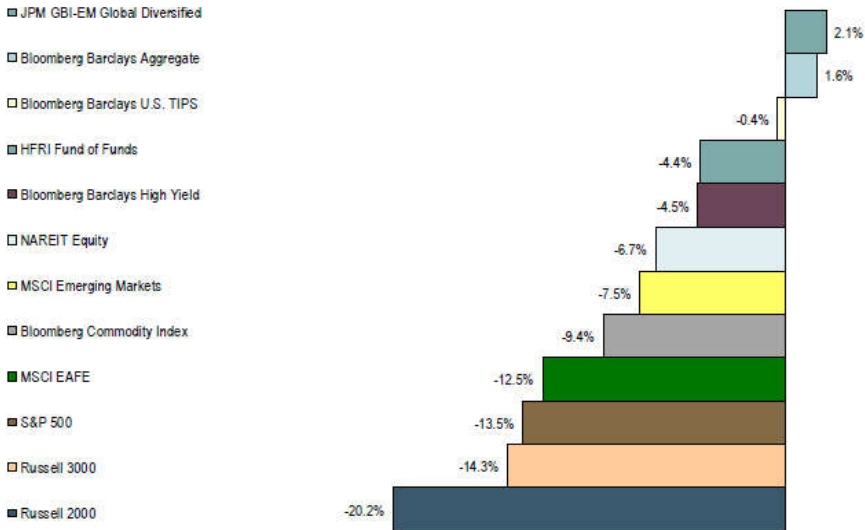
- The Return of Volatility
- Trade War Threats
- Normalization of Interest Rates
- Slowing Global Growth

What was the impact on the Markets?

1 Year



Q4



**All asset classes delivered negative returns for the year. For Q4, risk assets drove prices down
No Place to Hide - as all risk assets sold off**



MCERA Portfolio Overview

As of December 31, 2018, total assets invested were at \$778.2 million.

The Fund returned -7.5% for the fourth quarter (39th percentile among peers), trailing the policy benchmark by 0.4% during the quarter. Recall that in Q3, the Fund was a third quartile performer relative to peers, which could be an indication that the Fund was better positioned for market volatility vs peers. As a reminder, percentile ranks for short-term periods are subject to significant fluctuations. In the most recent quarter, Fixed Income and Private Equity were the main positive contributors from an absolute basis (+1.4% and +1.5%, respectively). On a relative basis, being overweight Public Equities for most of the period was the main detractor, while strong relative results from the Real Assets (including Real Estate) was the key contributor.

Calendar year 2018 ended with the Fund down -4.5%. Absolute results were disappointing for the year, but on a positive note, the Fund was able to outpace the passive 60/40 benchmark (MSCI ACWI/Barclays Agg) by 1.0%. One-year results ranked MCERA in the 64 percentile. On an absolute basis, International Public Equity was the key detractor, reporting a -15.2% return for the year. Fixed Income protected, providing modest positive returns (+0.4%), while Hedge Funds were flat for the year. Real Assets (including Real Estate) were able to produce positive results at +2.1%, while Private Equity (+18.3%) generated significant positive results, but we should note that the results are lagged for the Private Markets.

MCERA Portfolio Overview (continued)

During the fourth quarter, global equities endured a sharp decline. U.S. and International Equities were the main absolute detractors.

- The Fund's U.S. Equity portfolio reported significant negative returns, at -15.8%, with International Equity down -11.8%. Emerging Markets Equity (within International Equity) fared better, but still declined by -7.7%.
- Fixed Income was positive in the fourth quarter, at +1.4%. Within Fixed Income, both Barrow Hanley and Vanguard Short-Term Treasury Index Fund were up during the risk-off period.
- Hedge Funds in aggregate returned -4.8% in the quarter. Private Equity reported a +1.5% return, with Real Assets posting a -0.7% return.

Manager Updates / Recommendations / Watch List

Asset Allocation Update

Private Equity will take additional time to fund up to its new target; therefore, we expect this category to remain underweight relative to targets for the next several years. As such, other asset classes will be overweight during that time, including Public Equities and Fixed Income. We are also reviewing the exposure to the SSgA Real Assets Fund, to determine if any adjustments are warranted. If the Board decides to reduce the exposure to SSgA, the proceeds could be used to bring Emerging Markets Equity to target (please see section that highlights importance of Emerging Markets Equity). Part of the proceeds could also be used to help fund the new investments or it could be held in the Vanguard Short-Term Bond Index for future capital call funding. Please see the SSgA Review section for details.

Watch List

No funds on the watch list.

Active Manager Expectations

Manager	Strategy Description	Beta (High/Low/Neutral)	Tracking Error Range (bps)	Environments Manager Underperforms
Domestic Equity				
DFA U.S. Small Cap Trust	Very diversified small cap portfolio that tilts toward value	Neutral	2.0% to 2.7%	In growth-oriented markets
PanAgora U.S. Small Cap Core Stock Selector	Diversified, quantitatively managed small cap portfolio	Neutral	2.5% to 4.0%	In low quality rallies or at market inflection points
Mellon Capital MCM Dynamic U.S. Equity	Very diversified, quantitative, large cap core portfolio	Neutral (higher in more recent periods)	2.5% to 5.0%	When investors misprice forward looking return/risk characteristics; when returns are concentrated in one sector
Developed Markets Equity (Non-U.S.)				
Copper Rock International Small Cap Strategy	Diversified, growth-at-a-reasonable price manager; combination of quantitative tools and fundamental research	Low	4.0% to 5.0%	At market inflection points, with abrupt leadership change. Deep value, low quality market environments (e.g. 2009, 2016)
Emerging Markets Equity				
Wells Capital Berkeley St Emerging Markets	Diversified, quality-at-a-reasonable price manager	Low	3.5% to 4.0%	Deep value, low quality market environments
Investment Grade Bonds				
Barrow Hanley Core Fixed Income	Conservative, low tracking-error core strategy focused on bottom-up security selection	Neutral	0.2% to 0.7%	At market inflection points, but should track the index very closely

Manager Monitor

Manager	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with MIG	Comments
Domestic Equity Assets				
Mellon Capital BNY Mellon MCM Dynamic US Equity Fund	No	-	Mar 2017	Merger of smaller boutiques – Met Mellon in March 2017 to go over HY Beta Strategy & conference call for Carbon Efficiency strategy.
Mellon Capital EB DV Large Cap Stock Index Fund	No	-	Mar 2017	Merger of smaller boutiques – Met Mellon in March 2017 to go over HY Beta Strategy & conference call for Carbon Efficiency strategy.
DFA US Small Cap Trust	No	-	Aug 2018	Co-CEO resignation (8/17) – Our view is that the departure is immaterial to the investment thesis for DFA's products. Met with DFA to discuss non-U.S. equities in August of this year.
PanAgora US Small Cap Core Stock Selector	No	-	Aug 2018	CEO Eric Sorensen, who is credited with turning the firm around, has not announced a plan to retire and no formal succession plan is in place. We do not recommend any changes at this time.
Developed Markets Equity (Non-U.S.) Assets				
Copper Rock International Small Cap Strategy	Yes	-	October 2018	Met onsite to discuss underperformance and asset growth. Watch List.
Mellon Capital EB DV International Stock Index Fund	No	-	Mar 2017	Merger of smaller boutiques – Met Mellon in March 2017 to go over HY Beta Strategy & conference call for Carbon Efficiency strategy.
Emerging Markets Equity Assets				
Wells Capital Berkeley Street Emerging Markets Fund	No	-	June 2018	Met with Bob Hrabchak (product specialist) with overview of EM strategy – very quality oriented and valuation sensitive with a long-term view. Jerry Zhang is the lead portfolio manager who has been running the product for 12 years.
US Fixed Income Assets				
Barrow Hanley Core Fixed Income Fund	No	-	Aug 2018	John Williams, founder of fixed income group retired in Feb 2018. Retirement was announced well in advance.
Vanguard Short Term Treasury Index Fund	No	-	July 2017	Review of Target Date Retirement Funds.
Private Equity Program	N/A	N/A	N/A	Oversight by Cliffwater.
Real Assets Program	N/A	N/A	N/A	Oversight by Cliffwater.
Hedge Fund Program	N/A	N/A	N/A	Oversight by Cliffwater.

Active Manager Peer Rankings

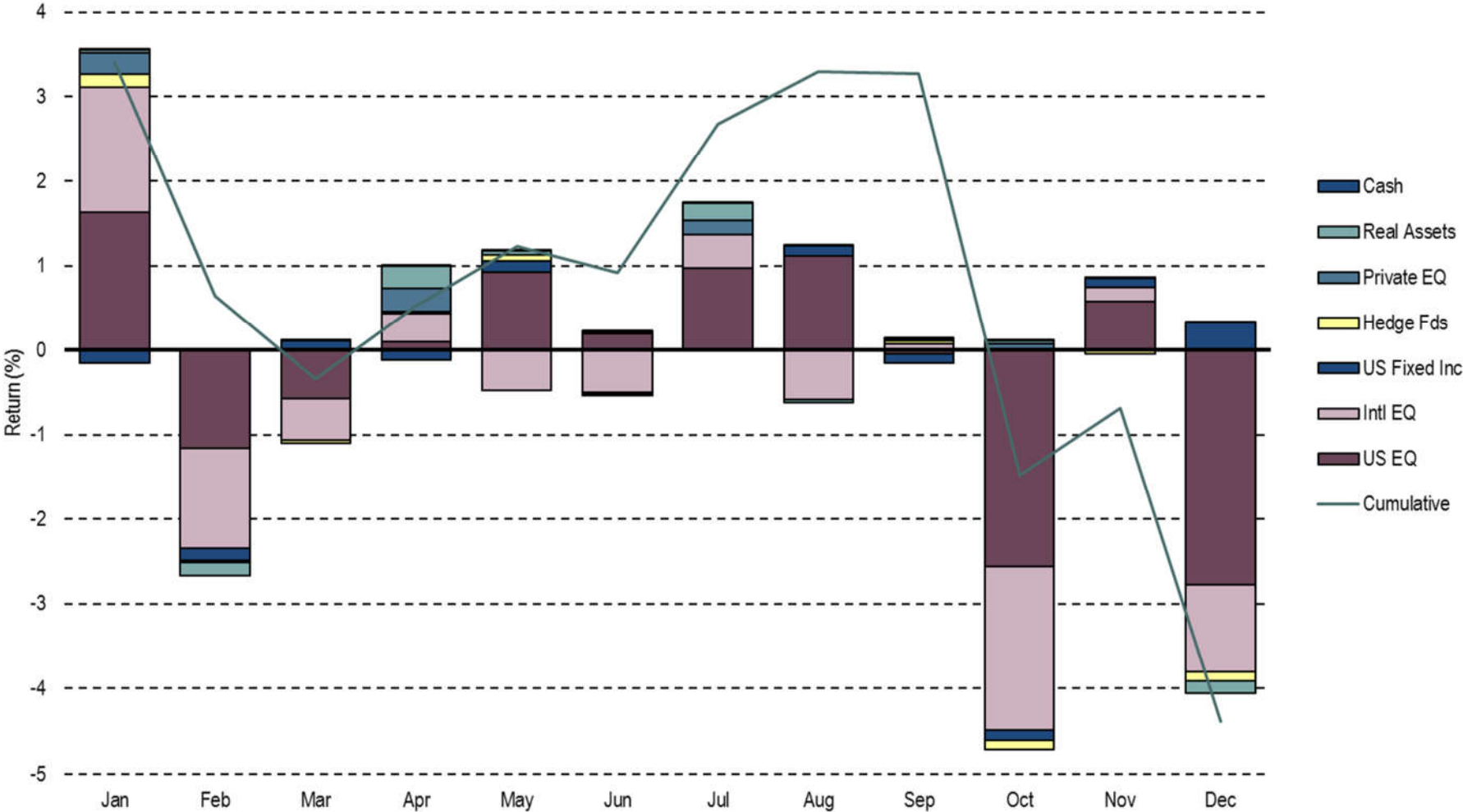
Investment Managers	Product	Peer Group	Market Value (\$ mm)	YTD December	1 YR	3 YR	5 YR	10 YR	Client Inception	Years in portfolio
DFA	US Small Cap Equity Strategy	US Small Cap Core	15.6	60	60	49	61	42	Jun-14	4.6
PanAgora	US Small Cap Core Stock Selector	US Small Cap Core	15.4	36	36	55	42	11	Sep-13	5.3
Mellon Capital	Dynamic US Equity Strategy	US Large Cap Core	69.9	60	60	3	2	2	Dec-12	6.1
Copper Rock	International Small Cap	EAFE Small Cap	18.2	85	85	99	91	82	Sep-13	5.3
Wells Capital	Berkeley Street Emerging Markets	Emerging Markets	53.7	38	38	28	45	51	Mar-12	6.8
Barrow Hanley	Core Fixed Income	US Core Fixed Income	134.0	42	42	66	66	68	Mar-10	8.8

Source: eVestment universe data.

Shaded values are rankings prior to Client inception in the strategy.

Ranks are based on gross of fee returns for extended periods (shaded values).

A Deeper Look at Results – Month by Month Total Return with Asset Class Contribution



A Deeper Look at 2018 Results – Month by Month Total Return with Asset Class Contribution (continued)

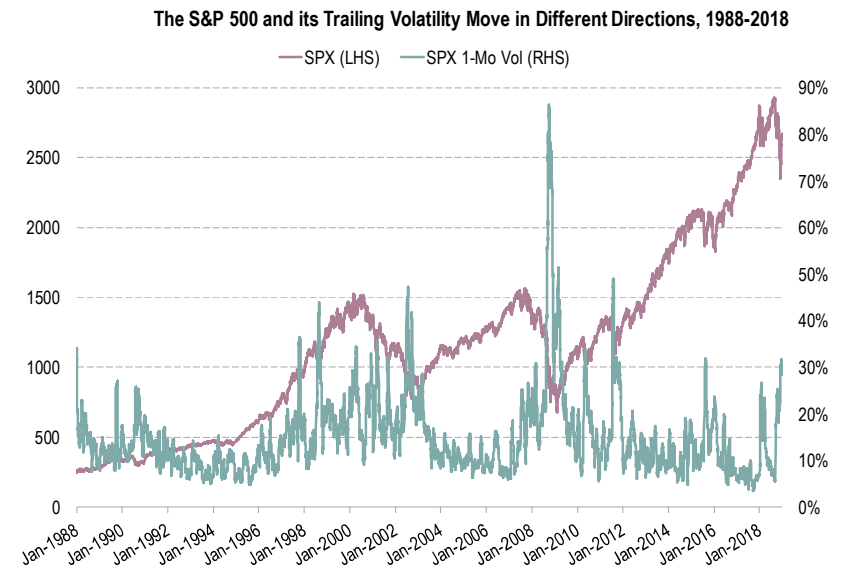
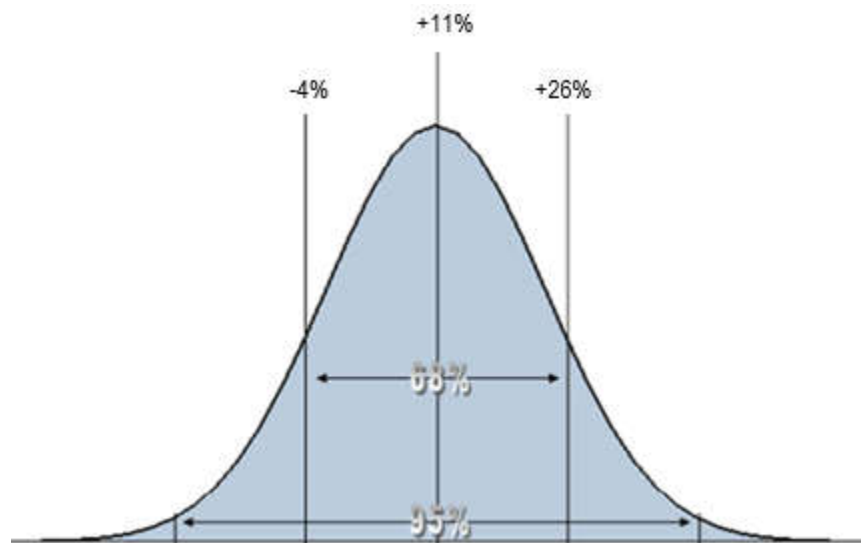
- For the calendar year, the Fund was down -4.5%.
- The chart on the previous page provides total returns on a monthly basis, with the contribution from each asset class embedded in each bar. For each month, any asset class beneath the horizontal axis at zero had a negative contribution; conversely, any asset class above would be positive. To help illustrate the point, you will notice that in December, the dark purple portion of the bar (which represents the U.S. Equity sleeve) was the main negative contributor of a notably down month.
- The line on the chart represents the cumulative growth of the portfolio throughout the year. The year started on a positive note in January, and then flattened during the second quarter with a modest upswing in the third quarter. Then the markets were roiled in the fourth quarter.
- As you can see, the equity sell-offs in October and December were the key drivers for what turned out to be a tumultuous year.
- For the year, the International Markets Equity allocation was the main detractor and not surprisingly, posted the worst return (-15.2%) among the different asset classes. U.S. Equity was also a noteworthy detractor, given the large weight and significant negative return.
- From a relative basis, the key drivers for the calendar year were Real Assets and International Equity. Real Assets was the main positive contributor as this part of the portfolio outperformed the benchmark by a sizeable margin. Hedge Funds also contributed, but to a lesser extent as the exposure was relatively smaller. The main relative detractor, as well as the most impactful, was the International Equity segment.

The Return of Volatility

Equity Markets Are Volatile

Since the end of World War II, the U.S. stock market¹ has returned nearly 11% per year on average, but with considerable annual variation.

- The standard deviation of returns, a measure of volatility, has been about 15% per year.
 - Implies that annual returns fall into the range of -4% to +26% about two-thirds of the time – which they have.
 - Implies that annual returns will be less than -4% about one-sixth of the time – which they have.
- Volatility often spikes when markets decline: an inverse relationship.



¹ Measured by the total return of the S&P 500 index.

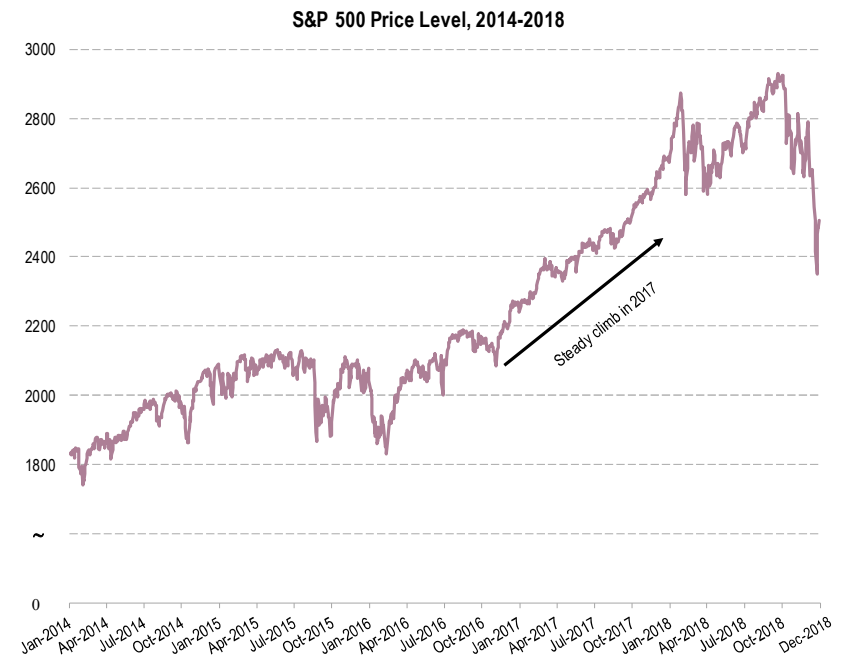
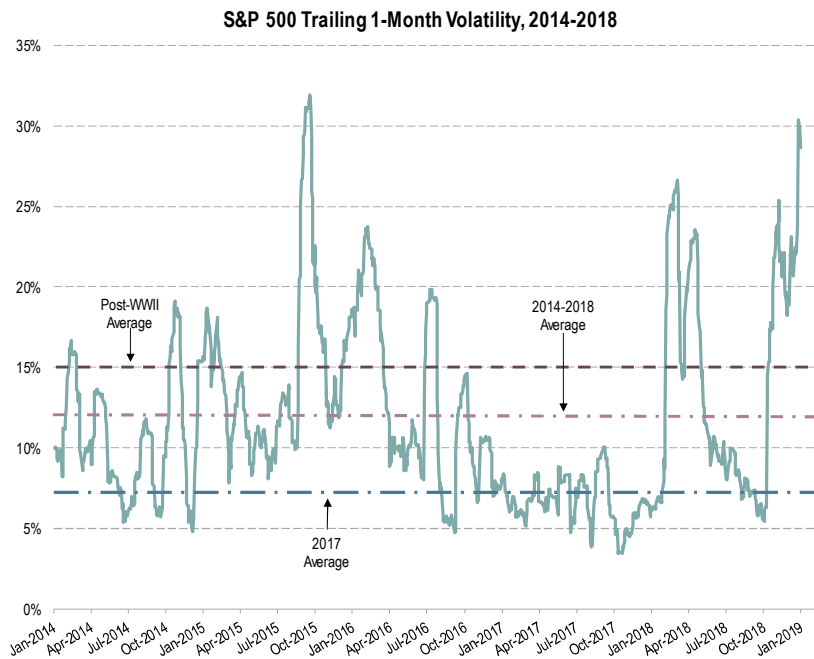
In Recent Years, Volatility Decreased Markedly

During 2014–2018, the S&P 500's trailing one-month volatility fell to an annualized rate of under 12%, on average, and to under 7% during 2017.

- In 2017, trailing one-month volatility was below 5% on 35 days, an extraordinarily low level. The prior annual record of sub-5% close was six days (in 1995).

The same period was marked by a long rise in the level of the S&P 500 with few setbacks.

- During 2017, the S&P 500 had a positive return every single month. This has never happened before.



The Return of Volatility is a Return to Normalcy

Equity markets move in cycles and suffer corrections – declines of over 10% from a peak – from time to time.

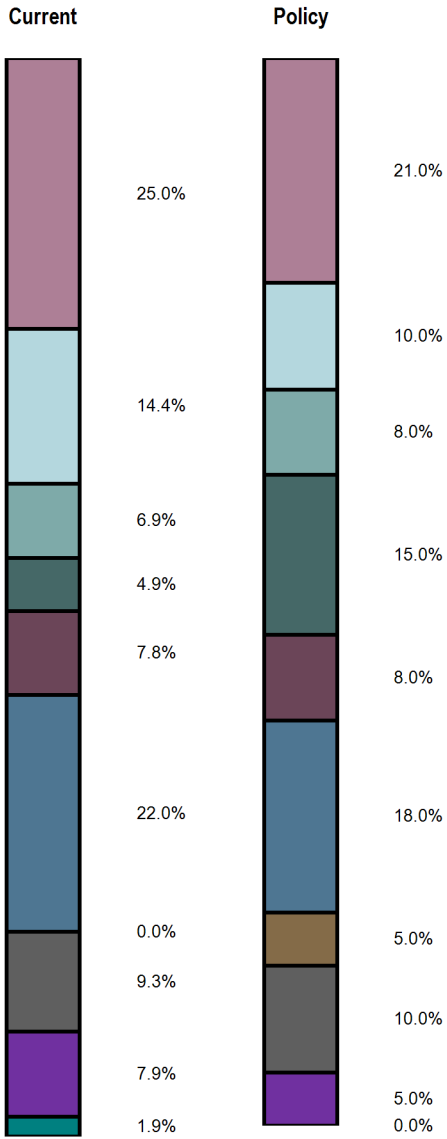
- Investors became accustomed to muted volatility and little downside in recent years.
- The corrections in both Jan-Apr 2018 and Sept-Dec 2018 felt like shocks, but both were “routine.”
- The average level of volatility 2018 was about 15, in line with the long-term average.
- In other words, the volatility that has been experienced “feels” particularly bad because it followed a period of historically low volatility.

For investors who invest in risky assets (e.g., equities) in order to meet their objectives, it is worth remembering that the cost of doing so is volatility.

We recommend that investors:

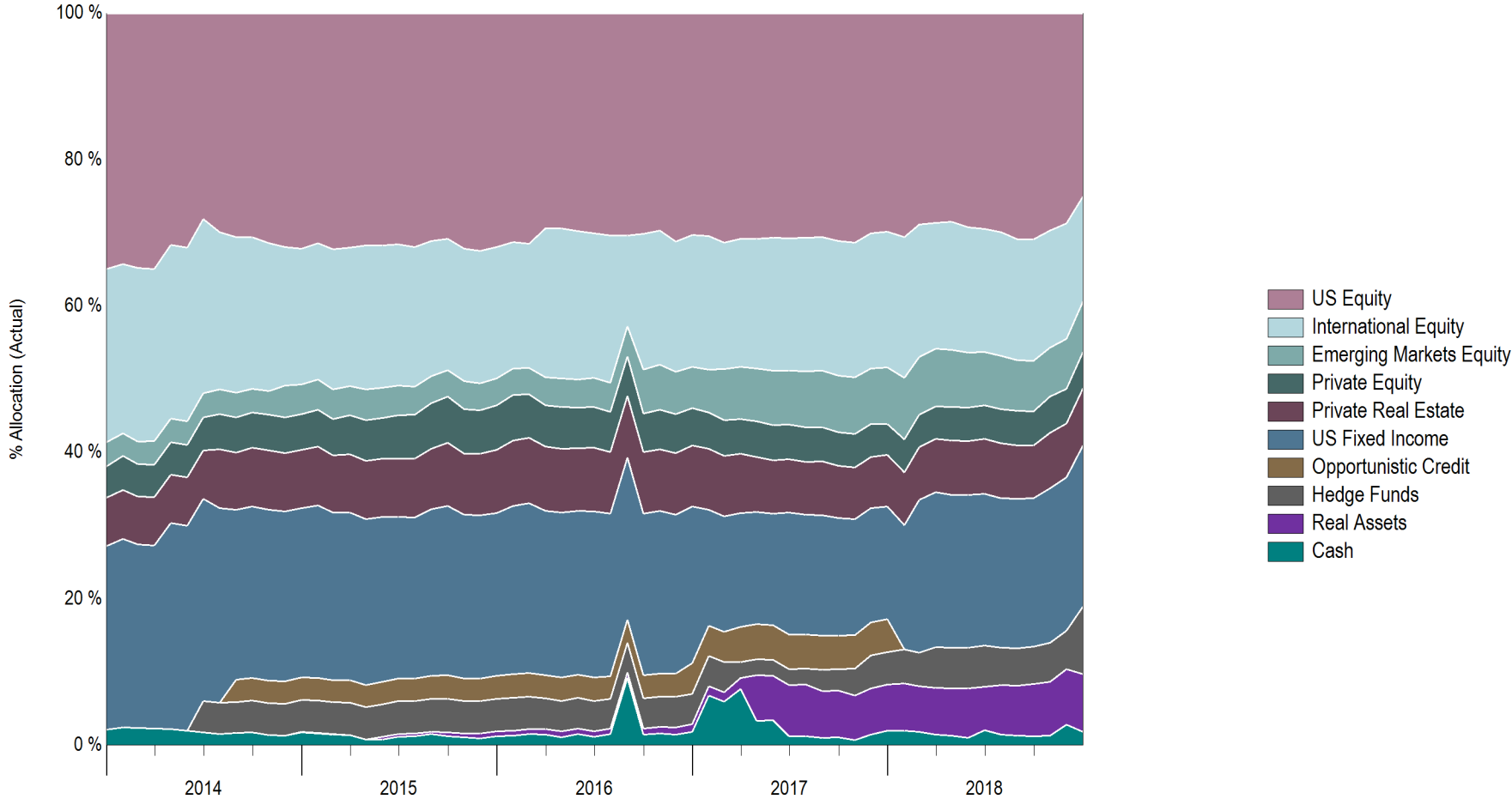
- maintain a long-term outlook,
- remain patient during periods of heightened volatility, and
- continue to rebalance to targets, allowing them to buy assets on weakness.

Quarterly Review As of December 31, 2018



Allocation vs. Targets and Policy							
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?	
US Equity	\$194,880,658	25.0%	21.0%	4.0%	15.0% - 26.0%	Yes	
International Equity	\$111,683,723	14.4%	10.0%	4.4%	5.0% - 15.0%	Yes	
Emerging Markets Equity	\$53,681,177	6.9%	8.0%	-1.1%	4.0% - 12.0%	Yes	
Private Equity	\$38,411,563	4.9%	15.0%	-10.1%	5.0% - 20.0%	No	
Private Real Estate	\$60,595,456	7.8%	8.0%	-0.2%	6.0% - 10.0%	Yes	
US Fixed Income	\$171,152,385	22.0%	18.0%	4.0%	13.0% - 23.0%	Yes	
Opportunistic Credit	--	--	5.0%	-5.0%	3.0% - 7.0%	No	
Hedge Funds	\$72,155,163	9.3%	10.0%	-0.7%	5.0% - 15.0%	Yes	
Real Assets	\$61,172,657	7.9%	5.0%	2.9%	3.0% - 7.0%	No	
Cash	\$14,420,899	1.9%	0.0%	1.9%	0.0% - 5.0%	Yes	
Total	\$778,153,681	100.0%	100.0%				

Asset Allocation History
5 Years Ending December 31, 2018



As of December 31, 2018

Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund (Net)*	778,153,681	100.0	-7.5	-4.5	-5.3	-4.5	6.1	4.9	8.5	7.7	Dec-94
Total Fund (Gross)*			-7.4	-4.3	-5.2	-4.3	6.4	5.2	8.8	7.8	
<i>Policy Index</i>			<i>-7.1</i>	<i>-3.7</i>	<i>-4.8</i>	<i>-3.7</i>	<i>6.9</i>	<i>5.4</i>	<i>9.0</i>	<i>5.7</i>	<i>Dec-94</i>
Total Fund w/o Alternatives (Net)	531,397,943	68.3	-9.8	-7.4	-7.4	-7.4	5.9	4.3	--	--	Dec-94
Total Fund w/o Alternatives (Gross)			-9.7	-7.1	-7.3	-7.1	6.2	4.6	--	--	
<i>Policy Index w/o AI</i>			<i>-8.7</i>	<i>-6.2</i>	<i>-6.2</i>	<i>-6.2</i>	<i>6.2</i>	<i>4.4</i>	<i>--</i>	<i>--</i>	<i>Dec-94</i>
US Equity (Net)	194,880,658	25.0	-15.8	-6.6	-10.0	-6.6	9.6	8.4	13.7	9.4	Dec-94
US Equity (Gross)			-15.8	-6.4	-9.9	-6.4	9.8	8.6	13.9	9.5	
<i>80% R1000 / 20% R2000</i>			<i>-15.1</i>	<i>-6.0</i>	<i>-9.5</i>	<i>-6.0</i>	<i>8.8</i>	<i>7.6</i>	<i>13.0</i>	<i>9.4</i>	<i>Dec-94</i>
International Equity (Net)	165,364,900	21.3	-11.8	-15.2	-12.2	-15.2	3.8	0.3	6.8	4.6	Dec-98
International Equity (Gross)			-11.7	-14.8	-12.0	-14.8	4.3	0.9	7.3	4.8	
<i>International Equity Custom</i>			<i>-11.0</i>	<i>-13.6</i>	<i>-10.3</i>	<i>-13.6</i>	<i>5.5</i>	<i>1.4</i>	<i>6.5</i>	<i>3.8</i>	<i>Dec-98</i>
US Fixed Income (Net)	171,152,385	22.0	1.4	0.4	1.6	0.4	3.2	2.8	4.3	5.2	Dec-94
US Fixed Income (Gross)			1.5	0.6	1.6	0.6	3.4	3.0	4.7	5.4	
<i>US Fixed Custom</i>			<i>1.7</i>	<i>0.8</i>	<i>1.7</i>	<i>0.8</i>	<i>3.5</i>	<i>3.0</i>	<i>3.8</i>	<i>5.6</i>	<i>Dec-94</i>
Hedge Fund (Net)	72,155,163	9.3	-4.8	0.0	-4.1	0.0	3.6	--	--	3.1	Jun-14
Hedge Fund (Gross)			-4.7	0.2	-4.0	0.2	3.7	--	--	3.2	
<i>Hedge Fund Custom</i>			<i>-5.0</i>	<i>-3.8</i>	<i>-4.8</i>	<i>-3.8</i>	<i>2.2</i>	<i>--</i>	<i>--</i>	<i>1.8</i>	<i>Jun-14</i>
Private Equity (Net)	38,411,563	4.9	1.5	18.3	5.1	18.3	10.8	11.3	7.3	8.1	Jun-05
Private Equity (Gross)			1.5	18.3	5.1	18.3	10.8	11.3	7.6	8.2	
<i>Thomson Reuters Cambridge Private Equity Index</i>			<i>0.0</i>	<i>12.3</i>	<i>3.8</i>	<i>12.3</i>	<i>17.4</i>	<i>14.9</i>	<i>--</i>	<i>--</i>	<i>Jun-05</i>

Data prior to March 2018 provided by prior consultant.



As of December 31, 2018

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Assets (Net)	121,768,114	15.6	-0.7	2.1	0.7	2.1	6.0	7.1	--	--	Mar-99
Real Assets (Gross)			-0.7	2.1	0.7	2.1	6.5	7.9	--	--	
<i>Real Asset Custom</i>			<i>-4.0</i>	<i>-0.7</i>	<i>-3.0</i>	<i>-0.7</i>	<i>8.5</i>	<i>6.4</i>	<i>--</i>	<i>--</i>	<i>Mar-99</i>
Private Real Estate (Net)	60,595,456	7.8	1.3	7.7	3.3	7.7	7.3	8.0	--	--	Mar-99
Private Real Estate (Gross)			1.3	7.7	3.3	7.7	7.8	8.8	7.6	8.7	
<i>NCREIF ODCE (net)</i>			<i>1.5</i>	<i>7.4</i>	<i>3.4</i>	<i>7.4</i>	<i>7.3</i>	<i>9.4</i>	<i>6.0</i>	<i>7.5</i>	<i>Mar-99</i>
Private Infrastructure (Net)	21,614,053	2.8	3.3	8.1	4.2	8.1	9.2	--	--	6.8	Dec-14
Private Infrastructure (Gross)			3.3	8.1	4.2	8.1	9.2	--	--	6.8	
<i>S&P Global Infrastructure Net TR USD</i>			<i>-5.3</i>	<i>-10.4</i>	<i>-7.0</i>	<i>-10.4</i>	<i>6.0</i>	<i>3.2</i>	<i>--</i>	<i>1.1</i>	<i>Dec-14</i>
Private Natural Resources (Net)	9,450,995	1.2	1.2	11.5	6.6	11.5	20.5	--	--	18.4	Sep-15
Private Natural Resources (Gross)			1.2	11.5	6.6	11.5	20.5	--	--	18.4	
<i>S&P Global Natural Resources Index TR USD</i>			<i>-16.8</i>	<i>-12.6</i>	<i>-15.7</i>	<i>-12.6</i>	<i>12.4</i>	<i>-0.5</i>	<i>3.1</i>	<i>11.6</i>	<i>Sep-15</i>
Cash (Net)	14,420,899	1.9	0.4	0.8	0.5	0.8	--	--	--	--	
Cash (Gross)			0.4	0.8	0.5	0.8	--	--	--	--	

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

As of December 31, 2018

Trailing Net Performance

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund*	778,153,681	100.0	--	-7.5	-4.5	-5.3	-4.5	6.1	4.9	8.5	7.7	Dec-94
Policy Index				-7.1	-3.7	-4.8	-3.7	6.9	5.4	9.0	5.7	Dec-94
InvestorForce Public DB \$250mm-\$1B Gross Median				-7.9	-4.1	-5.1	-4.1	6.1	4.8	8.6	7.8	Dec-94
InvestorForce Public DB \$250mm-\$1B Gross Rank				39	64	56	64	50	47	60	65	Dec-94
Total Fund w/o Alternatives	531,397,943	68.3	68.3	-9.8	-7.4	-7.4	-7.4	5.9	4.3	--	--	Dec-94
Policy Index w/o AI				-8.7	-6.2	-6.2	-6.2	6.2	4.4	--	--	Dec-94
InvestorForce Public DB \$250mm-\$1B Net Median				-8.2	-4.4	-5.4	-4.4	5.8	4.5	8.3	7.3	Dec-94
InvestorForce Public DB \$250mm-\$1B Net Rank				89	97	89	97	44	68	--	--	Dec-94
US Equity	194,880,658	25.0	36.7	-15.8	-6.6	-10.0	-6.6	9.6	8.4	13.7	9.4	Dec-94
80% R1000 / 20% R2000				-15.1	-6.0	-9.5	-6.0	8.8	7.6	13.0	9.4	Dec-94
InvestorForce All DB US Eq Net Median				-14.8	-6.1	-9.2	-6.1	8.4	7.0	12.7	9.0	Dec-94
InvestorForce All DB US Eq Net Rank				80	62	68	62	7	5	8	25	Dec-94
Mellon Dynamic US Equity	69,946,631	9.0	35.9	-15.6	-6.6	-8.5	-6.6	11.1	10.4	--	14.7	Dec-12
S&P 500				-13.5	-4.4	-6.9	-4.4	9.3	8.5	13.1	12.2	Dec-12
eV US Large Cap Core Equity Net Median				-13.8	-5.8	-7.7	-5.8	7.8	7.3	12.2	11.1	Dec-12
eV US Large Cap Core Equity Net Rank				81	60	62	60	3	2	--	1	Dec-12
Mellon Large Cap	93,886,352	12.1	48.2	-14.3	-5.3	-7.9	-5.3	--	--	--	9.3	Mar-16
Russell 1000				-13.8	-4.8	-7.4	-4.8	9.1	8.2	13.3	9.5	Mar-16
eV US Large Cap Core Equity Net Median				-13.8	-5.8	-7.7	-5.8	7.8	7.3	12.2	8.4	Mar-16
eV US Large Cap Core Equity Net Rank				62	43	56	43	--	--	--	27	Mar-16
DFA Small Cap	15,633,216	2.0	8.0	-19.4	-12.0	-16.7	-12.0	7.0	--	--	4.5	Jun-14
Russell 2000				-20.2	-11.0	-17.3	-11.0	7.4	4.4	12.0	4.2	Jun-14
eV US Small Cap Core Equity Net Median				-19.9	-11.1	-16.8	-11.1	6.9	4.4	12.3	4.3	Jun-14
eV US Small Cap Core Equity Net Rank				39	60	50	60	49	--	--	44	Jun-14

Historical returns for the US Equity Composite prior to January 2012 and for the International Equity Composite prior to December 2010 are gross only.



As of December 31, 2018

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
PanAgora	15,414,459	2.0	7.9	-22.2	-9.2	-19.9	-9.2	6.6	4.9	--	6.6	Sep-13
<i>Russell 2000</i>				-20.2	-11.0	-17.3	-11.0	7.4	4.4	12.0	5.9	Sep-13
<i>eV US Small Cap Core Equity Net Median</i>				-19.9	-11.1	-16.8	-11.1	6.9	4.4	12.3	6.0	Sep-13
<i>eV US Small Cap Core Equity Net Rank</i>				85	36	86	36	55	42	--	41	Sep-13
International Equity	165,364,900	21.3	31.1	-11.8	-15.2	-12.2	-15.2	3.8	0.3	6.8	4.6	Dec-98
<i>International Equity Custom</i>				-11.0	-13.6	-10.3	-13.6	5.5	1.4	6.5	3.8	Dec-98
<i>InvestorForce All DB ex-US Eq Net Median</i>				-12.2	-15.1	-12.0	-15.1	4.1	0.8	6.6	4.6	Dec-98
<i>InvestorForce All DB ex-US Eq Net Rank</i>				41	51	56	51	58	68	39	52	Dec-98
Copper Rock	18,224,785	2.3	11.0	-18.4	-23.1	-20.3	-23.1	-2.4	0.5	--	2.1	Sep-13
<i>MSCI World ex USA Small Cap</i>				-16.2	-18.1	-16.9	-18.1	3.8	2.3	10.1	3.2	Sep-13
<i>eV EAFE Small Cap Equity Net Median</i>				-17.2	-20.2	-18.1	-20.2	3.1	2.9	11.5	4.2	Sep-13
<i>eV EAFE Small Cap Equity Net Rank</i>				76	85	81	85	99	91	--	90	Sep-13
Mellon International	93,458,938	12.0	56.5	-12.5	-13.5	-11.3	-13.5	--	--	--	4.7	Mar-16
<i>MSCI EAFE</i>				-12.5	-13.8	-11.4	-13.8	2.9	0.5	6.3	4.3	Mar-16
<i>eV All EAFE Equity Net Median</i>				-14.0	-15.8	-13.5	-15.8	2.7	1.1	7.2	3.8	Mar-16
<i>eV All EAFE Equity Net Rank</i>				26	32	29	32	--	--	--	31	Mar-16
Wells Capital	53,681,177	6.9	32.5	-7.7	-15.2	-10.9	-15.2	9.0	1.6	--	1.3	Mar-12
<i>MSCI Emerging Markets</i>				-7.5	-14.6	-8.5	-14.6	9.2	1.6	8.0	1.4	Mar-12
<i>eV Emg Mkts Equity Net Median</i>				-7.6	-16.2	-10.6	-16.2	7.7	1.4	8.9	1.9	Mar-12
<i>eV Emg Mkts Equity Net Rank</i>				51	38	56	38	28	45	--	67	Mar-12

As of December 31, 2018

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
US Fixed Income	171,152,385	22.0	32.2	1.4	0.4	1.6	0.4	3.2	2.8	4.3	5.2	Dec-94
<i>US Fixed Custom</i>				1.7	0.8	1.7	0.8	3.5	3.0	3.8	5.6	Dec-94
<i>InvestorForce All DB US Fix Inc Net Median</i>				0.8	-0.1	1.1	-0.1	2.7	2.7	4.8	5.8	Dec-94
<i>InvestorForce All DB US Fix Inc Net Rank</i>				22	34	23	34	39	44	62	80	Dec-94
Barrow Hanley	133,976,457	17.2	78.3	1.5	-0.1	1.6	-0.1	2.0	2.5	--	3.1	Mar-10
<i>BBgBarc US Aggregate TR</i>				1.6	0.0	1.7	0.0	2.1	2.5	3.5	3.1	Mar-10
<i>eV US Core Fixed Inc Net Median</i>				1.3	-0.2	1.4	-0.2	2.1	2.5	4.1	3.3	Mar-10
<i>eV US Core Fixed Inc Net Rank</i>				27	42	33	42	66	66	--	71	Mar-10
Vanguard Short-Term Treasury Index Fund	37,175,928	4.8	21.7	1.3	--	1.5	--	--	--	--	1.9	Feb-18
<i>BBgBarc US Govt 1-3 Yr TR</i>				1.3	1.6	1.5	1.6	1.0	0.8	1.0	1.9	Feb-18
<i>BBgBarc US Govt 1-5 Yr TR</i>				1.7	1.5	1.8	1.5	1.1	1.1	1.4	2.2	Feb-18
<i>eV US Short Duration Fixed Inc Net Median</i>				0.9	1.4	1.3	1.4	1.4	1.3	2.0	1.8	Feb-18
<i>eV US Short Duration Fixed Inc Net Rank</i>				7	--	18	--	--	--	--	32	Feb-18
Hedge Fund	72,155,163	9.3	9.3	-4.8	0.0	-4.1	0.0	3.6	--	--	3.1	Jun-14
<i>Hedge Fund Custom</i>				-5.0	-3.8	-4.8	-3.8	2.2	--	--	1.8	Jun-14
<i>InvestorForce All DB Hedge Funds Net Median</i>				-4.7	-2.2	-3.8	-2.2	2.4	2.0	4.4	1.6	Jun-14
<i>InvestorForce All DB Hedge Funds Net Rank</i>				51	26	60	26	26	--	--	16	Jun-14
OZ Domestic II	9,287,389	1.2	12.9	-5.4	-2.2	-6.4	-2.2	4.8	--	--	4.1	Jun-14
Graham Absolute Return	6,987,486	0.9	9.7	-2.9	0.8	-4.3	0.8	--	--	--	-0.2	Aug-17
Wellington-Archipelago	10,763,722	1.4	14.9	-8.2	-2.6	-6.6	-2.6	--	--	--	-0.8	Aug-17
KLS Diversified	9,079,069	1.2	12.6	-5.2	1.4	-3.0	1.4	--	--	--	1.5	Oct-17

The market values for KLS Diversified, Winton, and Silver Point Capital have been adjusted to reflect the additional subscriptions that took place during the month.

Historical returns for the US Fixed Income Composite prior to December 2010 and for Barrow Hanley prior to June 2010 are gross only.



As of December 31, 2018

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Winton	6,058,693	0.8	8.4	-2.6	-0.6	-1.8	-0.6	--	--	--	1.7	Oct-17
Marshall Wace Eureka	3,014,045	0.4	4.2	-5.9	-0.6	-5.6	-0.6	--	--	--	0.1	Nov-17
Silver Point Capital	11,890,439	1.5	16.5	-6.0	-1.1	-4.6	-1.1	--	--	--	-0.5	Nov-17
<i>HFRI Fund of Funds Composite Index</i>				-5.0	-4.1	-4.8	-4.1	1.3	1.4	3.1	-3.0	Nov-17
Laurion Capital	5,111,320	0.7	7.1	1.3	--	--	--	--	--	--	3.2	Aug-18
Taconic Opportunity Fund	9,963,000	1.3	13.8	--	--	--	--	--	--	--	--	Dec-18
Private Equity	38,411,563	4.9	4.9	1.5	18.3	5.1	18.3	10.8	11.3	7.3	8.1	Jun-05
<i>Thomson Reuters Cambridge Private Equity Index</i>				0.0	12.3	3.8	12.3	17.4	14.9	--	--	Jun-05
<i>InvestorForce All DB Private Eq Net Median</i>				1.8	14.2	5.5	14.2	12.4	10.9	10.1	9.9	Jun-05
<i>InvestorForce All DB Private Eq Net Rank</i>				53	26	54	26	58	48	80	72	Jun-05
Adams Street	7,880,471	1.0	20.5	4.2	17.8	8.8	17.8	13.1	14.0	9.7	7.1	Sep-05
Invesco IV	474,703	0.1	1.2	-18.6	42.6	-19.1	42.6	6.2	10.6	7.4	8.4	Jun-05
Invesco VI	6,439,663	0.8	16.8	1.6	16.3	5.3	16.3	11.8	15.1	--	12.5	Jun-13
Ocean Avenue II	9,024,231	1.2	23.5	3.9	23.9	5.4	23.9	19.1	--	--	11.3	Jun-14
Pantheon I	1,019,139	0.1	2.7	0.0	6.5	3.9	6.5	6.5	6.4	5.0	3.8	Dec-05
Pantheon II	4,008,282	0.5	10.4	0.0	11.6	7.4	11.6	14.2	14.7	--	11.7	Dec-11

All private markets performance and market values reflect a 9/30/2018 capital account balance unless otherwise noted.

Historical returns for Invesco IV prior to April 2012 are gross only.

The market values for Pantheon I and Pantheon II reflect a 6/30/2018 capital account balance.

Adams Street includes Adams Street 2005, Adams Street 2007, and Adams Street 2011.

Pantheon I includes Pantheon US Fund VI and Pantheon Europe Fund IV.

Pantheon II includes Pantheon US Fund IX, Pantheon Asia Fund VI, and Pantheon Europe Fund VII.

Pantheon Secondary includes Pantheon GLO SEC III B.



As of December 31, 2018

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Pantheon Secondary	1,313,060	0.2	3.4	4.5	14.0	18.3	14.0	6.5	4.8	1.2	4.2	Jun-07
Raven Asset Fund II	3,385,915	0.4	8.8	2.1	14.8	4.0	14.8	-1.6	--	--	-2.0	Aug-14
Davidson Kempner Long-Term Distressed Opportunities Fund IV	1,639,602	0.2	4.3	3.5	--	12.0	--	--	--	--	12.8	Apr-18
GTCR Fund XII	713,916	0.1	1.9	0.0	--	0.0	--	--	--	--	0.0	Jun-18
Carrick Capital Partners III	762,581	0.1	2.0	-4.8	--	--	--	--	--	--	-4.8	Aug-18
Taconic CRE Dislocation Fund II	1,250,000	0.2	3.3	--	--	--	--	--	--	--	0.0	Nov-18
Cressey & Company Fund VI	500,000	0.1	1.3	--	--	--	--	--	--	--	--	Jan-19
Real Assets	121,768,114	15.6	15.6	-0.7	2.1	0.7	2.1	6.0	7.1	--	--	Mar-99
<i>Real Asset Custom</i>				-4.0	-0.7	-3.0	-0.7	8.5	6.4	--	--	Mar-99
<i>eV Liquid Real Assets Net Median</i>				-7.1	-5.6	-6.2	-5.6	3.8	1.8	--	--	Mar-99
<i>eV Liquid Real Assets Net Rank</i>				1	1	1	1	1	1	--	--	Mar-99
SSgA	30,107,609	3.9	24.7	-7.2	-7.4	-7.8	-7.4	--	--	--	-0.3	Apr-17
<i>Real Asset Custom</i>				-4.0	-0.7	-3.0	-0.7	8.5	6.4	--	4.9	Apr-17
Private Real Estate	60,595,456	7.8	49.8	1.3	7.7	3.3	7.7	7.3	8.0	--	--	Mar-99
<i>NCREIF ODCE (net)</i>				1.5	7.4	3.4	7.4	7.3	9.4	6.0	7.5	Mar-99
<i>InvestorForce All DB Real Estate Pub+Priv Net Median</i>				1.4	7.2	3.3	7.2	7.3	9.5	5.8	7.4	Mar-99
<i>InvestorForce All DB Real Estate Pub+Priv Net Rank</i>				58	33	50	33	51	88	--	--	Mar-99
Greenfield Gap VII	12,386,436	1.6	20.4	0.4	12.9	5.2	12.9	13.7	--	--	12.9	Dec-14
Patron Capital V	5,282,118	0.7	8.7	4.0	27.0	0.9	27.0	--	--	--	15.5	Jan-16
UBS Trumbull Property	42,653,574	5.5	70.4	1.4	4.9	3.2	4.9	5.1	7.5	5.5	7.3	Mar-99

As of December 31, 2018

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Carlyle Realty VIII	273,328	0.0	0.5	-23.9	-44.5	-23.9	-44.5	--	--	--	-44.5	Dec-17
<i>NCREIF-ODCE</i>				1.8	8.3	3.9	8.3	8.2	10.4	7.0	8.3	Dec-17
Private Infrastructure	21,614,053	2.8	17.8	3.3	8.1	4.2	8.1	9.2	--	--	6.8	Dec-14
<i>S&P Global Infrastructure Net TR USD</i>				-5.3	-10.4	-7.0	-10.4	6.0	3.2	--	1.1	Dec-14
KKR Global II	10,396,231	1.3	48.1	4.8	10.1	6.0	10.1	9.1	--	--	10.5	Dec-14
North Haven Infrastructure II	9,619,275	1.2	44.5	1.7	8.3	4.6	8.3	11.0	--	--	6.5	May-15
ISQ Global Infrastructure Fund II	1,252,108	0.2	5.8	2.7	--	-31.9	--	--	--	--	-31.9	Jul-18
<i>DJ Brookfield Global Infrastructure Net TR USD</i>				-5.9	-7.9	-6.7	-7.9	6.3	3.6	10.7	-6.7	Jul-18
KKR Global Infrastructure Investors III	346,439	0.0	1.6	--	--	--	--	--	--	--	--	Jan-19
Private Natural Resources	9,450,995	1.2	7.8	1.2	11.5	6.6	11.5	20.5	--	--	18.4	Sep-15
<i>S&P Global Natural Resources Index TR USD</i>				-16.8	-12.6	-15.7	-12.6	12.4	-0.5	3.1	11.6	Sep-15
EnCap XI	434,832	0.1	4.6	-4.8	-25.9	-9.9	-25.9	--	--	--	-37.7	Jul-17
EnCap IV	799,241	0.1	8.5	-1.2	--	-9.6	--	--	--	--	-17.0	Feb-18
GSO Energy Opportunities	4,504,791	0.6	47.7	1.5	11.7	5.0	11.7	19.5	--	--	19.0	Nov-15
Taurus Mining	2,223,173	0.3	23.5	1.9	14.9	9.7	14.9	20.2	--	--	17.9	Sep-15
Taurus Mining Annex	1,488,958	0.2	15.8	2.2	21.6	15.3	21.6	--	--	--	31.2	Jan-17
Cash	14,420,899	1.9	1.9	0.4	0.8	0.5	0.8	--	--	--	--	
Cash	7,839,966	1.0	54.4	0.6	1.2	0.8	1.2	1.0	0.7	--	--	Sep-03
Treasury Cash	6,580,933	0.8	45.6									

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

As of December 31, 2018

Benchmark History

As of December 31, 2018

Total Fund		
1/1/2019	Present	21% US Equity Custom / 18% International Equity Custom / 23% US Fixed Custom / 10% Hedge Fund Custom / 15% Thomson Reuters Cambridge Private Equity Index / 13% Real Asset Custom
1/1/2017	12/31/2018	27% US Equity Custom / 23% International Equity Custom / 22% US Fixed Custom / 5% Hedge Fund Custom / 9% Thomson Reuters Cambridge Private Equity Index / 14% Real Asset Custom
7/1/2014	12/31/2016	22.7% Russell 1000 / 5.7% Russell 2000 / 23.6% International Equity Custom / 28.5% US Fixed Custom / 4.5% Hedge Fund Custom / 8% NCREIF ODCE (net) / 7% Cambridge Assoc. U.S. Private Equity Index
US Equity		
12/31/1994	Present	80% Russell 1000 / 20% Russell 2000
International Equity		
1/1/2019	Present	56% MSCI EAFE Gross / 44% MSCI Emerging Markets Gross
1/1/2017	12/31/2018	69.56% MSCI EAFE Gross / 30.44% MSCI Emerging Markets Gross
7/1/2013	12/31/2016	MSCI ACWI ex USA Gross
US Fixed Income		
3/1/2018	Present	77.27% BBgBarc US Aggregate TR / 22.73% BBgBarc US Govt 1-5 Yr TR
1/1/2017	2/28/2018	77.27% BBgBarc US Aggregate TR / 22.73% Credit Suisse Leveraged Loans
8/1/2014	12/31/2016	71.93% BBgBarc US Aggregate TR / 17.54% ICE BofAML US High Yield TR / 10.53% Credit Suisse Leveraged Loans
Hedge Fund		
7/1/2017	Present	100% HFRI Fund of Funds Composite Index
1/1/2015	6/30/2017	50% HFRI Fund of Funds Composite Index / 50% HFRI RV: Multi-Strategy Index
Real Assets		
1/1/2019	Present	62% NCREIF ODCE (net) / 19% S&P Global Natural Resources Index TR USD / 19% S&P Global Infrastructure TR USD
6/1/2013	12/31/2018	57.14% NCREIF ODCE (net) / 21.43% S&P Global Natural Resources Index TR USD / 21.43% S&P Global Infrastructure TR USD



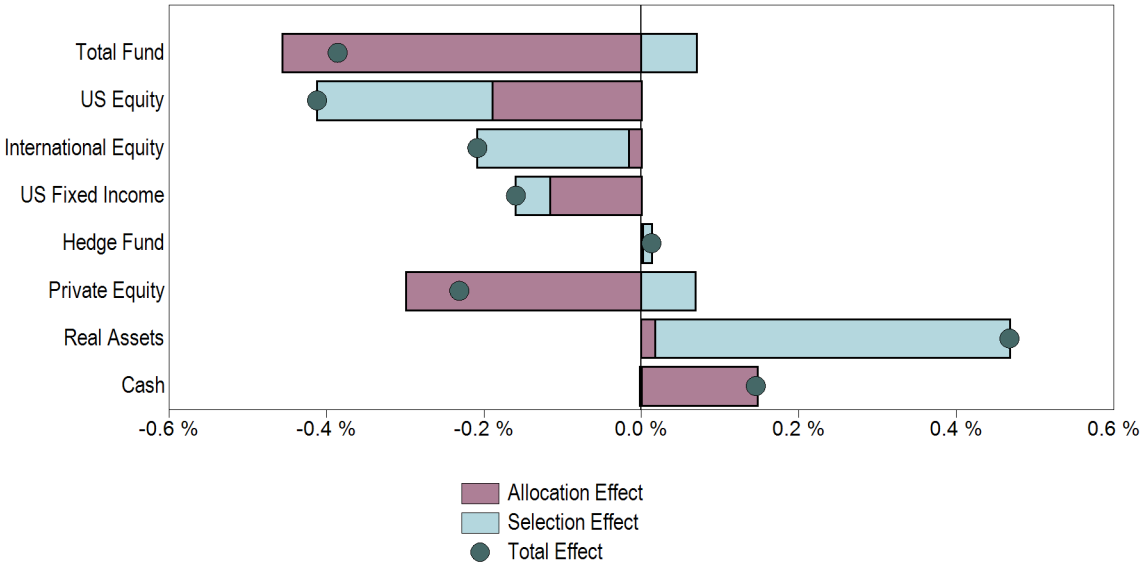
Statistics Summary

5 Years Ending December 31, 2018

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	4.86%	6.39%	-0.59	1.04	0.66	0.96%
Policy Index	5.42%	6.08%	--	1.00	0.79	0.00%
InvestorForce Public DB \$250mm-\$1B Gross Median	4.82%	6.44%	0.08	1.00	0.65	1.15%

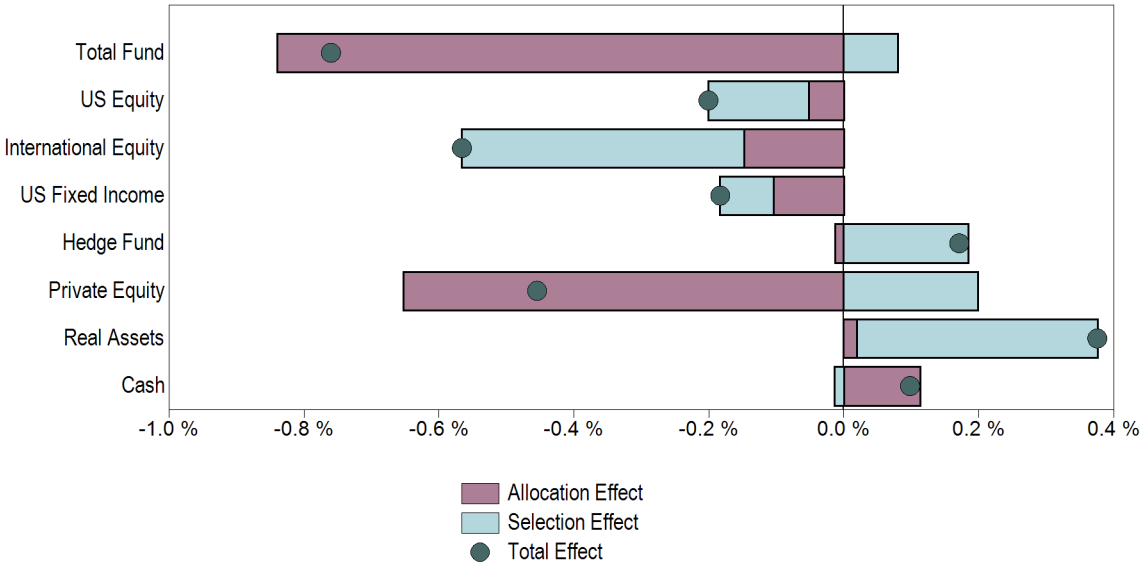


Attribution Effects
3 Months Ending December 31, 2018



3 Months Ending December 31, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
US Equity	-15.8%	-15.1%	-0.7%	-0.2%	-0.2%	-0.4%
International Equity	-11.8%	-11.0%	-0.8%	-0.2%	0.0%	-0.2%
US Fixed Income	1.4%	1.7%	-0.2%	0.0%	-0.1%	-0.2%
Hedge Fund	-4.8%	-5.0%	0.2%	0.0%	0.0%	0.0%
Private Equity	1.5%	0.0%	1.5%	0.1%	-0.3%	-0.2%
Real Assets	-0.7%	-4.0%	3.3%	0.4%	0.0%	0.5%
Cash	0.4%	0.6%	-0.1%	0.0%	0.1%	0.1%
Total	-7.5%	-7.1%	-0.4%	0.1%	-0.5%	-0.4%

Attribution Effects
1 Year Ending December 31, 2018



1 Year Ending December 31, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
US Equity	-6.6%	-6.0%	-0.6%	-0.1%	-0.1%	-0.2%
International Equity	-15.2%	-13.6%	-1.6%	-0.4%	-0.1%	-0.6%
US Fixed Income	0.4%	0.8%	-0.4%	-0.1%	-0.1%	-0.2%
Hedge Fund	0.0%	-3.8%	3.7%	0.2%	0.0%	0.2%
Private Equity	18.3%	12.3%	6.0%	0.2%	-0.7%	-0.5%
Real Assets	2.1%	-0.7%	2.7%	0.4%	0.0%	0.4%
Cash	0.8%	1.9%	-1.1%	0.0%	0.1%	0.1%
Total	-4.5%	-3.7%	-0.8%	0.1%	-0.8%	-0.8%

As of December 31, 2018

Annual Investment Expense Analysis

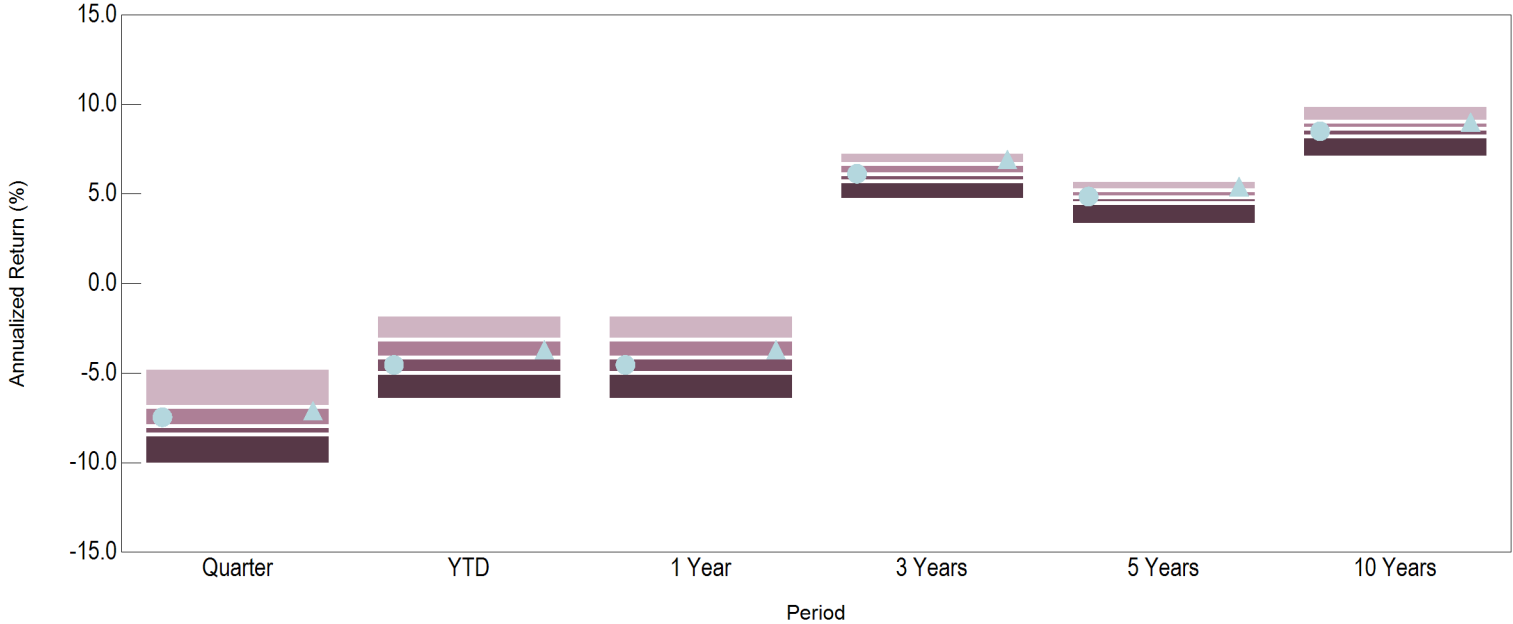
As Of December 31, 2018

Name	Fee Schedule	Market Value	Estimated Fee	Estimated Fee Value
Total Fund w/o Alternatives		\$531,397,943		
US Equity		\$194,880,658		
Mellon Dynamic US Equity	0.30% of Assets	\$69,946,631	0.30%	\$209,840
Mellon Large Cap	0.04% of First 100.0 Mil, 0.02% Thereafter	\$93,886,352	0.04%	\$37,555
DFA Small Cap	0.35% of Assets	\$15,633,216	0.35%	\$54,716
PanAgora	0.80% of Assets	\$15,414,459	0.80%	\$123,316
International Equity		\$165,364,900		
Copper Rock	0.85% of Assets	\$18,224,785	0.85%	\$154,911
Mellon International	0.04% of Assets	\$93,458,938	0.04%	\$37,384
Wells Capital	0.90% of First 100.0 Mil, 0.85% Thereafter	\$53,681,177	0.90%	\$483,131
US Fixed Income		\$171,152,385		
Barrow Hanley	0.30% of First 50.0 Mil, 0.20% of Next 100.0 Mil, 0.15% Thereafter	\$133,976,457	0.24%	\$317,953
Vanguard Short-Term Treasury Index Fund	0.05% of Assets	\$37,175,928	0.05%	\$18,588
Hedge Fund		\$72,155,163		
OZ Domestic II	Performance-based 1.50 and 20.00	\$9,287,389	1.50%	\$139,311
Graham Absolute Return	Performance-based 1.75 and 20.00	\$6,987,486	1.75%	\$122,281
Wellington-Archipelago	Performance-based 1.00 and 20.00	\$10,763,722	1.00%	\$107,637
KLS Diversified	Performance-based 2.00 and 20.00	\$9,079,069	2.00%	\$181,581
Winton	Performance-based 0.90 and 20.00	\$6,058,693	0.90%	\$54,528
Marshall Wace Eureka	Performance-based 2.00 and 20.00	\$3,014,045	2.00%	\$60,281
Silver Point Capital	Performance-based 2.00 and 20.00	\$11,890,439	2.00%	\$237,809
Laurion Capital		\$5,111,320		
Taconic Opportunity Fund		\$9,963,000		
Invesco IV		\$474,703		
Invesco VI		\$6,439,663		

As of December 31, 2018

Name	Fee Schedule	Market Value	Estimated Fee	Estimated Fee Value
Ocean Avenue II		\$9,024,231		
Pantheon I		\$1,019,139		
Pantheon II		\$4,008,282		
Pantheon Secondary		\$1,313,060		
Raven Asset Fund II		\$3,385,915		
Davidson Kempner Long-Term Distressed Opportunities Fund IV		\$1,639,602		
GTCR Fund XII		\$713,916		
Carrick Capital Partners III		\$762,581		
Taconic CRE Dislocation Fund II		\$1,250,000		
Cressey & Company Fund VI		\$500,000		
Real Assets		\$121,768,114		
SSgA	0.30% of First 50.0 Mil, 0.27% of Next 50.0 Mil, 0.25% Thereafter	\$30,107,609	0.30%	\$90,323
Private Real Estate		\$60,595,456		
Greenfield Gap VII		\$12,386,436		
Patron Capital V		\$5,282,118		
UBS Trumbull Property		\$42,653,574		
Carlyle Realty VIII		\$273,328		
Private Infrastructure		\$21,614,053		
KKR Global II		\$10,396,231		
North Haven Infrastructure II		\$9,619,275		
ISQ Global Infrastructure Fund II		\$1,252,108		
KKR Global Infrastructure Investors III		\$346,439		
Private Natural Resources		\$9,450,995		
EnCap XI		\$434,832		
EnCap IV		\$799,241		
GSO Energy Opportunities		\$4,504,791		
Taurus Mining		\$2,223,173		
Taurus Mining Annex		\$1,488,958		

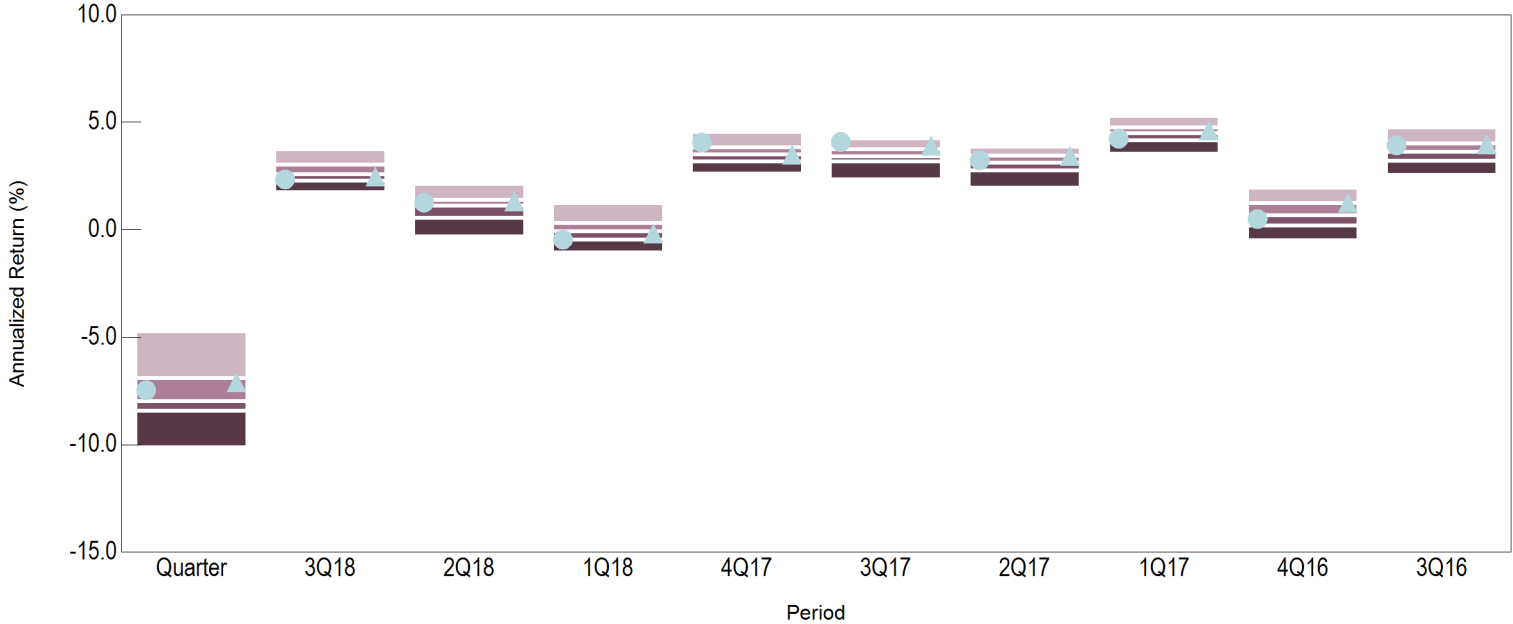
**InvestorForce Public DB \$250mm-\$1B Gross Return Comparison
Ending December 31, 2018**



	Return (Rank)											
5th Percentile	-4.7	-1.8	-1.8	7.3	5.8	9.9						
25th Percentile	-6.9	-3.1	-3.1	6.7	5.2	9.1						
Median	-7.9	-4.1	-4.1	6.1	4.8	8.6						
75th Percentile	-8.4	-5.0	-5.0	5.7	4.5	8.2						
95th Percentile	-10.1	-6.5	-6.5	4.7	3.3	7.1						
# of Portfolios	70	70	70	68	68	63						
● Total Fund	-7.5	(39)	-4.5	(64)	-4.5	(64)	6.1	(50)	4.9	(47)	8.5	(60)
▲ Policy Index	-7.1	(33)	-3.7	(38)	-3.7	(38)	6.9	(13)	5.4	(21)	9.0	(28)



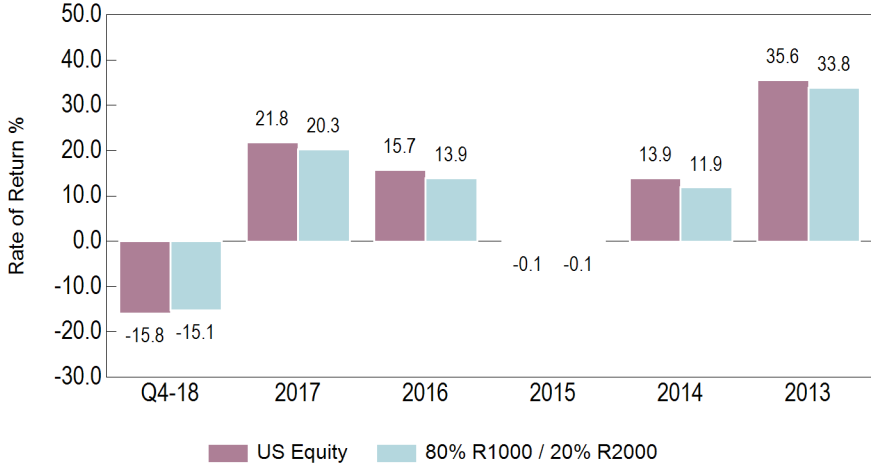
**InvestorForce Public DB \$250mm-\$1B Gross Return Comparison
Ending December 31, 2018**



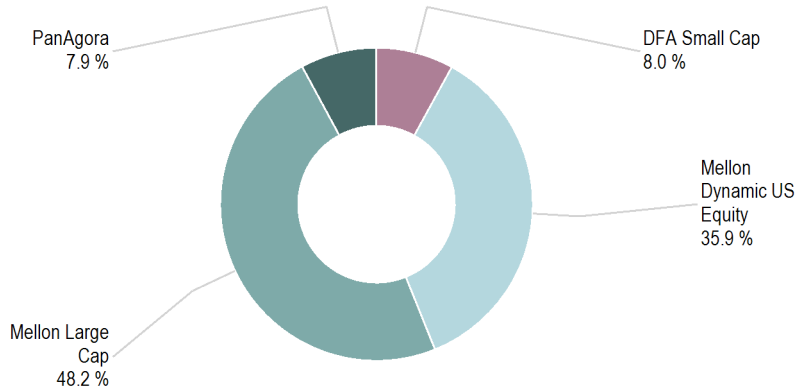
	Return (Rank)									
	Quarter	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16
5th Percentile	-4.7	3.7	2.1	1.2	4.5	4.2	3.9	5.3	1.9	4.7
25th Percentile	-6.9	3.0	1.4	0.3	3.8	3.8	3.5	4.8	1.3	4.0
Median	-7.9	2.6	1.1	-0.1	3.5	3.4	3.1	4.5	0.7	3.6
75th Percentile	-8.4	2.3	0.6	-0.4	3.2	3.2	2.8	4.2	0.2	3.2
95th Percentile	-10.1	1.8	-0.3	-1.0	2.6	2.4	2.0	3.6	-0.5	2.6
# of Portfolios	70	65	67	61	67	72	69	74	68	70
● Total Fund	-7.5 (39)	2.3 (73)	1.3 (37)	-0.5 (76)	4.1 (20)	4.1 (11)	3.2 (40)	4.2 (71)	0.5 (58)	3.9 (32)
▲ Policy Index	-7.1 (33)	2.5 (62)	1.3 (31)	-0.2 (63)	3.5 (53)	3.9 (14)	3.4 (28)	4.6 (44)	1.3 (26)	4.0 (27)



Return Summary

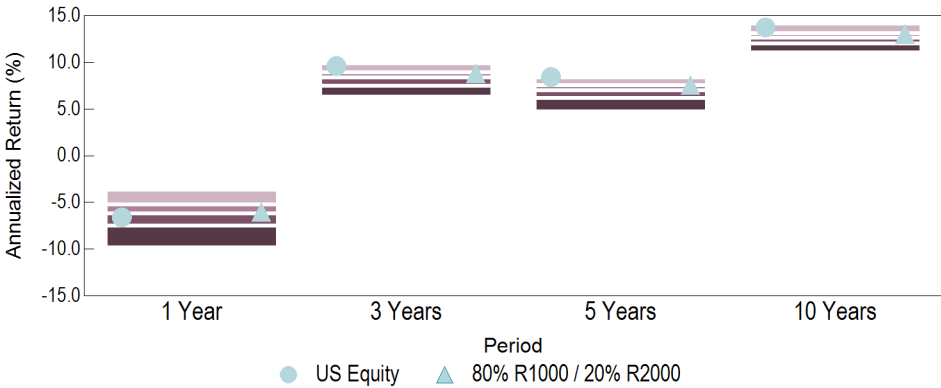
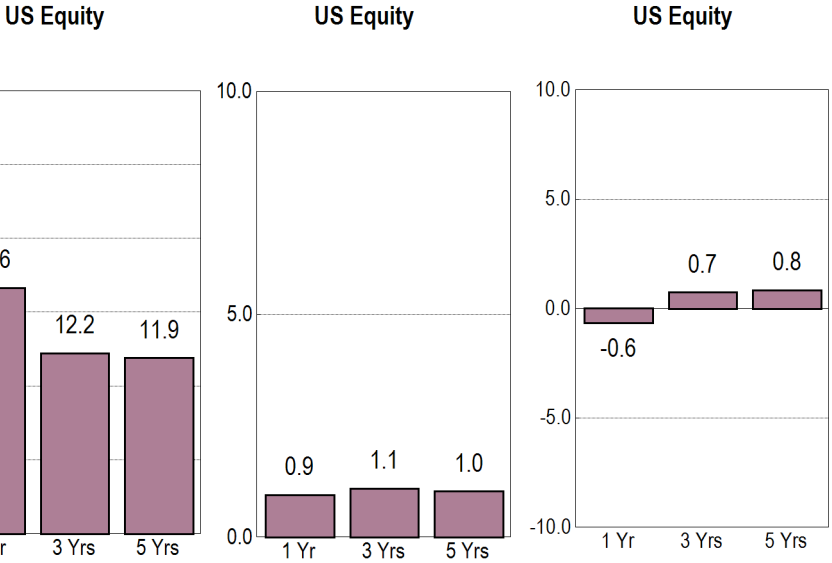


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
US Equity	-6.6	9.6	8.4	13.7
80% R1000 / 20% R2000	-6.0	8.8	7.6	13.0
InvestorForce All DB US Eq Net Median	-6.1	8.4	7.0	12.7
InvestorForce All DB US Eq Net Rank	62	7	5	8

Anzld. Std. Deviation Tracking Error Information Ratio



As of December 31, 2018

US Equity Characteristics
vs Russell 3000

	Portfolio Q4-18	Index Q4-18
Characteristics		
Weighted Avg. Market Cap. (\$B)	143.9	154.7
Median Market Cap (\$B)	2.0	1.4
P/E Ratio	22.1	22.3
Yield	2.1	2.1
EPS Growth - 5 Yrs.	8.1	9.0
Price to Book	5.2	4.2
Beta (holdings; domestic)	1.0	1.0

US Equity Sector Distribution
vs Russell 3000

	Portfolio Q4-18	Index Q4-18
Sector Distribution		
Energy	4.6	5.0
Materials	2.9	3.0
Industrials	10.0	9.9
Consumer Discretionary	10.0	10.3
Consumer Staples	6.2	6.7
Health Care	13.7	15.1
Financials	13.4	13.9
Information Technology	17.7	19.9
Communication Services	8.0	9.1
Utilities	3.1	3.3
Real Estate	3.0	3.9

Top Holdings

CASH - USD	3.5%
UST Bill 03/14/19	2.7%
MICROSOFT	2.7%
APPLE	2.5%
AMAZON.COM	2.1%
BERKSHIRE HATHAWAY 'B'	1.4%
JOHNSON & JOHNSON	1.2%
JP MORGAN CHASE & CO.	1.1%
ALPHABET 'C'	1.1%
FACEBOOK CLASS A	1.1%

Best Performers

	Return %
TESARO	90.3%
ELECTRO SCIEN.INDS.	71.7%
FLUENT	67.4%
AMERICAN SUPERCONDUCTOR	60.4%
MITEK SYSTEMS	53.3%
DIGITAL TURBINE	47.6%
SMTC	41.2%
INOVALON HOLDINGS	41.1%
K12	40.1%
INVESTMENT TECH.GROUP	39.9%

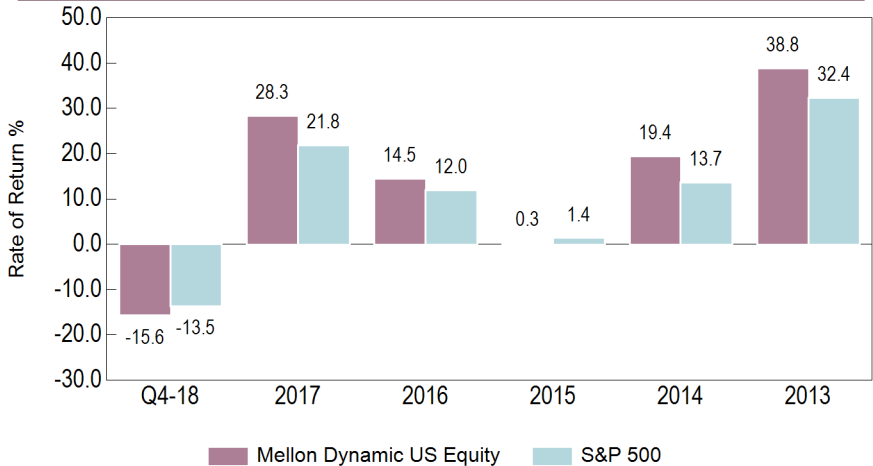
Worst Performers

	Return %
PARKER DRILLING (XSC)	-88.6%
SANCHEZ ENERGY	-88.3%
CLOUD PEAK ENERGY	-84.1%
CLEARSIDE BIOMEDICAL	-82.6%
FERROGLOBE	-80.5%
PHI NON-VOTING	-80.2%
BRISTOW GROUP	-80.0%
HORIZON GLOBAL	-79.9%
MELINTA THERAPEUTICS	-79.9%
TREVENA	-79.7%

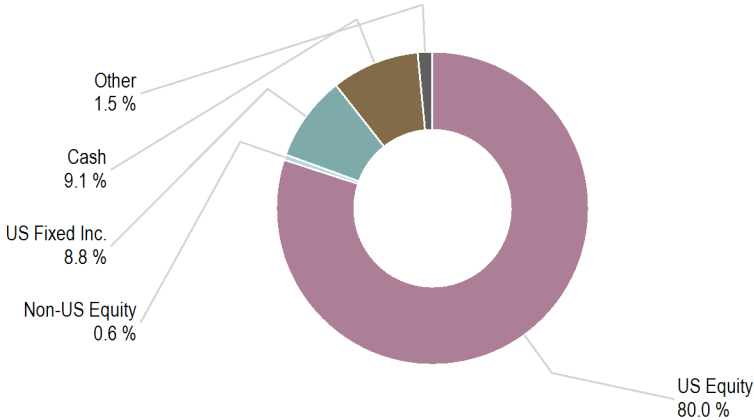
Mellon Dynamic US Equity

As of December 31, 2018

Return Summary

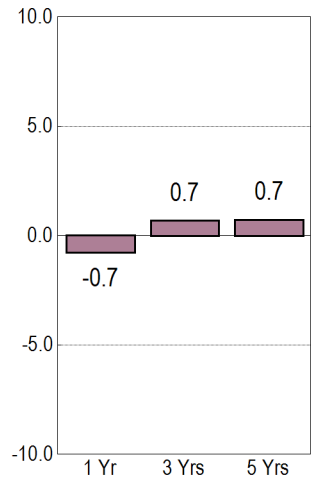
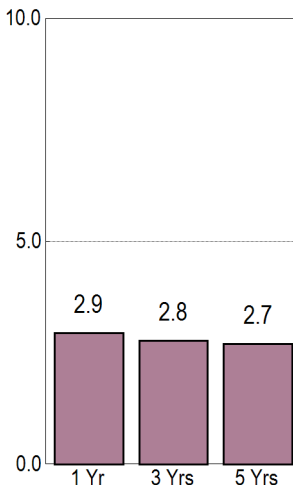
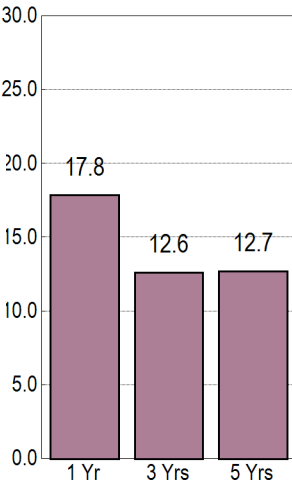
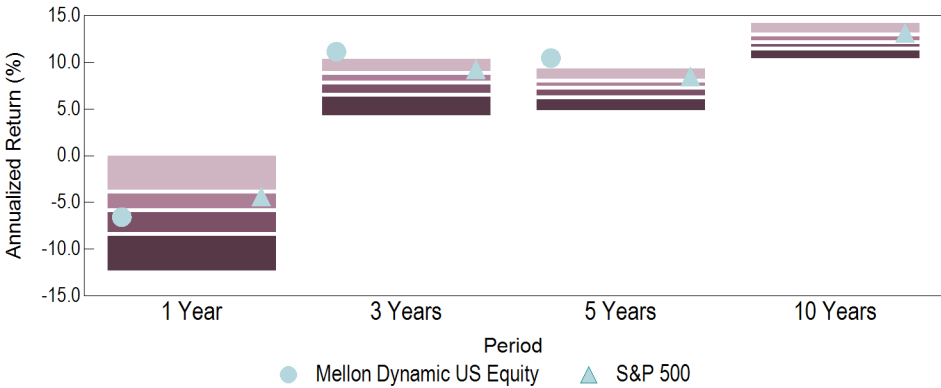


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Mellon Dynamic US Equity	-6.6	11.1	10.4	--
S&P 500	-4.4	9.3	8.5	13.1
eV US Large Cap Core Equity Net Median	-5.8	7.8	7.3	12.2
eV US Large Cap Core Equity Net Rank	60	3	2	--

Anzld. Std. Deviation	Tracking Error	Information Ratio
Mellon Dynamic US Equity	Mellon Dynamic US Equity	Mellon Dynamic US Equity



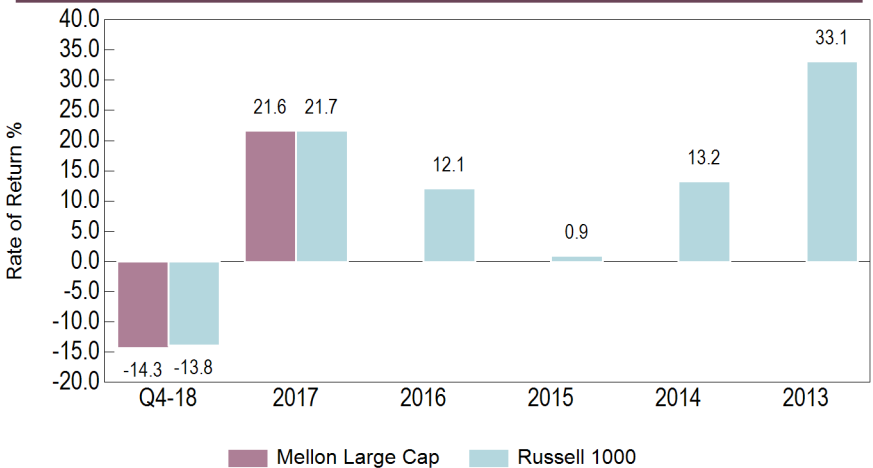
Mellon Dynamic US Equity

As of December 31, 2018

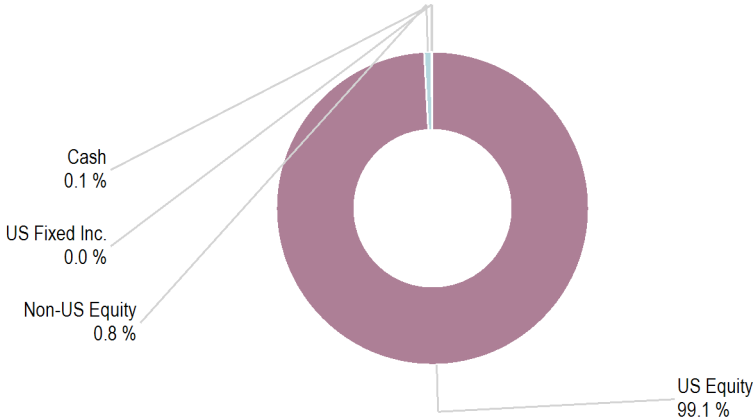
Account Information		Account Characteristics		Sector Distribution			
Account Name	Mellon Dynamic US Equity	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-18	Q4-18	Q4-18	Q4-18		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	12/31/12	Weighted Avg.	183.5	183.2	Energy	4.3	5.3
Account Type	US Equity	Market Cap. (\$B)			Materials	2.2	2.7
Benchmark	S&P 500	Median Market Cap (\$B)	18.4	18.5	Industrials	7.4	9.2
Universe	eV US Large Cap Core Equity Net	P/E Ratio	23.4	20.7	Consumer	8.0	9.9
		Yield	2.2	2.2	Discretionary		
		EPS Growth - 5 Yrs.	8.3	7.9	Consumer Staples	6.0	7.4
		Price to Book	5.9	4.6	Health Care	12.5	15.5
		Beta (holdings; domestic)	1.0	1.0	Financials	10.8	13.3
					Information Technology	16.2	20.1
					Communication Services	8.1	10.1
					Utilities	2.7	3.3
					Real Estate	2.4	3.0

Top Holdings		Best Performers		Worst Performers	
CASH - USD	9.1%		Return %		Return %
UST Bill 03/14/19	7.5%	RED HAT	28.9%	NVIDIA	-52.4%
MICROSOFT	3.0%	SCANA	23.2%	NEWFIELD EXPLORATION	-49.2%
APPLE	2.7%	NEWMONT MINING	15.2%	PG&E	-48.4%
AMAZON.COM	2.4%	STARBUCKS	13.9%	COTY CL.A	-47.0%
GENERIC OPTION	1.5%	REALTY INCOME	12.0%	ALIGN TECHNOLOGY	-46.5%
BERKSHIRE HATHAWAY 'B'	1.5%	CME GROUP	12.0%	NEKTAR THERAPEUTICS	-46.1%
JOHNSON & JOHNSON	1.3%	PROCTER & GAMBLE	11.4%	PERRIGO	-45.1%
UST Bill 03/07/19	1.3%	CHURCH & DWIGHT CO.	11.1%	CAPRI HOLDINGS	-44.7%
JP MORGAN CHASE & CO.	1.2%	DOLLAR TREE	10.8%	APACHE	-44.6%
		LAMB WESTON HOLDINGS	10.7%	FLUOR	-44.3%

Return Summary

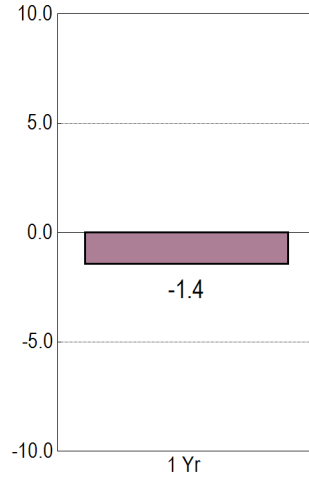
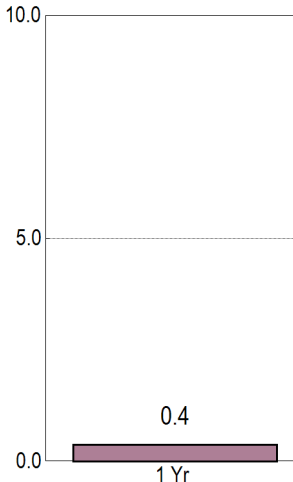
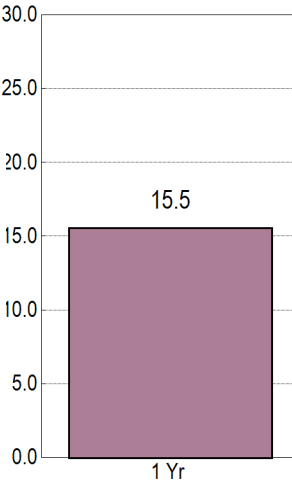
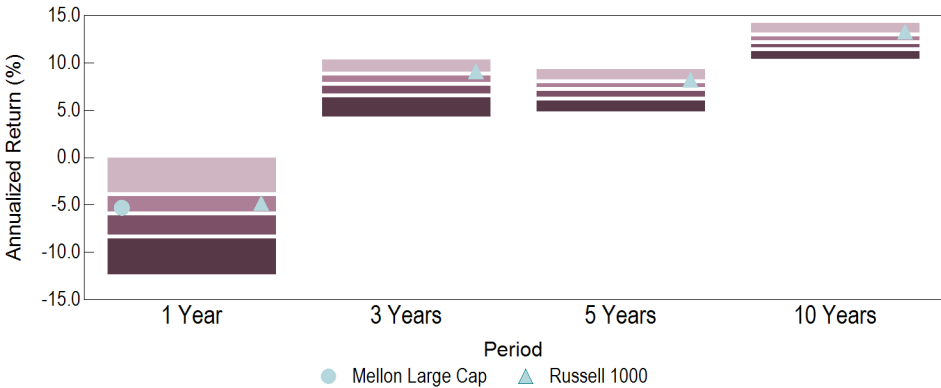


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Mellon Large Cap	-5.3	--	--	--
Russell 1000	-4.8	9.1	8.2	13.3
eV US Large Cap Core Equity Net Median	-5.8	7.8	7.3	12.2
eV US Large Cap Core Equity Net Rank	43	--	--	--

Anzld. Std. Deviation	Tracking Error	Information Ratio
Mellon Large Cap	Mellon Large Cap	Mellon Large Cap



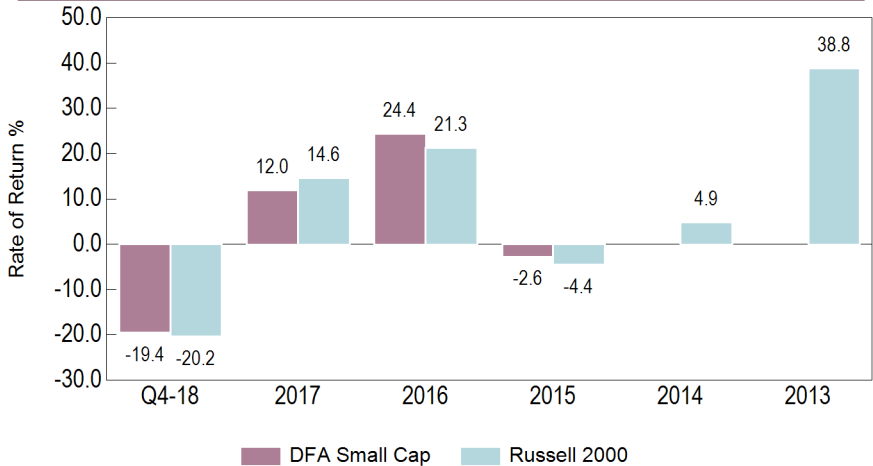
Mellon Large Cap

As of December 31, 2018

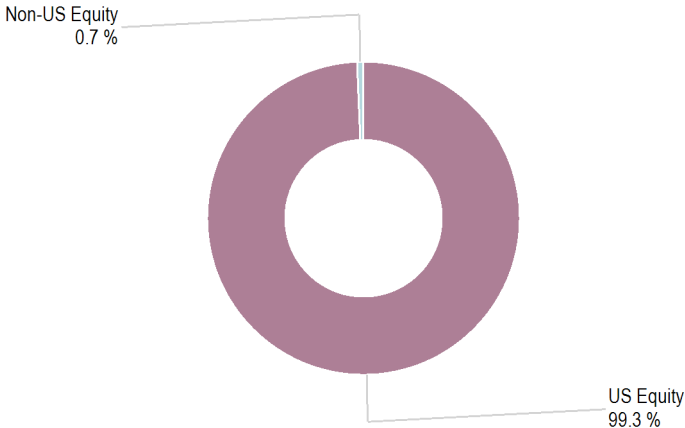
Account Information		Account Characteristics			Sector Distribution		
Account Name	Mellon Large Cap		Portfolio	Index		Portfolio	Index
Account Structure	Commingled Fund		Q4-18	Q4-18		Q4-18	Q4-18
Investment Style	Passive	Characteristics			Sector Distribution		
Inception Date	3/31/16	Weighted Avg.	166.5	166.3	Energy	5.1	5.1
Account Type	US Stock Large	Market Cap. (\$B)			Materials	3.0	3.0
Benchmark	Russell 1000	Median Market Cap (\$B)	8.8	8.8	Industrials	9.6	9.6
Universe	eV US Large Cap Core Equity Net	P/E Ratio	22.6	20.7	Consumer	10.1	10.1
		Yield	2.2	2.1	Discretionary		
		EPS Growth - 5 Yrs.	8.4	9.0	Consumer Staples	7.0	6.9
		Price to Book	5.8	4.6	Health Care	15.0	15.0
		Beta (holdings; domestic)	1.0	1.0	Financials	13.5	13.5
					Information Technology	20.2	20.3
					Communication Services	9.6	9.6
					Utilities	3.3	3.3
					Real Estate	3.6	3.6

Top Holdings		Best Performers		Worst Performers	
MICROSOFT	3.3%		Return %		Return %
APPLE	3.2%	TESARO	90.3%	WEATHERFORD INTL.	-79.4%
AMAZON.COM	2.6%	RED HAT	28.9%	NABORS INDUSTRIES	-66.8%
BERKSHIRE HATHAWAY 'B'	1.7%	VIRTU FINANCIAL CL.A	27.1%	EXTRACTION OIL &.GAS	-62.0%
JOHNSON & JOHNSON	1.5%	TESLA	25.7%	ADIANT	-61.4%
JP MORGAN CHASE & CO.	1.4%	SCANA	23.2%	WHITING PETROLEUM	-57.2%
ALPHABET 'C'	1.3%	TRIBUNE MEDIA CL.A	18.9%	KOSMOS ENERGY	-56.5%
ALPHABET A	1.3%	MARKETAXESS HOLDINGS	18.6%	CHESAPEAKE ENERGY	-53.2%
FACEBOOK CLASS A	1.3%	ARRIS INTERNATIONAL	17.6%	CONDUENT	-52.8%
EXXON MOBIL	1.2%	UNITED STATES CELLULAR	16.1%	NVIDIA	-52.4%
		NEWMONT MINING	15.2%	SM ENERGY	-50.8%

Return Summary

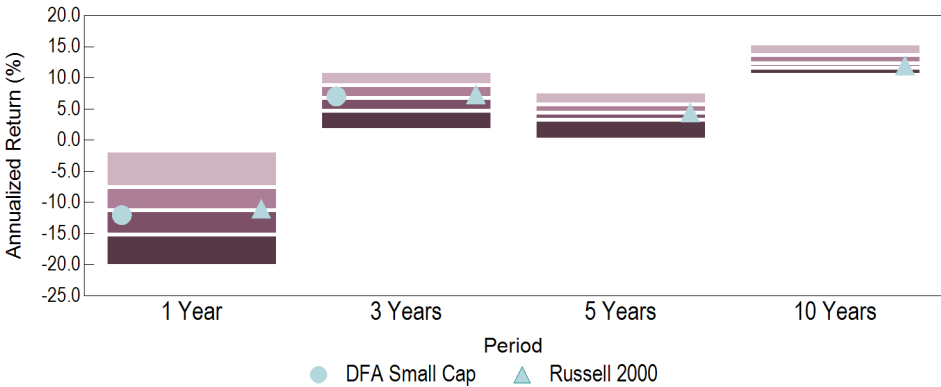
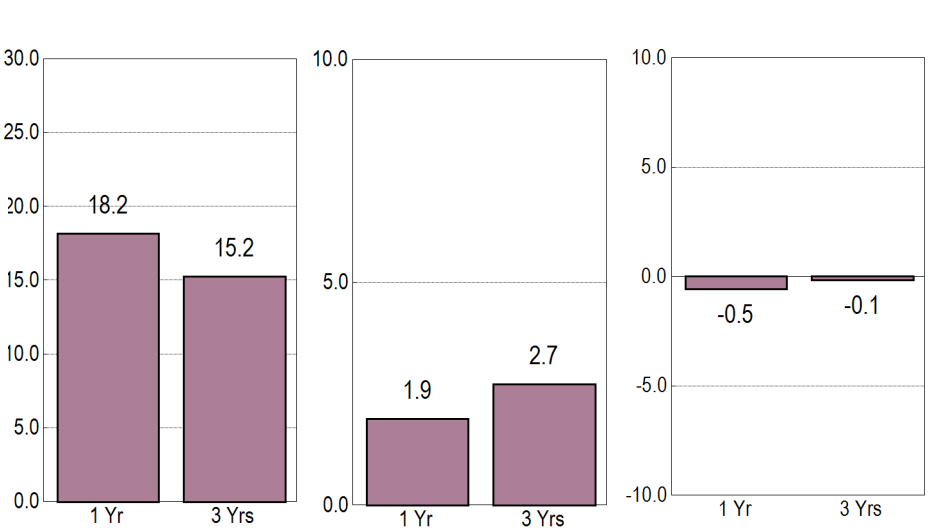


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
DFA Small Cap	-12.0	7.0	--	--
Russell 2000	-11.0	7.4	4.4	12.0
eV US Small Cap Core Equity Net Median	-11.1	6.9	4.4	12.3
eV US Small Cap Core Equity Net Rank	60	49	--	--

Anzld. Std. Deviation Tracking Error Information Ratio

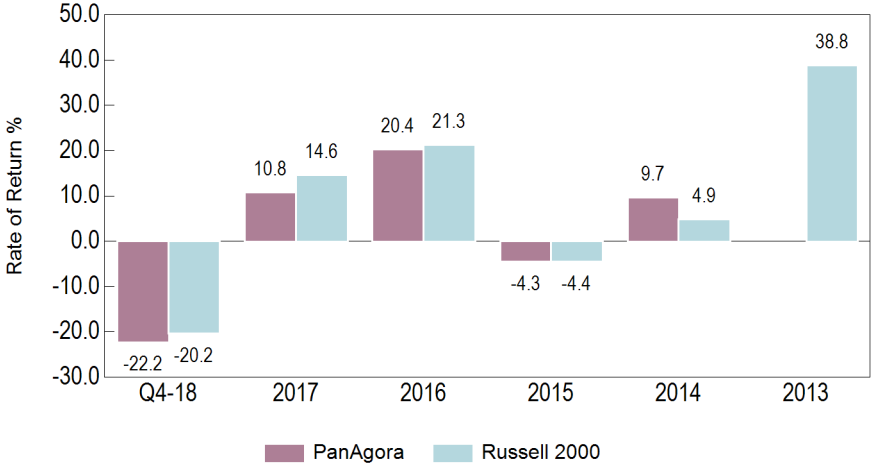


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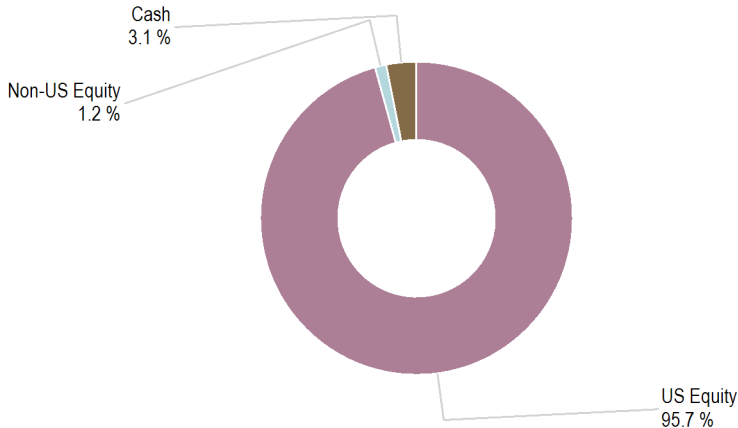
Account Information		Account Characteristics		Sector Distribution			
Account Name	DFA Small Cap	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-18	Q4-18	Q4-18	Q4-18		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	6/30/14	Weighted Avg.	1.9	2.0	Energy	4.2	3.4
Account Type	US Stock Small	Market Cap. (\$B)			Materials	5.0	3.7
Benchmark	Russell 2000	Median Market Cap (\$B)	0.7	0.7	Industrials	20.6	14.8
Universe	eV US Small Cap Core Equity Net	P/E Ratio	18.3	14.3	Consumer	14.8	12.2
		Yield	1.5	1.4	Discretionary		
		EPS Growth - 5 Yrs.	6.7	8.3	Consumer Staples	5.0	2.9
		Price to Book	2.8	2.6	Health Care	8.6	15.6
		Beta (holdings; domestic)	1.1	1.2	Financials	20.5	18.3
					Information Technology	12.8	14.7
					Communication Services	3.7	3.3
					Utilities	4.2	3.8
					Real Estate	0.7	7.2

Top Holdings		Best Performers		Worst Performers	
INTEGRATED DEVICE TECH.	0.3%		Return %		Return %
DECKERS OUTDOOR	0.3%	ELECTRO SCIEN.INDS.	71.7%	PARKER DRILLING (XSC)	-88.6%
PNM RESOURCES	0.3%	AMERICAN SUPERCONDUCTOR	60.4%	SANCHEZ ENERGY	-88.3%
SELECTIVE IN.GP.	0.3%	MITEK SYSTEMS	53.3%	CLOUD PEAK ENERGY	-84.1%
FIRSTCASH	0.3%	DIGITAL TURBINE	47.6%	CLEARSIDE BIOMEDICAL	-82.6%
MOOG 'A'	0.3%	SMTC	41.2%	FERROGLOBE	-80.5%
SEABOARD	0.3%	INOVALON HOLDINGS	41.1%	PHI NON-VOTING	-80.2%
HELEN OF TROY	0.3%	K12	40.1%	BRISTOW GROUP	-80.0%
CIENA	0.3%	INVESTMENT TECH.GROUP	39.9%	HORIZON GLOBAL	-79.9%
NEXSTAR MEDIA GROUP CL.A	0.3%	UNIVERSAL TCHN.INST.	37.2%	MELINTA THERAPEUTICS	-79.9%
		BELMOND 'A'	37.2%	TREVENA	-79.7%

Return Summary

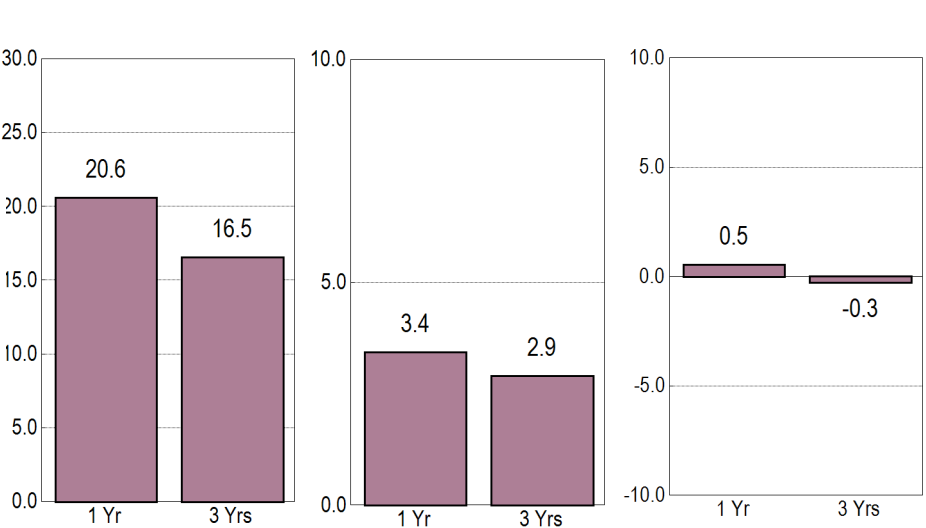


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
PanAgora	-9.2	6.6	4.9	--
Russell 2000	-11.0	7.4	4.4	12.0
eV US Small Cap Core Equity Net Median	-11.1	6.9	4.4	12.3
eV US Small Cap Core Equity Net Rank	36	55	42	--

Anzld. Std. Deviation Tracking Error Information Ratio

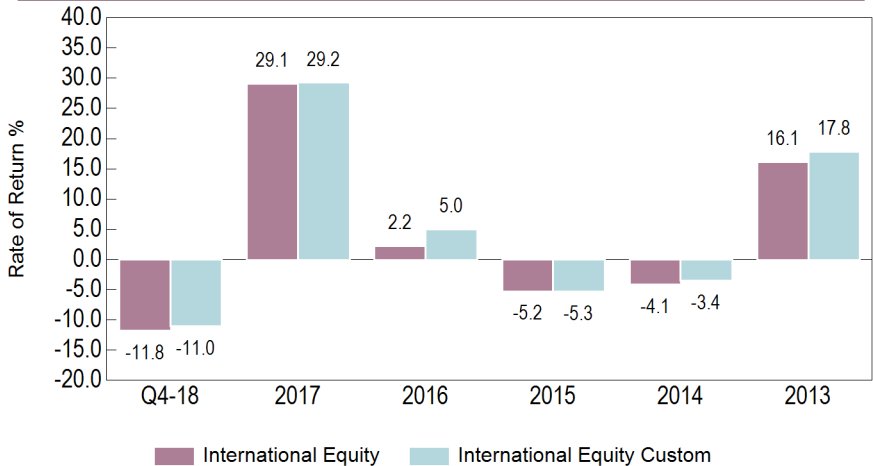


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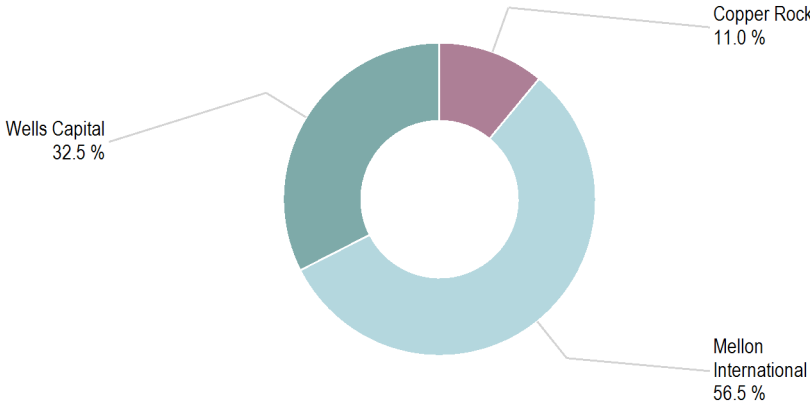
Account Information		Account Characteristics		Sector Distribution			
Account Name	PanAgora	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-18	Q4-18	Q4-18	Q4-18		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	9/30/13	Weighted Avg.	1.9	2.0	Energy	3.9	3.4
Account Type	US Stock Small Cap Core	Market Cap. (\$B)			Materials	3.1	3.7
Benchmark	Russell 2000	Median Market Cap (\$B)	0.7	0.7	Industrials	14.0	14.8
Universe	eV US Small Cap Core Equity Net	P/E Ratio	17.7	14.3	Consumer	13.7	12.2
		Yield	1.4	1.4	Discretionary		
		EPS Growth - 5 Yrs.	6.9	8.3	Consumer Staples	4.4	2.9
		Price to Book	3.4	2.6	Health Care	16.8	15.6
		Beta (holdings; domestic)	1.2	1.2	Financials	17.3	18.3
					Information Technology	13.7	14.7
					Communication Services	2.1	3.3
					Utilities	3.5	3.8
					Real Estate	4.4	7.2

Top Holdings		Best Performers		Worst Performers	
CASH - USD	3.1%		Return %		Return %
PORTLAND GEN.ELEC.	1.3%	FLUENT	67.4%	AKORN	-73.9%
INSPERITY	1.3%	MITEK SYSTEMS	53.3%	DENBURY RES.	-72.4%
PNM RESOURCES	1.3%	K12	40.1%	SUPERIOR INDS.INT.	-71.6%
ISHARES RSL.2000 VALUE	1.2%	INVESTMENT TECH.GROUP	39.9%	ION GEOPHYSICAL	-66.7%
GEO GROUP	1.2%	BELMOND 'A'	37.2%	CIVEO	-65.5%
CORECIVIC	1.1%	VERACYTE	31.7%	CALIFORNIA RESOURCES	-64.9%
FIRST CTZN.BCSH.A	1.1%	EMC INSURANCE GROUP	30.1%	IMMUNE DESIGN	-62.3%
INGEVITY	1.0%	IMPERVA	19.9%	PIONEER ENERGY SERVICES	-58.3%
VERINT SYSTEMS	1.0%	FLUIDIGM	15.1%	W&T OFFSHORE	-57.3%
		VANDA PHARMACEUTICALS	13.9%	ENDO INTERNATIONAL	-56.6%

Return Summary

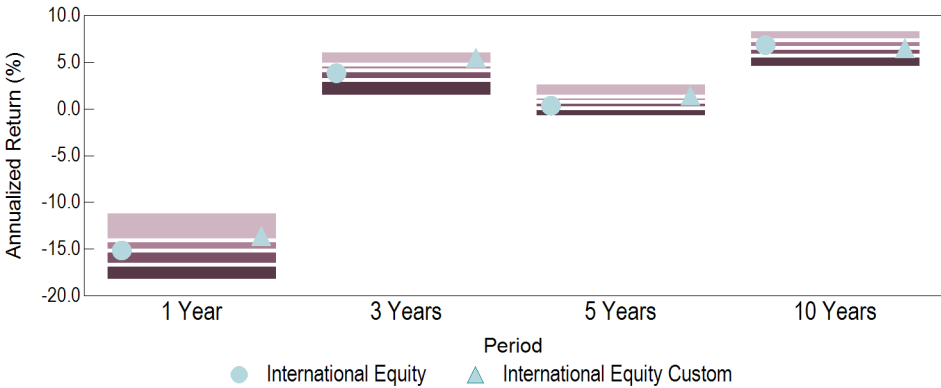
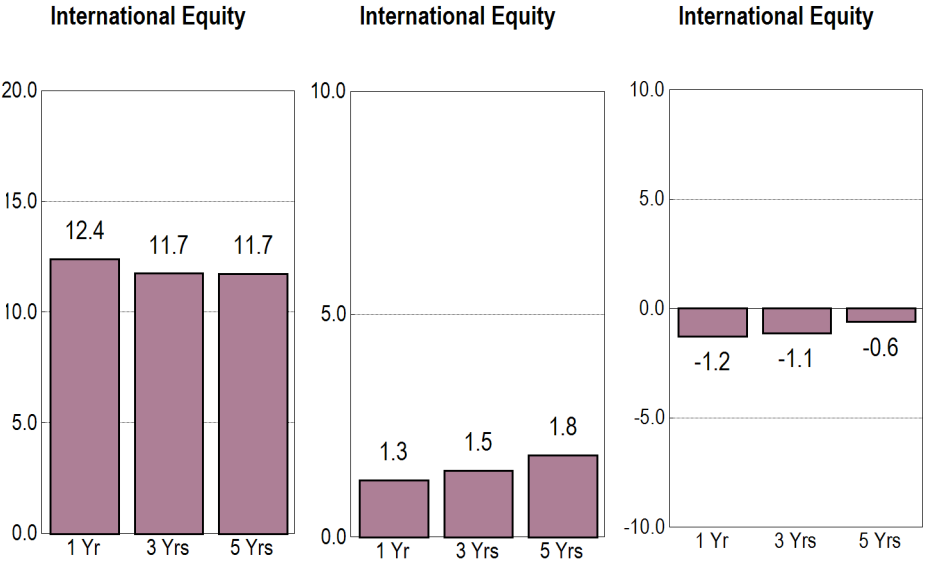


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
International Equity	-15.2	3.8	0.3	6.8
<i>International Equity Custom</i>	<i>-13.6</i>	<i>5.5</i>	<i>1.4</i>	<i>6.5</i>
<i>InvestorForce All DB ex-US Eq Net Median</i>	<i>-15.1</i>	<i>4.1</i>	<i>0.8</i>	<i>6.6</i>
<i>InvestorForce All DB ex-US Eq Net Rank</i>	<i>51</i>	<i>58</i>	<i>68</i>	<i>39</i>

Anzld. Std. Deviation Tracking Error Information Ratio



As of December 31, 2018

International Equity Characteristics
vs MSCI ACWI ex USA

	Portfolio Q4-18	Index Q4-18
Characteristics		
Weighted Avg. Market Cap. (\$B)	52.0	56.1
Median Market Cap (\$B)	8.3	7.0
P/E Ratio	17.4	16.4
Yield	3.1	3.4
EPS Growth - 5 Yrs.	8.5	9.5
Price to Book	3.0	2.4
Beta (holdings; domestic)	1.0	1.0

International Equity Sector Distribution
vs MSCI ACWI ex USA

	Portfolio Q4-18	Index Q4-18
Sector Distribution		
Energy	5.9	7.3
Materials	5.0	7.7
Industrials	11.2	11.7
Consumer Discretionary	12.5	10.6
Consumer Staples	13.4	9.8
Health Care	8.2	8.4
Financials	18.2	22.2
Information Technology	8.7	8.0
Communication Services	10.0	7.6
Utilities	2.6	3.4
Real Estate	3.3	3.3

Top Holdings

SAMSUNG ELECTRONICS	1.6%
CHINA MOBILE	1.2%
AIA GROUP	1.2%
NESTLE 'R'	1.1%
TENCENT HOLDINGS	1.1%
HDFC BANK ADR 1:3	1.0%
TAIWAN SEMICON.SPN.ADR 1:5	0.9%
NOVARTIS 'R'	0.8%
ROCHE HOLDING	0.8%
RELIANCE INDS.GDR 144A	0.8%

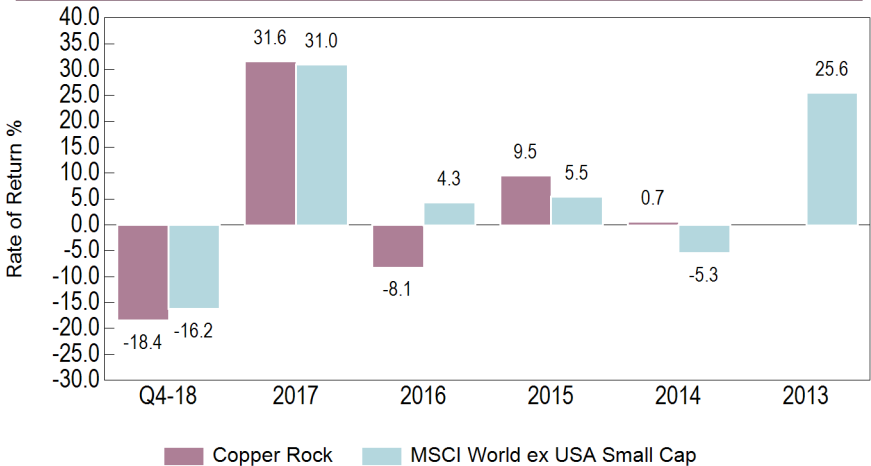
Best Performers

	Return %
BK BRA.OPEAS.A RTR. ON	58.8%
B2W COMPANHIA DIGITAL ON	56.3%
ANGLOGOLD ASHANTI SPN. ADR.1:1	46.3%
BNC.BRADESCO PF.SPN.ADR 1:1	42.7%
LOJAS RENNER ON	41.2%
SUMITOMO DAINIPPON PHA.	38.7%
PETROBRAS DISTRIBUIDORA ON	38.7%
HAPVIDA PARTP.E INVMS.ON	34.8%
MULTIPLAN EMPE. IMOBS.ON	33.9%
ST BARBARA	31.0%

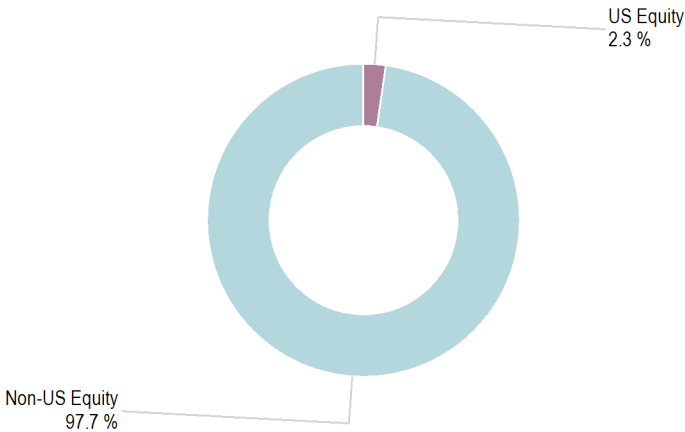
Worst Performers

	Return %
GRIDSUM HOLDING UNSP.ADR 1:1	-65.3%
CHINA RAPID FINANCE ADR 'A':1	-64.3%
PREMIER OIL	-53.1%
SHARP	-50.6%
COSMO ENERGY HOLDINGS	-49.8%
IQIYI ADS.1:7	-45.1%
SHOWA DENKO KK	-44.3%
SYSMEX	-44.2%
CYBERDYNE	-44.0%
ROYAL MAIL	-42.8%

Return Summary

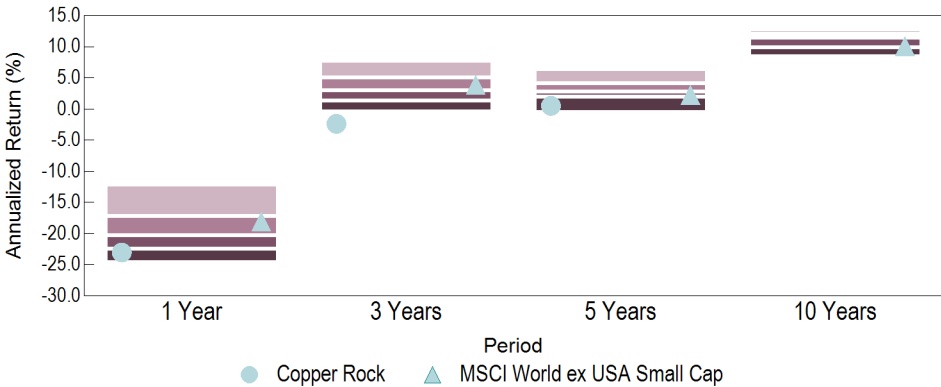
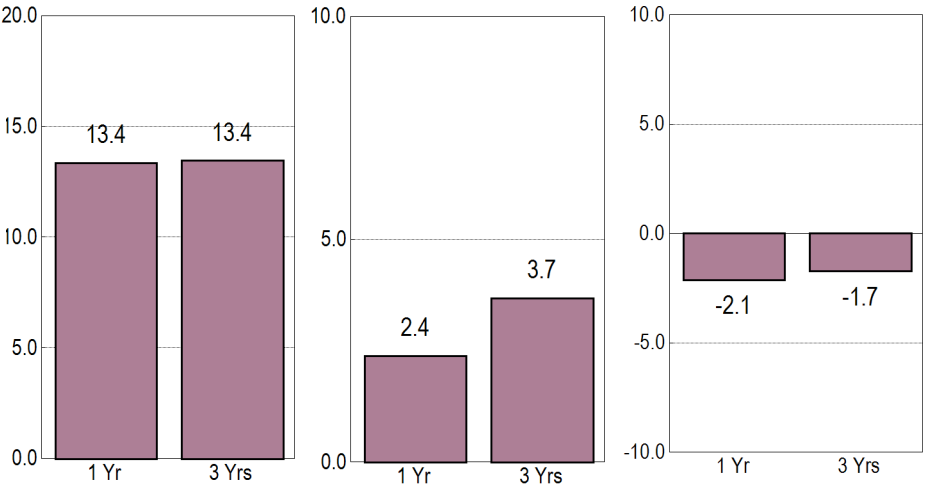


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Copper Rock	-23.1	-2.4	0.5	--
MSCI World ex USA Small Cap	-18.1	3.8	2.3	10.1
eV EAFE Small Cap Equity Net Median	-20.2	3.1	2.9	11.5
eV EAFE Small Cap Equity Net Rank	85	99	91	--

Anzld. Std. Deviation	Tracking Error	Information Ratio
Copper Rock	Copper Rock	Copper Rock

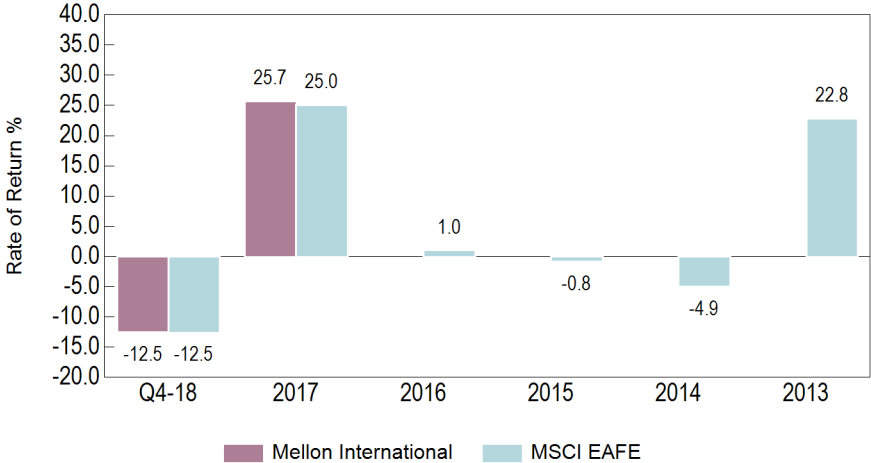


As of December 31, 2018

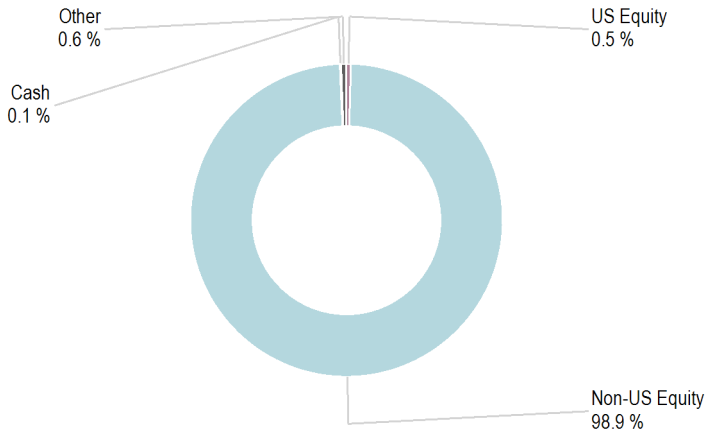
Account Information		Account Characteristics		Sector Distribution			
Account Name	Copper Rock	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-18	Q4-18	Q4-18	Q4-18		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	9/30/13	Weighted Avg.	3.0	2.2	Energy	6.5	3.5
Account Type	International Small Stocks	Market Cap. (\$B)			Materials	3.9	10.0
Benchmark	MSCI World ex USA Small Cap	Median Market Cap (\$B)	2.7	0.9	Industrials	20.1	20.6
Universe	eV EAFE Small Cap Equity Net	P/E Ratio	16.6	16.3	Consumer	10.4	12.5
		Yield	2.5	2.8	Discretionary		
		EPS Growth - 5 Yrs.	16.1	12.0	Consumer Staples	9.4	6.7
		Price to Book	2.8	2.1	Health Care	13.2	7.2
		Beta (holdings; domestic)	0.9	0.9	Financials	8.8	11.3
					Information Technology	10.1	8.7
					Communication Services	6.6	4.5
					Utilities	4.3	2.9
					Real Estate	6.2	12.0

Top Holdings		Best Performers		Worst Performers	
CHARTER HALL GROUP STAPLED UNITS	2.0%		Return %		Return %
NIPPON SUISAN KAISHA	1.8%	ST BARBARA	31.0%	PREMIER OIL	-53.1%
MARUI GROUP	1.6%	DIALOG SEMICON.	18.7%	COSMO ENERGY HOLDINGS	-49.8%
SUNRISE COMMUNICATIONS	1.6%	MORINAGA	15.4%	WORLEYPARSONS	-42.6%
SPARK NEW ZEALAND	1.6%	ORION	13.1%	TOKAI CARBON	-41.5%
NIHON UNISYS	1.5%	HOKKAIDO ELEC.POWER	9.9%	SEVEN GROUP HOLDINGS	-39.0%
TAKARA BIO	1.5%	AMER SPORTS	7.3%	BEACH ENERGY	-38.8%
LION	1.5%	ITALGAS	5.2%	ENCE ENERGIA Y CELULOSA	-37.4%
KANDENKO	1.5%	AIR FRANCE-KLM	4.0%	BLUESCOPE STEEL	-37.2%
ASR NEDERLAND	1.5%	KYORITSU MAINTENANCE	3.9%	ENERPLUS	-36.8%
		SPARK NEW ZEALAND	3.6%	SULZER 'R'	-34.4%

Return Summary

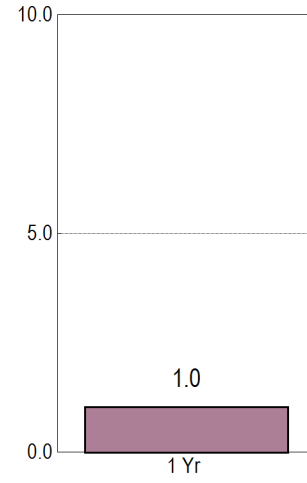
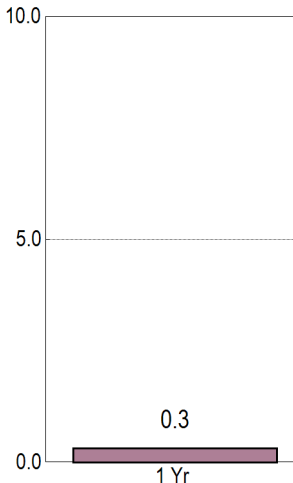
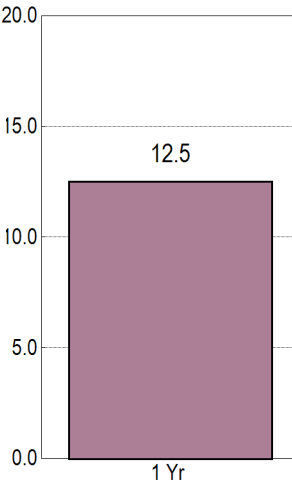
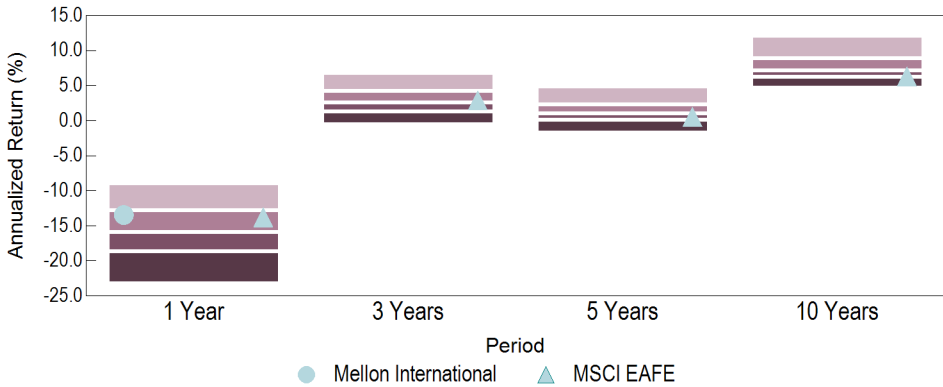


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Mellon International	-13.5	--	--	--
MSCI EAFE	-13.8	2.9	0.5	6.3
eV All EAFE Equity Net Median	-15.8	2.7	1.1	7.2
eV All EAFE Equity Net Rank	32	--	--	--

Anzld. Std. Deviation	Tracking Error	Information Ratio
Mellon International	Mellon International	Mellon International

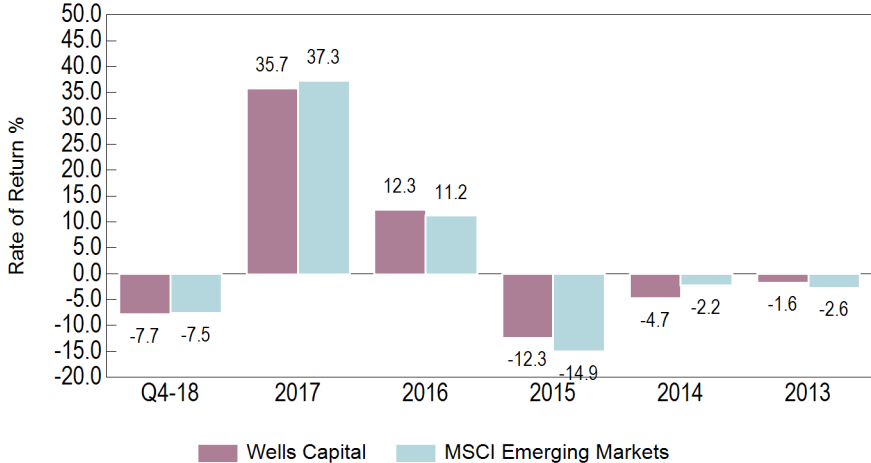


As of December 31, 2018

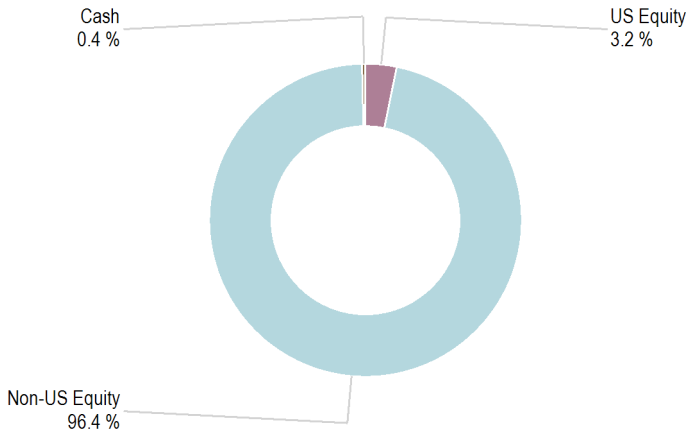
Account Information		Account Characteristics			Sector Distribution		
Account Name	Mellon International		Portfolio	Index		Portfolio	Index
Account Structure	Commingled Fund		Q4-18	Q4-18		Q4-18	Q4-18
Investment Style	Passive	Characteristics			Sector Distribution		
Inception Date	3/31/16	Weighted Avg.	52.7	52.6	Energy	5.8	5.9
Account Type	International	Market Cap. (\$B)			Materials	7.3	7.4
Benchmark	MSCI EAFE	Median Market Cap (\$B)	9.1	9.1	Industrials	14.2	14.3
Universe	eV All EAFE Equity Net	P/E Ratio	17.0	16.7	Consumer	11.1	11.2
		Yield	3.6	3.6	Discretionary		
		EPS Growth - 5 Yrs.	7.3	8.6	Consumer Staples	11.5	11.6
		Price to Book	2.7	2.3	Health Care	11.3	11.2
		Beta (holdings; domestic)	1.0	1.0	Financials	19.3	19.5
					Information Technology	5.9	6.0
					Communication Services	5.5	5.6
					Utilities	3.7	3.8
					Real Estate	3.6	3.7

Top Holdings		Best Performers		Worst Performers	
NESTLE 'R'	2.0%		Return %		Return %
NOVARTIS 'R'	1.5%	SUMITOMO DAINIPPON PHA.	38.7%	SHARP	-50.6%
ROCHE HOLDING	1.4%	COLRUYT	25.7%	SHOWA DENKO KK	-44.3%
HSBC HOLDINGS	1.3%	PAN PACIFIC INTERNATIONAL HOLDINGS	22.9%	SYSMEX	-44.2%
ROYAL DUTCH SHELL A(LON)	1.1%	FAMILYMART UNY HOLDINGS	21.7%	CYBERDYNE	-44.0%
TOYOTA MOTOR	1.1%	MEIJI HOLDINGS	21.6%	ROYAL MAIL	-42.8%
TOTAL	1.0%	TOKYO ELECTRIC POWER CO. HDG.	21.2%	WORLEYPARSONS	-42.6%
BP	1.0%	RANDGOLD RESOURCES SUSP - SUSP 31/12/18	17.3%	LENLEASE GROUP STAPLED UNITS	-42.4%
ROYAL DUTCH SHELL B	0.9%	TOHO	15.6%	CONVATEC GROUP	-41.6%
AIA GROUP	0.8%	BANDAI NAMCO HDG.	15.5%	M3	-40.8%
		YUE YUEN INDL.HDG.	15.1%	HOSHIZAKI ELECTRIC	-40.5%

Return Summary

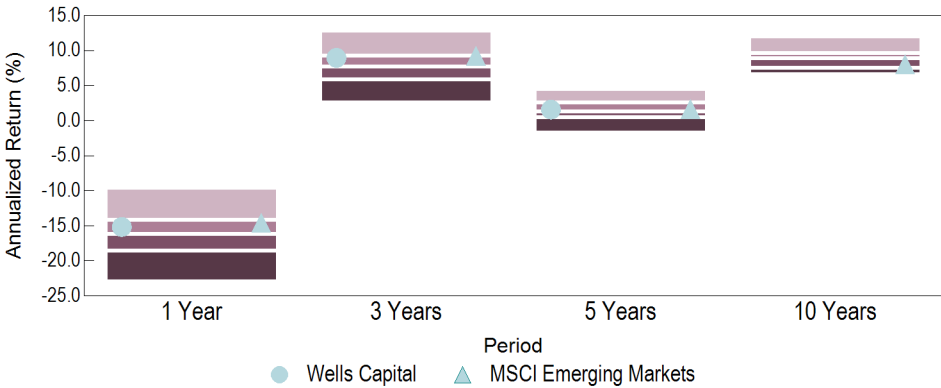
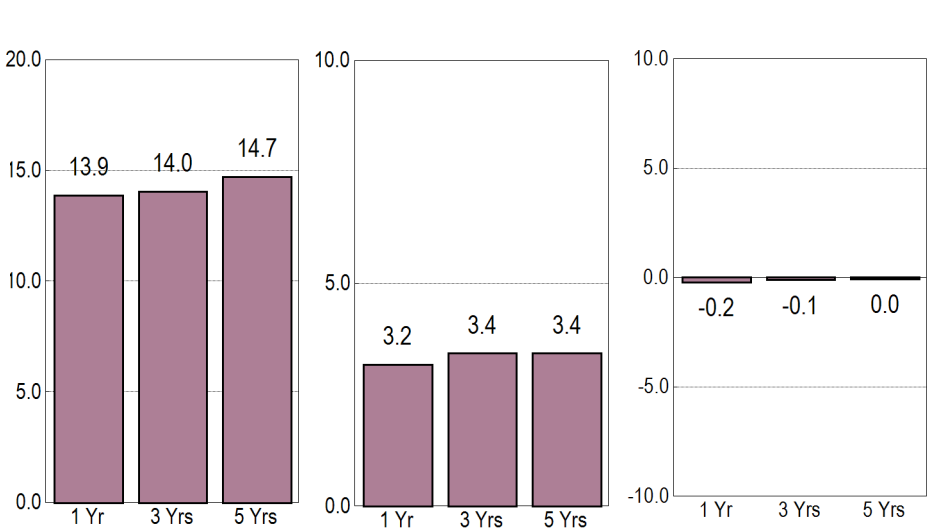


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Wells Capital	-15.2	9.0	1.6	--
MSCI Emerging Markets	-14.6	9.2	1.6	8.0
eV Emg Mkts Equity Net Median	-16.2	7.7	1.4	8.9
eV Emg Mkts Equity Net Rank	38	28	45	--

Anzld. Std. Deviation Tracking Error Information Ratio



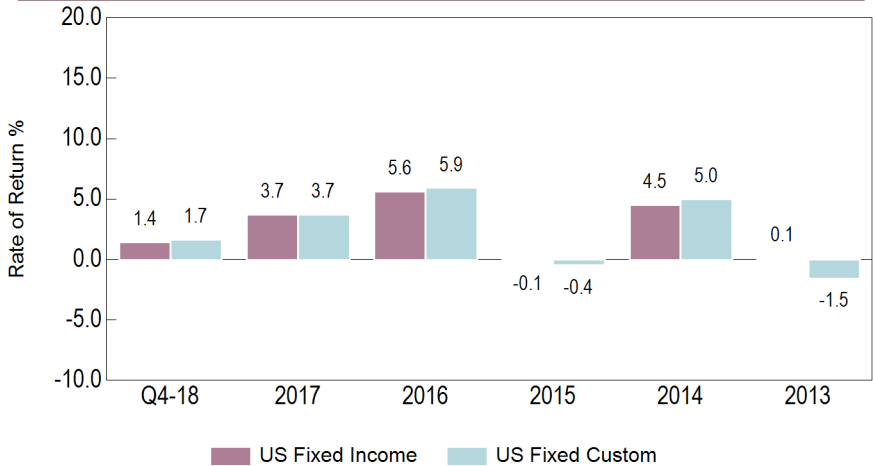
As of December 31, 2018

Account Information		Account Characteristics			Sector Distribution		
Account Name	Wells Capital		Portfolio	Index		Portfolio	Index
Account Structure	Commingled Fund		Q4-18	Q4-18		Q4-18	Q4-18
Investment Style	Active	Characteristics			Sector Distribution		
Inception Date	3/31/12	Weighted Avg.	68.6	70.0	Energy	5.7	8.0
Account Type	International Emerging Stocks	Market Cap. (\$B)			Materials	1.2	7.7
Benchmark	MSCI Emerging Markets	Median Market Cap (\$B)	8.7	4.9	Industrials	2.5	5.6
Universe	eV Emg Mkts Equity Net	P/E Ratio	18.5	16.6	Consumer	15.7	10.5
		Yield	2.5	2.9	Discretionary		
		EPS Growth - 5 Yrs.	9.8	11.7	Consumer Staples	18.2	6.7
		Price to Book	3.4	2.9	Health Care	0.6	2.8
		Beta (holdings; domestic)	1.0	1.1	Financials	19.6	24.8
					Information Technology	13.2	14.3
					Communication Services	19.5	14.0
					Utilities	0.0	2.7
					Real Estate	1.7	3.0

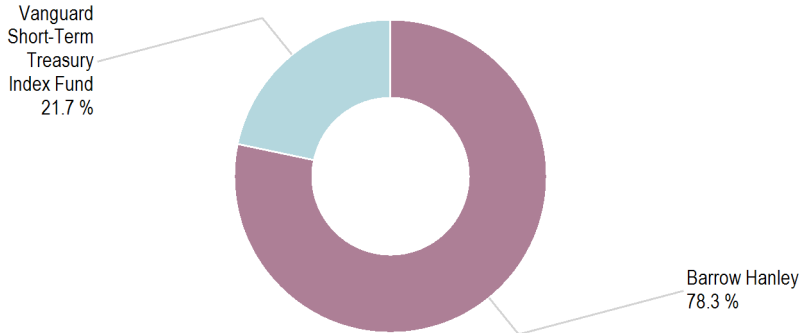
Top Holdings		Best Performers		Worst Performers	
SAMSUNG ELECTRONICS	5.0%		Return %		Return %
CHINA MOBILE	3.8%	BK BRA.OPEAS.A RTR. ON	58.8%	GRIDSUM HOLDING UNSP.ADR 1:1	-65.3%
TENCENT HOLDINGS	3.5%	B2W COMPANHIA DIGITAL ON	56.3%	CHINA RAPID FINANCE ADR 'A':1:1	-64.3%
HDFC BANK ADR 1:3	3.1%	ANGLOGOLD ASHANTI SPN. ADR.1:1	46.3%	IQIYI ADS.1:7	-45.1%
TAIWAN SEMICON.SPN.ADR 1:5	3.0%	BNC.BRADESCO PF.SPN.ADR 1:1	42.7%	GENTING MALAYSIA	-39.4%
RELIANCE INDS.GDR 144A	2.5%	LOJAS RENNER ON	41.2%	PPDAI GROUP ADR A 1:5	-33.1%
AIA GROUP	2.3%	PETROBRAS DISTRIBUIDORA ON	38.7%	GPO FINANCE BANORTE	-32.8%
UNI-PRESIDENT ENTS.	2.2%	HAPVIDA PARTP.E INVMS.ON	34.8%	CEMEX ADR 1:10	-31.5%
ALIBABA GROUP HLDG.SPN. ADR 1:1	2.2%	MULTIPLAN EMPE. IMOBS.ON	33.9%	BAIDU 'A' ADR 10:1	-30.6%
TAIWAN SEMICON.MNFG.	2.2%	IRB BRASIL RESSEGUROS ON	30.5%	BEST ADR 1:1	-30.6%
		LOJAS AMERICANAS PN REP1 PN	27.9%	CTRIP.COM INTL.ADR 8:1	-27.2%



Return Summary

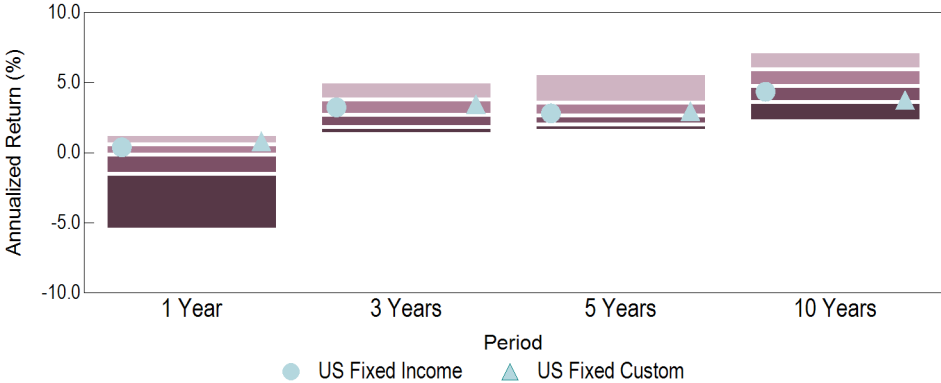
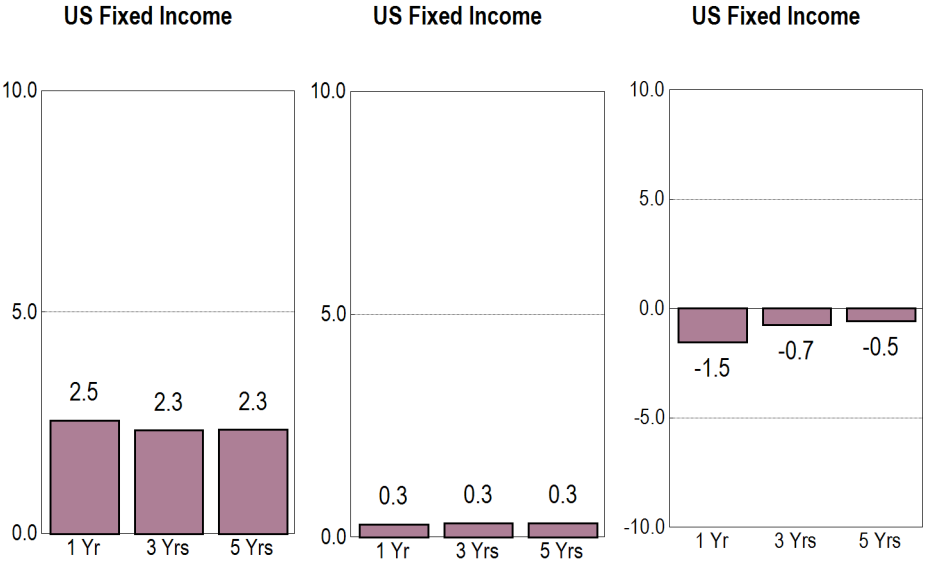


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
US Fixed Income	0.4	3.2	2.8	4.3
<i>US Fixed Custom</i>	<i>0.8</i>	<i>3.5</i>	<i>3.0</i>	<i>3.8</i>
<i>InvestorForce All DB US Fix Inc Net Median</i>	<i>-0.1</i>	<i>2.7</i>	<i>2.7</i>	<i>4.8</i>
<i>InvestorForce All DB US Fix Inc Net Rank</i>	<i>34</i>	<i>39</i>	<i>44</i>	<i>62</i>

Anzld. Std. Deviation Tracking Error Information Ratio



US Fixed Income

As of December 31, 2018

US Fixed Income Fixed Income Characteristics
 vs. BBgBarc US Aggregate TR

	Portfolio	Index	Portfolio	Index
	Q4-18	Q4-18	Q3-18	Q3-18
Fixed Income Characteristics				
Yield to Maturity	3.19	3.26	3.33	3.45
Average Duration	4.97	5.87	5.07	6.03
Average Quality	AA	AA	AA	AA
Weighted Average Maturity	7.64	12.93	7.53	12.94

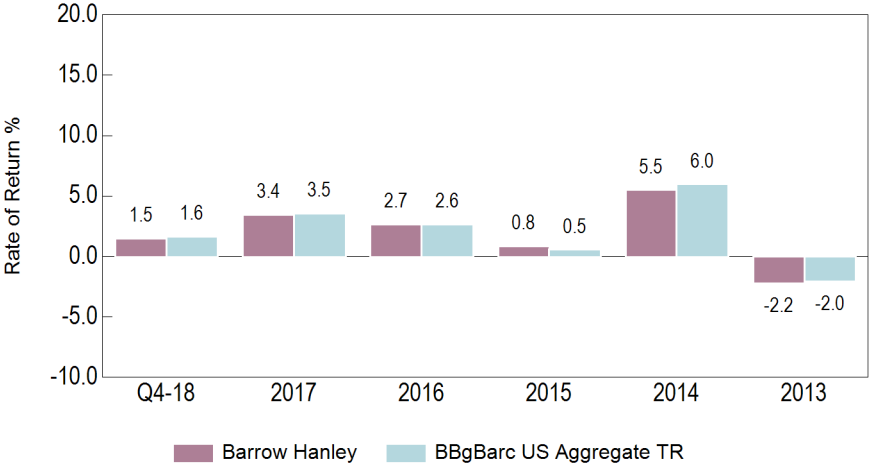
US Fixed Income Fixed Income Duration
 vs. BBgBarc US Aggregate TR

	Portfolio	Index	Portfolio	Index
	Q4-18	Q4-18	Q3-18	Q3-18
Credit Quality Allocation				
AAA	70.18	72.81	66.55	71.93
AA	3.37	3.59	3.92	3.73
A	12.76	10.02	13.72	10.84
BBB	13.70	13.59	13.70	13.51
Not Rated	--	--	2.12	--

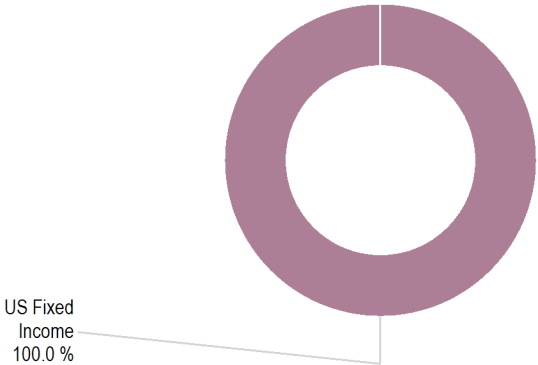
US Fixed Income Fixed Income Sector Allocation
 vs. BBgBarc US Aggregate TR

	Portfolio	Index	Portfolio	Index
	Q4-18	Q4-18	Q3-18	Q3-18
US Sector Allocation				
UST/Agency	42.13	41.68	40.82	40.95
Corporate	29.41	24.31	31.02	25.13
MBS	22.52	30.21	22.10	30.03
ABS	4.01	0.52	4.11	0.51
Foreign	0.23	2.39	0.23	2.47
Muni	0.92	0.90	0.92	0.91
Cash	0.78	--	0.81	--

Return Summary

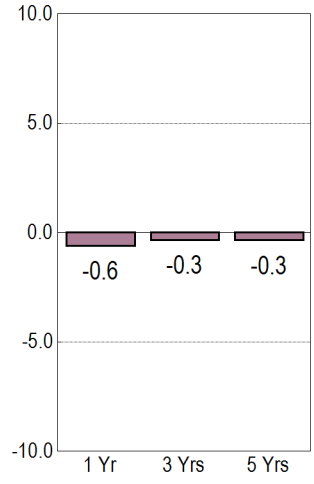
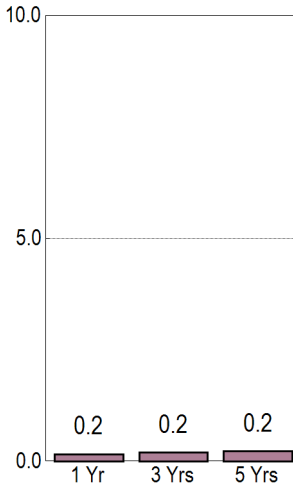
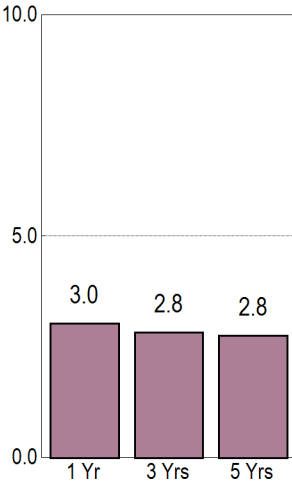


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Barrow Hanley	-0.1	2.0	2.5	--
BBgBarc US Aggregate TR	0.0	2.1	2.5	3.5
eV US Core Fixed Inc Net Median	-0.2	2.1	2.5	4.1
eV US Core Fixed Inc Net Rank	42	66	66	--

Anzld. Std. Deviation	Tracking Error	Information Ratio
Barrow Hanley	Barrow Hanley	Barrow Hanley



Account Information		Fixed Income Characteristics			Fixed Income Characteristics		
Account Name	Barrow Hanley		Portfolio	Index		Portfolio	Index
Account Structure	Separate Account		Q4-18	Q4-18		Q4-18	Q4-18
Investment Style	Active	Fixed Income Characteristics			Credit Quality Allocation		
Inception Date	3/31/10	Yield to Maturity	3.37	3.26	AAA	61.90	72.81
Account Type	US Fixed Income Core	Average Duration	5.82	5.87	AA	4.30	3.59
Benchmark	BBgBarc US Aggregate TR	Average Quality	AA	AA	A	16.30	10.02
Universe	eV US Core Fixed Inc Net	Weighted Average Maturity	7.64	12.93	BBB	17.50	13.59



Vanguard Short-Term Treasury Index Fund

As of December 31, 2018

Description:

The investment seeks to track the performance of a market-weighted government bond index with a short-term dollar-weighted average maturity.

The fund employs an indexing investment approach designed to track the performance of the Bloomberg Barclays US Treasury 1-3 Year Bond Index. This index includes fixed income securities issued by the U.S. Treasury (not including inflation-protected securities), all with maturities between 1 and 3 years. At least 80% of the fund's assets will be invested in bonds included in the index.

Portfolio Fund Information as of December 31, 2018		Top Holdings as of December 31, 2018		Fund Characteristics as of December 31, 2018	
Ticker	VSBIX	UNITED STATES TREASURY NOTES 1.25%	2.50%	Sharpe Ratio (3 Year)	
Morningstar Category	Short Government	UNITED STATES TREASURY NOTES 2.62%	2.38%	Average Duration	1.93
Average Market Cap (\$mm)		UNITED STATES TREASURY NOTES 3.62%	2.34%	Effective Duration	1.93
Net Assets (\$mm)	781.17	UNITED STATES TREASURY NOTES 2.12%	2.13%	Modified Duration	
% Assets in Top 10 Holdings	20.87	UNITED STATES TREASURY NOTES 1.12%	2.06%	Average Coupon	2.02%
Total Number of Holdings	93	UNITED STATES TREASURY NOTES 1.25%	1.98%	Average Effective Maturity	2.00
Manager Name	Joshua C. Barrickman	UNITED STATES TREASURY NOTES 1.62%	1.92%	R-Squared (3 Year)	
Manager Tenure	6	UNITED STATES TREASURY NOTES 2.88%	1.90%	Alpha (3 Year)	
Expense Ratio	0.05%	UNITED STATES TREASURY NOTES 1.38%	1.84%	Beta (3 Year)	
Closed to New Investors	No	UNITED STATES TREASURY NOTES 1.5%	1.83%		

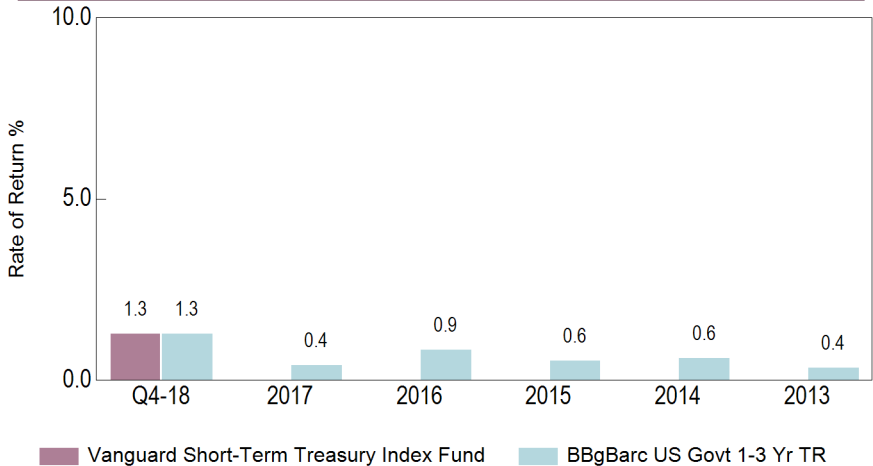
Maturities as of December 31, 2018		Fixed Income Sectors as of December 31, 2018		Credit Quality as of December 31, 2018	
1 to 3 Years	99.71%	GOVERNMENT	99.59%	AAA	100.00%
3 to 5 Years	0.29%	MUNICIPAL	0.00%	AA	0.00%
5 to 7 Years	0.00%	CORPORATE	0.00%	A	0.00%
7 to 10 Years	0.00%	SECURITIZED	0.00%	BBB	0.00%
10 to 15 Years	0.00%	CASH & EQUIVALENTS	0.41%	BB	0.00%
15 to 20 Years	0.00%	DERIVATIVE	0.00%	B	0.00%
20 to 30 Years	0.00%			Below B	0.00%
Greater than 30 Years	0.00%			Not Rated	0.00%



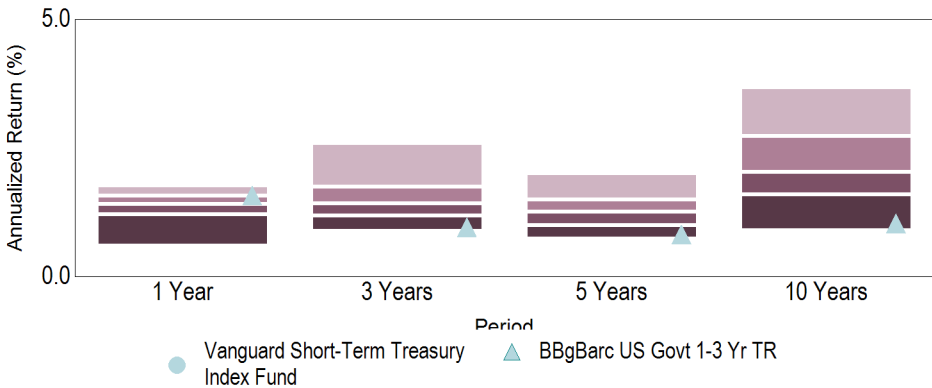
Vanguard Short-Term Treasury Index Fund

As of December 31, 2018

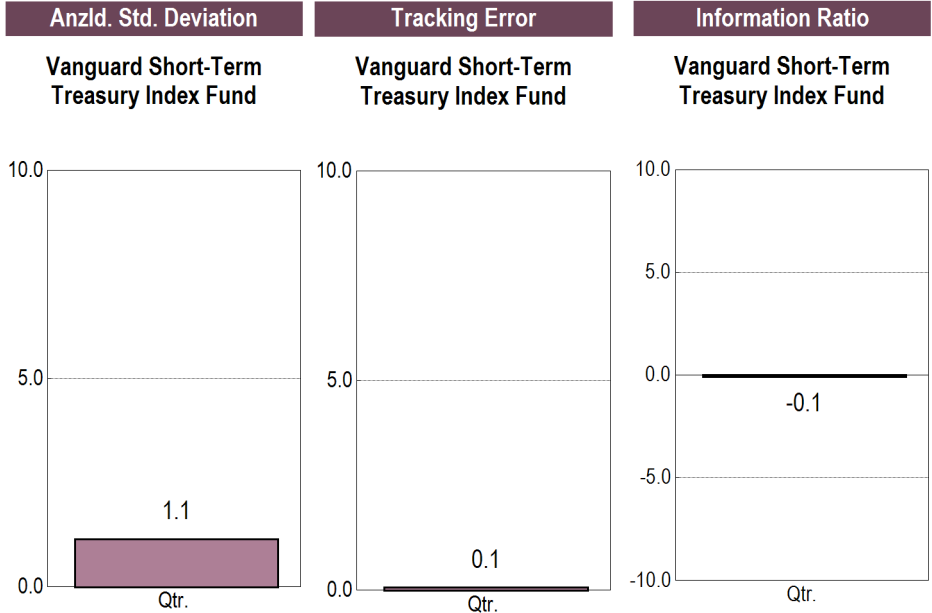
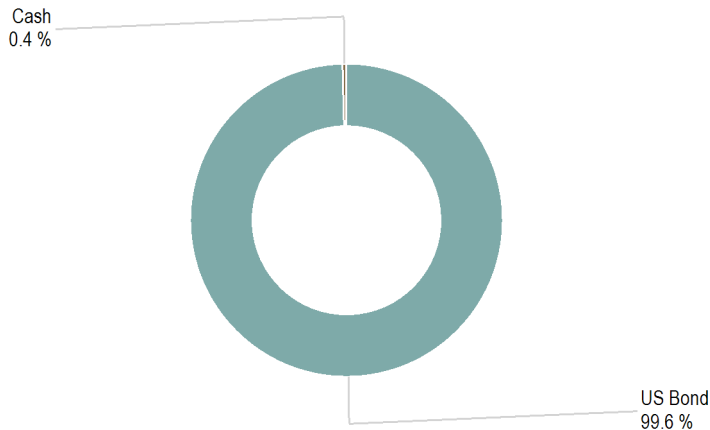
Return Summary



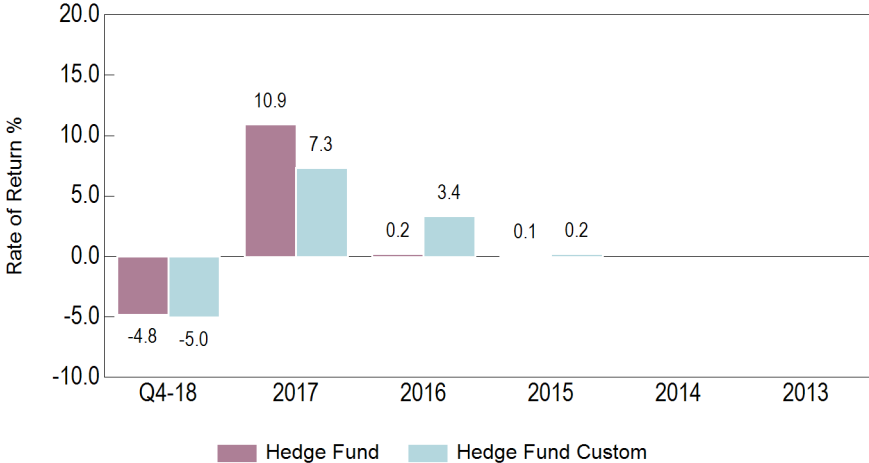
	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Vanguard Short-Term Treasury Index Fund	--	--	--	--
BBgBarc US Govt 1-3 Yr TR	1.6	1.0	0.8	1.0
eV US Short Duration Fixed Inc Net Median	1.4	1.4	1.3	2.0
eV US Short Duration Fixed Inc Net Rank	--	--	--	--



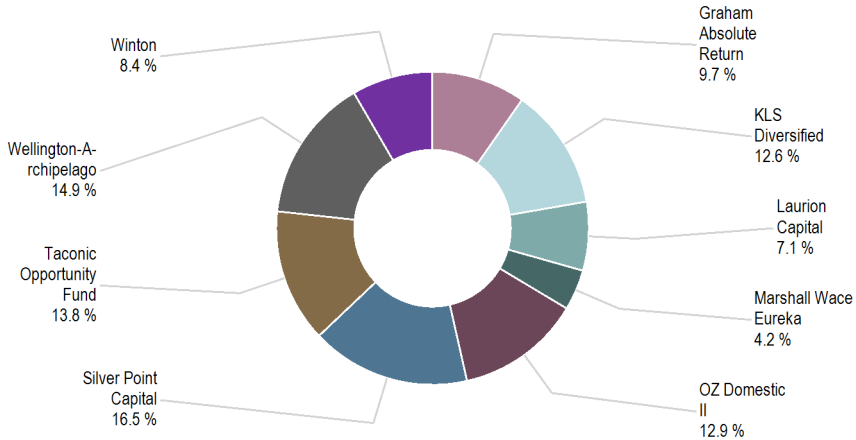
Mutual Fund Allocation as of December 31, 2018



Return Summary

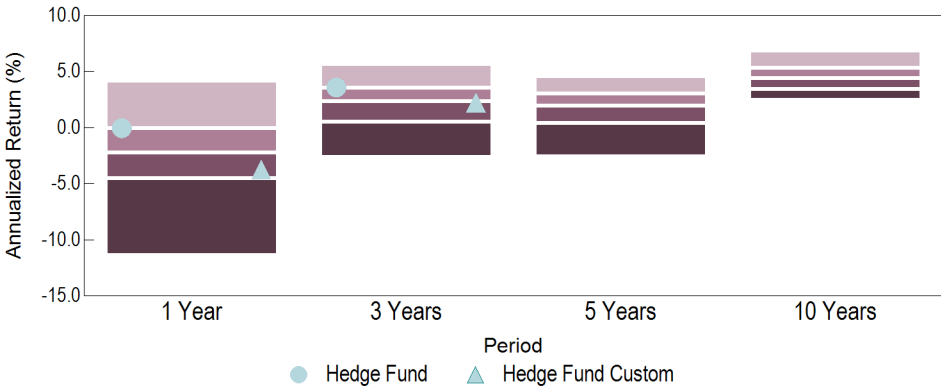
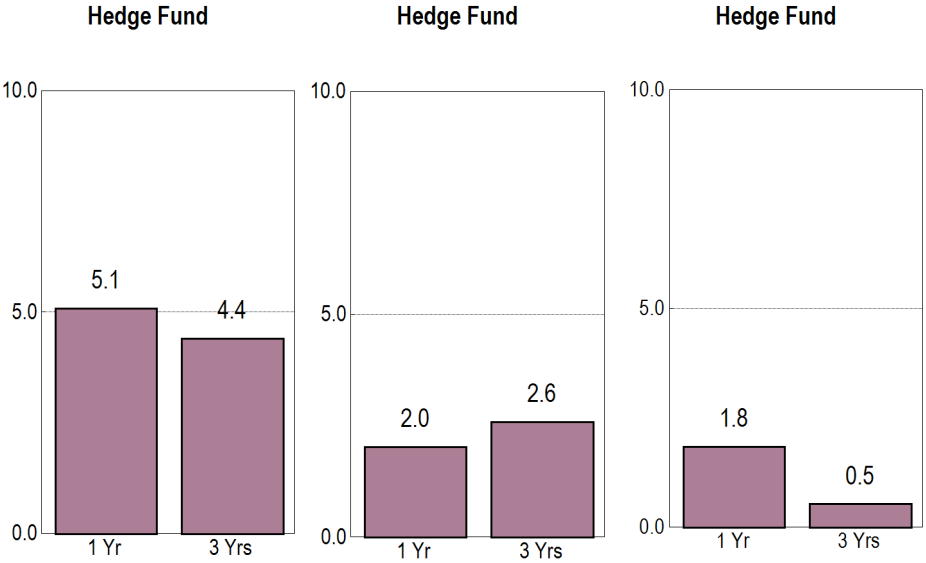


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Hedge Fund	0.0	3.6	--	--
Hedge Fund Custom	-3.8	2.2	--	--
InvestorForce All DB Hedge Funds Net Median	-2.2	2.4	2.0	4.4
InvestorForce All DB Hedge Funds Net Rank	26	26	--	--

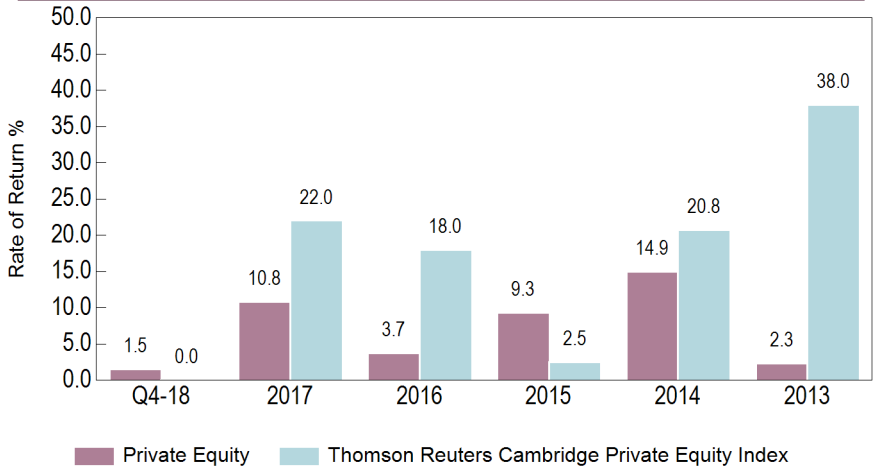
Anzld. Std. Deviation Tracking Error Information Ratio



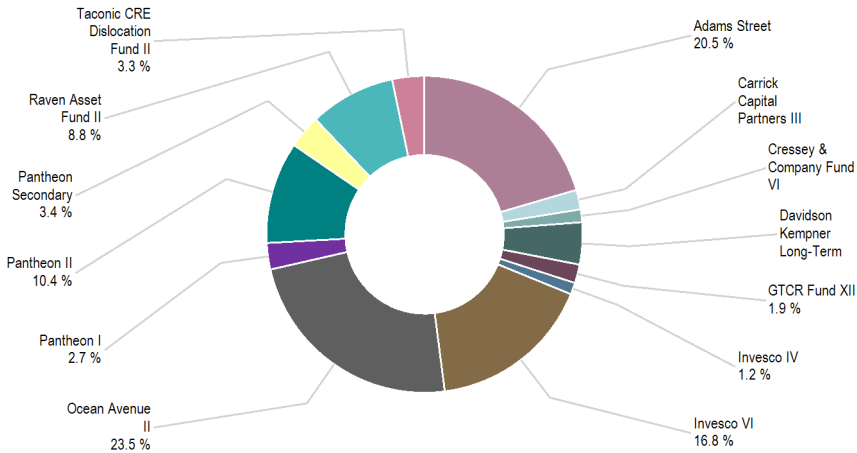
Private Equity

As of December 31, 2018

Return Summary

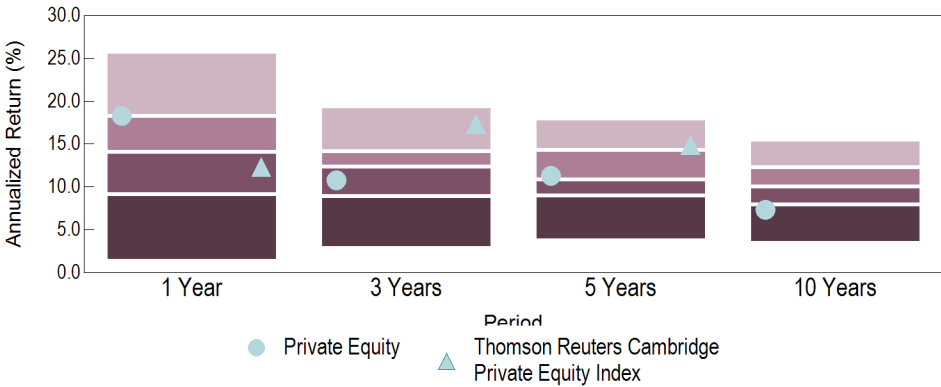
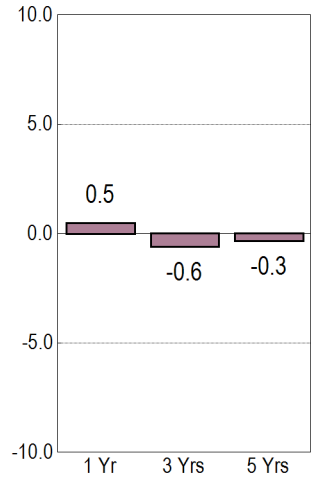
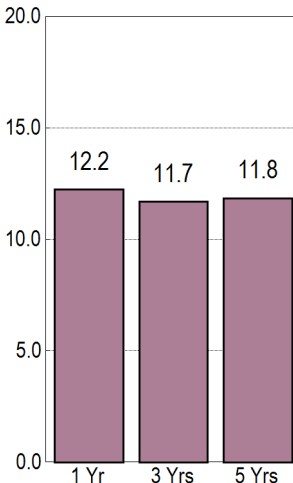
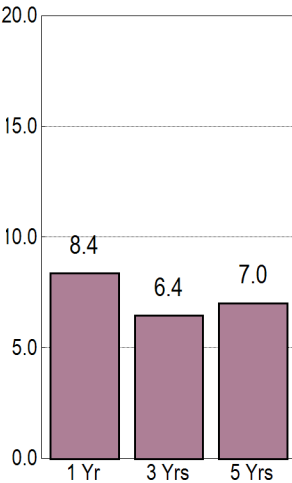


Current Allocation

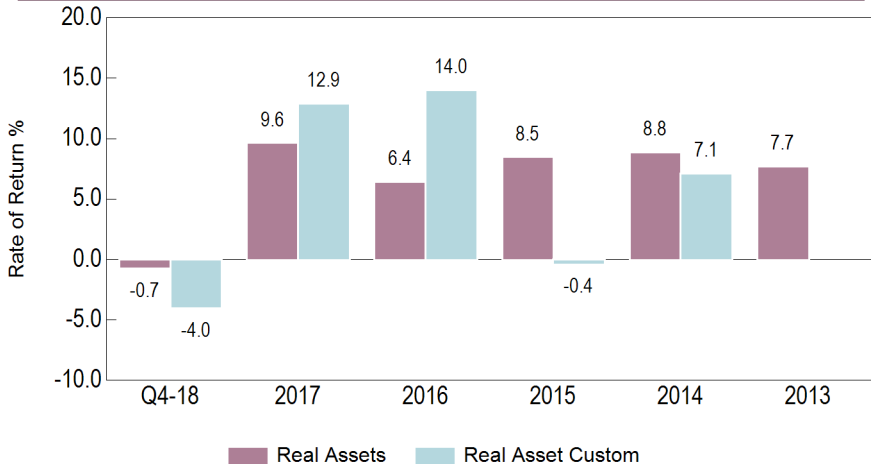


	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Private Equity	18.3	10.8	11.3	7.3
<i>Thomson Reuters Cambridge Private Equity Index</i>	12.3	17.4	14.9	--
<i>InvestorForce All DB Private Eq Net Median</i>	14.2	12.4	10.9	10.1
<i>InvestorForce All DB Private Eq Net Rank</i>	26	58	48	80

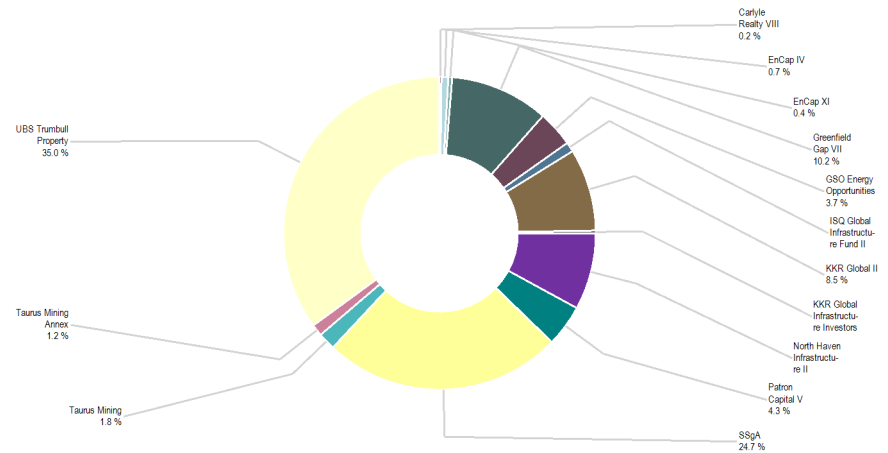
Anzld. Std. Deviation	Tracking Error	Information Ratio
Private Equity	Private Equity	Private Equity



Return Summary

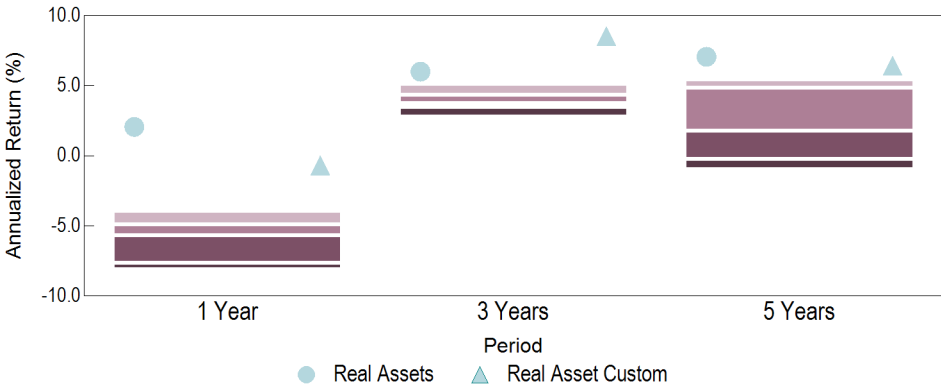
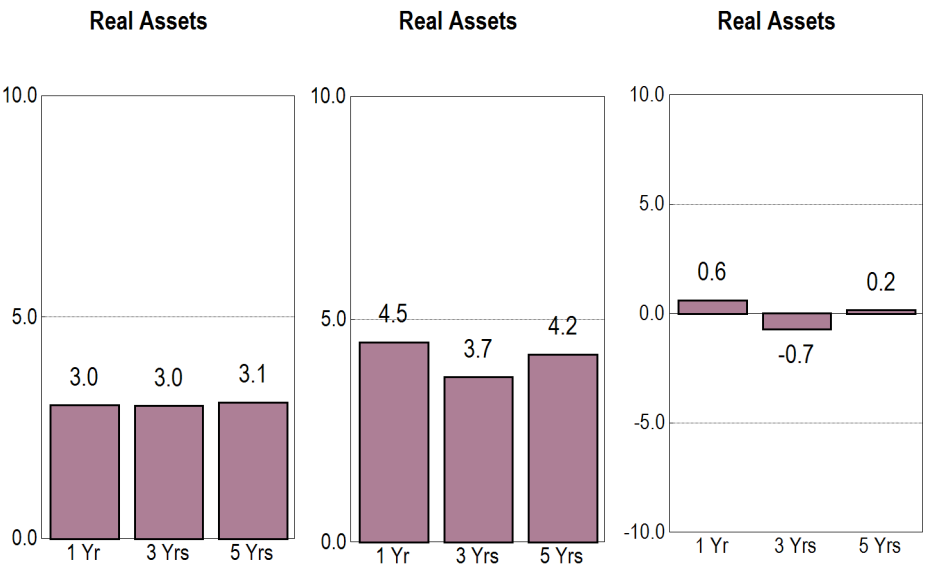


Current Allocation



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Real Assets	2.1	6.0	7.1	--
<i>Real Asset Custom</i>	-0.7	8.5	6.4	--
<i>eV Liquid Real Assets Net Median</i>	-5.6	3.8	1.8	--
<i>eV Liquid Real Assets Net Rank</i>	1	1	1	--

Anzld. Std. Deviation Tracking Error Information Ratio

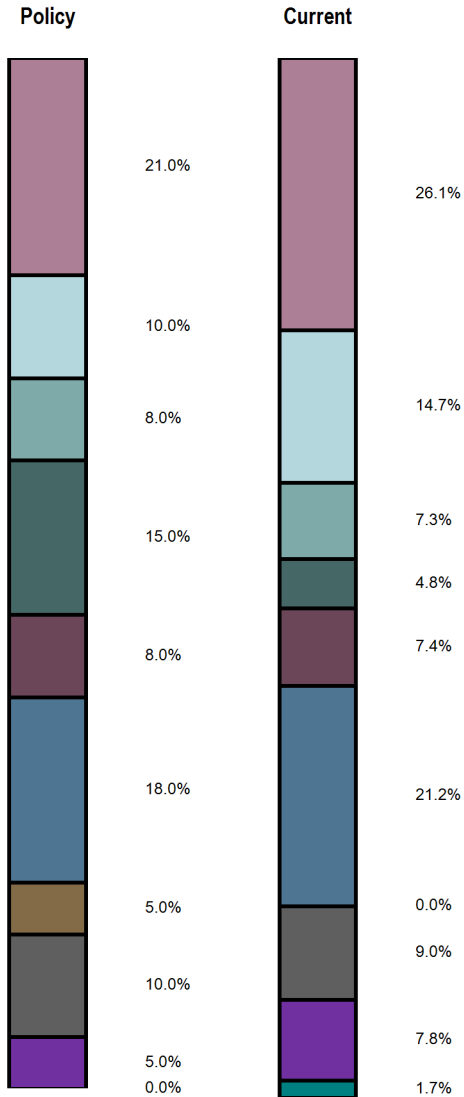


Performance Highlights
As of January 31, 2019

Preliminary Performance Summary for January 2019:

- Global stocks rebounded in January, recovering some of the losses from the tumultuous end to 2018. Improving sentiments with China over the trade war and the Fed signaling a hold on rate increases, helped boost global equities. For the month, the Fund recorded a 4.6% return, which exceeded the policy benchmark by 40 basis points.
- Both U.S. and International Equities within the Fund posted strong returns (+8.9% and +8.2%, respectively) for the month, contributing positively on an absolute basis.
- Despite the markets starting 2018 in a risk-on fashion, the fixed income sleeve was still able to record a positive return (+1.0%) as U.S. Treasury rates fell across the yield curve.

Performance Review
As of January 31, 2019

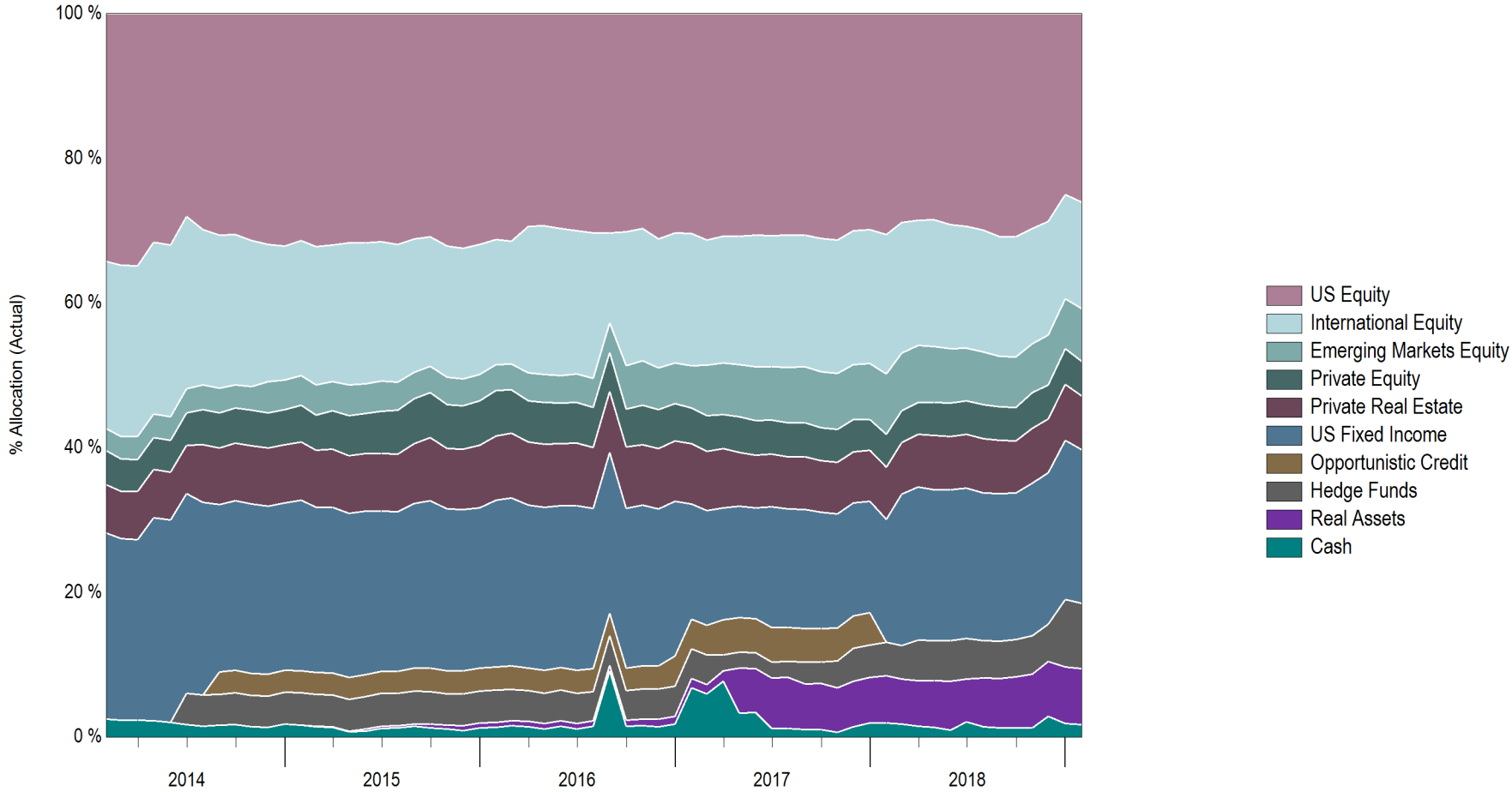


Cash range displayed for illustrative purposes only.

Allocation vs. Targets and Policy							
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?	
US Equity	\$212,245,572	26.1%	21.0%	5.1%	15.0% - 26.0%	No	
International Equity	\$119,490,355	14.7%	10.0%	4.7%	5.0% - 15.0%	Yes	
Emerging Markets Equity	\$59,456,783	7.3%	8.0%	-0.7%	4.0% - 12.0%	Yes	
Private Equity	\$38,804,495	4.8%	15.0%	-10.2%	5.0% - 20.0%	No	
Private Real Estate	\$60,446,256	7.4%	8.0%	-0.6%	6.0% - 10.0%	Yes	
US Fixed Income	\$172,448,126	21.2%	18.0%	3.2%	13.0% - 23.0%	Yes	
Opportunistic Credit	--	--	5.0%	-5.0%	3.0% - 7.0%	No	
Hedge Funds	\$73,346,901	9.0%	10.0%	-1.0%	5.0% - 15.0%	Yes	
Real Assets	\$63,189,921	7.8%	5.0%	2.8%	3.0% - 7.0%	No	
Cash	\$13,739,968	1.7%	0.0%	1.7%	0.0% - 5.0%	Yes	
Total	\$813,168,376	100.0%	100.0%				



Asset Allocation History
5 Years Ending January 31, 2019



As of January 31, 2019

Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund (Net)*	813,168,376	100.0	4.6	-1.0	4.6	-3.2	8.9	6.1	9.6	7.8	Dec-94
Total Fund (Gross)*			4.6	-0.8	4.6	-3.0	9.2	6.5	9.9	8.0	
<i>Policy Index</i>			4.2	-0.8	4.2	-2.5	9.4	6.6	9.5	5.8	Dec-94
Total Fund w/o Alternatives (Net)	563,640,835	69.3	6.1	-1.7	6.1	-5.4	9.4	6.0	--	--	Dec-94
Total Fund w/o Alternatives (Gross)			6.1	-1.6	6.1	-5.2	9.7	6.3	--	--	
<i>Policy Index w/o AI</i>			6.0	-0.6	6.0	-4.0	9.7	6.0	--	--	Dec-94
US Equity (Net)	212,245,572	26.1	8.9	-2.0	8.9	-3.6	14.7	11.0	15.6	9.8	Dec-94
US Equity (Gross)			8.9	-1.8	8.9	-3.3	15.0	11.2	15.8	9.8	
<i>80% R1000 / 20% R2000</i>			9.0	-1.4	9.0	-2.4	14.3	10.1	15.0	9.7	Dec-94
International Equity (Net)	178,947,137	22.0	8.2	-5.0	8.2	-13.1	9.1	2.8	8.8	5.0	Dec-98
International Equity (Gross)			8.2	-4.8	8.2	-12.8	9.6	3.4	9.3	5.2	
<i>International Equity Custom</i>			7.6	-3.6	7.6	-12.3	10.6	3.9	8.4	4.2	Dec-98
US Fixed Income (Net)	172,448,126	21.2	1.0	2.5	1.0	2.1	3.4	2.7	4.5	5.3	Dec-94
US Fixed Income (Gross)			1.0	2.6	1.0	2.3	3.6	2.9	4.9	5.4	
<i>US Fixed Custom</i>			0.9	2.6	0.9	2.4	3.5	2.9	3.9	5.6	Dec-94
Hedge Fund (Net)	73,346,901	9.0	1.6	-2.6	1.6	-1.8	5.1	--	--	3.4	Jun-14
Hedge Fund (Gross)			1.7	-2.5	1.7	-1.5	5.2	--	--	3.5	
<i>Hedge Fund Custom</i>			2.6	-2.3	2.6	-3.6	3.7	--	--	2.3	Jun-14
Private Equity (Net)	38,804,495	4.8	0.0	5.1	0.0	11.8	10.8	9.3	7.3	8.0	Jun-05
Private Equity (Gross)			0.0	5.1	0.0	11.8	10.8	9.3	7.6	8.2	
<i>Thomson Reuters Cambridge Private Equity Index</i>			0.0	3.8	0.0	12.3	14.4	13.9	--	--	Jun-05
Real Assets (Net)	123,636,177	15.2	1.6	2.3	1.6	3.4	6.7	7.5	--	--	Mar-99
Real Assets (Gross)			1.6	2.3	1.6	3.4	6.9	8.2	--	--	
<i>Real Asset Custom</i>			3.5	0.4	3.5	1.4	10.4	7.4	--	--	Mar-99

Data prior to March 2018 provided by prior consultant



As of January 31, 2019

	Market Value (\$)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Real Estate (Net)	60,446,256	7.4	0.0	3.3	0.0	5.2	7.4	8.0	--	--	Mar-99
Private Real Estate (Gross)			0.0	3.3	0.0	5.2	7.6	8.8	7.7	8.7	
<i>NCREIF ODCE (net)</i>			<i>0.0</i>	<i>3.4</i>	<i>0.0</i>	<i>7.4</i>	<i>7.3</i>	<i>9.4</i>	<i>6.0</i>	<i>7.5</i>	<i>Mar-99</i>
Private Infrastructure (Net)	21,516,152	2.6	0.0	4.2	0.0	5.8	9.7	--	--	6.7	Dec-14
Private Infrastructure (Gross)			0.0	4.2	0.0	5.8	9.7	--	--	6.7	
<i>S&P Global Infrastructure Net TR USD</i>			<i>8.7</i>	<i>1.0</i>	<i>8.7</i>	<i>-3.7</i>	<i>9.2</i>	<i>5.1</i>	<i>--</i>	<i>3.2</i>	<i>Dec-14</i>
Private Natural Resources (Net)	9,623,144	1.2	0.0	6.6	0.0	8.7	20.8	--	--	17.9	Sep-15
Private Natural Resources (Gross)			0.0	6.6	0.0	8.7	20.8	--	--	17.9	
<i>S&P Global Natural Resources Index TR USD</i>			<i>9.6</i>	<i>-7.6</i>	<i>9.6</i>	<i>-8.9</i>	<i>18.7</i>	<i>2.5</i>	<i>4.6</i>	<i>14.4</i>	<i>Sep-15</i>
Cash (Net)	13,739,968	1.7	0.1	0.6	0.1	0.9	--	--	--	--	
Cash (Gross)			0.1	0.6	0.1	0.9	--	--	--	--	

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

As of January 31, 2019

Trailing Net Performance

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund(Net)*	813,168,376	100.0	--	4.6	-1.0	-3.2	8.9	6.1	9.6	7.8	Dec-94
<i>Policy Index</i>				4.2	-0.8	-2.5	9.4	6.6	9.5	5.8	Dec-94
Total Fund w/o Alternatives(Net)	563,640,835	69.3	69.3	6.1	-1.7	-5.4	9.4	6.0	--	--	Dec-94
<i>Policy Index w/o AI</i>				6.0	-0.6	-4.0	9.7	6.0	--	--	Dec-94
US Equity(Net)	212,245,572	26.1	37.7	8.9	-2.0	-3.6	14.7	11.0	15.6	9.8	Dec-94
<i>80% R1000 / 20% R2000</i>				9.0	-1.4	-2.4	14.3	10.1	15.0	9.7	Dec-94
Mellon Dynamic US Equity(Net)	76,220,461	9.4	35.9	8.9	-0.3	-4.4	15.8	13.2	--	16.1	Dec-12
<i>S&P 500</i>				8.0	0.6	-2.3	14.0	11.0	15.0	13.4	Dec-12
Mellon Large Cap(Net)	101,767,952	12.5	47.9	8.4	-0.2	-2.7	--	--	--	12.1	Mar-16
<i>Russell 1000</i>				8.4	0.3	-2.2	14.1	10.7	15.2	12.3	Mar-16
DFA Small Cap(Net)	17,219,764	2.1	8.1	10.1	-8.3	-5.0	12.9	--	--	6.7	Jun-14
<i>Russell 2000</i>				11.2	-8.0	-3.5	14.7	7.3	14.5	6.6	Jun-14
PanAgora(Net)	17,037,396	2.1	8.0	10.5	-11.5	-4.1	12.9	7.6	--	8.4	Sep-13
<i>Russell 2000</i>				11.2	-8.0	-3.5	14.7	7.3	14.5	7.9	Sep-13
International Equity(Net)	178,947,137	22.0	31.7	8.2	-5.0	-13.1	9.1	2.8	8.8	5.0	Dec-98
<i>International Equity Custom</i>				7.6	-3.6	-12.3	10.6	3.9	8.4	4.2	Dec-98
Copper Rock(Net)	19,886,095	2.4	11.1	9.1	-13.1	-19.7	3.3	2.7	--	3.7	Sep-13
<i>MSCI World ex USA Small Cap</i>				8.5	-9.8	-15.1	9.6	4.3	11.6	4.7	Sep-13
Mellon International(Net)	99,604,259	12.2	55.7	6.6	-5.5	-12.2	--	--	--	6.9	Mar-16
<i>MSCI EAFE</i>				6.6	-5.5	-12.5	7.7	2.7	8.1	6.5	Mar-16
Wells Capital(Net)	59,456,783	7.3	33.2	10.7	-1.4	-12.7	14.7	5.4	--	2.8	Mar-12
<i>MSCI Emerging Markets</i>				8.8	-0.5	-14.2	14.9	4.8	9.7	2.6	Mar-12

Historical returns for the US Equity Composite prior to January 2012 and for the International Equity Composite prior to December 2010 are gross only.



As of January 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
US Fixed Income(Net)	172,448,126	21.2	30.6	1.0	2.5	2.1	3.4	2.7	4.5	5.3	Dec-94
<i>US Fixed Custom</i>				0.9	2.6	2.4	3.5	2.9	3.9	5.6	Dec-94
Barrow Hanley(Net)	135,179,627	16.6	78.4	1.1	2.7	2.3	2.0	2.4	--	3.2	Mar-10
<i>BBgBarc US Aggregate TR</i>				1.1	2.7	2.3	2.0	2.4	3.7	3.2	Mar-10
Vanguard Short-Term Treasury Index Fund(Net)	37,268,499	4.6	21.6	0.2	1.7	--	--	--	--	2.2	Feb-18
<i>BBgBarc US Govt 1-3 Yr TR</i>				0.3	1.8	2.2	0.8	0.8	1.1	2.2	Feb-18
Hedge Fund(Net)	73,346,901	9.0	9.0	1.6	-2.6	-1.8	5.1	--	--	3.4	Jun-14
<i>Hedge Fund Custom</i>				2.6	-2.3	-3.6	3.7	--	--	2.3	Jun-14
OZ Domestic II(Net)	9,646,203	1.2	13.2	3.9	-2.7	-1.9	6.8	--	--	4.9	Jun-14
Graham Absolute Return(Net)	7,233,928	0.9	9.9	3.3	-1.1	-2.3	--	--	--	2.2	Aug-17
Wellington-Archipelago(Net)	11,272,073	1.4	15.4	4.6	-2.2	-1.0	--	--	--	2.5	Aug-17
KLS Diversified(Net)	9,207,185	1.1	12.6	1.4	-1.6	1.5	--	--	--	2.5	Oct-17
Winton(Net)	5,912,575	0.7	8.1	-2.4	-4.2	-7.1	--	--	--	-0.4	Oct-17
Marshall Wace Eureka(Net)	3,062,842	0.4	4.2	1.6	-4.1	-2.7	--	--	--	1.5	Nov-17
Silver Point Capital(Net)	11,943,126	1.5	16.3	0.4	-4.2	-2.2	--	--	--	-0.1	Nov-17
<i>HFRI Fund of Funds Composite Index</i>				2.6	-2.3	-3.8	3.1	2.0	3.3	-0.6	Nov-17
Laurion Capital(Net)	5,074,480	0.6	6.9	-0.7	--	--	--	--	--	2.4	Aug-18
Taconic Opportunity Fund(Net)	9,994,488	1.2	13.6	0.3	--	--	--	--	--	--	Dec-18

Historical returns for the US Fixed Income Composite prior to December 2010 and for Barrow Hanley prior to June 2010 are gross only.



As of January 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Equity(Net)	38,804,495	4.8	4.8	0.0	5.1	11.8	10.8	9.3	7.3	8.0	Jun-05
<i>Thomson Reuters Cambridge Private Equity Index</i>				0.0	3.8	12.3	14.4	13.9	--	--	Jun-05
Adams Street(Net)	7,860,903	1.0	20.3	0.0	8.8	12.5	12.3	12.4	9.7	7.1	Sep-05
Invesco IV(Net)	474,703	0.1	1.2	0.0	-19.1	-16.1	5.7	7.1	7.4	8.3	Jun-05
Invesco VI(Net)	6,439,663	0.8	16.6	0.0	5.3	10.4	11.8	13.3	--	12.3	Jun-13
Ocean Avenue II(Net)	8,724,231	1.1	22.5	0.0	5.4	22.9	19.0	--	--	11.1	Jun-14
Pantheon I(Net)	1,019,139	0.1	2.6	0.0	3.9	7.0	6.7	5.4	5.0	3.7	Dec-05
Pantheon II(Net)	4,008,282	0.5	10.3	0.0	7.4	12.2	13.1	10.9	--	11.6	Dec-11
Pantheon Secondary(Net)	1,313,060	0.2	3.4	0.0	18.3	15.3	6.4	4.2	1.2	4.2	Jun-07
Raven Asset Fund II(Net)	3,385,915	0.4	8.7	0.0	4.0	5.9	-0.2	--	--	-1.9	Aug-14
Davidson Kempner Long-Term Distressed Opportunities Fund IV(Net)	2,039,602	0.3	5.3	0.0	12.0	--	--	--	--	12.8	Apr-18
GTCR Fund XII(Net)	1,026,416	0.1	2.6	0.0	0.0	--	--	--	--	0.0	Jun-18
Carrick Capital Partners III(Net)	762,581	0.1	2.0	0.0	--	--	--	--	--	-4.8	Aug-18
Taconic CRE Dislocation Fund II(Net)	1,250,000	0.2	3.2	0.0	--	--	--	--	--	0.0	Nov-18

All private markets performance and market values reflect a 9/30/2018 capital account balance unless otherwise noted.

The market values for the following funds reflect a 6/30/2018 capital account balance: Pantheon I and Pantheon II.

Adams Street includes Adams Street 2005, Adams Street 2007, and Adams Street 2011.

Historical returns for Invesco IV prior to April 2012 are gross only.

Pantheon I includes Pantheon US Fund VI and Pantheon Europe Fund IV.

Pantheon II includes Pantheon US Fund IX, Pantheon Asia Fund VI, and Pantheon Europe Fund VII.

Pantheon Secondary includes Pantheon GLO SEC III B.



As of January 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Cressey & Company Fund VI(Net)	500,000	0.1	1.3	0.0	--	--	--	--	--	0.0	Jan-19
Real Assets(Net)	123,636,177	15.2	15.2	1.6	2.3	3.4	6.7	7.5	--	--	Mar-99
Real Asset Custom				3.5	0.4	1.4	10.4	7.4	--	--	Mar-99
SSgA(Net)	32,050,625	3.9	25.9	6.4	-1.9	-2.4	--	--	--	3.4	Apr-17
Real Asset Custom				3.5	0.4	1.4	10.4	7.4	--	6.8	Apr-17
Private Real Estate(Net)	60,446,256	7.4	48.9	0.0	3.3	5.2	7.4	8.0	--	--	Mar-99
NCREIF ODCE (net)				0.0	3.4	7.4	7.3	9.4	6.0	7.5	Mar-99
Greenfield Gap VII(Net)	12,386,436	1.5	20.5	0.0	5.2	5.9	11.1	--	--	12.6	Dec-14
Patron Capital V(Net)	5,405,552	0.7	8.9	0.0	0.9	7.4	15.1	--	--	15.1	Jan-16
UBS Trumbull Property(Net)	42,214,117	5.2	69.8	0.0	3.2	4.9	5.2	7.5	5.5	7.3	Mar-99
Carlyle Realty VIII(Net)	440,151	0.1	0.7	0.0	-23.9	-23.9	--	--	--	-41.9	Dec-17
NCREIF-ODCE				0.0	3.9	8.3	8.2	10.4	7.0	7.7	Dec-17
Private Infrastructure(Net)	21,516,152	2.6	17.4	0.0	4.2	5.8	9.7	--	--	6.7	Dec-14
S&P Global Infrastructure Net TR USD				8.7	1.0	-3.7	9.2	5.1	--	3.2	Dec-14
KKR Global II(Net)	10,298,330	1.3	47.9	0.0	6.0	7.7	9.1	--	--	10.3	Dec-14
North Haven Infrastructure II(Net)	9,619,275	1.2	44.7	0.0	4.6	6.0	11.9	--	--	6.3	May-15
ISQ Global Infrastructure Fund II(Net)	1,252,108	0.2	5.8	0.0	-31.9	--	--	--	--	-31.9	Jul-18
DJ Brookfield Global Infrastructure Net TR USD				9.4	2.1	0.8	9.7	5.6	12.2	2.1	Jul-18
KKR Global Infrastructure Investors III(Net)	346,439	0.0	1.6	0.0	--	--	--	--	--	0.0	Jan-19
Private Natural Resources(Net)	9,623,144	1.2	7.8	0.0	6.6	8.7	20.8	--	--	17.9	Sep-15
S&P Global Natural Resources Index TR USD				9.6	-7.6	-8.9	18.7	2.5	4.6	14.4	Sep-15
EnCap XI(Net)	583,370	0.1	6.1	0.0	-9.9	-15.3	--	--	--	-36.1	Jul-17

As of January 31, 2019

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
EnCap IV(Net)	822,852	0.1	8.6	0.0	-9.6	--	--	--	--	-17.0	Feb-18
GSO Energy Opportunities(Net)	4,504,791	0.6	46.8	0.0	5.0	7.4	20.3	--	--	18.4	Nov-15
Taurus Mining(Net)	2,223,173	0.3	23.1	0.0	9.7	13.2	20.2	--	--	17.4	Sep-15
Taurus Mining Annex(Net)	1,488,958	0.2	15.5	0.0	15.3	19.5	--	--	--	29.7	Jan-17
Cash(Net)	13,739,968	1.7	1.7	0.1	0.6	0.9	--	--	--	--	
Cash(Net)	7,577,352	0.9	55.1	0.2	1.0	1.3	1.1	0.8	--	--	Sep-03
Treasury Cash(Net)	6,162,616	0.8	44.9								

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

Benchmark History

As of January 31, 2019

Total Fund		
1/1/2019	Present	21% US Equity Custom / 18% International Equity Custom / 23% US Fixed Custom / 10% Hedge Fund Custom / 15% Thomson Reuters Cambridge Private Equity Index / 13% Real Asset Custom
1/1/2017	12/31/2018	27% US Equity Custom / 23% International Equity Custom / 22% US Fixed Custom / 5% Hedge Fund Custom / 9% Thomson Reuters Cambridge Private Equity Index / 14% Real Asset Custom
7/1/2014	12/31/2016	22.7% Russell 1000 / 5.7% Russell 2000 / 23.6% International Equity Custom / 28.5% US Fixed Custom / 4.5% Hedge Fund Custom / 8% NCREIF ODCE (net) / 7% Cambridge Assoc. U.S. Private Equity Index
US Equity		
12/31/1994	Present	80% Russell 1000 / 20% Russell 2000
International Equity		
1/1/2019	Present	56% MSCI EAFE Gross / 44% MSCI Emerging Markets Gross
1/1/2017	12/31/2018	69.56% MSCI EAFE Gross / 30.44% MSCI Emerging Markets Gross
7/1/2013	12/31/2016	MSCI ACWI ex USA Gross
US Fixed Income		
3/1/2018	Present	77.27% BBgBarc US Aggregate TR / 22.73% BBgBarc US Govt 1-5 Yr TR
1/1/2017	2/28/2018	77.27% BBgBarc US Aggregate TR / 22.73% Credit Suisse Leveraged Loans
8/1/2014	12/31/2016	71.93% BBgBarc US Aggregate TR / 17.54% ICE BofAML US High Yield TR / 10.53% Credit Suisse Leveraged Loans
Hedge Fund		
7/1/2017	Present	100% HFRI Fund of Funds Composite Index
1/1/2015	6/30/2017	50% HFRI Fund of Funds Composite Index / 50% HFRI RV: Multi-Strategy Index
Real Assets		
1/1/2019	Present	62% NCREIF ODCE (net) / 19% S&P Global Natural Resources Index TR USD / 19% S&P Global Infrastructure TR USD
6/1/2013	12/31/2018	57.14% NCREIF ODCE (net) / 21.43% S&P Global Natural Resources Index TR USD / 21.43% S&P Global Infrastructure TR USD

As of January 31, 2019

Annual Investment Expense Analysis

As Of January 31, 2019

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Total Fund w/o Alternatives		\$563,640,835		
US Equity		\$212,245,572		
Mellon Dynamic US Equity	0.30% of Assets	\$76,220,461	\$228,661	0.30%
Mellon Large Cap	0.04% of First 100.0 Mil, 0.02% Thereafter	\$101,767,952	\$40,354	0.04%
DFA Small Cap	0.35% of Assets	\$17,219,764	\$60,269	0.35%
PanAgora	0.80% of Assets	\$17,037,396	\$136,299	0.80%
International Equity		\$178,947,137		
Copper Rock	0.85% of Assets	\$19,886,095	\$169,032	0.85%
Mellon International	0.04% of Assets	\$99,604,259	\$39,842	0.04%
Wells Capital	0.90% of First 100.0 Mil, 0.85% Thereafter	\$59,456,783	\$535,111	0.90%
US Fixed Income		\$172,448,126		
Barrow Hanley	0.30% of First 50.0 Mil, 0.20% of Next 100.0 Mil, 0.15% Thereafter	\$135,179,627	\$320,359	0.24%
Vanguard Short-Term Treasury Index Fund	0.05% of Assets	\$37,268,499	\$18,634	0.05%
Hedge Fund		\$73,346,901		
OZ Domestic II	Performance-based 1.50 and 20.00	\$9,646,203	\$215,440	2.23%
Graham Absolute Return	Performance-based 1.75 and 20.00	\$7,233,928	\$177,621	2.46%
Wellington-Archipelago	Performance-based 1.00 and 20.00	\$11,272,073	\$219,193	1.94%
KLS Diversified	Performance-based 2.00 and 20.00	\$9,207,185	\$210,129	2.28%
Winton	Performance-based 0.90 and 20.00	\$5,912,575	\$53,213	0.90%
Marshall Wace Eureka	Performance-based 2.00 and 20.00	\$3,062,842	\$71,174	2.32%
Silver Point Capital	Performance-based 2.00 and 20.00	\$11,943,126	\$249,447	2.09%
Laurion Capital		\$5,074,480		
Taconic Opportunity Fund		\$9,994,488		

As of January 31, 2019

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Invesco IV		\$474,703		
Invesco VI		\$6,439,663		
Ocean Avenue II		\$8,724,231		
Pantheon I		\$1,019,139		
Pantheon II		\$4,008,282		
Pantheon Secondary		\$1,313,060		
Raven Asset Fund II		\$3,385,915		
Davidson Kempner Long-Term Distressed Opportunities Fund IV		\$2,039,602		
GTCR Fund XII		\$1,026,416		
Carrick Capital Partners III		\$762,581		
Taconic CRE Dislocation Fund II		\$1,250,000		
Cressey & Company Fund VI		\$500,000		
Real Assets		\$123,636,177		
SSgA	0.30% of First 50.0 Mil, 0.27% of Next 50.0 Mil, 0.25% Thereafter	\$32,050,625	\$96,152	0.30%
Private Real Estate		\$60,446,256		
Greenfield Gap VII		\$12,386,436		
Patron Capital V		\$5,405,552		
UBS Trumbull Property		\$42,214,117		
Carlyle Realty VIII		\$440,151		
Private Infrastructure		\$21,516,152		
KKR Global II		\$10,298,330		

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
North Haven Infrastructure II		\$9,619,275		
ISQ Global Infrastructure Fund II		\$1,252,108		
KKR Global Infrastructure Investors III		\$346,439		
Private Natural Resources		\$9,623,144		
EnCap XI		\$583,370		
EnCap IV		\$822,852		
GSO Energy Opportunities		\$4,504,791		
Taurus Mining		\$2,223,173		
Taurus Mining Annex		\$1,488,958		
Cash		\$13,739,968		
Cash		\$7,577,352		
Treasury Cash		\$6,162,616		



Emerging Market Equity

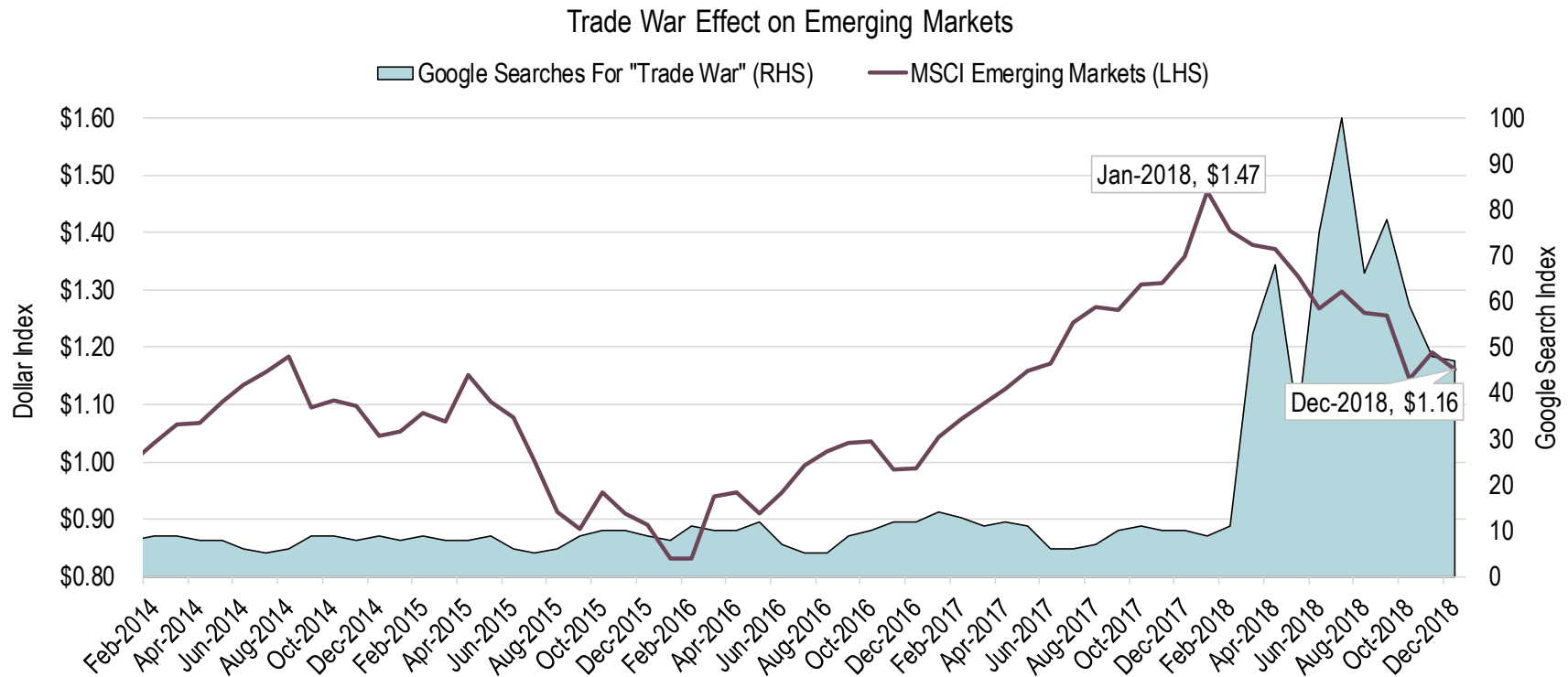
Emerging Market Equity – What Happened?

- Emerging Market Equity fell by 14.6% in 2018¹.
- What happened?
 - As always in financial markets, it was a combination of factors.
- The major contributors were:
 - Trade War Threats
 - Declining Chinese Growth
 - The Return of Market Volatility

¹ Proxied by the MSCI Emerging Markets Index.



Trade War



- As a proxy, we show an index of Google searches for the term “Trade War¹”.
 - Trade wars are very rare events, but this certainly had a negative impact for EM Equity.

¹ <https://trends.google.com/trends/explore?date=all&q=trade%20war>.

Why Trade Wars Matter

- Because of political frictions around trade, the International Monetary Fund (IMF) has lowered its growth projections in the World Economic Outlook.
 - The reduction for global growth was 20 basis points, from 3.7% to 3.5%.
- Future growth expectations are especially important for equities because equities represent investment in future earnings.
 - Therefore, if future earnings are expected to fall, the value of equities is lower.
- Trade is especially important to emerging markets.
 - For many of the largest economies in this group (e.g., China, India, Russia), the percent of GDP driven by trade is roughly double that of the U.S.¹

¹ <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?end=2017&locations=CN-BR-IN-RU-US&start=1994>.

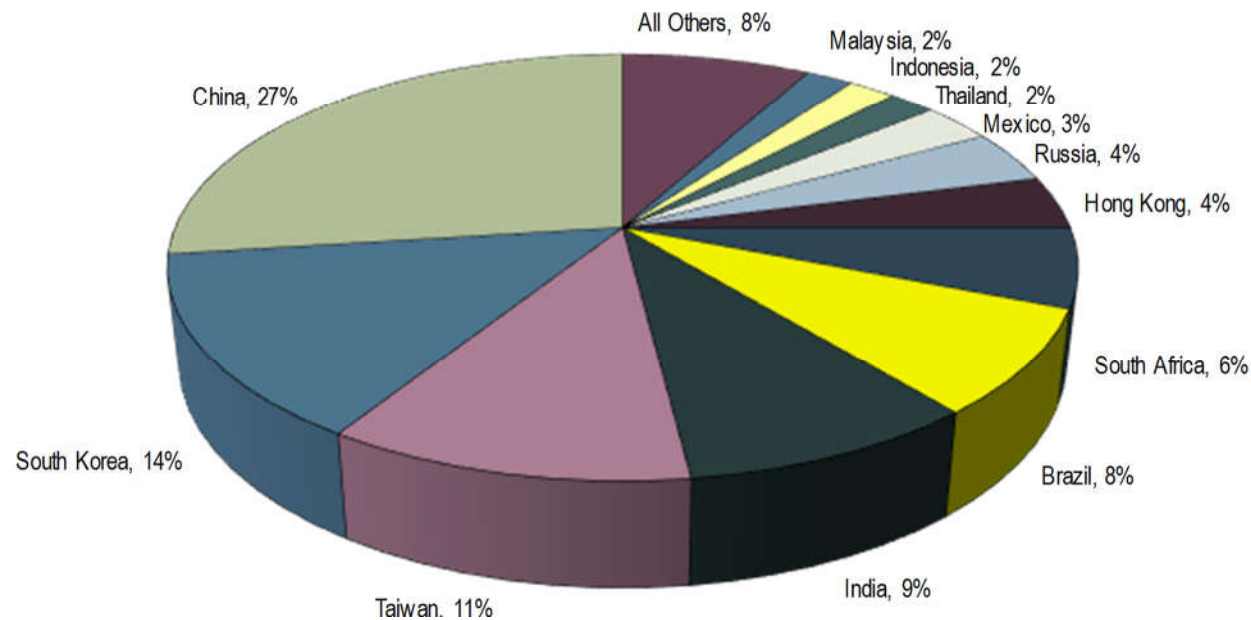
Falling Chinese Growth



- China is undoubtedly the most important economy in the Emerging Market asset class.
 - In 2018 specifically, as part of a longer-term trend, growth in China continued to slow.

China is the Largest Member of EM

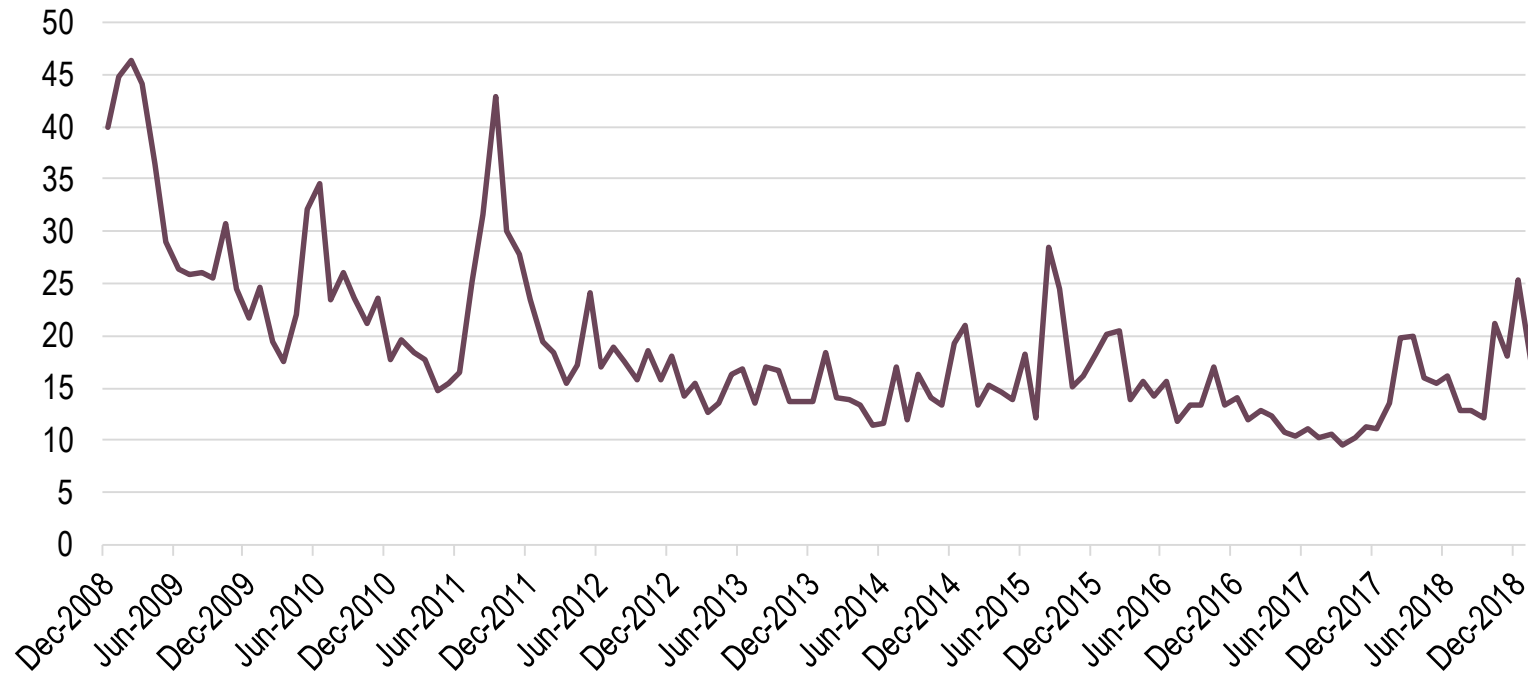
MSCI Emerging Markets By Country Weight



- Measuring the Market Capitalization of the MSCI Emerging Market Index shows China is by far the largest member.
 - As a result, falling growth in China has an outsized impact on this index.

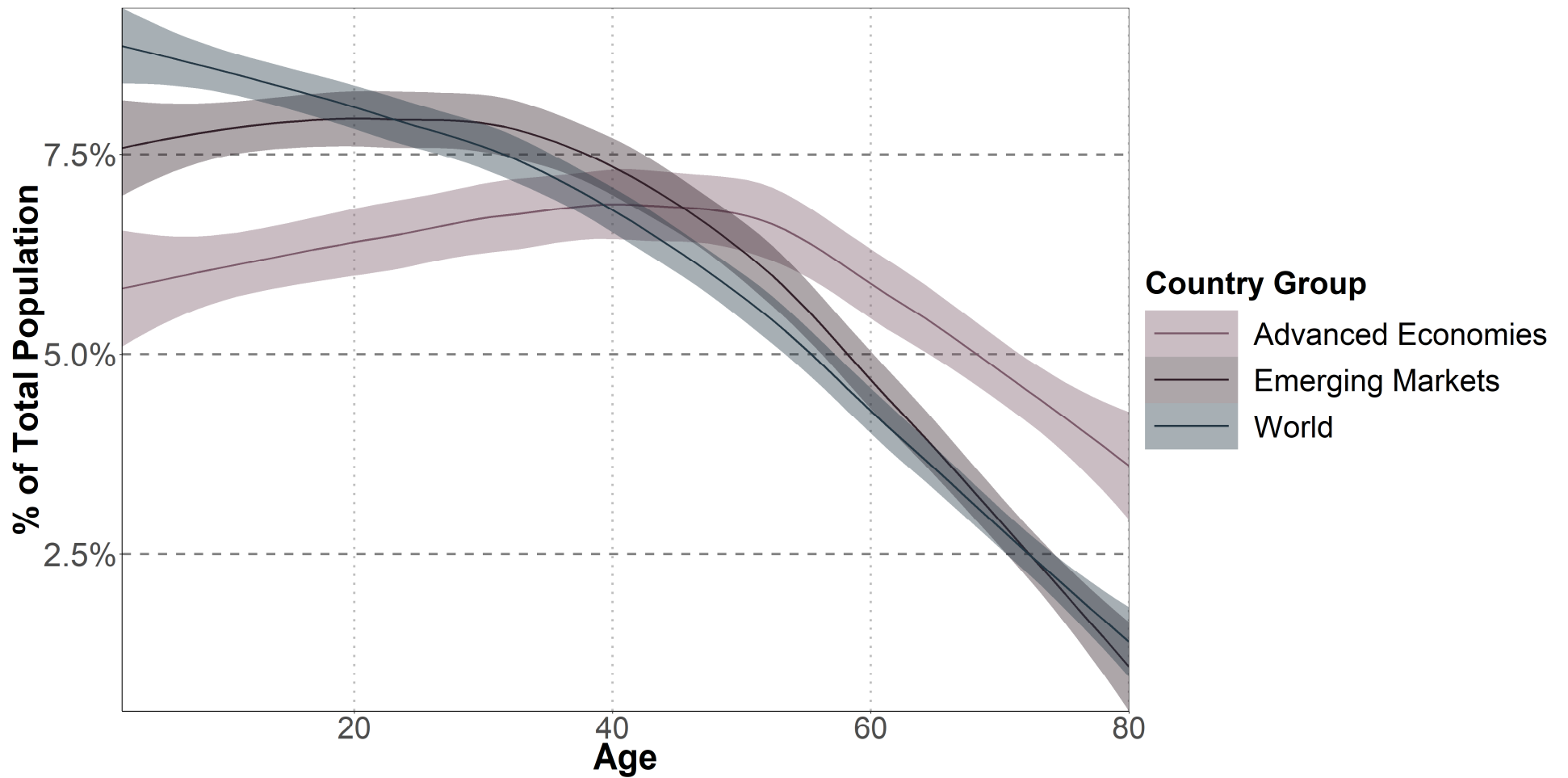
Return of Volatility

CBOE SPX VOLATILITY INDEX



- Another reason for underperformance of the asset class was volatility.
- As shown by the VIX index, 2018 saw a strong resurgence in market volatility.
 - While the VIX measures U.S. equity volatility, all geographies' equities experienced higher volatility.

The Case for EM Equity: Demographics Still Favorable



- While the entire world is aging, emerging markets are still younger than the developed markets.

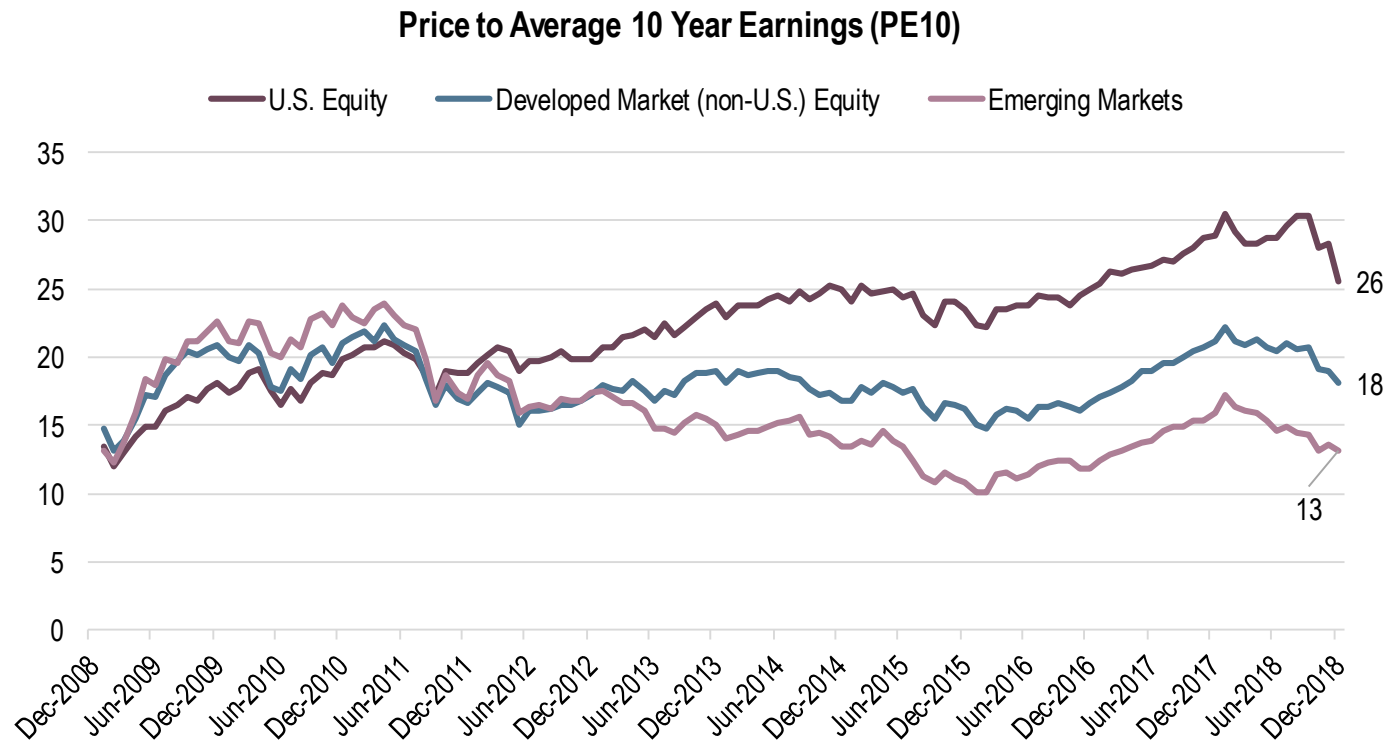
The Case for EM Equity: Low Debt

MSCI Region	Average Debt Burden ¹ (% of GDP)
United States	71
Developed Markets ex. U.S.	82
Emerging Markets	48

- The debt burden is also lower for these economies.
- This means that the ‘drag’ on the economy from required debt payments is low.

¹ This measure uses public debt less repayments. Data from CIA world fact book 2014 data.

The Case for EM Equity: Lower Price



- This ratio is the price multiple paid for average earnings.
- Indicates future expected earnings from Emerging Markets companies are less expensive.

Conclusions

- Emerging markets had a disappointing year in 2018.
 - A number of factors combined to cause this, of which some of the most important were:
 - The initiation of a trade war – where EM gets more growth
 - Declining Chinese growth – which is the largest component of EM
 - Return of market volatility – which tends to impact EM more than other assets
- The future for emerging markets is still strong.
 - Demographics are still more favorable.
 - Emerging markets have relatively low debt.
 - They also have lower valuations.
- The outlook for the asset class remains strong but its trajectory will likely continue to include such volatile years in the future.

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS QUARTERLY REPORT FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION.

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

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

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

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

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

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

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

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

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

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

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

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

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

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

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

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

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

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

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

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

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

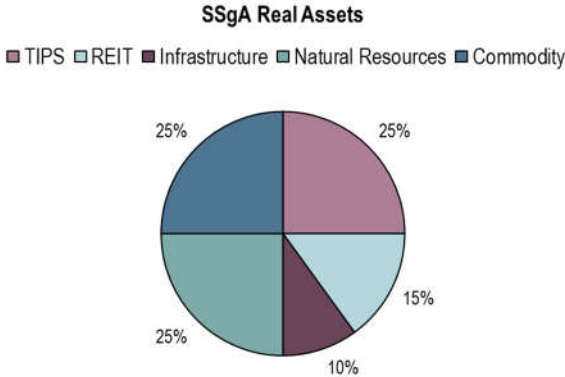
Values shown are in millions of dollars, unless noted otherwise.



Merced County Employees' Retirement Association
SSgA Real Asset Strategy Review

Introduction

- At the last Board meeting, the Investment Committee members expressed some concern about the approximately \$32 million dollars in the SSgA Real Asset Commingled Fund. There was some discussion around how it came into the portfolio and then how large the exposure had become. It was first introduced into the portfolio in April 2017 as a recommendation from the previous consultant, likely to act as a source for future Real Asset calls.
- As a reminder, the SSgA Real Asset Fund seeks to approximate the performance of a composite of indexes: 25% Bloomberg Roll Select Commodity IndexSM, 25% S&P® Global Large mid cap Commodity And Resources Index, 10% S&P Global Infrastructure Index, 15% Dow Jones U.S. Select Reit IndexSM, 25% Bloomberg Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index.



- In this document, we review the characteristics of the SSgA Real Assets Fund to help address two related issues:
 - 1) Is SSgA the right vehicle to house assets for future Real Asset capital calls? Or, is it more prudent to park all/or part of the assets in a short-term fixed-income vehicle?
 - 2) The Real Assets segment is currently overweight relative to policy ranges, should we reduce the SSgA exposure, and if so, by how much?

Exhibit 1

Rolling 3 YR Annualized Returns

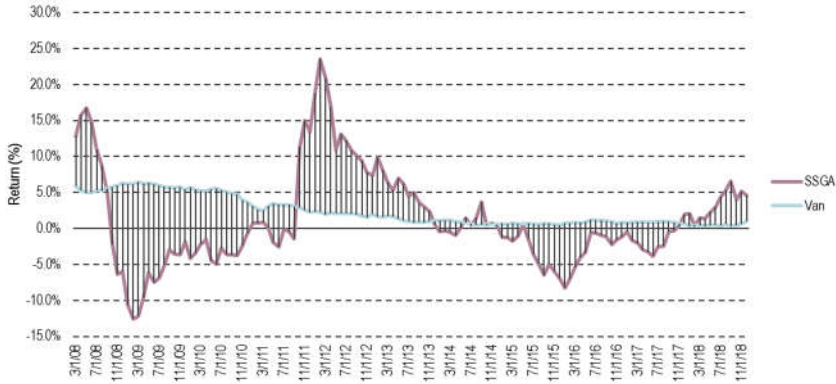


Exhibit 2

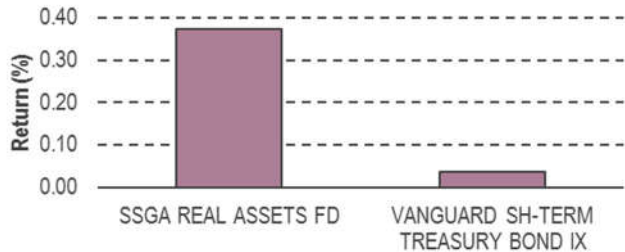
Rolling 3 YR Annualized Std Dev



Vanguard ST Bond Index provides a good source of liquidity for immediate needs, while dampening volatility in the interim. Returns are modest, with the primary objective being capital preservation (Exhibit 1 and 2).

Exhibit 3

Correlation with Merced Real Assets (%)



Given that capital calls and funding needs will occur over several years (4-5yrs anticipated), we believe it's prudent to maintain Real Asset Class policy target weights by keeping half of the existing SSgA Real Asset Fund untouched. This would better align intended portfolio exposures as noted by the higher correlation to Merced Real Assets (Exhibit 3).



4 Things MCERA can Accomplish with Reduction to SSgA

The Real Assets category is comprised of 1) the SSgA Real Assets Fund (3.9%), (2) Private Infrastructure investments (2.6%) and 3) Private Natural Resources investments (1.2%).

In aggregate, current allocation to the Real Asset category is 7.8%, which falls both outside of policy target (5%), and accepted policy range (3%-7%).

1. Recommendation/ Action: As of the end of January, the market value of the SSgA Real Assets Fund was roughly \$32 million or 3.9% of the total Plan portfolio. We recommend reducing the SSgA Fund by 50%, or \$16 million.

Goal: Real Assets would fall back to within the policy range, to approximately 5.8% of total Plan portfolio.

2. Recommendation/ Action: As of the end of January, the market value of Emerging Market Equity was roughly \$59 million or 7.3% of the total Plan portfolio. We recommend moving \$6 million of the \$16 million in proceeds from SSgA partial redemption to increase exposure to Emerging Markets Equity.

Goal: Emerging Markets Equity would reach its 8% policy target.

3. Recommendation/ Action: Move the remaining \$10 million of the \$16 million in proceeds from SSgA to the Vanguard Short-Term Treasury Bond Index.

Goal: To be used as a source of cash for future capital calls and/or funding of investments.

4. Recommendation/ Action: Keep the residual \$16 million in SSgA Real Assets Fund in the Real Assets category.

Goal: Better alignment with the Real Assets portion of the portfolio given its higher correlation to the category relative to the alternative considered of moving all to a short-term bond fund. This would also keep allocations in-line with policy.

Timing: All recommendations could be completed within a short timeframe.

Additional Considerations

- With annual capital budget targets of \$40 million and \$10 million for Private Equity and Real Assets, respectively, it would be prudent to have some liquid reserves on hand. With SSgA Real Assets Fund a daily liquid fund, the aforementioned transactions could be processed relatively quickly.
- The relative positioning between U.S. Equity and Developed International Equity has skewed a bit, meaning International Developed exposure has become too large when compared to U.S. Equity. In order to have assets in these two segments more properly aligned, we recommend moving \$10 million from Mellon International to Mellon Dynamic U.S. Equity. This should bring the actual ratio between the two asset classes closer to the ratio represented in the policy targets. Please see the table below for details.

	Jan 2019 Market Value (\$)	Allocation (%)	Transition (\$)	Pro Forma Market Value (\$)	New Allocation (%)	Policy Targets (%)	Notes
Equity	391,192,710	48.1		397,192,710	48.8	39.0	
U.S. Equity	212,245,572	26.1	10,000,000	222,245,572	27.3	21.0	To Mellon Dynamic US EQ
Developed Market Equity (non-U.S.)	119,490,355	14.7	(10,000,000)	109,490,355	13.5	10.0	From Mellon International
Emerging Market Equity	59,456,783	7.3	6,000,000	65,456,783	8.0	8.0	From SSgA redemption
Fixed Income	172,448,126	21.2		182,448,126	22.4	23.0	
Investment Grade Bonds	172,448,126	21.2	10,000,000	182,448,126	22.4	18.0	From SSgA redemption
Opportunistic Credit	0	0.0		0	0.0	5.0	
Hedge Funds	73,346,901	9.0		73,346,901	9.0	10.0	
Private Equity	38,804,495	4.8		38,804,495	4.8	15.0	
Real Estate	60,446,256	7.4		60,446,256	7.4	8.0	
Real Assets	63,189,921	7.8	(16,000,000)	47,189,921	5.8	5.0	\$6M to Wells Capital EM and \$10M Vanguard Short-Term
Cash	13,739,968	1.7		13,739,968	1.7	0.0	
Total Fund:	813,168,376	100.0		813,168,376	100.0	100.0	

**Merced County Employees' Retirement Association (MCERA)
RETIREMENT BOARD AGENDA ITEM**

DATE: February 28, 2019

TO: MCERA Board of Retirement
FROM: Kristie Santos, Plan Administrator

SUBJECT: Payment to CPAS for outstanding service/support hours

ITEM NUMBER: 4

ITEM TYPE: Action

STAFF RECOMMENDATION:

Approve staff to amend current budget by the amount of \$77,838.60 to pay CPAS for outstanding service and support hours.

DISCUSSION:

The Merced County Employees' Retirement Association (MCERA) uses CPAS as the association's pension system. The current CPAS contract with MCERA pre-pays for a maintenance extended warranty fee of \$1,919 per month and software application support services for minor projects fee of \$12,600 per month. The software application support services fee pre-pays service and support hours of 60 hours per month at a rate of \$210 per hour.

Currently, MCERA has a deficit of hours; meaning MCERA has used more than the pre-paid 60 hours per month resulting in MCERA owing CPAS for approximately 371 hours in the amount of \$77,838.60. This deficit of hours came to light in January of 2019 and MCERA has requested that CPAS invoice MCERA for the outstanding hours.

Staff are asking the MCERA Board of Retirement to amend the current budget in the amount of \$77,838.60 to pay CPAS.

INVOICE**Invoice 1513618**

CPAS Systems, Inc.
 250 Ferrand Drive Suite 700
 Toronto ON M3C3G8

Page Number: 1
 Date: 2/13/2019
 Customer: 664348
Please Remit Payments To:
 Citibank New York
 ABA: 021000089, SWIFT: CITIUS33
 Citibank NA Canadian Branch
 SWIFT: CITICATTBCH
 Conduent BS Canada Acct#2015080032

(now part of AVENU INSIGHTS & ANALYTICS)

BN 101197119**SOLD**

TO: MERCED COUNTY EMPLOYEES' RETIREMENT
 ASSOCIATION
 3199 'M' STREET
 MERCED CA 95348

SHIP

TO: MERCED COUNTY EMPLOYEES' RETIREMENT
 ASSOCIATION
 3199 'M' STREET
 MERCED CA 95348

Amount Enclosed:

CUSTOMER P.O.		ORDER #	TERMS		DUE DATE
			NET 30		3/15/2019
ITEM NO.	DESCRIPTION	UM	QTY	UNIT PRICE	AMOUNT
443-DBSUP	Billing Period: 01/01/2017 – 12/31/2018 Excess Support Hours 370.66 hrs @ \$210/hr (RFI 1504)	EA	1	77,838.600000	77,838.60

Subtotal:	\$ 77,838.60
Tax:	
Total:	\$ 77,838.60

For Invoice Questions Call:
 Maria Deyto ((416)) 422-0563 x 221

Invoice is presented in USD

MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION NO. 2019-01

Trustee Service Appreciation Mr. Sam Spangler

WHEREAS, Mr. Sam Spangler was elected to serve as a member of the Merced County Employees' Retirement Association Retirement Board; February 15, 2017 serving until February 28, 2019; and

WHEREAS, Mr. Sam Spangler participated in meetings and contributed by lending his expertise to the discussion of issues before the Retirement Board; and

WHEREAS, Mr. Sam Spangler displayed commitment and worked for the interests of all members of the Retirement System and represented the Merced County safety members throughout his tenure on the Retirement Board; and

NOW, THEREFORE, BE IT RESOLVED that the Retirement Board expresses its sincere appreciation for Mr. Spangler's dedicated service to the members of the Merced County Employees' Retirement Association and to the citizens of Merced County.

Ayes:

Noes:

Abstain:

Absent:

Darlene Ingersoll, Chair

Alfonse Peterson, Secretary

I hereby certify that on the 28th day of February, 2019, the Retirement Board of Merced County Employees' Retirement Association made and adopted this Resolution.

Kristen Santos, Plan Administrator



November 16, 2018

To: SACRS Trustees & SACRS Administrators/CEO's
 From: Ray McCray, SACRS Immediate Past President, Nominating Committee Chair
 SACRS Nominating Committee
 Re: SACRS Board of Director Elections 2019-2020 Elections

SACRS BOD 2019-2020 election process will begin **January 2019**. Please review the following timeline and distribute to your Board of Trustees.

DEADLINE	DESCRIPTION
March 1, 2019	Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations prior to the first Business Day after March 1 of each calendar year. Nominations shall not be accepted from the floor on the day of the election.
March 25, 2019	The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25
May 10, 2019	Nomination Committee to conduct elections during the SACRS Business Meeting at the Spring Conference (May 7-10, 2019)
May 10, 2019	Board of Directors take office for 1 year

Per SACRS Bylaws, Article VIII, Section 1. Board of Director and Section 2. Elections of Directors:

Section 1. Board of Directors. The Board shall consist of the officers of SACRS as described in Article VI, Section 1, the immediately Past President, and two (2) regular members.

- A. Immediate Past President. The immediate Past President, while he or she is a regular member of SACRS, shall also be a member of the Board. In the event the immediate Past President is unable to serve on the Board, the most recent Past President who qualifies shall serve as a member of the Board.
- B. Two (2) Regular Members. Two (2) regular members shall also be members of the Board.

Section 2. Elections of Directors. Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations prior to the first Business Day after March 1 of each calendar year. Nominations shall not be accepted from the floor on the day of the election.

The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25.

The Administrator of each regular member County Retirement System shall be responsible for communicating the Nominating Committee's recommended ballot and final ballot to each trustee and



placing the election of SACRS Directors on his or her board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee.

Director elections shall take place during the first regular meeting of each calendar year. The election shall be conducted by an open roll call vote, and shall conform with Article V, Sections 6 and 7 of these Bylaws.

Newly elected Directors shall assume their duties at the conclusion of the meeting at which they are elected, with the exception of the office of Treasurer. The incumbent Treasurer shall co-serve with the newly elected Treasurer through the completion of the current fiscal year.

Interested candidates should submit their letter of intent and the form included in this letter to the Nomination Committee no later than the cut-off dates listed in the schedule.

The elections will be held at the SACRS Spring Conference May 7-10, 2019 at the Resort at Squaw Creek, Lake Tahoe, CA. Elections will be held during the Annual Business meeting on Friday, May 10, 2019.

If you have any questions, please contact me at Ray McCray, raym1@sbcglobal.net or (209) 471- 4472.

Thank you for your prompt attention to this timely matter.

Sincerely,

Ray McCray

Ray McCray, San Joaquin CERA Trustee
SACRS Nominating Committee Chair

CC: SACRS Board of Directors
SACRS Nominating Committee Members
Sulema H. Peterson, SACRS Administrator



**SACRS Nomination Submission Form
SACRS Board of Directors Elections 2019-2020**

All interested candidates must complete this form and submit along with a letter of intent. **Both the form and the letter of intent must be submitted no later than March 1, 2019.** Please submit to the Nominating Committee Chair at raym1@sbcglobal.net AND to SACRS at sulema@sacrs.org. If you have any questions, please feel free to contact Sulema Peterson at SACRS at (916) 441-1850.

Name of Candidate	
Candidate Contact Information (Please include – Phone Number, Email Address and Mailing Address)	
Name of Retirement System Candidate Currently Serves On	
Current Position On Candidates Retirement Board (Chair, Alternate, Retiree, General Elected, Etc)	
Applying for SACRS Board of Directors Position (select only one)	<ul style="list-style-type: none"><input type="radio"/> President<input type="radio"/> Vice President<input type="radio"/> Treasurer<input type="radio"/> Secretary<input type="radio"/> Regular Member
Brief Bio	