Executive Summary - Informational

TO: **State Investment Board**

FROM: Dave Hunter

DATE: February 22, 2021

SUBJECT: **SIB Meeting Materials – February 26, 2021**

Our February SIB meeting will include Callan's Quarterly Performance Review as of 12/31/2020. RIO will request SIB approval of an Advisory Board recommendation to incorporate a new 3% target asset allocation to Private Capital including a preference for in-state investments at a competitive rate of return for the Legacy Fund. RIO will also request SIB approval of up to a $200 million diversified real assets commitment to GCM Grosvenor.

Asset and Performance Overview – Over 99% of our SIB clients generated net returns which exceeded their approved policy benchmarks for the 5 years ended 12/31/2020 including Legacy, PERS, TFFR, WSI and Budget Stabilization. For the current fiscal year, Legacy, PERS and TFFR net returns were 14.37%, 15.10% and 14.86%, respectively, exceeding Policy Benchmark Returns. WSI and Budget Stabilization Fund also performed well with net investment returns of 8.16% and 2.80%, respectively, in the current fiscal year.

SIB Five Largest Clients (AUM as of 12/31/2020)	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020	10 Yrs Ended 12/31/2020
Legacy Fund $8.16 billion					Since 10/1/2011
Total Fund Return - Net	14.37%	12.22%	7.88%	9.25%	6.03%
Policy Benchmark Return	13.32%	12.08%	7.96%	8.60%	5.28%
Excess Return	1.06%	0.14%	-0.08%	0.65%	0.75%
PERS $3.67 billion					
Total Fund Return - Net	15.10%	12.19%	8.28%	9.77%	8.34%
Policy Benchmark Return	14.52%	11.96%	8.37%	9.27%	7.88%
Excess Return	0.58%	0.23%	-0.09%	0.50%	0.46%
TFFR $2.955 billion					
Total Fund Return - Net	14.86%	12.07%	8.25%	9.69%	8.29%
Policy Benchmark Return	14.66%	12.00%	8.38%	9.24%	7.72%
Excess Return	0.20%	0.07%	-0.13%	0.45%	0.57%
WSI $2.263 billion					
Total Fund Return - Net	8.16%	9.85%	7.12%	7.84%	7.29%
Policy Benchmark Return	6.61%	9.54%	6.71%	6.65%	5.90%
Excess Return	1.54%	0.31%	0.41%	1.20%	1.39%
BSF $747 million					
Total Fund Return - Net	2.80%	3.45%	3.24%	2.53%	2.15%
Policy Benchmark Return	0.35%	3.22%	2.94%	2.14%	1.29%
Excess Return	2.45%	0.23%	0.30%	0.39%	0.86%

Note: Legacy Fund was invested in 100% short-term fixed income from Sep. 7, 2011 to Aug. 1, 2013.

Legacy Fund Investment Update – After the Advisory Board and SIB engaged Callan to conduct a study to determine the most effective, efficient and prudent manner in which to increase the Legacy Fund's in-state investment program (on 11/12 and 11/20), the Advisory Board engaged Callan to conduct phase 1 of an asset allocation study to evaluate the impact of incorporating a new target allocation to private equity (on 1/29). After Callan presented these results (on 2/16), the Advisory Board approved Callan's recommendation to include a new 3% Private Capital target including a preference for in-state investments at a competitive rate of return. **RIO supports this recommendation and will request SIB approval of a revised Legacy Fund investment policy statement which incorporates a new 3% Private Capital target allocation.**

Diversified Real Assets – **RIO will recommend up to a $200 million follow-on commitment to GCM Grosvenor Customized Infrastructure Strategies (CIS Series III)** to be deployed in Pension, Insurance and Legacy noting we are underweight this sector of diversified real assets given strong equity returns in the past year. Callan supports this recommendation after refreshing their own investment due diligence and research efforts on this management team, investment structure/strategy and fund documents. The SIB previously committed $105 million to Series I and $75 million to Series II in the past decade. Investment returns are in-line with expectations including an inception to date time-weighted return of 8.6% for Series I and 6.2% for Series II (with one-year time-weighted returns of 9.3% for Series I and 14.0% for Series II). Net Internal Rate of Returns (IRR) for CIS I and CIS II were 8.5% and 10.7%, respectively, on an inception to date basis as of 9/30/2020 (noting private market returns are reported on a one-quarter lag). GCM is targeting a net return of 9% to 11% and gross cash yield of 3% to 5% following the same investment strategy as in prior funds including sector diversification with a focus on digital infrastructure, conventional and renewable power generation, regulated utilities, transportation and midstream. Approximately 30-35 investments will be targeted to manage concentration risk.

Governance Review – Our annual governance review will be completed including a summary of best practices in public fund board oversight of in-state investment programs based on a review of a prior presentation by Mosaic Governance Advisors last November.

SIB Committee Reports - **RIO will request the Board to accept sub-committee reports provided by the SIB Audit Committee, Executive Review Committee and Securities Litigation Committee.**

Quarterly Monitoring Reports – **Board acceptance will be requested for Quarterly Monitoring Reports on Executive Limitations/Staff Relations, Budget/Financial Conditions, and Investment & Retirement Program Ends (including the TFFR Pension Administration System enhancement project) and SIB Watch List.** RIO is not recommending any Watch List revisions at this time.

Legislative Update – RIO will review recent legislative developments on bills impacting the SIB, TFFR, RIO and Legacy Fund. RIO intends to provide neutral clarifying testimony unless directed otherwise by the SIB.

North Dakota State Investment Board

ND STATE INVESTMENT BOARD MEETING

Friday, February 26, 2021, 8:30 a.m.
RIO Conference Room (Virtual Host)
3442 East Century Ave, Bismarck, ND

Teleconference 701-328-0950, Conference ID: 910036322#

Agenda

I. **APPROVAL OF AGENDA**

II. **APPROVAL OF MINUTES (January 22, 2021)**

III. **INVESTMENTS** (Enclosed)

A. Asset & Performance Update - Mr. Hunter (10 minutes) Informational
B. In-State Investment Program Update – Mr. Hunter (5 minutes)
   1. Callan Update – Mr. Erlendson, Mr. Browning, **Mr. Jay Kloepfer** (20 minutes)
   2. Advisory Board Investment Policy Recommendation – Mr. Hunter **Board Action**
C. Diversified Real Assets – Mr. Darren Schulz (5 minutes)
   1. GCM Grosvenor Presentation – Mr. Erik Hall and Mr. Mike Rose (20 minutes)
   2. Staff Recommendation – Mr. Schulz and Ms. Jan Mende **Board Action**
D. Callan Performance Review (30 minutes)
   1. Market Update – Mr. Paul Erlendson and Mr. Alex Browning
   2. Pension and Insurance Pools and Legacy Fund **Board Acceptance**

IV. **GOVERNANCE & EDUCATION** (Enclosed) (30 minutes)

A. Governance Review Wrap-Up – Mr. Hunter **Board Acceptance**
B. Audit Committee Update – Ms. Sara Sauter **Board Acceptance**
C. Executive Review Committee Update – ERC Chair Ms. Yvonne Smith **Board Acceptance**
D. Securities Litigation Committee Update – Mr. Hunter **Board Acceptance**
E. Legislative Update – Mr. Hunter and Ms. Janilyn Murtha **Board Action**

V. **QUARTERLY MONITORING – 12/31/20** (10 minutes) **Board Acceptance**

A. Executive Limitations/Staff Relations - Mr. Hunter
B. Budget/Financial Conditions - Ms. Connie Flanagan
C. Investment Ends / Watch List - Mr. Schulz
D. TFFR PAS - Ms. Murtha

VI. **OTHER**

Next Meetings: Executive Review Committee - March 8, 2021, 8:30 a.m. RIO Conference Room
SIB Meeting - March 26, 2021, 8:30 a.m., RIO Conference Room

VII. **ADJOURNMENT.**

Any individual requiring an auxiliary aid or service, please contact the Retirement and Investment Office (701) 328-9885 at least three (3) days prior to the scheduled meeting.

NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
JANUARY 22, 2021, BOARD MEETING

MEMBERS PRESENT:	Brent Sanford, Lt. Governor, Chair Rob Lech, TFFR Board, Vice Chair Troy Seibel, PERS Board, Parliamentarian Jon Godfread, Insurance Commissioner Toni Gumeringer, TFFR Board Keith Kempenich, Legacy/Budget Stab. Adv. Board Bryan Klipfel, Director of WSI Adam Miller, PERS Board Tom Beadle, State Treasurer Yvonne Smith, PERS Board
MEMBER ABSENT:	Mel Olson, TFFR Board Jodi Smith, Commissioner of Trust Lands
STAFF PRESENT:	Eric Chin, Chief Risk Officer/Senior CIO Connie Flanagan, Chief Financial Officer Ann Griffin, Investment Accountant Bonnie Heit, Admin Svs Suprv David Hunter, Exec Dir/CIO Matt Posch, Investment/Compliance Officer Sara Sauter, Suprv of Internal Audit Darren Schulz, Dep CIO Dottie Thorsen, Internal Auditor Susan Walcker, Senior Financial Accountant
GUESTS:	Alex Browning, Callan LLC Dean DePountis, Attorney General's Office Paul Erlendson, Callan LLC Eric Hardmeyer, LBSFAB Kelvin Hullet, BND Jeff Indovina, Parks & Rec Candace Johnson, Securities Dept. Rachel Kriege, Ins. Dept. Jerry Klein, LBSFAB Adam Mathiak, Legislative Council Adam Montgomery, Securities Dept. Tim Porter, BND Ryan Rauschenberger, LBSFAB Bryan Reinhardt, PERS Karen Tyler, Securities Dept. Commissioner

CALL TO ORDER:

Lt. Governor Sanford, Chair, called the State Investment Board (SIB) regular meeting to order at 8:33 a.m. on Friday, January 22, 2021. The meeting was held at the Retirement and Investment Office (RIO) (virtual host), 3442 E Century Ave, Bismarck, ND.

AGENDA:

The Board considered the agenda for the January 22, 2021, meeting,

IT WAS MOVED BY DR. LECH AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO ACCEPT THE AGENDA FOR THE JANUARY 22, 2021, MEETING.

AYES: MR. KLIPFEL, COMMISSIONER GODFREAD, TREASURER BEADLE, MR. SEIBEL, DR. LECH, MR. MILLER, MS. SMITH, MS. GUMERINGER, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON, COMMISSIONER SMITH

MINUTES:

IT WAS MOVED BY MS. GUMERINGER AND SECONDED BY DR. LECH AND CARRIED BY A VOICE VOTE TO APPROVE THE NOVEMBER 20, 2020, MINUTES AS DISTRIBUTED.

AYES: DR. LECH, TREASURER BEADLE, MR. SEIBEL, MR. MILLER, COMMISSIONER GODFREAD, MS. GUMERINGER, MS. SMITH, MR. KLIPFEL, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON, COMMISSIONER SMITH

INVESTMENTS:

Asset/Performance Overview - Mr. Hunter provided an asset and performance update. In the current fiscal year, U.S. and global equity markets gained over 19% and 17%, respectively, for the 5 months ended Nov. 30, 2020. Most SIB Clients benefited from these strong equity markets and earned over $1.6 billion of net investment income for the five months ending November 30, 2020. The vast majority of SIB clients generated actual net investment returns which exceeded respective policy benchmarks by at least 0.20% versus passive indices.

Net investment income for the SIB's five largest clients for the five months ending November 30, 2020, included Teachers' Fund for Retirement (TFFR) $287 million, PERS $358 million, Workforce Safety & Insurance $137 million, Budget Stabilization Fund $17 million, and Legacy Fund $778 million. Relative performance versus approved benchmarks was positive on a trailing 1, 3 and 5-year periods for the vast majority of the SIB clients. Client assets rose by over 10% or $1.6 billion from $16.3 billion at June 30, 2020 to over $17.9 billion as of November 30, 2020, and climbed over 34% since 2018.

In-State Investment Program – Callan LLC highlighted key points and takeaways from a recently completed survey of potential in-state investment program managers to gain insight into their overall approach, unique views on the investment opportunity set in various sectors, target asset allocation ranges, deployment guidelines, expected sector returns, optimal investment vehicle structures, and key success elements, for building the program in North Dakota.

Discussion followed on the Governance/Statute roles of the Legacy and Budget Stabilization Fund Advisory Board (LBSFAB) and the SIB.

Discussion then followed on next steps for the in-state investment program.

IT WAS MOVED BY DR. LECH AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO REQUEST THAT RIO ENGAGE WITH CALLAN TO ADVANCE AT LEAST ONE EXPERT, IN-STATE INVESTMENT FIRM FOR FINAL REVIEW AND APPROVAL AT A FUTURE SIB MEETING IN EITHER FEBRUARY OR MARCH 2021.

AYES: COMMISSIONER GODFREAD, MR. KLIPFEL, MS. GUMERINGER, MS. SMITH, MR. SEIBEL, MR. MILLER, DR. LECH, TREASURER BEADLE, AD LT. GOVERNOR SANFORD
NAYS: NONE
ABSENT: COMMISSIONER SMITH, MR. OLSON

Public Employees Retirement System (PERS)/Retiree Health Insurance Credit (RHIC) – Mr. Hunter reviewed the changes to the PERS RHIC Investment Policy Statement. Callan LLC recommended asset allocation changes to include a 5% increase to global ex-US equity and a 5% reduction to Fixed Income. The changes are consistent with PERS RHIC fund targeted investment return assumptions based on Callan LLC's latest capital market assumptions. The PERS board approved the changes at their January 14, 2021, meeting.

IT WAS MOVED BY MS. SMITH AND SECONDED BY DR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE REVISIONS TO THE PERS RHIC INVESTMENT POLICY STATEMENT.

AYES: MR. GUMERINGER, MS. SMITH, TREASURER BEADLE, DR. LECH, COMMISSIONER GODFREAD, MR. SEIBEL, MR. MILLER, MR. KLIPFEL, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: COMMISSIONER SMITH, MR. OLSON

Investment Work Plan – Mr. Schulz reviewed RIO investment personnel's recommendation to seek SIB approval to retain Callan LLC to assist in reviewing real asset exposures with the goal of developing program commitments for the Pension, Insurance, and Legacy pools in the near term.

In 2020, thanks to unprecedented policy support in response to the COVID-19 induced downturn and the realization of at least three viable COVID-19 vaccines, investors looked through near-term economic and market volatility and adopted a pro-risk stance, thus bidding up public equity securities. As investors sought to discern cyclical weakness from an acceleration of pre-existing secular trends already in play, the performance of real assets such as private real estate was mixed, reflecting uncertainty regarding the pace and shape of the post-pandemic recovery. As a result of the divided 2020 return environment, RIO investment personnel recognized the need to address imbalances relative to policy targets within the broad diversified real assets category created by strong equity market performance across the Pension, Insurance and Legacy Fund pools.

IT WAS MOVED BY DR. LECH AND SECONDED BY MR. MILLER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION TO ENGAGE CALLAN LLC TO ASSIST IN REVIEWING REAL ASSET EXPOSURES WITH THE GOAL OF DEVELOPING PROGRAM COMMITMENTS IN THE PENSION, INSURANCE, AND LEGACY FUND POOLS.

AYES: MS. GUMERINGER, MR. MILLER, MS. SMITH, MR. SEIBEL, MR. KLIPFEL, COMMISSIONER GODFREAD, DR. LECH, TREASURER BEADLE, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON, COMMISSIONER SMITH

GOVERNANCE/EDUCATION:

Meeting Schedule – A draft of the meeting scheduled for July 1, 2021 – June 30, 2022, was presented for consideration.

IT WAS MOVED BY MS. SMITH AND SECONDED BY MS. GUMERINGER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE SIB MEETING SCHEDULE FOR THE PERIOD OF JULY 1, 2021 – JUNE 30, 2022.

AYES: TREASURER BEADLE, MR. MILLER, COMMISSIONER GODFRED, MR. KLIPFEL, MS. GUMERINGER, MR. SEIBEL, DR. LECH, MS. SMITH, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: COMMISSIONER SMITH, MR. OLSON

Governance Review – A second reading of Sections A-Executive Limitations, B-Governance Process, C-Board/Staff Relationship, and D-Ends of the SIB Governance Manual was considered.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO APPROVE THE SECOND READING, WITH NO EXCEPTIONS, TO SECTIONS A – D.

AYES: MS. GUMERINGER, MS. SMITH, MR. KLIPFEL, TREASURER BEADLE, DR. LECH, COMMISSIONER GODFREAD, MR. SEIBEL, MR. MILLER, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: COMMISSIONER SMITH, MR. OLSON

Mosaic Review – Mr. Hunter will provide a follow-up report on the governance review of Ms. Amy McDuffee, Mosaic Governance Advisors, at the next meeting. The report will coincide with the first reading of the remaining sections of the SIB Governance Manual.

Lt. Governor Sanford requested the Mosaic report be shared with the LBSFAB.

Executive Review Committee (ERC) – Membership of the ERC was considered for the period of January 22, 2021 – December 31, 2021. ERC members will remain the same; Ms. Smith, Mr. Olson, and Mr. Miller.

Board Self-Assessment – Mr. Hunter reviewed the SIB self-assessment background and proposed the following: 1) Conduct the SIB self-assessment in 2021, 2) Confirm the ERC members will be appointed to serve the SIB in providing oversight and direction for the 2021 self-assessment, 3) Confirm RIO's Supervisor of Audit Services will offer administrative support to complete the self-assessment and survey process on or before May 21, 2021.

IT WAS MOVED BY MR. KLIPFEL AND SECONDED BY MS. GUMERINGER AND CARRIED BY A VOICE VOTE TO ACCEPT THE BOARD SELF-ASSESSMENT PROPOSALS.

AYES: MR. SEIBEL, MS. GUMERINGER, COMMISSIONER GODFREAD, MS. SMITH, MR. MILLER, TREASURER BEADLE, MR. KLIPFEL, DR. LECH, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON, COMMISSIONER SMITH

Investment Manager Compliance – The Investment Compliance Report for the fiscal year ended June 30, 2020, was provided to the board. The report compiled and completed by RIO Investment Personnel, was for informational purposes only.

Legislation – Mr. Hunter reviewed and discussion took place on legislation affecting RIO and the SIB. The SIB encouraged Mr. Hunter to offer neutral clarifying testimony at legislative when deemed appropriate and/or upon specific request by legislative committee members.

OTHER:

The next regular meeting of the SIB Securities Litigation Committee is scheduled for February 4, 2021, at 2:00 p.m. at RIO (virtual).

The next regular meeting of the SIB Audit Committee is scheduled for February 25, 2021, at 3:00 p.m. at Workforce Safety & Insurance.

The next regular meeting of the SIB has been scheduled for February 26, 2021, at 8:30 a.m. at RIO.

ADJOURNMENT:

With no further business to come before the SIB, Lt. Governor Sanford adjourned the meeting at 10:50 a.m.

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Lt. Governor Sanford, Chair
State Investment Board

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Bonnie Heit
Recorder

Agenda Item III. A.

Informational

Asset and Performance Overview

As of December 31, 2020

February 19, 2021

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

Jan Murtha, Deputy Executive Director / Chief Retirement Officer

Connie Flanagan, Chief Financial Officer

Eric Chin, Chief Risk Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

State Investment Board – Client Assets Under Management

- **SIB client assets under management (AUM) totaled $18.5 billion at December 31, 2020, including the Pension Trust at $6.9 billion, Insurance Trust at $3.2 billion and Legacy Fund at $8.2 billion. Bolstered by a continuing rebound in equities, SIB clients generated $634 million of net investment income in the quarter ending 12/31/20 and the Legacy Fund benefitted from $306 million of net investment income in the quarter.**
- **The Pension Trust posted a net return of +12.1% in the last year ending 12/31/20.** The Pension Trust generated a net annualized return of 9.7% during the last 5-years exceeding the policy benchmark of 9.3%.
- **The Insurance Trust generated a net investment return of +8.2% in the last year.** During the last 5-years, the Insurance Trust posted a net annualized return of 7.0%, exceeding the performance benchmark of 5.9%.
- **The Legacy Fund generated a net investment return of +12.2% last year.** During the last 5-years, Legacy Fund earned a net annualized return of 9.3%, exceeding the policy benchmark of 8.6%.
- The U.S. economy and global capital markets continued to rebound in the quarter ended December 31, 2020, although U.S. GDP ended the year with a 3.5% decline in GDP compared to 2019. **Since March 31, 2020**, the S&P 500 Index has materially recovered in part due to an unprecedented level of government intervention, although there remains a wide disparity of returns between mega-cap growth stocks and the broader market.

Fund Name	Market Values as of 12/31/20 [1]	Market Values as of 6/30/20 [2]	Market Values as of 12/31/19 [1]
Pension Trust Fund			
Public Employees Retirement System (PERS)	3,669,544,518	3,212,113,498	3,319,707,790
Teachers' Fund for Retirement (TFFR)	2,955,046,540	2,612,716,511	2,687,249,769
City of Bismarck Employees Pension	118,302,220	106,946,867	108,655,081
City of Grand Forks Employees Pension	73,985,605	67,458,580	69,164,764
City of Bismarck Police Pension	47,429,292	42,552,004	43,450,353
Grand Forks Park District	8,481,140	7,406,214	7,552,173
Subtotal Pension Trust Fund	**6,872,789,316**	**6,049,193,674**	**6,235,779,930**
Insurance Trust Fund			
Workforce Safety & Insurance (WSI)	2,263,037,089	2,125,881,223	2,118,242,946
Budget Stabilization Fund	747,151,469	727,275,064	674,214,754
City of Fargo FargoDome Permanent Fund	47,800,930	43,550,868	45,623,406
PERS Group Insurance Account	38,893,539	31,495,987	31,454,744
State Fire and Tornado Fund	24,865,710	22,825,556	24,261,188
ND Association of Counties (NDACo) Fund	7,421,330	6,693,192	6,676,495
Petroleum Tank Release Compensation Fund	6,284,647	6,165,425	6,114,860
State Risk Management Fund	4,203,923	4,561,174	4,274,579
State Risk Management Workers Comp Fund	4,084,826	5,116,218	4,094,172
State Bonding Fund	3,865,916	3,787,526	3,686,047
ND Board of Medicine	2,694,800	2,470,789	2,448,215
Insurance Regulatory Trust Fund	1,184,979	5,714,620	1,604,567
Attorney General Settlement Fund	1,000,461	1,057,148	1,139,130
Lewis & Clark Interpretive Center Endowment Fund	880,637	793,808	792,156
Bismarck Deferred Sick Leave Account	816,186	770,793	767,969
Cultural Endowment Fund	567,139	493,401	506,814
ND Veterans' Cemetary Trust Fund	357,277	312,782	
Subtotal Insurance Trust Fund	**3,155,110,859**	**2,988,965,574**	**2,925,902,042**
Legacy Trust Fund			
Legacy Fund	8,160,014,967	6,999,783,268	6,862,725,642
PERS Retiree Insurance Credit Fund	167,553,037	144,237,322	145,020,752
Job Service of North Dakota Pension	96,957,073	95,338,533	97,905,630
ND Tobacco Prevention and Control Trust Fund	1,593,679	7,589,354	9,391,018
Total Assets Under SIB Management	**18,454,018,930**	**16,285,107,725**	**16,276,725,014**

[1] *Market values are unaudited and subject to change.*

[2] *6/30/20 market values as stated in the Comprehensive Annual Financial Report.*

SIB Pension Clients:

PERS and TFFR earned a net investment return of approximately 9.7% for the 5 years end 12/31/2020, exceeding Policy Returns by at least 0.45%.

For the Current Fiscal Year To Date (FYTD), PERS and TFFR earned a net investment return of 15.1% and 14.86%, respectively.

Job Service, a de-risked pension plan with a funded ratio in excess of 130%, failed to exceed Policy Benchmark Returns for the 1, 3 and 5 year periods ended 12/31/2020.

Over 98% of SIB Pension clients earned net returns which exceeded their Policy Benchmarks for 5 years ended 12/31/2020.

Risk, as measured by standard deviation was within 115% of Policy Benchmark for the 5-years ended 12/31/2020 for all SIB Pension clients.

	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020	Risk 5 Yrs Ended 12/31/2020	Risk Adj Excess Return 5 Yrs Ended 12/31/2020
PERS $3.67 billion					115% Limit	
Total Fund Return - Net	15.10%	12.19%	8.28%	9.77%	10.3%	0.23%
Policy Benchmark Return	14.52%	11.96%	8.37%	9.27%	10.0%	
Excess Return	0.58%	0.23%	-0.09%	0.50%	103%	
TFFR $2.955 billion						
Total Fund Return - Net	14.86%	12.07%	8.25%	9.69%	10.2%	0.38%
Policy Benchmark Return	14.66%	12.00%	8.38%	9.24%	10.2%	
Excess Return	0.20%	0.07%	-0.13%	0.45%	101%	
Bismarck Employee $118 million						
Total Fund Return - Net	12.27%	10.50%	7.63%	8.89%	8.4%	0.46%
Policy Benchmark Return	12.12%	10.73%	7.67%	8.41%	8.4%	
Excess Return	0.13%	-0.23%	-0.04%	0.48%	100%	
Bismarck Police $47 millon						
Total Fund Return - Net	13.23%	10.87%	7.79%	9.16%	9.2%	0.47%
Policy Benchmark Return	13.22%	11.12%	7.85%	8.75%	9.2%	
Excess Return	0.00%	-0.25%	-0.06%	0.41%	99%	
Grand Forks $74 million						
Total Fund Return - Net	15.26%	12.81%	8.91%	10.10%	10.7%	0.40%
Policy Benchmark Return	15.56%	12.99%	8.95%	9.79%	10.8%	
Excess Return	-0.30%	-0.18%	-0.04%	0.30%	99%	
Grand Forks Park Dist. $8.5 million						
Total Fund Return - Net	14.43%	12.23%	8.37%	9.66%	9.9%	0.01%
Policy Benchmark Return	13.84%	11.92%	8.27%	9.23%	9.4%	
Excess Return	0.62%	0.31%	0.10%	0.42%	105%	
Job Service $97 million						
Total Fund Return - Net	4.08%	3.85%	4.47%	5.58%	4.3%	-1.28%
Policy Benchmark Return	5.59%	7.37%	5.95%	6.47%	3.9%	
Excess Return	-1.51%	-3.52%	-1.48%	-0.89%	110%	

Note: Amounts are unaudited and subject to change.

Non-Pension Clients:

WSI and Legacy Fund earned a net return of 7.84% and 9.25%, respectively, for the 5 years ended 12/31/20, which exceeded their respective Policy Benchmarks by 0.65% or more.

Budget Stabilization Fund generated a net investment return of 2.53% for the 5 years ended 12/31/2020 which exceeded Policy Benchmark by 0.39%.

Over 98% of Non-Pension clients earned net returns which exceeded their Policy Benchmarks over the last 5-years.

Risk Targets:
Policy Benchmark > 8% 115%
Policy Benchmark < 8% 1%

	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020	Risk 5 Yrs Ended 12/31/2020	Risk Adj Excess Return 5 Yrs Ended 12/31/2020
WSI $2.263 billion					Target < 1% or 115%	
Total Fund Return - Net	8.16%	9.85%	7.12%	7.84%	5.96%	-0.48%
Policy Benchmark Return	6.61%	9.54%	6.71%	6.65%	4.46%	
Excess Return	1.54%	0.31%	0.41%	1.20%	1.5%	
Legacy $8.16 billion						
Total Fund Return - Net	14.37%	12.22%	7.88%	9.25%	10.63%	-0.19%
Policy Benchmark Return	13.32%	12.08%	7.96%	8.60%	9.52%	
Excess Return	1.06%	0.14%	-0.08%	0.65%	112%	
BSF $747 million						
Total Fund Return - Net	2.80%	3.45%	3.24%	2.53%	2.81%	-0.41%
Policy Benchmark Return	0.35%	3.22%	2.94%	2.14%	1.12%	
Excess Return	2.45%	0.23%	0.30%	0.39%	1.7%	
Fire & Tornado $25 million						
Total Fund Return - Net	10.69%	10.41%	7.28%	8.14%	8.40%	-0.54%
Policy Benchmark Return	9.51%	10.95%	7.39%	7.32%	6.76%	
Excess Return	1.19%	-0.54%	-0.11%	0.82%	1.6%	
State Bonding $3.9 million						
Total Fund Return - Net	2.03%	4.85%	4.07%	3.93%	2.14%	0.55%
Policy Benchmark Return	0.75%	4.40%	3.66%	2.99%	1.84%	
Excess Return	1.29%	0.46%	0.41%	0.94%	OK	
Insur.Reg.Trust $1.2 million						
Total Fund Return - Net	8.69%	10.58%	6.62%	6.88%	6.03%	0.60%
Policy Benchmark Return	7.91%	8.44%	5.98%	5.94%	5.66%	
Excess Return	0.77%	2.14%	0.64%	0.95%	OK	

Note: Amounts are unaudited and subject to change.

Elevated Risk:

The global pandemic triggered an unprecedented rise in global market volatility and a period of fixed income illiquidity in March which prompted the Fed to initiate the largest and most wide spread government stimulus package in history.

Due to the sharp and severe impact of the COVID-19 outbreak on the capital markets including even high quality fixed income securities, many of our SIB clients posted record high levels of volatility including WSI, Budget Stabilization Fund and Job Service, each of which generated negative Risk Adjusted Returns for the 5-year ended Dec. 31, 2020.

Risk Targets:

Policy Benchmark > 8% 115%
Policy Benchmark < 8% 1%

	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020	Risk 5 Yrs Ended 12/31/2020	Risk Adj Excess Return 5 Yrs Ended 12/31/2020
Petrol Tank Release $6.3 million						
Total Fund Return - Net	1.86%	4.39%	3.81%	3.66%	1.93%	0.57%
Policy Benchmark Return	0.69%	4.05%	3.47%	2.82%	1.72%	
Excess Return	1.17%	0.34%	0.34%	0.84%	OK	
State Risk Mgmt. $4.2 million						
Total Fund Return - Net	9.71%	10.54%	7.77%	8.39%	7.76%	-0.85%
Policy Benchmark Return	8.82%	11.90%	8.09%	7.70%	6.09%	
Excess Return	0.89%	-1.36%	-0.33%	0.69%	1.7%	
State Bonding Fund $4.1 million						
Total Fund Return - Net	11.23%	11.33%	8.26%	9.03%	9.00%	-0.90%
Policy Benchmark Return	10.66%	13.07%	8.81%	8.54%	7.40%	
Excess Return	0.57%	-1.74%	-0.55%	0.49%	1.6%	
NDACo $7.4 million						
Total Fund Return - Net	10.92%	11.15%	7.70%	8.09%	8.56%	-0.60%
Policy Benchmark Return	9.45%	11.42%	7.70%	7.21%	6.72%	
Excess Return	1.47%	-0.27%	0.00%	0.87%	1.8%	
Bis.Def.Sick Leave $816,186						
Total Fund Return - Net	9.83%	10.26%	7.21%	8.03%	7.71%	-0.52%
Policy Benchmark Return	8.28%	10.56%	7.12%	6.94%	5.89%	
Excess Return	1.54%	-0.30%	0.08%	1.09%	1.8%	
Fargodome $48 million						
Total Fund Return - Net	14.39%	11.70%	7.84%	9.31%	11.20%	-0.45%
Policy Benchmark Return	13.88%	13.04%	8.34%	8.79%	9.86%	
Excess Return	0.50%	-1.33%	-0.50%	0.52%	114%	
Cultural Endow. $567,139						
Total Fund Return - Net	15.02%	12.02%	8.51%	9.92%	11.82%	-0.77%
Policy Benchmark Return	14.87%	13.89%	9.37%	9.79%	10.61%	
Excess Return	0.14%	-1.87%	-0.86%	0.13%	111%	

Note: Amounts are unaudited and subject to change.

Key Takeaways:

Over 99% of our SIB clients earned net returns in excess of Policy Benchmarks for the 5-years ended 12/31/2020 creating $300 million of incremental client income (e.g. $12 billion x 0.50% = $60 million/year x 5 years) for our clients over the last 5 years. This favorable experience supports our fundamental investment belief the prudent use of active management can positively impact client investment outcomes.

All SIB clients experienced elevated levels of volatility due to the impact of COVID-19 pandemic on the global capital markets. Despite these conditions, most SIB clients risk levels were within targeted levels on a trailing 5-year basis including all Pension Pool clients & Legacy Fund.

Risk Targets:

Policy Benchmark > 8% 115%

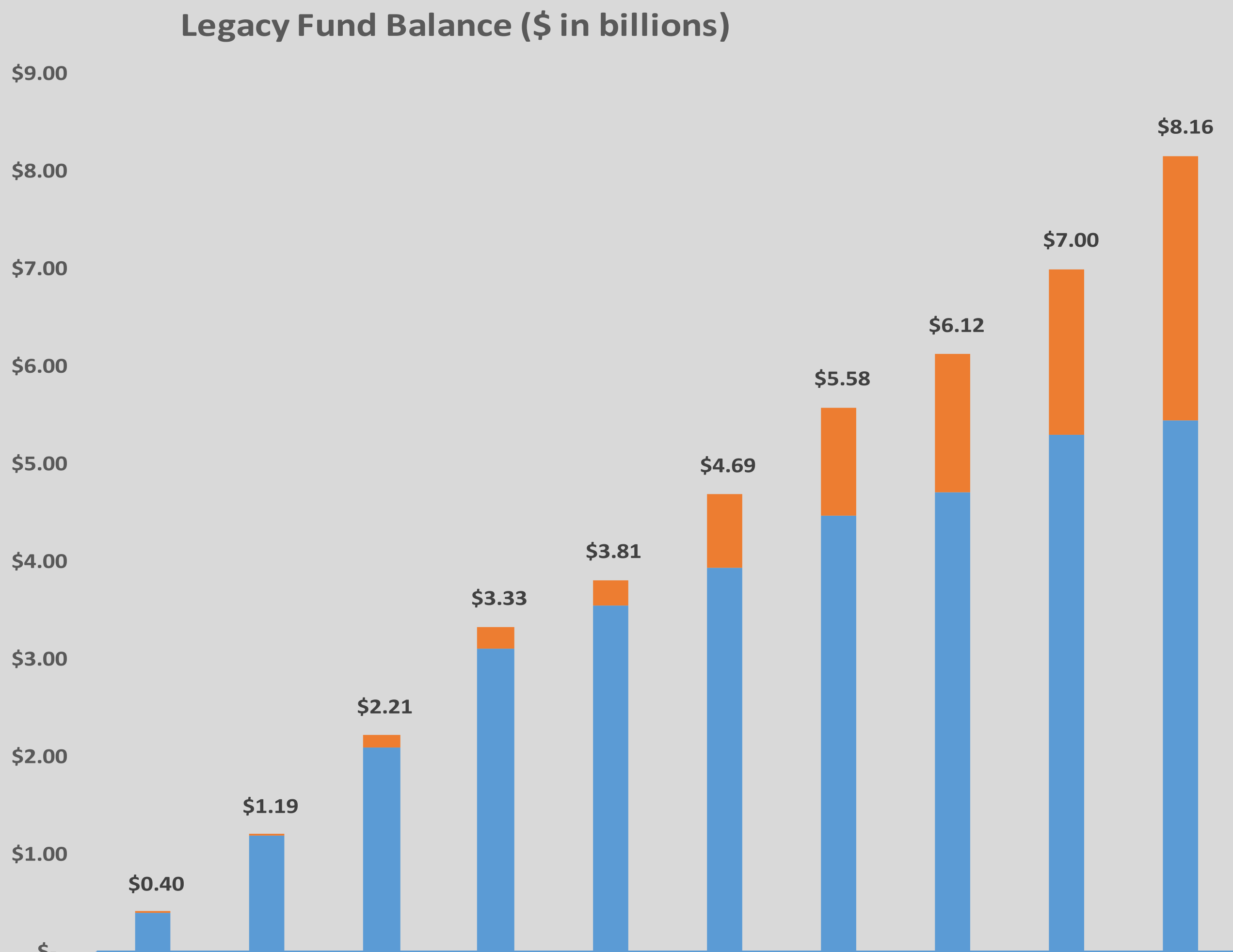
Policy Benchmark ≤ 8% 1%

	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020	Risk 5 Yrs Ended 12/31/2020	Risk Adj Excess Return 5 Yrs Ended 12/31/2020
Board of Medicine $2.7 million						
Total Fund Return - Net	9.09%	10.73%	6.60%	6.10%	6.45%	-0.62%
Policy Benchmark Return	7.58%	9.99%	6.25%	5.44%	4.77%	
Excess Return	1.53%	0.74%	0.35%	0.66%	1.7%	
PERS Group Ins. $39 million						
Total Fund Return - Net	2.59%	3.28%	3.08%	2.23%	2.6%	-0.49%
Policy Benchmark Return	0.43%	3.16%	2.83%	2.11%	1.1%	
Excess Return	2.16%	0.12%	0.25%	0.12%	1.5%	
Lewis & Clark $880 million						
Total Fund Return - Net	11.05%	11.29%	N/A	N/A		
Policy Benchmark Return	9.41%	11.19%	N/A	N/A		
Excess Return	1.29%	0.10%	N/A	N/A		
AG Settlement $1 million						
Total Fund Return - Net	2.80%	N/A	N/A	N/A		
Policy Benchmark Return	0.44%	N/A	N/A	N/A		
Excess Return	2.36%	N/A	N/A	N/A		
Veterans' Cemetery $357 million						
Total Fund Return - Net	14.34%	N/A	N/A	N/A		
Policy Benchmark Return	13.47%	N/A	N/A	N/A		
Excess Return	0.88%	N/A	N/A	N/A		
Retiree Health $168 million						
Total Fund Return - Net	16.83%	15.17%	9.27%	10.18%	12.3%	-0.49%
Policy Benchmark Return	15.63%	14.20%	9.22%	9.85%	11.1%	
Excess Return	1.19%	0.97%	0.04%	0.34%	110%	
Tobacco Control $1.6 million						
Total Fund Return - Net	0.10%	2.71%	2.89%	2.56%	1.42%	-0.05%
Policy Benchmark Return	0.14%	2.77%	2.90%	2.57%	1.38%	
Excess Return	-0.03%	-0.06%	-0.01%	-0.01%	OK	

Note: Amounts are unaudited and subject to change.

Legacy Fund Gains over $1 Billion in Last Half of 2020

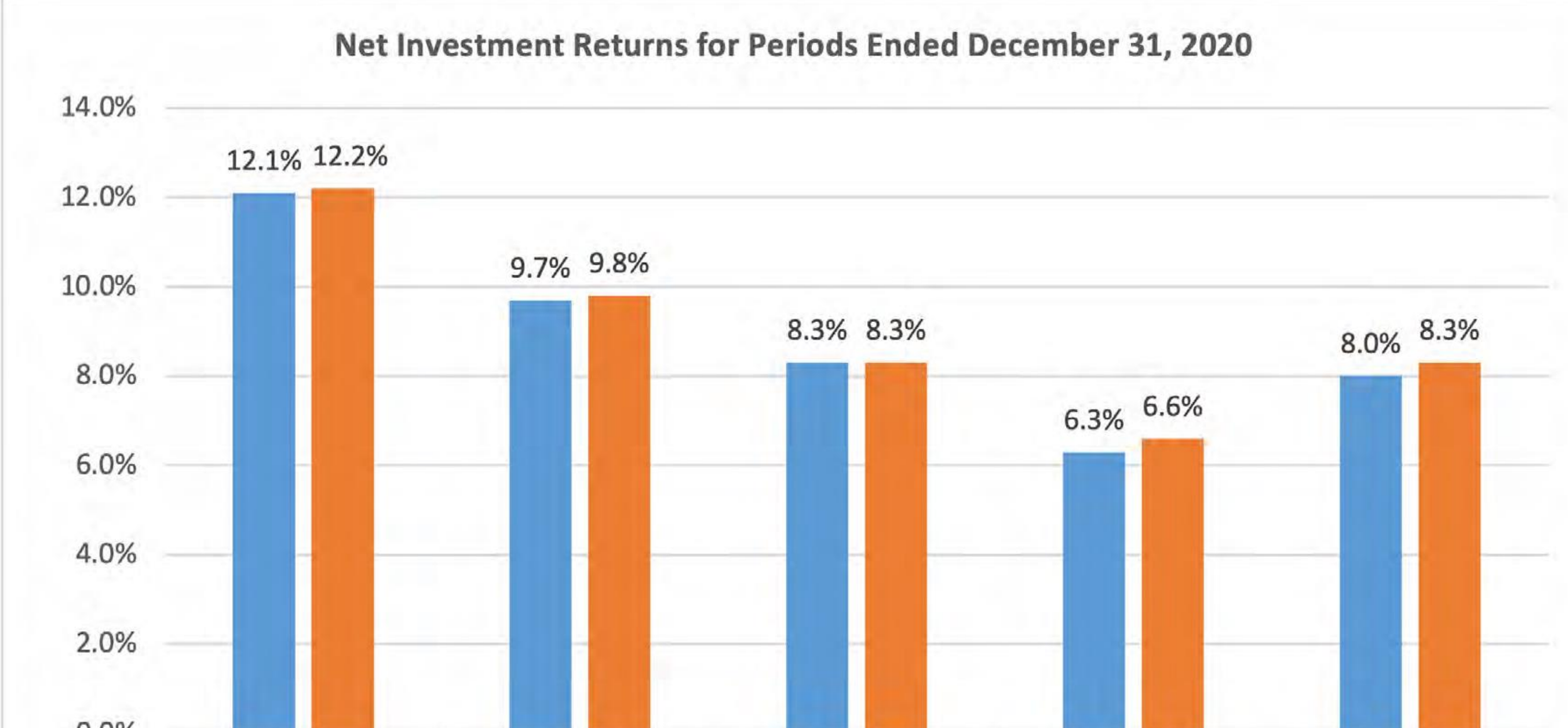
The Legacy Fund earned a net investment return of 14.37% in last half of 2020. This $1 billion of net investment income, along with $146 million of new oil and gas tax deposits, drove the Legacy Fund to exceed $8.1 billion at 12/31/2020.



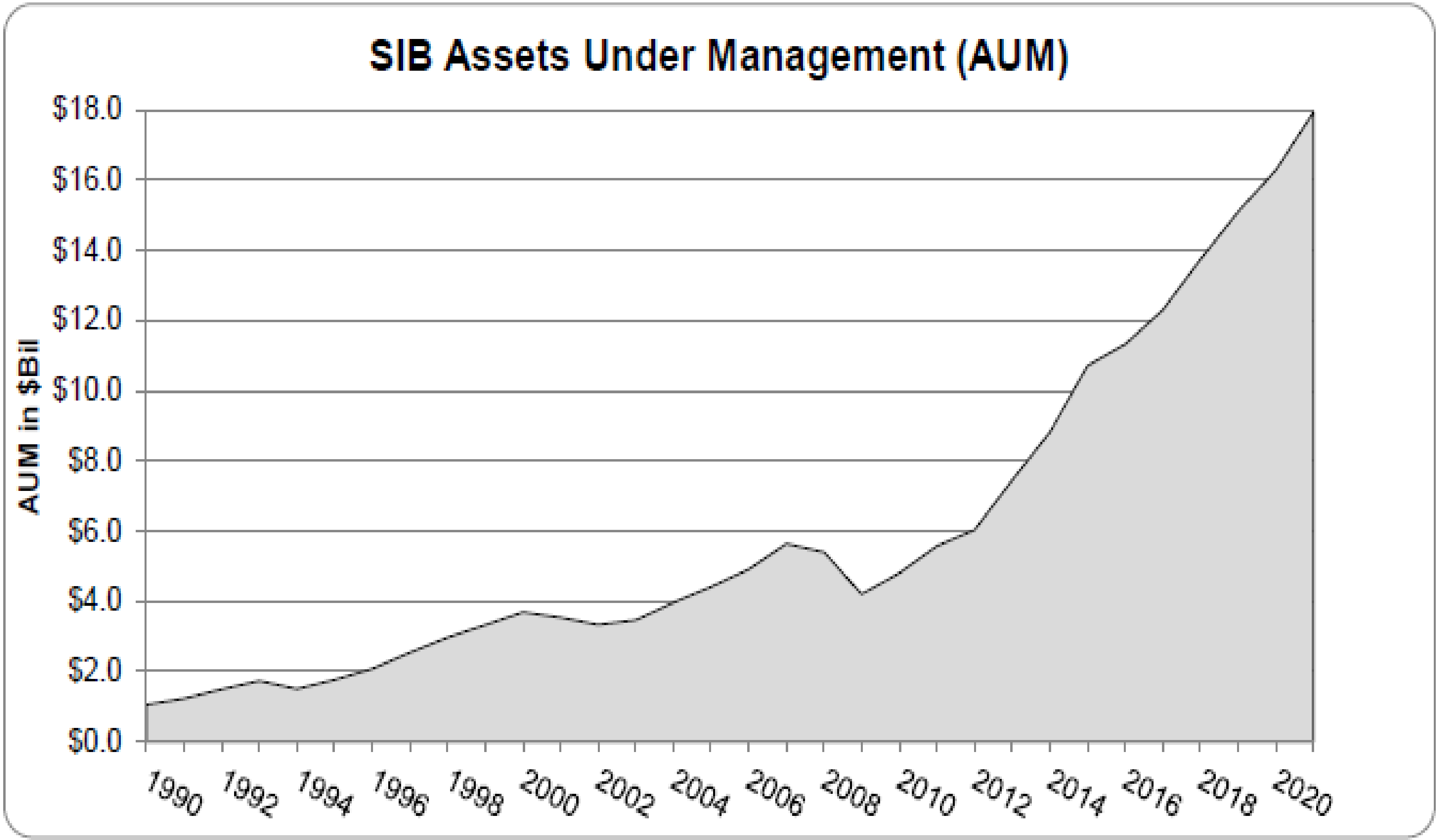
	6/30/12	6/30/13	6/30/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	12/31/20
Cumulative Net Income ($ billions)	$0.00	$0.01	$0.12	$0.22	$0.27	$0.75	$1.11	$1.41	$1.69	$2.70
Cumulative Net Deposits ($ billions)	$0.40	$1.19	$2.09	$3.11	$3.54	$3.94	$4.47	$4.71	$5.30	$5.45
Balance ($ billions)	$0.40	$1.19	$2.21	$3.33	$3.81	$4.69	$5.58	$6.12	$7.00	$8.16

Note: All data as of December 31, 2020, is unaudited and subject to change.

TFFR and PERS Returns Exceed 12% in 2020 and 9.7% for the 5-Years Ended December 31, 2020.

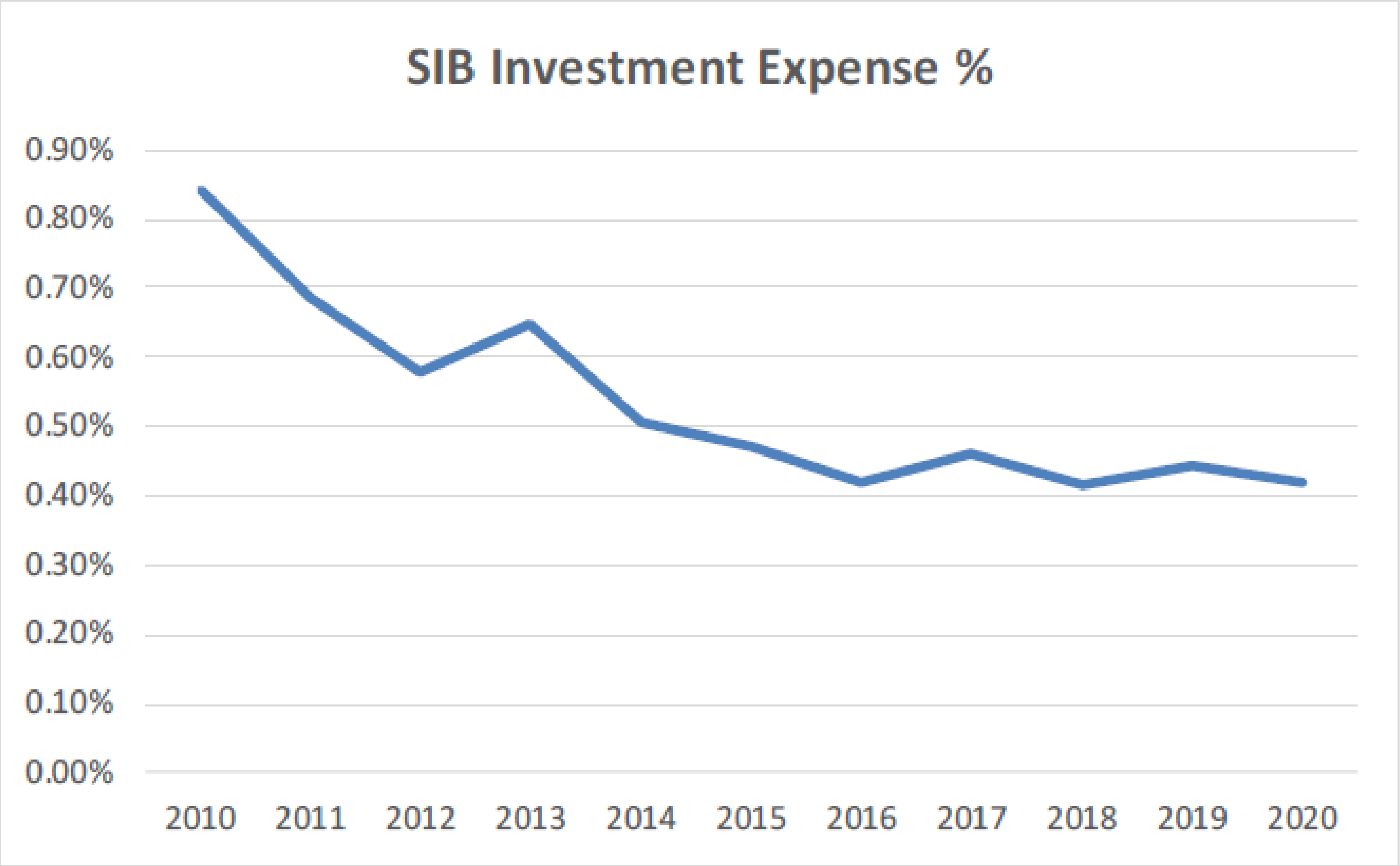


	1-Year	5-Years	10-Years	20-Years	30-Years
TFFR	12.1%	9.7%	8.3%	6.3%	8.0%
PERS	12.2%	9.8%	8.3%	6.6%	8.3%



Note: Amounts are unaudited, but deemed to be materially accurate.

SIB Investment Expense % Reduced by 50% from 0.84% in Fiscal 2010 to 0.42% in Fiscal 2020



0.84%	0.69%	0.58%	0.65%	0.51%	0.47%	0.42%	0.46%	0.42%	0.44%	0.42%

Note: Amounts are unaudited, but deemed to be materially accurate.

SIB Highlights and RIO Mission Statement

Updated as of December 31, 2020

SIB Highlights:

- **SIB client assets under management have more than tripled from $5 billion in 2010 to over $18 billion in 2020, while rising over 35% since Jan. 1, 2019.**
- **SIB investment fees have been significantly reduced from 0.84% in 2010 to 0.42% in 2020.**
- **The SIB's keen focus on fees is saving our clients over $20 million per year in lower costs which increases client net investment income.**
- **The SIB's prudent use of active investment management has generated over $300 million of incremental income for our clients in the last 5-years.**
- **SIB client investment performance compares favorably with our peers including U.S. public pension plans and larger sovereign wealth funds.**
- **Actual net investment returns for 99% of our SIB clients have exceeded approved performance benchmarks for the 5-years ended Dec. 31, 2020.**
- **Active management has generated over $70 million of incremental income for the Legacy Fund in the last half of 2020 after deducting all investment fees and expenses.**
- **SIB clients have earned over $4.2 billion of net investment income in the last two years including over $1.9 billion in the Legacy Fund (from 1/1/2019 to 12/31/2020).**

Mission Statement: RIO serves the State Investment Board (SIB) and exists in order that:

1) **SIB clients receive investment returns, consistent with their written investment policies and market variables, in a cost effective investment manner and under the Prudent Investor Rule (as defined in NDCC 21-10-07 "Legal Investments").**
2) **Potential SIB clients have access to information regarding the services provided by the SIB.**
3) **SIB clients receive satisfactory services from our Board & RIO staff including TFFR, PERS, WSI and Legacy & Budget Stabilization Funds.**

Legacy Fund

Source: NDRIO Legacy Fund website https://www.rio.nd.gov/legacy-fund

The Legacy Fund was created by a constitutional amendment in 2010. The amendment provides that 30% of oil and gas gross production and oil extraction taxes on oil produced after June 30, 2011, be transferred to the Legacy Fund. The State Investment Board (SIB) is responsible for the investment of the fund. The first Legacy Fund transfer was received by the SIB in September 2011. The ND Constitution also requires that all earnings accrued after June 30, 2017, must be transferred to the state's general fund at the end of each biennium.

Balances listed below as of December 31, 2020.

FUND VALUE

$8,155,612,172

INCEPTION-TO-DATE NET INCOME

$2,704,809,148

PRINCIPAL BALANCE

$6,342,905,912

CURRENT BIENNIUM-TO-DATE EARNINGS
(as defined by NDCC 21-10-12)

$591,812,867

EARNINGS TRANSFERRED TO GENERAL FUND

2017-19 Biennium $455,263,216

*****PLEASE NOTE: Monthly numbers are preliminary and subject to change.***

Legacy Fund

In-State Investment Program Update

Legacy Fund In-State Investment Program Overview:

2Q/2017 - BND Match Loan Certificates of Deposit Program ("BND CD") – an In-State Investment Program – transferred from Budget Stabilization Fund to the Legacy Fund (representing a sector allocation within Fixed Income).

4Q/2019 - SIB and Advisory Board increase BND In-State Investment Program by $100 million up to $300 million.

4Q/2020 - Callan, Adams Street, Barings, Commerce, Grosvenor and Hamilton Lane share their insight, background and experience in expanding SIB's existing in-state investment program. Mosaic Governance Advisors review key factors when "Constructing Prudent Due Diligence When Expanding an In-State Investment Program"

Nov/2020 - SIB and Advisory Board formally approve a $100 million increase in BND In-State Investment Program raising the total commitment up to $400 million (representing a 5% target allocation).

Jan/2021 - Callan and RIO outline key considerations to expand the Legacy Fund In-State Investment Program and review recent in-state investment survey results. Timeline proposed to advance an "In-State Investment Program" in accordance with Advisory Board recommendations and subject to final approval by SIB. Callan engaged by Advisory Board to conduct an asset allocation study to evaluate the impact of including a target allocation to private equity. Callan engaged by SIB to identify at least one private equity firm with expert, institutional experience within "in-state private equity programs" by March 26, 2021.

Feb/2021 - After Callan presents Phase I of Asset Allocation Review to Advisory Board, Callan recommends a Private Capital target asset allocation of 3% (+/- 3%) with a preference to in-state investments at a competitive rate. After Callan provides an In-State Investment Program update to the SIB, RIO will request the SIB to approve a revised Legacy Fund investment policy as recommended by Callan and approved by the Advisory Board.

Callan's Advisory Board "Asset Allocation Review – Phase 1" on slides 8 to 21

Brief Overview of Legacy Fund's Original Asset Allocation Study

RVKuhns & ASSOCIATES, INC.

North Dakota Legacy Fund
Asset Allocation and Spending Policy Project

North Dakota Legacy Fund | April 2, 2013

Overview of the Asset Allocation and Spending Policy Project

- Based on the work RVK has done on behalf of the Legacy Fund Advisory Board to date, we believe that establishing an appropriate asset allocation policy is the most important investment decision facing the Advisory Board.
- We are confident that this report will provide useful information to help the Board establish an asset allocation structure that will provide the Fund the best chance of achieving all of its objectives over the long-term, and under a wide range of potential economic and investment scenarios.

Summary of Objectives

"The Legacy Fund was created, in part, due to the recognition that state revenue from the oil and gas industry will be derived over a finite timeframe. The Legacy Fund defers the recognition of 30 percent of this revenue for the benefit of future generations. The primary mission of the Legacy Fund is to preserve the real, inflation-adjusted purchasing power of the monies deposited into the Fund."[1]

- This policy excerpt introduces two key concepts used in our analysis:
  - Focus on building a corpus for future generations
  - Focus on preserving purchasing power
- Implications for asset allocation policy include:
  - Current income is not a primary focus – the Legacy Fund is a mechanism to defer income recognition.
  - The Legacy Fund is intended to help create generational equality – emphasis on growth and a very long-term investment horizon.

1. Source: North Dakota Legacy Fund Investment Policy Statement.

RVKuhns & ASSOCIATES, INC.

Preserving Real Return

North Dakota Legacy Fund | April 2, 2013

- Preservation of real, inflation-adjusted purchasing power implies the need for assets to grow by a rate that exceeds the combination of the rate of inflation, the spending rate, and expenses.

- Required Rate of Return > Expected Rate of Inflation + Expected Rate of Spending + Expenses

- *Example:*

  2.5% Inflation
  3.5% Spending
  0.6% Expenses

  Example Assumptions – Feb. 2021

  2.0% Inflation
  3.5% Spending (or 3% or 4%)
  0.5% Expenses
  6.0% Required Rate of Return

  2.5% + 3.5% + 0.6% = 6.6% or higher Required Rate of Return

- The Required Rate of Return is a function of these variables.

RVKuhns & ASSOCIATES, INC.

North Dakota's Legacy Fund earned a Net Investment Return of 9.25% for the 5-years ended 12/31/2020 including a 14.37% return in the last half of 2020

	Current FYTD 12/31/2020	1 Yr Ended 12/31/2020	3 Yrs Ended 12/31/2020	5 Yrs Ended 12/31/2020
Legacy $8.16 billion				
Total Fund Return - Net	14.37%	12.22%	7.88%	9.25%
Policy Benchmark Return	13.32%	12.08%	7.96%	8.60%
Total Relative Return	1.06%	0.14%	-0.08%	0.65%

1. As of 12/31/2020, Legacy had a market value of over $8.1 billion. Legacy's target asset allocation policy is 50% Global Equity, 35% Global Fixed Income and 15% Diversified Real Assets (including Global Real Estate & Infrastructure and U.S. Treasuries), as approved by the Legacy Fund Advisory Board and SIB.

2. In the Current Fiscal Year To Date (FYTD) 12/31/2020, Legacy Fund generated a Net Investment Return of 14.37% exceeding the Policy Benchmark of 13.32% by over 1%.

3. For the 5-Years Ended 12/31/2020, Legacy Fund earned a Net Return of 9.25% exceeding the Policy Benchmark Return of 8.60% by 0.65% over the last 5-years.

4. The SIB's prudent use of active investment management generated over $70 million of incremental income (versus passive investments) for the Legacy Fund over the last 6-months after deducting all investment fees and expenses (e.g. average balance over $7 billion x Excess Return of over 1% = $70 million in the last six months).

Note: All returns as of December 31, 2020, are unaudited and subject to change.

Legacy Fund Asset Allocation
Actual versus Target

As of December 31, 2020

	December-20			Current FYTD
		Allocation		Returns
	Market Value	Actual	Policy	Net
TOTAL LEGACY FUND	**8,160,014,967**	**100.0%**	**100.0%**	**14.37%**
POLICY TARGET BENCHMARK				*13.32%*
TOTAL RELATIVE RETURN				**1.06%**
GLOBAL EQUITY	***4,202,904,222***	***51.5%***	***50.0%***	***25.78%***
Benchmark				***25.43%***
GLOBAL FIXED INCOME	**2,764,119,570**	**33.9%**	**35.0%**	**3.62%**
Benchmark				**1.29%**
GLOBAL REAL ASSETS	***1,127,690,479***	***13.8%***	***15.0%***	***3.40%***
Benchmark				***2.93%***
TOTAL CASH EQUIVALENTS	***65,300,695***	***0.8%***	***0.0%***	***0.03%***
90 Day T-Bill				***0.07%***

Initial funding September 7, 2011.

NOTE: Monthly returns and market values are preliminary and subject to change.

ND Legacy Fund
Summary of Deposits, Earnings and Net Position
As of December 31, 2020

	Deposits	Withdrawals	Total Net Earnings	Net Increase/ (Decrease)	Ending Net Position	Earnings as defined in NDCC 21-10-12
FY2012	396,585,658	-	2,300,225	398,885,883	398,885,883	2,571,475
FY2013	791,126,479	-	4,216,026	795,342,505	1,194,228,388	15,949,089
FY2014	907,214,971	-	113,153,662	1,020,368,633	2,214,597,021	50,033,655
FY2015	1,011,343,040	-	99,895,650	1,111,238,690	3,325,835,711	95,143,905
FY2016	434,853,950	-	45,851,680	480,705,630	3,806,541,341	65,326,673
FY2017	399,501,134	-	479,595,256	879,096,390	4,685,637,731	207,814,875
Totals	3,940,625,232	-	745,012,499	4,685,637,731	4,685,637,731	436,839,672
				All earnings prior to 7/1/2017 became part of principal.		
FY2018	529,870,755		360,575,532	890,446,287	5,576,084,018	242,859,840
FY2019 *	628,610,681		53,186,743	681,797,424	6,257,881,442	212,403,376
			Earnings transferred 7/23/19 for 2017-19 biennium			455,263,216
June, 2019	63,958,262	(455,263,216)	255,651,383	(135,653,571)	6,122,227,871	46,980,140
FY2020	596,589,041	-	276,492,158	873,081,199	6,995,309,070	253,723,766
FY2021 **	146,412,269	-	1,013,890,833	1,160,303,102	8,155,612,172	291,108,961
			Earnings transferrable at end of 2019-21 biennium			591,812,867
Life-to-date Totals	5,906,066,240	(455,263,216)	2,704,809,148	8,155,612,172	8,155,612,172	1,483,915,755

* FY2019 amounts reflect 11 months ended 5/31/19 as 2019-21 transfer was based on 23 months.

** FY2021 amounts are preliminary and unaudited.

Callan

February 12, 2021

Legacy and Budget Stabilization Fund Advisory Board

Asset Allocation Review: Phase One

Paul Erlendson
Fund Sponsor Consulting

Alexander Browning
Fund Sponsor Consulting

Jay Kloepfer
Capital Market Research

Overview

- Section 21-10-11 of the North Dakota Century Code provides a description of the Legacy and Budget Stabilization Fund Advisory Board's responsibilities, including the following three numbered paragraphs:
  1. "The legacy and budget stabilization fund advisory board is created to develop recommendations for the investment of funds in the legacy fund and the budget stabilization fund to present to the state investment board."
  2. "The goal of investment for the legacy fund is ***principal preservation while maximizing total return***[1]."
  7. "The staff and consultants of the state retirement and investment office shall advise the board in developing asset allocation and investment policies."
- Consistent with the duties listed above, the North Dakota Retirement and Investment Office (RIO) made a series of recommendations to the Legacy and Budget Stabilization Fund Advisory Board on January 29, 2021:
  - A. Determine if the Advisory Board seeks to expand the "in state investment platform" by allowing private market investments; and if so
  - B. Seek to retain a qualified outside firm to conduct an asset allocation study with the purpose of evaluating a potential addition of "private equity" to the Legacy Fund's strategic asset allocation policy.
- RIO's recommendation suggested that the Advisory Board perform the asset allocation study in two phases.
  - C. Phase One is a returns-only analysis. The present report contains the results of that analysis. It evaluates what adding Private Capital investments may do to the Legacy Fund's *expected return and risk levels*.
  - D. Phase Two will analyze the impact of Private Capital investments by measuring the dollar-based future variations in the Legacy Fund's *market value;* ranges of *expected inflows* (based on projected oil prices and production volumes); and *ouflows transferred to the General Fund* based on projected earnings.[2]

[1] Emphasis added
[2] Phase Two of the asset liability will assess the investment and fund value implications should a vote of at least two-thirds of the members elected to each house of the legislative assembly result in up to fifteen percent of the principal of the Legacy Fund being expended during a biennium.

Private Capital and the North Dakota Legacy Fund

- The Legacy Fund's current strategic asset allocation policy ("Target") includes six broad asset classes:
  - Public U.S. equity
  - Public non-U.S. equity, including emerging markets
  - Broad fixed income, including a 5% allocation to private credit
  - TIPS ("Treasury Inflation-Protected Securities")
  - Private infrastructure
  - Private real estate
- The North Dakota Legislative Assembly is currently considering legislation that would require the Legacy Fund to allocate capital to in-state investments. The majority of states with in-state programs invest via private rather than public markets for these types of investment mandates. This experience provides the basis for considering "private capital" as an asset class to house prospective direct private investments for the Legacy Fund.
- "Private capital" includes the potential for investment in private equity (ownership) and private debt (direct lending)
- Private equity and private debt require development of a comprehensive program to deploy capital
  - Establish goals, design portfolio, develop plan to allocate capital across strategies and time, source deals, execute, and monitor
- An allocation to in-state investments, including through Private Capital, should have the goal of meeting institutional best practices in design, execution, and due diligence, as well as expectations for risk and return
- A Private Capital program will focus on investing in North Dakota, but the allocation will be broadly diversified and include private investments across the U.S.

Benefits and Considerations Private Capital

BENEFITS

- Expected higher return than in public markets, in exchange for illiquidity and lock-up of assets for an extended periods
  - Successfully implemented private ***equity*** expected to generate a 1.5% compound return premium over public equity
  - Successfully implemented private ***debt*** expected to generate a 4.5% compound return premium over public fixed income
- Define "private capital" as including investments in both private equity and private debt

CONSIDERATIONS

- Investing in private markets takes time
  - "Vintage year" diversification reduces exposure to economic downturns and market cycles dictate the available opportunities in a given year
  - Diversification by strategy and economic sector
  - Program stability and continuity will require a strategic plan to "pace" asset flows into and out of the program through time
  - Investments will mature (produce "realizations" at time of sale) at different times, generally over a 4 – 10 year period.
  - Distributions typically occur later in the cycle, requiring that new investments be funded with capital taken from other assets
- Capital calls and illiquidity will impact the ability of the Legacy Fund to generate cash for distributions
  - Private capital strategies typically call capital from investors over a period of years rather than all at once.
  - Assets invested in private capital cannot be redeemed on demand, requiring that funds be taken from a smaller subset of the liquid, public market assets in order to meet biannual distributions.
  - Market drawdown in public equities or a large withdrawal under the current spending policy will push up the relative size of the private markets program, altering the desired risk profile for the investment program
- Size and pacing matters
  - The in-state program manager will develop a multi-year plan to deploy target amount of assets into the investment opportunities..
  - Depending on the opportunities presented, it may be prudent to work up to the target allocation size over time.

2021 Callan Capital Market Assumptions

Risk and return: 2021–2030

Asset Class	Index	PROJECTED RETURN 1-Year Arithmetic	10-Year Geometric*	Real	PROJECTED RISK Standard Deviation	Sharpe Ratio	Projected Yield
Equities							
Broad U.S. Equity	Russell 3000	8.00%	6.60%	4.60%	17.95%	0.390	1.95%
Large Cap U.S. Equity	S&P 500	7.85%	6.50%	4.50%	17.70%	0.387	2.00%
Small/Mid Cap U.S. Equity	Russell 2500	8.75%	6.70%	4.70%	21.30%	0.364	1.75%
Global ex-U.S. Equity	MSCI ACWI ex USA	8.70%	6.80%	4.80%	20.70%	0.372	2.80%
Developed ex-U.S. Equity	MSCI World ex USA	8.25%	6.50%	4.50%	19.90%	0.364	3.00%
Emerging Market Equity	MSCI Emerging Markets	9.80%	6.90%	4.90%	25.15%	0.350	2.35%
Fixed Income							
Short Duration Gov't/Credit	Bloomberg Barclays 1-3 Yr G/C	1.50%	1.50%	-0.50%	2.00%	0.250	1.55%
Core U.S. Fixed	Bloomberg Barclays Aggregate	1.80%	1.75%	-0.25%	3.75%	0.213	2.50%
Long Government	Bloomberg Barclays Long Gov	1.35%	0.60%	-1.40%	12.50%	0.028	3.00%
Long Credit	Bloomberg Barclays Long Cred	2.95%	2.45%	0.45%	10.50%	0.186	4.65%
Long Government/Credit	Bloomberg Barclays Long G/C	2.30%	1.80%	-0.20%	10.40%	0.125	4.00%
TIPS	Bloomberg Barclays TIPS	1.80%	1.70%	-0.30%	5.05%	0.158	2.35%
High Yield	Bloomberg Barclays High Yield	4.85%	4.35%	2.35%	10.75%	0.358	6.70%
Global ex-U.S. Fixed	Bloomberg Barclays Gl Agg xUSD	1.15%	0.75%	-1.25%	9.20%	0.016	1.80%
Emerging Market Sovereign Debt	EMBI Global Diversified	3.90%	3.50%	1.50%	9.50%	0.305	5.95%
Alternatives							
Core Real Estate	NCREIF ODCE	6.60%	5.75%	3.75%	14.10%	0.397	4.40%
Private Infrastructure	MSCI Glb Infra/FTSE Dev Core 50/50	7.00%	6.00%	4.00%	15.45%	0.388	4.60%
Private Equity	Cambridge Private Equity	11.50%	8.00%	6.00%	27.80%	0.378	0.00%
Private Credit	N/A	7.15%	6.25%	4.25%	14.60%	0.421	6.25%
Hedge Funds	Callan Hedge FoF Database	4.25%	4.00%	2.00%	8.00%	0.406	0.00%
Commodities	Bloomberg Commodity	3.80%	2.25%	0.25%	18.00%	0.156	2.00%
Cash Equivalents	90-Day T-Bill	1.00%	1.00%	-1.00%	0.90%	0.00%	1.00%
Inflation	CPI-U		2.00%		1.50%		

- Note that return projections for public markets assume index returns with no premium for active management.

- Geometric returns are derived from arithmetic returns and the associated risk (standard deviation); Projected yields represent the expected 10-year average

Source: Callan LLC

2021 Callan Capital Market Assumptions

Correlations: 2021 - 2030

	Lg Cap	Sm/Mid	Dev ex-US	Em Market Eq	Sht Dur	Core Fix	Long Gov	Long Credit	TIPS	Hi Yield	Global ex-US Fixed	EMD	Core Real Estate	Private Equity	Hedge Funds	Comm	Cash Equiv	Inflation
Large Cap U.S. Eq	1.000																	
Small/Mid Cap U.S. Eq	0.915	1.000																
Dev. ex-U.S. Eq	0.765	0.775	1.000															
Emerging Market Eq	0.775	0.765	0.845	1.000														
Short Duration	-0.040	-0.065	-0.050	-0.080	1.000													
Core U.S. Fixed	-0.100	-0.125	-0.105	-0.140	0.845	1.000												
Long Government	-0.100	-0.125	-0.110	-0.170	0.770	0.900	1.000											
Long Credit	0.300	0.275	0.230	0.230	0.640	0.840	0.750	1.000										
TIPS	-0.040	-0.075	-0.050	-0.085	0.555	0.640	0.530	0.480	1.000									
High Yield	0.600	0.585	0.570	0.560	-0.030	0.030	-0.100	0.400	0.055	1.000								
Global ex-U.S. Fixed	0.010	0.000	0.050	0.100	0.495	0.530	0.470	0.540	0.400	0.120	1.000							
EM Sovereign Debt	0.530	0.515	0.515	0.545	0.050	0.110	-0.010	0.350	0.180	0.600	0.010	1.000						
Core Real Estate	0.695	0.665	0.660	0.625	-0.005	-0.035	-0.045	0.320	0.000	0.455	-0.050	0.360	1.000					
Private Equity	0.830	0.805	0.795	0.765	-0.160	-0.185	-0.250	0.190	-0.135	0.525	0.060	0.425	0.600	1.000				
Hedge Funds	0.775	0.750	0.745	0.720	0.055	0.100	0.120	0.390	0.085	0.560	-0.050	0.540	0.525	0.635	1.000			
Commodities	0.220	0.210	0.205	0.200	-0.195	-0.100	-0.030	-0.045	0.120	0.100	0.150	0.190	0.200	0.180	0.210	1.000		
Cash Equivalents	-0.030	-0.045	-0.030	-0.065	0.300	0.100	0.040	-0.100	0.120	-0.110	0.000	-0.070	-0.060	0.000	-0.070	0.070	1.000	
Inflation	-0.020	0.020	0.000	0.030	-0.205	-0.280	-0.250	-0.250	0.100	0.070	-0.100	0.000	0.100	0.060	0.200	0.400	0.000	1.000

- Relationships between asset classes are as important as standard deviation
- To determine portfolio mixes, Callan employs mean-variance optimization
- Return, standard deviation, and correlation determine the composition of efficient asset mixes

Source: Callan LLC

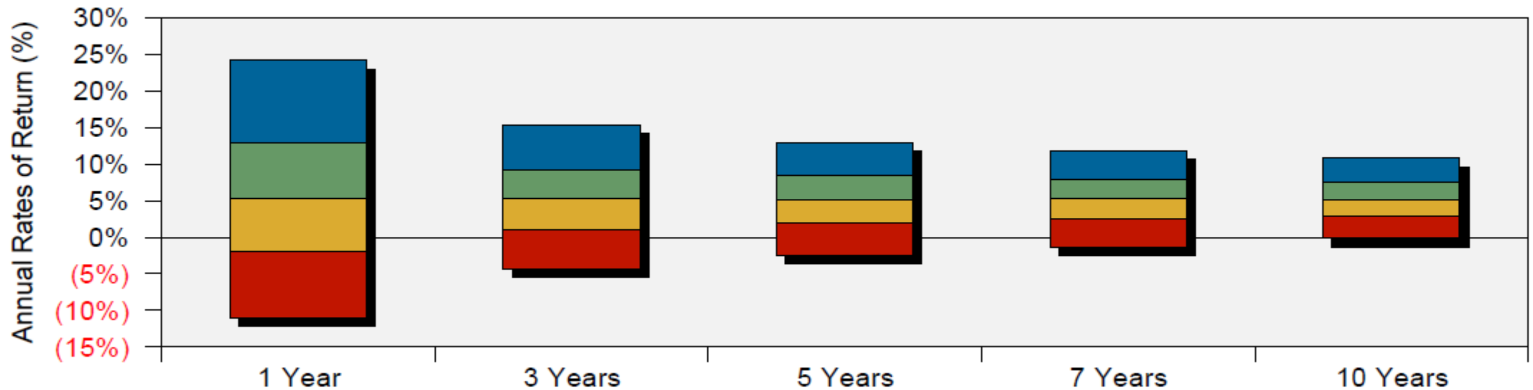
Legacy Fund's Current Policy Target; Alternative Mixes Add Private Capital

Asset Class	Policy Target	Optimal Mixes Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad US Equity	30%	29%	28%	28%	27%	27%
Broad Non-US Equity	20%	20%	20%	19%	19%	18%
Private Capital	0%	1%	2%	3%	4%	5%
Domestic Fixed Income	35%	35%	35%	35%	35%	35%
TIPS	5%	5%	5%	5%	5%	5%
Infrastructure	5%	5%	5%	5%	5%	5%
Real Estate	5%	5%	5%	5%	5%	5%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Expected Return	**5.14%**	**5.17%**	**5.20%**	**5.22%**	**5.26%**	**5.28%**
Expected Real Return	**3.14%**	**3.17%**	**3.20%**	**3.22%**	**3.26%**	**3.28%**
Expected Standard Deviation	**10.16%**	**10.22%**	**10.27%**	**10.31%**	**10.37%**	**10.42%**
Projected Yield	**2.59%**	**2.57%**	**2.55%**	**2.52%**	**2.51%**	**2.48%**
Total Equity (%)	**50%**	**50%**	**50%**	**50%**	**50%**	**50%**
Total Fixed Income (%)	**40%**	**40%**	**40%**	**40%**	**40%**	**40%**
% Illiquid	**15%**	**16%**	**17%**	**18%**	**19%**	**20%**

- The Policy Target (on left side of panel above) was adopted in 2013.
  - Real estate, private credit (5% of assets under fixed income) and infrastructure are the current illiquid asset classes. An allocation to private capital will increase illiquid asset exposure.
  - Maximum exposure to "illiquid" assets was limited to a maximum of 20% based on the Legislature's 15% of principal call option.
- The expected return for the Policy Target (first row in table above) represents a 10-year compound rate of 5.1%
- Alternative Mixes 1 – 5 add "Private Capital" in one percent increments: 1% in Mix 1 up to 5% in Mix 5

Range of Potential Return Over Multiple Time Periods – Policy Target

Illustration applies to the Current Target (excluding any allocation to "Private Capital")



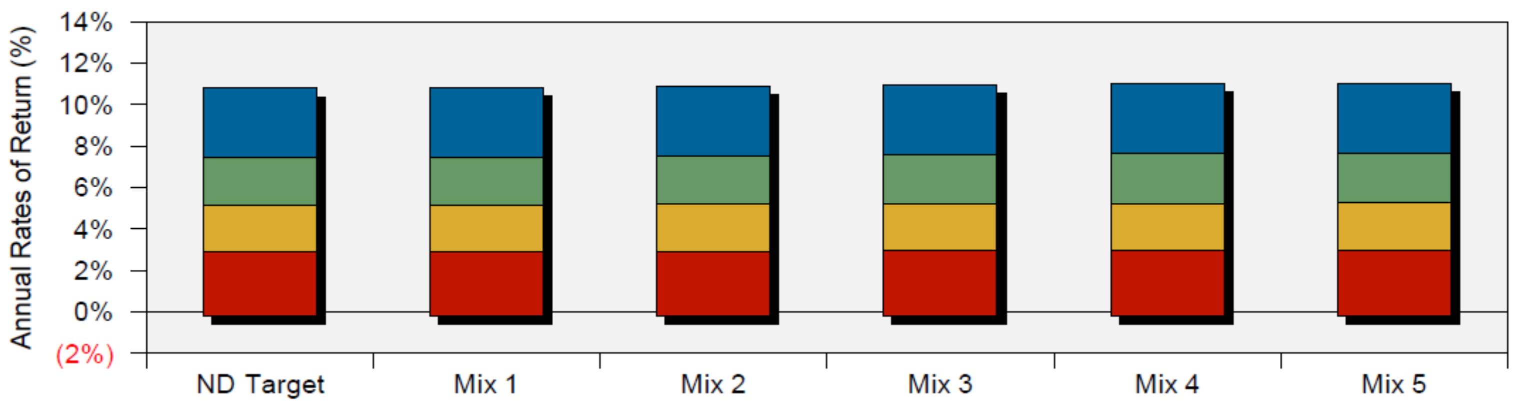
	1 Year	3 Years	5 Years	7 Years	10 Years
5th Percentile	24.1%	15.3%	12.9%	11.8%	10.8%
25th Percentile	12.8%	9.3%	8.4%	7.9%	7.4%
Median	5.2%	5.3%	5.2%	5.2%	5.1%
75th Percentile	(1.9%)	1.1%	2.0%	2.5%	2.9%
95th Percentile	(11.1%)	(4.3%)	(2.4%)	(1.4%)	(0.2%)

- Widest range of potential return outcomes is greater over shorter periods (bars on the left side of the chart) and decreases as the investment time horizon increases (bars on the right side of the chart)
- The greatest uncertainty of market returns (and greatest volatility) is likely to occur over a one-year period
- Range of compound returns narrows over time because the returns in good years offset those in poor years

Range of Potential Returns – 10 Year Projection

Illustration of the Current Target and five Alternative Mixes with progressively more Private Capital

Range of Projected Rates of Return
Projection Period: 10 Years



	ND Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
5th Percentile	10.79%	10.83%	10.88%	10.95%	11.01%	11.04%
25th Percentile	7.44%	7.48%	7.54%	7.57%	7.62%	7.67%
Median	5.12%	5.16%	5.18%	5.20%	5.24%	5.27%
75th Percentile	2.89%	2.92%	2.93%	2.95%	2.95%	2.95%
95th Percentile	(0.17%)	(0.19%)	(0.20%)	(0.21%)	(0.22%)	(0.20%)

- The “ND Target” reflects the Legacy Fund’s current asset allocation policy and does not include Private Capital.
- The five alternative mixes add Private Capital in one-percent increments (1% in Mix 1 to 5% in Mix 5)
- Over a ten-year horizon, the addition of Private Capital modestly enhances returns in the expected case with a slightly wider range of potential outcomes
- Compounding of higher expected returns shifts the Total Fund return distribution modestly higher over time

Summary Observations and Recommendation

OBSERVATIONS

- Existing in-state investment programs have clearly shown that the majority of investments are made via private markets rather than through public markets. They have typically begun with low single-digit target allocations.
- The addition of a "Private Capital" category to the Legacy Fund's Policy Asset Mix will be required if a robust in-state investment program is to be implemented without violating the Fund's current Investment Policy Statement
- All relevant parameters being equal, Private Capital is expected to have a preference for in-state investments although the category is also expected to be diversified with other private investments from across the U.S.
- The Legacy Fund's Private Capital and in-state investment program should be managed in accordance with Institutional best practice including diversification across vintage years, strategies, industries and geography
- As the Private Capital portfolio is assembled over time, it will reduce liquidity available to meet distributions
- Current portfolio invested in 15% illiquid assets
- Unique spending policy of up to 15% of fund assets available for distribution each biennium, on top of annual income, could tax liquidity in a market downturn or should oil and gas royalty payments decline.
- Private Capital programs are expensive so the Legacy Fund's investment management costs will likely increase.

RECOMMENDATION

- Callan recommends that the Legacy and Budget Stabilization Fund Advisory Board consider adopting Mix 3. The interim Private Capital target would be 3 +/- 3% (a range of a minimum 0% to a maximum of 6%).
  - The Target could be adjusted as the program gains traction via successful implementation.
- The adoption of the proposed target would be subject to acceptance by the State Investment Board.
- Expansion of the in-state investment mandate will be subject to the SIB retaining a qualified program manager.

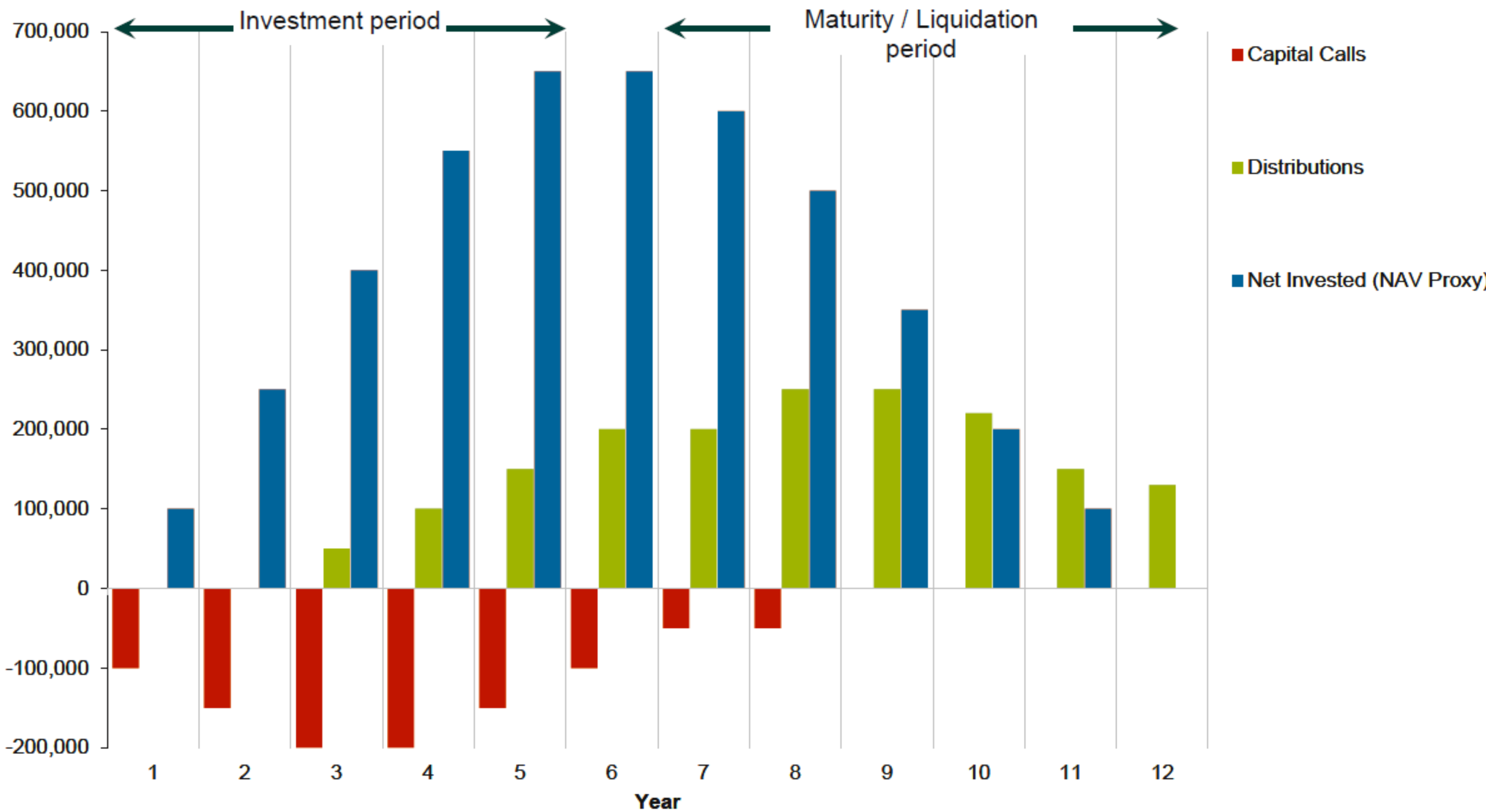
Callan

Supplemental Information

Legacy Fund Asset Allocation Review: Phase One

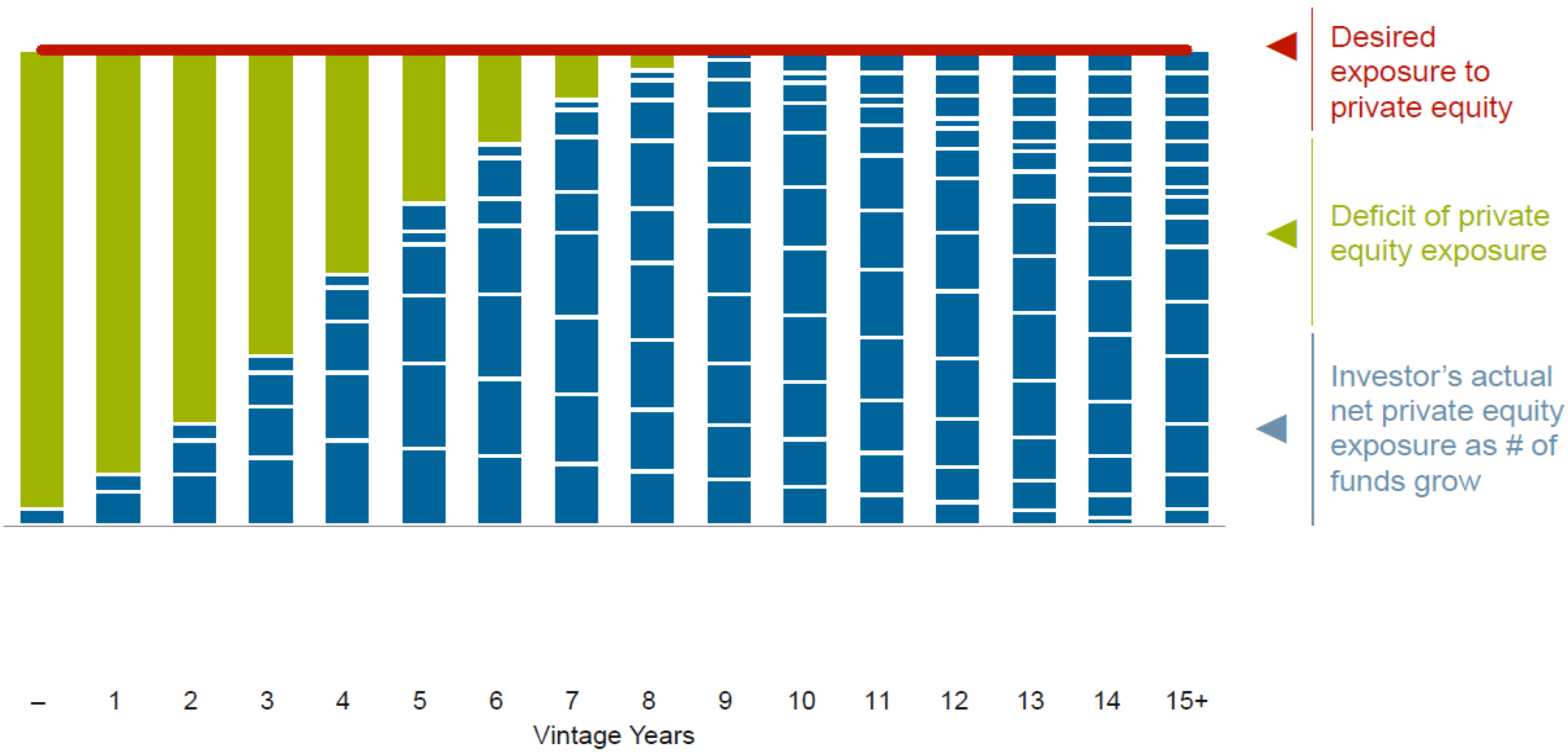
Private Capital Cash Flows and Net Asset Value

Represents yearly cash flow and NAV for a $1 million partnership (or vintage year) commitment



Commitment Pacing

Private Capital Program Development



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Board Action Requested

Legacy Fund Investment Policy Statement

Review of Proposed Changes to the Legacy Fund Investment Policy Statement and Target Asset Allocation Policy

The Legacy Fund Investment Policy Statement was last reviewed and approved by the Advisory Board on February 16, 2021, for accuracy and completeness.

NORTH DAKOTA LEGACY FUND
INVESTMENT POLICY STATEMENT

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The North Dakota Legacy Fund was created in 2010 when the voters of North Dakota approved a constitutional amendment--now Article X, Section 26, of the Constitution of North Dakota--to provide that 30 percent of oil and gas gross production and oil extraction taxes on oil and gas produced after June 30, 2011, be transferred to the Legacy Fund. The principal and earnings of the Legacy Fund may not be spent until after June 30, 2017, and any expenditure of principal after that date requires a vote of at least two-thirds of the members elected to each house of the Legislative Assembly. Not more than 15 percent of the principal of the Legacy Fund may be spent during a biennium. The Legislative Assembly may transfer funds from any source to the Legacy Fund, and such transfers become part of the principal of the fund. The State Investment Board (SIB) is responsible for investment of the principal of the Legacy Fund. Interest earnings accruing after June 30, 2017, are transferred to the general fund at the end of each biennium. North Dakota Century Code Section 21-10-11 provides that the goal of investment for the Legacy Fund is principal preservation while maximizing total return.

2. FUND MISSION

The legacy fund was created, in part, due to the recognition that state revenue from the oil and gas industry will be derived over a finite timeframe. The legacy fund defers the recognition of 30 percent of this revenue for the benefit of future generations. The primary mission of the legacy fund is to preserve the real inflation-adjusted purchasing power of the money deposited into the fund while maximizing total return.

3. RESPONSIBILITIES AND DISCRETION OF THE STATE INVESTMENT BOARD

The Legacy and Budget Stabilization Fund Advisory Board (the "Advisory Board") is charged by law under Section 21-10-11 with the responsibility of recommending policies on investment goals and asset allocation of the Legacy Fund. The SIB is charged with implementing policies and asset allocation and investing the assets of the Legacy Fund in the manner provided in Section 21-10-07--the prudent institutional investor rule. The fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers, which are also required to employ investment strategies consistent with the investment policy. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory not advisory.

At the discretion of the SIB, the fund's assets may be pooled with other funds. In pooling funds, the SIB may establish whatever asset class pools it deems necessary with specific quality, diversification, restrictions, and performance objectives appropriate to the prudent investor rule and the objectives of the funds participating in the pool.

The SIB is responsible for establishing criteria, procedures, and making decisions with respect to hiring, retaining, and terminating money managers. The SIB investment responsibility also includes selecting performance measurement services, consultants, report formats, and frequency of meetings with managers.

The SIB shall notify the Advisory Board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant.

The SIB, after consultation with the board, will implement necessary changes to this policy in an efficient and prudent manner.

4. RISK TOLERANCE

The Advisory Board's risk tolerance with respect to the primary aspect of the legacy fund's mission is low. The Advisory Board is unwilling to undertake investment strategies that might jeopardize the ability of the legacy fund to maintain principal value over time. The Advisory Board recognizes that the plan will evolve as the legacy fund matures and economic conditions and opportunities change.

5. INVESTMENT OBJECTIVES

The Advisory Board's investment objectives are expressed in terms of reward and risk expectations relative to investable, passive benchmarks. The legacy fund's policy benchmark is comprised of policy mix weights of appropriate asset class benchmarks as set by the SIB:

a. **The legacy fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.**
b. The legacy fund's risk, measured by the standard deviation of net returns, should not exceed 115 percent of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the legacy fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

6. POLICY ASSET MIX

After consideration of all the inputs and a discussion of its own collective risk tolerance, the Advisory Board approved the following policy asset mix for the Legacy Fund as of April 2, 2013, and reaffirmed the policy asset mix n May 24, 2018:

Asset Class	Policy Target Percentage
Broad US Equity	30%
Broad International Equity	20%
Fixed Income and BND CD	35%
Core Real Estate	5%
Diversified Real Assets	10%

Broad U.S. Equity	28%
Broad Non-U.S. Equity	19%
Private Capital	3%
Fixed Income and BND CD	35%
Broad Real Estate	5%
Diversified Real Assets	10%

Recommendation: RIO requests the SIB to approve an Advisory Board Recommendation to include a new "Private Capital" target of 3% including a preference for in-state investments at a competitive rate of return. Legacy Fund's revised asset allocation policy is highlighted above and includes a recommended range of +/- 3%.

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually. The SIB approved an 18-month implementation strategy which was completed in January of 2015.

On June 17, 2017, the Advisory Board acknowledged the transfer of the Bank of North Dakota Match Loan Certificates of Deposit Program ("BND CD") – an In-State Investment Program - to the Legacy Fund in early-2017 (representing a sector allocation within Fixed Income). On Aug. 23, 2019, the SIB increased its commitment to the BND Match Loan In-State Investment Program by $100 million for a total commitment of $300 million. On Dec. 3, 2019, the Advisory Board approved this change in the Legacy Fund's asset allocation without exception. BND will be requested to guarantee a minimum investment return. This minimum return requirement will be periodically reviewed in connection with Legacy Fund's overall asset allocation framework. On Oct. 25, 2019, S&P affirmed BND's Issuer Credit Rating as A+ (Long-Term) and A-1+ (Short-Term) with a "Stable" Outlook. **On Nov. 12, 2020, the Advisory Board approved a $100 million increase in the BND's In-State Investment Program raising the total commitment up to $400 million (with a 5% target allocation).**

7. RESTRICTIONS

While the SIB is responsible for establishing specific quality, diversification, restrictions, and performance objectives for the investment vehicles in which the legacy fund's assets will be invested, it is understood that:

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
c. No transaction may be made that would threaten the tax-exempt status of the legacy fund.
d. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
e. No unhedged short sales or speculative margin purchases may be made.
f. Social investing is prohibited unless it meets the exclusive benefit rule, and it can be substantiated that the investment provides an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk. For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the Fund.
g. Economically targeted investing is prohibited unless the investment meets the exclusive benefit rule.

For the purpose of this document, economically targeted investment is defined as an investment designed to produce a competitive rate of return commensurate with risk involved as well as to create collateral economic benefits for a targeted geographic area, group of people, or sector of the economy. Also, for the purpose of this document, the exclusive benefit rule is met if the following four conditions are satisfied:

- **The cost does not exceed the fair market value at the time of investment.**
- **The investment provides the legacy fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.**
- **Sufficient liquidity is maintained in the legacy fund to permit distributions in accordance with the terms of the plan.**
- **The safeguards and diversity that a prudent investor would adhere to are present.**
- **Where investment characteristics, including yield, risk, and liquidity, are equivalent, the Advisory Board's policy favors investments which will have a positive impact on the economy of North Dakota.**

8. INTERNAL CONTROLS

A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for investment manager selection and monitoring. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions, and compliance with the investment policy.

9. EVALUATION AND REVIEW

Investment management of the legacy fund will be evaluated against the fund's investment objectives and investment performance standards. Emphasis will be placed on 5-year and 10-year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the investment policy statement for achieving those objectives.

Performance reports will be provided to the Advisory Board periodically, but not less than quarterly. Such reports will include asset returns and allocation data. Additionally, not less than annually, reports will include information regarding all significant and/or material matters and changes pertaining to the investment of the legacy fund, including:

- Changes in asset class portfolio structures, tactical approaches, and market values.
- Loss of principal, if any.
- Management costs associated with various types of investments.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.
- An evaluation of the national economic climate.
- A forecast of the expected economic opportunities and dangers.
- Management of risk by the SIB.

In addition to the quarterly and annual evaluation and review process, the SIB shall notify the Advisory Board within 30 days of any substantial or notable deviation from the normal management of the legacy fund, including any anomalies, notable losses, gains, or liquidation of assets affecting the fund.

RIO is available to assist the Advisory Board establish separate formal governance policies, if so directed.

ADVISORY BOARD ACTION REQUESTED

TO: **Legacy and Budget Stabilization Fund Advisory Board**

FROM: Dave Hunter and Darren Schulz

DATE: January 29, 2021

SUBJECT: **RIO's In-State Investment Asset Allocation Study Recommendation**

SIB In-State Investment History:

The SIB and Advisory Board have supported in state investment opportunities since their inception. As example, the BND Match Loan CD program, which supports cost efficient financing to businesses looking to start or expand their operations in North Dakota, was raised to a record high $400 million commitment level in late-2020, while the Legacy's other investments earned over $2.4 billion of net investment income for North Dakota in the last 9 years.

Recent SIB and Advisory Board actions to allocate committed capital to support in state investments have kept pace with growth of the Legacy Fund and represent a target 5% allocation in 2020.

Given recent SIB and Advisory Board discussions, RIO recommends the Advisory Board consider two questions:

1) **Determine if the Advisory Board seeks to expand the "in state investment platform" by allowing private market investments; and if so**

2) **Seek to retain a qualified outside firm to conduct an asset allocation study with the purpose of evaluating a potential addition of "private equity" to the Legacy Fund's strategic asset allocation policy.**

Based on the State Investment Board's current research on in-state investing, it is very likely that private equity would be one of the primary asset classes into which potential in-state investments would be allocated. However, an asset allocation study is required to determine the impact of a new private equity program on the Legacy Fund's long-term expected returns, risk profile and needs for liquidity.

Phase One of the Asset Allocation Study will look at optimized asset class projections only and will measure the impact of adding private equity to the Legacy Fund's expected return and risk levels. (1-2 weeks)

Phase Two of the Asset Allocation Study will integrate projections of assets, expected contributions, and targeted spending to measure the range of the Legacy Fund's future financial position. This phase of the analysis will be similar to the asset-liability study conducted by Callan for the Legacy Fund in early-2018. The Phase Two study will use the asset mixes identified in Phase One but will add dollar-measured outcomes that incorporate expected contributions based on oil tax revenues and spending based on projected principal and earnings of the Legacy Fund. (6-7 weeks)

These recommendations seek alignment with recent SIB discussions and serve to harmonize our joint efforts in a professional, diligent and cost efficient manner.

<u>Bank of North Dakota (BND) In-State Investment Program Background and Update</u>:

The BND Match Loan CD Program was established nearly 30 years ago and the SIB and Advisory Board have supported this important in state investment program since their inceptions. In recent years, both boards have approved two Bank of North Dakota (BND) requests to increase the Match Loan CD Program, which enhances BND's ability to offer cost-efficient financing for companies seeking to develop or expand new business opportunities within the State and provide a direct benefit to our local economy. **These two board actions increased the Legacy Fund in-state investment program commitment from $200 million to $300 million in August of 2019 and to a record high of $400 million in late-2020.** RIO understands that BND has a significant pipeline of new loan activity under consideration which prompted BND's two most recent requests for additional committed capital.

RIO has consistently worked to support BND's requested increases to the "In-State Investment Program" in recent years to coincide with Legacy Fund's strong overall growth, but only after significant internal staff discussion, due diligence and consultation with Callan. RIO also engages with large fixed income investment firms to obtain indicative pricing spreads for BND CD's to like-term U.S. Treasuries. After confirming indicative credit spreads and return levels on BND CD's (with fixed rate terms of up to 10-years), RIO gained reasonable assurance the most recently approved program terms and pricing remain in adherence to the "prudent investor rule". **The SIB and RIO consistently strive to meet the requirements of Legal Investments as defined by NDCC 21-10-07, including the "prudent investor rule".**

Key Milestones to Expand Legacy Fund In-State Investment Program:

Sep. 25, 2020 - SIB raises Legacy Fund In-State Investment Program Commitment to $400 million

Oct. 23, 2020 - Callan, Barings, Commerce, Grosvenor and Hamilton Lane share their insight, background and experience in expanding SIB's existing in-state investment program

Nov. 20, 2020 - Callan, RIO and SWIB In-State Portfolio Manager highlight common elements of other mature in-state investment programs in private equity, venture capital and private credit
- Mosaic Governance Advisors reviews key factors when *"Constructing Prudent Due Diligence When Considering an In-State Investment Program"*

Jan. 22, 2021 - RIO outlines key considerations to expand the Legacy Fund In-State Investment Program
- Callan and RIO review recent in-state investment survey results and propose a timeline to advance an "In-State Investment Program" for review and approval by the Advisory Board

Jan. 29, 2021 - RIO recommends the Advisory Board engage Callan to conduct an asset allocation study to evaluate the impact of including a target allocation to private equity by February 12, 2021; and
- Acknowledge the SIB will seek to engage Callan to identify at least one private equity firm with expert, institutional experience within "in-state private equity programs" by March 26, 2021

Feb. 12, 2021 - Callan to present the results of their asset allocation study including the recommended options to expand the Legacy Fund in-state investment program in the private markets. RIO will seek to incorporate the recommended changes into a new Legacy Fund investment policy statement

Feb. 26, 2021 - RIO will seek SIB approval of Legacy Fund's revised investment policy statement including any asset allocation changes to add a new private markets in-state investment program

Mar. 26, 2021 - Callan and RIO will advance at least one investment management firm with expert, institutional experience in implementing a new in-state investment program in the private markets

<u>Callan In-State Investment Program Research of Other U.S. Public Funds</u>:

Callan previously provided a comprehensive list of 23 in-state investment programs in 16 other states ranging in size from $50 million in Colorado and Nevada and up to roughly $1 billion in larger states like California, Florida, New Mexico, New York and Texas. **Although the dollar value of the programs varied widely, they generally represented less than 3% of the underlying investment fund.**

Callan also highlighted programs in states like Alaska, Connecticut, Nevada, New Mexico and Oregon with state economies being more closely comparable to North Dakota's in terms of size and structure (with GDP ranging from $54 to $287 billion). Amounts invested within this group ranged from $50 million to $360 million based on Callan's research. Most of these programs invested in multiple asset classes, though the primary focus is venture capital and growth equity, noting that these two strategies are expected to be the most effective in driving job creation and economic development. Implementation has been through a combination of private equity fund commitments and co-investments, although each state uses different guidelines for which types of businesses the programs intend to target. Most of these programs are designed to support businesses in the state, although Connecticut and Oregon's are regional. Investment outcomes across these state programs has varied from satisfactory to disappointing.

In-State Investment Program Research Project: Phase I

Additional Detail for Selected Programs

State/Region	Program Name	Inception	Invested Capital	Asset Class(es)	Active?	Prudent Inv Rule?	State GDP ($bn)	Implementation	Description
Alaska	Alaska Investment Program	2019	$200m committed	Growth equity, private equity, infrastructure, private credit	Y	Y	$54	Fund investments	Means of supporting growing businesses in the state; Alaska-based investments made with the $200 million won't get preferential treatment: "our No. 1 and only goal is really to beat that private equity benchmark"
Connecticut	Nutmeg Opportunities Fund	2009, 2017	$260m	Private equity, growth equity, venture capital	Y	Y	$287	Fund commitments, direct investments	Invests in smaller or emerging managers with commitment to maintaining an office; having a significant business presence; or business plan to conduct substantial operations in CT
Nevada	Silver State Opportunities Fund	2012	$50m committed	Private equity	Y	N	$178	Fund commitments, co-investments	Generate attractive private equity returns for the State of Nevada Permanent School Fund by investing in Nevada companies either directly or through fund managers. A company is considered a Nevada business if it has a headquarters in the state, or in the process of planning an expansion in or relocation in the state, or significant percentage of employees residing in the state.
New Mexico	Private Equity Investment Program	1993	$360.0m	Venture capital, growth equity, buyout	Y	N	$105	Fund investments and co-investments	Support investments in companies located in the state; companies' headquarters need to be in New Mexico and at least 50% of its employees are required to live and work in the state
Oregon	Oregon Investment Fund	2004	$195.7m	Venture capital, growth equity, buyout	N	Y	$254	Fund investments and co-investments	Fund-of-fund strategy capitalized by the OIC to take advantage of the private equity opportunities in Oregon and the Pacific Northwest. Committed to funds that invest in companies located primarily in the state of Oregon and the Pacific Northwest region, and operating companies alongside the selected managers.

Agenda Item III.C.

BOARD ACTION REQUESTED

TO: State Investment Board

FROM: Dave Hunter, Darren Schulz, Eric Chin and Matt Posch

DATE: January 22, 2021

SUBJECT: Callan LLC Diversified Real Assets Engagement Recommendation

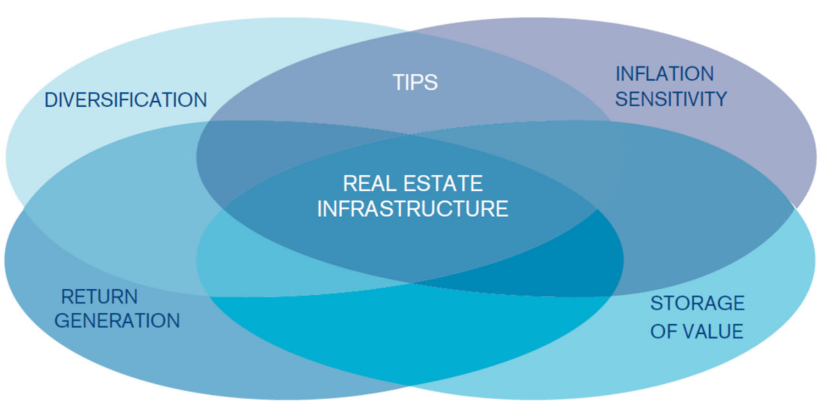
Summary:

In 2020, thanks to unprecedented policy support in response to the COVID-19 induced downturn and the realization of at least three viable COVID-19 vaccines, investors looked through near-term economic and market volatility and adopted a pro-risk stance, thus bidding up public equity securities. Meanwhile, as investors sought to discern cyclical weakness from an acceleration of pre-existing secular trends already in play, the performance of real assets such as private real estate was mixed, reflecting uncertainty regarding the pace and shape of the post-pandemic recovery. As a result of the bifurcated 2020 return environment, Staff recognizes the need to address imbalances relative to policy targets within the broad Diversified Real Assets category created by strong equity market performance across the Pension, Insurance and Legacy Fund pools. Staff is seeking Board approval to retain Callan LLC to assist Staff in reviewing real asset exposures with the goal of developing program commitments in the near term.

Background:

Global real assets are one of four broad asset class categories utilized by the SIB defined by the roles played in the whole portfolio, behaviors in varying economic regimes, and reactions to specific capital market factors. Real assets are broadly defined as value-generating physical assets that serve as portfolio diversifiers when combined with financial assets such as equities and fixed income. Additionally, real assets can provide varying degrees of inflation protection as the revenues of the underlying assets may be linked to measures of inflation such as CPI. Typically, the returns are expected to be derived from income or income-generating potential with some form of capital appreciation. Real assets broadly include a range of such assets as real estate, infrastructure, timberland, and commodities. Inflation-linked securities such as Treasury Inflation-Protected Securities (TIPS) are also often considered a real asset when the definition of real assets includes inflation mitigation given that TIPS are structurally indexed to inflation.

Real Assets Characteristics



Real Assets Portfolio Risk Factors

In designing and implementing a diversified real assets program, a number of risk factors must be taken into account, including the degree to which these factors vary considerably across various real assets categories:

Economic growth (GDP) sensitivity	Asset behavior in response to general economic growth
Inflation sensitivity	Asset behavior in response to changes in measures of inflation
Income/yield-orientation	The contribution of cash yield/income to total return
Interest rate (duration risk)	Sensitivity to changes in interest rates
Project/development risk	Exposure to project-specific development risk
Financing/leverage risk	Dependence on access to availability of credit, leverage levels
Political/geographic risk	Exposure to non-US developed (OECD) and EM economies
Illiquidity risk	Willingness and ability to accept illiquidity
Regulatory exposure	Reliance on regulatory support

Source: Mercer

To illustrate how these key factor risks vary within the real assets class as a whole, the ranges become more pronounced when considering subcategories of implementation options as illustrated in the table below:

Asset class / risk factor	Economic (GDP) growth sensitivity	Inflation linkage	Income / yield-orientation	Interest rate (duration risk)	Project / development risk	Financing / leverage risk	Political / geographic risk	Illiquidity risk	Regulatory exposure
Core real estate	Medium	Medium	High	High	Low	Medium	Low	Medium	Low
Value-added real estate	High	Low	Medium	Medium	Medium	High	Low	High	Low
Opportunistic real estate	High	Low	Low	Low	High	High	Medium	High	Low
Core infrastructure	Low	High	High	High	Low	High	Low	High	High
Core plus infrastructure	Medium	Medium	Medium	High	Medium	High	Low	High	High
Opportunistic infrastructure	High	Medium	Low	High	High	High	Medium	High	High
Timberland	Medium	Medium	Medium	Medium	Medium	Low	Medium	High	Medium
TIPS	Medium	High	High	High	-	-	Low	Low	-
Source: Mercer									

Real estate and infrastructure subcategories listed above can be defined as follows:

Core real estate	Fully stabilized, income-focused properties requiring little to no improvements; low leverage and credit quality tenants in major primary markets; a conservative bond-like return profile and a long-term holding period
Value-added real estate	Properties in primary, secondary and tertiary markets that have higher vacancy rates or some physical obsolescence; once stabilized the property can be marketed as Core; total return is a blend of income and capital appreciation
Opportunistic real estate	Includes ground-up development, redevelopment and adaptive re-use properties that carry execution risk; very little or no cash flow initially and highly levered; focuses mainly on capital appreciation as the primary source of return
Core infrastructure	Established assets with highly contracted cash flows that require little in the way of operational improvements; can be regulated assets with low GDP sensitivity; returns are typically generated through a predictable income return stream
Core plus infrastructure	Assets with less predictable revenues in need of operational improvements and asset-expansion synergies; typically greater economic sensitivity; total returns consist of a balance of income and capital appreciation
Opportunistic infrastructure	Heaviest economic exposure, usually in assets in their development phase with non-contracted revenues or fluctuations in market demand; private equity-like returns are targeted through primarily capital appreciation.

SIB Diversified Real Assets Implementation

Historically, implementation of real assets portfolios across SIB pools have emphasized more income-oriented, defensive investments that generate steady cash flows. Hence what are defined as "Core" or "Core Plus" strategies predominate SIB exposures. For example, SIB real estate investments are geared towards income-focused and near to fully leased properties with low leverage, while infrastructure investments consist largely of regulated assets with availability-type income streams or mature operations that may have some GDP sensitivity. In general, opportunistic investments that entail project development or redevelopment risk, higher leverage and higher economic growth sensitivity are limited in scope. Finally, a preference for unlisted structures has been expressed recognizing that low liquidity needs of most SIB client funds allow them to earn an illiquidity premium in compensation for judiciously surrendering liquidity by investing in private market vehicles.

Current SIB Diversified Real Assets Exposures

Due to strong equity market performance, mixed returns within Diversified Real Assets, and distributions from maturing, later life partnerships, deviations from policy targets, as evidenced below, need to be addressed by Staff with the assistance of Callan LLC, our general consultant.

SIB Consolidated Investment Pools
Diversified Real Assets Portfolios
as of November 30, 2020

	Pension				Legacy				Insurance			
Real Assets Category	Market Value	Actual %	Target %	O/(U)	Market Value	Actual %	Target %	O/(U)	Market Value	Actual %	Target %	O/(U)
Real Estate	672,733,075	10.1%	10.5%	(0.4%)	344,181,873	4.4%	5.0%	(0.6%)	96,926,265	3.1%	3.6%	(0.5%)
Infrastructure	304,562,212	4.6%	6.1%	(1.6%)	290,414,064	3.7%	3.7%	0.0%	51,782,670	1.7%	1.7%	0.0%
U.S. TIPS	-	0.0%	0.0%	0.0%	456,351,432	5.8%	6.3%	(0.5%)	163,350,923	5.2%	5.4%	(0.2%)
Timber	123,307,174	1.9%	1.9%	0.0%	-	0.0%	0.0%	0.0%	51,892,399	1.7%	1.7%	0.0%
Total	1,100,602,461	16.5%	18.6%	(2.0%)	1,090,947,370	13.8%	15.0%	(1.2%)	363,952,257	11.7%	12.3%	(0.7%)

Current Market Environment

2020's disruption produced winners and victims that were a combination of themes both transformational and transitional:

- An acceleration of pre-existing structural themes such as tailwinds in e-commerce and digitization. E-commerce has fueled logistics real estate and connectivity has benefited data centers, cell towers, fiber and telecom.

- Assets dependent on mobility, such as lodging, retail and transportation were in the crosshairs of the pandemic. The pre-existing trend of the shrinkage of brick and mortar retail accelerated significantly.

- The future of the office post-pandemic is top of mind for institutional investors as companies are looking to reduce the amount of space they lease per worker. The traditional model of a single site, sole-occupancy corporate HQ is a relic of the past as companies now seek smaller, more flexible and cheaper office space.

These are important trends to navigate in the early recovery of more cyclically sensitive sectors in which case some may fall victim to permanent disruption.

Conclusion

Staff is seeking Board approval to retain Callan LLC to assist Staff in reviewing real asset exposures with the goal of developing program commitments for the Pension, Insurance and Legacy pools in the near term.

GCM GROSVENOR

North Dakota State Investment Board

GCM Grosvenor CIS III

February 2021

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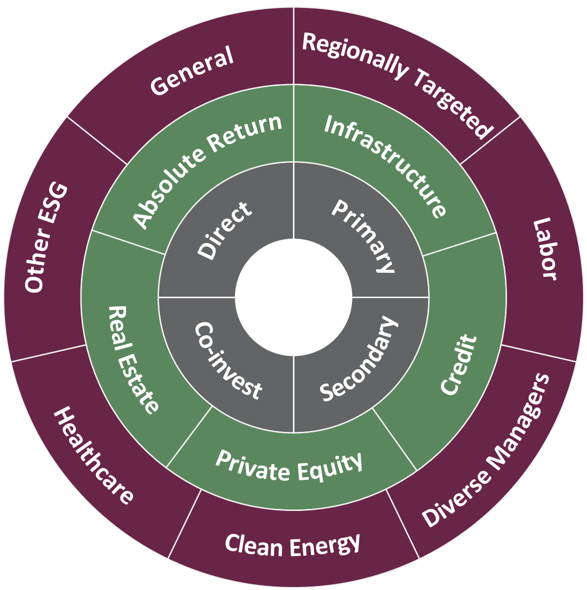
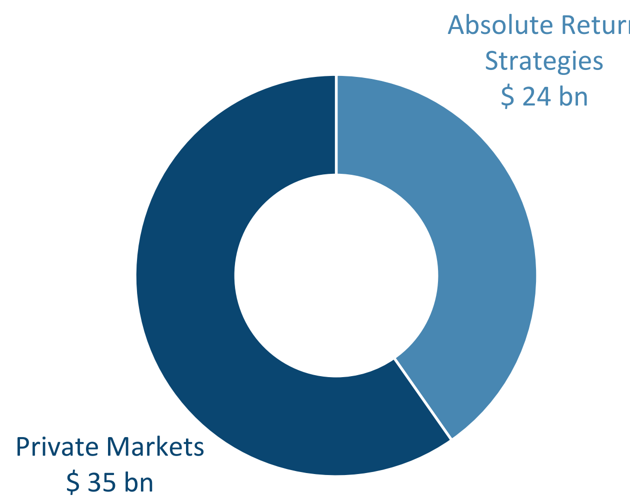
50 Years of Alternatives Investing

GCM Grosvenor is one of the world's largest and most diversified independent alternative asset management firms.

1971	77%	$59 bn	497	171
First year of Investing	of AUM in customized separate accounts	Assets under Management	Employees	Investment professionals





Employee data as of October 1, 2020. AUM data as of September 30, 2020. The Operational Due Diligence team is included in the Investment professionals count.

A Global Leader in Infrastructure Investments

Select risks include: *information risk, foreign country exposure risk, construction risk, commodity price risk, operating risk and technological risks.*

A Partner of Choice

2,000+ *Infrastructure deals reviewed since 2003*

- ✓ Long-term relationships
- ✓ Flexible capital solution provider
- ✓ Selective approach
- ✓ Large, focused investment team

Primary Funds

2005	43	$1.4B
Date of First Investment	Number of Funds	Median Fund Size

Potential Benefits

- › **Broad diversification** from look through exposure to 100+ underlying investments
- › Improved net outcomes from **fee/carry negotiations** with sponsors
- › **Access** to new managers, unique mandates, hard to access funds from GCM Grosvenor's proprietary network

Co-Investments

2003	56	17
Date of First Investment	Number of Transactions	Number of Realizations

Potential Benefits

- › **Best ideas** from the best managers
- › **Alpha generation** from targeted opportunities and sub-sectors
- › **Fee efficiency** from typically one layer of fees
- › **J-curve mitigation** from shorter hold periods/cash yield

Secondaries

2009	27	18.2%
Date of First Investment	Number of Fund Interests Purchased	Average Discount Paid[1]

Potential Benefits

- › Additional **diversification** from seeded portfolios
- › **Alpha generation** from discounted valuation
- › **Fee efficiency** from avoided historical fees/expenses
- › **J-curve mitigation** from shorter hold periods/cash yield

Data as of June 30, 2020 unless otherwise noted. Deals sourced data as of December 31, 2020.

1 Weighted average discount based on initial PCAP contributions; data as of June 30, 2020.

No assurance can be given that any investment will achieve its objectives or avoid losses. Unless apparent from context, all statements herein represent GCM Grosvenor's opinion.

CIS III

Overview

- Portfolio of global infrastructure assets constructed by partnering with world class sponsors
- Focused on generating attractive risk-adjusted returns and current income
- 17+ year track record of successful infrastructure investing

CIS I	CIS II
$538 million[1]	$643 million[1]
2009 Vintage	2015 Vintage

Geography	Primarily North America and Europe
Diversification across sectors	Digital infrastructure, conventional and renewable power generation, regulated utilities, midstream, social infrastructure, and transportation
Structure	Equity (80-100%), Debt (0-20%)
Stage	Brownfield (70-90%), Greenfield (10-30%)
Strategy	Core Plus/Value Add

Strategy Options

	DIVERSIFIED STRATEGY
Target net IRR[2]	9% - 11%
Target gross annual cash yield[2]	3% - 5%
Number of investments	~30
Fund term	12 years
Investment type	 Co-investments/ Secondaries: at least 50%; Primary funds: up to 50%

1 Fund size represents LP and GP commitments to CIS I and CIS II. CIS I and CIS II are closed to new investors.

2 **Target returns, forward looking estimates, and risk parameters are shown to illustrate the current risk/return profile of how the fund or investment is/will be managed. <u>They do not forecast, predict, or project any fund, investment, or investor return.</u> See the Notes and Disclosures following this report for additional information regarding target returns, forward looking estimates and risk parameters.**

For illustrative purposes only. No assurance can be given that any investment will achieve its objectives or avoid losses. Past performance is not necessarily indicative of future results.

GCM Grosvenor's Differentiated Approach

Robust Deal Flow[1]

Primary Funds
Sourced: 760
Diligenced: 78
Committed: 43

Secondaries
Sourced: 176
Diligenced: 61
Committed: 27

Co-Investments
Sourced: 1,122
Diligenced: 141
Committed: 56

Our fully integrated program leads to unique sourcing

Deep Infrastructure Relationships

Mega Funds
Brookfield Infrastructure Partners
Global Infrastructure Partners
Stonepeak Infrastructure Partners
KKR
I Squared Capital
Antin Infrastructure Partners
Macquarie

Mid-Cap Funds
The Carlyle Group
InstarAGF
Manulife
John Hancock

Emerging Managers
equitix
Dalmore Capital
Star America Infrastructure Partners, LLC

Sector Specialist
Orion Energy Partners
digitalcolony
EIG Global Energy Partners

Strategic Investors
GE

Intermediaries
PJ Solomon
Campbell Lutyens

Sovereign Funds/ Pensions
GIC
TRS
Abu Dhabi Investment Council
CPP Investment Board

Committed data as of June 30, 2020.

1 Data from 2003 – December 31, 2020 unless otherwise noted. Deal flow count methodology changed in 2013. As a result, deal flow count for years prior to 2013 are an approximate count.

For illustrative purposes only. Unless apparent from context, all statements herein represent GCM Grosvenor's opinion. **No assurance can be given that any investment will achieve its objectives or avoid losses.**

Where We are Focused Today

Dislocations are driving opportunities not seen in over a decade

MIDSTREAM

- Depressed crude prices will stress midstream businesses
- Decreased demand for electricity will stress conventional generation assets

TRANSPORTATION

- COVID-19 has likely changed the face of travel for an extended period
- Recessionary economics will result in lower container volumes in near term

SECONDARIES

- Potential for denominator effect to force LPs to consider liquidity
- Write downs, longer holds may cause GPs to seek fund-wide capital solutions

Infrastructure sectors showing resilience in the current environment

DIGITAL INFRASTRUCTURE

- Mobile network traffic growth to 5G transition
- Demand for towers and data centers

RENEWABLE POWER GENERATION

- ESG mandates and legislative standards increasing demand
- Coal/nuclear phase-outs require new build generation

REGULATED UTILITIES

- Need for grid reliability/storage infrastructure
- Regulated utilities seeking capital to modernize

Unless apparent from context, all statements herein represent GCM Grosvenor's opinion. **No assurance can be given that any investment will achieve its objectives or avoid losses.**

CIS I and II Performance Update

Inception to Date Returns for North Dakota State Investment Board

CIS I

2009
Vintage

$538 million
Fund size[1]

1.52x	10.3%	1.14x
Gross MOIC	Gross IRR	Gross DPI
1.40x	**8.5%**	**1.01x**
Net MOIC	Net IRR	Net DPI

Number of investments	32
Gross average annual cash yield[2]	3.6%
Loss ratio	5.2%

CIS II

2015
Vintage

$643 million
Fund size[1]

1.32x	13.4%	0.41x
Gross MOIC	Gross IRR	Gross DPI
1.27x	**9.9%**	**0.43x**
Net MOIC	Net IRR	Net DPI

Number of investments	33
Gross average annual cash yield[2]	2.8%
Loss ratio	0.9%

Sectors[3]:

Social/PPP	28%
Social (Waste Management)	23%
Communication Infrastructure	12%
Renewables	9%
Regulated Utilities	9%
Power Generation – Conventional	6%
Transportation	5%
Other	4%
Midstream Infrastructure	3%
Utilities	1%

Sectors[3]:

Communication Infrastructure	26%
Transportation	22%
Renewables	18%
Power Generation - Conventional	9%
Midstream Infrastructure	8%
Social/PPP	7%
Regulated Utilities	6%
Utilities	3%
Other	<1%

1. Fund size represents LP and GP commitments to CIS I and CIS II.
2. Inception to date as of December 31, 2019, updated annually.
3. Data is based on underlying holdings as of the stated valuation date referenced in the "Summary of Endnotes".

As of September 30, 2020, please see "Summary of Endnotes" for additional information. **Past performance is not necessarily indicative of future results. No assurance can be given that any investment will achieve its objectives or avoid losses. CIS I and II are closed to new investors.**

Summary of Terms and Conditions: Diversified Strategy[1]

CIS III

TERMS:

Minimum Commitment	$5.0 million
GP Commitment	1% of aggregate commitments
Commitment Period	Three years from final closing
Target Term	Twelve years after the final closing[2]
Available Structures	Delaware ($), Cayman ($) or Luxembourg (€)

FEES:

Aggregate Commitment	Standard
Below $50m	0.30% Estimated Average Annual Effective Fee[3] *(0.55% per annum[4])*
$50m and above	0.27% Estimated Average Annual Effective Fee[3] *(0.50% per annum[4])*

First Close Discount:	5 bps[4]

Carried Interest

- Primary Fund Investments: none
- Co-investments and Secondaries: 10% with a 100% GP catch-up

Preferred Return

8% per annum compounded annually

1 Diversified includes: co-investments, secondaries, and primary funds.
2 The term may be extended (i) in the sole discretion of the General Partner for up to two successive one-year terms, and (ii) one year thereafter with the consent of the Fund's Limited Partners.
3 Represents estimated average annual effective management fee over life of assumed 16-year program based on ramp-in and ramp-down schedule, available upon request.
4 Fee charged on total capital commitments multiplied by a ramp-in and ramp-down schedule, available upon request.

This summary of select terms and conditions is qualified in its entirety by reference to the fund's Private Placement Memorandum, agreement of limited partnership, and other operative documents as finalized by GCM Grosvenor.

The fund will bear reasonable expenses incurred in connection with the fund's organization. The fund will also bear its operational costs, including GCM Grosvenor's out-of-pocket expenses associated with identifying, making, and monitoring investments, as well as costs associated with insurance, reporting, taxes (if any), legal and accounting costs, and the costs of any audits.

Appendix

Notes and Disclosures

Summary of Endnotes

Notes and Disclosures (1 of 2)

Universal

- All Fund/Program data is as of **September 30, 2020**, unless otherwise noted. All fund investment and co-investment valuations are as of **June 30, 2020** and **September 30, 2020**, respectively, unless otherwise noted.
- Investment Returns (Gross Returns) are presented net of fees and expenses charged at the investment level but do not reflect the fees, expenses, and carried interest charged by the relevant GCM Fund/Program to its investors/participants (i.e., gross/net performance). Unless otherwise indicated, Investment Returns do not take into account the application of leverage. Additional information is available upon request.
- Investor Net (Limited Partner “LP” net) Returns are presented net of all fees, expenses, and carried interest (i.e., net/net performance).
- If applicable, pie charts reflecting remaining value are based on the Fund/Program’s percentage of ownership in the investments. Remaining value is by the stated valuation date and is reflected gross of both investment and Fund/Program-related management fees, expenses and carried interest, if applicable.
- If applicable, performance of predecessor investments and/or funds reflected herein may not represent GCM Grosvenor’s returns for such investments/funds. Information regarding predecessor investments and/or funds sourced from reports and/or other materials provided by managers/sponsors.
- If applicable, investments may be held indirectly through special purpose vehicles.
- If applicable, for secondary investments, commitments to the investments represent the purchase price paid plus unfunded commitment at the time of purchase.
- Amounts for any foreign-denominated investments, if applicable, have been converted to the Fund/Program’s currency as of period-end.
- GCM Grosvenor’s investment characteristics and related definitions may differ from those used by The Burgiss Group (“Burgiss”). GCM Grosvenor has used its best efforts to match each characteristic with the appropriate Burgiss characteristic but material differences may exist. Additional information is available upon request.

Fund/Program Summary

- Capital Called from Investor(s) - Includes amounts called for investments, Fund/Program expenses and management fees.
- Distributions to Investor(s) - Represents total proceeds returned to investor(s) (including recallable and non-recallable returns of capital) and withholding taxes paid to taxing authorities on behalf of investor(s), if applicable.
- Fund Size - As of the previous quarter-end or earlier and reflect the aggregate fund size which may include additional investment vehicles to which the Fund/Program may not have commitments.
- Funded Amount/Invested Capital/Contributions - Represents amounts funded to the investments plus capitalized expenses paid. A portion of the funded amount may not reduce the Fund/Program’s remaining commitments to the investments.
- Reported Value/Fair Value/Net Asset Value “NAV” - Represents the fair value reported by the funds as of the stated valuation date, adjusted for cash flows through period end, where applicable, pursuant to GCM Grosvenor’s valuation policy. If applicable, for co-investments, the fair value is determined by the General Partner/Investment Manager as of the stated valuation date pursuant to GCM Grosvenor’s valuation policy.

Summary of Endnotes (continued)

Notes and Disclosures (2 of 2)

- Distributions/Realized Proceeds - Represents recallable and non-recallable proceeds received from the investments. If applicable, for co-investments, amounts may be inclusive of escrow proceeds receivable.
- Total Value - Represents the Reported Value plus Distributions.
- Investment Multiple/Gross Multiple/Gross MOIC/TVPI - Represents the Total Value divided by the Funded Amount.
- Investment IRR/Gross IRR – Investment IRR is calculated using all investment-related cash flows through and the reported value of investments as of the stated valuation date. Because GCM Grosvenor management fees, allocable expenses and carried interest, as applicable, are recorded at the Fund/Program level and not at the investment level, such fees and expenses are excluded from the calculation of individual investment returns. The Investment IRR for all performance information with less than 365 days of cash flows has not been annualized. The Investment IRR for all performance information with more than 365 days of cash flows has been annualized. N/A is reflected for Investment IRR if there is no cash flow activity as of the date referenced or earlier. N/M is reflected for Investment IRR if GCM Grosvenor believes the cash flow activity is not meaningful as of the date referenced.
- Investor Net Multiple/LP Net Multiple/LP Net TVPI – Investor Net Multiple is calculated as total proceeds distributed to the Investor plus the Investor's ending value as of **September 30, 2020** divided by the Investor's total contributions. The Investor Net Multiple includes management fees, allocable expenses and carried interest at the Fund/Program level.
- Investor Net IRR/LP Net IRR - The Investor Net IRR returns are based on the actual cash flows to the investor and the ending capital account value as of **September 30, 2020**. The Investor Net IRR includes management fees, allocable expenses and carried interest, if applicable, at the Fund/Program level.
- Valuation Date – Represents the valuation date of the respective investments reflected herein. If applicable, charts that are inclusive of both co-investments and underlying holdings of fund investments may reflect a co-investment valuation date as of the fund investment valuation date (i.e., on a quarter lag).
- Other Fund Net Assets/(Liabilities) - Represents all other assets and/or liabilities other than investments, consisting of cash balance, accrued management fees, accrued Fund/Program expenses and/or any other receivable and payables, where applicable, as of the period end.

Past performance of CIS I or CIS II is not indicative of future results of any other GCM Grosvenor fund and there can be no assurance that comparable returns will be achieved by any other GCM Grosvenor fund.

Target Returns, Forward Looking Estimates, and Risk Parameters

Notes and Disclosures

Target Returns, Forward Looking Estimates, and Risk Parameters: Target returns, forward looking estimates, and risk parameters are shown to illustrate the current risk/return profile of how the fund or investment is/will be managed. **Target returns, forward looking estimates, and risk parameters do not forecast, predict, or project any fund, investment, or investor return.** It does not reflect the actual or expected returns of any investor, investment, GCM fund, or strategy pursued by any GCM fund, and does not guarantee future results.

Target returns, forward looking estimates, and risk parameters:

- are based solely upon how the fund or investment is expected to be managed including, but not limited to, GCM Grosvenor's current view of the potential returns and risk parameters of the investment, investments in the GCM fund, or strategy pursued by a GCM fund;
- do not forecast, predict, or project the returns or risk parameters for any investor, investment, GCM fund, or any strategy pursued by any GCM fund; and
- are subject to numerous assumptions including, but not limited to, observed and historical market returns relevant to certain investments, asset classes, projected cash flows, projected future valuations of target assets and businesses, other relevant market dynamics (including interest rate and currency markets), anticipated contingencies, and regulatory issues.

Changes in the assumptions will have a material impact on the target returns, forward looking estimates, and risk parameters presented. Target returns and forward looking estimates are generally shown before fees, transactions costs and taxes and do not account for the effects of inflation. Management fees, transaction costs, and potential expenses may not be considered and would reduce returns and affect parameters. **Target Returns And Risk Parameters May Not Materialize.**

In addition to the general disclosures discussed herein, please also consider the following when reviewing information relating to GCM Grosvenor Customized Infrastructure Strategies III, L.P. (the "Fund").

An investment in the Fund is subject to general categories of risk in addition to those that apply to investing in all Grosvenor Funds (see the above disclosures), including, but not limited to: **Strategy Risks** – Infrastructure investments will expose the Fund to risks associated with changes in the availability or price of inputs necessary, including but not limited to, electricity and fuel, for the operation and or/construction of infrastructure assets. Events outside the control of the Fund (e.g., political actions, economic growth, macroeconomic policies, terrorist acts, competition from other infrastructure assets, labor costs, labor disputes, construction delays, public demand/usage, adverse weather conditions, natural disasters, etc.) will directly impact the infrastructure assets held by the Fund, perhaps in a materially way. The operation and maintenance of infrastructure assets involve various risks and is subject to substantial regulation and such operation and maintenance may be delegated to a third party unaffiliated with the Fund or applicable Underlying Fund and the failure of such third-party to perform its duties could have an adverse impact on the Fund. If an investment in an infrastructure asset is not made, the Fund may still bear a portion of the third-party costs incurred while performing due diligence for such potential infrastructure asset. Infrastructure projects are especially sensitive to government regulations and such regulations may add additional costs that would be indirectly borne, in part, by the Fund. In addition, infrastructure assets may be subject to unfavorable rate regulation by government agencies. Co-investments will expose the Fund to risks associated with the sponsor alongside whom the Fund is co-investing; and the interests of such Sponsor may conflict with the interests of the Fund. The Fund expects to have little opportunity to review and/or negotiate the terms of a particular co-investment and will typically not have the same access to information regarding a particular co-investment opportunity if it were leading the negotiation of such terms. The Fund will have limited control over individual co-investments and will likely be required to rely on the sponsor to make such determinations. The Fund may also be exposed to potential liabilities of a controlling person with respect to individual co-investments.

Infrequently, the Fund may pay a "sourcing fee" or substantially similar fee to a co-investment sponsor in relation to the Fund's investment alongside such sponsor.

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Notes and Disclosures

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The information contained in this presentation (“GCM Information”) relates to GCM Grosvenor, to one or more investment vehicles/accounts managed or advised by GCM Grosvenor (the “GCM Funds”) and/or to one or more investment vehicles/accounts (“Underlying Funds”) managed or advised by third-party investment management firms (“Investment Managers”). **GCM Information is general in nature and does not take into account any investor’s particular circumstances. GCM Information is neither an offer to sell, nor a solicitation of an offer to buy, an interest in any GCM Fund. Any offer to sell or solicitation of an offer to buy an interest in a GCM Fund must be accompanied by such GCM Fund’s current confidential offering or risk disclosure document (“Fund Document”).** All GCM Information is subject in its entirety to information in the applicable Fund Document. Please read the applicable Fund Document carefully before investing. **Except as specifically agreed, GCM Grosvenor does not act as agent/broker for prospective investors. An investor must rely on its own examination in identifying and assessing the merits and risks of investing in a GCM Fund or Underlying Fund (together, “Investment Products”), and each prospective investor should consult its own attorney, business advisor and tax advisor as legal, business, tax and related matters concerning any Investment Products.**

A summary of certain risks and special considerations relating to an investment in the GCM Fund(s) discussed in this presentation is set forth below. A more detailed summary of these risks is included in the relevant Part 2A of Form ADV for the GCM Grosvenor entity (available at: http://www.adviserinfo.sec.gov) and as well as those described under the section entitled “Risk Factors” in GCM Grosvenor's filings with the SEC, which are accessible on the SEC’s website at www.sec.gov. **Regulatory Status-** neither the GCM Funds nor interests in the GCM Funds have been registered under any federal or state securities laws, including the Investment Company Act of 1940. Investors will not receive the protections of such laws. **Market Risks-** the risks that economic and market conditions and factors may materially adversely affect the value of a GCM Fund. **Illiquidity Risks-** Investors in GCM Funds have either very limited or no rights to redeem or transfer interests. Interests are not traded on any securities exchange or other market. **Strategy Risks-** the risks associated with the possible failure of the asset allocation methodology, investment strategies, or techniques used by GCM Grosvenor or an Investment Manager. GCM Funds and Underlying Funds may use leverage, which increases the risks of volatility and loss. The fees and expenses charged by GCM Funds and Underlying Funds may offset the trading profits of such funds. **Valuation Risks-** the risks relating to the fact that valuations of GCM Grosvenor funds may differ significantly from the eventual liquidation values, and that investors may be purchasing/redeeming on such potentially inaccurate valuations. **Tax Risks-** the tax risks and special tax considerations arising from the operation of and investment in pooled investment vehicles. **Institutional Risks-** the risks that a GCM Fund could incur losses due to failures of counterparties and other financial institutions. **Manager Risks-** the risks associated with investments with Investment Managers. **Structural and Operational Risks-** the risks arising from the organizational structure and operative terms of the relevant GCM Fund and the Underlying Funds. **Cybersecurity Risks-** technology used by GCM Grosvenor could be compromised by unauthorized third parties. **Foreign Investment Risk-** the risks of investing in non-U.S. Investment Products and non-U.S. Dollar currencies. **Concentration Risk-** GCM Funds may make a limited number of investments that may result in wider fluctuations in value and the poor performance by a few of the investments could severely affect the total returns of such GCM Funds. In addition, GCM Grosvenor and the Investment Managers are subject to certain actual and potential conflicts of interest. An investment in an Underlying Fund may be subject to similar and/or substantial additional risks and an investor should carefully review an Underlying Fund’s risk disclosure document prior to investing. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this presentation and in GCM Grosvenor’s filings with the SEC.

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GCM Grosvenor considers numerous factors in evaluating and selecting investments, and GCM Grosvenor may use some or all of the processes described herein when conducting due diligence for an investment. Assets under management for hedge fund investments include all subscriptions to, and are reduced by all redemptions from, a GCM Fund effected in conjunction with the close of business as of the date indicated. Assets under management for private equity, real estate, and infrastructure investments include the net asset value of a GCM Fund and include any unallocated investor commitments during a GCM Fund's commitment period as well as any unfunded commitments to underlying investments as of the close of business as of the date indicated. GCM Grosvenor may classify Underlying Funds as pursuing particular "strategies" or "sub-strategies" (collectively, "strategies") using its reasonable discretion; GCM Grosvenor may classify an Underlying Fund in a certain strategy even though it may not invest all of its assets in such strategy. If returns of a particular strategy or Underlying Fund are presented, such returns are presented net of any fees and expenses charged by the relevant Underlying Fund(s), but do not reflect the fees and expenses charged by the relevant GCM Fund to its investors/participants.

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To the extent GCM Information contains "forward-looking" statements, including within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, such statements represent GCM Grosvenor's good-faith expectations concerning future actions, events or conditions, and can never be viewed as indications of whether particular actions, events or conditions will occur. You can identify these forward-looking statements by the use of words such as "outlook," "indicator," "believes," "expects," "potential," "continues," "may," "will," "should," "seeks," "approximately," "predicts," "intends," "plans," "estimates," "anticipates" or the negative version of these words or other comparable words. Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in the GCM Information. All expressions of opinion are subject to change without notice in reaction to shifting market, economic, or other conditions. GCM Grosvenor does not give any assurance that it will achieve any of its expectations. GCM Grosvenor undertakes no obligation to publicly update or review any forward-looking statements, whether as a result of new information, future developments or otherwise, except as required by applicable law.

For any questions, please contact GCM Grosvenor Investor Relations at investorrelations@gcmlp.com.

Callan

February 19, 2021

North Dakota State Investment Board

Grosvenor Customized Infrastructure Strategies III L.P.

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Executive Summary

This report provides a summarized review and recommendation regarding a potential investment by North Dakota State Investment Board ("SIB") to Grosvenor Customized Infrastructure Strategies III L.P. (the "Fund", "Fund III" or "CIS III"), sponsored by GCM Grosvenor ("Grosvenor", "Manager" or "Sponsor"). SIB made a $105 million commitment to Grosvenor Customized Infrastructure Strategies II L.P. ("Fund II" or "CIS II") and a $75 million commitment to Grosvenor Customized Infrastructure Strategies I L.P. ("Fund I" or "CIS I") which are part of the same fund series. It is standard practice within closed-end fund investing to commit to follow on funds within a series to maintain vintage year diversification, barring significant changes to or challenges within the management organization, fund strategy or performance.

Callan reviewed the Fund's documents, including the Limited Partnership Agreement, Private Partnership Memorandum, and Due Diligence Questionnaire, as well as the marketing presentations and research used by the Sponsor to evaluate the investing environment. Callan met with members of the GCM Grosvenor team in the GCM Grosvenor New York City office in 2019 and met with Scott Litman (Managing Director) and Lisa Kastigar (Managing Director) in the Callan San Francisco office in February 2020. Callan conducted a virtual diligence meeting with Scott Litman, Michael Rose (Managing Director) and Lisa Kastigar in January 2021 as part of the diligence process for a potential investment in Fund III.

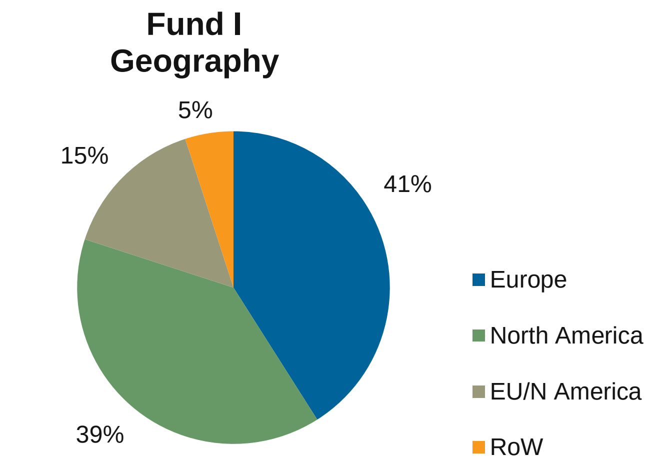
Investment Strategy[1]

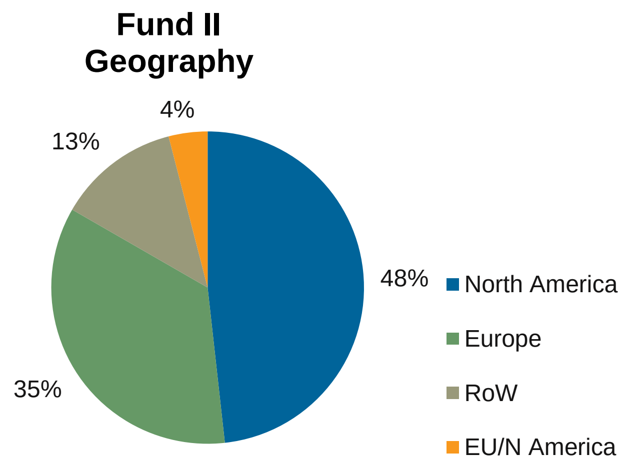
The Fund is the third infrastructure equity fund sponsored by Grosvenor in the series. The Sponsor is targeting a Fund size of $750 million, which is slightly larger than prior fund in the series, CIS II, which raised $643 million. The Fund is targeting a net return of 9%-11%, with a target gross yield of 3% to 5%, and is aiming to generate a low-to-mid-single-digit cash yield to CIS III upon full investment of the Fund. The Sponsor will continue the same investment strategy as prior funds in the series, focused on investments in core plus/value add infrastructure and infrastructure-related assets and businesses – alongside experienced infrastructure sponsors focused on the North American and European market. Geographically, the Fund targets 40-60% exposure to North America, 40-60% Europe and 0-20% to Rest of World ("RoW"). At least 80% of the Fund will be invested in equity strategies, with up to 20% allowed for debt-focused strategies. The Fund will focus on brownfield (e.g. existing) investments, although it may invest up to 30% of total commitments in greenfield (e.g. development) investments. The Fund III target portfolio will be comprised of up to 50% primary funds and at least 50% co-investments/secondaries exposure. The Sponsor is targeting 30-35 investments. The Fund does not have any seed assets.

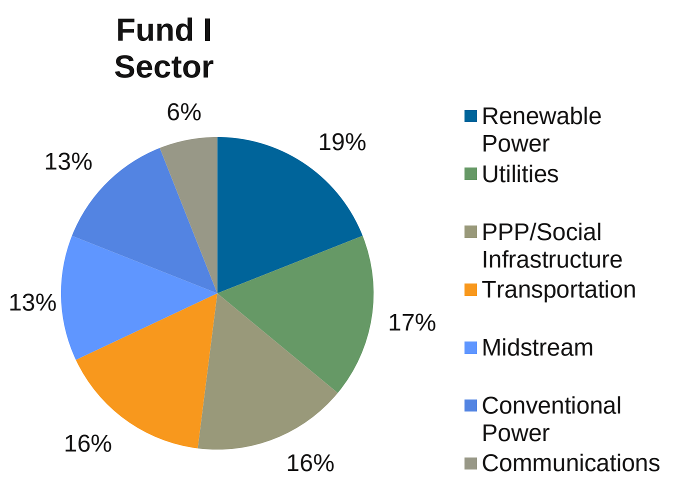
Fund III will target the same type of sector diversification as the prior fund, with a focus on digital infrastructure, conventional and renewable power generation, regulated utilities, transportation, midstream and social infrastructure. In recent years, digital infrastructure has become a larger part of the infrastructure sector; as moving, processing and storing data has required the development of significant physical infrastructure, such as fiber, wireless and wireline networks, and thousands of megawatts of datacenter capacity. Power/midstream/renewables investments will be considered as the US energy sector continues to develop (e.g. natural gas and shale discoveries) and infrastructure is developed to move and store these fuel sources. There is increasing interest in renewables as a source of power, which offers opportunity to invest in wind, solar, storage and other related infrastructure. Transportation-related infrastructure encompasses assets such as airports, rail, roads, marine terminals, ports, logistics and supply chain storage may be part of the investment opportunity. Regulated utilities and social infrastructure may also be considered as part of the investment universe.

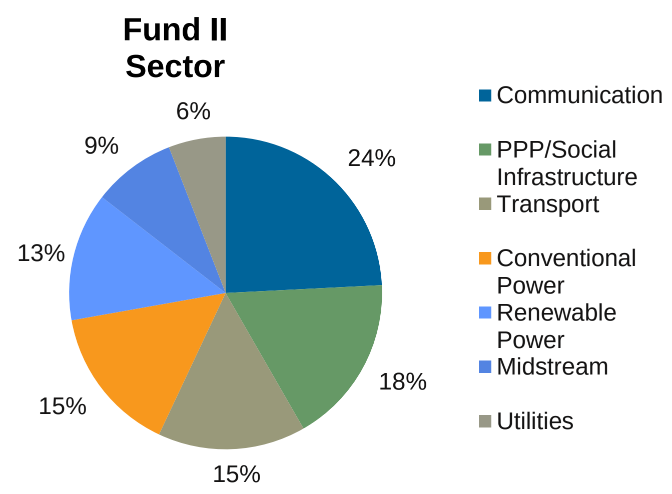
[1] Includes quoted and paraphrased excerpts from representative materials provided to, and reviewed by, Callan.

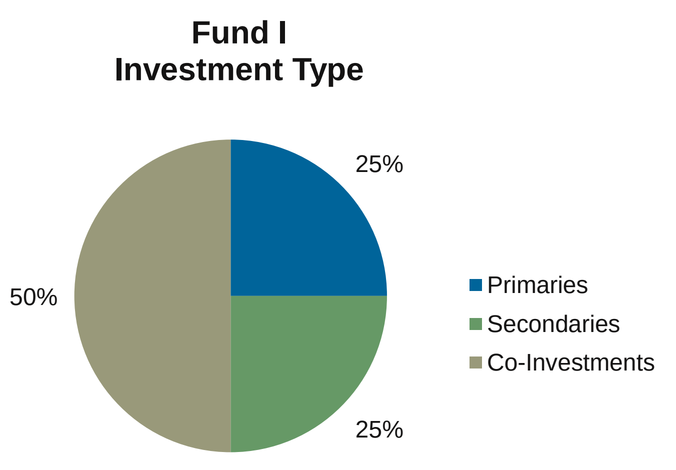
The following pie charts summarize CIS Fund I and II diversification at September 30, 2020, which is expected to be similar for Fund III.

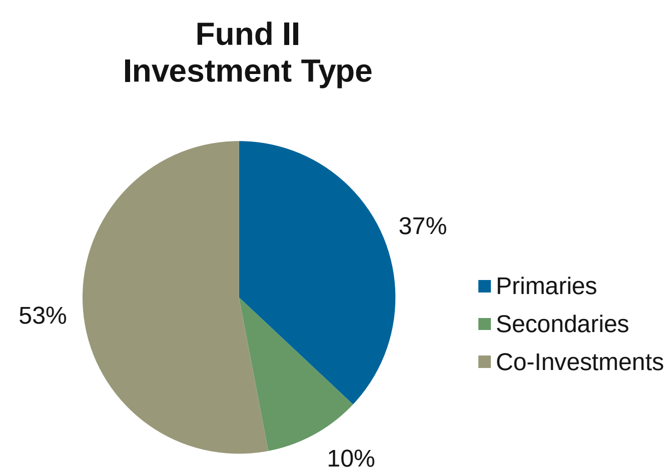












A key objective of the Fund's investment thesis is to access the infrastructure asset class through a more fee-efficient approach than a portfolio of primary commitments in direct infrastructure funds. The Team believes the potential combination of: (i) preferred economics on primary fund commitments (where GCM Grosvenor uses its size and reputation as an active infrastructure investor in seeking to achieve preferential pricing and terms from fund managers (including, but not limited to, discounts on management fees and/or carried interest, preferred terms and/or preferred co-investment rights); (ii) the mature nature and bypassed fees of secondaries; and (iii) potential fee savings on co-investments (relative to accessing the same deal through a primary commitment to a direct infrastructure fund) have the capability to make CIS III a more fee-efficient proposition (and thus, potentially offer a higher net return) for investors. In CIS I, the Manager secured preferred economics for four out of seven primary funds and in CIS II, the Manager secured preferred economics for seven out of eight primary funds.

Sponsorship[2]

GCM Grosvenor (the "Firm") is a global alternatives investment firm with approximately $59 billion in assets under management in private equity, infrastructure, real estate, credit, absolute return strategies, and multi-asset class opportunistic investments. The Firm's team of approximately 500 professionals from diverse backgrounds serves a global client base of institutional and high net worth investors. GCM Grosvenor is headquartered in Chicago, with offices in New York, Los Angeles, London, Tokyo, Hong Kong, and Seoul.

GCM Grosvenor operates the infrastructure business associated with the Fund through GCM Customized Fund Investment Group, L.P., an SEC-registered investment adviser since October 22, 2013. GCM Grosvenor acquired the Customized Fund Investment Group of Credit Suisse Group AG in January 2014. CIS I was managed by the Customized Fund Investment Group for all periods prior to January 2014. Of the 32 distinct investments made by CIS I as of March 31, 2019, 26 were first made prior to January 2014. GCM Grosvenor's Investment Committee (which will make investment decisions for the Fund) employs substantially the same investment process, as the relevant investment committee of the Customized Fund Investment Group immediately prior to January 2014.

The Firm has been investing in infrastructure since 2003 and has made more than 126 investments, including execution of 56 co-investments and 27 secondary transactions, as of June 30, 2020. The dedicated Infrastructure Team ("Team") of 15 professionals has broad transaction experience across geography, sectors, and implementation types. The Team manages approximately $5.6 billion of infrastructure AUM across multi-client funds, dedicated separate accounts, and other diversified programs (as of September 30, 2020).

The Team is led by nine senior investment professionals (Principal and above) with an average of 17 years of investment experience. The professionals on the Team have led all aspects of program building and investing, including client negotiations, structuring, deal flow generation, due diligence, managing and monitoring investments, and exits. The Team has professionals located in the U.S. and Europe with backgrounds in investment in primary infrastructure funds, secondary investments in infrastructure, co-investment, direct infrastructure investing, financing, legal, and operations. Team members have both brownfield and greenfield experience across all infrastructure sectors, including midstream infrastructure, utilities, conventional and renewable power generation, transportation, public-private partnerships/social infrastructure and telecom/technology infrastructure. Given the breadth and depth of the Team's co-investment expertise, the Team understands how to work with sponsors, how to think about governance and how to ensure interests are aligned.

[2] Includes quoted and paraphrased excerpts from representative materials provided to, and reviewed by, Callan.

Historical Performance

CIS III's predecessor funds have invested over $900 million across 65 investments. CIS I has realized/partially realized 23 of 32 investments, and CIS II has realized/partially realized 10 of its 33 investments, as summarized in the following table.

Prior Fund Performance as of September 30, 2020.

Partnership investment values as of June 30, 2020; Co-investment values as of September 30, 2020. ($ millions)

Fund/Vehicle	CIS I	CIS II
Vintage Year	2009	2015
Original Capital Commitments	$537.8	$643.0
# Investments	32	33
# Partially Realized Investments	11	8
# Fully Realized Investments	12	2
Called Fund Capital	$445.8	$394.1
Distributed Capital	$494.1	$157.0
Fund NAV	$182.3	$357.7
Yield	3.54%	2.67%
Fund Level Since Inception IRR (gross)	10.25%	13.18%
Fund Level Since Inception Multiple (gross)	1.52x	1.31x
Fund Level Since Inception IRR (net)	8.53%	10.72%
Fund Level Since Inception Multiple (net)	1.37x	1.27x

Key Terms

CIS III terms are largely unchanged from the prior fund, although there are a few main areas that reflect changes. 1) Change in the management fee ramp in/down schedule which was intended to reduce the impact of fees in the early years of the Fund's life, 2) Weakening of the key person clause by allowing GCM Grosvenor to appoint representatives that do not need approval but rather disapproval, 3) Increase in the General Partner's share of carry for secondary and co-investments and elimination of carry for primary investments, 4) Removal of some investment restrictions, and 5) Other changes to reflect more disclosure regarding fees charged by the Fund which is consistent with industry practices.

Affiliate and Legal Activity

According to GCM Grosvenor, neither the Manager, nor any associated employee thereof has been subject to or are anticipating any litigation or legal proceedings related to the Fund's investment operations.

Recommendation

Callan recommends an investment of up to $200 million in Grosvenor Customized Infrastructure Strategies III L.P.; it is Callan's opinion that the Fund is an appropriate non-core investment for the North Dakota State Investment Board ("SIB") infrastructure portfolio.

Strengths

- GCM Grosvenor's infrastructure team is global and has a broad base of experience in the sector which facilitates deal-flow and ability to evaluate relative value within the sector.
- The Sponsor has demonstrated its ability to source, invest in, and manage assets globally with experienced managers in the sector, which has proven to be an advantage to securing deal-flow in prior funds.
- The Sponsor has shown the ability to build a portfolio that is highly diversified by sector and region in prior CIS funds. This is difficult to do on a direct basis and provides efficiency for CIS investors.
- Both prior funds have demonstrated ability to pay distributions within three to four years of activating the fund investment period.
- GCM Grosvenor is an active investor in the sector and has demonstrated its ability to secure favorable economics with underlying fund commitments with the amount of capital that it allocates across the sector.
- Overall, the fee terms have improved with the ramp-in / ramp-down schedule which reduces J-Curve impact. The Fund terms no longer include primary fund performance in the carried interest calculation; although the Fund terms include a larger share of the carried interest for investments in secondaries and co-investments which further aligns incentives for the Manager.
- SIB would qualify for a 5 bps fee reduction as a first-closer in the Fund. On a Management fee of 50 bps, as a large investor, this is a reasonable discount.
- SIB would be offered a seat on the Fund's Limited Partner Advisory Committee ("LPAC") and have additional insight on the Fund's activities and the ability to vote in key matters.

Risks

- There were two departures by Managing Directors in 2019 which were very senior in the Infrastructure Team leadership; GCM hired two equally senior Managing Directors in 2019 with strong industry experience to lead the team. The more junior level team has remained stable and a key NYC-based employee relocated to London in 2019 to ensure smooth transition for that office. CIS III indicative portfolio indicates consistency with prior funds strategy.
- Overlap with existing SIB commitments. In 2020, SIB committed $100 million to Macquarie Infrastructure Partners V ("MIP V"), which is focused on the North American infrastructure market. SIB also committed $140 million to the prior fund in that series, Macquarie Infrastructure Partners IV ("MIP IV"). GCM Grosvenor's CIS series has historically made primary, secondary and co-investments with the predecessor MIP funds. MIP V is still accepting investor commitments and could potentially be an investment for Fund III. Given that Fund III has not committed to MIP IV or MIP V to-date, and Fund III will not invest more than 20% of capital commitments in any single primary/secondary/co-investment the CIS III Fund will offer good underlying fund diversification to SIB.
- There is no Fund-level leverage limitation; which is expected for this type of investment vehicle and not uncommon with infrastructure funds in general. The Sponsor will evaluate any underlying fund/manager's past use of leverage in diligence.
- The Fund may be subject to currency fluctuation during the Fund's term for investments in countries where the underlying funds have not typically hedged currencies. The Manager will invest at least 80% of the Fund in the US/Europe and the underlying funds typically borrow in local currency to minimize the impact of currency volatility.
- There is no requirement to hold an annual meeting of the Limited Partner Advisory Committee – which was removed with the CIS III LPA to standardize the LPA with other GCM fund documents. SIB may consider requiring an annual Advisory Board meeting.
- The Sponsor manages multiple separate accounts ("SMA") in addition to the Fund, which helps the Fund to secure management fee discounts as part of the overall GCM Grosvenor commitment activity. The LPA requires that the Fund's LPAC approve certain decisions by the Sponsor that relate to CIS investments alongside SMA investments (e.g. relating to the exit of CIS assets if other SMA accounts choose to retain ownership of assets).

Disclosure

As indicated below, one or more of the candidates listed in this report may, itself, be a client of Callan as of the date of the most recent quarter end. These clients pay Callan for educational, software, database and/or reporting products and services. Given the complex corporate and organizational ownership structures of investment management firms and/or trust/custody or securities lending firms, the parent and affiliate firm relationships are not listed here.

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Firm	Is an Investment Manager Client of Callan*	Is Not an Investment Manager Client of Callan*
GCM Grosvenor	X	

*Based upon Callan manager clients as of the most recent quarter end.

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This investment evaluation gives consideration to the investment requirements and guidelines provided to Callan by North Dakota State Investment Board , and should not be relied upon by any person other than North Dakota State Investment Board or used in whole or in part for any purpose other than considering an investment in the candidate vehicle(s).

Information contained herein has been compiled by Callan and is based on information provided by various sources believed to be reliable but which Callan has not necessarily verified the accuracy or completeness of or updated. Information considered by Callan, includes information provided by the investment sponsor and information that is publicly available, as well as information developed by Callan from other sources, which may not be current as of the date of this investment evaluation. Callan does not make any representation or warranty, express or implied as to the accuracy or completeness of the information contained in this investment evaluation. Callan undertakes no obligation to update this investment evaluation except as specifically requested by North Dakota State Investment Board .

This investment evaluation is for informational purposes only and should not be construed as legal or tax advice. North Dakota State Investment Board is urged to consult with legal and tax advisers before investing in the candidate investment vehicle(s) or any other investment vehicle.

A potential investor in the candidate investment vehicle(s) should undertake an independent review of the sponsor's private placement memorandum, related offering documents and due diligence questionnaire, which describe, among other important information, the sponsor's background, experience and track record, investment strategy, investment risk factors, compensation program, and investor rights and obligations. Callan makes no representation or warranty, express or implied, as to the accuracy or completeness of the sponsor's offering materials. It is incumbent upon North Dakota State Investment Board to make an independent determination of the suitability and consequences of an investment in the candidate investment vehicle(s).

The appropriateness of the candidate investment vehicle(s) discussed in this investment evaluation is based on Callan's understanding of North Dakota State Investment Board 's portfolio as of February 19, 2021.

Opinions expressed in the investment evaluation are based on Callan's standard evaluation procedures which are designed to provide objective comments based upon information provided to Callan. Such opinions may be amended, supplemented or restated, based on changes in North Dakota State Investment Board 's investment objectives or investment portfolio, the macroeconomic environment, legal/regulatory/political climate, the organization or team of the candidate general partner(s) or candidate investment vehicle(s) or other identified or unidentified factors.

Callan undertakes no obligation to update any opinion expressed in this investment summary except as specifically requested by North Dakota State Investment Board .

Nothing contained in this investment evaluation should be relied upon as a promise or representation as to past or future performance of the candidate investment vehicle(s) or other entity. Past performance is no guarantee of future results.

Certain operational topics may be addressed in this investment evaluation for informational purposes; however, Callan has not conducted due diligence of the operations of the candidate sponsor, or candidate investment vehicle(s), as may typically be performed in an operational due diligence evaluation assignment.

The issues considered and risks highlighted in this investment evaluation may not be comprehensive and other undisclosed or heretofore unknown risks may exist that may be deemed material to North Dakota State Investment Board regarding the candidate sponsor and candidate investment vehicle(s).

The investment evaluation and any related due diligence questionnaire completed by the candidate sponsor may contain highly confidential information that is covered by a non-disclosure or other related agreement with the candidate sponsor which must be respected by North Dakota State Investment Board and its representatives. North Dakota State Investment Board agrees to adhere to the conditions of any confidentiality or non-disclosure agreement provided with the investment evaluation.

Acts, events, occurrences or accidents beyond reasonable control, including but not limited to pandemics, acts of terrorism, volatile market conditions, or other disruptions could have a negative and long-lasting impact on the business operations and financial condition of the candidate sponsor, the candidate investment vehicle, and investments and may materially adversely impact fundraising, operations, deal sourcing, management and due diligence of investments, liquidity, valuations and performance, among other potential impacts.

Agenda Item III.C.3

BOARD ACTION

TO: **State Investment Board**

FROM: Dave Hunter, Darren Schulz, Eric Chin and Matt Posch

DATE: February 26, 2021

SUBJECT: **GCM Grosvenor Customized Infrastructure Strategies III Recommendation**

Recommendation: **RIO requests the SIB approve up to a $200 million commitment to GCM Grosvenor Customized Infrastructure Strategies III (CIS III) split between the Legacy Fund ($105 million), the Pension Pool ($80 million) and the Insurance Trust ($15 million). A combination of strong public equity performance and the lifecycle of current commitments have led to deviations from policy targets in diversified real assets. This commitment will aid in bringing expected allocations in diversified real assets closer to target.** The SIB previously approved commitments to GCM Grosvenor's predecessor funds ($75 million to CIS I in 2011 and $105 million to CIS II in 2014). Performance of the predecessor funds are in line with expectations with a net IRR of 8.5% for CIS I and a net IRR of 9.9% for CIS II as of September 30, 2020.

GCM Grosvenor Overview:

GCM Grosvenor is a global alternatives investment firm with approximately $59 billion in assets under management in various alternative asset classes including over $5 billion in global infrastructure investments.

CIS III is a continuation of two predecessor funds (CIS I, 2009 vintage and CIS II, 2015 vintage) that invest in a diversified portfolio of core plus/value-add infrastructure assets primarily across North America and Europe. The strategy is designed to achieve stable/downside mitigated returns, diversification, current yield, J-curve mitigation, and a limited drag between gross and net returns. Current investment themes include opportunities in digital infrastructure, renewable power generation, and regulated utility sub-sectors. CIS III will invest in primary funds, secondaries, and co-investments.

Key tenets of the investment strategy are the following:

1. **Focus on strong risk adjusted returns:** Grosvenor seeks to partner with infrastructure managers with established track records of outperformance, a focus on traditional infrastructure sub-sectors, and low loss ratios. In co-investments, they seek contracted and/or regulated cash flows with low volatility, prudent capitalization, and strong downside risk mitigation.
2. **Focus on relative value:** Grosvenor focuses on identifying relative value within investment types, sub-sectors, and geographies to ensure the fund is targeting the best opportunities.
3. **Incorporating co-investments and secondaries with primary fund commitments:** The team believes that primaries, co-investments and secondaries are all critical components of an infrastructure portfolio and that each type of investment will enhance overall risk/adjusted performance.
4. **Limit commodity exposure:** Grosvenor limits direct commodity exposure to minimize the impact of high volatility in commodity prices.

5. **Focus on fee efficiency:** A key objective of the fund is to provide access to the infrastructure asset class through a more fee-efficient approach when compared to a portfolio exclusively of primary commitments in direct infrastructure funds.

CIS III Characteristics:

Fund Term	12 years after final close subject to two additional one year terms at the Manager's discretion
Commitment Period	Three years from final close
Return Objective	9-11% Net IRR with 3% to 5% Target Gross Yield
Geographic exposure	40-60% U.S., 40-60% Europe, up to 20% Rest of World
Number of Investments	~30
Management Fee	0.27% Estimated Average Annual Effective Fee (0.50% per annum)
Carried Interest	**Primary Fund Investments:** none **Co-investments and Secondaries:** 10% with 100% GP catch-up
Position Size Limit	No more than 20% of commitment in a single investment

Callan

February 2021

North Dakota State Investment Board

Performance Evaluation
as of December 31, 2020

Paul Erlendson
Senior Vice President

Alex Browning
Senior Vice President

Callan

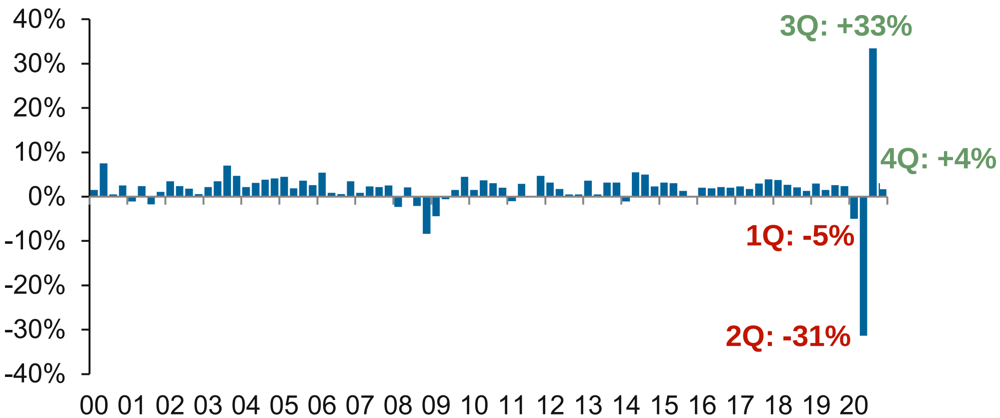
Market Update

Fourth Quarter 2020

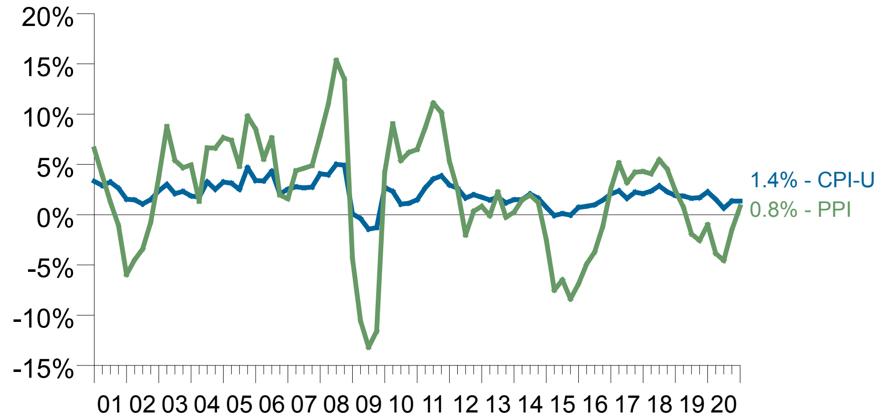
U.S. Economy—Summary

For Periods Ended 12/31/20

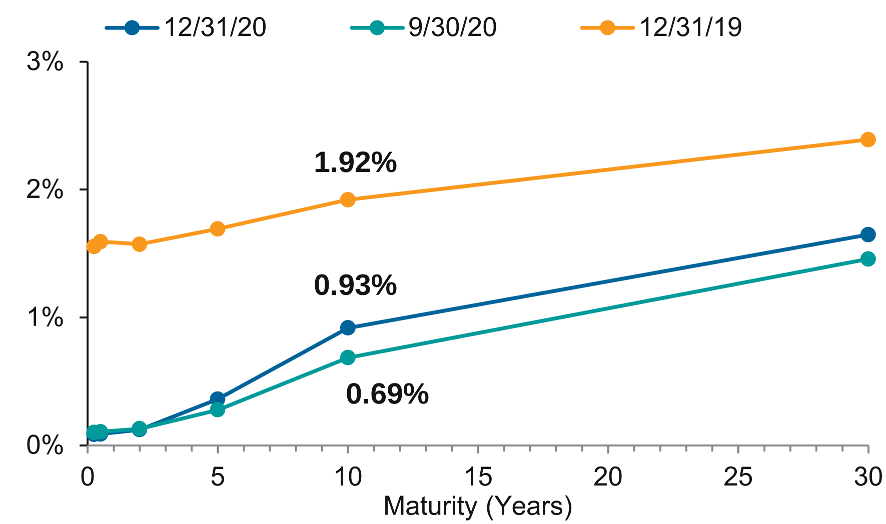
Quarterly Real GDP Growth*



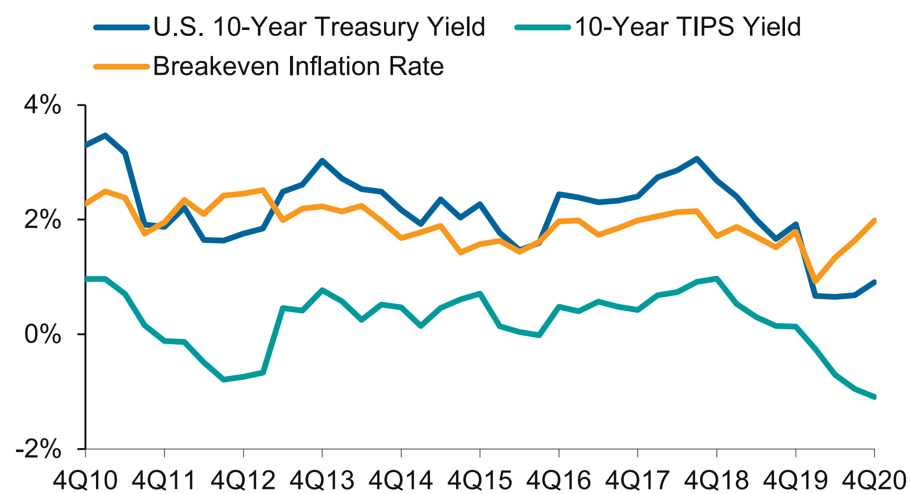
Inflation Year-Over-Year



U.S. Treasury Yield Curves

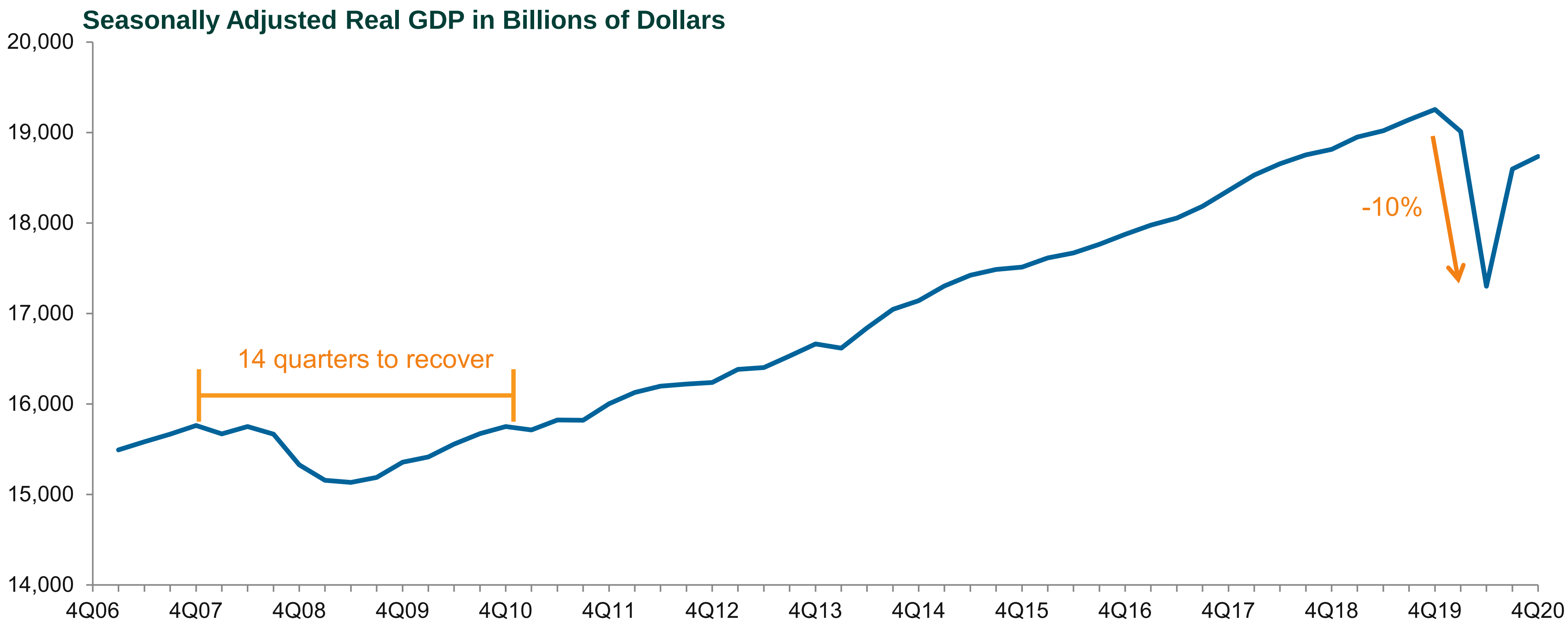


Historical 10-Year Yields



*Preliminary estimate for 4Q20. Sources: Bloomberg, Bureau of Labor Statistics, Callan, IHS Markit (annualized)

GDP Rebounds in Second Half of 2020 After Precipitous First-Half Decline

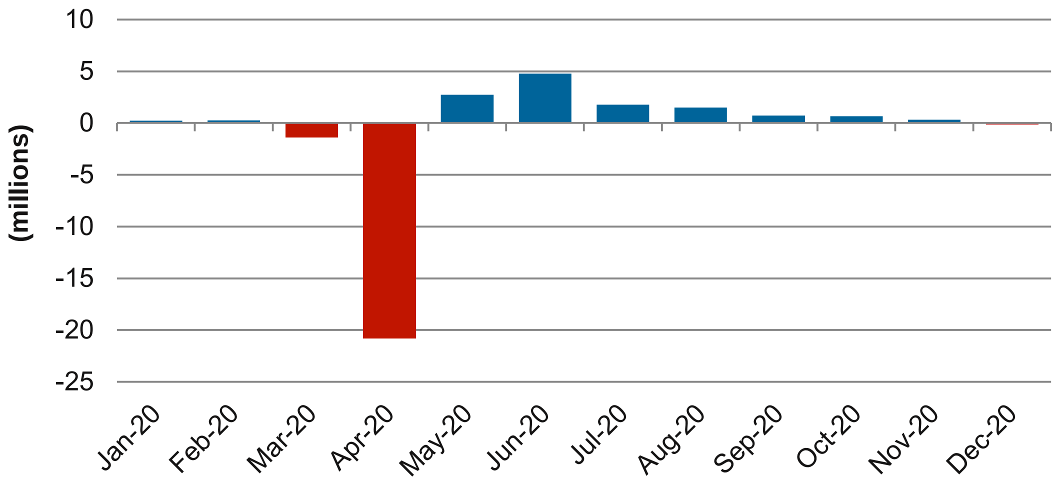


– Real GDP for 2020 declined an estimated 3.5% year-over-year.
– The Advanced estimate of 4Q real GDP is +4.0%, which reflects a continued rebound after 3Q real GDP of +33.4%. These numbers come after a difficult 2Q real GDP of -31.4%. Quarterly GDP numbers are quarter-over-quarter annualized.
– After the Global Financial Crisis, it took 3.5 years before real GDP reclaimed its pre-recession highs.
– GFC peak to trough was down 4%.

U.S. Employment Situation

While the Recovery Continues, the Employment Landscape Remains Depressed

Monthly Change in Nonfarm Payrolls



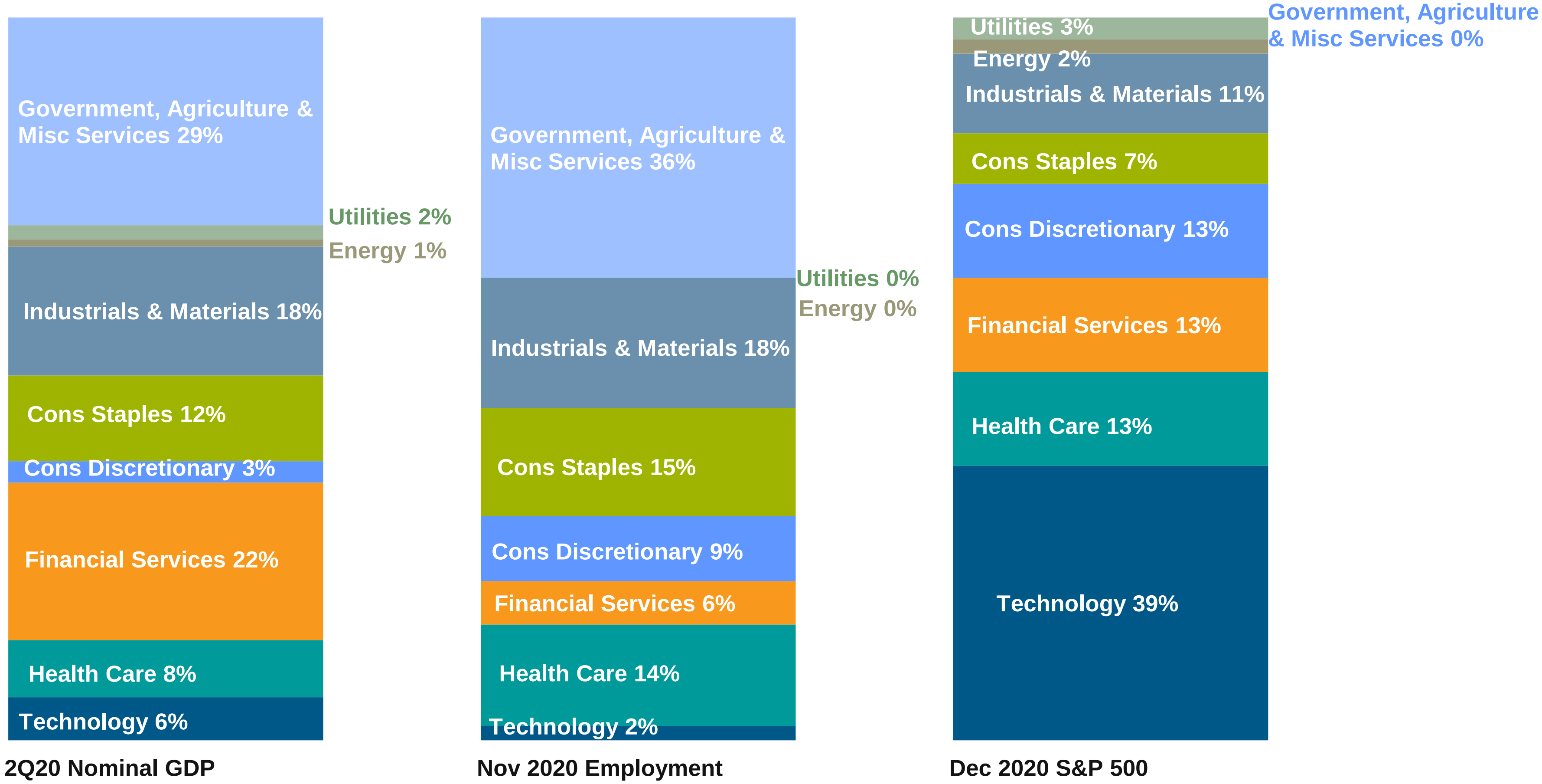
Change in Payrolls by Sector from February to December 2020

- There are currently 9.8 million fewer jobs in the economy than there were in February 2020
  - *This reflects a 6.5% drop in total employment*
- December marked the first time since April that the economy lost jobs
- Unemployment rate remained the same in December at 6.7%

Source: Department of Labor

The Stock Market Is Not the Economy

Sector Share of GDP, Employment, and S&P 500 Index



Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, S&P Dow Jones Indices, J.P. Morgan Asset Management Guide to the Markets – U.S. Data are as of 12/31/20. Technology: information (economy, employment), technology and communication services (S&P 500). Financial services includes real estate (S&P 500). Consumer discretionary: Arts, entertainment, recreation, accommodation, and food services (economy), leisure and hospitality (employment). Consumer staples: wholesale trade and retail trade (economy, employment). Industrials and materials: construction, manufacturing, transportation and warehousing (economy, employment). Energy: mining (economy), mining and logging (employment). Government, agriculture & misc. services: government, other services, professional and business services, education and agriculture, forestry, fishing, and hunting (economy), government, other services, professional and business services, and education (employment).

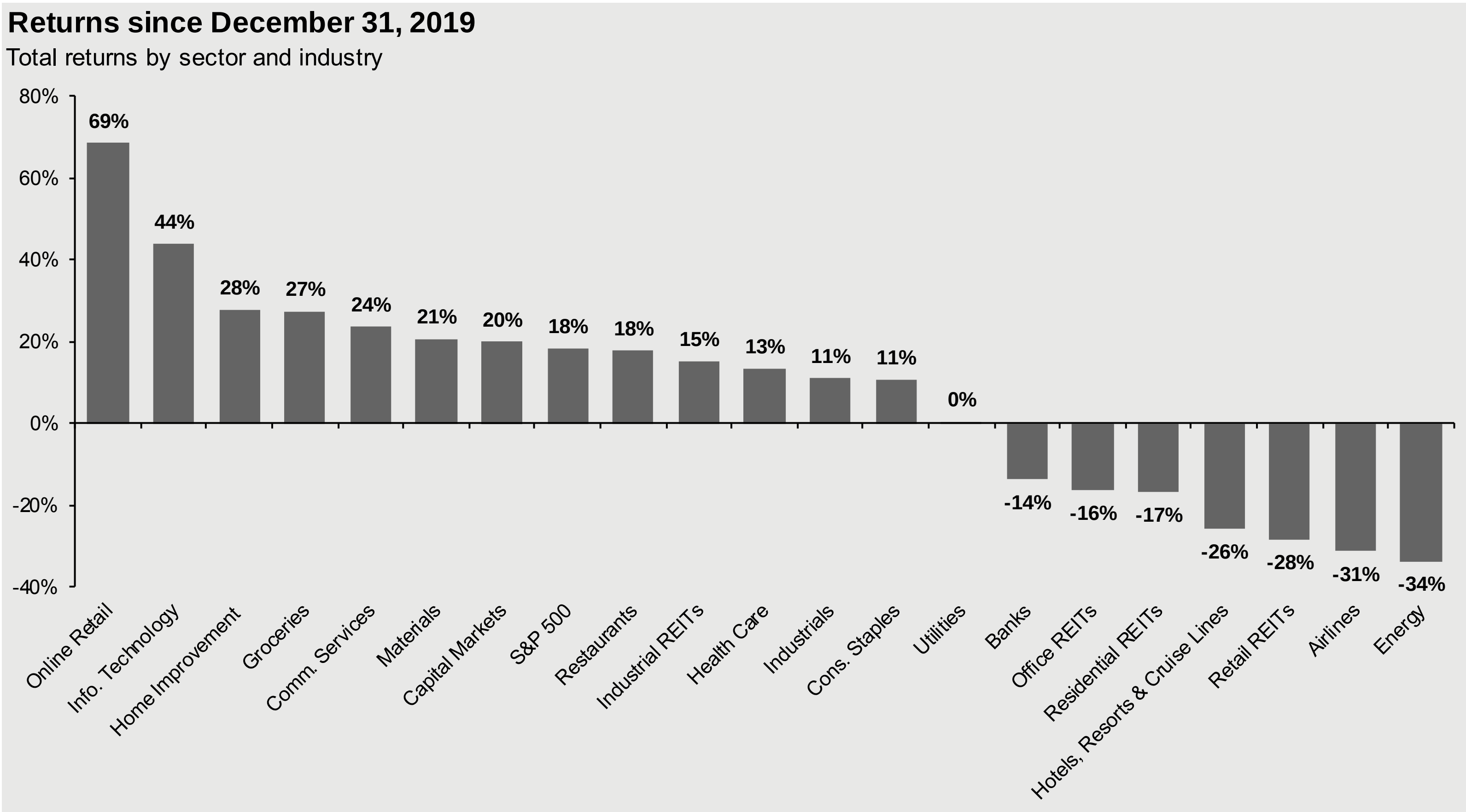
Callan Periodic Table of Investment Returns

Cumulative Returns			Quarterly Returns				Year 2020
3 Years	7 years	10 Years	1Q 20	2Q 20	3Q 20	4Q 20	Year Ending December 31, 2020
Large Cap Equity 11.4%	Large Cap Equity 12.7%	Large Cap Equity 13.6%	U.S. Fixed Income 3.1%	Emerging Market Equity 7.4%	Emerging Market Equity 9.6%	Small Cap Equity 31.4%	Small Cap Equity 20.0%
Small Cap Equity 10.0%	Small Cap Equity 10.4%	Small Cap Equity 11.8%	Global ex-U.S. Fixed Income -2.7%	Small Cap Equity 3.5%	Large Cap Equity 8.9%	Emerging Market Equity 19.7%	Large Cap Equity 18.4%
Emerging Market Equity 9.1%	Real Estate 7.3%	Real Estate 8.4%	High Yield -12.7%	Dev ex-U.S. Equity 3.4%	Small Cap Equity 4.9%	Dev ex-U.S. Equity 15.8%	Emerging Market Equity 18.3%
Dev ex-U.S. Equity 7.4%	High Yield 6.0%	High Yield 7.6%	Large Cap Equity -19.6%	Real Estate 2.6%	Dev ex-U.S. Equity 4.9%	Real Estate 13.3%	Global ex-U.S. Fixed Income 10.1%
High Yield 6.4%	Dev ex-U.S. Equity 5.3%	Dev ex-U.S. Equity 5.3%	Dev ex-U.S. Equity -23.3%	Large Cap Equity 2.0%	High Yield 4.6%	Large Cap Equity 12.1%	Dev ex-U.S. Equity 7.6%
Real Estate 4.4%	Emerging Market Equity 3.2%	U.S. Fixed Income 3.7%	Emerging Market Equity -23.6%	Global ex-U.S. Fixed Income 1.0%	Global ex-U.S. Fixed Income 4.1%	High Yield 6.5%	U.S. Fixed Income 7.5%
U.S. Fixed Income 2.2%	U.S. Fixed Income 2.1%	Emerging Market Equity 3.7%	Real Estate -28.5%	High Yield 1.0%	Real Estate 2.1%	Global ex-U.S. Fixed Income 5.1%	High Yield 7.1%
Global ex-U.S. Fixed Income 1.8%	Global ex-U.S. Fixed Income 0.1%	Global ex-U.S. Fixed Income 1.5%	Small Cap Equity -30.6%	U.S. Fixed Income 0.6%	U.S. Fixed Income 0.6%	U.S. Fixed Income 0.7%	Real Estate -9.0%

Sources: ● Bloomberg Barclays Aggregate ● Bloomberg Barclays Corp High Yield ● Bloomberg Barclays Global Aggregate ex US ● FTSE EPRA Nareit Developed ● MSCI World ex USA ● MSCI Emerging Markets ● Russell 2000 ● S&P 500

U.S. Stock Market Returns in 2020 Were Widely Dispersed

Concentration of outperformance in technology, online retail, and supporting industries

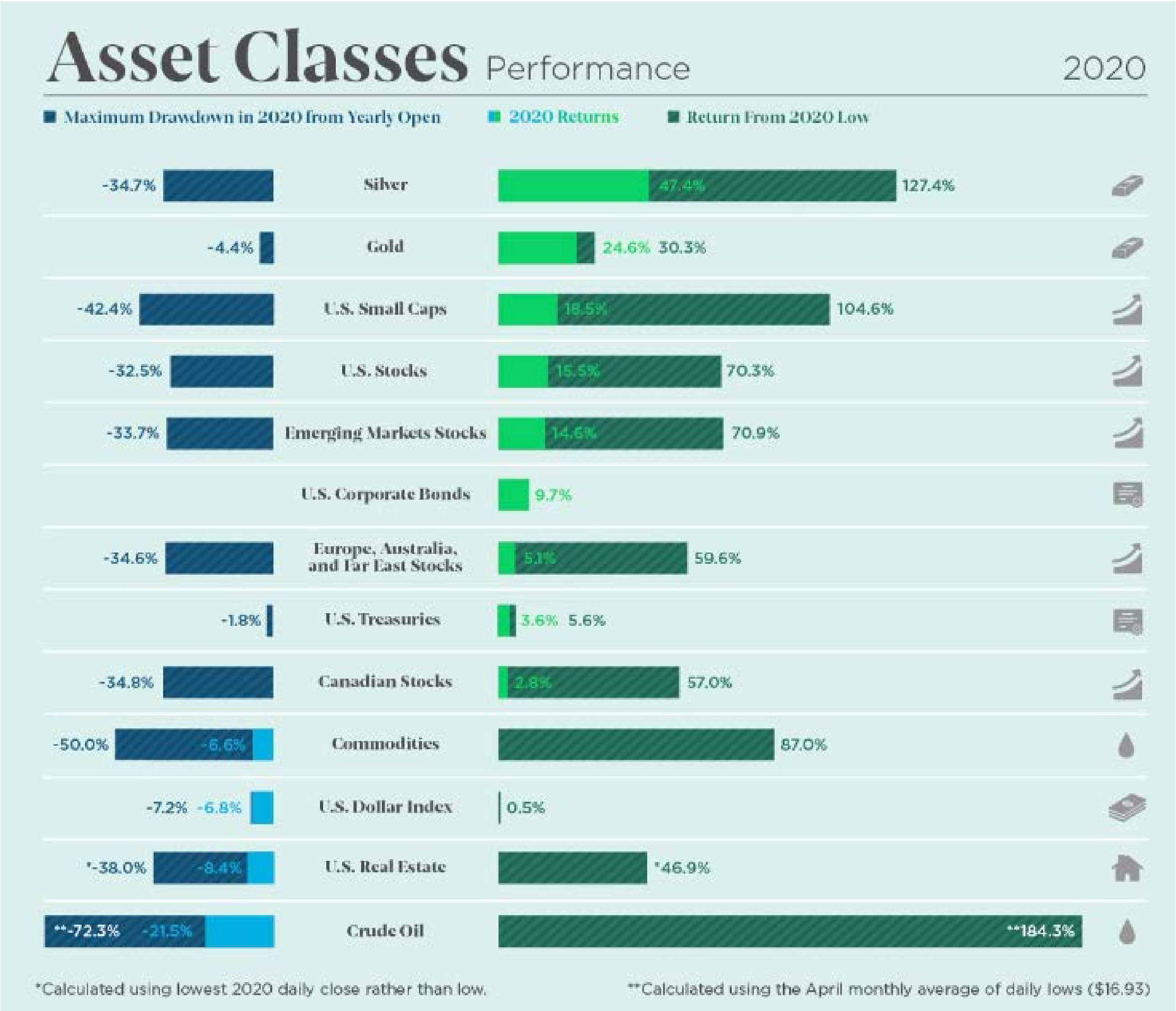


Best-performing sectors employ far fewer workers than many of the underperforming sectors (health care, capital markets, banks, hospitality, transportation, energy).

Sources: FactSet, J.P. Morgan Asset Management Guide to the Markets – U.S., S&P Dow Jones Indices; Data are as of 12/31/20.

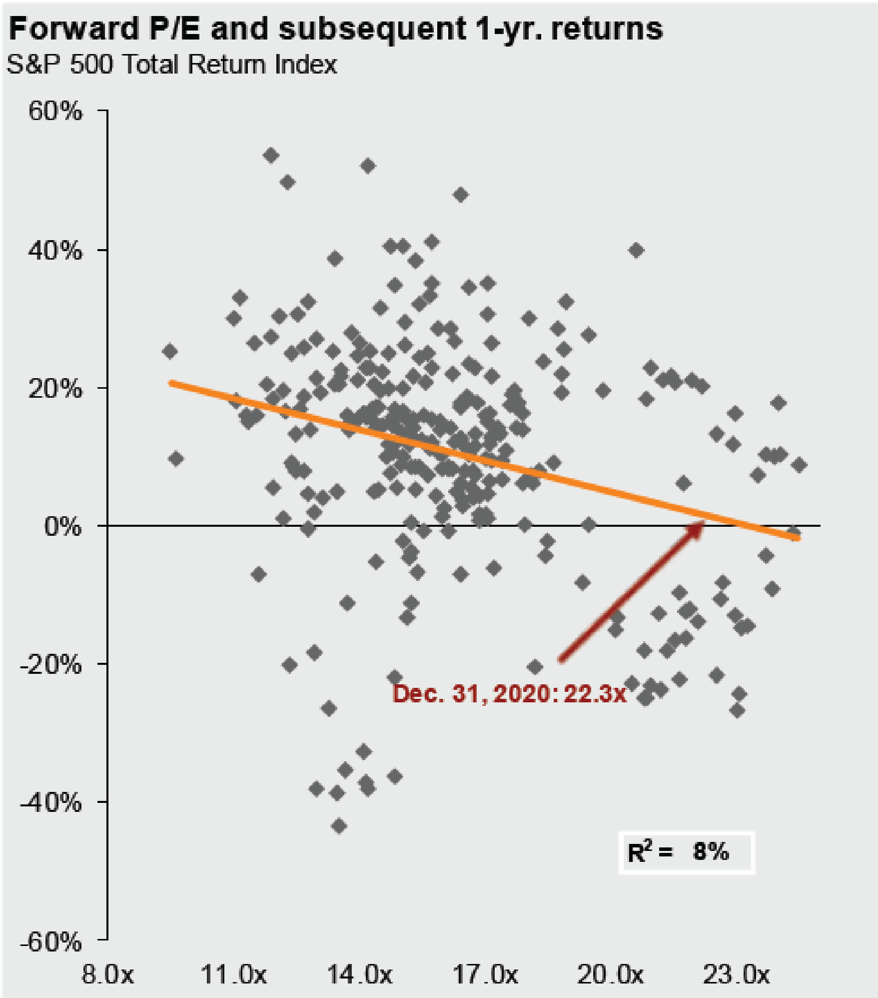
Asset Prices Experienced Significant Swings in 2020

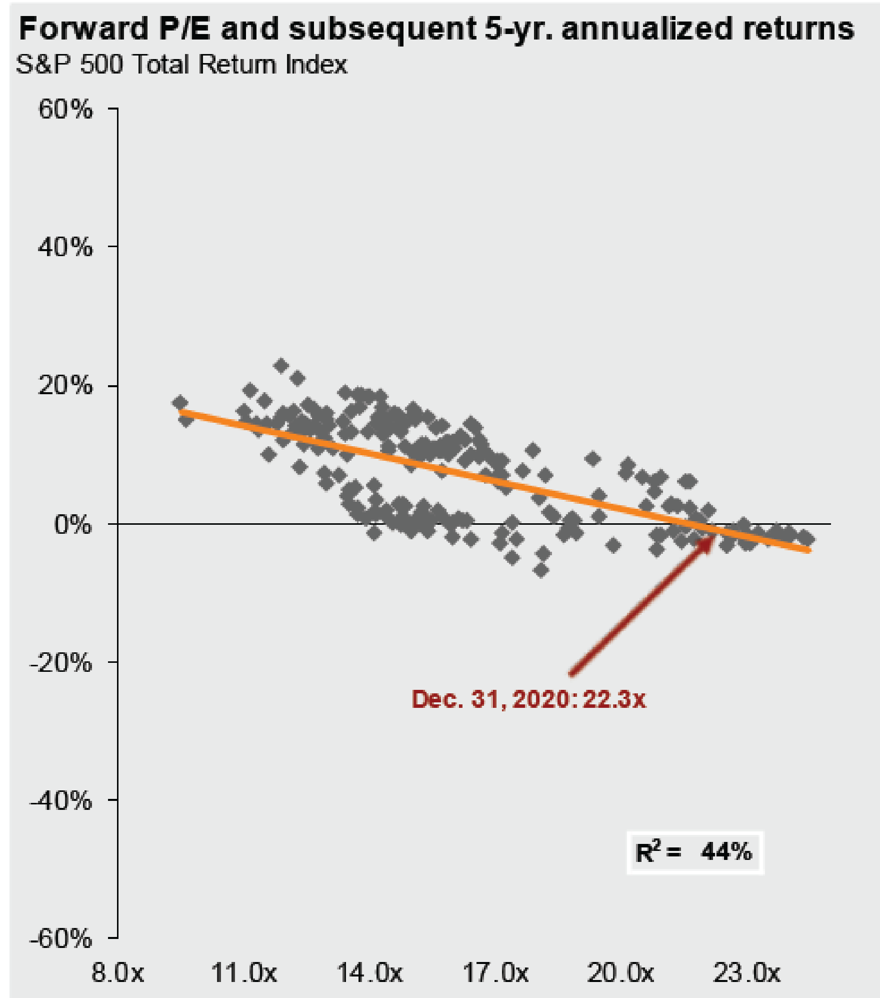
Calendar year 2020 performance



Source: Visual Capitalist

P/E Ratios and Equity Returns





Source: FactSet, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management.
Returns are 12-month and 60-month annualized total returns, measured monthly, beginning November 30, 1995. R^2 represents the percent of total variation in total returns that can be explained by forward P/E ratios.
Guide to the Markets – U.S. Data are as of December 31, 2020.

JPMorgan Guide to the Markets, 4Q20.

New Market Peaks in Year of the Pandemic: 4Q20

Record highs in 2020

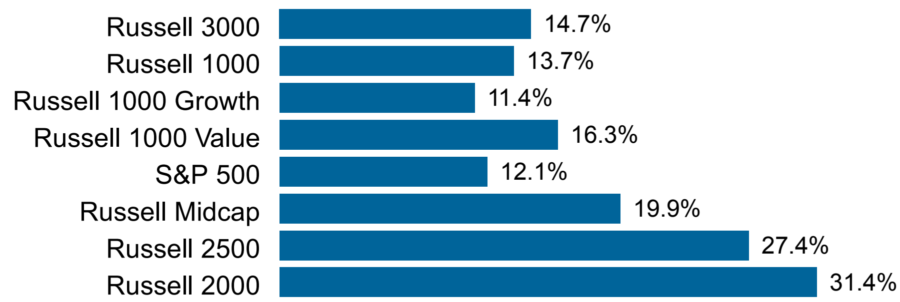
– The S&P 500 Index hit a record high in 4Q20. The Index was up 12.1% for the quarter, bringing the 2020 gain to 18.4%.
  - *Since March low, S&P is up over 70%, with all sectors posting increases greater than 40%.*
  - *4Q winner: Energy (+28%), but down 34% for the year*
  - *Technology (+12% in 4Q) top 2020 sector with 44% gain*
  - *Pandemic has cast a pall over certain sectors while rewarding others: online retail soared 69% in 2020, while hotels/cruise lines, airlines, and retail REITs dropped ~30%.*
  - *Apple, Microsoft, Amazon, Facebook, Alphabet made up 22% of S&P 500 at year-end, and for 2020, accounted for 12.1% of 18.4% Index return.*

Anti-momentum rally

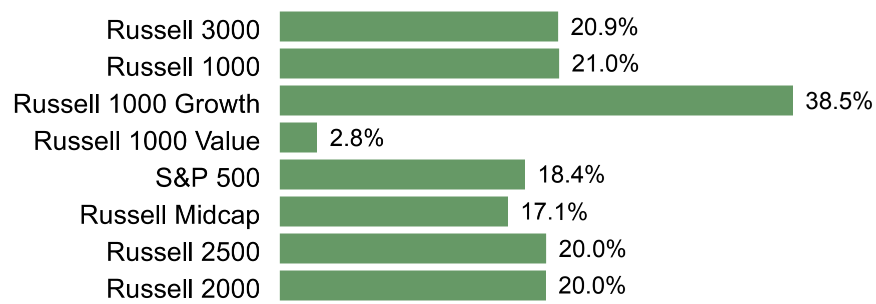
– In 4Q, driven by vaccine progress, political clarity, and further stimulus, value outperformed growth across the cap spectrum. . However, value trails growth by significant margin for the full year.

– Small caps outperformed large in 4Q but were even on the year. Small value was the best performer for 4Q, but 2020 gain is a mere 4.6%.

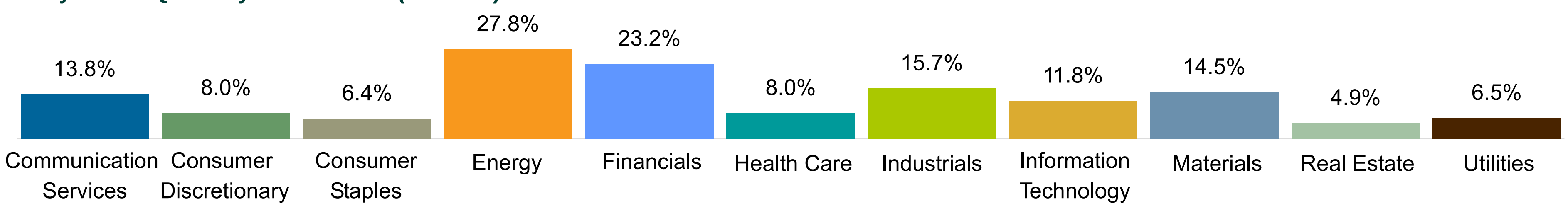
U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Industry Sector Quarterly Performance (S&P 500)



Sources: FTSE Russell, S&P Dow Jones Indices

Global ex-U.S. Equity Performance:4Q20

COVID-19 vaccine rollouts extend and expand risk-on rally

- Prospects of global economic recovery propelled by COVID-19 vaccination fueled double-digit returns across developed and emerging markets.
- Expectations of reverting back to normal economic activity by late 2021 fueled risk assets.
- Emerging markets outperformed developed markets, led by LATAM—specifically Brazil.
- Small cap outperformed large as business confidence improved with news of vaccination.

Market rotates to cyclicals

- Positive outlook on reflation trade stoked Energy, Materials, and Financials.
- Beta and volatility led factor performance due to market rotation.

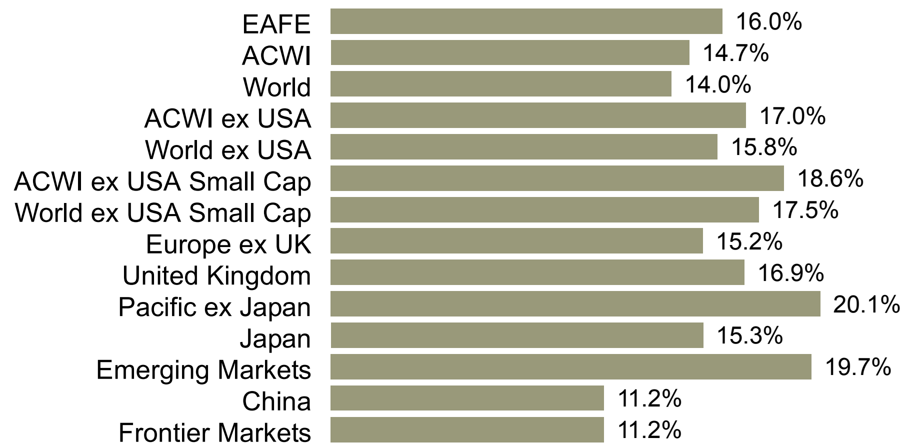
U.S. dollar vs. other currencies

- U.S. dollar continued to lose ground as appetite for risk increased.

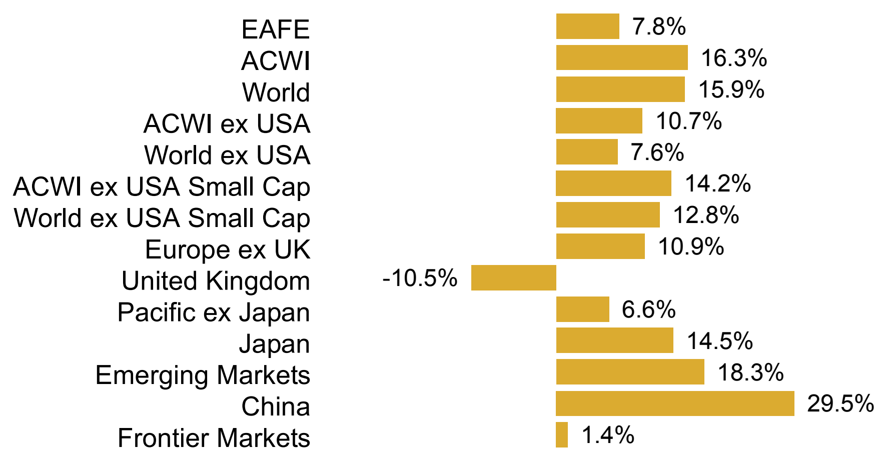
Growth vs. value

- Value outpaced growth as sentiment shifted to cyclical sectors.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



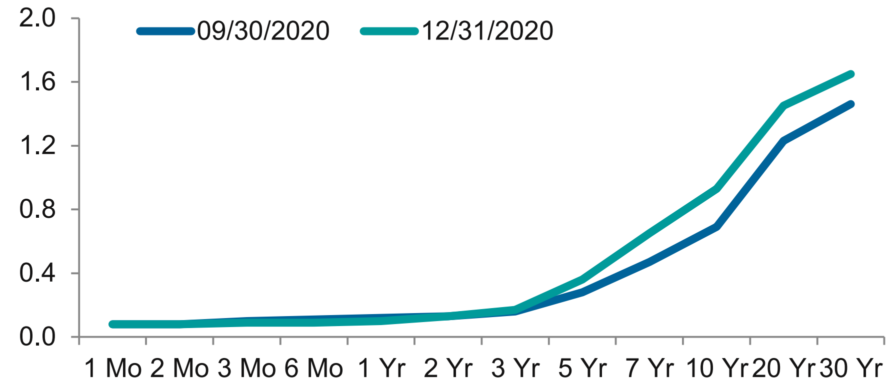
Source: MSCI

Implications of U.S. Rates Rising in 4Q20

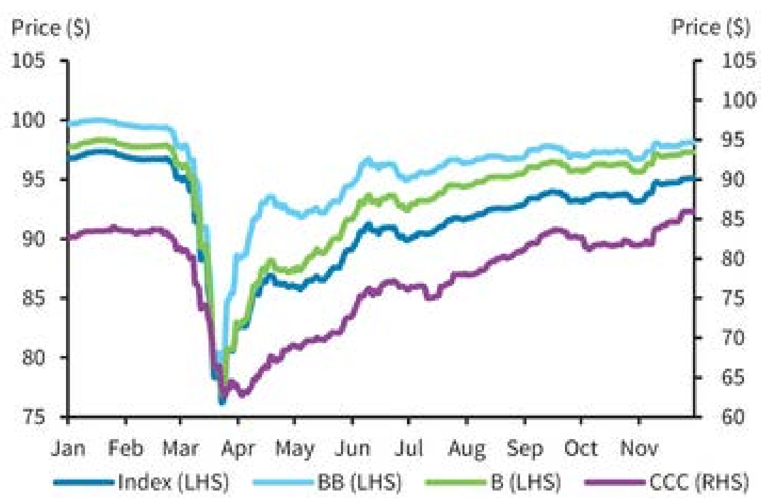
Opens opportunities for floating-rate securities

– U.S. Treasury rates rose in 4Q, most notably in the intermediate and long portions of the yield curve.
– As Democrats won both seats in the Georgia run-off, greater fiscal stimulus is likely. This may lead to further steepening of the yield curve and increased inflation expectations.
– A rising rate environment opens opportunities for floating-rate securities like leveraged loans, and makes securities with shorter durations such as securitized credit more attractive.

U.S. Treasury Yield Curve



Leveraged Loan Index Price Recovery



10-year Breakeven Inflation Rate

Sources: St. Louis Fed, Bloomberg Barclays

U.S. Fixed Income Performance: 4Q20

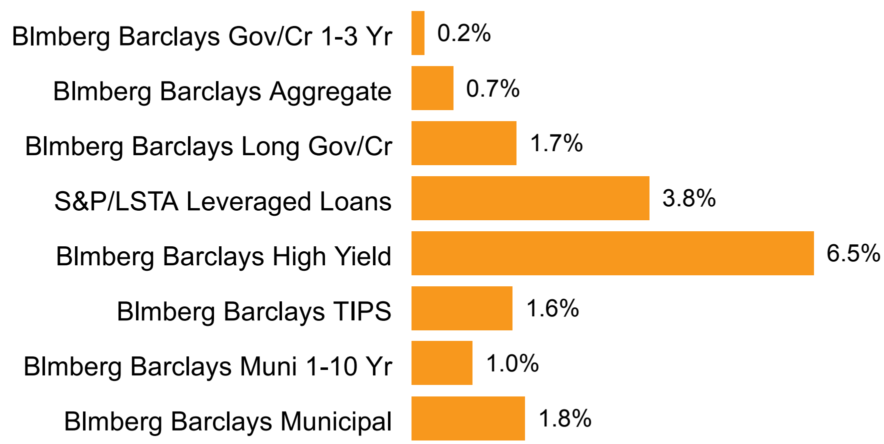
Treasury yields rose
- The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 163 bps to 199 bps.
- No rate hikes are expected until at least 2023.

Bloomberg Barclays Aggregate gained slightly
- Corporate credit outperformed treasuries as investors continued to hunt for yield.
- Corporate credit ended the year up 9.89% despite record issuance in 2020.

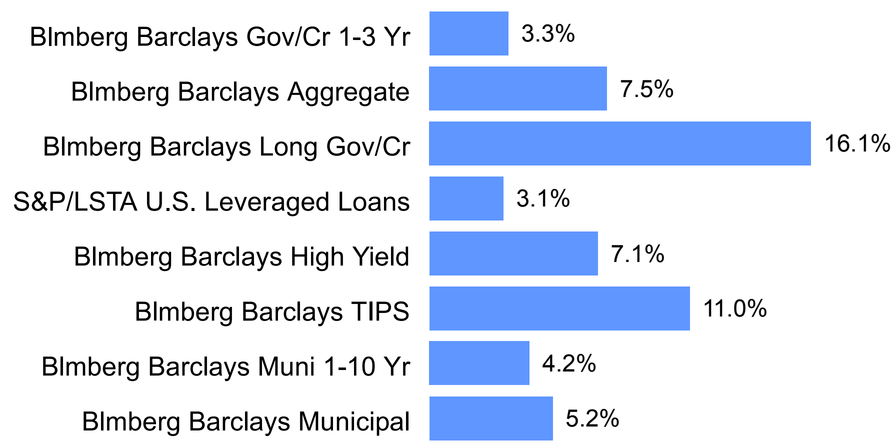
High yield bonds gained on the quarter as rally extended
- High yield bonds outperformed IG in 4Q, returning 6.48%, but trailed IG for the year.
- Leveraged loans gained 3.8% as demand remained strong to finish the year.

Munis boosted by favorable supply/demand dynamics
- Municipals outperformed Treasuries for the quarter, but remained down for the year.
- Tax-exempt issuance was muted amid strong demand.
- Lower quality outperformed for the quarter; however, higher quality outperformed for the year.

U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



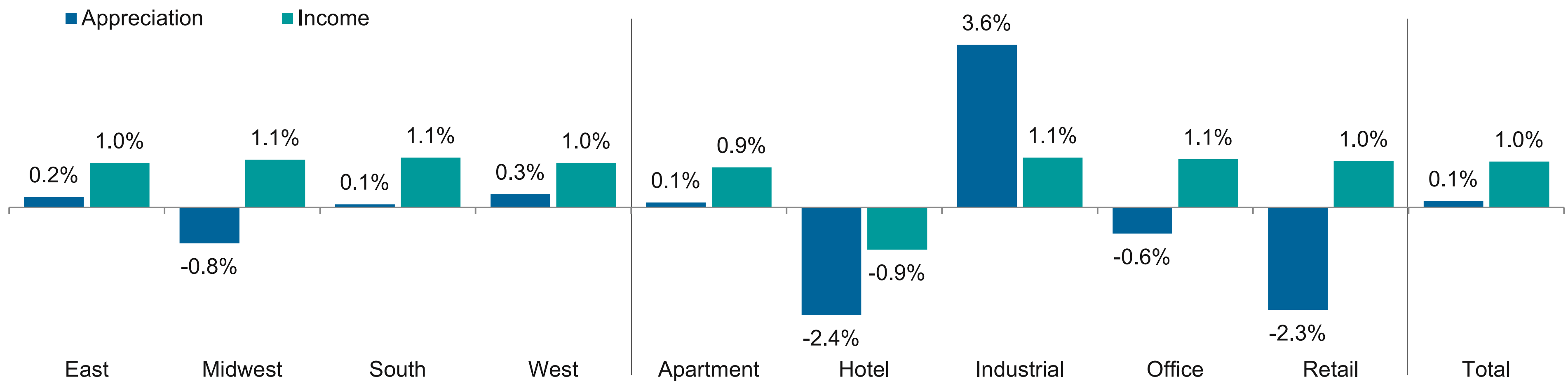
U.S. Private Real Estate Market Trends

Results

- Hotel and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
- Income remains positive except in Hotel sector.
- Appraisers have more certainty on pandemic's impact on valuations.
- Return dispersion by manager within the ODCE Index due to composition of underlying portfolios

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	1.3%	1.2%	4.9%	6.2%	9.9%
Income	0.9%	3.9%	4.1%	4.2%	4.8%
Appreciation	0.4%	-2.6%	0.8%	1.9%	5.0%
NCREIF Property Index	1.1%	1.6%	4.9%	5.9%	9.0%
Income	1.0%	4.2%	4.4%	4.6%	5.1%
Appreciation	0.1%	-2.5%	0.4%	1.3%	3.8%

NCREIF Property Index Returns by Region and Property Type



Source: NCREIF

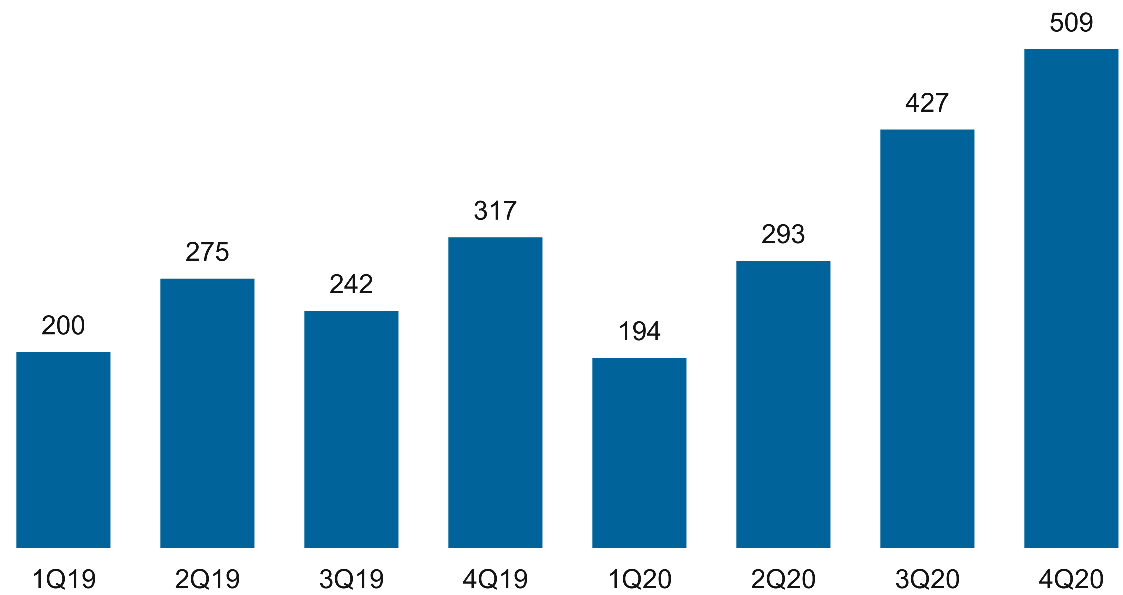
Recent Trends in Private Equity

Rush of IPOs in 2H 2020
- IPO activity nearly doubled in second half of 2020
- Notable IPOs: Ant Group, Airbnb, Doordash, and GoodRx

Late-Stage Venture Capital Surges
- Likewise, late-stage venture capital saw elevated activity in anticipation of these IPOs

SPAC Activity Remains Strong
- With over 250 SPACs raised this year, SPAC activity remained strong through the end of 2020

IPO Exits by Quarter



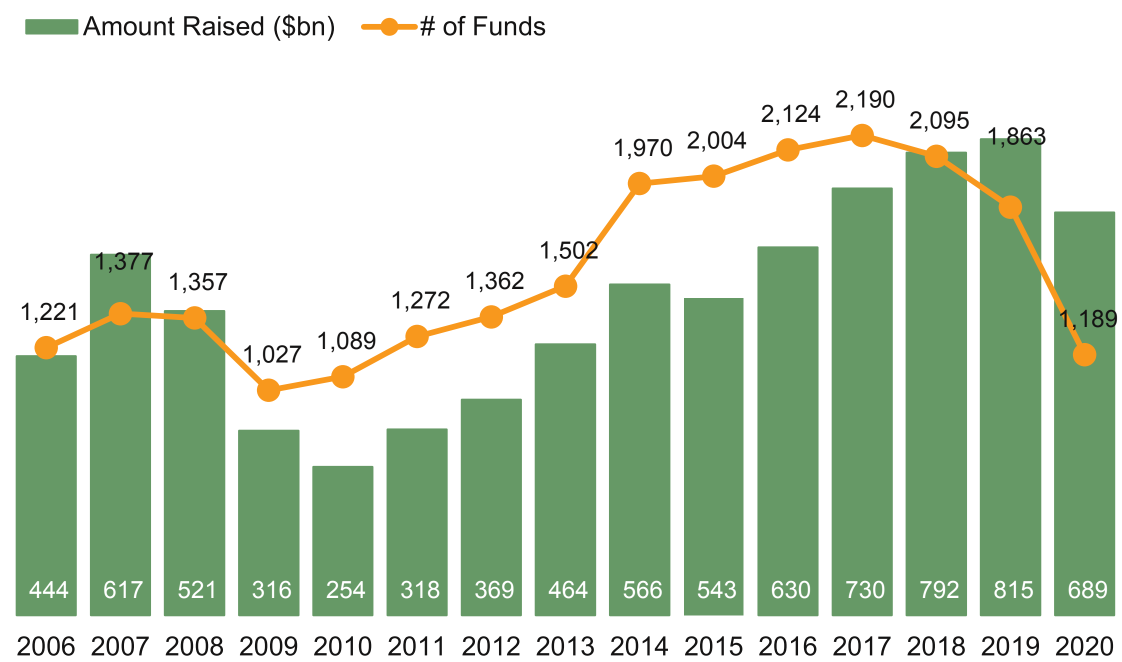
Source: PitchBook

Private Equity Global Fundraising

Slowdown during pandemic

- Fundraising for 2020 at 85% of 2019 levels
- Many fundraises pushed out to 2021 due to worries over investor appetite and inability of funds to deploy capital during the onset of the pandemic.
- Fundraising expected to pick up in 2021

Annual Fundraising



Source: PitchBook, includes private equity and private debt

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NDSIB Total Performance Summary

NDSIB Consolidated Gross Performance Summary

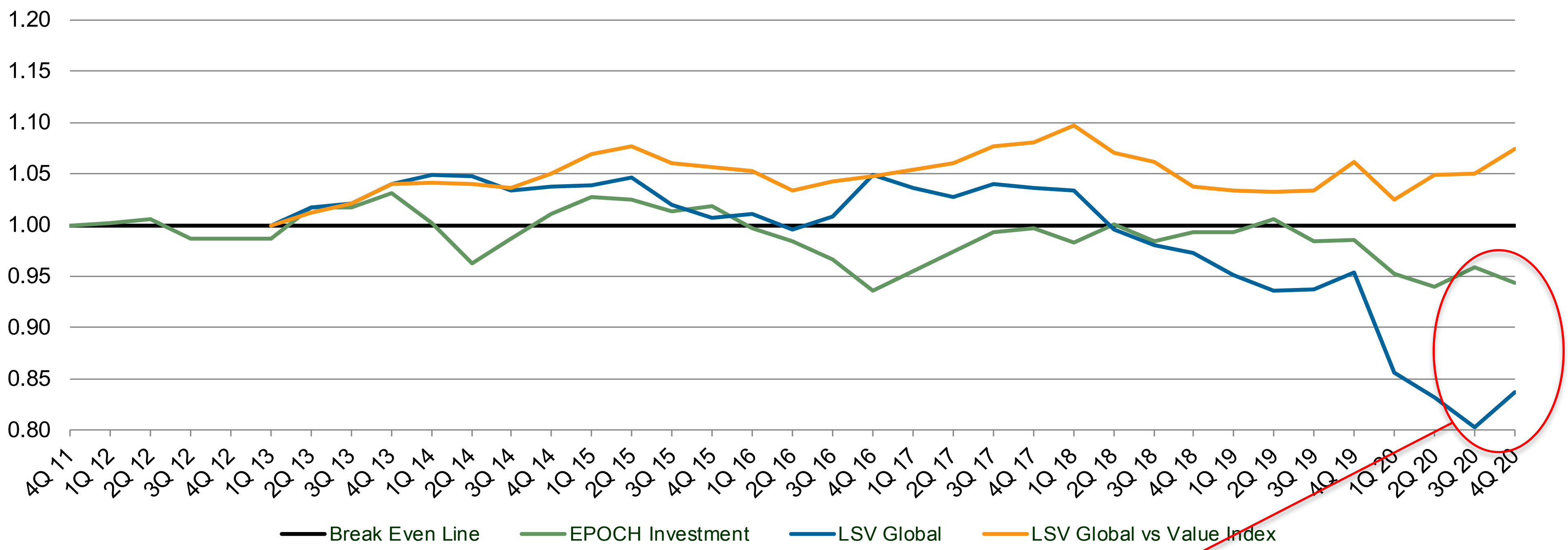
As of December 31, 2020

	Last Quarter	Last Year	Last 5 Years
Consolidated Pension Trust	9.59%	12.34%	9.98%
Consolidated Pension Trust Target	*9.74%*	*11.97%*	*9.26%*
Relative Performance vs. Target	-0.15%	0.37%	0.72%
PERS Total Fund	9.71%	12.47%	10.04%
NDSIB PERS Total Fund Target	*9.74%*	*11.96%*	*9.28%*
Relative Performance vs. Target	-0.03%	0.51%	0.76%
TFFR Total Fund	9.57%	12.33%	9.95%
NDSIB TFFR Total Fund Target	*9.81%*	*12.00%*	*9.25%*
Relative Performance vs. Target	-0.24%	0.33%	0.70%
WSI Total Fund	4.95%	10.03%	8.05%
NDSIB WSI Total Fund Target	*4.28%*	*9.54%*	*6.65%*
Relative Performance vs. Target	0.67%	0.49%	1.40%
Legacy - Total Fund	9.06%	12.44%	9.48%
NDSIB Legacy - Total Fund Target	*9.01%*	*12.07%*	*8.60%*
Relative Performance vs. Target	0.05%	0.37%	0.88%
Budget - Total Fund	1.17%	3.58%	2.68%
NDSIB Budget - Total Fund Target	*0.21%*	*3.30%*	*2.15%*
Relative Performance vs. Target	0.96%	0.28%	0.53%

Manager Relative Performance

Word Equities

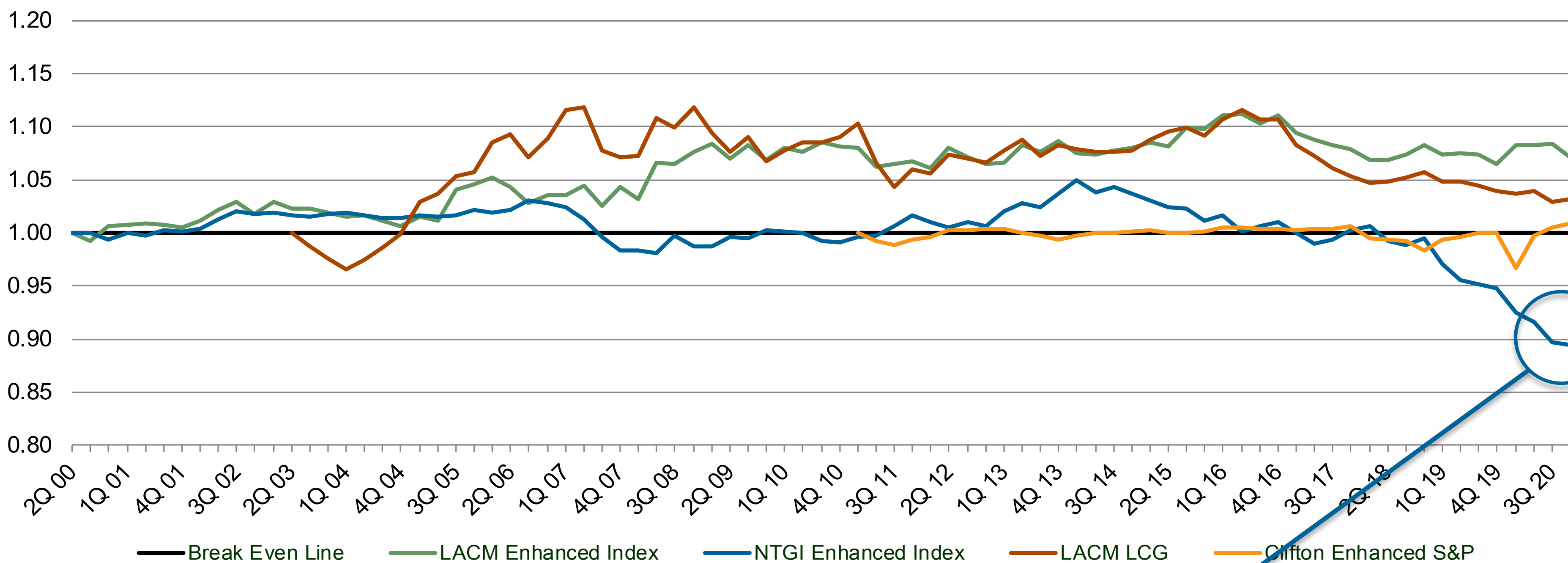
Cumulative Net Relative Return Since Inception, as of December 31, 2020



Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
EPOCH Investment	Q1 2012	0.94	MSCI World
LSV Global	Q2 2013	0.84	Custom LSV Global Index
LSV Global vs Value Index	Q2 2013	1.07	MSCI ACWI IMI Value

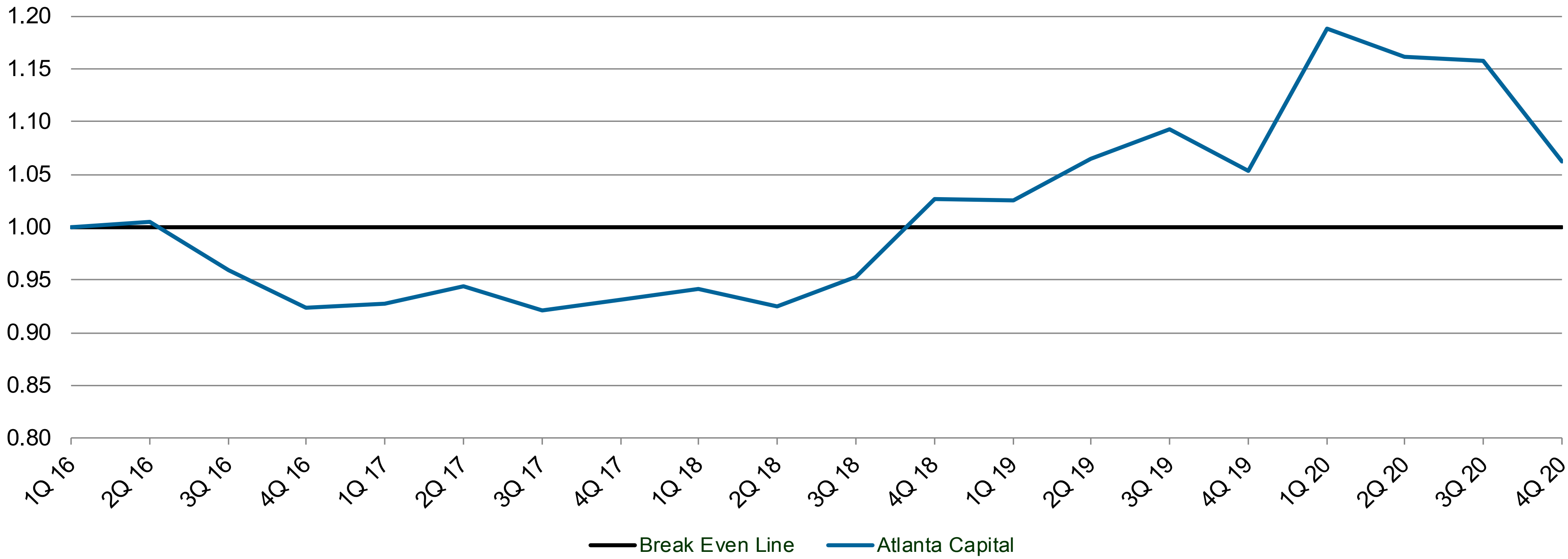
U.S. Large Cap Equities

Cumulative Net Relative Return Since Inception, as of December 31, 2020



Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
Clifton Enhanced S&P	Q2 2011	1.01	S&P 500
LACM LCG	Q3 2003	1.03	Russell 1000 Growth
LACM Enhanced Index	Q3 2000	1.07	Russell 1000
NTGI Enhanced Index	Q3 2000	0.89	S&P 500

Cumulative Net Relative Return Since Inception, as of December 31, 2020

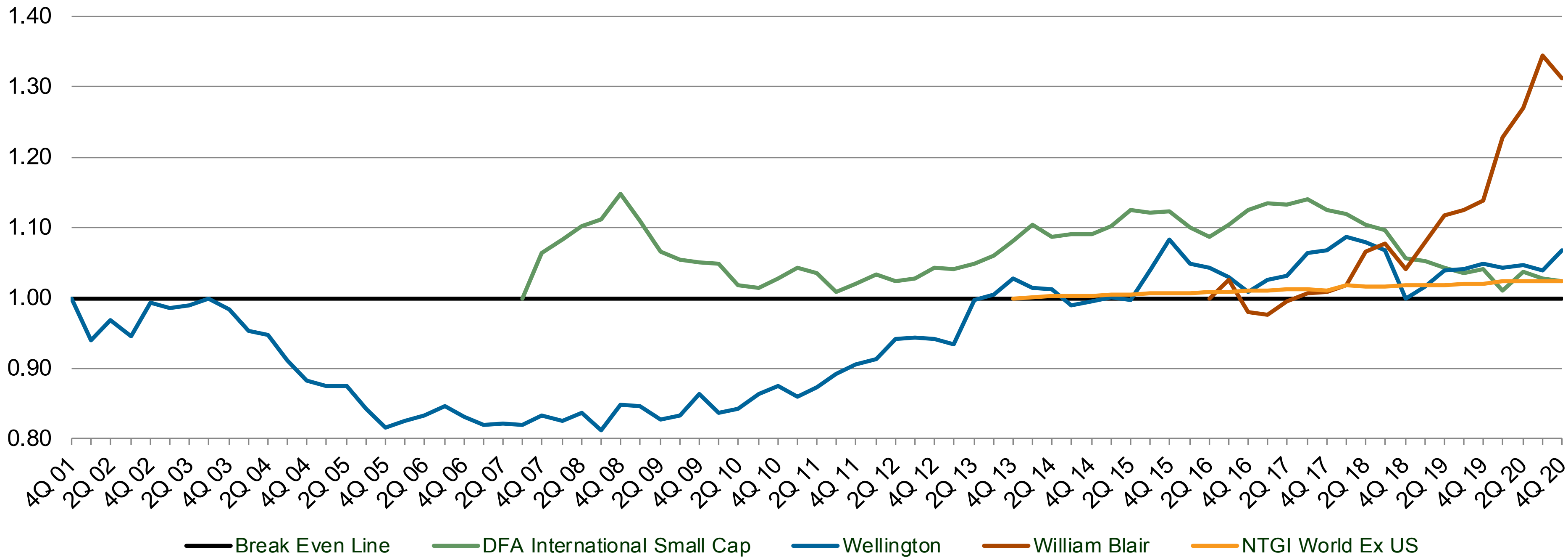


Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
Atlanta Capital	Q2 2016	1.06	S&P 600 Small Cap

Note: Next quarter will include Riverbridge and Sycamore

Developed International Equities

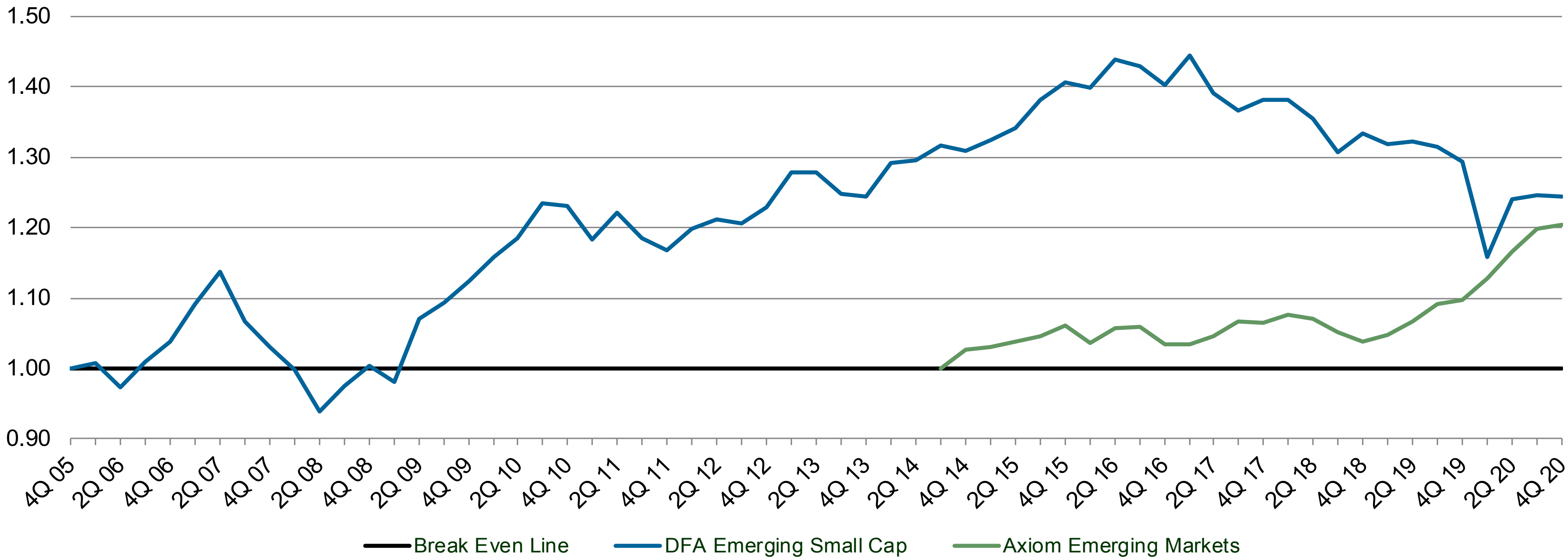
Cumulative Net Relative Return Since Inception, as of December 31, 2020



Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
DFA International Small Cap	Q4 2007	1.02	MSCI World Ex US SC Value
NTGI World Ex US	Q1 2014	1.02	MSCI World Ex US
Wellington	Q1 2002	1.07	BMI, EPAC, <$2 B
William Blair	Q3 2016	1.31	MSCI ACWI Ex US IMI

Emerging Market Equities

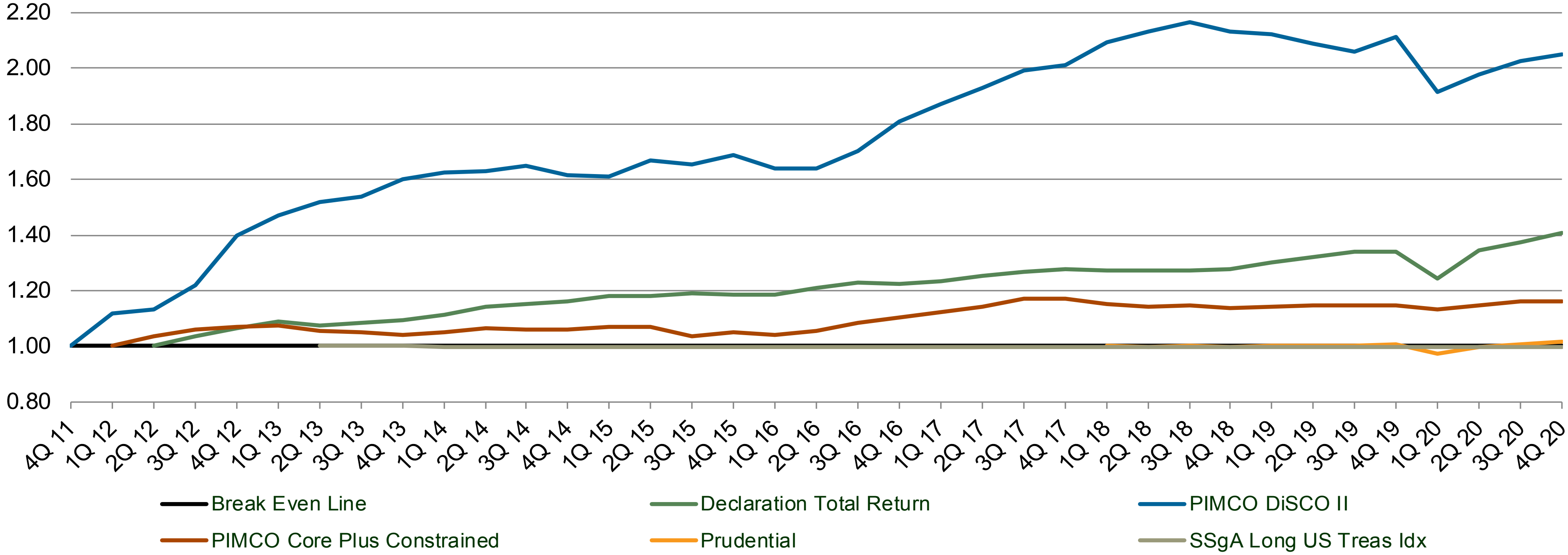
Cumulative Net Relative Return Since Inception, as of December 31, 2020



Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
Axiom Emerging Markets	Q4 2014	1.20	MSCI Emerging Market
DFA Emerging Small Cap	Q1 2006	1.24	MSCI Emerging Market

Investment Grade Fixed Income

Cumulative Net Relative Return Since Inception, as of December 31, 2020

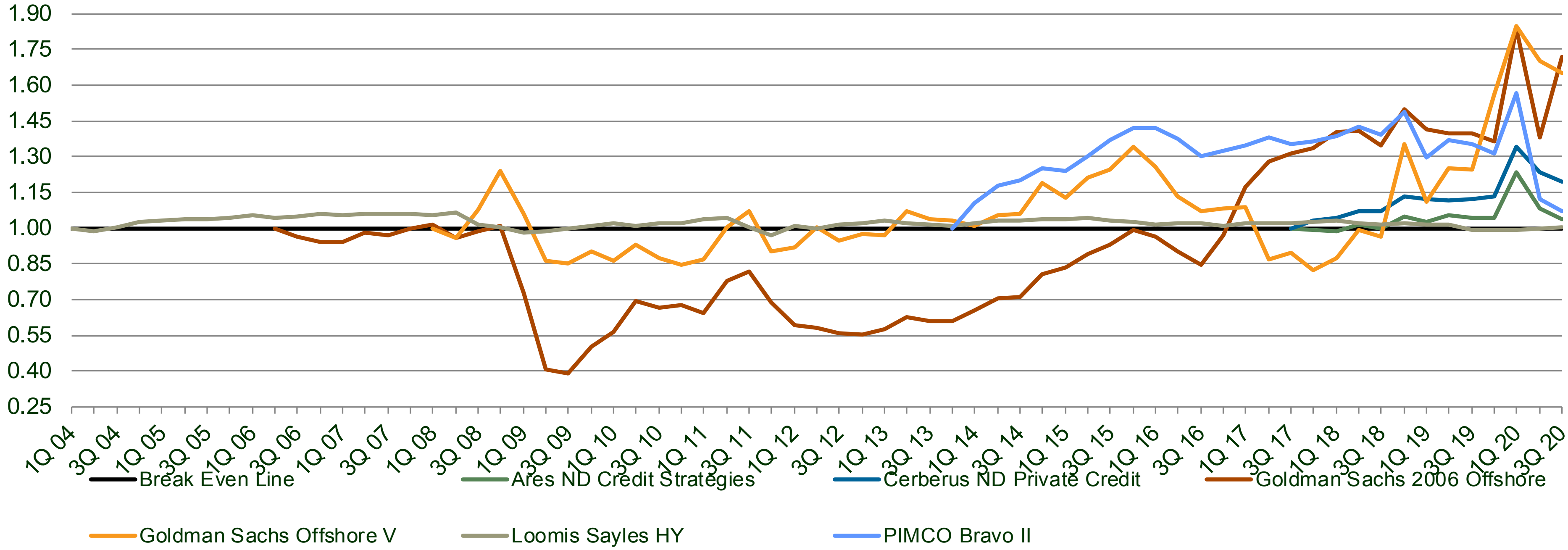


Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
Declaration Total Return	Q3 2012	1.41	3-Month LIBOR
PIMCO DiSCO II	Q1 2012	2.05	Bloomberg Aggregate
PIMCO Core Plus Constrained	Q2 2014	1.16	PIMCO Custom Benchmark
Prudential	Q2 2018	1.02	Bloomberg Aggregate
SSgA Long US Treas Idx	Q3 2013	1.00	Bloomberg Long Treasury

The PIMCO Custom Benchmark reflects the returns of 3-month Libor through Feb. 28, 2014; The fund's performance through March 31, 2014; 3-month Libor through June 30, 2018; and the Blmbg Agg thereafter.

Below Investment Grade Fixed Income

Cumulative Net Relative Return Since Inception, as of December 31, 2020



Fund Name	First Full Quarter of Returns	Cumulative Net Relative Return Since Inception	Benchmark
Ares ND Credit Strategies	Q4 2017	1.04	S&P:LSTA Leveraged Loan B
Cerberus ND Private Credit	Q4 2017	1.18	S&P:LSTA Leveraged Loan B
Goldman Sachs 2006 Offshore	Q3 2006	1.75	Bloomberg: HY Corp 2% Iss Cap
Goldman Sachs Offshore V	Q4 2007	1.57	Bloomberg: HY Corp 2% Iss Cap
Loomis Sayles HY	Q2 2004	1.01	Bloomberg: HY Corp 2% Iss Cap
PIMCO Bravo II	Q1 2014	1.01	Bloomberg: HY Corp 2% Iss Cap

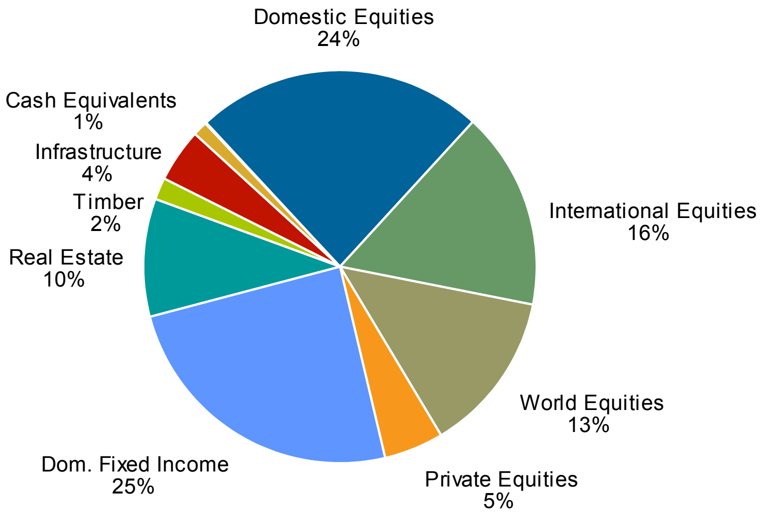
Callan

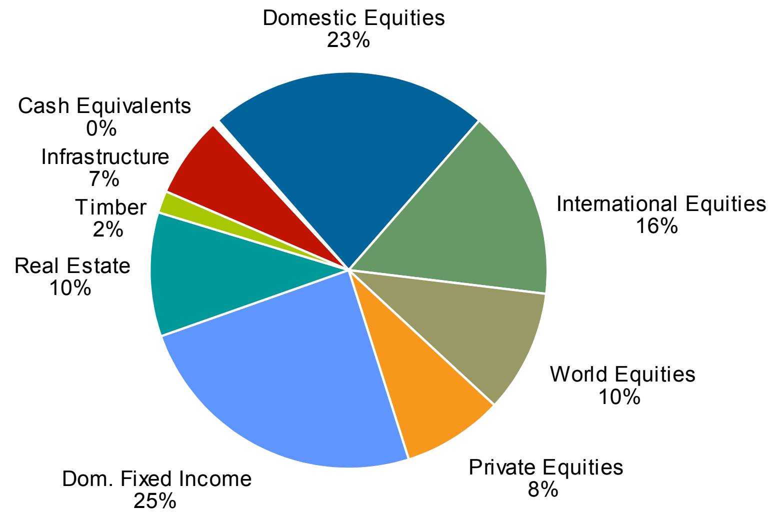
Consolidated Pension Trusts
Quarterly Review

- Public Employees Retirement System
- Teachers' Fund for Retirement

Consolidated Pension Trust Allocation

As of December 31, 2020

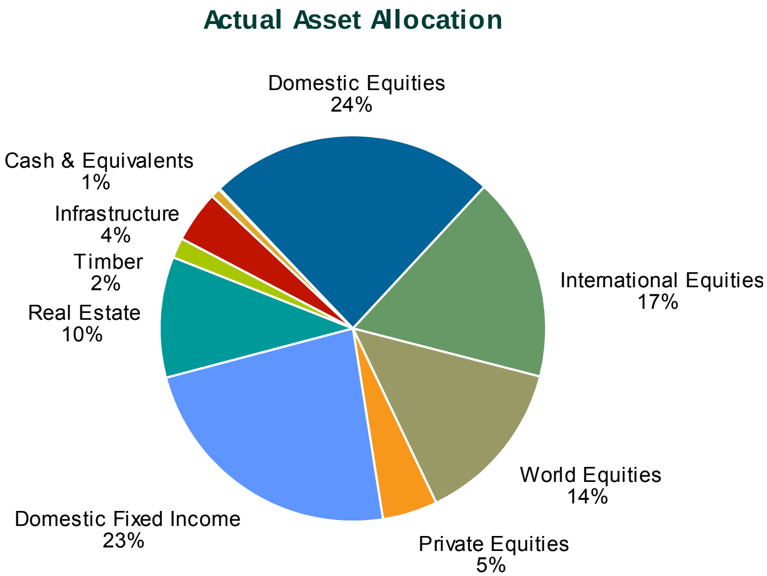


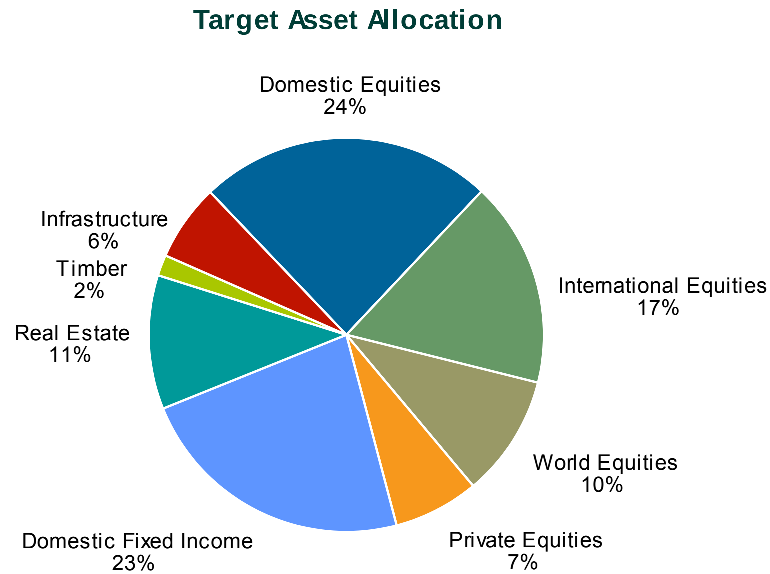


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	1,630,456	23.7%	22.8%	1.0%	66,317
International Equities	1,122,941	16.3%	15.5%	0.8%	56,938
World Equities	914,755	13.3%	10.0%	3.3%	227,476
Private Equities	335,828	4.9%	8.2%	(3.3%)	(227,984)
Dom. Fixed Income	1,692,659	24.6%	24.5%	0.1%	6,456
Real Estate	668,409	9.7%	10.1%	(0.4%)	(27,110)
Timber	123,307	1.8%	1.8%	(0.0%)	(0)
Infrastructure	301,608	4.4%	6.6%	(2.2%)	(154,628)
Cash Equivalents	82,825	1.2%	0.4%	0.8%	52,535
Total	6,872,789	100.0%	100.0%		

PERS Allocation

As of December 31, 2020

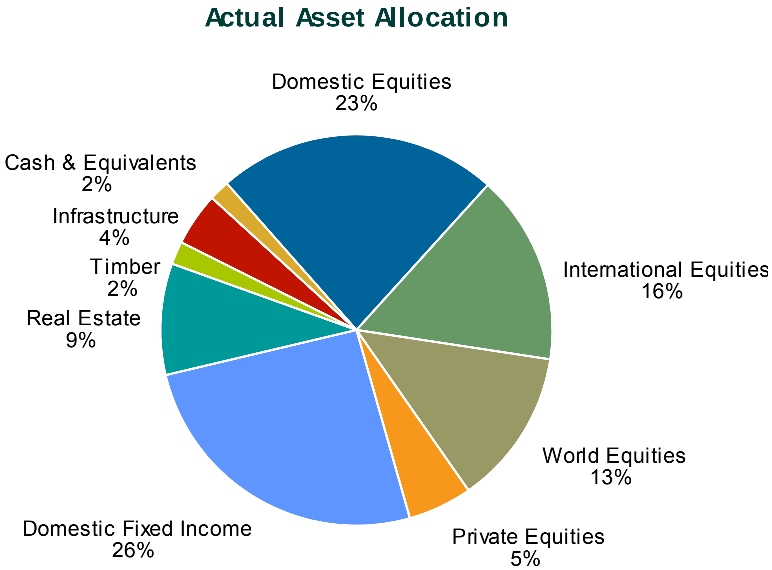


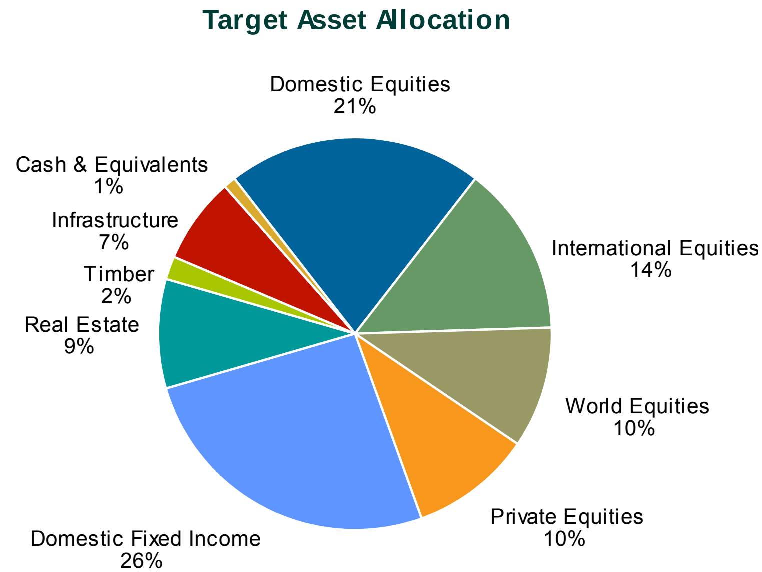


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	881,200	24.0%	24.1%	(0.1%)	(3,808)
International Equities	627,758	17.1%	16.9%	0.2%	8,252
World Equities	509,729	13.9%	10.0%	3.9%	142,775
Private Equities	167,920	4.6%	7.0%	(2.4%)	(88,948)
Domestic Fixed Income	859,955	23.4%	23.0%	0.4%	15,960
Real Estate	371,330	10.1%	11.0%	(0.9%)	(32,320)
Timber	62,355	1.7%	1.7%	0.0%	0
Infrastructure	158,125	4.3%	6.3%	(2.0%)	(73,083)
Cash & Equivalents	31,172	0.8%	0.0%	0.8%	31,172
Total	3,669,545	100.0%	100.0%		

TFFR Allocation

As of December 31, 2020



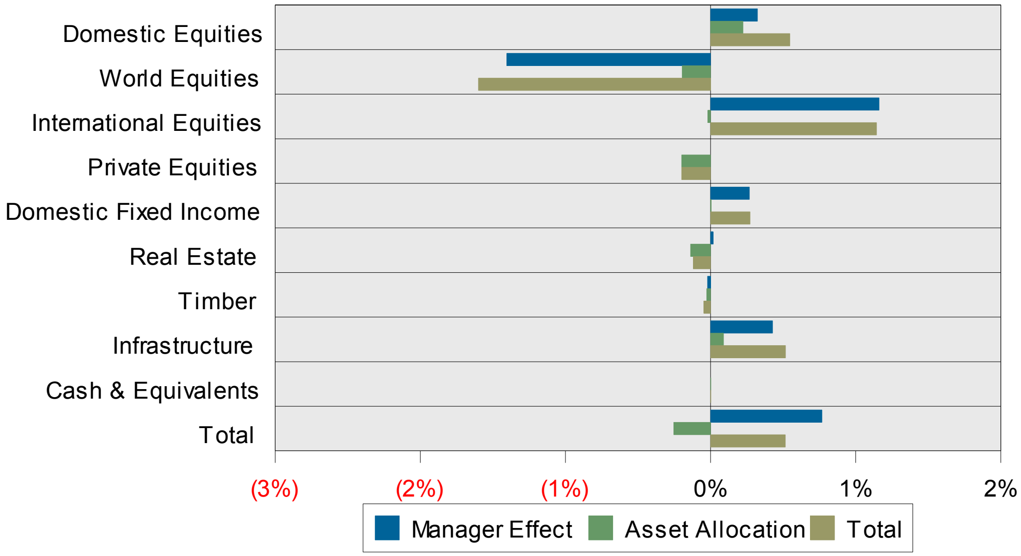


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	691,129	23.4%	21.0%	2.4%	70,569
International Equities	462,543	15.7%	14.0%	1.7%	48,837
World Equities	380,106	12.9%	10.0%	2.9%	84,601
Private Equities	155,476	5.3%	10.0%	(4.7%)	(140,029)
Domestic Fixed Income	759,077	25.7%	26.0%	(0.3%)	(9,235)
Real Estate	271,428	9.2%	9.0%	0.2%	5,474
Timber	55,660	1.9%	1.9%	0.0%	0
Infrastructure	129,203	4.4%	7.1%	(2.7%)	(81,091)
Cash & Equivalents	50,424	1.7%	1.0%	0.7%	20,874
Total	2,955,047	100.0%	100.0%		

PERS Performance and Attribution

As of December 31, 2020

One Year Relative Attribution Effects



Returns for 1 Year Ended 12/31/2020

Return Type	Return (%)
Gross	12.47%
Net of fees	12.19%
Target	11.96%
Net added	0.23%

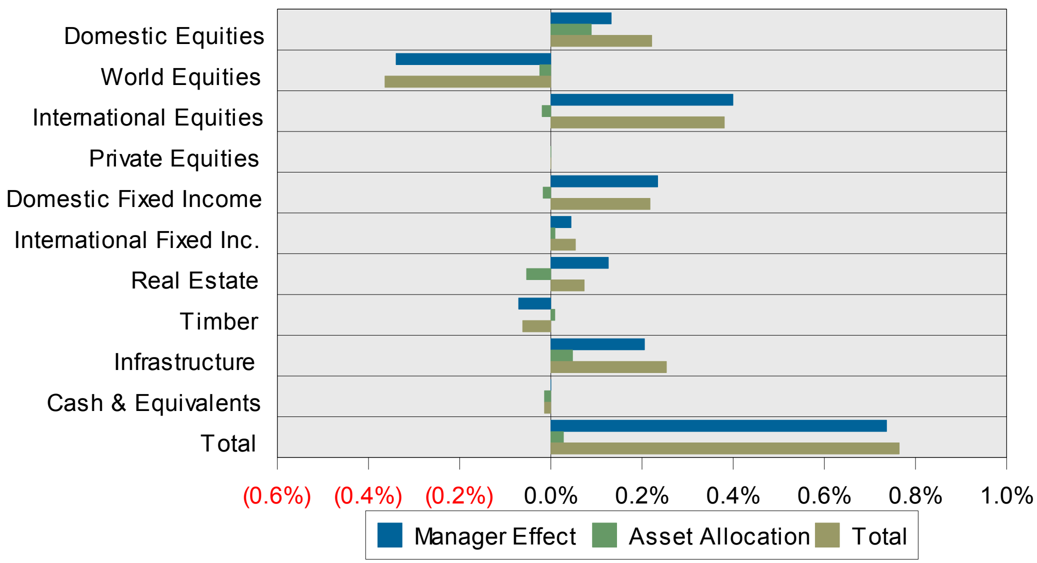
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	22.89%	20.78%	0.32%	0.22%	0.55%
World Equities	15%	15%	6.61%	15.90%	(1.40%)	(0.19%)	(1.60%)
International Equities	15%	15%	18.17%	10.26%	1.16%	(0.02%)	1.14%
Private Equities	4%	7%	12.24%	12.24%	0.00%	(0.20%)	(0.20%)
Domestic Fixed Income	24%	23%	8.59%	7.59%	0.27%	0.00%	0.27%
Real Estate	11%	11%	1.66%	1.60%	0.02%	(0.14%)	(0.12%)
Timber	2%	2%	(0.12%)	0.81%	(0.02%)	(0.03%)	(0.05%)
Infrastructure	5%	6%	9.06%	1.07%	0.43%	0.09%	0.52%
Cash & Equivalents	0%	0%	0.55%	0.55%	0.00%	0.00%	0.00%
Total			**12.47% =**	**11.96% +**	**0.77% +**	**(0.25%)**	**0.52%**

PERS Performance and Attribution

As of December 31, 2020

Five Year Annualized Relative Attribution Effects



Returns for 5 Year Ended 12/31/2020

Return Type	Return (%)
Gross	10.04%
Net of fees	9.77%
Target	9.28%
Net added	0.49%

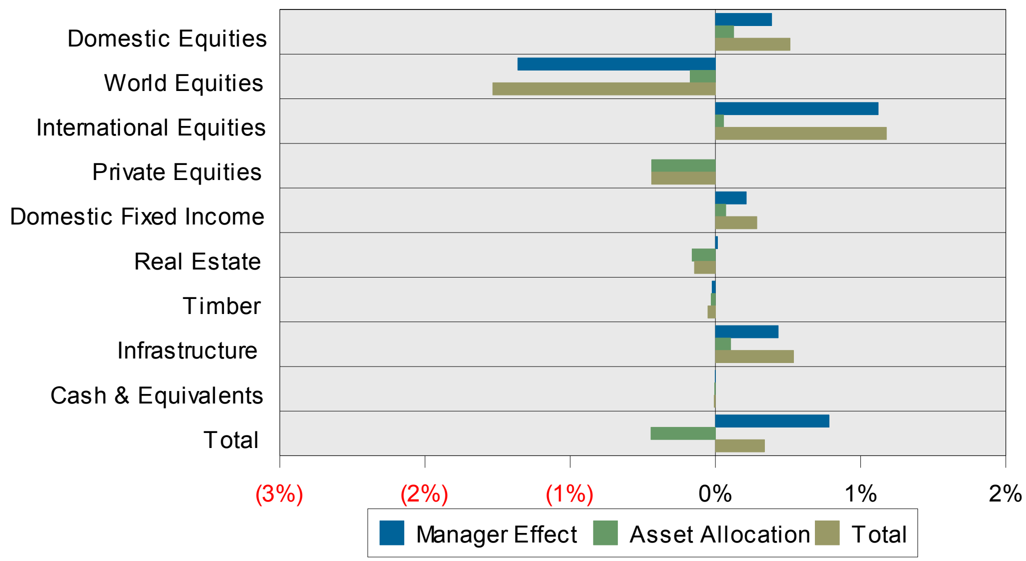
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.82%	15.10%	0.13%	0.09%	0.22%
World Equities	16%	16%	9.90%	12.19%	(0.34%)	(0.02%)	(0.36%)
International Equities	16%	14%	11.28%	8.70%	0.40%	(0.02%)	0.38%
Private Equities	3%	7%	6.43%	6.43%	0.00%	0.00%	0.00%
Domestic Fixed Income	21%	21%	6.78%	5.67%	0.23%	(0.02%)	0.22%
International Fixed Inc.	2%	2%	-	-	0.04%	0.01%	0.05%
Real Estate	11%	11%	7.00%	5.91%	0.13%	(0.05%)	0.07%
Timber	2%	3%	0.04%	2.30%	(0.07%)	0.01%	(0.06%)
Infrastructure	5%	6%	6.97%	2.65%	0.21%	0.05%	0.25%
Cash & Equivalents	1%	0%	1.26%	1.24%	0.00%	(0.01%)	(0.01%)
Total			**10.04% =**	**9.28% +**	**0.74% +**	**0.03%**	**0.76%**

TFFR Performance and Attribution

As of December 31, 2020

One Year Relative Attribution Effects



Returns for 1 Year Ended 12/31/2020

Return Type	Return (%)
Gross	12.33%
Net of fees	12.06%
Target	12.00%
Net added	0.06%

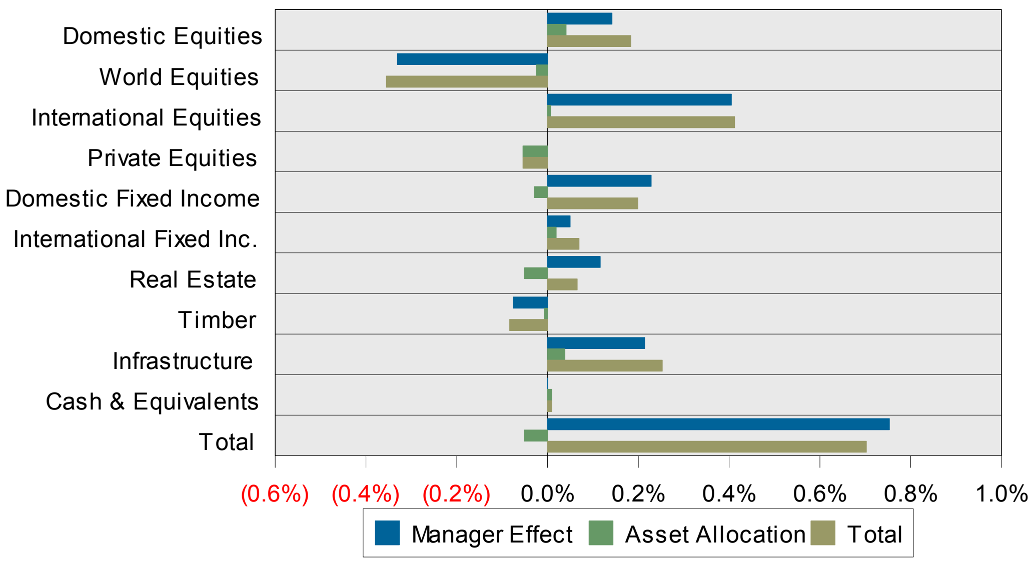
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	22%	21%	23.09%	20.82%	0.39%	0.13%	0.51%
World Equities	15%	15%	6.62%	15.90%	(1.36%)	(0.17%)	(1.53%)
International Equities	15%	14%	17.62%	9.87%	1.12%	0.06%	1.18%
Private Equities	5%	6%	12.24%	12.24%	0.00%	(0.44%)	(0.44%)
Domestic Fixed Income	24%	23%	8.39%	7.59%	0.21%	0.07%	0.29%
Real Estate	10%	10%	1.66%	1.60%	0.02%	(0.16%)	(0.14%)
Timber	2%	2%	(0.12%)	0.81%	(0.02%)	(0.03%)	(0.05%)
Infrastructure	5%	6%	9.06%	1.07%	0.43%	0.11%	0.54%
Cash & Equivalents	1%	1%	0.55%	0.67%	(0.00%)	(0.01%)	(0.01%)
Total			**12.33% =**	**12.00% +**	**0.78% +**	**(0.44%)**	**0.34%**

TFFR Performance and Attribution

As of December 31, 2020

Five Year Annualized Relative Attribution Effects



Returns for 5 Year Ended 12/31/2020

Return Type	Return (%)
Gross	9.95%
Net of fees	9.68%
Target	9.25%
Net added	0.43%

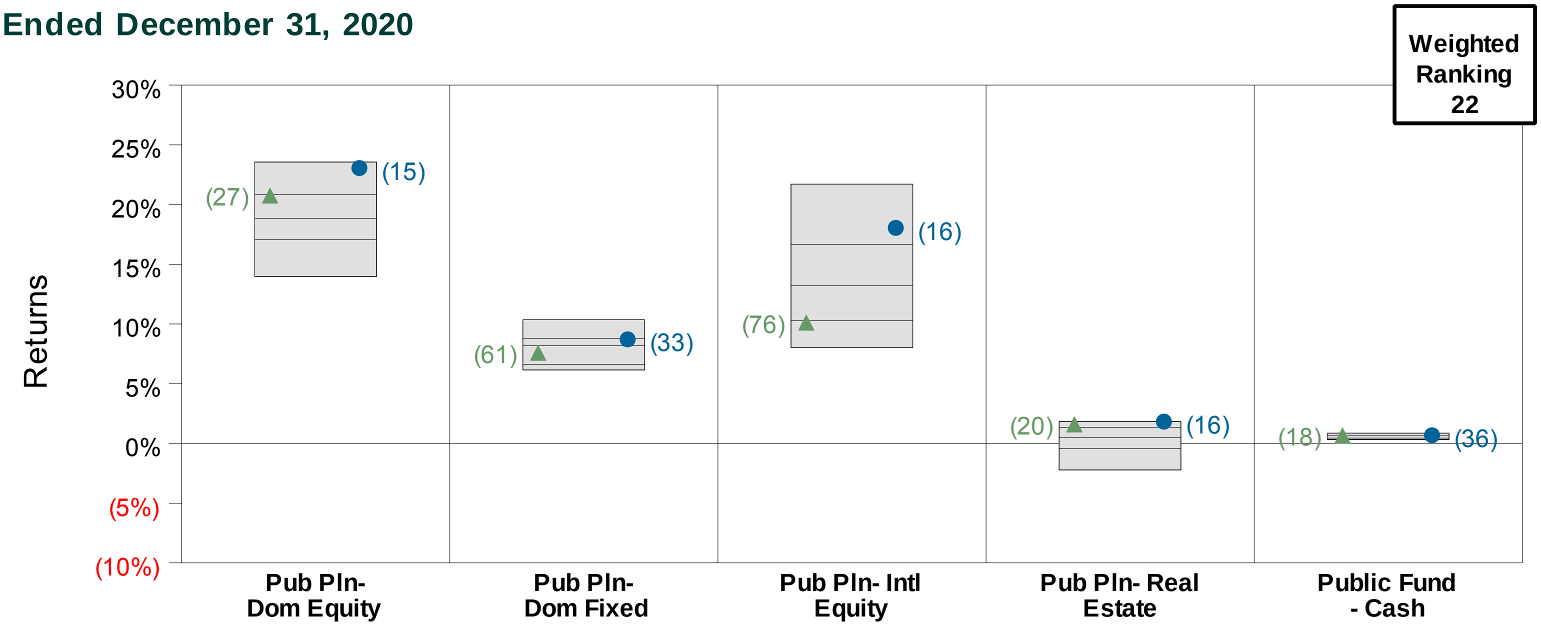
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.87%	15.13%	0.14%	0.04%	0.18%
World Equities	16%	16%	9.91%	12.19%	(0.33%)	(0.02%)	(0.36%)
International Equities	15%	15%	11.09%	8.46%	0.41%	0.01%	0.41%
Private Equities	4%	6%	6.43%	6.43%	0.00%	(0.05%)	(0.05%)
Domestic Fixed Income	21%	21%	6.66%	5.53%	0.23%	(0.03%)	0.20%
International Fixed Inc.	2%	2%	-	-	0.05%	0.02%	0.07%
Real Estate	10%	10%	7.00%	5.91%	0.12%	(0.05%)	0.07%
Timber	3%	3%	0.04%	2.30%	(0.08%)	(0.01%)	(0.08%)
Infrastructure	5%	6%	6.97%	2.65%	0.21%	0.04%	0.25%
Cash & Equivalents	1%	1%	1.26%	1.20%	0.00%	0.01%	0.01%
Total			**9.95% =**	**9.25% +**	**0.75% +**	**(0.05%)**	**0.70%**

Asset Class Composite Results

Consolidated Pension Trust Asset Class Results vs. Other Public Pension Funds

Total Asset Class Performance
One Year Ended December 31, 2020



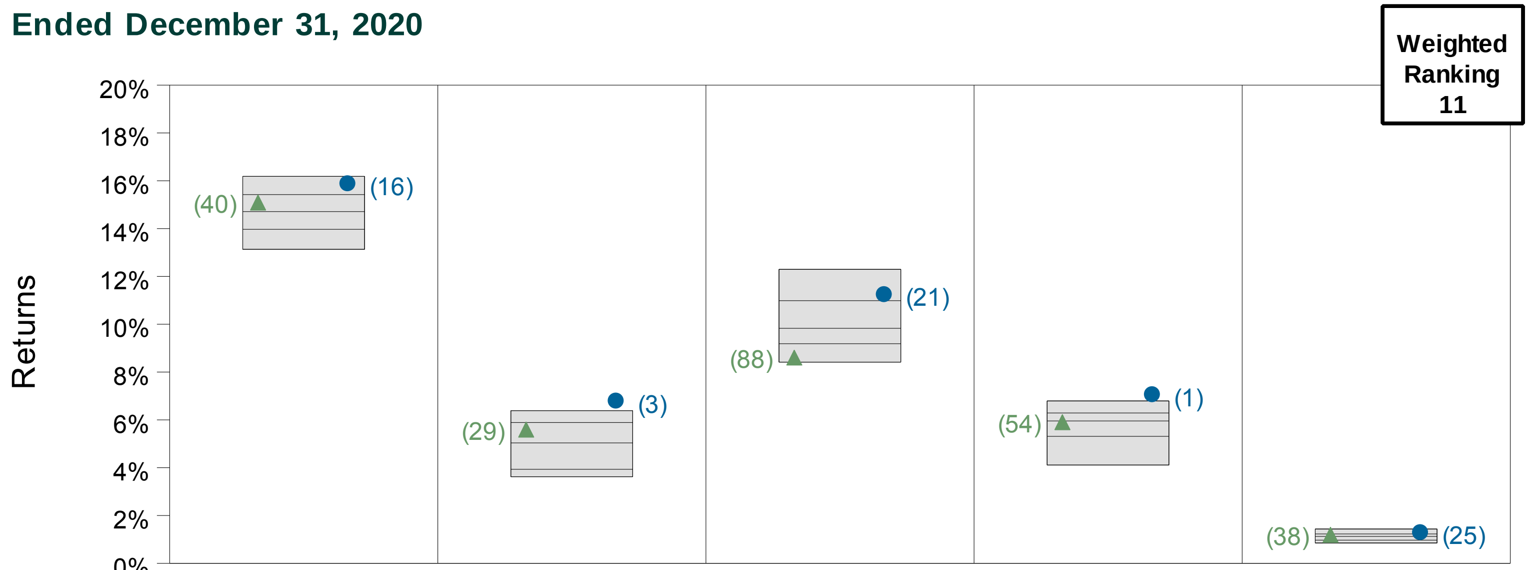
	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	23.56	10.36	21.71	1.85	0.87
25th Percentile	20.83	8.79	16.67	1.35	0.65
Median	18.84	8.19	13.20	0.50	0.45
75th Percentile	17.07	6.63	10.28	(0.43)	0.35
90th Percentile	13.98	6.15	8.02	(2.22)	0.31
Asset Class Composite ●	22.90	8.57	17.89	1.66	0.54
Composite Benchmark ▲	20.74	7.59	10.12	1.60	0.67

- Domestic and international equity allocations continued to drive absolute returns over the trailing 12 months.
- All asset classes outperformed their respective peer group medians.

Asset Class Composite Results

Consolidated Pension Trust Asset Class Results vs. Other Public Pension Funds

Total Asset Class Performance
Five Years Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	16.19	6.39	12.30	6.80	1.44
25th Percentile	15.43	5.89	10.99	6.29	1.24
Median	14.72	5.04	9.83	5.96	1.13
75th Percentile	13.97	3.94	9.19	5.32	0.97
90th Percentile	13.13	3.62	8.42	4.12	0.86
Asset Class Composite ●	15.82	6.73	11.19	7.00	1.24
Composite Benchmark ▲	15.10	5.60	8.61	5.91	1.20

- All asset classes outperformed their respective benchmarks over the trailing five years.
- All asset classes ranked in the top quartile over the trailing five years.

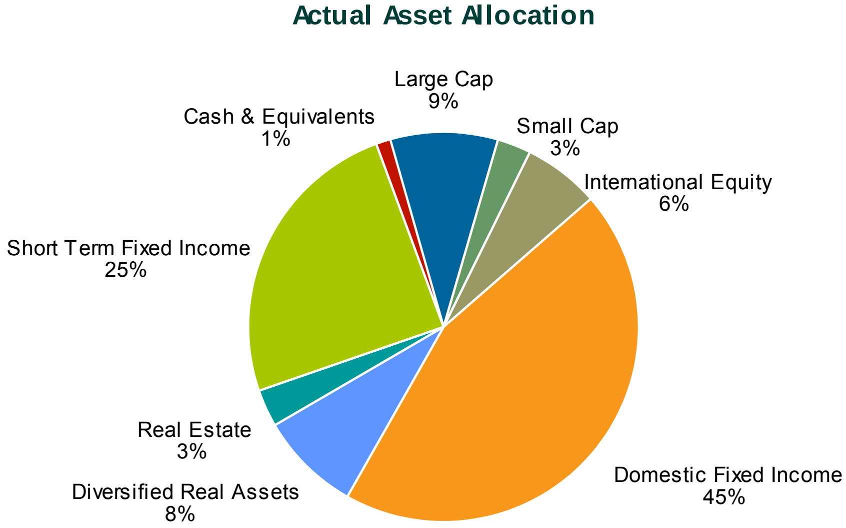
Callan

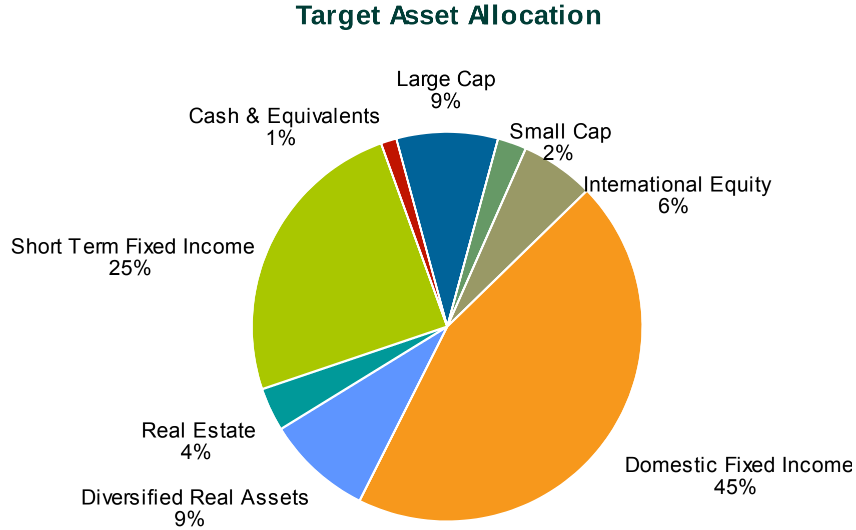
Consolidated Insurance Trust
Quarterly Review

- Workforce Safety and Insurance Legacy Fund
- Budget Stabilization Fund

Consolidated Insurance Trust Allocation

As of December 31, 2020



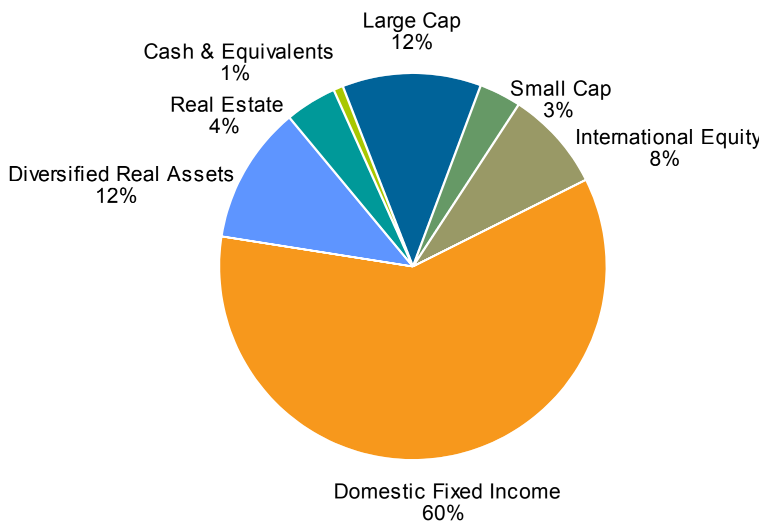


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	283,905	9.0%	8.5%	0.5%	14,708
Small Cap	87,146	2.8%	2.4%	0.3%	10,556
International Equity	200,223	6.3%	6.1%	0.3%	8,042
Domestic Fixed Income	1,406,232	44.6%	44.7%	(0.1%)	(2,611)
Diversified Real Assets	265,840	8.4%	8.8%	(0.3%)	(10,541)
Real Estate	96,926	3.1%	3.6%	(0.5%)	(16,433)
Short Term Fixed Income	778,365	24.7%	24.7%	(0.0%)	(0)
Cash & Equivalents	36,473	1.2%	1.3%	(0.1%)	(3,721)
Total	3,155,111	100.0%	100.0%		

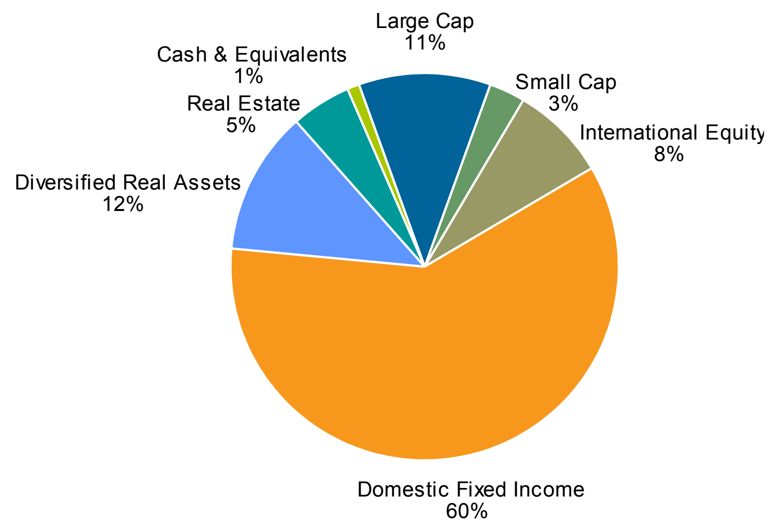
WSI Allocation

As of December 31, 2020

Actual Asset Allocation



Target Asset Allocation

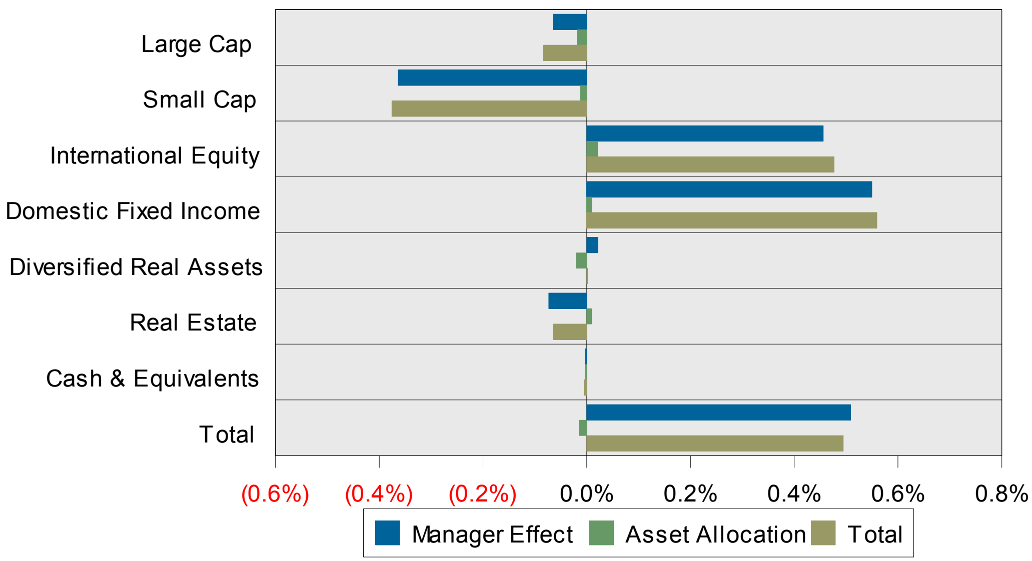


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	263,594	11.6%	11.0%	0.6%	14,660
Small Cap	78,526	3.5%	3.0%	0.5%	10,635
International Equity	189,099	8.4%	8.0%	0.4%	8,056
Domestic Fixed Income	1,355,150	59.9%	60.0%	(0.1%)	(2,672)
Diversified Real Assets	261,034	11.5%	12.0%	(0.5%)	(10,531)
Real Estate	96,722	4.3%	5.0%	(0.7%)	(16,430)
Cash & Equivalents	18,912	0.8%	1.0%	(0.2%)	(3,718)
Total	2,263,037	100.0%	100.0%		

WSI Performance and Attribution

As of December 31, 2020

One Year Relative Attribution Effects



Returns for 1 Year Ended 12/31/2020

Return Type	Return (%)
Gross	10.03%
Net of fees	9.85%
Target	9.54%
Net added	0.31%

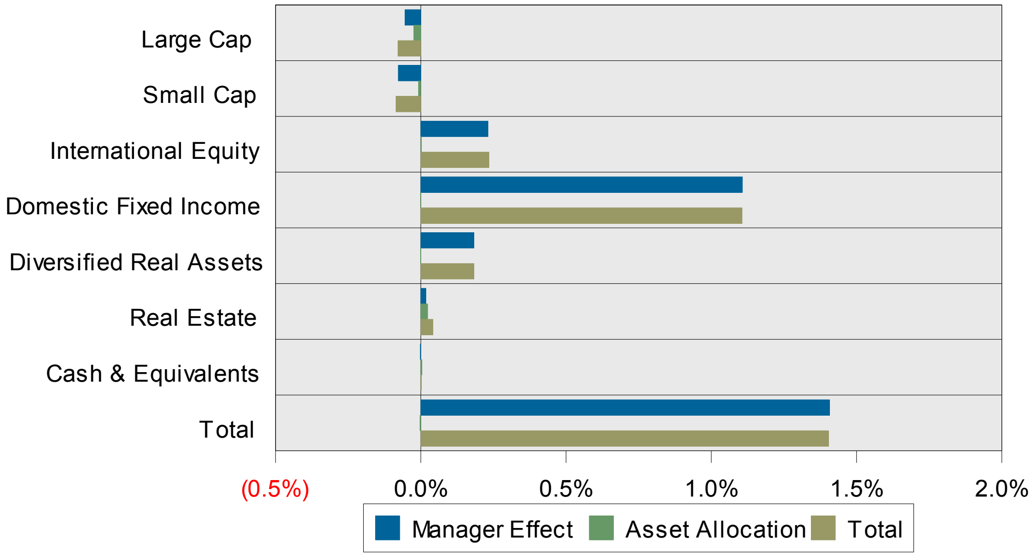
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	19.98%	20.96%	(0.06%)	(0.02%)	(0.08%)
Small Cap	3%	3%	8.40%	19.96%	(0.36%)	(0.01%)	(0.38%)
International Equity	8%	8%	13.19%	7.59%	0.46%	0.02%	0.48%
Domestic Fixed Income	61%	60%	8.65%	7.51%	0.55%	0.01%	0.56%
Diversified Real Assets	12%	12%	7.31%	7.10%	0.02%	(0.02%)	0.00%
Real Estate	5%	5%	(0.06%)	1.60%	(0.07%)	0.01%	(0.06%)
Cash & Equivalents	1%	1%	0.44%	0.67%	(0.00%)	(0.00%)	(0.00%)
Total			**10.03% =**	**9.54% +**	**0.51% +**	**(0.01%)**	**0.49%**

WSI Performance and Attribution

As of December 31, 2020

Five Year Annualized Relative Attribution Effects



Returns for 5 Year Ended 12/31/2020

Return Type	Return (%)
Gross	8.05%
Net of fees	7.84%
Target	6.65%
Net added	1.19%

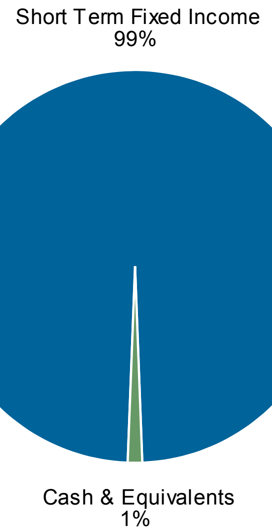
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	12%	11%	14.99%	15.60%	(0.05%)	(0.02%)	(0.08%)
Small Cap	3%	3%	10.75%	13.26%	(0.08%)	(0.01%)	(0.08%)
International Equity	8%	8%	9.88%	7.32%	0.23%	0.00%	0.23%
Domestic Fixed Income	56%	56%	6.50%	4.44%	1.11%	(0.00%)	1.11%
Diversified Real Assets	13%	14%	5.78%	4.44%	0.18%	(0.00%)	0.18%
Real Estate	6%	6%	5.88%	5.91%	0.02%	0.02%	0.04%
Cash & Equivalents	1%	1%	1.06%	1.20%	(0.00%)	0.00%	0.00%
Total			**8.05% =**	**6.65% +**	**1.41% +**	**(0.00%)**	**1.40%**

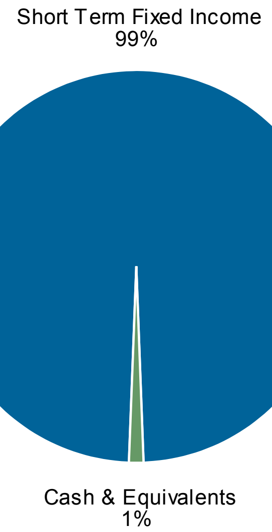
Budget Stabilization Fund Allocation

As of December 31, 2020

Actual Asset Allocation



Target Asset Allocation

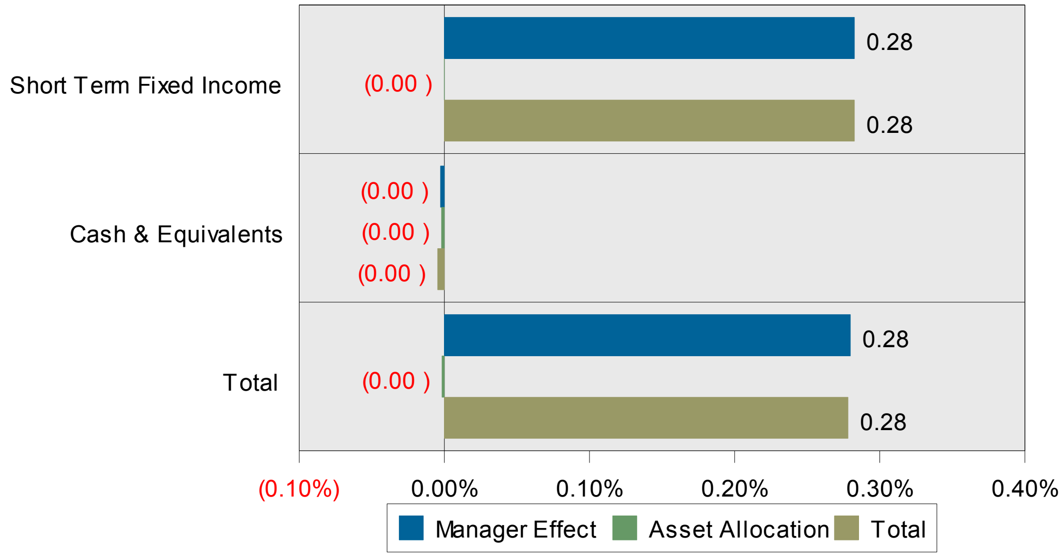


Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Short Term Fixed Income	739,685	99.0%	99.0%	0.0%	5
Cash & Equivalents	7,467	1.0%	1.0%	(0.0%)	(5)
Total	747,151	100.0%	100.0%		

Budget Stabilization Fund Performance and Attribution

As of December 31, 2020

One Year Relative Attribution Effects



Returns for 1 Year Ended 12/31/2020

Return Type	Return (%)
Gross	3.58%
Net of fees	3.45%
Target	3.30%
Net added	0.15%

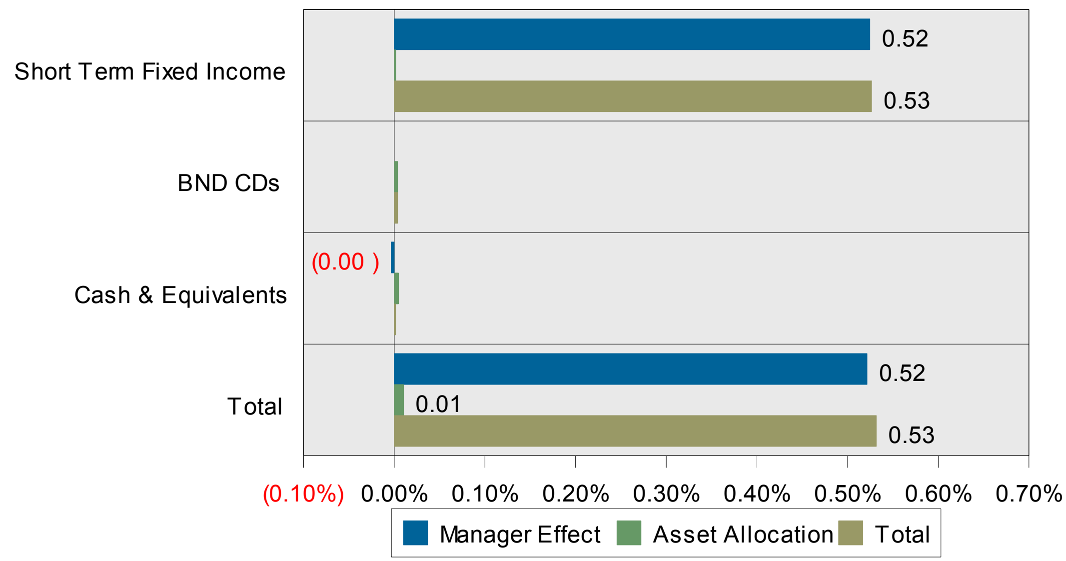
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Income	99%	99%	3.61%	3.33%	0.28%	(0.00%)	0.28%
Cash & Equivalents	1%	1%	0.44%	0.67%	(0.00%)	(0.00%)	(0.00%)
Total			**3.58% =**	**3.30% +**	**0.28% +**	**(0.00%)**	**0.28%**

Budget Stabilization Fund Performance and Attribution

As of December 31, 2020

Five Year Annualized Relative Attribution Effects



Returns for 5 Year Ended 12/31/2020

Return Type	Return (%)
Gross	2.68%
Net of fees	2.53%
Target	2.15%
Net added	0.38%

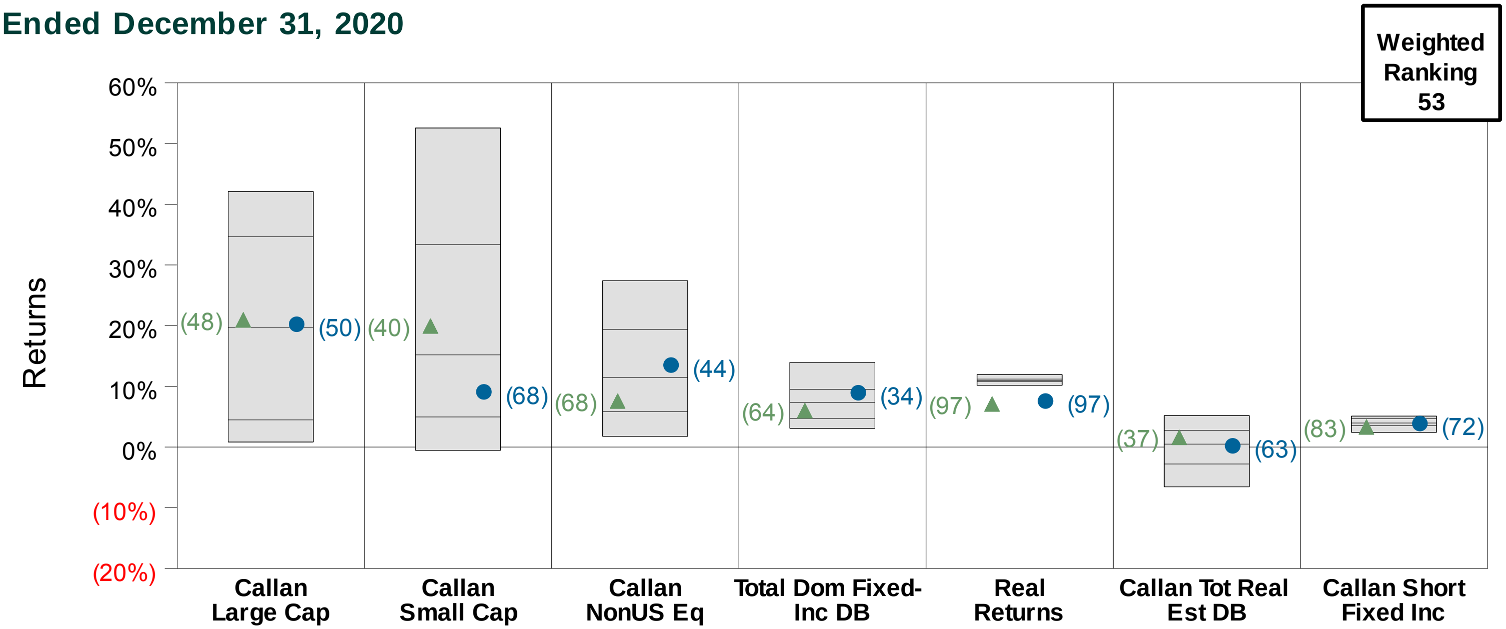
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return		Target Return		Manager Effect		Asset Allocation	Total Relative Return
Short Term Fixed Income	93%	93%	2.68%		2.10%		0.52%		0.00%	0.53%
BND CDs	4%	4%	-		-		0.00%		0.00%	0.00%
Cash & Equivalents	3%	3%	1.06%		1.20%		(0.00%)		0.00%	0.00%
Total			**2.68%**	**=**	**2.15%**	**+**	**0.52%**	**+**	**0.01%**	**0.53%**

Asset Class Composite Results

Consolidated Insurance Trust Asset Class Results vs. Callan Style Groups

Total Asset Class Performance
One Year Ended December 31, 2020



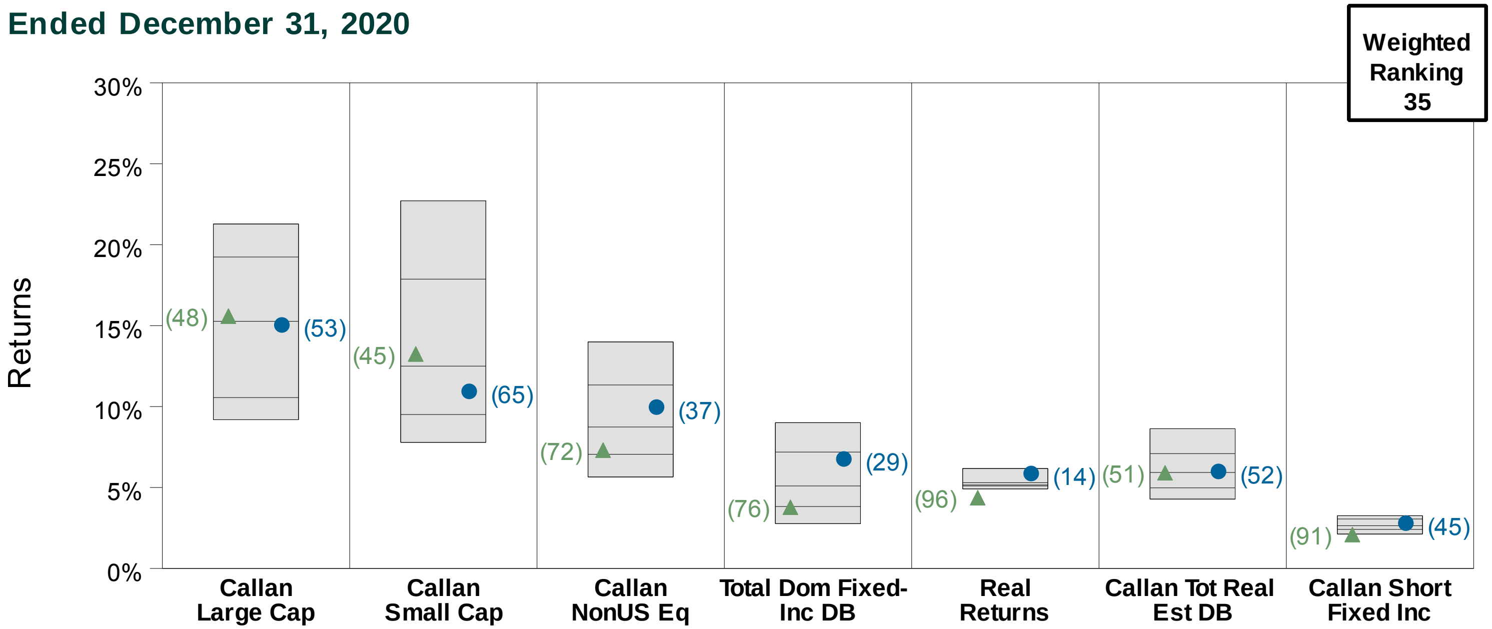
	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Short Fixed Inc
10th Percentile	42.13	52.59	27.42	13.97	11.94	5.19	5.11
25th Percentile	34.66	33.38	19.38	9.53	11.20	2.78	4.69
Median	19.74	15.20	11.45	7.36	11.01	0.49	3.98
75th Percentile	4.48	4.97	5.85	4.72	10.82	(2.79)	3.54
90th Percentile	0.82	(0.54)	1.78	3.09	10.19	(6.53)	2.42
Asset Class Composite ●	19.93	8.77	13.19	8.64	7.32	(0.06)	3.61
Composite Benchmark ▲	20.96	19.96	7.59	6.03	7.11	1.60	3.33

- International equity notably outperformed its benchmark over the trailing year, while U.S. SC equities significantly underperformed their benchmark.
- International equity and fixed income were the only asset classes to perform above median.

Asset Class Composite Results

Consolidated Insurance Trust Asset Class Results vs. Callan Style Groups

Total Asset Class Performance
Five Years Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Short Fixed Inc
10th Percentile	21.29	22.72	14.00	9.01	6.18	8.63	3.26
25th Percentile	19.25	17.88	11.34	7.19	5.30	7.10	3.06
Median	15.28	12.51	8.74	5.10	5.16	5.93	2.65
75th Percentile	10.56	9.51	7.05	3.83	5.10	4.98	2.42
90th Percentile	9.19	7.80	5.65	2.77	4.91	4.29	2.13
Asset Class Composite ●	14.93	10.84	9.85	6.65	5.76	5.88	2.69
Composite Benchmark ▲	15.60	13.26	7.32	3.78	4.37	5.91	2.10

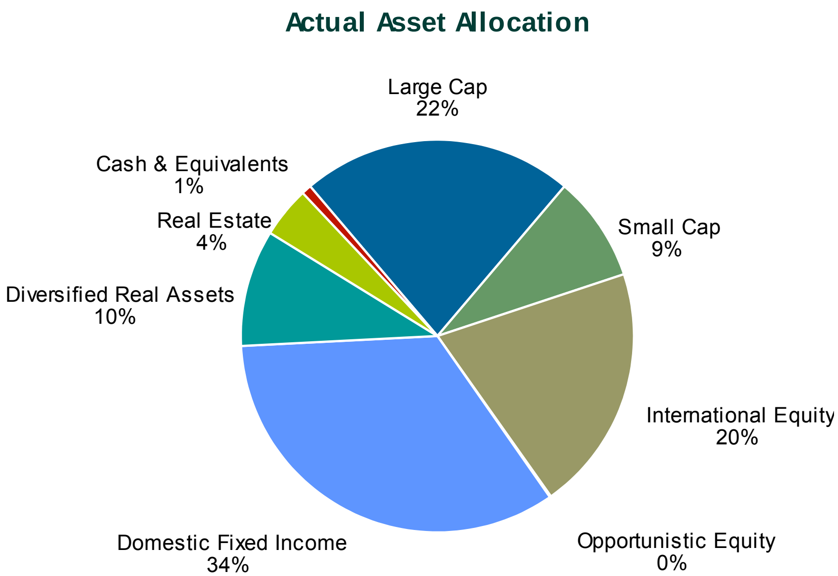
- U.S. LC equity and U.S. SC equity were the only asset classes to underperform their benchmarks over the trailing 5-year period.
- Real returns ranked in the top quartile, while international equity, fixed income, and short-term fixed income ranked above median.

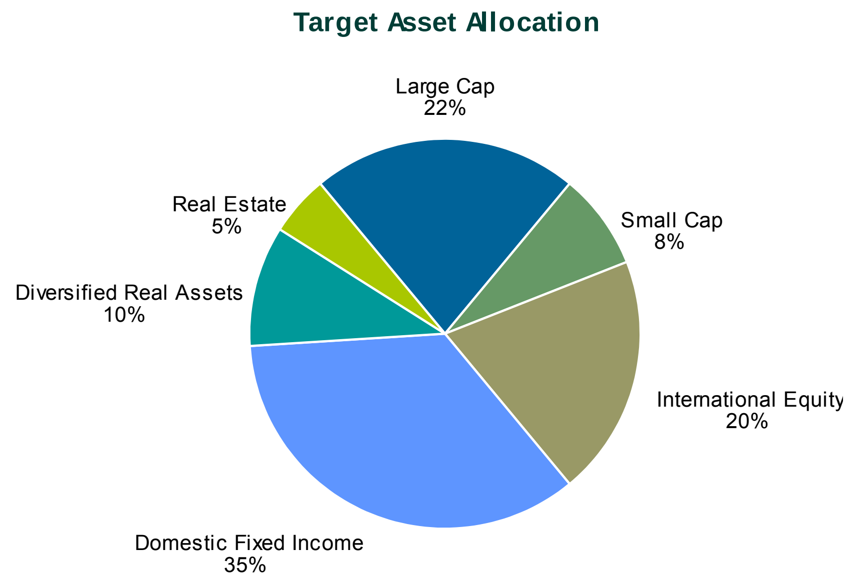
Callan

Legacy Fund Quarterly Review

Legacy Fund Allocation

As of December 31, 2020

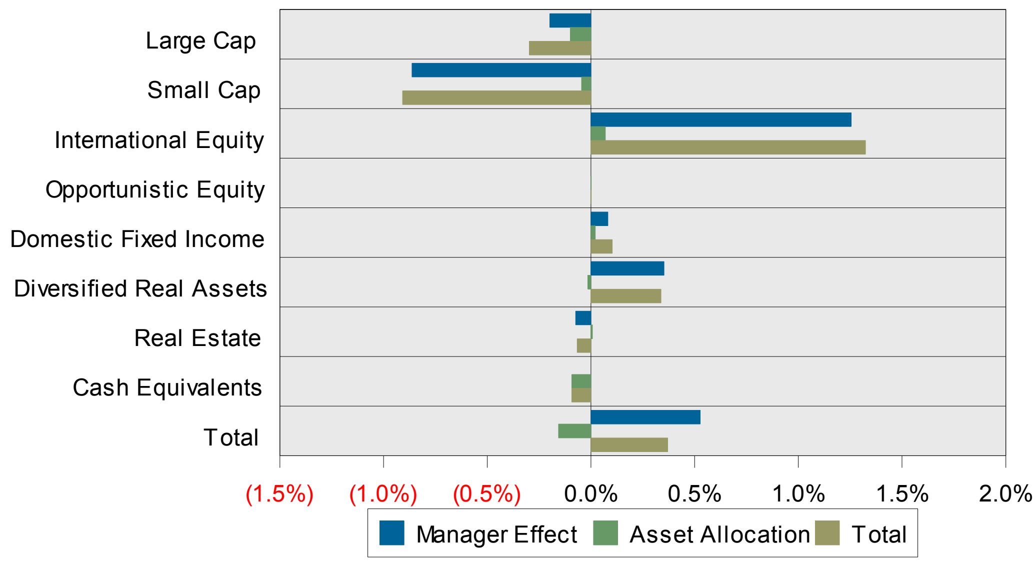




Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	1,825,140	22.4%	22.0%	0.4%	29,936
Small Cap	710,467	8.7%	8.0%	0.7%	57,665
International Equity	1,660,137	20.3%	20.0%	0.3%	28,134
Opportunistic Equity	7,161	0.1%	0.0%	0.1%	7,161
Domestic Fixed Income	2,764,120	33.9%	35.0%	(1.1%)	(91,886)
Diversified Real Assets	783,509	9.6%	10.0%	(0.4%)	(32,493)
Real Estate	344,182	4.2%	5.0%	(0.8%)	(63,819)
Cash & Equivalents	65,301	0.8%	0.0%	0.8%	65,301
Total	8,160,015	100.0%	100.0%		

As of December 31, 2020

One Year Relative Attribution Effects



Returns for 1 Year Ended 12/31/2020

Return Type	Return (%)
Gross	12.44%
Net of fees	12.22%
Target	12.07%
Net added	0.15%

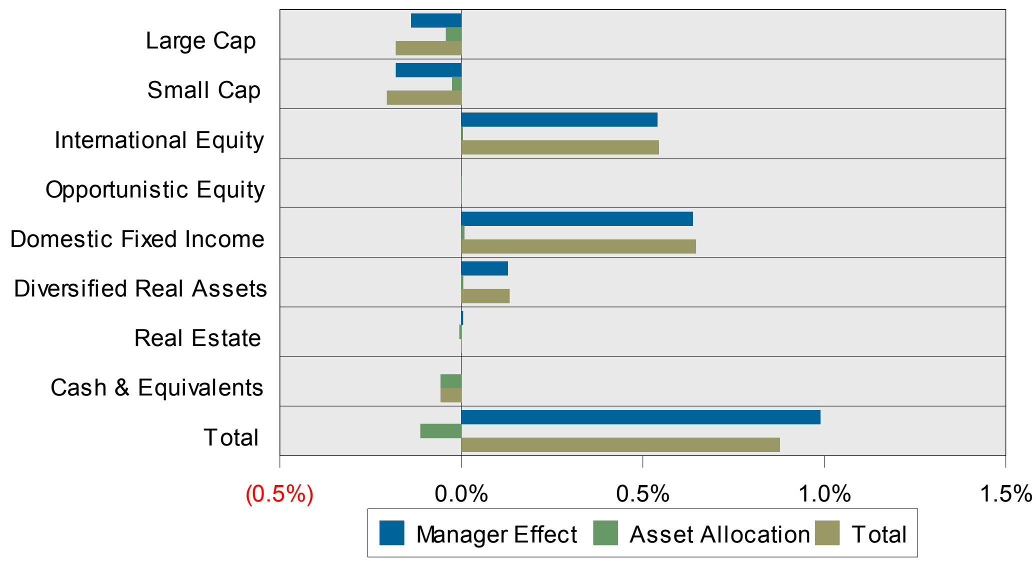
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	19.81%	20.96%	(0.20%)	(0.10%)	(0.30%)
Small Cap	8%	8%	9.63%	19.96%	(0.86%)	(0.05%)	(0.91%)
International Equity	20%	20%	13.68%	7.59%	1.25%	0.07%	1.32%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	35%	35%	8.32%	7.51%	0.08%	0.02%	0.10%
Diversified Real Assets	10%	10%	10.97%	7.36%	0.35%	(0.01%)	0.34%
Real Estate	5%	5%	(0.02%)	1.60%	(0.07%)	0.01%	(0.07%)
Cash Equivalents	1%	0%	0.42%	0.42%	0.00%	(0.09%)	(0.09%)
Total			**12.44%**	**= 12.07%**	**+ 0.53%**	**+ (0.16%)**	**0.37%**

Legacy Performance and Attribution

As of December 31, 2020

Five Year Annualized Relative Attribution Effects



Returns for 5 Year Ended 12/31/2020

Return Type	Return (%)
Gross	9.48%
Net of fees	9.25%
Target	8.60%
Net added	0.65%

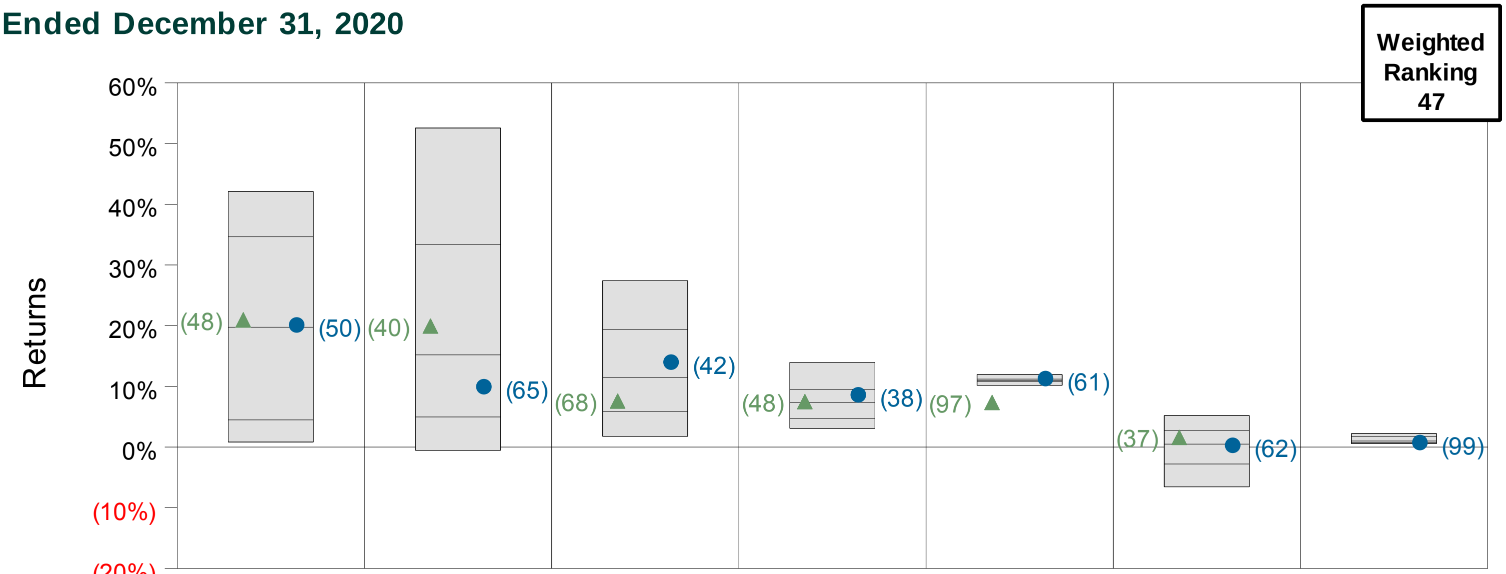
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	14.90%	15.60%	(0.14%)	(0.04%)	(0.18%)
Small Cap	8%	8%	11.14%	13.26%	(0.18%)	(0.02%)	(0.20%)
International Equity	20%	20%	9.94%	7.32%	0.54%	0.00%	0.54%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	35%	35%	6.38%	4.44%	0.64%	0.01%	0.65%
Diversified Real Assets	10%	10%	5.97%	4.64%	0.13%	0.00%	0.13%
Real Estate	5%	5%	5.83%	5.91%	0.00%	(0.00%)	(0.00%)
Cash & Equivalents	1%	0%	1.06%	1.06%	0.00%	(0.06%)	(0.06%)
Total			**9.48% =**	**8.60% +**	**0.99% +**	**(0.11%)**	**0.88%**

Asset Class Composite Results

Legacy Fund Asset Class Results vs. Callan Style Groups

Total Asset Class Performance
One Year Ended December 31, 2020



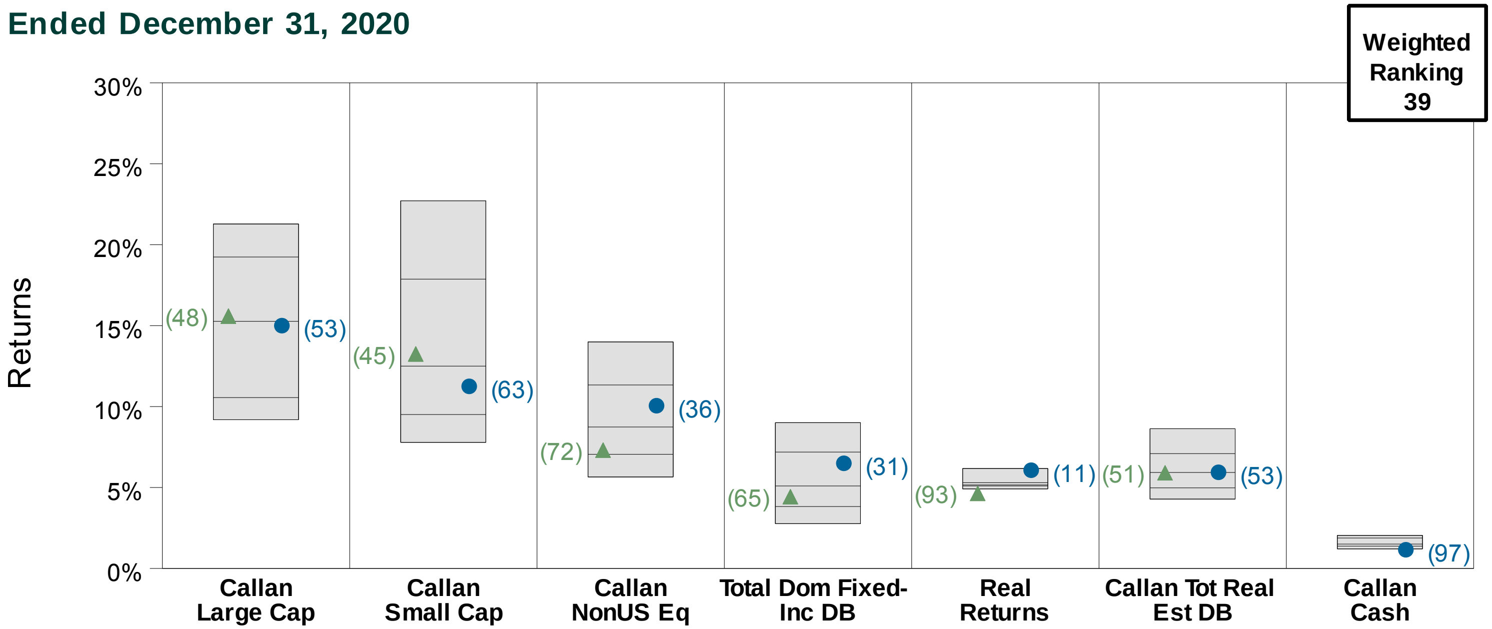
	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	42.13	52.59	27.42	13.97	11.94	5.19	2.24
25th Percentile	34.66	33.38	19.38	9.53	11.20	2.78	1.78
Median	19.74	15.20	11.45	7.36	11.01	0.49	1.01
75th Percentile	4.48	4.97	5.85	4.72	10.82	(2.79)	0.74
90th Percentile	0.82	(0.54)	1.78	3.09	10.19	(6.53)	0.57
Asset Class Composite ●	19.81	9.63	13.68	8.32	10.97	(0.02)	0.42
Composite Benchmark ▲	20.96	19.96	7.59	7.51	7.36	1.60	-

- Non-U.S. equity significantly outperformed its benchmark. Real returns and fixed income also outperformed. U.S. SC equity significantly underperformed.
- Non-U.S. equity and domestic fixed income outperformed the peer median.

Asset Class Composite Results

Legacy Fund Asset Class Results vs. Callan Style Groups

Total Asset Class Performance
Five Years Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	21.29	22.72	14.00	9.01	6.18	8.63	2.04
25th Percentile	19.25	17.88	11.34	7.19	5.30	7.10	1.89
Median	15.28	12.51	8.74	5.10	5.16	5.93	1.52
75th Percentile	10.56	9.51	7.05	3.83	5.10	4.98	1.39
90th Percentile	9.19	7.80	5.65	2.77	4.91	4.29	1.21
Asset Class Composite ●	14.90	11.14	9.94	6.38	5.97	5.83	1.06
Composite Benchmark ▲	15.60	13.26	7.32	4.44	4.64	5.91	-

- Non-U.S. equities, domestic fixed income, and real returns all beat their respective benchmarks over the past five years.
- Real returns ranked in the top quartile, while fixed income and non-U.S. equity ranked above median.

Callan

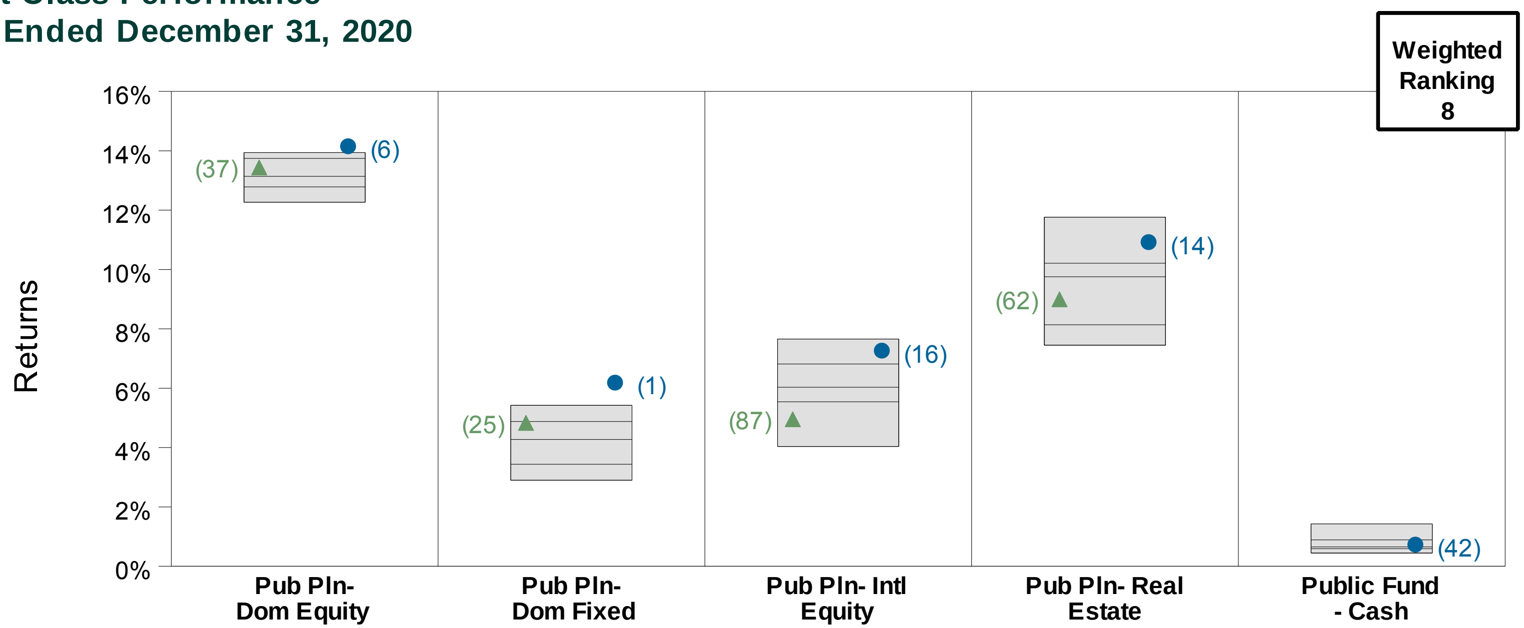
Appendix A

Consolidated Asset Class Rankings

Asset Class Composite Results

PERS' Asset Class Results vs. Other Public Pension Funds

Total Asset Class Performance
Ten Years Ended December 31, 2020



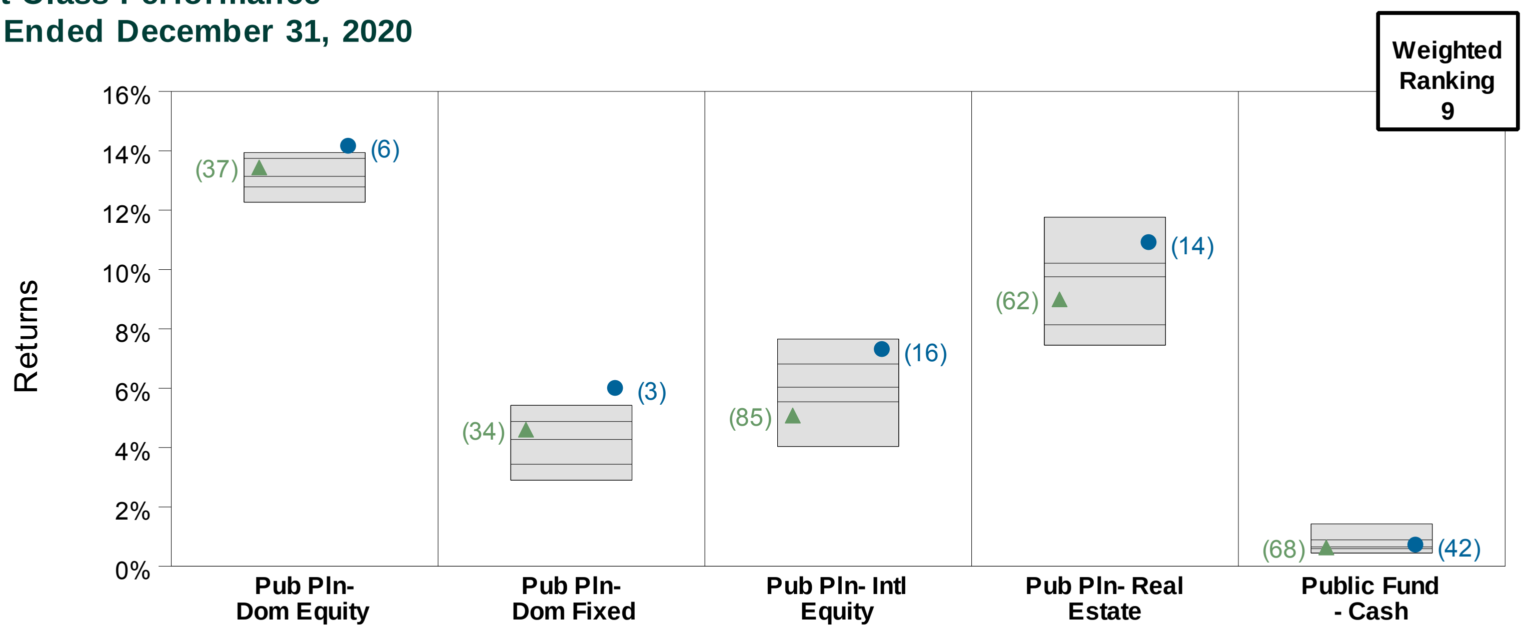
	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	13.94	5.42	7.66	11.77	1.43
25th Percentile	13.74	4.88	6.82	10.21	0.89
Median	13.14	4.28	6.03	9.76	0.65
75th Percentile	12.78	3.44	5.54	8.14	0.60
90th Percentile	12.27	2.90	4.04	7.45	0.45
Asset Class Composite ●	14.10	6.13	7.21	10.86	0.67
Composite Benchmark ▲	13.44	4.84	4.95	9.00	-

- All asset classes have outperformed their benchmarks and performed in the top quartile over the last 10 years (excluding cash).
- Domestic equity and fixed income ranked in the top decile over the period.

Asset Class Composite Results

TFFR's Asset Class Results vs. Other Public Pension Funds

Total Asset Class Performance
Ten Years Ended December 31, 2020



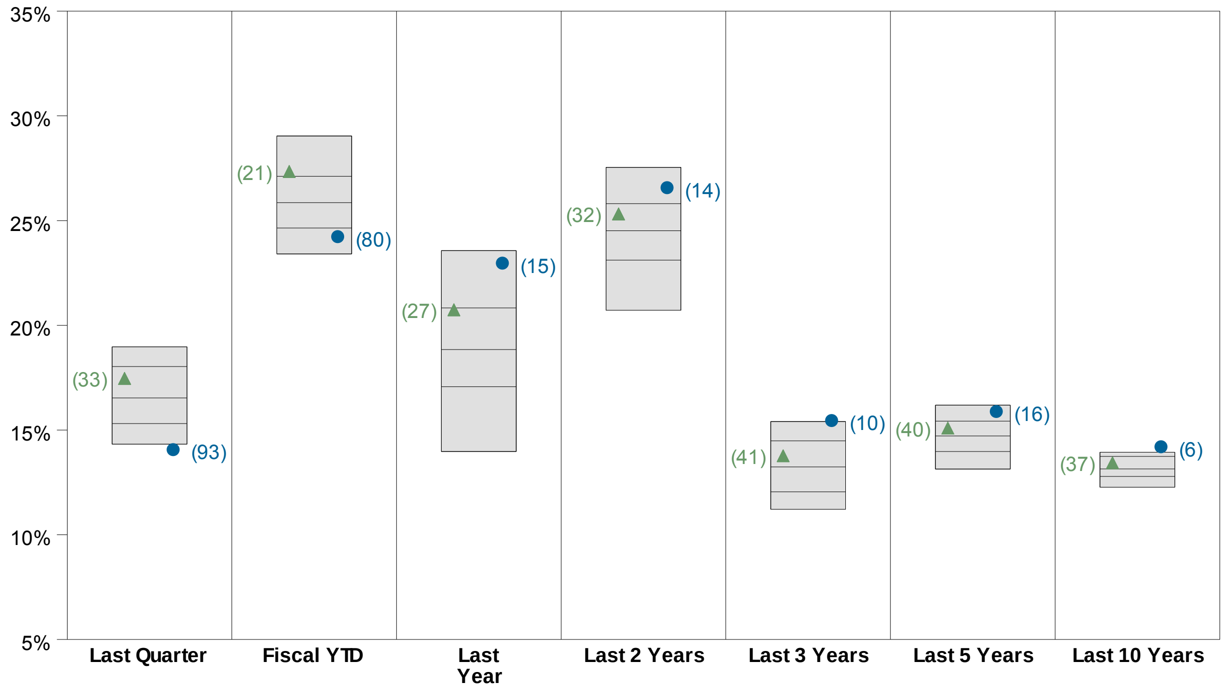
	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	13.94	5.42	7.66	11.77	1.43
25th Percentile	13.74	4.88	6.82	10.21	0.89
Median	13.14	4.28	6.03	9.76	0.65
75th Percentile	12.78	3.44	5.54	8.14	0.60
90th Percentile	12.27	2.90	4.04	7.45	0.45
Asset Class Composite ●	14.11	5.95	7.26	10.86	0.67
Composite Benchmark ▲	13.44	4.61	5.08	9.00	0.64

- All asset classes have outperformed their benchmarks over the last 10 years.
- With the exception of cash, all asset classes have ranked in the top quartile over the period.

Consolidated Pension Trust: Domestic Equity

As of December 31, 2020

Performance vs Public Fund - Domestic Equity (Gross)



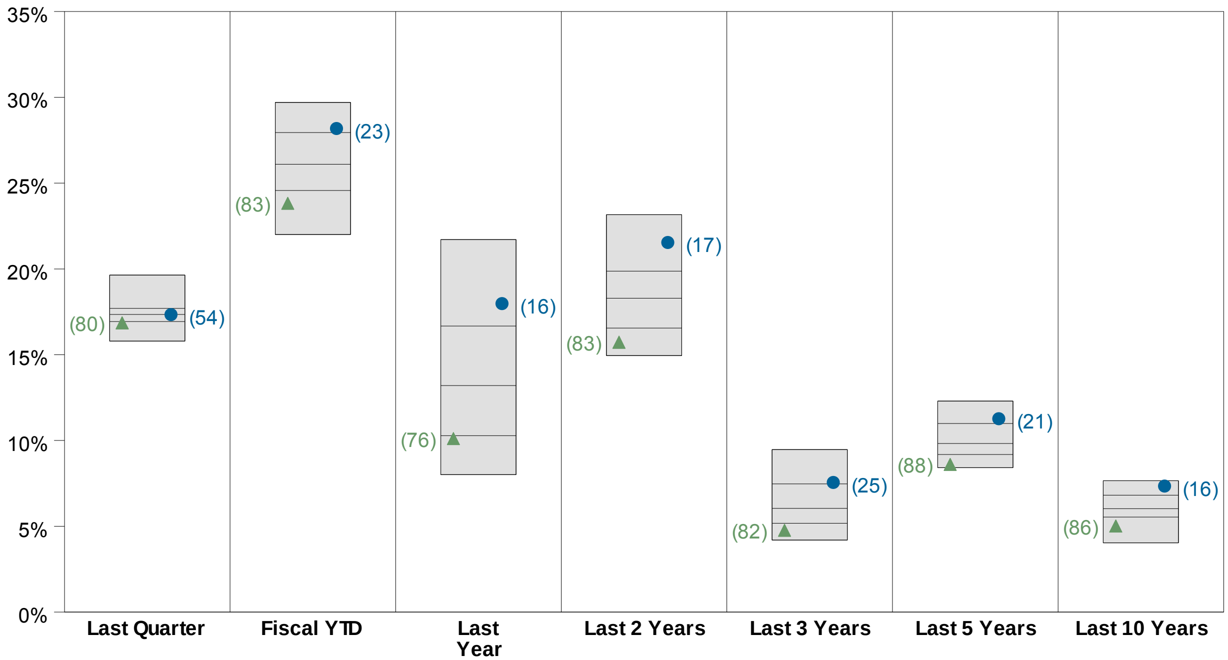
	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	18.97	29.04	23.56	27.54	15.40	16.19	13.94
25th Percentile	18.03	27.11	20.83	25.81	14.48	15.43	13.74
Median	16.53	25.86	18.84	24.51	13.24	14.72	13.14
75th Percentile	15.31	24.64	17.07	23.11	12.05	13.97	12.78
90th Percentile	14.33	23.41	13.98	20.72	11.22	13.13	12.27
Domestic Equities ●	14.00	24.17	22.90	26.51	15.39	15.82	14.14
Domestic Equity Target ▲	17.47	27.35	20.74	25.32	13.78	15.10	13.44

- The domestic equity composite underperformed the benchmark last quarter, but has outperformed over longer periods.
- NDSIB's domestic equity portfolio has benefitted from a meaningful growth tilt versus other Public Pension Funds.

Consolidated Pension Trust: International Equity

As of December 31, 2020

Performance vs Public Fund - International Equity (Gross)



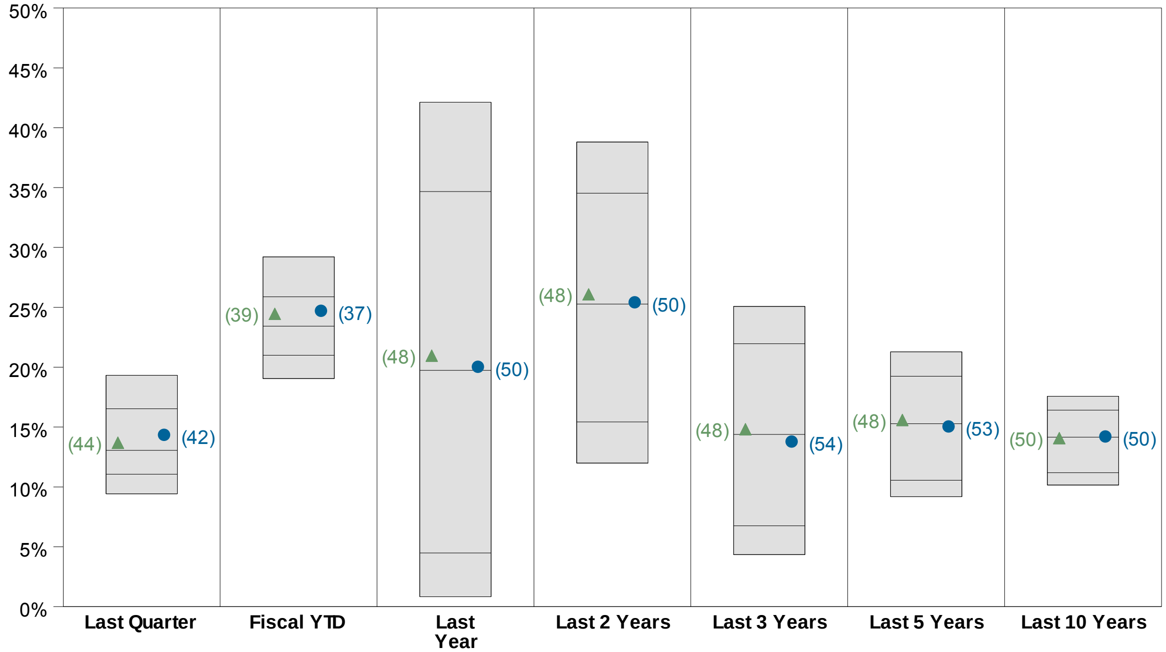
	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	19.64	29.70	21.71	23.16	9.47	12.30	7.66
25th Percentile	17.70	27.95	16.67	19.87	7.47	10.99	6.82
Median	17.34	26.09	13.20	18.29	6.05	9.83	6.03
75th Percentile	16.93	24.57	10.28	16.55	5.18	9.19	5.54
90th Percentile	15.79	22.01	8.02	14.95	4.20	8.42	4.04
International Equities ●	17.25	28.09	17.89	21.45	7.47	11.19	7.27
International Equity Target ▲	16.86	23.83	10.12	15.73	4.77	8.61	5.02

- NDSIB's international equity outperformed the benchmark over all measured periods.
- The portfolio has performed in the top quartile over all trailing periods longer than one year.
- NDSIB's international equity portfolio also benefits from a growth tilt versus other Public Pension Funds.

Consolidated Insurance Trust: Large Cap Equity

As of December 31, 2020

Performance vs Callan Large Capitalization (Gross)



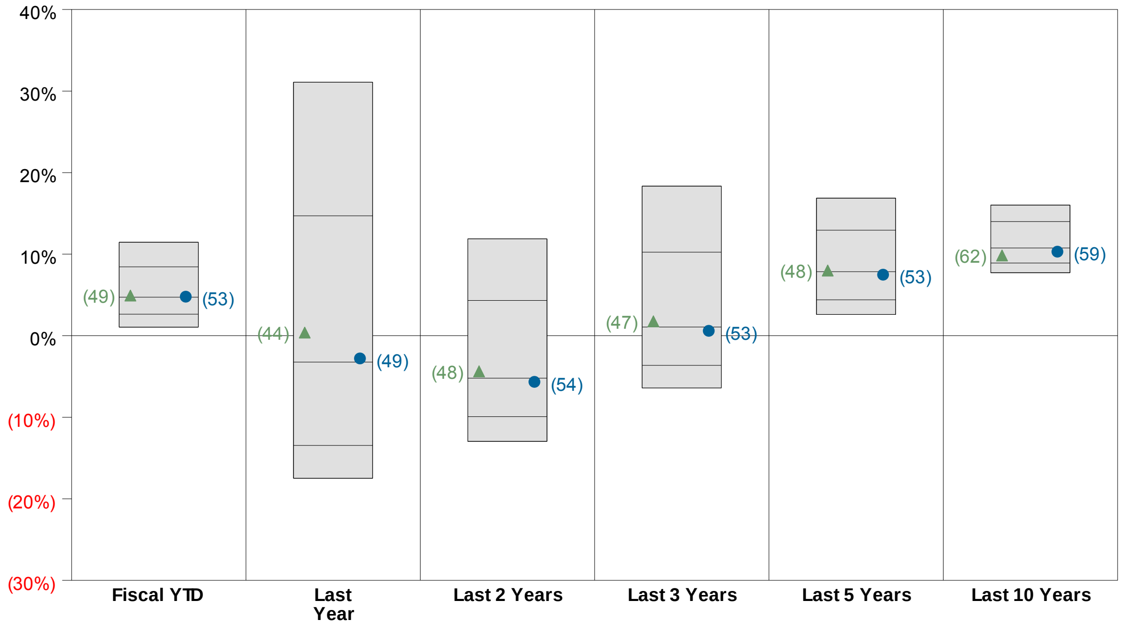
	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	19.33	29.22	42.13	38.81	25.08	21.29	17.57
25th Percentile	16.53	25.88	34.66	34.53	21.96	19.25	16.41
Median	13.06	23.43	19.74	25.27	14.39	15.28	14.16
75th Percentile	11.06	21.00	4.48	15.42	6.75	10.56	11.19
90th Percentile	9.43	19.05	0.82	11.99	4.35	9.19	10.16
Large Cap ●	14.24	24.60	19.93	25.31	13.68	14.93	14.10
Large Cap Equity Target ▲	13.69	24.46	20.96	26.09	14.82	15.60	14.08

- The portfolio has generally performed near the median among peer composites.

Consolidated Insurance Trust: Small Cap Equity

As of December 31, 2020

Performance vs Callan Small Capitalization (Gross)



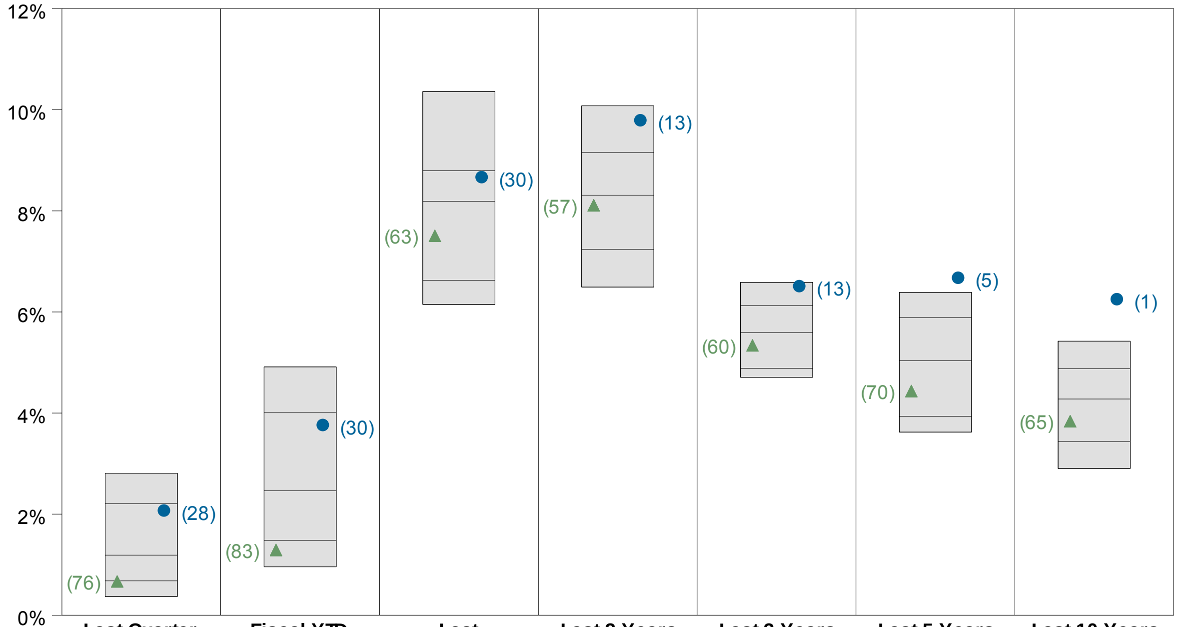
	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.47	31.09	11.88	18.34	16.86	16.01
25th Percentile	8.45	14.70	4.32	10.25	12.93	14.00
Median	4.73	(3.24)	(5.21)	1.07	7.85	10.75
75th Percentile	2.64	(13.45)	(9.93)	(3.63)	4.41	8.92
90th Percentile	1.05	(17.49)	(12.95)	(6.41)	2.61	7.73
Small Cap ●	4.63	(2.94)	(5.81)	0.44	7.32	10.15
Small Cap Equity Target ▲	4.93	0.39	(4.36)	1.77	8.00	9.85

- The asset class underperformed the benchmark over shorter periods, but remains above the target over the trailing ten-year period.

Consolidated Insurance Trust: Domestic Fixed Income

As of December 31, 2020

Performance vs Public Fund - Domestic Fixed (Gross)



	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.81	4.91	10.36	10.08	6.59	6.39	5.42
25th Percentile	2.21	4.02	8.79	9.15	6.13	5.89	4.88
Median	1.19	2.46	8.19	8.31	5.59	5.04	4.28
75th Percentile	0.68	1.48	6.63	7.24	4.88	3.94	3.44
90th Percentile	0.37	0.96	6.15	6.49	4.71	3.62	2.90
Domestic Fixed Income ●	2.04	3.74	8.64	9.76	6.48	6.65	6.22
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	3.84

- The asset class outperformed the target over all measured trailing periods.
- The domestic fixed income asset class ranked in the top decile for the five- and ten-year periods. Shorter term rankings have also been strong.

Callan Update

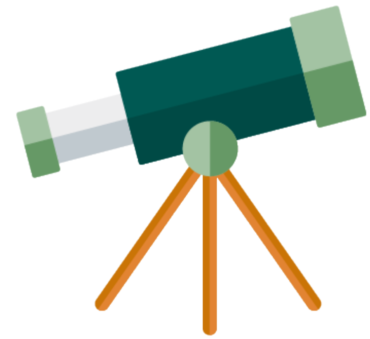
Published Research Highlights from 4Q20

Under the Hood of Alternative Beta

A Primer on Green Building Certifications

Private Equity ‘Research Café’

And coming in 2021: Our Capital Markets Assumptions



Recent Blog Posts

Will Boring Still Be Beautiful?

James Veneruso

The Private Equity Playbook: Playing Offense

Alternatives Consulting Group

Plus our blog contains a wide array of posts related to the pandemic

Additional Reading

Private Equity Trends quarterly newsletter

Active vs. Passive quarterly charts

Capital Markets Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Callan Institute Events

Upcoming Conferences, Workshops, and Webinars

March Workshop - Virtual

March 25, 2021

9:00 – 10:15am *(45 minutes prepared remarks; 30 minutes Q&A)*

A Fresh Look at Fixed Income – Generating Yield in a Zero Interest Rate Environment

As expectations for interest rates continue to fall, asset owners and fund managers are looking for new ways to generate returns. In this workshop, our consultants and specialists will share:

- How the drop in interest rate expectations impacts different types of investors.
- What Callan research has identified as potential approaches for garnering income and returns.
- What asset owners should consider as they evaluate options for their fixed income mandates.

This is your chance to step back and think differently about fixed income. You'll come away with a deeper understanding of the issues facing asset owners and how they are thinking about their options moving forward.

Callan College

Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of nonprofits, and public and corporate funds. This session familiarizes fund sponsor trustees and staff with basic investment theory, terminology, and practices.

Join our next virtual session:

April 13, 2021 – April 15, 2021
2-3 hour sessions over 3 days

Join our next LIVE session in San Francisco:

July 14, 2021 – July 15, 2021
1.5 day session held in Callan's San Francisco office

Save the Date!

2021 National Conference

Summer 2021

We can't wait to see you!

Callan

December 31, 2020

North Dakota State Investment Board Pension Funds

Investment Measurement Service Quarterly Review

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December 31, 2020

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Domestic Equities

International Equities

World Equities

Private Equities

Domestic Fixed Income

Real Estate

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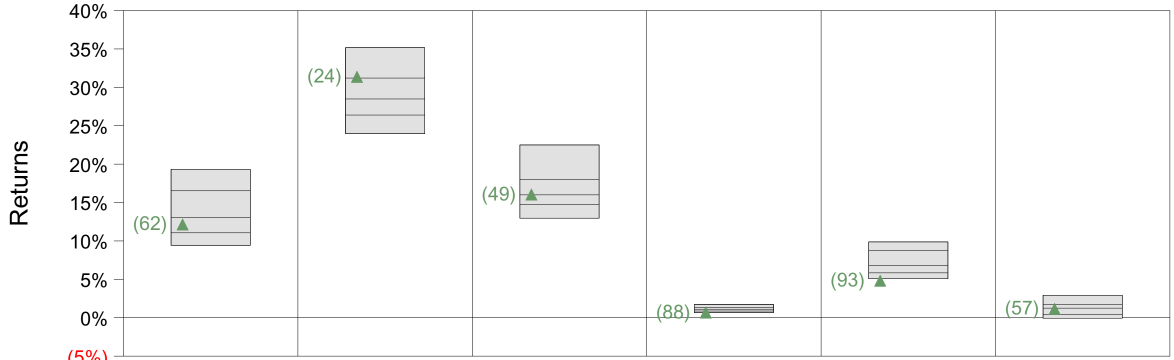
December 31, 2020

Market Overview
Active Management vs Index Returns

Market Overview

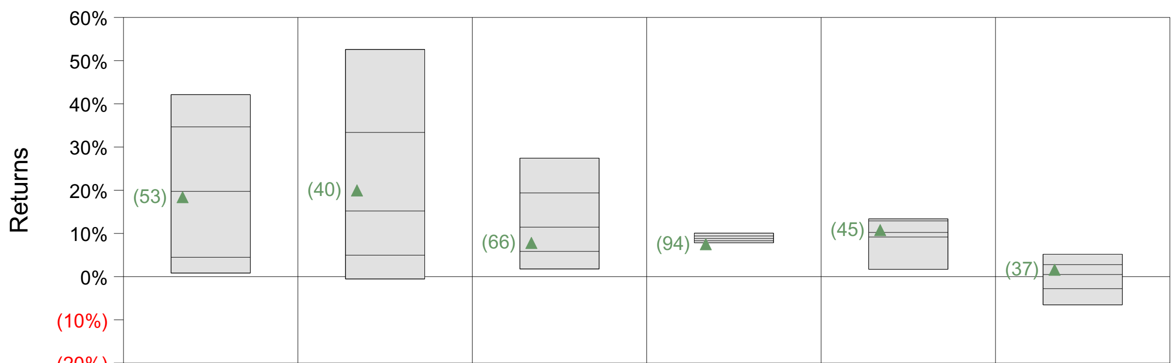
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also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

Range of Separate Account Manager Returns by Asset Class
One Quarter Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	19.33	35.17	22.50	1.73	9.87	2.92
25th Percentile	16.53	31.21	17.98	1.35	8.72	1.75
Median	13.06	28.49	16.00	1.11	6.80	1.25
75th Percentile	11.06	26.39	14.74	0.88	5.85	0.42
90th Percentile	9.43	23.97	12.96	0.66	5.08	(0.07)
Index ▲	12.15	31.37	16.05	0.67	4.82	1.15

Range of Separate Account Manager Returns by Asset Class
One Year Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	42.13	52.59	27.42	10.07	13.38	5.19
25th Percentile	34.66	33.38	19.38	9.41	12.90	2.78
Median	19.74	15.20	11.45	8.82	10.24	0.49
75th Percentile	4.48	4.97	5.85	8.30	9.17	(2.79)
90th Percentile	0.82	(0.54)	1.78	7.83	1.70	(6.53)
Index ▲	18.40	19.96	7.82	7.51	10.78	1.60

Callan Institute

Fourth Quarter 2020

Capital Markets Review

Uneven Recovery Ahead for Years

ECONOMY

2 PAGE

The path to recovery in the U.S. and most developed economies from the pandemic will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets in those countries are not likely to regain their pre-pandemic totals until well into 2022.

Robust Quarter Powers Strong 2020

INSTITUTIONAL INVESTORS

4 PAGE

Institutional investors saw strong gains in 4Q20 and positive results for 2020, despite the pandemic-induced headwinds. While results for 2020 lagged a 60% stocks/40% bonds benchmark, over longer periods investors' returns were on par with the benchmark.

Vaccine Hopes Fuel Double-Digit Gains

EQUITY

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The S&P 500 hit a record high in 4Q20, and was up 12.1% for the quarter and 18.4% for the year. Value outperformed growth in 4Q, but trailed for the year by a wide margin. Vaccine hopes fueled double-digit returns broadly across developed and emerging markets.

Investors Continue Their Hunt for Yield

FIXED INCOME

8 PAGE

The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%. Corporate credit outperformed treasuries as investors hunted for yield. Low rates and asset purchase programs continued to prop up the global bond market.

Hotels, Retail Face Pandemic Headwinds

REAL ESTATE/REAL ASSETS

10 PAGE

Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer. Global REITs gained 13.5% compared to 14.0% for global equities. U.S. REITs rose 11.6%, but they lagged the S&P 500 Index (+12.1%).

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY

12 PAGE

Private equity fared quite well in 2020, all things considered. Diminished activity in 2Q and 3Q mixed with strong gains in 1Q and 4Q. Private equity activity showed tolerable declines for most private M&A measures, but the IPO market had a gangbuster year.

Healthy Returns amid Volatile Markets

HEDGE FUNDS/MACs

13 PAGE

The vigorous but volatile market conditions enabled healthy hedge fund profits from both alpha and beta. The median managers of Callan Multi-Asset Class style groups generated positive returns, gross of fees, consistent with their underlying risk exposures.

Second Straight Quarterly Gain

DEFINED CONTRIBUTION

15 PAGE

The Callan DC Index's gain of 6.0% in 3Q20 comes two quarters after the 15.0% plunge it experienced in 1Q20. The Index is now positive for the year. The Age 45 TDF posted a larger gain, due to its higher equity allocation. Balances also rose, solely from investment returns.

Broad Market Quarterly Returns

U.S. Equity Russell 3000	Global ex-U.S. Equity MSCI ACWI ex USA	U.S. Fixed Income Bloomberg Barclays Agg	Global ex-U.S. Fixed Income Bloomberg Barclays Gbl ex US
14.7%	17.0%	0.7%	5.1%

Sources: Bloomberg Barclays, FTSE Russell, MSCI

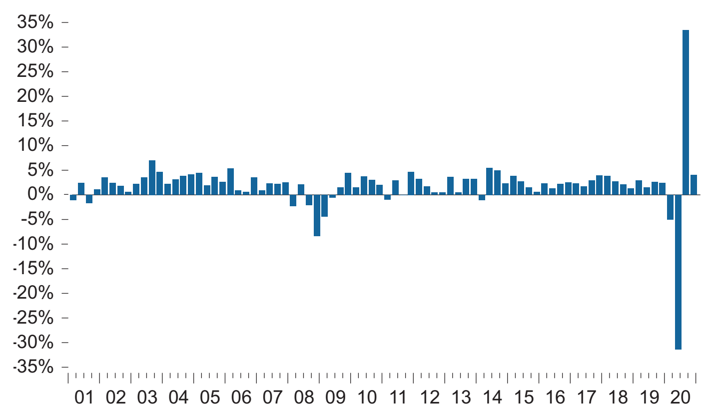
An Uneven Recovery and an Unreliable Narrator

ECONOMY | Jay Kloepfer

The U.S. economy grew at a 4% rate in the fourth quarter of 2020 but finished the year with a 3.5% decline in GDP compared to 2019, the steepest recession in 75(!) years. The plunge in economic activity in 2Q and the sharp rebound in 3Q put into question the reliability of economic data, and GDP in particular, in telling the tale of the true economic impact of the pandemic. The way countries measure GDP varies, especially when it comes to the output of the government sector. Reported GDP plunged in the U.K. far more than in continental Europe or the U.S., but the difference had to do with the valuation of the change in government output. In the U.S., we value government output in large part by looking at how much is spent on government services. Teachers, civil servants, and public health care workers were still paid, even though their activities were severely altered, so government output changed little. In the U.K. and France, data such as the number of hospital procedures, doctor's visits, and pupils in school are used, and this activity fell sharply. Did economic activity really fall farther in the U.K., or are the data not telling the full story?

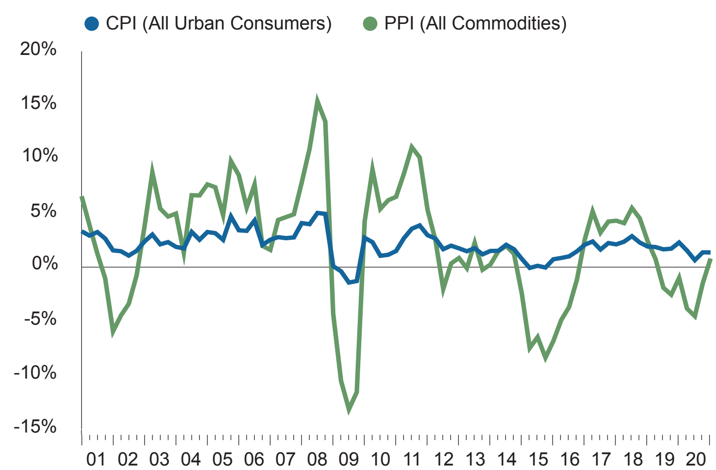
The labor market data also seem to reveal a tale of two cities—or do they? The difference in the benefits offered by different countries to those dislocated by the pandemic are substantial, and seriously bias economic measures such as the number of people employed and unemployment rates. In many euro zone countries, pandemic relief came in the form of subsidies to companies to keep their employees on the payroll. In the U.S., companies furloughed or let go of employees, and the states and federal government used the unemployment benefits system along with direct grants to households via stimulus payments to support these dislocated workers. As a result, unemployment in the U.S. spiked to almost 15% in April, while the unemployment rate in many euro zone countries barely moved. Another complication is that the unemployment rate in the U.S. suggests more slack than there may be in practice. A clue to this mismatch in the data between unemployment and potential capacity is in the data tracking those seeking work. In the U.S., the number seeking jobs usually tracks the unemployment rate very closely. During the pandemic, the number of job seekers barely increased while the unemployment rate quadrupled, suggesting workers are expecting to be rehired into their former jobs or in their former industry.

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

This focus on the labor market is important for clues as to how the economy will recover and who has been the most affected by the pandemic-induced recession. Since consumption is 70% of GDP in the U.S., the direct tie between employment and income and then spending is vital; that tie has been

blurred by the massive stimulus provided both here and in our trading partners. Stimulus payments directly to industries and individuals, as well as expanded unemployment benefits, have buoyed spending both by consumers within countries and on our traded goods between countries, and prevented an even steeper economic decline than this worst-in-seven-decades experience. Total employment in the U.S. fell by 22 million between January and April, and we have generated 12 million jobs since April to replace them. The problem for the continued recovery is that we are still short millions of jobs, and the rate of job recovery plateaued in October 2020 and remained flat through December.

Employment loss by industry has been wildly variable, and points up just how different the economic impact has been from the stock market's incredible recovery. The sectors that drove the stock market rebound since March—information technology, communications, the sectors of consumer goods and wholesale/retail trade driven by Amazon—suffered little if any employment decline, and in fact employ far fewer people than the sectors that are underrepresented in the stock market and suffered the biggest job losses. Employment in leisure and hospitality fell by 8.2 million during March and April, increased by 4.9 million from May to November, and then declined by over half a million in December as stricter shelter-in-place rules were reinstated prior to the holiday season in many states. Since February 2020, employment in leisure and hospitality is down by 3.9 million, or 22.9 percent. The other big losses were in state and local government, services, manufacturing, and education. These sectors employ many lower-paid, lower-skilled, and part-time workers and often feature a high concentration of female employees. Income inequality during the pandemic has been exacerbated as a result.

The Long-Term View

Index	4Q20	Periods Ended 12/31/20 Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	14.7	20.9	15.4	13.8	9.7
S&P 500	12.2	18.4	15.2	13.9	9.6
Russell 2000	31.4	20.0	13.3	11.2	9.1
Global ex-U.S. Equity					
MSCI EAFE	16.1	7.8	7.5	5.5	5.0
MSCI ACWI ex USA	17.0	10.7	8.9	4.9	--
MSCI Emerging Markets	19.7	18.3	12.8	3.6	--
MSCI ACWI ex USA Small Cap	18.6	14.2	9.4	6.0	6.5
Fixed Income					
Bloomberg Barclays Agg	0.7	7.5	4.4	3.8	5.2
90-Day T-Bill	0.0	0.7	1.2	0.6	2.3
Bloomberg Barclays Long G/C	1.7	16.1	9.4	8.2	7.4
Bloomberg Barclays Gl Agg ex US	5.1	10.1	4.9	2.0	4.0
Real Estate					
NCREIF Property	1.2	1.6	5.9	9.0	9.1
FTSE Nareit Equity	11.6	-8.0	4.8	8.3	9.6
Alternatives					
CS Hedge Fund	6.4	6.4	4.1	3.8	7.3
Cambridge PE*	10.4	17.9	13.9	13.8	15.1
Bloomberg Commodity	10.2	-3.1	1.0	-6.5	1.0
Gold Spot Price	0.0	24.4	12.3	2.9	6.6
Inflation – CPI-U	0.1	1.4	2.0	1.7	2.1

*Data for most recent period lags by a quarter. Data as of 9/30/20.
Sources: Bloomberg, Bloomberg Barclays, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

The path to recovery in the U.S. and most developed economies will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets are not likely to regain their pre-pandemic job counts until well into 2022, restraining consumer spending and the overall global recovery.

Recent Quarterly Economic Indicators

	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19	2Q19	1Q19
Employment Cost–Total Compensation Growth	2.5%	2.4%	2.7%	2.8%	2.7%	2.8%	2.7%	2.8%
Nonfarm Business–Productivity Growth	-4.8%	5.1%	10.6%	-0.3%	1.6%	0.3%	2.0%	3.7%
GDP Growth	4.0%	33.4%	-32.9%	-5.0%	2.4%	2.6%	1.5%	2.9%
Manufacturing Capacity Utilization	72.7%	70.8%	63.2%	73.9%	75.0%	75.4%	75.5%	76.4%
Consumer Sentiment Index (1966=100)	79.8	75.6	74.0	96.4	97.2	93.8	98.4	94.5

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

Robust Quarterly Gains Power Strong 2020 Returns

INSTITUTIONAL INVESTORS

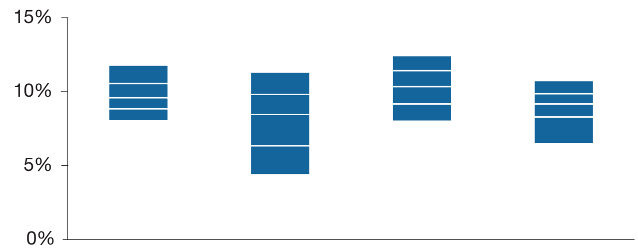
Performance

- All investor types saw robust gains in 4Q20, easily outpacing a 60% stocks/40% bonds benchmark, which rose 7.5%.
- The robust quarterly results pushed their gains for the year into double digits, outpacing global ex-U.S. equities and fixed income, although falling below the 60%/40% benchmark.
- Long-term results continue to be on par with the 60%/40% benchmark and better than bonds or global ex-U.S. equities.
- Nonprofits set the pace for the quarter, while corporate defined benefit (DB) plans top the leader board for most longer-term periods.
- Public DB plans were the best performers over 20 years, but results for all plan types fell in a narrow range.

Broad Issues

- Many institutional investors are re-examining portfolios to adjust for the new environment.
- They are also re-evaluating all asset classes, not just the diversifiers, including fixed income; public equity; hedge funds and liquid alternatives; private equity, private credit, and the notion of private capital; and real assets.
- But the key issue is what to do about fixed income in the lower yield environment.
- Liquidity needs ease but remain top of mind for investors.

Quarterly Returns, Callan Database Groups



	Public Database	Corporate Database	Nonprofit Database	Taft-Hartley Database
10th Percentile	11.8	11.3	12.4	10.8
25th Percentile	10.6	9.8	11.4	9.9
Median	9.6	8.5	10.3	9.2
75th Percentile	8.8	6.3	9.2	8.3
90th Percentile	8.0	4.4	8.0	6.5

Source: Callan

- Investors are also wrestling with whether to rebalance out of growth managers, and U.S. equity, as both growth and large cap U.S. equity crushed value and global ex-U.S. equity. The key question: Rebalance, or ride the risks of style tilt and manager concentration?
- As noted, real assets are under serious review, within DC as well as DB plans. The source of the discomfort is the underperformance of segments like energy, MLPs, and commodities.
- Investors are also trying to determine what can serve as an equity diversifier equal to bonds with the return of zero interest rates.

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Database Group	Quarter	Year-to-date	Year	3 Years	5 Years	10 Years
Public Database	**9.6**	**11.7**	**11.7**	**8.2**	**9.4**	**8.1**
Corporate Database	**8.5**	**13.7**	**13.7**	**9.2**	**10.1**	**8.5**
Nonprofit Database	**10.3**	**12.3**	**12.3**	**8.3**	**9.6**	**8.1**
Taft-Hartley Database	**9.2**	**11.1**	**11.1**	**8.3**	**9.5**	**8.5**
All Institutional Investors	**9.5**	**12.3**	**12.3**	**8.5**	**9.6**	**8.3**
Large (>$1 billion)	**9.3**	**12.4**	**12.4**	**8.6**	**9.7**	**8.4**
Medium ($100mm - $1bn)	**9.4**	**12.3**	**12.3**	**8.6**	**9.7**	**8.3**
Small (<$100 million)	**9.7**	**12.1**	**12.1**	**8.2**	**9.5**	**8.0**

*Returns less than one year are not annualized.

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

Corporate DB Plans

– The plunge in Treasury rates in March 2020 obscured the impact of spread widening. The funded status for corporate DB plans moving down their LDI glidepaths did not take the hit many suffered in the GFC.
– The plunge has not yet derailed the commitment to de-risking, but moves to STRIPS for extra duration are now in question.
– There is likely to be an uptick in termination and risk transfer, and consideration of a pause to further de-risking if rates start to rise.

DC Plans

– Fees continued to be the top issue for DC plan sponsors, as has been true for many quarters.
– DC glidepaths saw an increase in private markets exposures, and higher equity allocations in the mid-career and path landing point (age 80). Greater diversification helps manage the risk with greater return-seeking strategies, while more passive exposure is used to manage fees.
– There was a flurry of rulemaking from the Trump administration in its final months, and many DC plan sponsors and recordkeepers have been moving rapidly to track all the changes, and the potential for them to be undone by the incoming administration.
– DC plan sponsors and recordkeepers are both working rapidly to address lessons learned from the pandemic to alter participant-facing services like enrollment and financial counseling, making them more digital-first.
– Recordkeeper consolidation activity picked up in 4Q20. This will likely point to an increase in recordkeeper searches in the near term.

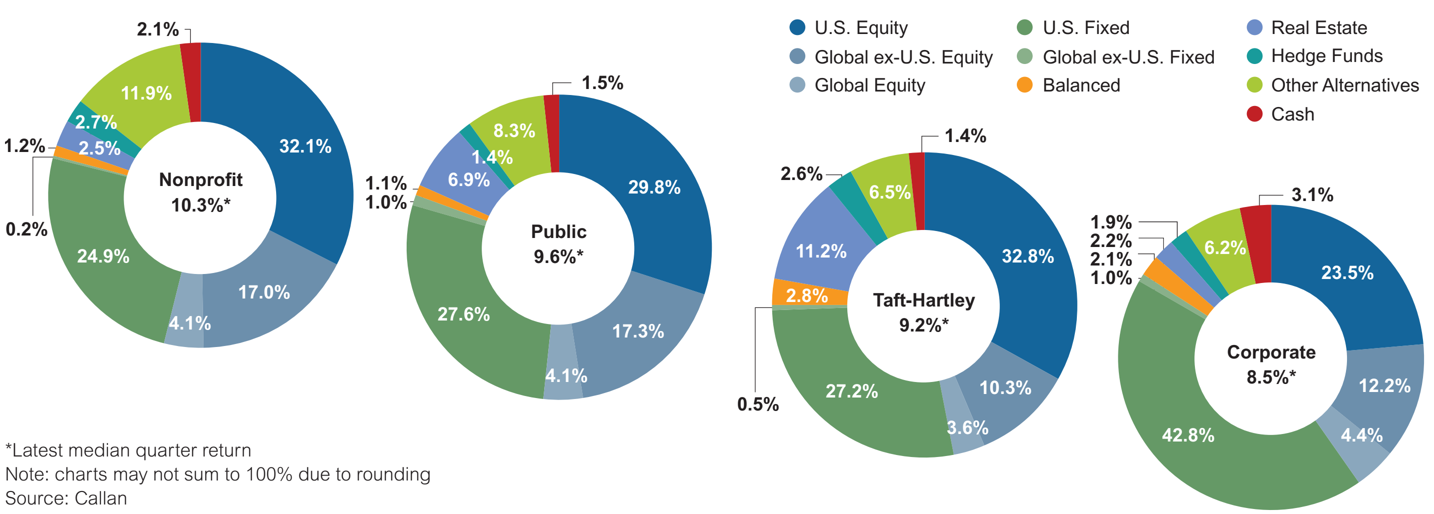
Public DB Plans

– There was a surge in public plan asset allocation reviews and capital markets discussions.
– The "V-shaped" recovery in equities helped calm fears.
– But there are great concerns about lower capital markets assumptions over the next 10 years, which are seriously challenging expectations for funding and solvency; this is a decades-long problem, made worse by the pandemic.
– ROA assumptions have been reduced but face further downward pressure. Weaker return assumptions may derail the expressed desire to bring in risk; there is growing interest in 30-year assumptions to justify more balanced portfolios.
– Liquidity needs and drawdown risks are top of mind. Stress testing is at the forefront of asset/liability studies, focusing on funding, contributions, liquidity, and solvency.

Nonprofits

– Subdued expectations for capital markets returns are challenging both the risk tolerance of endowments/foundations and the sustainability of established spending rates.
– There is growing dissatisfaction with private real assets, hedge funds, and the presence of any fixed income; significant portfolio reconstruction is on the table.

Average Asset Allocation, Callan Database Groups



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

Equity

U.S. Equities

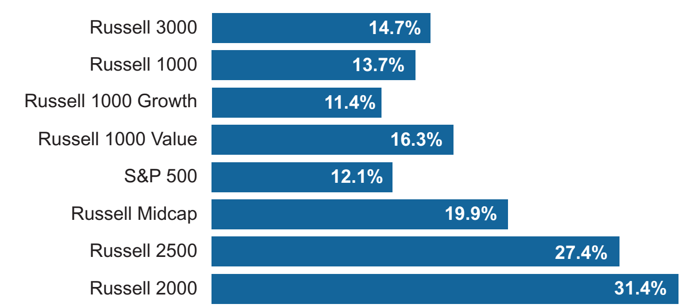
Record highs in 2020

– The S&P 500 Index hit a record high in 4Q20. The Index was up 12.1% for the quarter, bringing the 2020 gain to 18.4%.
– Since its March low, the S&P is up over 70%, with all sectors posting increases greater than 40%.
– 4Q winner: Energy (+28%), but down 34% for the year
– Top 2020 sector: Technology with 44% gain (+12% in 4Q)
– Pandemic has cast a pall over certain sectors while rewarding others: online retail soared 69% in 2020, while hotels/cruise lines, airlines, and retail REITs dropped ~30%.
– Apple, Microsoft, Amazon, Facebook, and Alphabet made up 22% of S&P 500 market cap at year-end, and for 2020, accounted for 12.1% of 18.4% Index return.

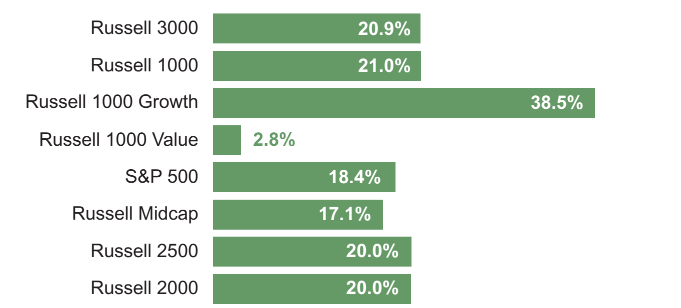
4Q saw shift in market trends

– In 4Q, value outperformed growth across the cap spectrum driven by vaccine progress, political clarity, and further stimulus. For the year, however, value trails growth by a significant margin due to Tech's outperformance.
– Fueled by the prospect of an economic recovery, small cap outperformed large in 4Q but was even on the year. Small value was the best performer for the quarter, but 2020 gain is a mere 4.6%.
– 4Q experienced a shift in YTD 2020 trends, attributed to expectations of broader economic recovery from the vaccine roll-out and the presidential election outcome.
– Cyclical sectors such as Energy, Financials, Industrials, and Materials outperformed during the quarter.

U.S. Equity: Quarterly Returns



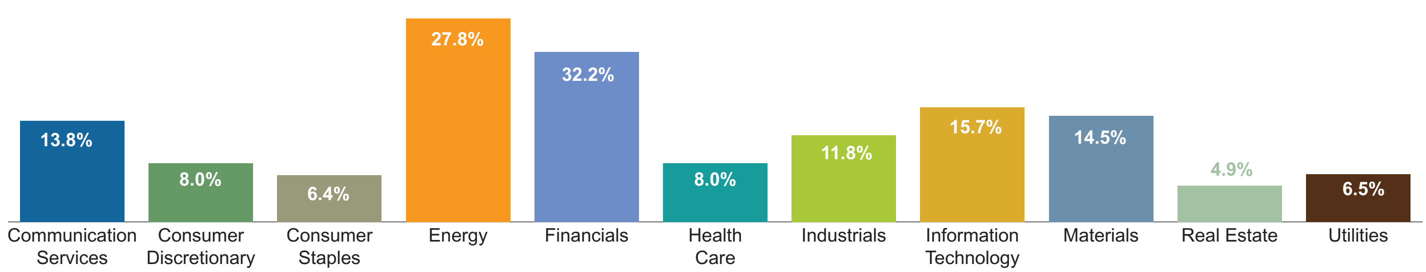
U.S. Equity: One-Year Returns



Sources: FTSE Russell and S&P Dow Jones Indices

– Although stocks with the highest P/E's significantly outperformed for the year, the trend shifted after the vaccine announcement and stocks with zero earnings estimates or P/E's less than 10 shot up.

Quarterly Performance of Industry Sectors



Source: S&P Dow Jones Indices

Global/Global ex-U.S. Equity

Vaccine rollouts extend and expand risk-on rally

- Prospects of global economic recovery propelled by COVID-19 vaccination fueled double-digit returns broadly across developed and emerging markets.
- Expectations of reverting back to normal economic activity by late 2021 enabled risk assets to thrive.
- Emerging markets outperformed developed markets, led by Latam—specifically Brazil.
- Small cap outperformed large as business confidence improved with news of vaccination.

Market rotates to cyclicals

- Positive outlook on reflation trade stoked Energy, Materials, and Financials to drive the market.
- Beta and volatility led factor performance due to market rotation.

U.S. dollar vs. other currencies

- U.S. dollar continued to lose ground as appetite for risk increased with the expectation that a path to global economic recovery is on the horizon.

Growth vs. value

- Value topped growth as sentiment shifted to cyclical sectors.

4Q20 belonged to value; does it have staying power?

- COVID-19 benefited value as the quarter brought news of successful vaccines.
- Financials, Travel, and Energy rebounded.
- MSCI World Growth (+12.4%) trailed MSCI World Value (+15.2%) over the three-month period.
- Even with this divergence of style in 4Q20, growth still outpaced value globally by over 35% for the full year.

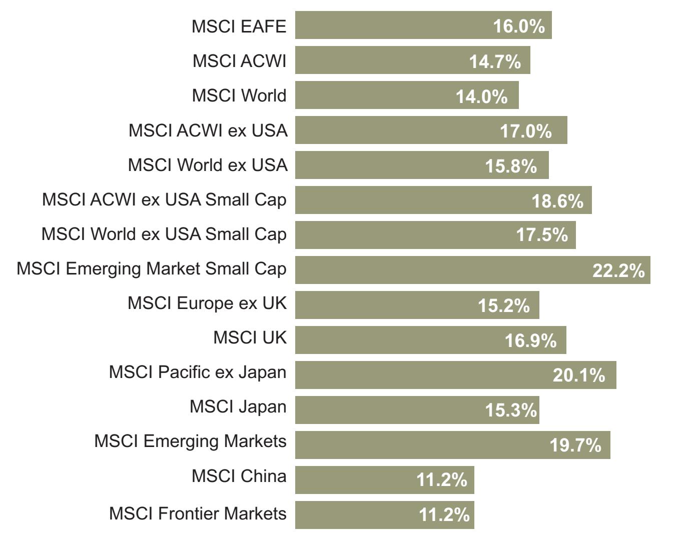
Potential tailwinds for value

- Higher interest rates on the heels of potentially higher inflation with government stimulus and businesses reopening
- Continued rebound of discretionary spending in areas neglected in 2020 as markets reopen: lodging, travel

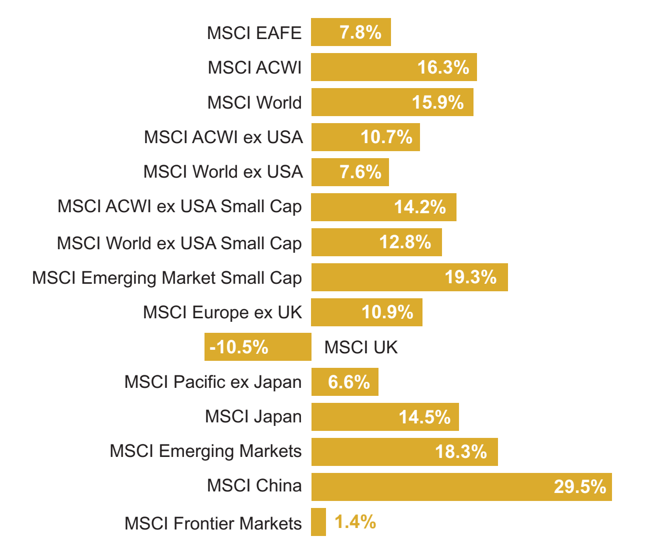
The good news

- Recent dollar weakness supports emerging markets.
- Could continue in 2021, driven by wider U.S. fiscal deficit plus stronger emerging market currencies

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar)



Source: MSCI

Fixed Income

U.S. Fixed Income

Treasury yields rose

- The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 163 bps to 199 bps.
- No rate hikes are expected until at least 2023.

Bloomberg Barclays Aggregate gained slightly

- Corporate credit outperformed treasuries as investors continued to hunt for yield.
- Corporate credit ended the year up 9.9% despite record issuance in 2020.

High yield bonds gained on the quarter as rally extended

- High yield bonds outperformed investment grade (IG) securities in 4Q, returning 6.5%, but trailed IG for the year.
- Leveraged loans gained 3.6% as demand remained strong to finish the year.

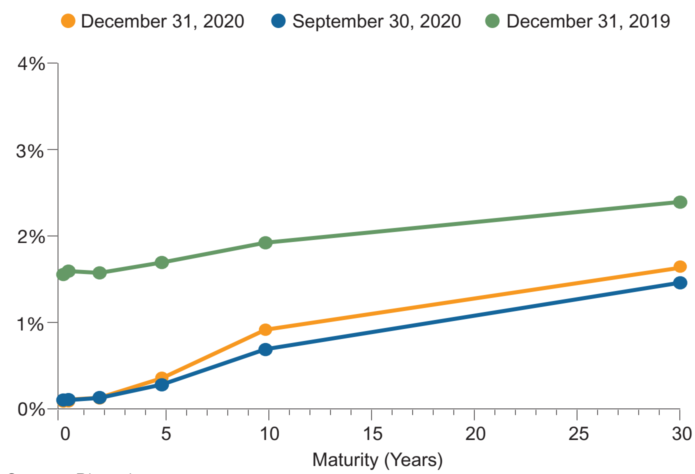
Munis boosted by favorable supply/demand dynamics

- Municipals outperformed Treasuries for the quarter, but remained down for the year.
- Tax-exempt issuance was muted amid strong demand.
- Lower quality outperformed for the quarter; however, higher quality outperformed for the year.

U.S. credit attractive to non-U.S. investors

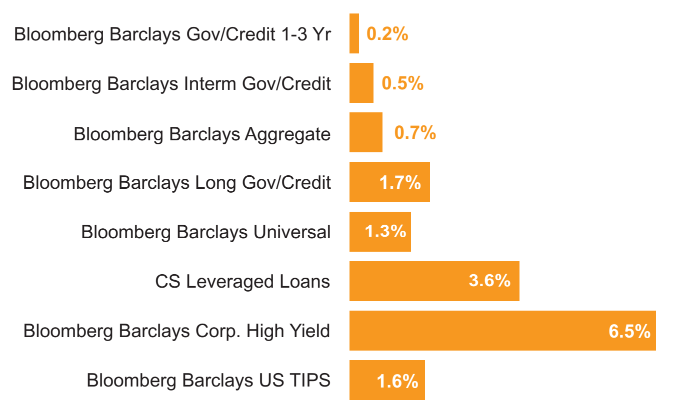
- Central banks globally are adopting a "lower for longer" mindset toward rates.
- 89% of positive yields globally are in the U.S., spurring demand for U.S. corporate credit.
- Lower LIBOR rates have decreased currency hedging costs; combined with a steep Treasury curve, that makes U.S. credit attractive to non-U.S. investors.

U.S. Treasury Yield Curves



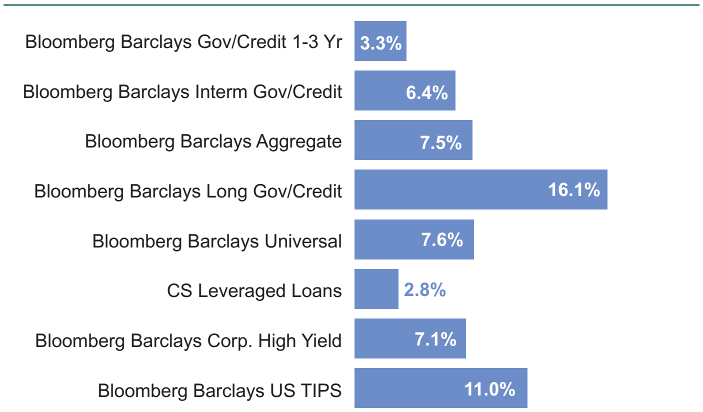
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and Credit Suisse

Implications of U.S. rates rising in 4Q

- U.S. Treasury rates rose in 4Q, most notably in the intermediate and long portions of the yield curve.
- As Democrats won both seats in the Georgia run-off, greater fiscal stimulus is likely. This may lead to further steepening of the yield curve and increased inflation expectations.
- A rising rate environment opens opportunities for floating-rate securities like leveraged loans, and makes securities with shorter durations such as securitized credit more attractive.

Global Fixed Income

Global fixed income rose amid monetary backdrop

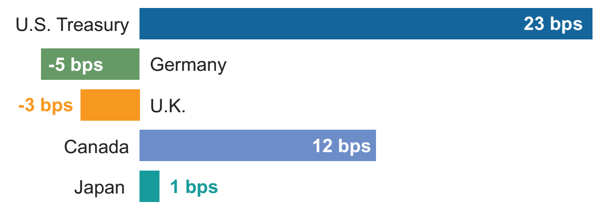
- Low rates and asset purchase programs continued to prop up the global bond market.
- Broad-based U.S. dollar weakness resulting from continued confidence in risk assets dampened hedged returns as the USD lost 4.27% versus the euro, 5.43% versus the British pound, and 2.02% versus the yen.

Emerging market debt ended the year positive

- Emerging market debt indices gained in 4Q20, finishing the year in positive territory amid a global search for yield and renewed growth expectations.
- U.S. dollar-denominated index (EMBI Global Diversified) underperformed local currency emerging market debt as U.S. rates rose; returns were mixed across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) was up significantly, with broad-based gains across constituents.

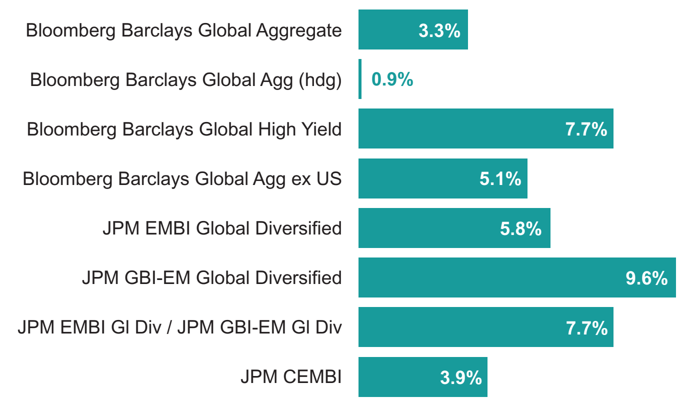
Change in 10-Year Global Government Bond Yields

3Q20 to 4Q20



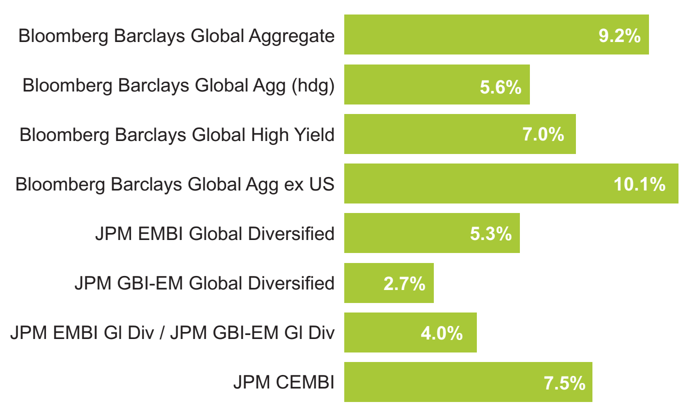
Source: Bloomberg Barclays

Global Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Global Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Hotels, Retail Face Pandemic Headwinds; REITs Gain but Lag Equities

REAL ESTATE/REAL ASSETS | Munir Iman

Pandemic continues to challenge Hotels and Retail

– Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
– Income remains positive except in the Hotel sector.
– Appraisers have more certainty on the pandemic's impact on valuations.
– Return dispersion by manager within the ODCE Index is due to the composition of underlying portfolios.

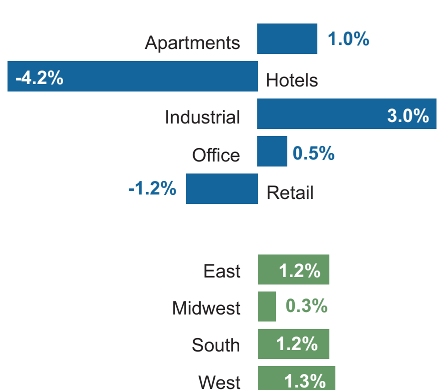
More than $200b of dry power

– U.S. core open end funds have investment queues of roughly $5 billion and exit queues of $20 billion.
– >$200 billion of capital waiting to be deployed in North America
– Majority of dry powder capital in opportunistic, value-add, and debt funds

Fundamentals will continue to be affected

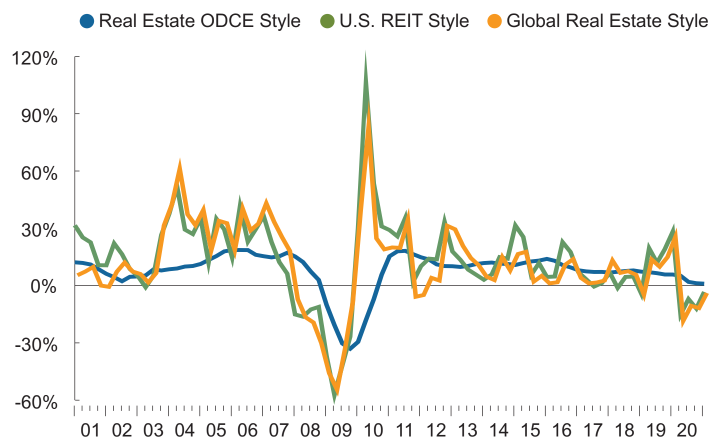
– Vacancy rates for all property types have been or will be affected.
– Net operating income has declined as Retail continues to suffer.
– 4Q20 rent collections showed relatively stable income throughout the quarter in the Industrial, Apartment, and Office sectors. The Retail sector remains challenged, with regional malls affected most heavily.
– Class A/B urban apartments relatively strong, followed by certain types of Industrial and Office
– Supply was in check before the pandemic.

Sector Quarterly Returns by Property Type and Region



Source: NCREIF

Rolling One-Year Returns



Source: Callan

– Construction is limited to finishing up existing projects but has been hampered by shelter-in-place orders and material shortages.
– New construction of preleased industrial and multifamily is occurring.
– Transaction volume dropped off during the quarter, except for multifamily and industrial assets with strong-credit tenants, which are trading at pre-COVID-19 levels.
– Cap rates remained steady during the quarter. The spread between cap rates and 10-year Treasuries is relatively high, leading some market participants to speculate that cap rates will not adjust much. Price discovery is happening and there are limited transactions.
– Callan believes the pandemic may cause a permanent re-pricing of risk across property types. Property types with more reliable cash flows will experience less of a change in cap rates; however, those with less reliable cash flows will see greater adjustments.

Global REITs increased but slightly lagged equities

– Global REITs underperformed slightly in 4Q20, gaining 13.3% compared to 14.0% for global equities (MSCI World).
– U.S. REITs rose 11.6% in 4Q20, lagging the S&P 500 Index, which jumped 12.1%.
– Globally, REITs are trading at a discount to NAV with the exception of those in the U.S., Singapore, and Australia.

- Sectors are mixed, between trading at a discount or premium.
- Ongoing volatility in REIT share prices offers opportunities to purchase mispriced securities, individual assets from REIT owners, and discounted debt, as well as lend to companies and/or execute take-privates of public companies.

Investment opportunities: real estate

- Primary opportunity: purchase of mispriced publicly traded real estate, both equity and debt
- Emerging opportunity: purchase of mezzanine loans from forced sellers
- The pandemic continues to impact real estate assets across Europe, with the Retail and Office sectors the first to undergo write-downs. Transaction activity has not yet meaningfully bounced back, as price discovery is still underway.

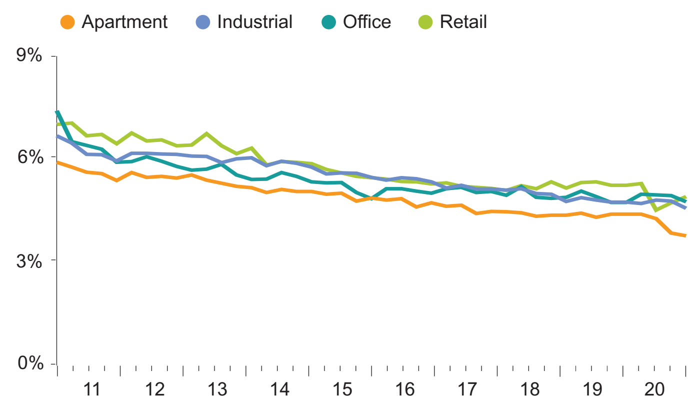
Investment opportunities: infrastructure

- Strong performance from communications assets has drawn increased interest from infrastructure investors, and in some cases real estate investors for data centers.
- Most infrastructure investment continues to be focused in OECD countries in North America and Europe. Some managers are sponsoring Asia-focused funds.

Investment opportunities: timberland and farmland

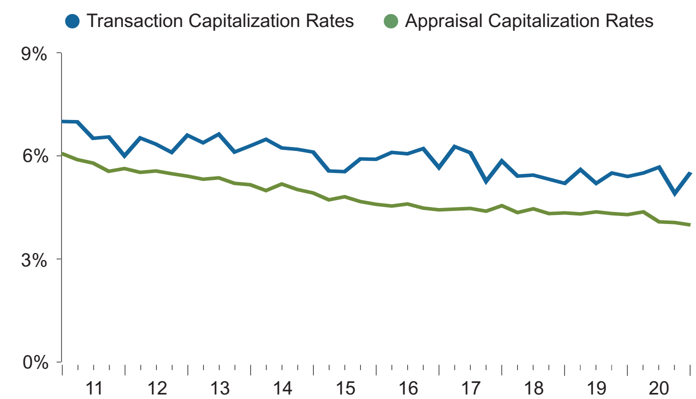
- Investment in farmland may increase if it proves to be a true diversifier in the pandemic.
- Institutional investment in timber has been waning for several years. The pandemic is unlikely to turn that tide.

NCREIF Capitalization Rates by Property Type



Source: NCREIF. Capitalization rates (net operating income / current market value (or sale price)) are appraisal-based.

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF

Note: Transaction capitalization rate is equal weighted.

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Private Real Assets	Quarter	Year to Date	Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	**1.3**	**1.0**	**1.0**	**4.6**	**5.9**	**9.1**	**5.5**
NFI-ODCE (value wt net)	1.1	0.3	0.3	4.0	5.3	8.9	5.5
NCREIF Property	1.2	1.6	1.6	4.9	5.9	9.0	7.1
NCREIF Farmland	0.6	1.7	1.7	3.9	5.0	10.1	11.2
NCREIF Timberland	0.6	0.8	0.8	1.8	2.3	4.6	5.4
Public Real Estate							
Global Real Estate Style	**11.4**	**-3.9**	**-3.9**	**4.6**	**5.8**	**7.5**	**5.7**
FTSE EPRA Nareit Developed	13.3	-9.0	-9.0	1.5	3.7	5.4	--
Global ex-U.S. Real Estate Style	**12.7**	**-0.9**	**-0.9**	**5.4**	**6.3**	**7.2**	**5.9**
FTSE EPRA Nareit Dev ex US	13.9	-7.1	-7.1	1.7	5.0	4.5	--
U.S. REIT Style	**9.8**	**-3.2**	**-3.2**	**5.8**	**6.4**	**9.5**	**7.4**
EPRA Nareit Equity REITs	11.6	-8.0	-8.0	3.4	4.8	8.3	6.5

*Returns less than one year are not annualized.

Sources: Callan, FTSE Russell, NCREIF

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY | Gary Robertson

Given travel restrictions and the move to video due diligence "on-sites," global private equity fundraising held up amazingly well in 2020. The same can be said for the volumes of underlying portfolio company investments and exits. Private equity market liquidity showed a quickening pace in the final quarter, which is expected to carry to 2021.

In 2020, private equity partnerships holding final closes raised $645 billion globally across 1,163 partnerships (unless otherwise noted, PitchBook provided all data cited). The dollar amount declined only 12% from 2019's near record total, and the number of funds raised fell 34%. 4Q20 finished strong with final closes totaling $197 billion, up 74% from 3Q. The number of funds totaled 295, up 22%.

Funds Closed 1/1/20 to 12/31/20

Strategy	No. of Funds	Amt ($mm)	Share
Venture Capital	592	110,362	17%
Growth Equity	99	49,493	8%
Buyouts	273	285,346	44%
Mezzanine Debt	18	21,362	3%
Distressed	34	40,149	6%
Energy	4	6,216	1%
Secondary and Other	79	103,814	16%
Fund-of-Funds	64	27,814	4%
Totals	**1,163**	**644,556**	**100%**

Source: PitchBook (Figures may not total due to rounding.)

New buyout investments for 2020 totaled 7,575, down 20% from 2019. Dollar volume fell 36% to $441 billion. The fourth quarter saw 2,223 new investments, a 23% increase, and dollar volume jumped 20% to $116 billion.

The year produced 32,198 rounds of new investment in venture capital (VC) companies, down 19% from 2019. Announced volume of $326 billion was up 18%. 4Q saw 7,227 new rounds, a 4% decline, and dollar volume rose 9% to $96 billion.

Last year also saw 1,791 buyout-backed private M&A exits, down 31% from 2019, with proceeds of $373 billion, down 42%. 4Q had 497 private exits, up 29%, with proceeds of $117 billion, up 144%. IPOs were strong for both venture capital and buyouts. The year's 144 buyout-backed IPOs increased 16% from 2019, with proceeds of $58 billion, up 71%. 4Q buyout-backed IPOs numbered 62, a jump of 32% from 3Q, with $24 billion of proceeds, up 60%.

Venture-backed M&A exits for the year totaled 1,788, down 18% from 2019. Announced dollar volume of $108 billion was down 19%. The final quarter had 473 exits, up 9%, and announced value of $46 billion vaulted 171%. The year's 391 venture-backed IPOs jumped 46% from 2019, with proceeds of $76 billion, up 65%. There were 115 VC-backed offerings in 4Q, a 17% drop, and the $26 billion of proceeds dropped 21% from 3Q.

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/20*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	11.1	27.9	20.8	14.6	16.6	12.3	6.0	26.6
Growth Equity	12.4	25.8	19.2	16.4	14.7	13.5	11.3	15.1
All Buyouts	10.8	15.6	13.4	14.3	14.0	12.4	11.9	13.2
Mezzanine	5.5	7.5	9.0	10.0	11.5	10.5	8.4	9.8
Credit Opportunities	3.5	-1.8	2.7	5.6	8.2	8.5	9.4	9.5
Control Distressed	7.8	5.9	5.8	8.5	10.3	9.6	10.3	10.7
All Private Equity	**10.5**	**18.1**	**14.7**	**13.9**	**13.9**	**12.1**	**10.0**	**14.1**
S&P 500	8.9	15.2	12.3	14.2	13.7	9.2	6.4	9.3
Russell 3000	14.7	20.9	14.5	15.4	13.8	10.0	7.8	9.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices
*Most recent data available at time of publication

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

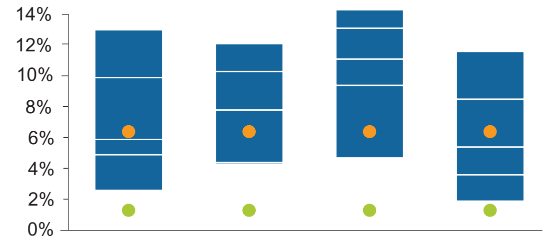
Hedge Funds Vaccinated Against Risk

HEDGE FUNDS/MACs | Jim McKee

The vigorous but volatile market conditions fed by continuing central bank liquidity enabled healthy hedge fund profits from both alpha and beta. As a proxy of asset-weighted hedge fund performance, the Credit Suisse Hedge Fund Index (CS HFI) surged 6.4% in 4Q20, its strongest quarterly gain since 2009. Representing actual hedge fund portfolios net of all fees and expenses, the median manager in the Callan Hedge Fund-of-Funds (FOF) Peer Group advanced 8.5%.

All strategies within the CS HFI were positive. Frenzied corporate issuance, whether equity, credit, or blank checks in the form of SPACs, particularly enriched Risk Arbitrage (+11.3%) and Event-Driven Multi-Strategy (+10.7%). Revived hopes for downtrodden credits benefited Distressed (+9.2%), marking the strategy's best quarterly gain since its 1994 inception. Riding the equity wave higher with an average 0.5 beta exposure, Long-Short Equity added 7.6%.

Hedge Fund Style Group Returns



	Absolute Return FOF	Core Div. FOF	Long/Short Equity FOF	Institutional Hedge Funds
10th Percentile	13.0	12.1	14.3	11.6
25th Percentile	9.9	10.3	13.1	8.5
Median	5.9	7.8	11.1	5.4
75th Percentile	4.9	4.4	9.4	3.6
90th Percentile	2.6	4.3	4.7	1.9
CS Hedge Fund ●	6.4	6.4	6.4	6.4
90-Day T-Bill +5% ●	1.3	1.3	1.3	1.3

Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/20

Hedge Fund Universe	Quarter	Year	3 Years	5 Years	10 Years	15Years
Callan Institutional Hedge Fund Peer Group	**5.4**	**6.8**	**5.1**	**5.9**	**5.7**	**6.9**
Callan Fund-of-Funds Peer Group	**8.5**	**13.1**	**6.5**	**5.7**	**5.0**	**4.8**
Callan Absolute Return FOF Style	**5.9**	**4.4**	**3.8**	**4.1**	**4.3**	**4.2**
Callan Core Diversified FOF Style	**7.8**	**12.4**	**5.7**	**5.2**	**4.7**	**4.6**
Callan Long/Short Equity FOF Style	**11.1**	**17.9**	**8.1**	**7.3**	**6.2**	**5.5**
BB GS Cross Asset Risk Premia 6% Vol Idx	1.2	-4.3	2.3	3.2	5.1	5.9
Credit Suisse Hedge Fund	6.4	6.4	4.0	4.1	3.8	4.7
CS Convertible Arbitrage	4.2	10.3	5.2	5.5	4.1	4.8
CS Distressed	9.2	3.8	1.2	3.4	3.6	4.4
CS Emerging Markets	5.6	12.2	4.6	6.9	4.7	5.7
CS Equity Market Neutral	0.7	1.7	-0.6	0.3	1.6	-0.9
CS Event-Driven Multi	10.7	6.9	4.1	3.9	2.5	4.7
CS Fixed Income Arb	3.3	3.6	3.6	4.3	4.6	4.0
CS Global Macro	6.0	6.5	5.5	4.4	4.1	6.0
CS Long/Short Equity	7.6	7.9	4.9	4.8	5.0	5.5
CS Managed Futures	5.9	1.9	1.2	-0.1	0.6	2.8
CS Multi-Strategy	5.1	5.6	3.9	4.6	5.7	5.6
CS Risk Arbitrage	11.3	16.0	6.8	6.4	3.9	4.5
HFRI Asset Wtd Composite	7.6	2.8	3.2	3.8	3.7	--
90-Day T-Bill + 5%	1.3	5.7	6.6	6.2	5.6	6.2

*Net of fees. Sources: Bloomberg Barclays GSAM, Callan, Credit Suisse, Hedge Fund Research

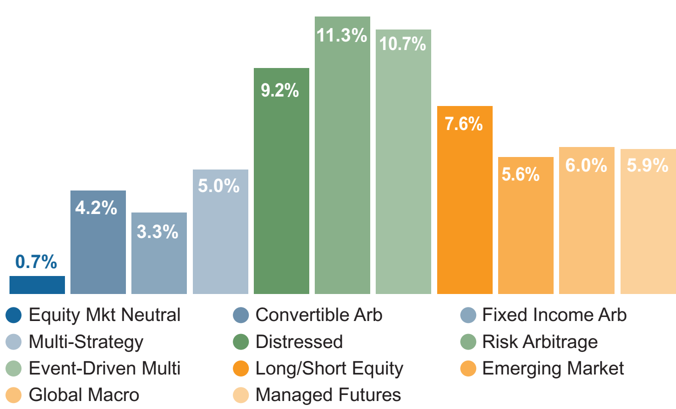
Within Callan's Hedge FOF Peer Group, market exposures differentiated performance in the quarter. Fed by the equity rally as well as stock dispersion within it, the median Callan Long/Short Equity FOF (+11.1%) easily beat the Callan Absolute Return FOF (+5.9%), which benefited from tightening spreads in equity, credit, and event arbitrage. With diversifying exposures to both non-directional and directional styles, the Core Diversified FOF gained 7.8%.

Tracking 50 of the largest, broadly diversified hedge funds with low-beta exposure to equity markets, the median manager in the Callan Institutional Hedge Fund (CIHF) Peer Group gained 5.4% in 4Q. For the year, the median manager was up 6.8%. Those funds focused on hedged credit led, on average, others focused more on equities, rates, and cross-asset strategies in the quarter, but lagged those others for the full year.

Measuring the performance of these alternative risk premia in the quarter, the Bloomberg GSAM Risk Premia Index gained 1.2% based upon a 6% volatility target. Within the underlying styles of the Index's alternative risk premia, Currency Carry (+3.7%), U.S. Equity Value (+3.6%), and Currency Trend (+3.6%) were the big beneficiaries of the quarter's cyclical risk-on rotation.

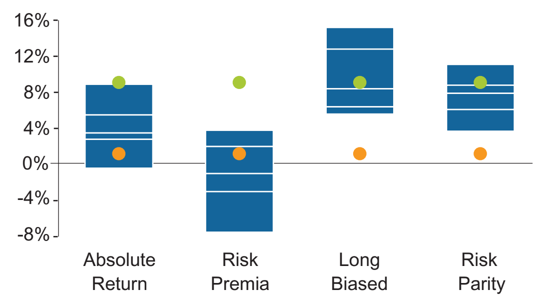
Within Callan's database of liquid alternative solutions, the median managers of Callan Multi-Asset Class (MAC) style groups generated positive returns, gross of fees, consistent with their underlying risk exposures. For example, the Callan Risk Parity MAC, which typically targets equal risk-weighted allocations across asset classes with leverage, gained 7.9%, slightly trailing the more equity risk-oriented benchmark of 60% MSCI ACWI and 40% Bloomberg Barclays US Aggregate Bond Index (+9.1%). Given its usually long equity bias within a dynamic asset allocation framework, the Callan Long-Biased MAC (+8.4%) also marginally underperformed the 60%/40% index. The median Callan Risk Premia MAC fell 1.0%, reflecting its levered exposures to uncorrelated alternative risk premia (such as those in the Bloomberg GSAM Risk Premia Index). As the most conservative MAC style focused on non-directional strategies of long and short asset class exposures, the Callan Absolute Return MAC earned 3.5%.

Credit Suisse Hedge Fund Strategy Returns



Source: Credit Suisse

MAC Style Group Returns



	Absolute Return	Risk Premia	Long Biased	Risk Parity
10th Percentile	8.9	3.8	15.2	11.1
25th Percentile	5.5	2.0	12.8	8.8
Median	3.5	-1.0	8.4	7.9
75th Percentile	2.8	-3.0	6.4	6.1
90th Percentile	-0.4	-7.5	5.6	3.7
BB GS Cross Asset Risk Premia (6%v)	1.2	1.2	1.2	1.2
60% MSCI ACWI/ 40% BB Barclays Agg	9.1	9.1	9.1	9.1

Sources: Bloomberg Barclays, Callan, Eurekahedge, S&P Dow Jones Indices

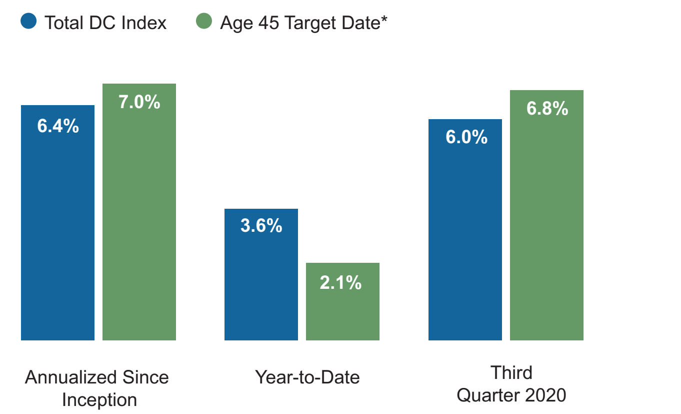
Index Posts Second Straight Quarterly Gain

DEFINED CONTRIBUTION | Patrick Wisdom

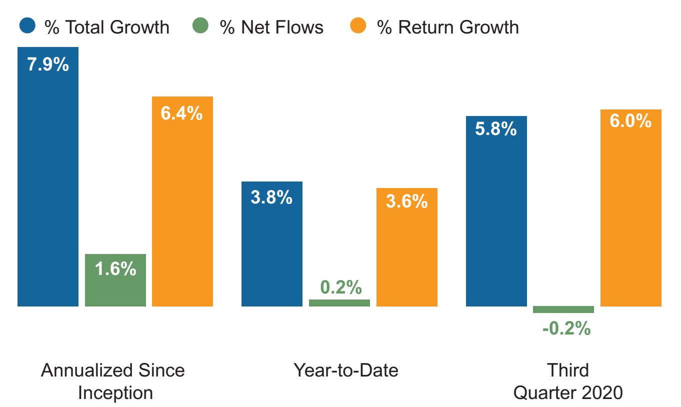
- The Callan DC Index™ rose 6.0% in 3Q20, the second straight quarter of gains after a 15.0% 1Q20 plunge. The increase propelled the Index to a gain year to date (3.6%). The Age 45 Target Date Fund (analogous to the 2040 vintage) posted a larger quarterly gain (6.8%), attributable to its higher allocation to equity.
- Balances within the DC Index rose by 5.8%. Investment returns (6.0%) were the sole driver of the growth, while net flows (-0.2%) had a small, negative effect.
- Target date funds typically get the largest net inflows, but they received only 12.5% of quarterly inflows as investors gravitated to relatively safer asset classes such as U.S. fixed income (36.9%) and stable value (30.7%).
- U.S. large cap (-45.1%) and U.S. small/mid cap (-38.9%) had the largest net outflows.
- Turnover (i.e., net transfer activity levels within DC plans) increased in 3Q, rising to 0.75% from the previous quarter's 0.37%.
- The Index's overall allocation to equity increased slightly to 68.8% from the previous quarter's 68.4%. U.S. large cap saw the largest percentage increase in allocation, rising by 60 basis points to 26.0%. U.S. small/mid cap had the largest percentage decrease, to 7.4% from 7.7% in 2Q.
- The prevalence of a money market offering (49.1%) increased by 1.4 percentage points from 2Q20. The percentage of plans offering a balanced fund (47.4%) dipped by more than 3 percentage points.
- For plans with more than $1 billion in assets, the average asset-weighted fee decreased by 2 basis points to 0.27%. Plans with less than $500 million in assets saw a slightly larger fee decrease of 4 bps to 0.33%, while the fee for plans with assets between $500 million and $1 billion remained steady at 0.36%.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of over 100 plans, representing nearly $300 billion in assets. The Index is updated quarterly and is available on Callan's website.

Investment Performance



Growth Sources



Net Cash Flow Analysis (3Q20)
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
U.S. Fixed Income	36.91%
Stable Value	30.67%
U.S. Smid Cap	-38.89%
U.S. Large Cap	-45.14%
Total Turnover**	**0.75%**

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

Note: DC Index inception date is January 2006.

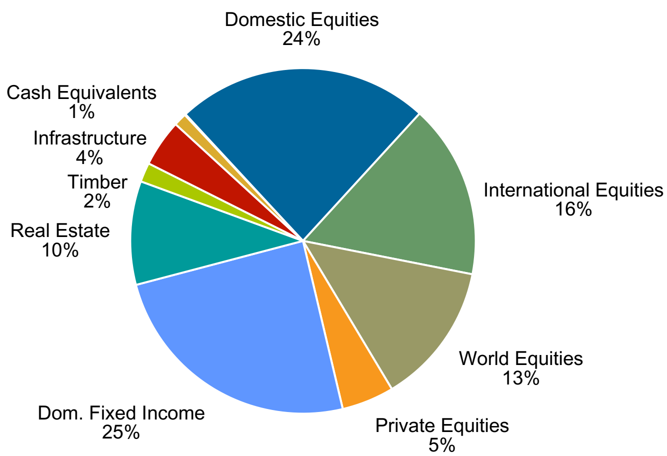
* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

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

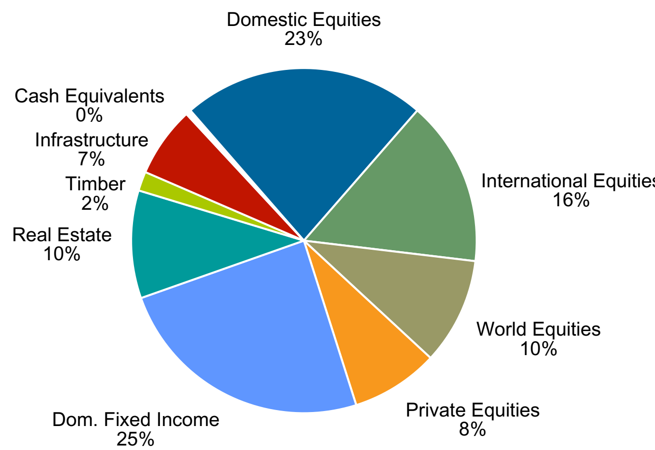
Actual vs Target Asset Allocation
As of December 31, 2020

The top left chart shows the Fund's asset allocation as of December 31, 2020. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.

Actual Asset Allocation

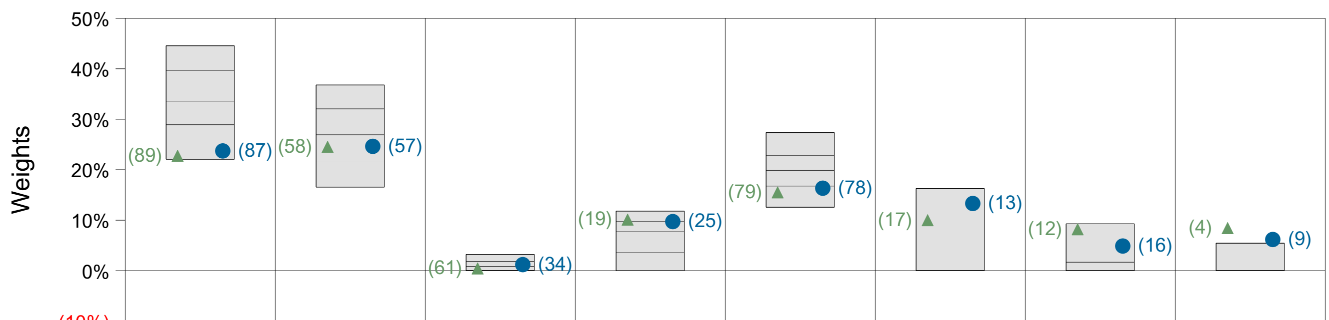


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	1,630,456	23.7%	22.8%	1.0%	66,317
International Equities	1,122,941	16.3%	15.5%	0.8%	56,938
World Equities	914,755	13.3%	10.0%	3.3%	227,476
Private Equities	335,828	4.9%	8.2%	(3.3%)	(227,984)
Dom. Fixed Income	1,692,659	24.6%	24.5%	0.1%	6,456
Real Estate	668,409	9.7%	10.1%	(0.4%)	(27,110)
Timber	123,307	1.8%	1.8%	(0.0%)	(0)
Infrastructure	301,608	4.4%	6.6%	(2.2%)	(154,628)
Cash Equivalents	82,825	1.2%	0.4%	0.8%	52,535
Total	6,872,789	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



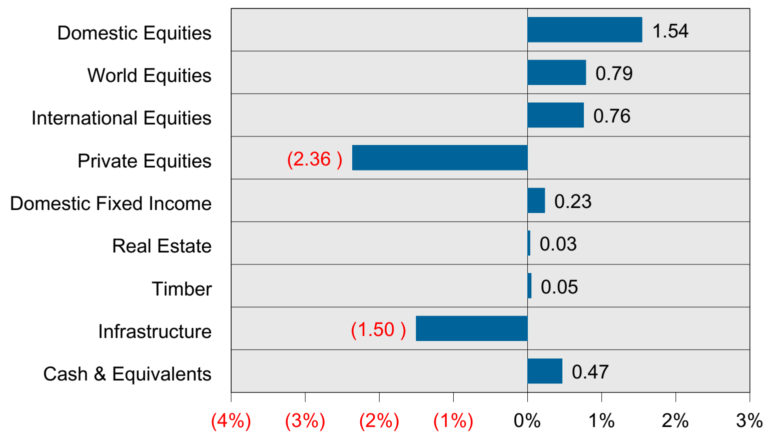
	Domestic Equities	Dom. Fixed Income	Cash Equivalents	Real Estate	International Equities	World Equities	Private Equities	Real Assets
10th Percentile	44.56	36.79	3.22	11.81	27.36	16.28	9.29	5.45
25th Percentile	39.70	32.06	1.84	9.71	22.86	0.00	1.68	0.00
Median	33.59	26.93	0.85	7.71	19.88	0.00	0.00	0.00
75th Percentile	28.92	21.73	0.04	3.56	16.76	0.00	0.00	0.00
90th Percentile	22.08	16.55	0.00	0.00	12.57	0.00	0.00	0.00
Fund ●	23.72	24.63	1.21	9.73	16.34	13.31	4.89	6.18
Target ▲	22.76	24.53	0.44	10.12	15.51	10.00	8.20	8.43
% Group Invested	94.07%	98.52%	77.04%	81.48%	90.37%	19.26%	25.93%	18.52%

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

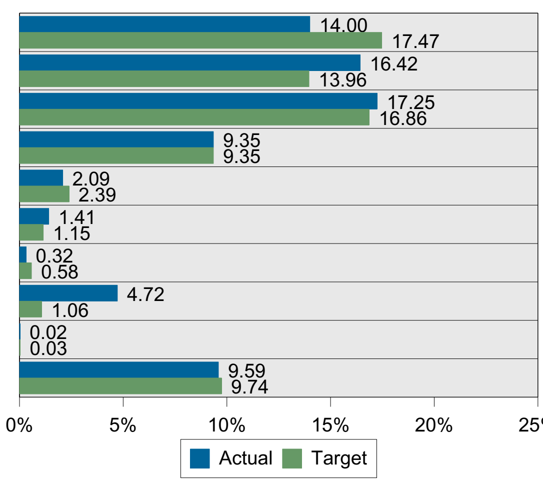
Quarterly Total Fund Relative Attribution - December 31, 2020

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

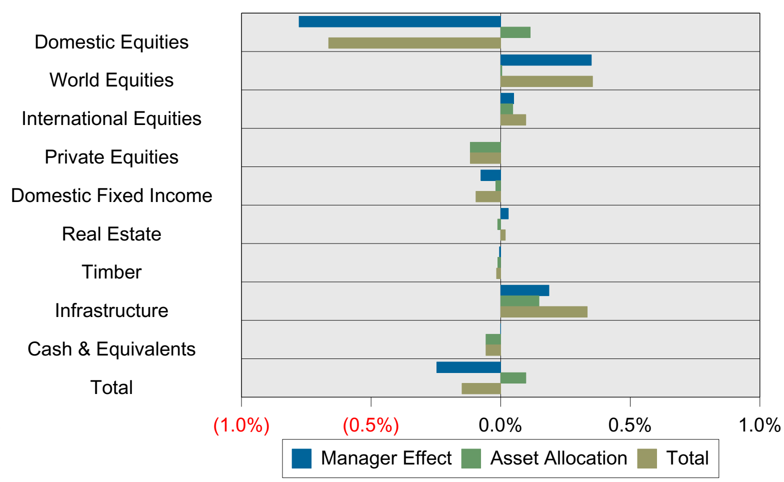
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2020

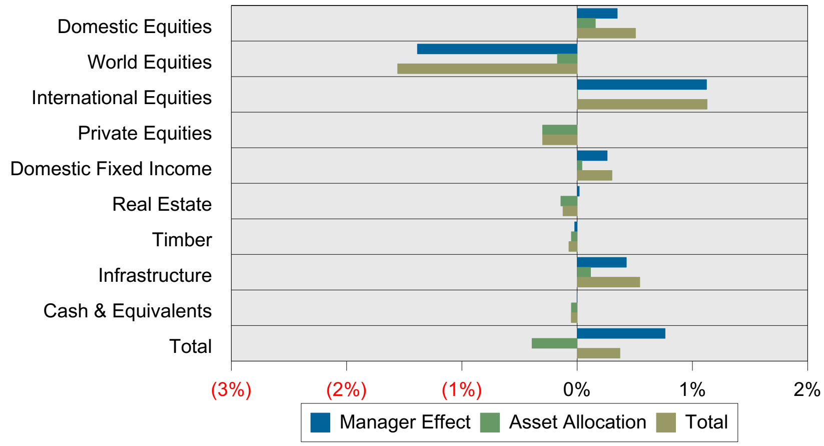
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	14.00%	17.47%	(0.78%)	0.11%	(0.66%)
World Equities	15%	14%	16.42%	13.96%	0.35%	0.00%	0.35%
International Equities	16%	15%	17.25%	16.86%	0.05%	0.05%	0.10%
Private Equities	5%	7%	9.35%	9.35%	0.00%	(0.12%)	(0.12%)
Domestic Fixed Income	24%	24%	2.09%	2.39%	(0.08%)	(0.02%)	(0.10%)
Real Estate	10%	10%	1.41%	1.15%	0.03%	(0.01%)	0.02%
Timber	2%	2%	0.32%	0.58%	(0.00%)	(0.01%)	(0.02%)
Infrastructure	5%	6%	4.72%	1.06%	0.19%	0.15%	0.33%
Cash & Equivalents	1%	0%	0.02%	0.03%	(0.00%)	(0.06%)	(0.06%)
Total			**9.59% =**	**9.74% +**	**(0.25%) +**	**0.10%**	**(0.15%)**

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

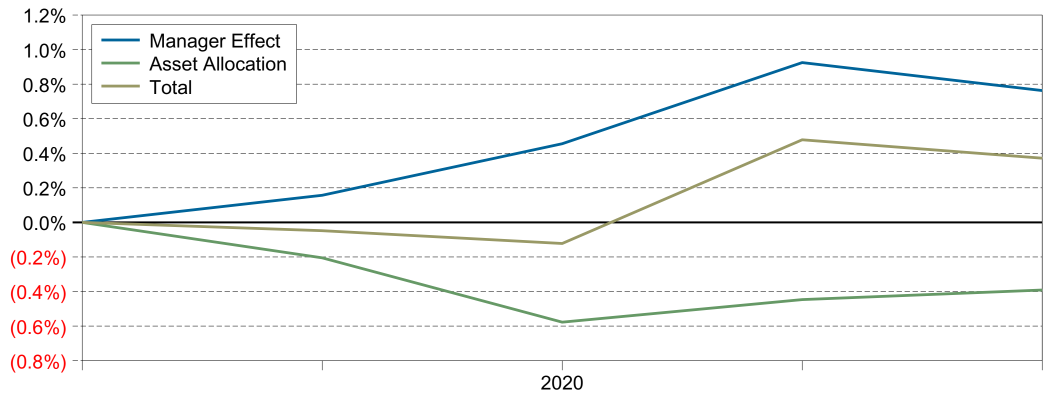
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

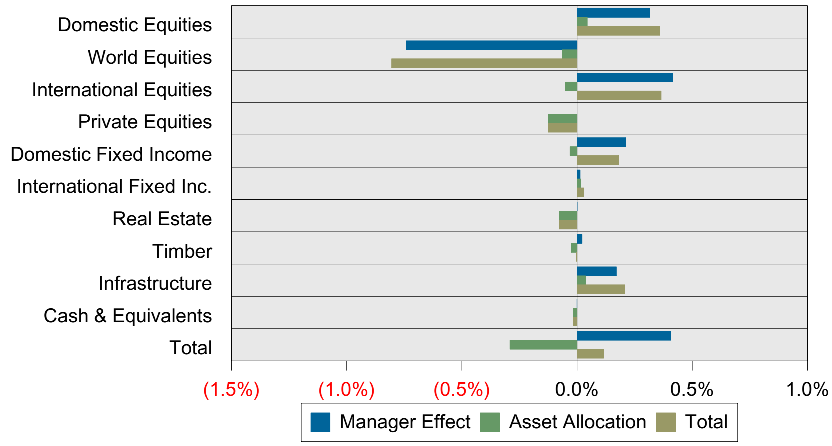
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	22%	21%	22.90%	20.74%	0.35%	0.16%	0.51%
World Equities	15%	15%	6.61%	15.90%	(1.39%)	(0.17%)	(1.56%)
International Equities	15%	14%	17.89%	10.12%	1.12%	0.00%	1.13%
Private Equities	5%	7%	12.25%	12.25%	0.00%	(0.30%)	(0.30%)
Domestic Fixed Income	24%	23%	8.57%	7.59%	0.26%	0.04%	0.30%
Real Estate	11%	11%	1.66%	1.60%	0.02%	(0.14%)	(0.12%)
Timber	2%	2%	(0.12%)	0.81%	(0.02%)	(0.05%)	(0.07%)
Infrastructure	5%	6%	9.04%	1.07%	0.43%	0.12%	0.54%
Cash & Equivalents	1%	0%	0.54%	0.67%	(0.00%)	(0.05%)	(0.05%)
Total			**12.34% =**	**11.97% +**	**0.76% +**	**(0.39%)**	**0.37%**

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

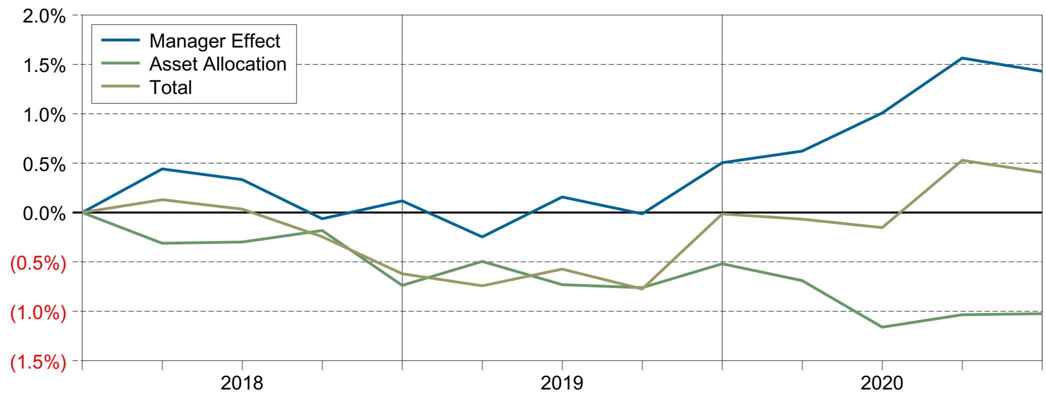
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

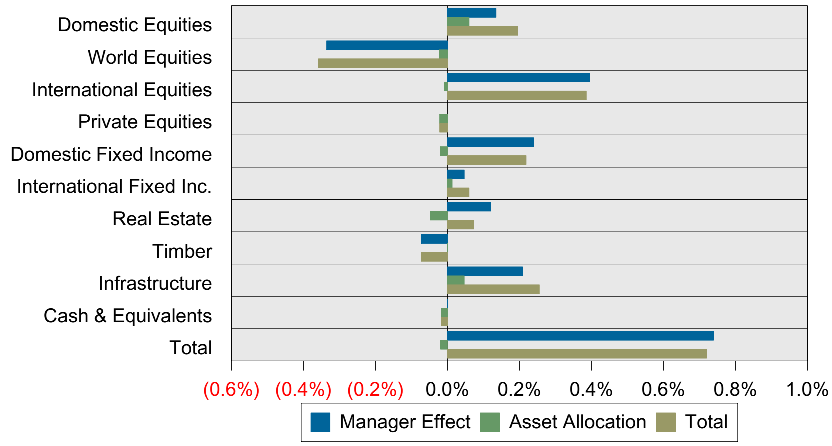
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	22%	21%	15.39%	13.78%	0.32%	0.04%	0.36%
World Equities	16%	16%	5.74%	10.54%	(0.74%)	(0.06%)	(0.80%)
International Equities	15%	14%	7.47%	4.77%	0.42%	(0.05%)	0.37%
Private Equities	4%	7%	8.21%	8.21%	0.00%	(0.12%)	(0.12%)
Domestic Fixed Income	23%	23%	6.55%	5.67%	0.21%	(0.03%)	0.18%
International Fixed Inc.	0%	0%	-	-	0.01%	0.02%	0.03%
Real Estate	11%	11%	4.85%	4.89%	0.00%	(0.08%)	(0.08%)
Timber	2%	2%	2.80%	1.77%	0.02%	(0.03%)	(0.00%)
Infrastructure	5%	6%	6.36%	3.03%	0.17%	0.04%	0.21%
Cash & Equivalents	1%	0%	1.55%	1.60%	(0.00%)	(0.02%)	(0.02%)
Total			**8.49% =**	**8.38% +**	**0.41% +**	**(0.29%)**	**0.12%**

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

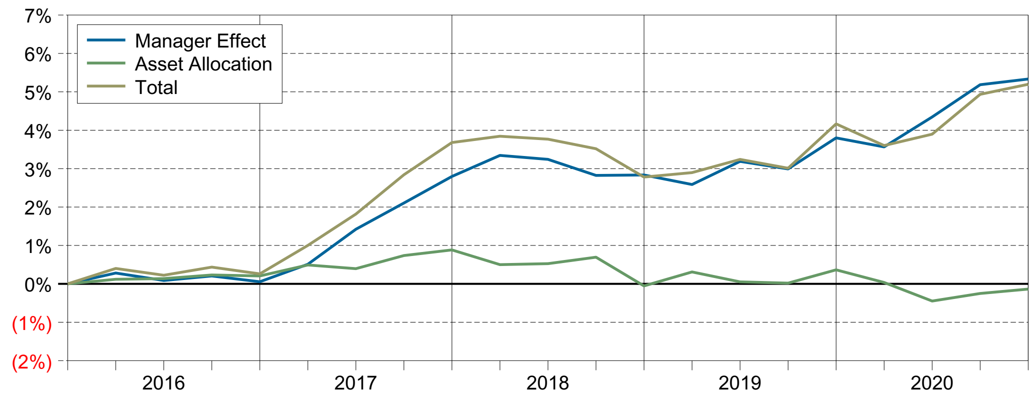
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.82%	15.10%	0.14%	0.06%	0.20%
World Equities	16%	16%	9.90%	12.19%	(0.34%)	(0.02%)	(0.36%)
International Equities	15%	14%	11.19%	8.61%	0.39%	(0.01%)	0.39%
Private Equities	4%	6%	6.42%	6.42%	0.00%	(0.02%)	(0.02%)
Domestic Fixed Income	21%	21%	6.73%	5.60%	0.24%	(0.02%)	0.22%
International Fixed Inc.	2%	2%	-	-	0.05%	0.01%	0.06%
Real Estate	11%	10%	7.00%	5.91%	0.12%	(0.05%)	0.07%
Timber	2%	3%	0.04%	2.30%	(0.07%)	(0.00%)	(0.07%)
Infrastructure	5%	6%	6.96%	2.65%	0.21%	0.05%	0.26%
Cash & Equivalents	1%	1%	1.24%	1.20%	0.00%	(0.02%)	(0.02%)

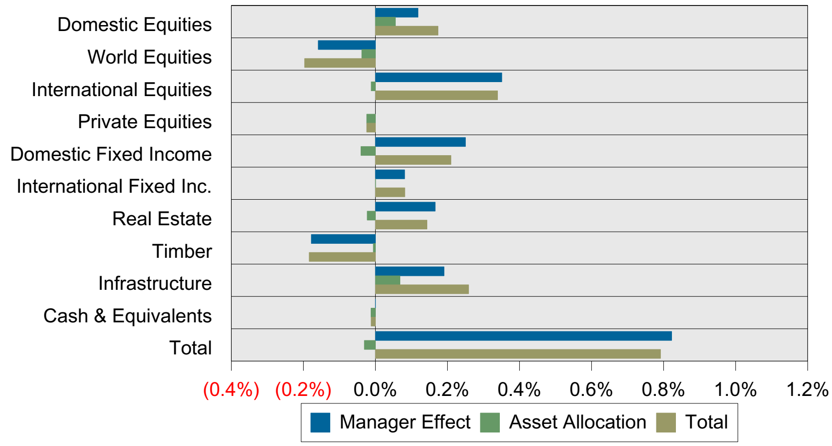
Total			**9.98% =**	**9.26% +**	**0.74% +**	**(0.02%)**	**0.72%**

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

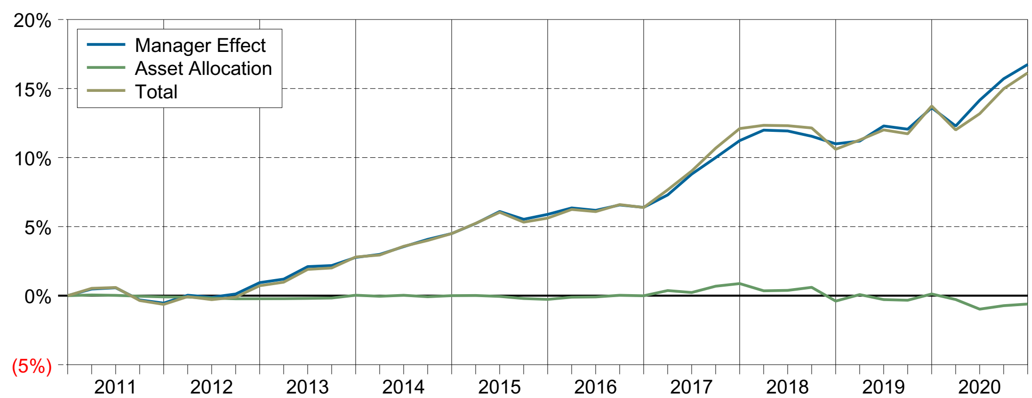
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

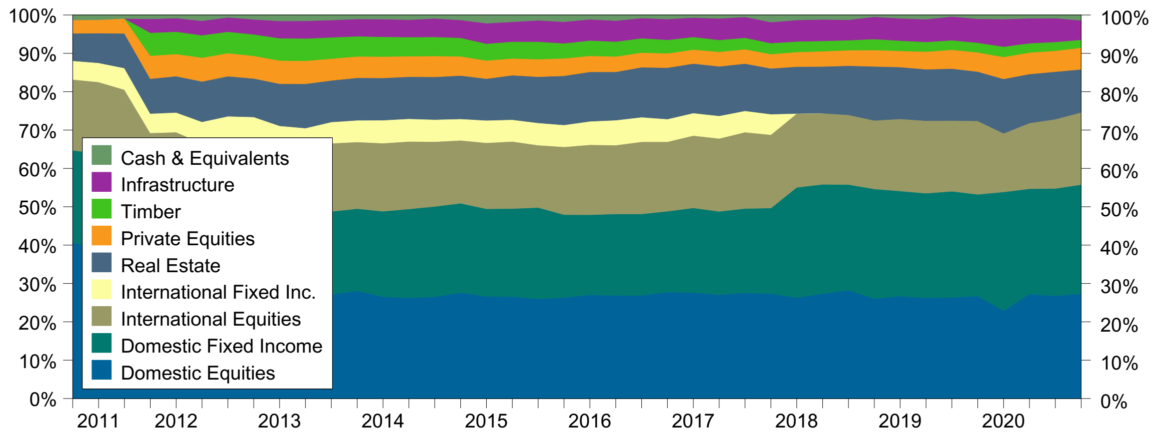
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	23%	14.14%	13.44%	0.12%	0.06%	0.17%
World Equities	13%	13%	-	-	(0.16%)	(0.04%)	(0.20%)
International Equities	16%	15%	7.27%	5.02%	0.35%	(0.01%)	0.34%
Private Equities	4%	6%	4.46%	4.46%	0.00%	(0.02%)	(0.02%)
Domestic Fixed Income	20%	20%	6.08%	4.70%	0.25%	(0.04%)	0.21%
International Fixed Inc.	4%	4%	-	-	0.08%	0.00%	0.08%
Real Estate	10%	10%	10.84%	9.00%	0.17%	(0.02%)	0.14%
Timber	3%	3%	-	-	(0.18%)	(0.01%)	(0.18%)
Infrastructure	4%	5%	-	-	0.19%	0.07%	0.26%
Cash & Equivalents	1%	1%	0.66%	0.64%	0.00%	(0.01%)	(0.01%)
Total			**8.63% =**	**7.84% +**	**0.82% +**	**(0.03%)**	**0.79%**

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

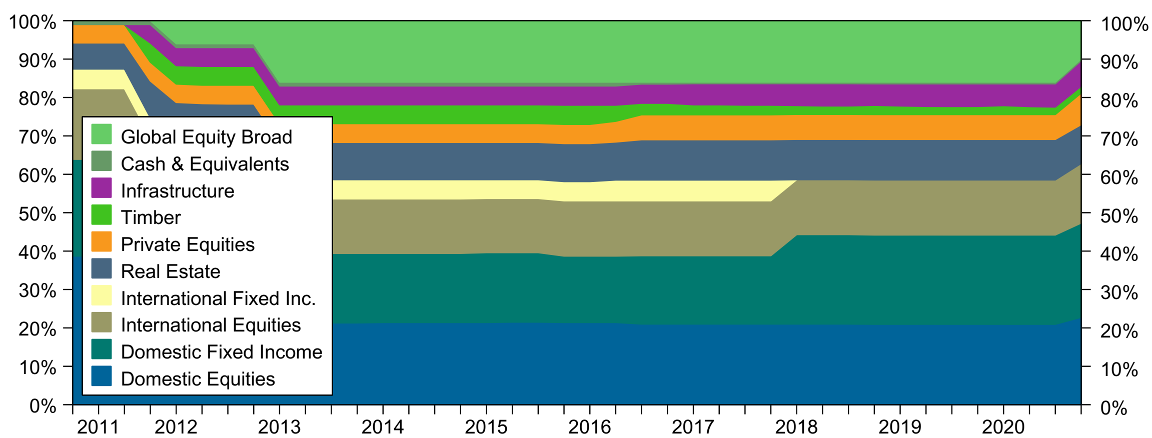
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

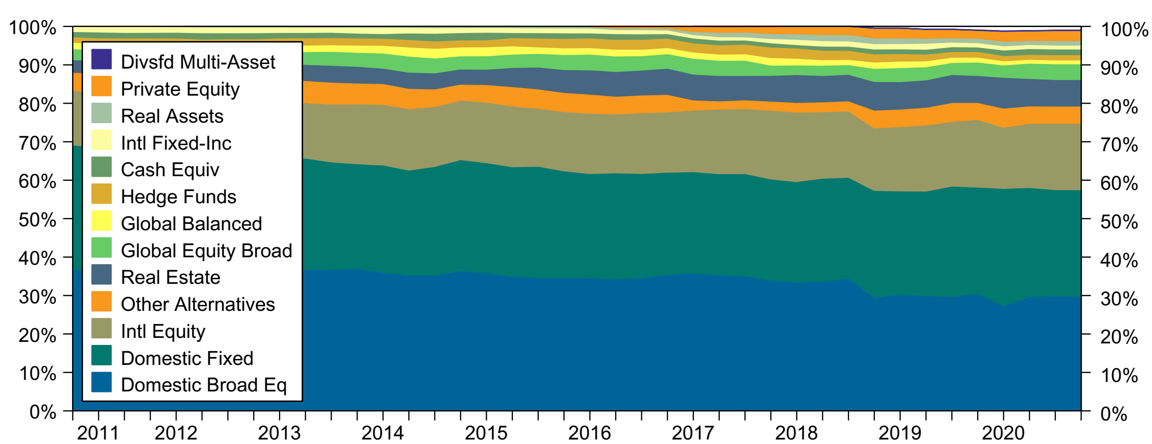
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation

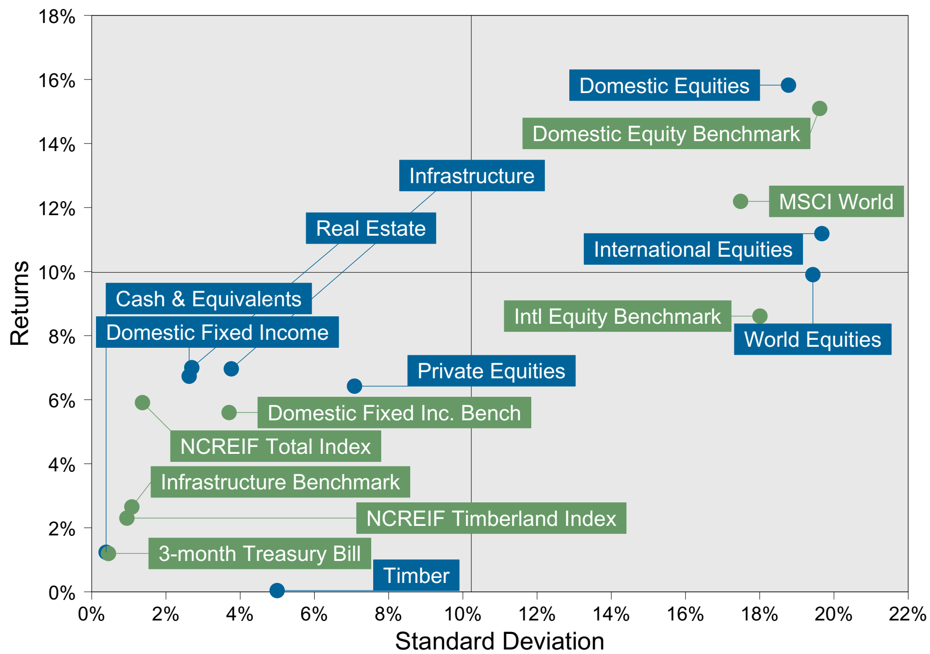


* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

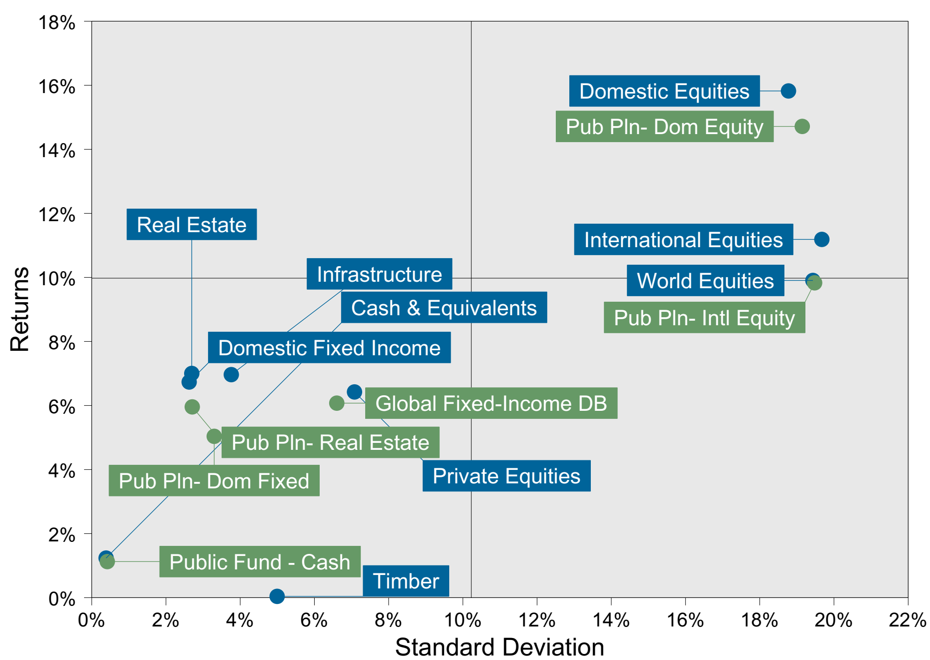
Asset Class Risk and Return

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

Five Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



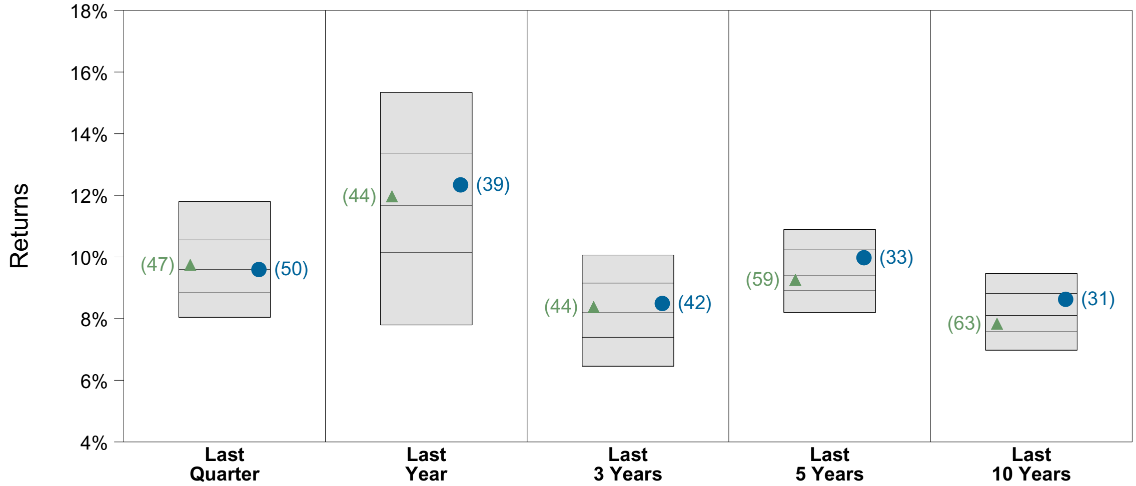
Five Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

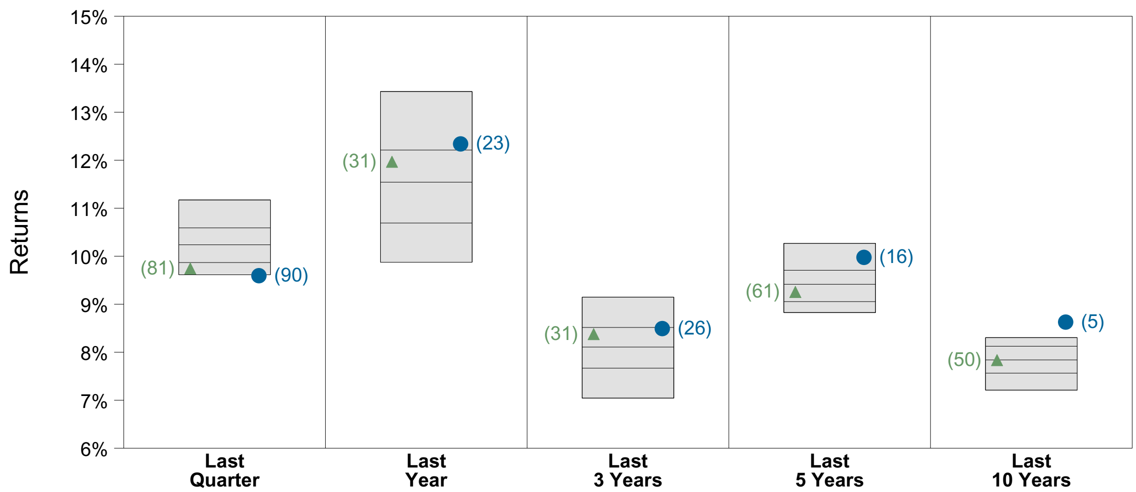
The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended December 31, 2020. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.80	15.34	10.06	10.89	9.46
25th Percentile	10.55	13.37	9.15	10.23	8.81
Median	9.59	11.68	8.19	9.39	8.10
75th Percentile	8.84	10.14	7.39	8.91	7.57
90th Percentile	8.04	7.80	6.46	8.20	6.98
Total Fund ●	9.59	12.34	8.49	9.98	8.63
Policy Target ▲	9.74	11.97	8.38	9.26	7.84

Asset Allocation Adjusted Ranking



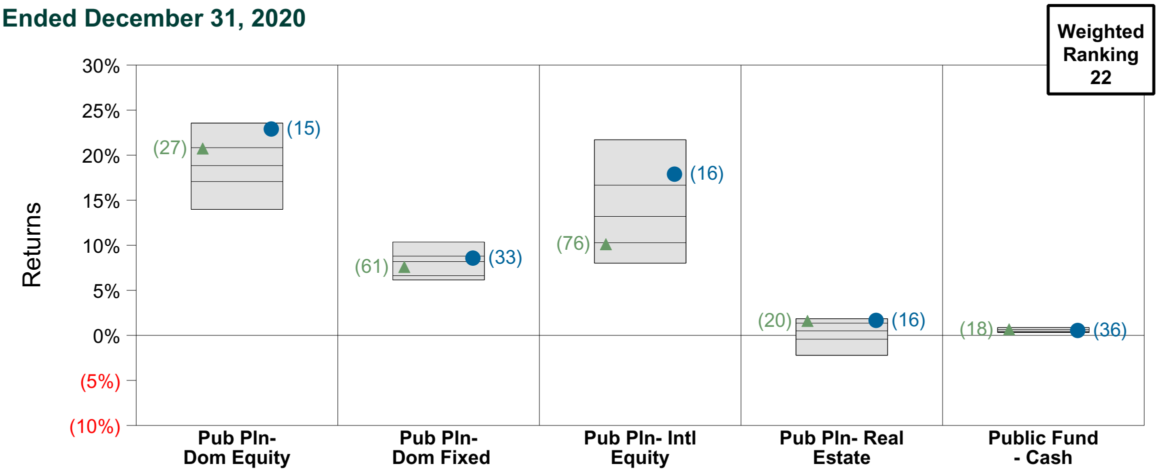
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.17	13.43	9.15	10.27	8.30
25th Percentile	10.59	12.21	8.52	9.71	8.12
Median	10.24	11.54	8.11	9.42	7.84
75th Percentile	9.87	10.69	7.67	9.05	7.56
90th Percentile	9.61	9.87	7.04	8.83	7.21
Total Fund ●	9.59	12.34	8.49	9.98	8.63
Policy Target ▲	9.74	11.97	8.38	9.26	7.84

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

Asset Class Rankings

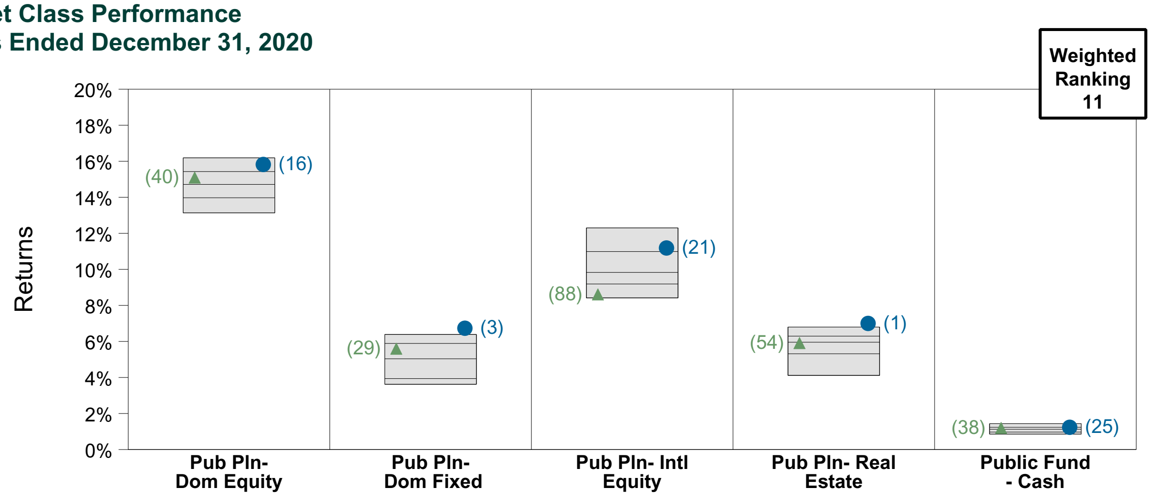
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	23.56	10.36	21.71	1.85	0.87
25th Percentile	20.83	8.79	16.67	1.35	0.65
Median	18.84	8.19	13.20	0.50	0.45
75th Percentile	17.07	6.63	10.28	(0.43)	0.35
90th Percentile	13.98	6.15	8.02	(2.22)	0.31
Asset Class Composite ●	22.90	8.57	17.89	1.66	0.54
Composite Benchmark ▲	20.74	7.59	10.12	1.60	0.67

Total Asset Class Performance
Five Years Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	16.19	6.39	12.30	6.80	1.44
25th Percentile	15.43	5.89	10.99	6.29	1.24
Median	14.72	5.04	9.83	5.96	1.13
75th Percentile	13.97	3.94	9.19	5.32	0.97
90th Percentile	13.13	3.62	8.42	4.12	0.86
Asset Class Composite ●	15.82	6.73	11.19	7.00	1.24
Composite Benchmark ▲	15.10	5.60	8.61	5.91	1.20

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	**$4,003,980,727**	**58.26%**	**$(183,408,981)**	**$548,110,156**	**$3,639,279,552**	**57.77%**
Public Equities	**$3,668,152,261**	**53.37%**	**$(197,579,812)**	**$519,390,666**	**$3,346,341,407**	**53.12%**
World Equities	**$914,754,872**	**13.31%**	**$(180,871,838)**	**$151,185,087**	**$944,441,623**	**14.99%**
EPOCH Investment Partners	446,580,052	6.50%	(90,755,934)	57,234,447	480,101,539	7.62%
LSV Asset Management	468,174,820	6.81%	(90,115,904)	93,950,640	464,340,085	7.37%
Domestic Equities	**$1,630,456,285**	**23.72%**	**$(6,062,121)**	**$201,832,113**	**$1,434,686,293**	**22.78%**
Large Cap	**$1,264,290,046**	**18.40%**	**$(311,068)**	**$135,953,566**	**$1,128,647,548**	**17.92%**
L.A. Capital	521,360,927	7.59%	(249,933)	54,618,470	466,992,391	7.41%
LACM Enhanced Index	255,566,680	3.72%	(61,135)	28,089,351	227,538,464	3.61%
Northern Trust AM Enh S&P 500	233,635,391	3.40%	0	24,707,015	208,928,376	3.32%
Parametric Enh S&P 500	253,727,047	3.69%	0	28,538,730	225,188,317	3.57%
Small Cap	**$366,166,239**	**5.33%**	**$(5,751,053)**	**$65,878,547**	**$306,038,744**	**4.86%**
Atlanta Capital	114,418,253	1.66%	(54,217,672)	20,118,469	148,517,456	2.36%
Riverbridge Small Cap Growth	128,153,531	1.86%	104,500,000	23,653,531	-	-
Parametric Enh Small Cap	0	0.00%	(160,533,381)	3,012,093	157,521,288	2.50%
Sycamore Small Cap Value	123,594,455	1.80%	104,500,000	19,094,455	-	-
International Equities	**$1,122,941,104**	**16.34%**	**$(10,645,853)**	**$166,373,466**	**$967,213,491**	**15.35%**
Developed	**$856,159,778**	**12.46%**	**$(10,392,450)**	**$121,561,758**	**$744,990,469**	**11.83%**
DFA Int'l Small Cap	80,225,959	1.17%	0	13,264,548	66,961,412	1.06%
Northern Trust AM World Ex US	410,215,009	5.97%	(26,547)	56,122,540	354,119,016	5.62%
Wellington Management Co.	94,608,880	1.38%	(161,080)	16,693,157	78,076,803	1.24%
William Blair	271,109,930	3.94%	(10,204,822)	35,481,514	245,833,238	3.90%
Emerging Markets	**$266,781,326**	**3.88%**	**$(253,404)**	**$44,811,708**	**$222,223,022**	**3.53%**
Axiom	202,469,518	2.95%	(253,404)	34,347,884	168,375,037	2.67%
DFA	64,311,809	0.94%	0	10,463,824	53,847,985	0.85%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Private Equities	**$335,828,466**	**4.89%**	**$14,170,831**	**$28,719,490**	**$292,938,145**	**4.65%**
Adams St Direct Co-Invest Fund	192,479	0.00%	0	1,053	191,426	0.00%
Adams St Direct Fund 2010	800,470	0.01%	0	91,576	708,894	0.01%
Adams St 1998 Partnership	13,381	0.00%	0	1	13,380	0.00%
Adams St 1999 Partnership	129,727	0.00%	0	(1,708)	131,435	0.00%
Adams St 2000 Partnership	310,304	0.00%	0	(10,355)	320,659	0.01%
Adams St 2001 Partnership	612,334	0.01%	0	82,637	529,697	0.01%
Adams St 2002 Partnership	136,939	0.00%	0	519	136,420	0.00%
Adams St 2003 Partnership	143,435	0.00%	0	(909)	144,344	0.00%
Adams St 2010 Partnership	6,167,595	0.09%	(331,108)	1,241,219	5,257,484	0.08%
Adams St 2008 Fund	6,330,789	0.09%	(847,032)	702,167	6,475,654	0.10%
Adams St 1999 Non-US	49	0.00%	(72,725)	(763)	73,537	0.00%
Adams St 2000 Non-US	224,363	0.00%	(118,106)	(23,655)	366,124	0.01%
Adams St 2001 Non-US	94,744	0.00%	0	125	94,619	0.00%
Adams St 2002 Non-US	86,251	0.00%	0	361	85,890	0.00%
Adams St 2003 Non-US	161,695	0.00%	0	1,459	160,236	0.00%
Adams St 2004 Non-US	185,376	0.00%	0	8,236	177,140	0.00%
Adams St 2010 Non-US	2,810,759	0.04%	(119,279)	278,069	2,651,969	0.04%
Adams St 2010 Non-US Emg	1,727,788	0.03%	(99,140)	142,971	1,683,957	0.03%
Adams St 2015 Global Fund	30,328,738	0.44%	675,000	2,642,076	27,011,662	0.43%
Adams St 2016 Global Fund	23,103,601	0.34%	1,056,000	1,370,522	20,677,079	0.33%
Adams St 2017 Global Fund	41,804,144	0.61%	0	3,170,142	38,634,002	0.61%
Adams St 2018 Global Fund	26,922,745	0.39%	2,905,500	2,205,967	21,811,278	0.35%
Adams St 2019 Global Fund	7,901,516	0.11%	0	1,922,733	5,978,783	0.09%
Adams St 2020 Global Fund	1,200,000	0.02%	1,200,000	0	-	-
Adams Street BVCF IV Fund	4,365	0.00%	0	0	4,365	0.00%
BlackRock	127,662,251	1.86%	6,718,416	14,991,269	105,952,566	1.68%
Sixth Street TAO	10,740,797	0.16%	9,718,000	(22,311)	1,045,108	0.02%
Remaining Misc. Funds*	46,031,831	0.67%	(6,514,695)	(73,911)	52,620,437	0.84%

* Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Fixed Income	**$1,692,659,427**	**24.63%**	**$162,189,086**	**$31,943,611**	**$1,498,526,730**	**23.79%**
Domestic Fixed Income	**$1,692,659,427**	**24.63%**	**$162,189,086**	**$31,943,611**	**$1,498,526,730**	**23.79%**
Investment Grade	**$1,225,471,970**	**17.83%**	**$144,714,198**	**$11,187,530**	**$1,069,570,241**	**16.98%**
Declaration Total Return	129,457,214	1.88%	(76,415)	3,043,587	126,490,042	2.01%
PIMCO DiSCO II	112,289,141	1.63%	0	1,990,259	110,298,882	1.75%
PIMCO Core Plus Constrained	420,333,327	6.12%	54,895,720	3,950,547	361,487,061	5.74%
Prudential Core	423,677,834	6.16%	54,898,874	5,427,203	363,351,758	5.77%
SSgA Long US Treas Index	139,714,453	2.03%	34,996,020	(3,224,066)	107,942,499	1.71%
Below Investment Grade	**$467,187,457**	**6.80%**	**$17,474,888**	**$20,756,081**	**$428,956,488**	**6.81%**
Ares ND Credit Strategies Fd	121,405,633	1.77%	0	4,304,896	117,100,737	1.86%
Cerberus ND Private Credit Fd	145,666,327	2.12%	19,250,000	3,261,035	123,155,292	1.96%
Goldman Sachs 2006 Offshore	67,333	0.00%	0	986	66,347	0.00%
Goldman Sachs Offshore V	231,049	0.00%	0	17,906	213,143	0.00%
Loomis Sayles	185,716,077	2.70%	(203,070)	13,094,038	172,825,108	2.74%
PIMCO Bravo II Fund	14,101,038	0.21%	(1,572,043)	77,220	15,595,861	0.25%
Global Real Assets	**$1,093,324,058**	**15.91%**	**$(48,569,257)**	**$24,033,531**	**$1,117,859,784**	**17.75%**
Real Estate	**$668,408,711**	**9.73%**	**$(4,339,696)**	**$9,399,585**	**$663,348,823**	**10.53%**
Invesco Core Real Estate	325,506,420	4.74%	(258,410)	(916,627)	326,681,457	5.19%
Invesco Fund III	1	0.00%	(7,028,938)	4,022,474	3,006,465	0.05%
Invesco Asia RE Fund III	18,798,025	0.27%	0	982,322	17,815,703	0.28%
Invesco Value Added Fd IV	33,012,386	0.48%	(1,329,987)	315,416	34,026,957	0.54%
Invesco Value Added Fd V	38,900,801	0.57%	4,277,639	(210,703)	34,833,865	0.55%
JP Morgan	251,523,130	3.66%	0	5,178,589	246,344,542	3.91%
JP Morgan Greater European Opp Fd	667,948	0.01%	0	28,114	639,834	0.01%
Other Real Assets	**$424,915,346**	**6.18%**	**$(44,229,561)**	**$14,633,946**	**$454,510,961**	**7.22%**
Infrastructure	**$301,608,172**	**4.39%**	**$(44,229,561)**	**$14,240,750**	**$331,596,983**	**5.26%**
ISQ Global Infrastructure II	43,617,605	0.63%	(1,256,197)	1,668,875	43,204,927	0.69%
The Rohatyn Group	15,622,567	0.23%	157,582	(222,810)	15,687,795	0.25%
JP Morgan IIF	133,564,316	1.94%	(43,364,001)	6,979,128	169,949,190	2.70%
Grosvenor Cust. Infrastructure	16,049,742	0.23%	(5,428,320)	918,996	20,559,066	0.33%
Grosvenor Cust. Infrastructure II	18,585,400	0.27%	(847,567)	1,441,805	17,991,162	0.29%
Macquarie Infrastructure Fund IV	67,110,601	0.98%	(548,999)	3,454,757	64,204,843	1.02%
Macquarie Infrastructure Fund V	7,057,941	0.10%	7,057,941	(0)	-	-
Timber	**$123,307,174**	**1.79%**	**$0**	**$393,196**	**$122,913,978**	**1.95%**
TIR Teredo	27,109,957	0.39%	0	383,035	26,726,922	0.42%
TIR Springbank	96,197,217	1.40%	0	10,161	96,187,056	1.53%
Cash	**$82,825,104**	**1.21%**	**$39,111,571**	**$15,498**	**$43,698,035**	**0.69%**
Northern Trust Cash Account	72,236,126	1.05%	39,111,571	12,829	33,111,726	0.53%
Bank of ND	10,588,978	0.15%	0	2,669	10,586,309	0.17%
Total Fund	**$6,872,789,316**	**100.0%**	**$(30,677,581)**	**$604,102,795**	**$6,299,364,101**	**100.0%**

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equities					
Gross	15.17%	16.00%	9.94%	12.28%	-
Net	15.09%	15.73%	9.71%	12.04%	-
Weighted Benchmark	15.77%	16.55%	10.35%	11.98%	-
Public Equities					
Gross	15.66%	16.54%	-	-	-
Net	15.57%	16.24%	-	-	-
Weighted Benchmark	16.31%	16.35%	-	-	-
World Equities					
Gross	16.42%	6.61%	5.74%	9.90%	-
Net	16.33%	6.24%	5.38%	9.52%	-
MSCI World	13.96%	15.90%	10.54%	12.19%	9.87%
EPOCH Investment - Gross(1)	12.31%	11.58%	9.19%	11.18%	-
EPOCH Investment - Net	12.14%	10.90%	8.52%	10.48%	-
MSCI World	13.96%	15.90%	10.54%	12.19%	9.87%
LSV Asset Management - Gross(2)	20.68%	2.21%	2.91%	8.75%	-
LSV Asset Management - Net	20.65%	2.11%	2.80%	8.61%	-
Benchmark(4)	15.70%	16.25%	10.35%	12.68%	-
Domestic Equities					
Gross	14.00%	22.90%	15.39%	15.82%	14.14%
Net	13.94%	22.71%	15.20%	15.62%	13.90%
Weighted Benchmark	17.47%	20.74%	13.78%	15.10%	13.44%
Large Cap					
Gross	12.05%	25.94%	16.83%	16.66%	14.88%
Net	12.02%	25.88%	16.73%	16.54%	14.72%
Large Cap Benchmark(3)	13.69%	20.96%	14.82%	15.60%	14.08%
L.A. Capital - Gross	11.70%	37.76%	22.36%	19.88%	16.80%
L.A. Capital - Net	11.64%	37.49%	22.11%	19.63%	16.56%
Russell 1000 Growth Index	11.39%	38.49%	22.99%	21.00%	17.21%
LACM Enhanced Index - Goss	12.35%	21.77%	14.69%	15.15%	14.03%
LACM Enhanced Index - Net	12.32%	21.65%	14.56%	15.03%	13.90%
Russell 1000 Index	13.69%	20.96%	14.82%	15.60%	14.01%
Northern Tr AM Enh S&P500 - Gross	11.83%	11.72%	9.94%	12.43%	12.91%
Northern Tr AM Enh S&P500 - Net	11.83%	11.72%	9.94%	12.43%	12.72%
S&P 500 Index	12.15%	18.40%	14.18%	15.22%	13.88%
Parametric Enh S&P500 - Gross	12.67%	19.19%	14.22%	15.40%	-
Parametric Enh S&P500 - Net	12.67%	19.47%	14.30%	15.40%	-
S&P 500 Index	12.15%	18.40%	14.18%	15.22%	13.88%
Small Cap					
Gross	21.11%	12.31%	10.47%	12.90%	11.56%
Net	20.93%	11.71%	10.02%	12.45%	11.08%
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	11.20%
Atlanta Capital - Gross	20.66%	12.89%	13.30%	-	-
Atlanta Capital - Net	20.43%	12.16%	12.55%	-	-
S&P 600 Small Cap Index	31.31%	11.29%	7.74%	12.37%	11.92%

(1) EPOCH Investment was removed from the Domestic Equities Composite to the World Equities Composite as of 1/1/2012.
(3) LSV Asset Management was removed from the Domestic Equities and Intl Equities Composites to the World Equities Composite as of February 1, 2013.
(3) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.
(4) MSCI ACWI Gross through 6/30/2019 and MSCI ACWI IMI thereafter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equities					
Gross	17.25%	17.89%	7.47%	11.19%	7.27%
Net	17.17%	17.54%	7.24%	10.97%	6.98%
Weighted Benchmark	16.86%	10.12%	4.77%	8.61%	5.02%
Developed					
Gross	16.37%	15.55%	7.11%	10.19%	7.42%
Net	16.31%	15.30%	6.88%	9.95%	7.13%
Benchmark(1)	15.85%	7.59%	4.22%	7.32%	5.33%
DFA Int'l Small Cap Value - Net	19.81%	0.81%	(2.20%)	5.27%	5.49%
World ex US SC Value	20.30%	2.58%	0.94%	7.25%	5.54%
Northern Tr AM World ex US - Gross	15.85%	8.16%	4.73%	8.05%	-
Northern Tr AM World ex US - Net	15.84%	8.12%	4.70%	8.02%	-
MSCI World ex US	15.85%	7.59%	4.22%	7.64%	5.19%
Wellington Management - Gross	21.43%	17.24%	4.10%	9.04%	9.83%
Wellington Management - Net	21.17%	16.25%	3.21%	8.12%	8.91%
BMI, EPAC, <$2 B	17.86%	14.15%	3.17%	8.43%	6.76%
William Blair - Gross	14.59%	28.54%	14.84%	-	-
William Blair - Net	14.49%	28.09%	14.44%	-	-
MSCI ACWI ex US IMI	17.22%	11.12%	4.83%	8.98%	5.06%
Emerging Markets					
Gross	20.17%	26.36%	8.72%	14.40%	6.29%
Net	20.05%	25.63%	8.51%	14.26%	6.00%
Emerging Mkts - Net	19.70%	18.31%	6.18%	12.81%	3.63%
Axiom - Gross(2)	20.41%	30.91%	10.94%	15.90%	-
Axiom - Net	20.25%	29.91%	10.65%	15.73%	-
Emerging Mkts - Net	19.70%	18.31%	6.18%	12.81%	3.63%
DFA - Net	19.43%	13.80%	2.53%	10.09%	3.74%
Emerging Mkts - Net	19.70%	18.31%	6.18%	12.81%	3.63%

(1) MSCI EAFE through 12/31/1996; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US thereafter.
(2) Axiom's performance are reported net of fees through 6/30/2020.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Private Equities*					
Net	9.35%	12.25%	8.21%	6.42%	4.43%
Adams St Direct Co-Invest Fund	0.55%	(59.13%)	(38.84%)	(25.35%)	(7.20%)
Adams St Direct Fund 2010	12.92%	12.64%	12.19%	10.55%	12.48%
Adams St 1998 Partnership	0.00%	(0.16%)	2.51%	1.76%	1.79%
Adams St 1999 Partnership	(1.30%)	6.90%	2.05%	1.36%	2.95%
Adams St 2000 Partnership	(3.23%)	(4.32%)	2.55%	2.45%	3.14%
Adams St 2001 Partnership	15.60%	16.23%	6.98%	5.21%	6.08%
Adams St 2002 Partnership	0.38%	1.02%	(5.18%)	3.86%	4.55%
Adams St 2003 Partnership	(0.63%)	(6.96%)	0.21%	3.54%	6.52%
Adams St 2010 Partnership	24.68%	35.76%	23.18%	17.51%	15.69%
Adams St 2008 Fund	11.81%	23.59%	16.21%	15.18%	12.70%
Adams St 1999 Non-US	(1.19%)	0.25%	0.79%	0.88%	6.92%
Adams St 2000 Non-US	(9.27%)	(2.52%)	3.32%	4.22%	2.08%
Adams St 2001 Non-US	0.13%	1.41%	7.56%	1.56%	8.36%
Adams St 2002 Non-US	0.42%	(2.79%)	0.29%	1.44%	3.82%
Adams St 2003 Non-US	0.91%	(7.31%)	(6.53%)	3.43%	6.72%
Adams St 2004 Non-US	4.65%	3.97%	4.74%	4.25%	5.77%
Adams St 2010 Non-US	10.98%	20.92%	18.12%	18.07%	11.07%
Adams St 2010 Non-US Emg	9.02%	14.26%	12.47%	11.76%	4.02%
Adams St 2015 Global Fund	9.66%	19.12%	18.16%	25.48%	-
Adams St 2016 Global Fund	6.45%	15.42%	13.28%	-	-
Adams St 2017 Global Fund	8.21%	18.27%	13.02%	-	-
Adams St 2018 Global Fund	9.40%	21.47%	-	-	-
Adams St 2019 Global Fund	32.16%	93.33%	-	-	-
Adams St BVCF IV Fund	0.00%	(99.61%)	(89.03%)	(73.22%)	(39.37%)
BlackRock	13.09%	12.00%	8.68%	-	-
Sixth Street TAO	3.30%	-	-	-	-
Remaining Misc. Funds**	(0.14%)	(2.03%)	0.35%	(1.13%)	(1.16%)

* Corsair III was taken out from the Private Equity Composite on July 1, 2009. It was then added back into the Private Equity Composite on October 1, 2011. At this time Corsair IV, Capital Intl and EIG were also added to this composite.
** Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.

Investment Manager Returns

The table below details the rates of return for the Fund’s investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund’s accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Fixed Income					
Gross	2.09%	8.57%	6.80%	6.93%	-
Net	2.06%	8.44%	6.65%	6.74%	-
Weighted Benchmark	2.39%	7.59%	5.98%	5.86%	-
Domestic Fixed Income					
Gross	2.09%	8.57%	6.55%	6.73%	6.08%
Net	2.06%	8.44%	6.41%	6.56%	5.89%
Weighted Benchmark	2.39%	7.59%	5.67%	5.60%	4.70%
Investment Grade					
Gross	1.00%	9.53%	6.65%	6.03%	5.45%
Net	0.98%	9.41%	6.54%	5.90%	5.31%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Declaration Total Return - Net	2.41%	5.75%	5.18%	5.03%	-
Libor-3 Month	0.06%	0.64%	1.78%	1.47%	0.89%
PIMCO Core Plus Cons. - Gross(1)	1.06%	9.18%	6.07%	6.50%	-
PIMCO Core Plus Cons. - Net	1.03%	9.02%	5.94%	6.24%	-
Blended Benchmark(2)	0.67%	7.51%	6.28%	4.14%	-
PIMCO DiSCO II - Net	1.80%	4.31%	5.97%	8.57%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Prudential Core - Gross	1.45%	8.86%	-	-	-
Prudential Core - Net	1.42%	8.74%	-	-	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
SSgA Long US Treas Idx - Gross	(2.99%)	17.85%	9.94%	7.88%	-
SSgA Long US Treas Idx - Net	(3.00%)	17.83%	9.92%	7.85%	-
Blmbg Long Treas	(3.00%)	17.70%	9.88%	7.85%	7.80%
Below Investment Grade					
Gross	4.81%	5.74%	6.10%	8.37%	7.58%
Net	4.76%	5.53%	5.86%	8.06%	7.24%
Blmbg HY Corp 2% Issue	6.44%	7.05%	6.21%	8.57%	6.79%
Ares ND Credit Strategies Fd - Net	3.68%	3.29%	6.13%	-	-
Cerberus ND Private Credit Fd - Net	2.55%	8.58%	9.42%	-	-
S&P/LSTA Leveraged Loan B	3.78%	3.80%	4.50%	5.68%	4.71%
Goldman Sachs 2006 Offshore - Net	1.49%	7.96%	7.30%	15.85%	14.63%
Goldman Sachs Offshore V - Net	8.40%	37.27%	42.63%	17.63%	16.40%
PIMCO Bravo II Fund - Net	0.50%	(17.51%)	(3.77%)	1.46%	-
Blmbg HY Corp 2% Issue	6.44%	7.05%	6.21%	8.57%	6.79%
Loomis Sayles - Gross	7.58%	9.48%	6.30%	8.74%	7.14%
Loomis Sayles - Net	7.46%	8.96%	5.77%	8.20%	6.67%
Blmbg HY Corp 2% Issue	6.44%	7.05%	6.21%	8.57%	6.79%

(1) The product changed from Commingled Fund to Separate Account in March 2014.
(2) Libor-3 month through Feb. 28, 2014; Fund’s performance through March 31, 2014; Libor-3 month through June 30, 2018; Blmbg Aggregate thereafter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

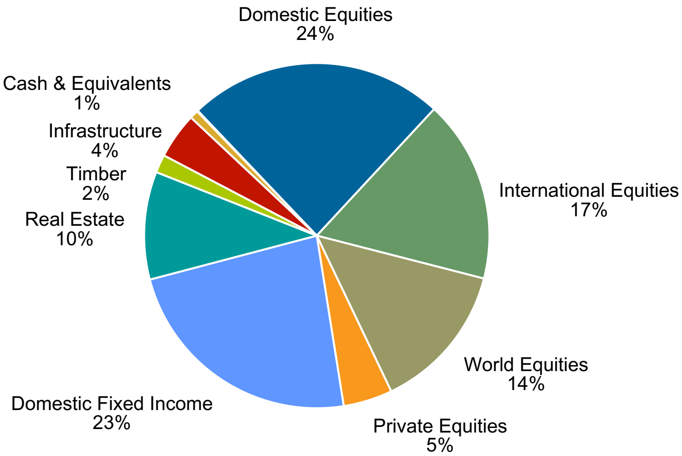
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Real Assets					
Gross	2.20%	3.53%	5.02%	5.93%	-
Net	2.11%	3.03%	4.58%	5.49%	-
Weighted Benchmark	1.06%	1.35%	3.94%	4.40%	-
Real Estate					
Gross	1.41%	1.66%	4.85%	7.00%	10.84%
Net	1.28%	1.04%	4.33%	6.48%	10.18%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Invesco Core Real Estate - Gross	(0.28%)	(0.94%)	4.12%	5.97%	9.58%
Invesco Core Real Estate - Net	(0.36%)	(1.27%)	3.80%	5.63%	9.19%
Invesco Asia RE Fund III - Net	5.51%	16.14%	31.41%	25.69%	-
Invesco Value Added Fd IV - Net	0.93%	1.65%	8.39%	9.11%	-
Invesco Value Added Fd V - Net	(0.58%)	1.69%	-	-	-
JP Morgan - Gross	2.10%	2.23%	5.45%	6.59%	10.73%
JP Morgan - Net	1.86%	1.01%	4.48%	5.62%	9.71%
JPM Greater European Opp Fd - Net	4.39%	(8.99%)	(23.32%)	(9.85%)	*******%)
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Other Real Assets					
Gross	3.44%	6.37%	-	-	-
Net	3.40%	6.05%	-	-	-
Weighted Benchmark	0.95%	1.02%	-	-	-
Infrastructure					
Gross	4.72%	9.04%	6.36%	6.96%	-
Net	4.66%	8.60%	5.90%	6.46%	-
ISQ Global Infrastructure II - Net	3.86%	9.58%	-	-	-
The Rohatyn Group - Net	(1.41%)	(16.51%)	(12.75%)	(3.92%)	(0.77%)
JP Morgan IIF - Gross	4.73%	9.70%	7.67%	7.55%	6.88%
JP Morgan IIF - Net	4.62%	8.86%	6.93%	6.78%	5.94%
Grosvenor Cust. Infrastructure - Net	4.65%	9.33%	5.14%	6.92%	-
Grosvenor Cust. Infrastructure II - Net	8.01%	14.05%	11.69%	6.90%	-
Benchmark(1)	1.06%	1.07%	3.03%	2.65%	2.03%
Macquarie Infras. Partners IV - Net	5.40%	11.16%	-	-	-
Benchmark(2)	1.06%	1.07%	-	-	-
Timber					
Net	0.32%	(0.12%)	2.80%	0.04%	-
TIR Teredo - Net	1.43%	1.54%	2.07%	0.86%	3.55%
TIR Springbank - Net	0.01%	(0.62%)	3.05%	(0.17%)	(1.05%)
NCREIF Timberland Index	0.58%	0.81%	1.77%	2.30%	4.55%
Cash & Cash Equivalents - Net	**0.02%**	**0.54%**	**1.55%**	**1.24%**	**0.66%**
Cash Account - Net	0.02%	0.54%	1.53%	1.24%	0.66%
Bank of ND - Net	0.03%	0.56%	1.54%	-	-
3-month Treasury Bill	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	9.59%	12.34%	8.49%	9.98%	8.63%
Net	9.53%	12.06%	8.24%	9.71%	8.28%
Target*	9.74%	11.97%	8.38%	9.26%	7.84%

* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg:HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.3% CPI All Urban Cons lagged 3 months, 3.3% NCREIF NFI-ODCE Eq Wt Net, 1.8% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.
(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.
(2) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

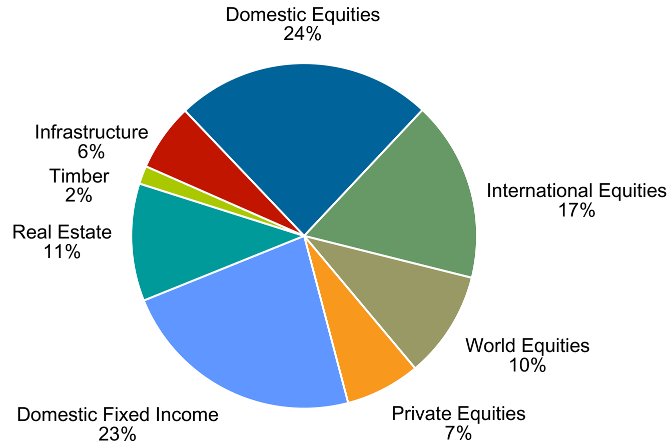
Actual vs Target Asset Allocation
As of December 31, 2020

The top left chart shows the Fund's asset allocation as of December 31, 2020. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.

Actual Asset Allocation

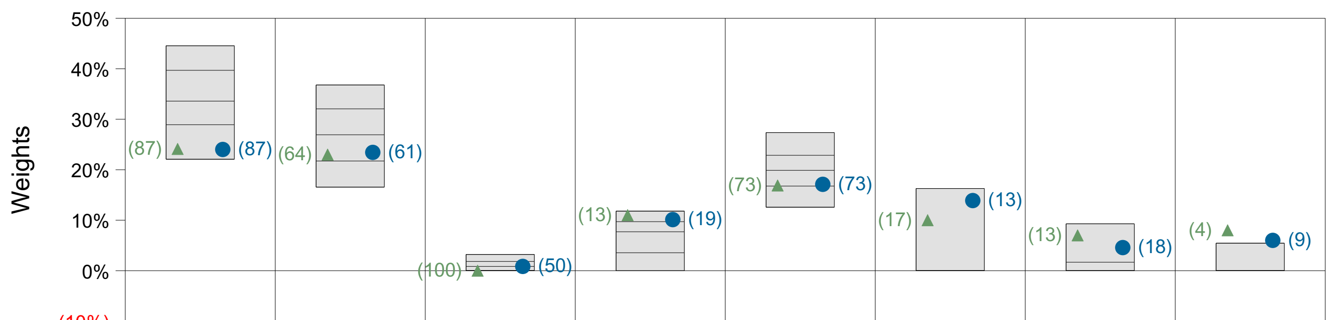


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	881,200	24.0%	24.1%	(0.1%)	(3,808)
International Equities	627,758	17.1%	16.9%	0.2%	8,252
World Equities	509,729	13.9%	10.0%	3.9%	142,775
Private Equities	167,920	4.6%	7.0%	(2.4%)	(88,948)
Domestic Fixed Income	859,955	23.4%	23.0%	0.4%	15,960
Real Estate	371,330	10.1%	11.0%	(0.9%)	(32,320)
Timber	62,355	1.7%	1.7%	0.0%	0
Infrastructure	158,125	4.3%	6.3%	(2.0%)	(73,083)
Cash & Equivalents	31,172	0.8%	0.0%	0.8%	31,172
Total	3,669,545	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



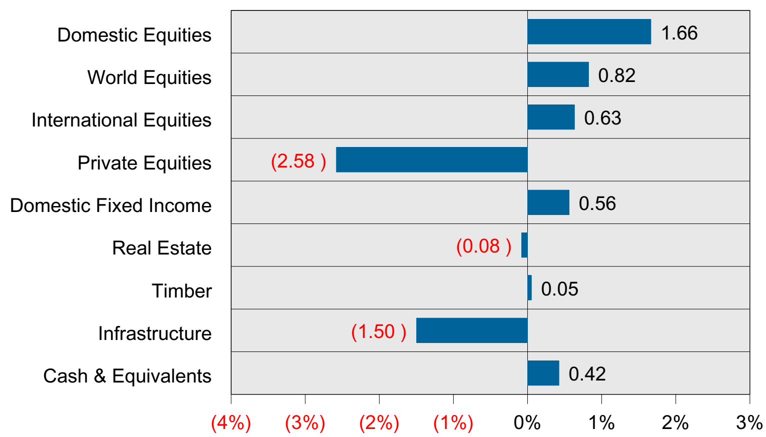
	Domestic Equities	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equities	World Equities	Private Equities	Real Assets
10th Percentile	44.56	36.79	3.22	11.81	27.36	16.28	9.29	5.45
25th Percentile	39.70	32.06	1.84	9.71	22.86	0.00	1.68	0.00
Median	33.59	26.93	0.85	7.71	19.88	0.00	0.00	0.00
75th Percentile	28.92	21.73	0.04	3.56	16.76	0.00	0.00	0.00
90th Percentile	22.08	16.55	0.00	0.00	12.57	0.00	0.00	0.00
Fund ●	24.01	23.43	0.85	10.12	17.11	13.89	4.58	6.01
Target ▲	24.12	23.00	0.00	11.00	16.88	10.00	7.00	8.00
% Group Invested	94.07%	98.52%	77.04%	81.48%	90.37%	19.26%	25.93%	18.52%

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

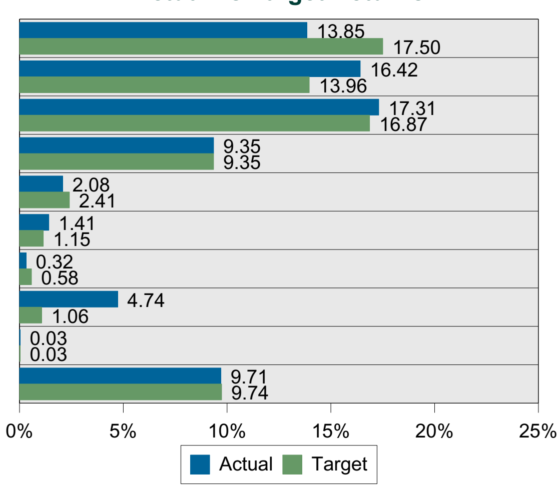
Quarterly Total Fund Relative Attribution - December 31, 2020

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

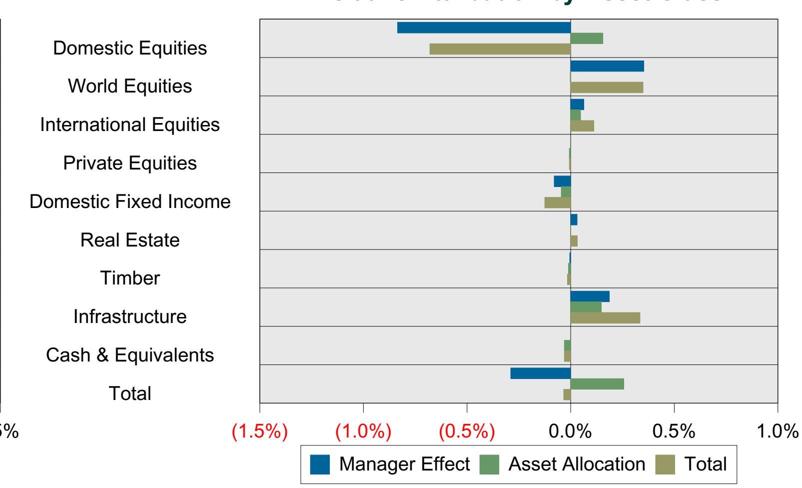
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2020

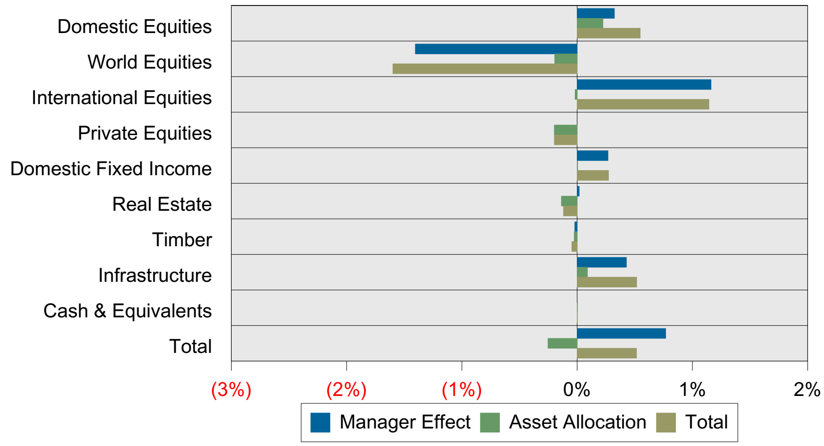
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	13.85%	17.50%	(0.84%)	0.16%	(0.68%)
World Equities	15%	14%	16.42%	13.96%	0.35%	(0.00%)	0.35%
International Equities	16%	15%	17.31%	16.87%	0.06%	0.05%	0.11%
Private Equities	4%	7%	9.35%	9.35%	0.00%	(0.01%)	(0.01%)
Domestic Fixed Income	24%	23%	2.08%	2.41%	(0.08%)	(0.05%)	(0.13%)
Real Estate	11%	11%	1.41%	1.15%	0.03%	0.00%	0.03%
Timber	2%	2%	0.32%	0.58%	(0.00%)	(0.01%)	(0.02%)
Infrastructure	5%	6%	4.74%	1.06%	0.19%	0.15%	0.33%
Cash & Equivalents	0%	0%	0.03%	0.03%	0.00%	(0.03%)	(0.03%)
Total			**9.71% =**	**9.74% +**	**(0.29%) +**	**0.26%**	**(0.03%)**

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

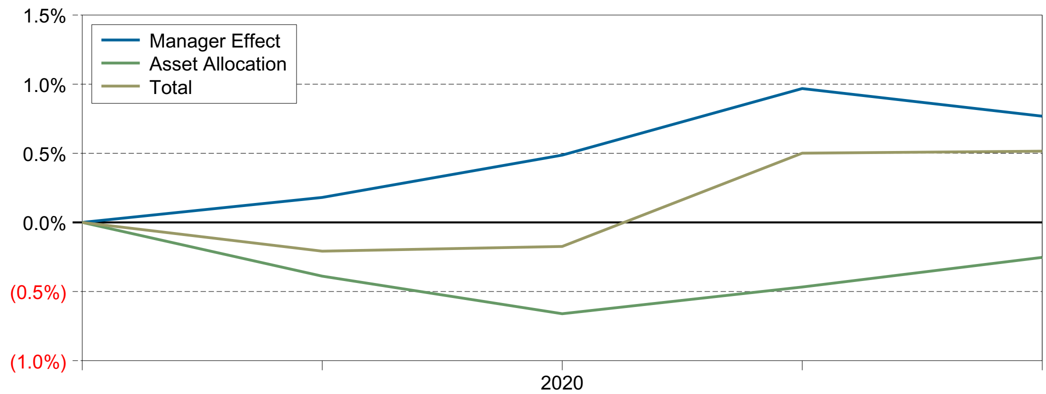
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

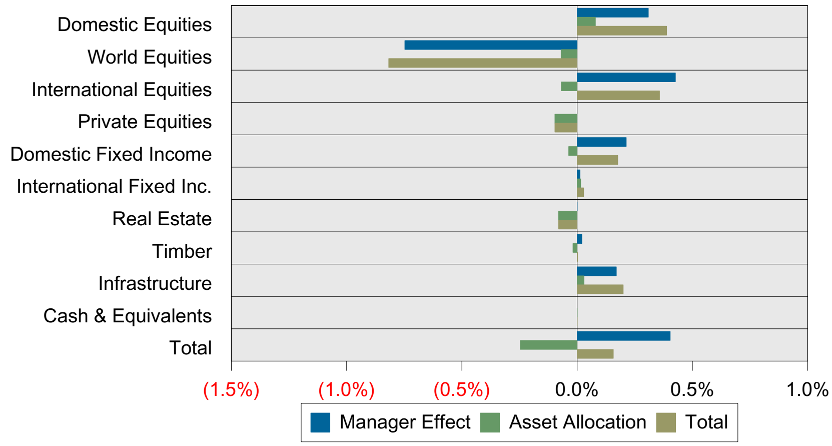
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	22.89%	20.78%	0.32%	0.22%	0.55%
World Equities	15%	15%	6.61%	15.90%	(1.40%)	(0.19%)	(1.60%)
International Equities	15%	15%	18.17%	10.26%	1.16%	(0.02%)	1.14%
Private Equities	4%	7%	12.24%	12.24%	0.00%	(0.20%)	(0.20%)
Domestic Fixed Income	24%	23%	8.59%	7.59%	0.27%	0.00%	0.27%
Real Estate	11%	11%	1.66%	1.60%	0.02%	(0.14%)	(0.12%)
Timber	2%	2%	(0.12%)	0.81%	(0.02%)	(0.03%)	(0.05%)
Infrastructure	5%	6%	9.06%	1.07%	0.43%	0.09%	0.52%
Cash & Equivalents	0%	0%	0.55%	0.55%	0.00%	0.00%	0.00%
Total			**12.47% =**	**11.96% +**	**0.77% +**	**(0.25%)**	**0.52%**

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

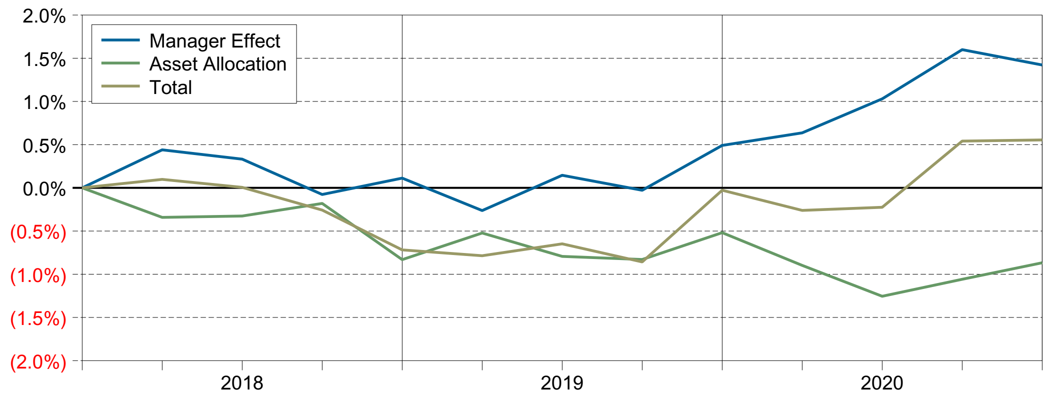
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

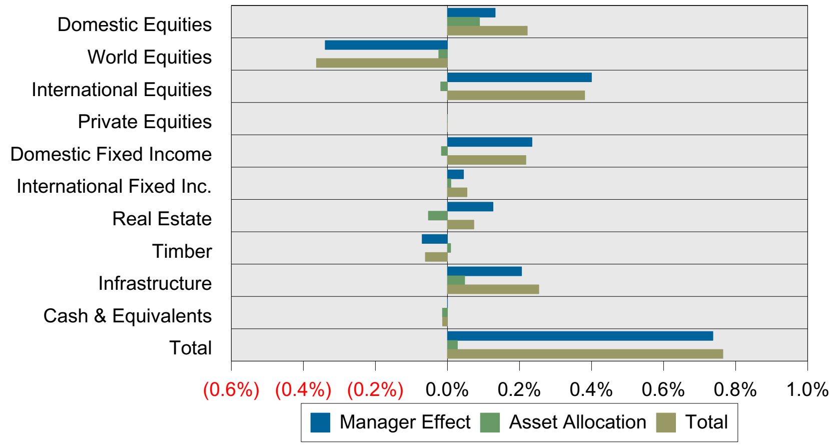
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.39%	13.79%	0.31%	0.08%	0.39%
World Equities	16%	16%	5.74%	10.54%	(0.75%)	(0.07%)	(0.82%)
International Equities	16%	14%	7.52%	4.79%	0.43%	(0.07%)	0.36%
Private Equities	4%	7%	8.22%	8.22%	0.00%	(0.10%)	(0.10%)
Domestic Fixed Income	23%	23%	6.57%	5.69%	0.21%	(0.04%)	0.18%
International Fixed Inc.	0%	0%	-	-	0.01%	0.02%	0.03%
Real Estate	11%	11%	4.85%	4.89%	0.00%	(0.08%)	(0.08%)
Timber	2%	2%	2.80%	1.77%	0.02%	(0.02%)	0.00%
Infrastructure	5%	6%	6.37%	3.03%	0.17%	0.03%	0.20%
Cash & Equivalents	1%	0%	1.58%	1.58%	0.00%	0.00%	0.00%
Total			**8.53% =**	**8.37% +**	**0.40% +**	**(0.25%)**	**0.16%**

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

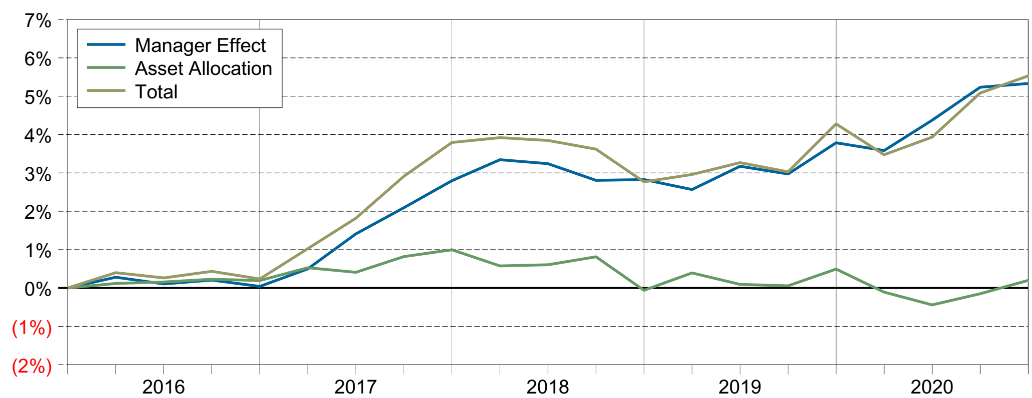
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

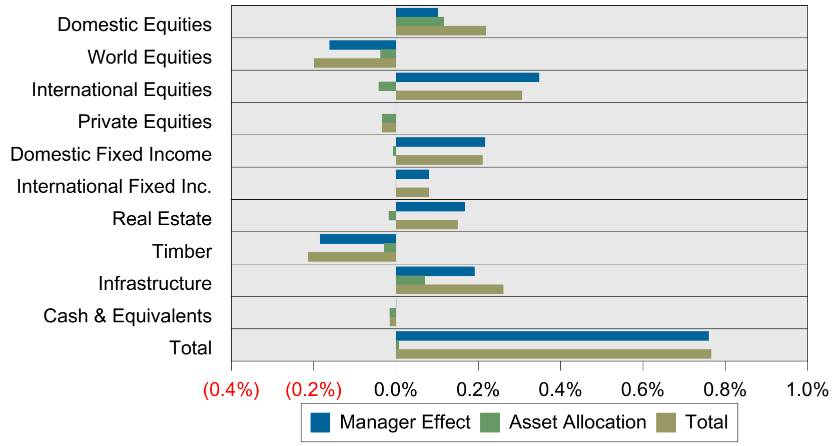
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.82%	15.10%	0.13%	0.09%	0.22%
World Equities	16%	16%	9.90%	12.19%	(0.34%)	(0.02%)	(0.36%)
International Equities	16%	14%	11.28%	8.70%	0.40%	(0.02%)	0.38%
Private Equities	3%	7%	6.43%	6.43%	0.00%	0.00%	0.00%
Domestic Fixed Income	21%	21%	6.78%	5.67%	0.23%	(0.02%)	0.22%
International Fixed Inc.	2%	2%	-	-	0.04%	0.01%	0.05%
Real Estate	11%	11%	7.00%	5.91%	0.13%	(0.05%)	0.07%
Timber	2%	3%	0.04%	2.30%	(0.07%)	0.01%	(0.06%)
Infrastructure	5%	6%	6.97%	2.65%	0.21%	0.05%	0.25%
Cash & Equivalents	1%	0%	1.26%	1.24%	0.00%	(0.01%)	(0.01%)
Total			**10.04% =**	**9.28% +**	**0.74% +**	**0.03%**	**0.76%**

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

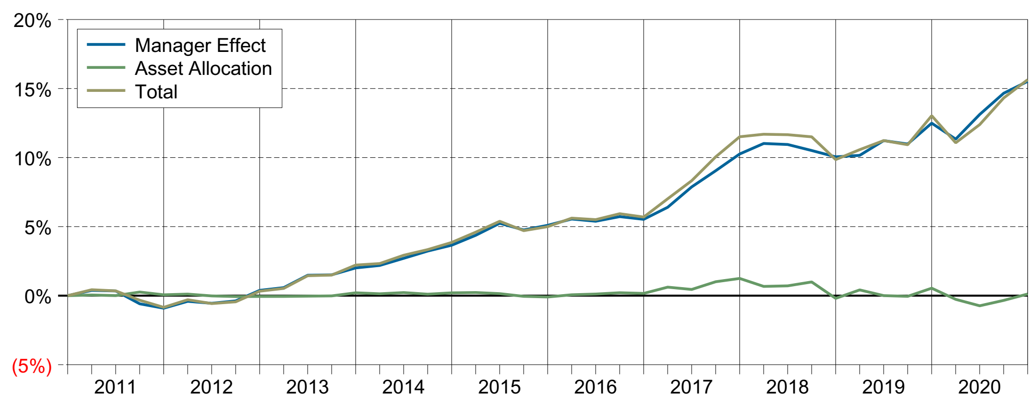
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

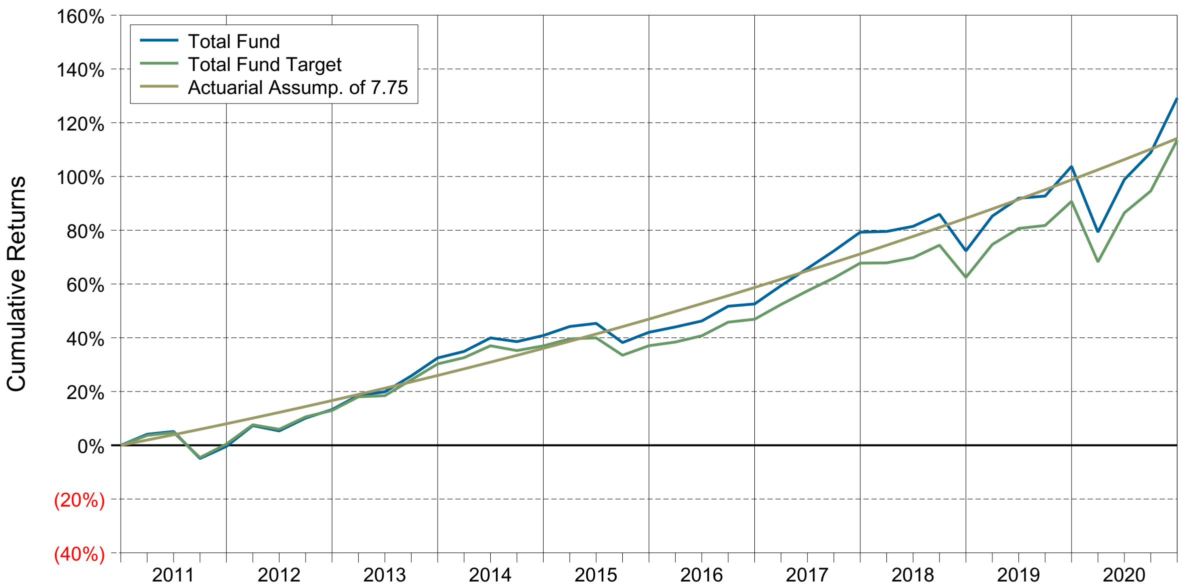
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	23%	14.10%	13.44%	0.10%	0.12%	0.22%
World Equities	13%	13%	-	-	(0.16%)	(0.04%)	(0.20%)
International Equities	16%	15%	7.21%	4.95%	0.35%	(0.04%)	0.31%
Private Equities	4%	6%	4.45%	4.45%	0.00%	(0.03%)	(0.03%)
Domestic Fixed Income	20%	20%	6.13%	4.84%	0.22%	(0.01%)	0.21%
International Fixed Inc.	4%	4%	-	-	0.08%	(0.00%)	0.08%
Real Estate	10%	10%	10.86%	9.00%	0.17%	(0.02%)	0.15%
Timber	3%	3%	-	-	(0.18%)	(0.03%)	(0.21%)
Infrastructure	4%	5%	-	-	0.19%	0.07%	0.26%
Cash & Equivalents	1%	1%	0.67%	0.65%	0.00%	(0.02%)	(0.01%)
Total			**8.65% =**	**7.88% +**	**0.76% +**	**0.01%**	**0.77%**

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

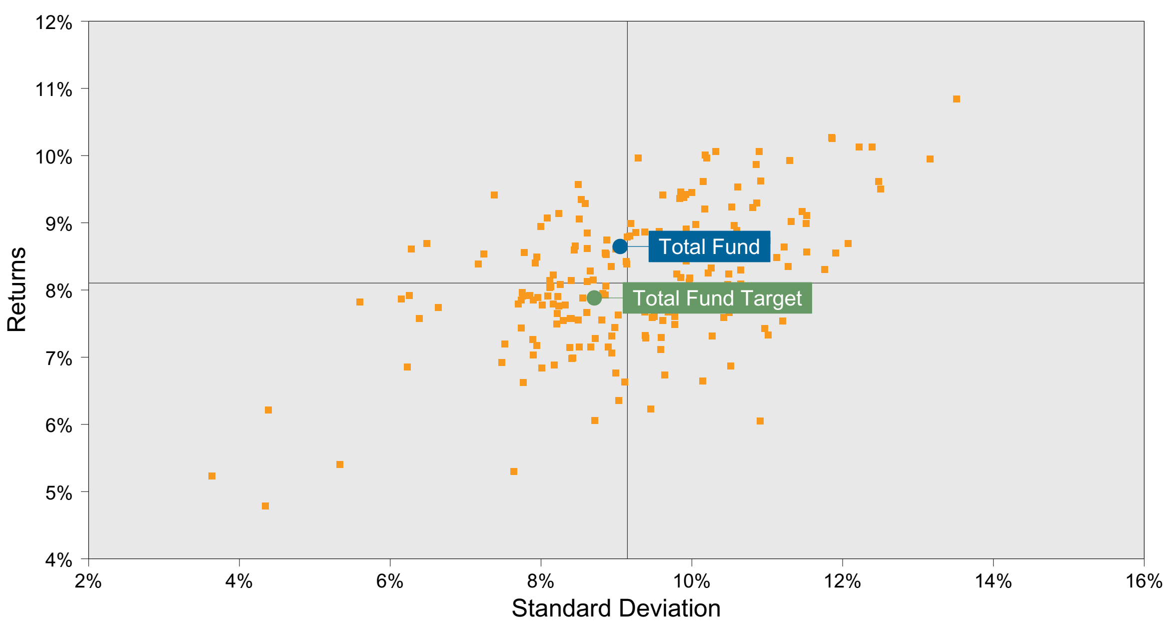
Cumulative Performance Relative to Target

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

Cumulative Returns Actual vs Target



Ten Year Annualized Risk vs Return



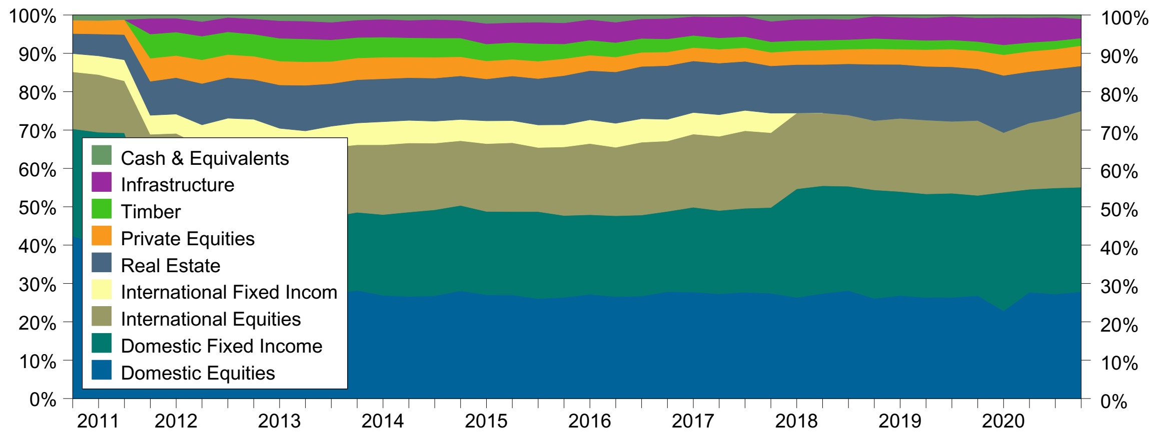
Squares represent membership of the Callan Public Fund Sponsor Database

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

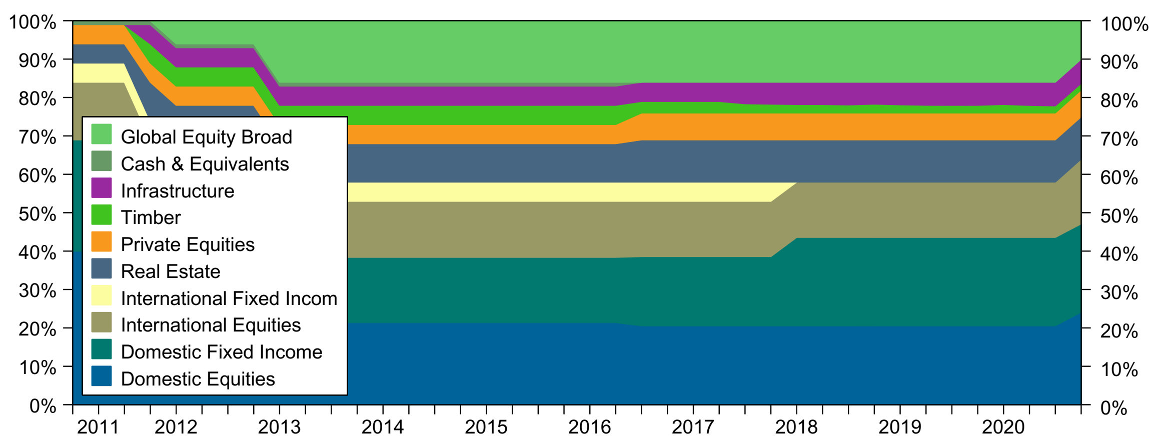
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

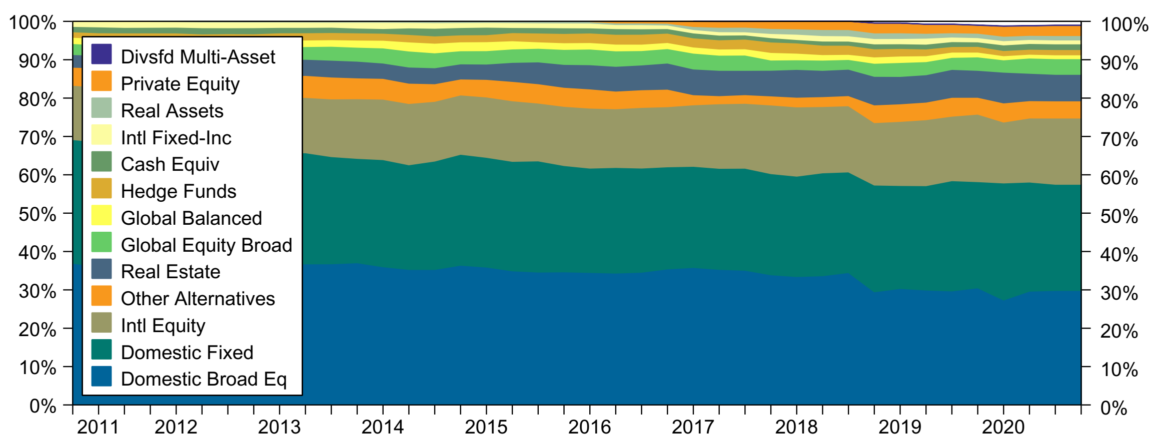
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation

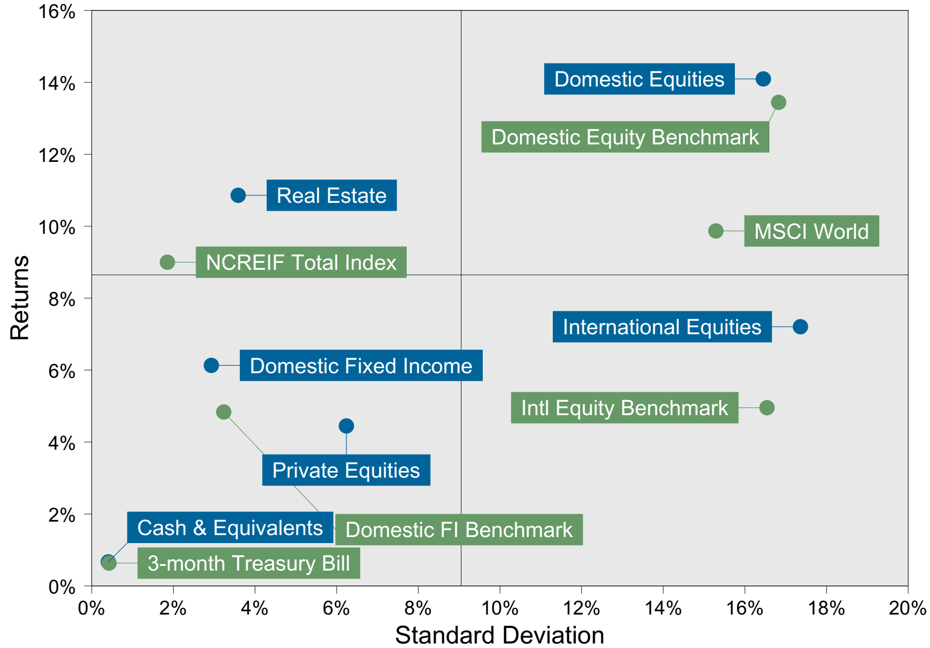


* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

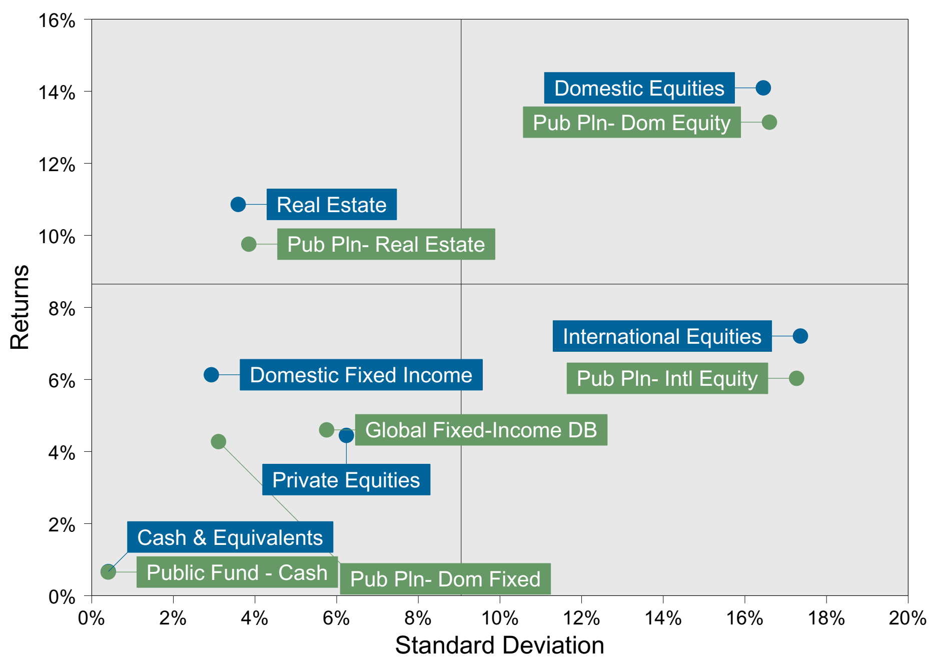
Asset Class Risk and Return

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

Ten Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



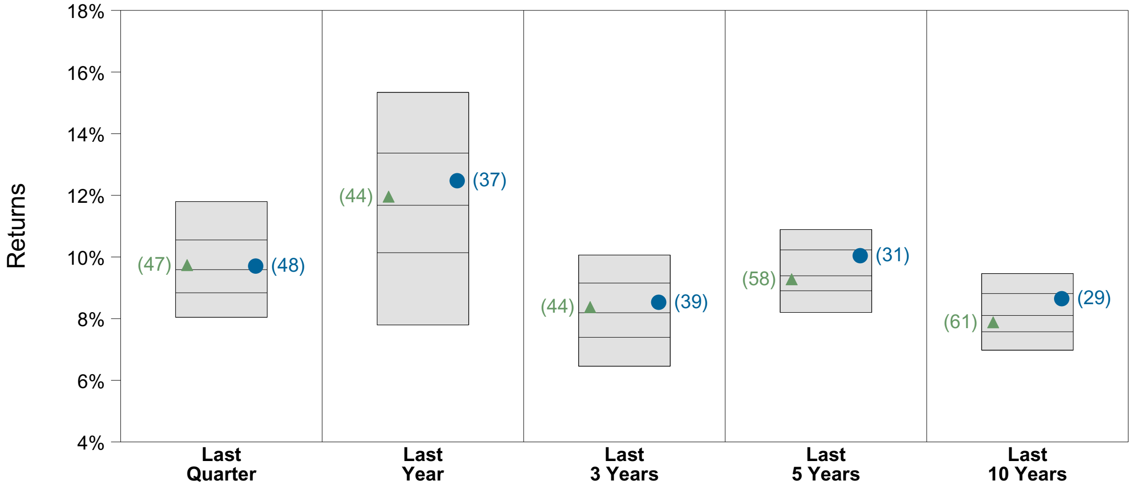
Ten Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

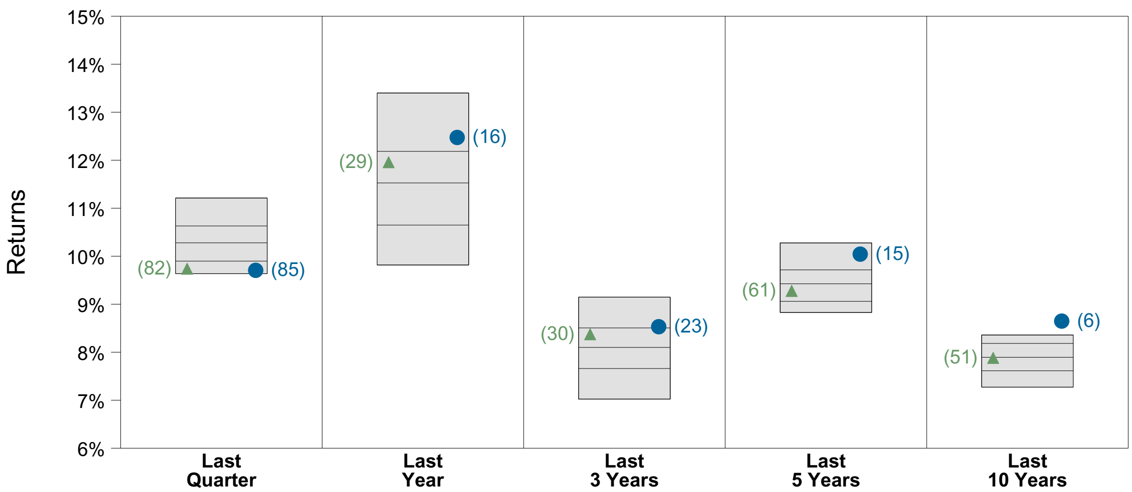
The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended December 31, 2020. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.80	15.34	10.06	10.89	9.46
25th Percentile	10.55	13.37	9.15	10.23	8.81
Median	9.59	11.68	8.19	9.39	8.10
75th Percentile	8.84	10.14	7.39	8.91	7.57
90th Percentile	8.04	7.80	6.46	8.20	6.98
Total Fund ●	9.71	12.47	8.53	10.04	8.65
Policy Target ▲	9.74	11.96	8.37	9.28	7.88

Asset Allocation Adjusted Ranking



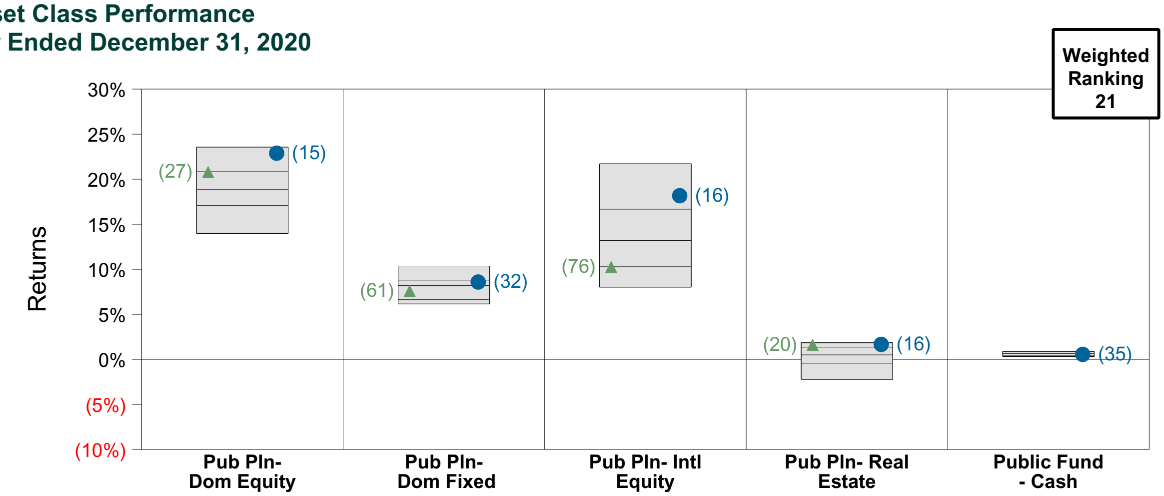
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.21	13.40	9.15	10.28	8.36
25th Percentile	10.63	12.18	8.51	9.72	8.18
Median	10.28	11.53	8.10	9.42	7.89
75th Percentile	9.90	10.65	7.66	9.06	7.61
90th Percentile	9.64	9.82	7.02	8.83	7.27
Total Fund ●	9.71	12.47	8.53	10.04	8.65
Policy Target ▲	9.74	11.96	8.37	9.28	7.88

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

Asset Class Rankings

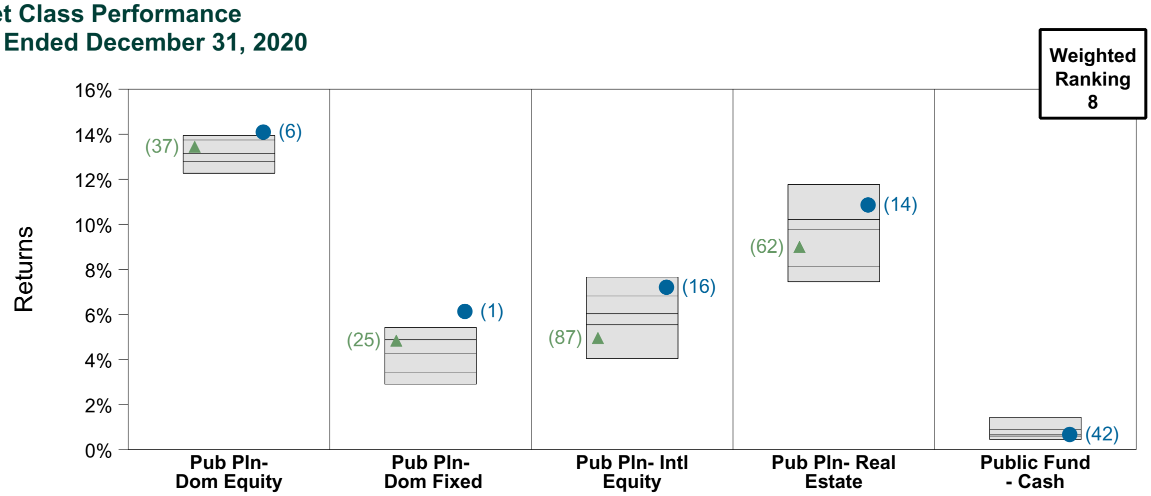
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	23.56	10.36	21.71	1.85	0.87
25th Percentile	20.83	8.79	16.67	1.35	0.65
Median	18.84	8.19	13.20	0.50	0.45
75th Percentile	17.07	6.63	10.28	(0.43)	0.35
90th Percentile	13.98	6.15	8.02	(2.22)	0.31
Asset Class Composite ●	22.89	8.59	18.17	1.66	0.55
Composite Benchmark ▲	20.78	7.59	10.26	1.60	-

Total Asset Class Performance
Ten Years Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	13.94	5.42	7.66	11.77	1.43
25th Percentile	13.74	4.88	6.82	10.21	0.89
Median	13.14	4.28	6.03	9.76	0.65
75th Percentile	12.78	3.44	5.54	8.14	0.60
90th Percentile	12.27	2.90	4.04	7.45	0.45
Asset Class Composite ●	14.10	6.13	7.21	10.86	0.67
Composite Benchmark ▲	13.44	4.84	4.95	9.00	-

* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Class Allocation

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	**$2,186,607,017**	**59.59%**	**$(53,943,669)**	**$295,516,717**	**$1,945,033,968**	**57.92%**
Public Equities	**$2,018,686,545**	**55.01%**	**$(60,831,494)**	**$281,156,351**	**$1,798,361,688**	**53.55%**
World Equities	**$509,729,206**	**13.89%**	**$(72,084,220)**	**$81,178,426**	**$500,635,001**	**14.91%**
Domestic Equities	**$881,199,525**	**24.01%**	**$(6,601,791)**	**$108,996,378**	**$778,804,938**	**23.19%**
Large Cap	686,485,218	18.71%	(6,688,440)	74,217,965	618,955,693	18.43%
Small Cap	194,714,306	5.31%	86,649	34,778,413	159,849,245	4.76%
International Equities	**$627,757,814**	**17.11%**	**$17,854,517**	**$90,981,548**	**$518,921,749**	**15.45%**
Developed	470,474,807	12.82%	17,606,709	64,591,764	388,276,335	11.56%
Emerging Markets	157,283,007	4.29%	247,808	26,389,784	130,645,415	3.89%
Private Equities	**$167,920,472**	**4.58%**	**$6,887,826**	**$14,360,365**	**$146,672,280**	**4.37%**
Global Fixed Income	**$859,954,825**	**23.43%**	**$53,104,598**	**$16,694,925**	**$790,155,303**	**23.53%**
Domestic Fixed Income	**$859,954,825**	**23.43%**	**$53,104,598**	**$16,694,925**	**$790,155,303**	**23.53%**
Investment Grade	611,274,898	16.66%	43,680,446	5,812,312	561,782,140	16.73%
Below Investment Grade	248,679,927	6.78%	9,424,152	10,882,612	228,373,163	6.80%
Global Real Assets	**$591,810,596**	**16.13%**	**$(27,355,982)**	**$12,969,153**	**$606,197,425**	**18.05%**
Real Estate	**$371,329,845**	**10.12%**	**$(2,907,404)**	**$5,225,818**	**$369,011,431**	**10.99%**
Other Real Assets	**$220,480,750**	**6.01%**	**$(24,448,578)**	**$7,743,335**	**$237,185,994**	**7.06%**
Infrastructure	158,125,479	4.31%	(24,448,578)	7,544,499	175,029,558	5.21%
Timber	62,355,271	1.70%	0	198,836	62,156,436	1.85%
Cash	**$31,172,080**	**0.85%**	**$14,462,479**	**$5,238**	**$16,704,363**	**0.50%**
Total Fund	**$3,669,544,518**	**100.0%**	**$(13,732,574)**	**$325,186,032**	**$3,358,091,060**	**100.0%**

PLEASE REFER TO PAGES 29-31 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equities					
Gross	15.16%	16.10%	9.95%	12.32%	-
Net	15.09%	15.83%	9.72%	12.08%	-
Weighted Benchmark	15.58%	16.48%	10.37%	12.02%	-
Public Equities					
Gross	15.61%	16.62%	-	-	-
Net	15.54%	16.33%	-	-	-
Weighted Benchmark	16.33%	16.38%	-	-	-
World Equities					
Gross	16.42%	6.61%	5.74%	9.90%	-
Net	16.32%	6.24%	5.38%	9.52%	-
MSCI World	13.96%	15.90%	10.54%	12.19%	9.87%
Domestic Equities					
Gross	13.85%	22.89%	15.39%	15.82%	14.10%
Net	13.79%	22.69%	15.20%	15.63%	13.87%
Weighted Benchmark	17.50%	20.78%	13.79%	15.10%	13.44%
Large Cap					
Gross	12.04%	26.02%	16.87%	16.68%	14.87%
Net	12.01%	25.95%	16.77%	16.56%	14.69%
Benchmark(1)	13.69%	20.96%	14.82%	15.60%	14.08%
Small Cap Equity					
Gross	21.10%	12.41%	10.50%	12.92%	11.48%
Net	20.93%	11.79%	10.05%	12.47%	11.14%
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	11.20%
International Equities					
Gross	17.31%	18.17%	7.52%	11.28%	7.21%
Net	17.24%	17.81%	7.29%	11.07%	6.94%
Weighted Benchmark	16.87%	10.26%	4.79%	8.70%	4.95%
Developed					
Gross	16.37%	15.59%	7.12%	10.20%	7.33%
Net	16.32%	15.35%	6.90%	9.96%	7.05%
Benchmark(2)	15.85%	7.59%	4.22%	7.32%	5.33%
Emerging Markets					
Gross	20.17%	26.39%	8.75%	14.41%	6.27%
Net	20.05%	25.66%	8.54%	14.28%	6.03%
Benchmark(3)	19.70%	18.31%	6.18%	12.81%	3.65%
Private Equities					
Net	9.35%	12.24%	8.21%	6.43%	4.41%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.
(2) 50% Hedged EAFE through 3/31/2011, MSCI EAFE through 6/30/2016; MSCI World ex-US thereafter.
(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 32-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Fixed Income					
Gross	2.08%	8.59%	6.82%	6.98%	-
Net	2.06%	8.46%	6.68%	6.79%	-
Weighted Benchmark	2.40%	7.59%	5.97%	5.88%	-
Domestic Fixed Income					
Gross	2.08%	8.59%	6.57%	6.78%	6.13%
Net	2.06%	8.46%	6.43%	6.61%	5.92%
Weighted Benchmark	2.41%	7.59%	5.69%	5.67%	4.84%
Inv. Grade Fixed Income					
Gross	1.00%	9.52%	6.64%	6.02%	5.45%
Net	0.99%	9.42%	6.54%	5.90%	5.31%
Blmbg Aggregate Index	0.67%	7.51%	5.34%	4.44%	3.84%
Below Inv. Grade Fixed Income					
Gross	4.75%	5.64%	6.08%	8.36%	7.57%
Net	4.70%	5.44%	5.84%	8.05%	7.19%
Blmbg HY Corp 2% Issue	6.44%	7.05%	6.21%	8.57%	6.79%
Global Real Assets					
Gross	2.19%	3.49%	5.02%	5.99%	-
Net	2.09%	2.98%	4.58%	5.55%	-
Weighted Benchmark	1.07%	1.36%	3.97%	4.43%	-
Real Estate					
Gross	1.41%	1.66%	4.85%	7.00%	10.86%
Net	1.29%	1.04%	4.33%	6.48%	10.32%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Other Real Assets					
Gross	3.49%	6.47%	-	-	-
Net	3.45%	6.14%	-	-	-
Weighted Benchmark	0.95%	1.02%	-	-	-
Infrastructure					
Gross	4.74%	9.06%	6.37%	6.97%	-
Net	4.68%	8.62%	5.91%	6.47%	-
Benchmark(1)	1.06%	1.07%	3.03%	2.65%	-
Timber					
Net	0.32%	(0.12%)	2.80%	0.04%	-
NCREIF Timberland Index	0.58%	0.81%	1.77%	2.30%	4.55%
Cash & Equivalents - Net	**0.03%**	**0.55%**	**1.58%**	**1.26%**	**0.67%**
3-month Treasury Bill	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	9.71%	12.47%	8.53%	10.04%	8.65%
Net	9.64%	12.19%	8.28%	9.77%	8.34%
Target*	9.74%	11.96%	8.37%	9.28%	7.88%

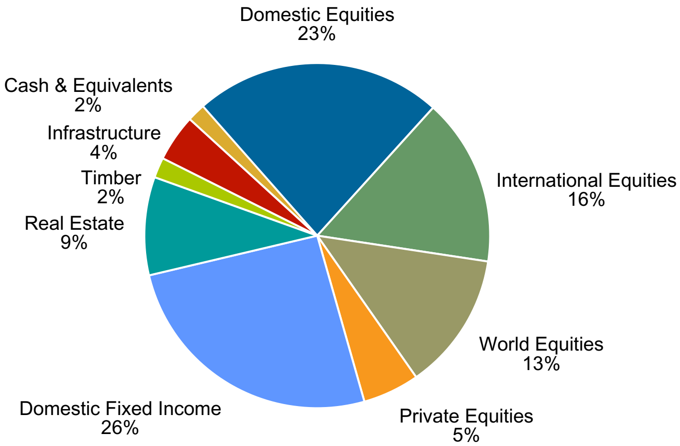
* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg:HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.2% NCREIF NFI-ODCE Eq Wt Net, 3.2% CPI All Urban Cons lagged 3 months and 1.7% NCREIF Timberland Index.
(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

PLEASE REFER TO PAGES 32-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

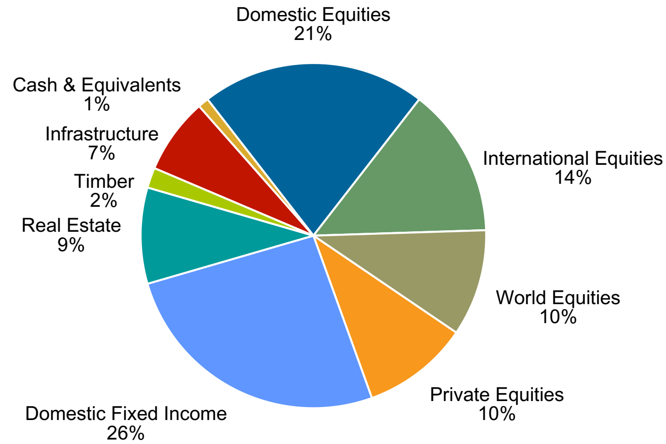
Actual vs Target Asset Allocation
As of December 31, 2020

The top left chart shows the Fund's asset allocation as of December 31, 2020. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.

Actual Asset Allocation

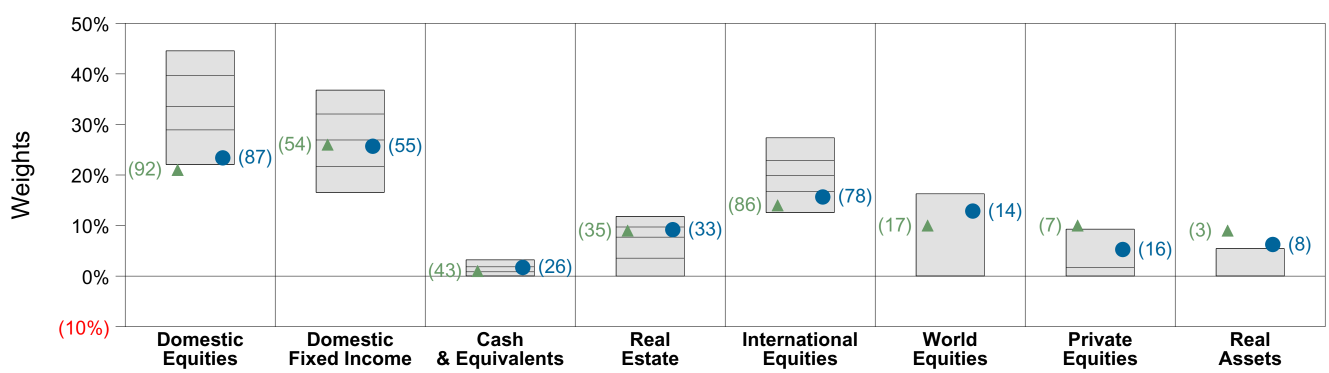


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	691,129	23.4%	21.0%	2.4%	70,569
International Equities	462,543	15.7%	14.0%	1.7%	48,837
World Equities	380,106	12.9%	10.0%	2.9%	84,601
Private Equities	155,476	5.3%	10.0%	(4.7%)	(140,029)
Domestic Fixed Income	759,077	25.7%	26.0%	(0.3%)	(9,235)
Real Estate	271,428	9.2%	9.0%	0.2%	5,474
Timber	55,660	1.9%	1.9%	0.0%	0
Infrastructure	129,203	4.4%	7.1%	(2.7%)	(81,091)
Cash & Equivalents	50,424	1.7%	1.0%	0.7%	20,874
Total	2,955,047	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



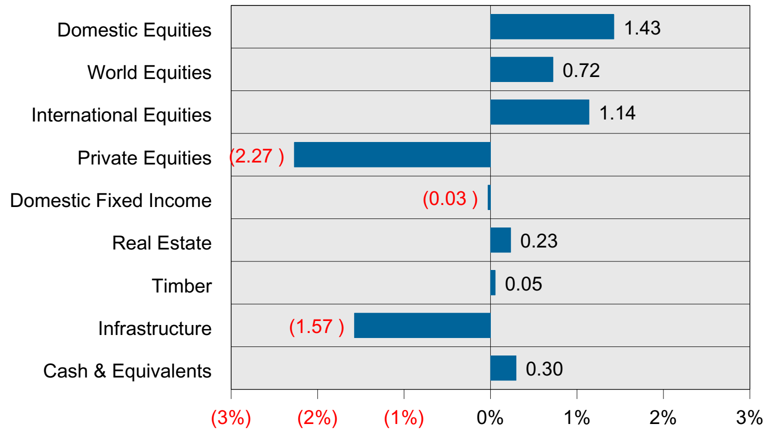
	Domestic Equities	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equities	World Equities	Private Equities	Real Assets
10th Percentile	44.56	36.79	3.22	11.81	27.36	16.28	9.29	5.45
25th Percentile	39.70	32.06	1.84	9.71	22.86	0.00	1.68	0.00
Median	33.59	26.93	0.85	7.71	19.88	0.00	0.00	0.00
75th Percentile	28.92	21.73	0.04	3.56	16.76	0.00	0.00	0.00
90th Percentile	22.08	16.55	0.00	0.00	12.57	0.00	0.00	0.00
Fund ●	23.39	25.69	1.71	9.19	15.65	12.86	5.26	6.26
Target ▲	21.00	26.00	1.00	9.00	14.00	10.00	10.00	9.00
% Group Invested	94.07%	98.52%	77.04%	81.48%	90.37%	19.26%	25.93%	18.52%

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

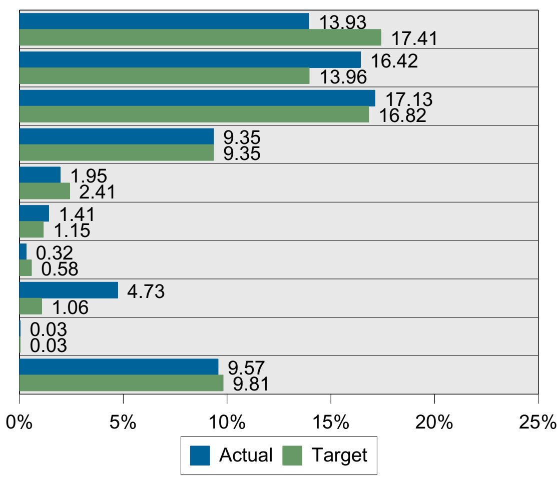
Quarterly Total Fund Relative Attribution - December 31, 2020

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

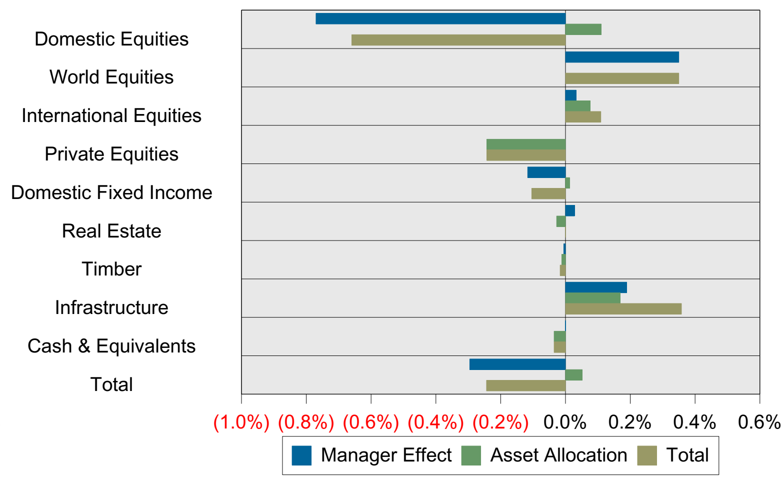
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2020

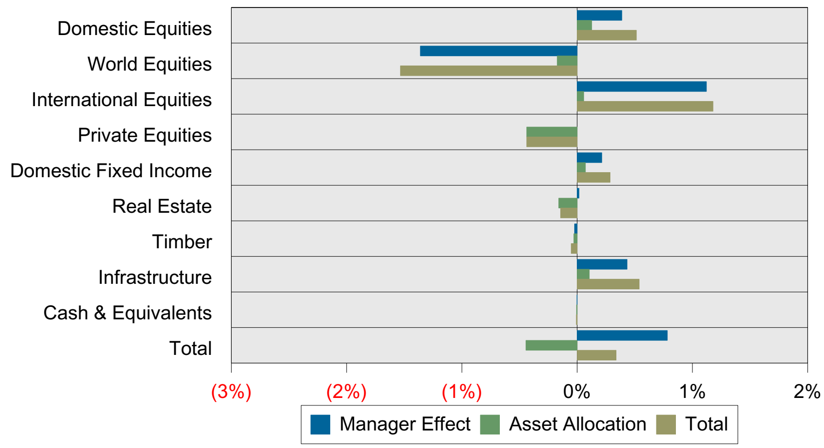
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	13.93%	17.41%	(0.77%)	0.11%	(0.66%)
World Equities	15%	14%	16.42%	13.96%	0.35%	0.00%	0.35%
International Equities	15%	14%	17.13%	16.82%	0.03%	0.08%	0.11%
Private Equities	5%	7%	9.35%	9.35%	0.00%	(0.24%)	(0.24%)
Domestic Fixed Income	24%	24%	1.95%	2.41%	(0.12%)	0.01%	(0.10%)
Real Estate	10%	10%	1.41%	1.15%	0.03%	(0.03%)	0.00%
Timber	2%	2%	0.32%	0.58%	(0.01%)	(0.01%)	(0.02%)
Infrastructure	5%	6%	4.73%	1.06%	0.19%	0.17%	0.36%
Cash & Equivalents	1%	1%	0.03%	0.03%	(0.00%)	(0.04%)	(0.04%)
Total			**9.57% =**	**9.81% +**	**(0.30%) +**	**0.05%**	**(0.24%)**

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

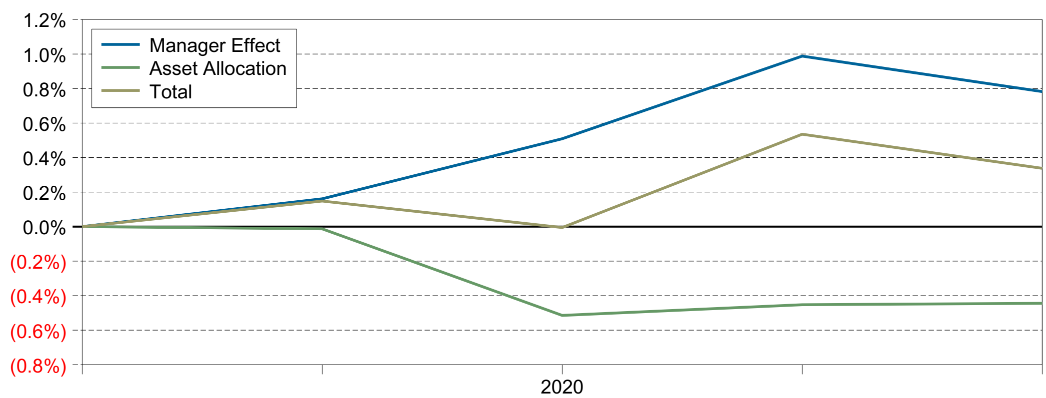
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

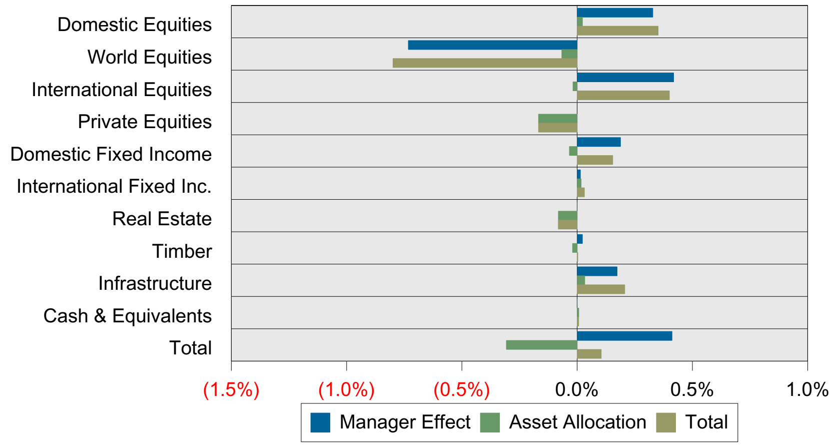
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	22%	21%	23.09%	20.82%	0.39%	0.13%	0.51%
World Equities	15%	15%	6.62%	15.90%	(1.36%)	(0.17%)	(1.53%)
International Equities	15%	14%	17.62%	9.87%	1.12%	0.06%	1.18%
Private Equities	5%	6%	12.24%	12.24%	0.00%	(0.44%)	(0.44%)
Domestic Fixed Income	24%	23%	8.39%	7.59%	0.21%	0.07%	0.29%
Real Estate	10%	10%	1.66%	1.60%	0.02%	(0.16%)	(0.14%)
Timber	2%	2%	(0.12%)	0.81%	(0.02%)	(0.03%)	(0.05%)
Infrastructure	5%	6%	9.06%	1.07%	0.43%	0.11%	0.54%
Cash & Equivalents	1%	1%	0.55%	0.67%	(0.00%)	(0.01%)	(0.01%)
Total			**12.33%**	**= 12.00%**	**+ 0.78%**	**+ (0.44%)**	**0.34%**

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

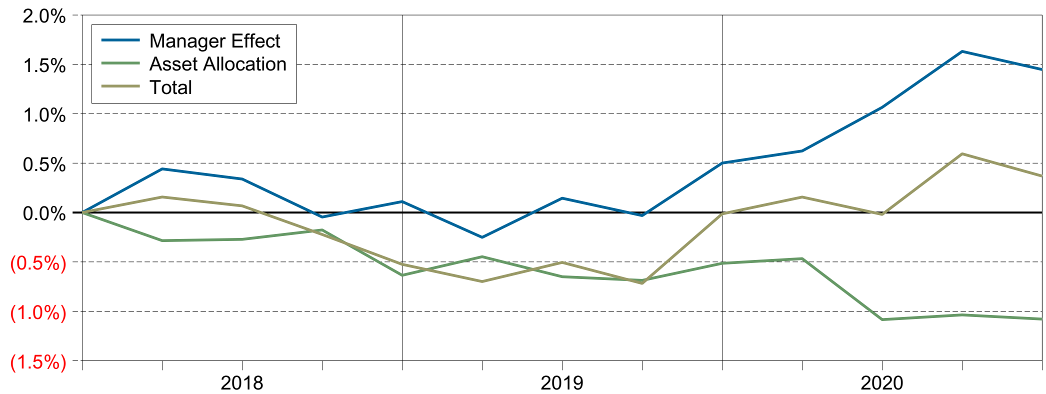
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

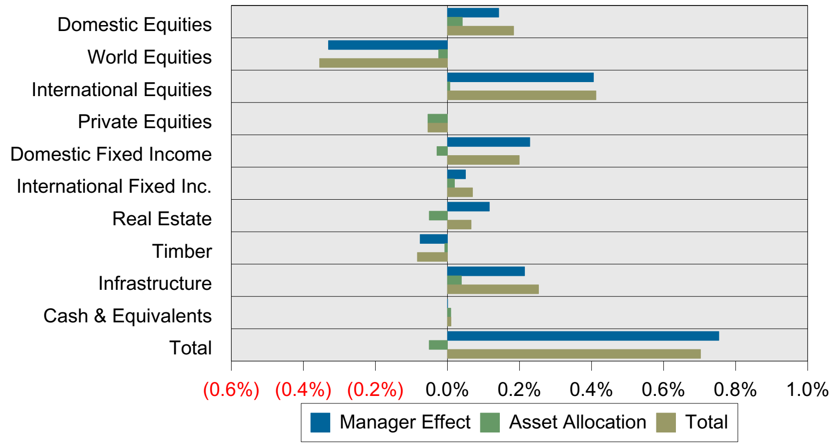
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.48%	13.83%	0.33%	0.02%	0.35%
World Equities	16%	16%	5.74%	10.54%	(0.73%)	(0.07%)	(0.80%)
International Equities	15%	15%	7.43%	4.72%	0.42%	(0.02%)	0.40%
Private Equities	4%	6%	8.21%	8.21%	0.00%	(0.17%)	(0.17%)
Domestic Fixed Income	23%	23%	6.45%	5.66%	0.19%	(0.03%)	0.15%
International Fixed Inc.	0%	0%	-	-	0.01%	0.02%	0.03%
Real Estate	10%	10%	4.85%	4.89%	(0.00%)	(0.08%)	(0.08%)
Timber	2%	2%	2.80%	1.77%	0.02%	(0.02%)	0.00%
Infrastructure	5%	6%	6.37%	3.03%	0.17%	0.03%	0.21%
Cash & Equivalents	1%	1%	1.58%	1.60%	(0.00%)	0.01%	0.01%
Total			**8.49% =**	**8.39% +**	**0.41% +**	**(0.31%)**	**0.10%**

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

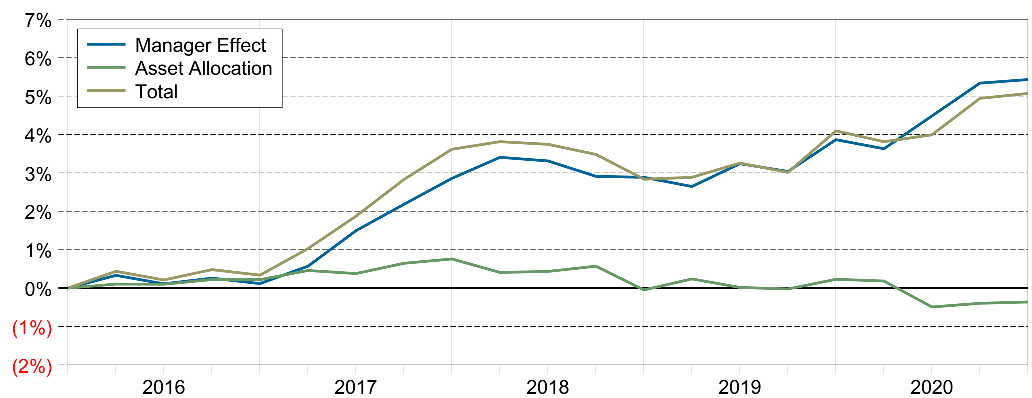
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

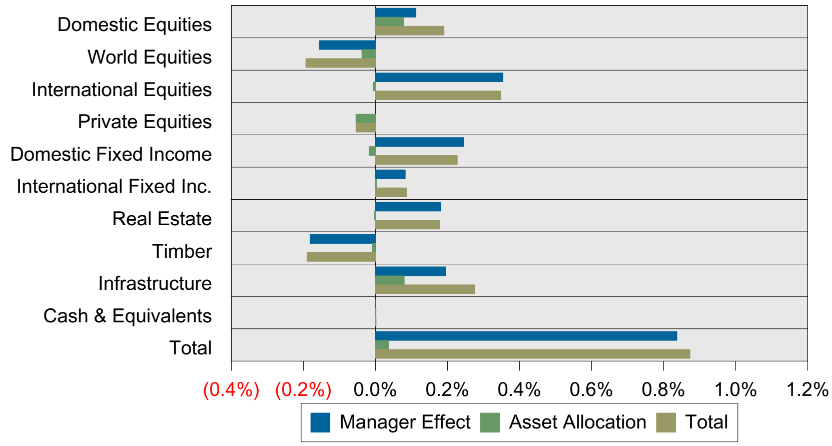
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	15.87%	15.13%	0.14%	0.04%	0.18%
World Equities	16%	16%	9.91%	12.19%	(0.33%)	(0.02%)	(0.36%)
International Equities	15%	15%	11.09%	8.46%	0.41%	0.01%	0.41%
Private Equities	4%	6%	6.43%	6.43%	0.00%	(0.05%)	(0.05%)
Domestic Fixed Income	21%	21%	6.66%	5.53%	0.23%	(0.03%)	0.20%
International Fixed Inc.	2%	2%	-	-	0.05%	0.02%	0.07%
Real Estate	10%	10%	7.00%	5.91%	0.12%	(0.05%)	0.07%
Timber	3%	3%	0.04%	2.30%	(0.08%)	(0.01%)	(0.08%)
Infrastructure	5%	6%	6.97%	2.65%	0.21%	0.04%	0.25%
Cash & Equivalents	1%	1%	1.26%	1.20%	0.00%	0.01%	0.01%
Total			**9.95% =**	**9.25% +**	**0.75% +**	**(0.05%)**	**0.70%**

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

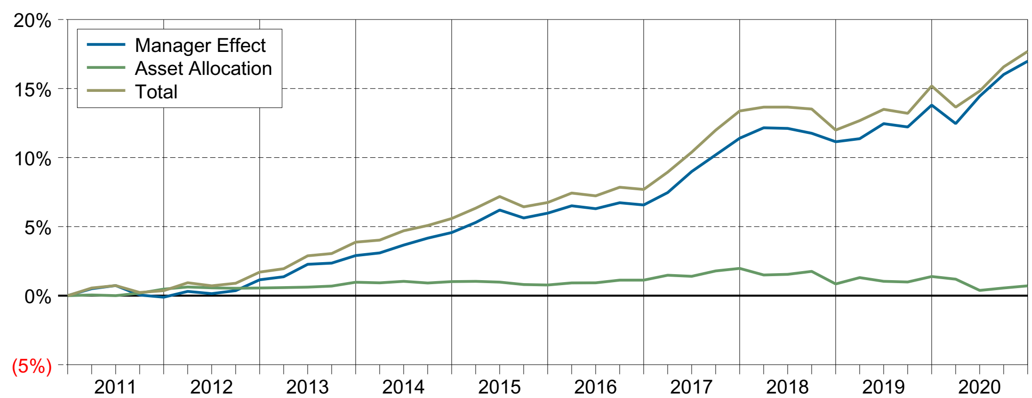
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

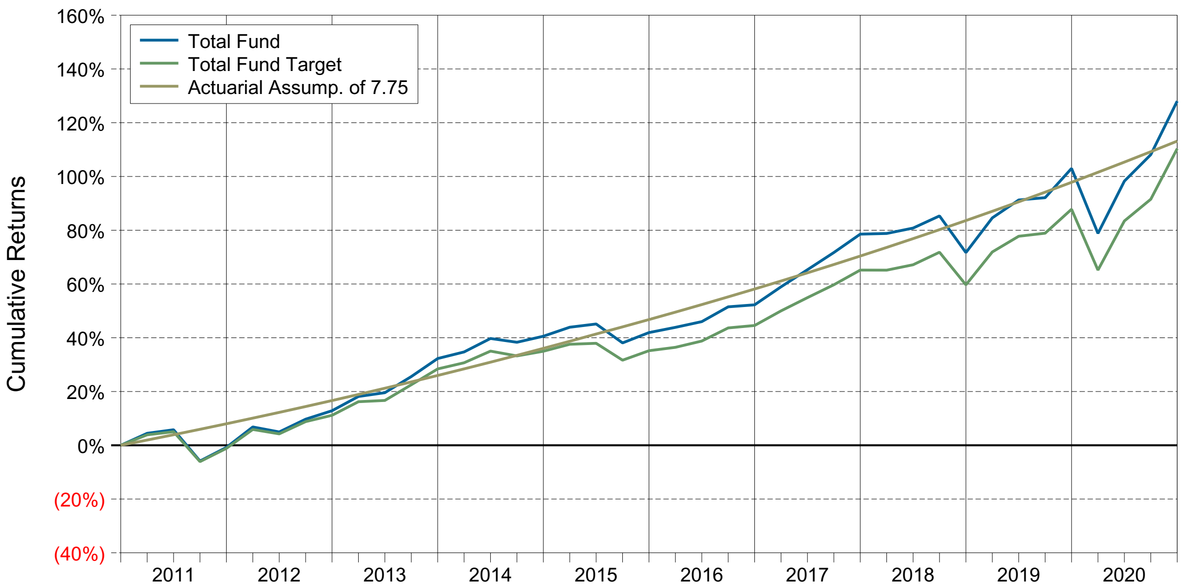
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	24%	14.11%	13.44%	0.11%	0.08%	0.19%
World Equities	13%	13%	-	-	(0.16%)	(0.04%)	(0.19%)
International Equities	16%	16%	7.26%	5.08%	0.35%	(0.01%)	0.35%
Private Equities	4%	5%	4.46%	4.46%	0.00%	(0.05%)	(0.05%)
Domestic Fixed Income	19%	19%	5.95%	4.61%	0.24%	(0.02%)	0.23%
International Fixed Inc.	4%	4%	-	-	0.08%	0.00%	0.09%
Real Estate	10%	10%	10.86%	9.00%	0.18%	(0.00%)	0.18%
Timber	3%	3%	-	-	(0.18%)	(0.01%)	(0.19%)
Infrastructure	4%	5%	-	-	0.20%	0.08%	0.28%
Cash & Equivalents	1%	1%	0.67%	0.64%	0.00%	0.00%	0.00%
Total			**8.59% =**	**7.72% +**	**0.84% +**	**0.04%**	**0.87%**

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

Cumulative Performance Relative to Target

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

Cumulative Returns Actual vs Target



Ten Year Annualized Risk vs Return

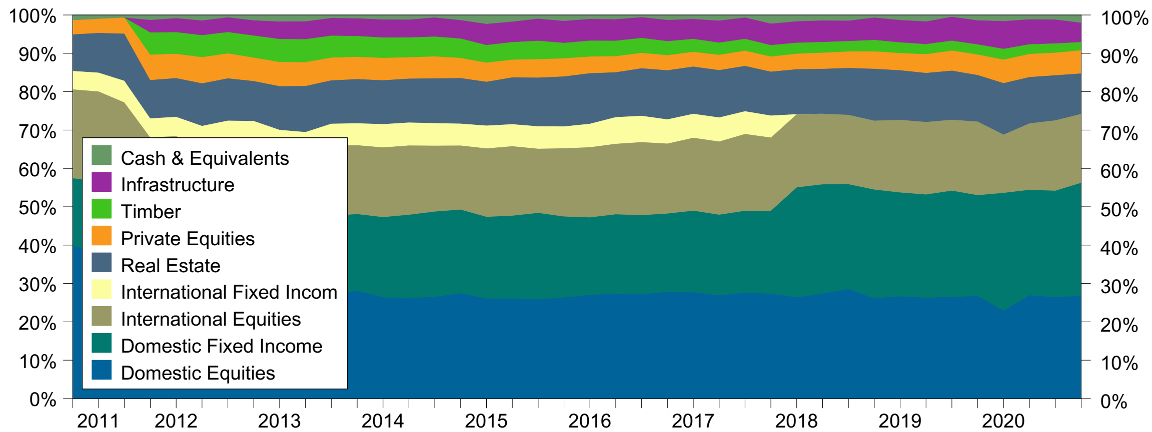
Squares represent membership of the Callan Public Fund Sponsor Database

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

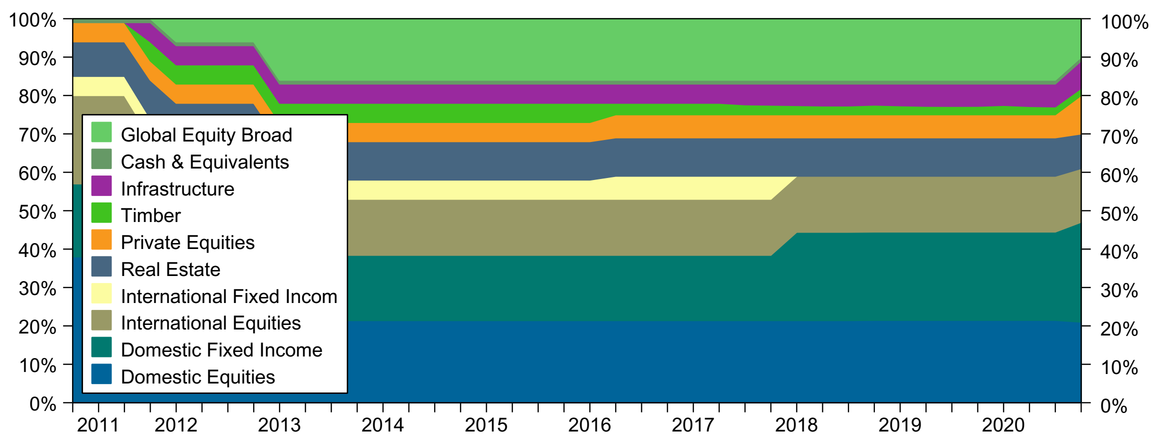
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

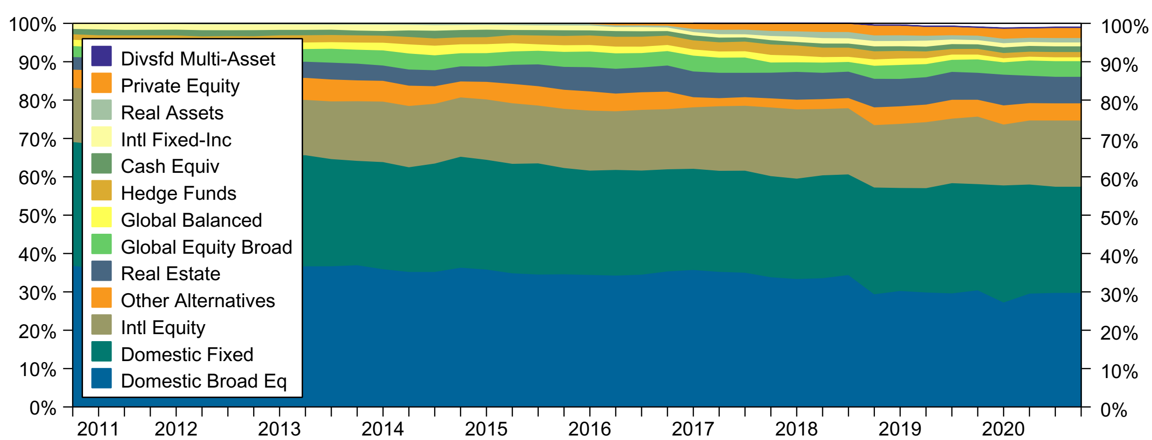
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation

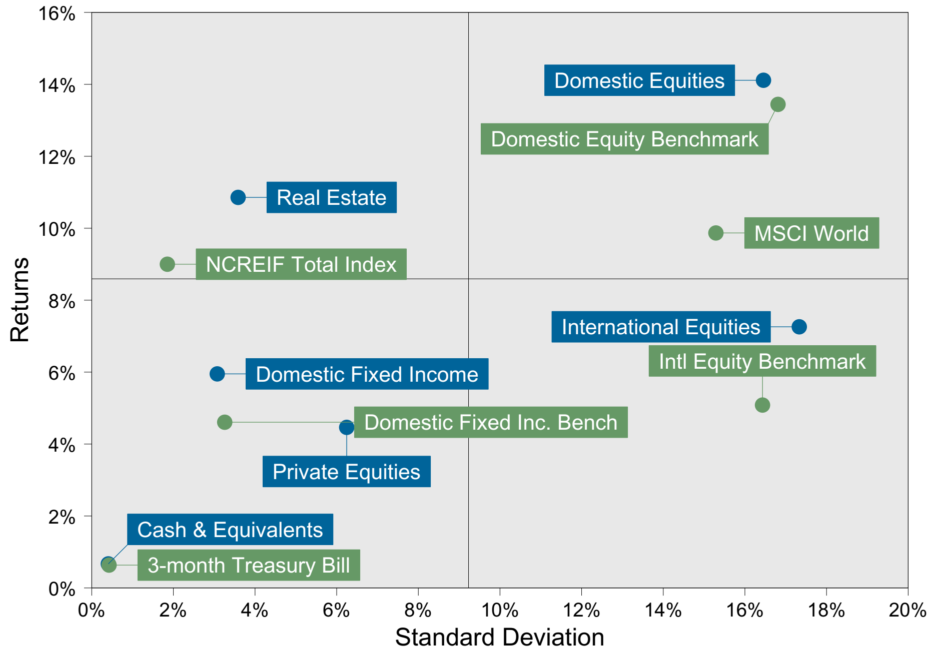


* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

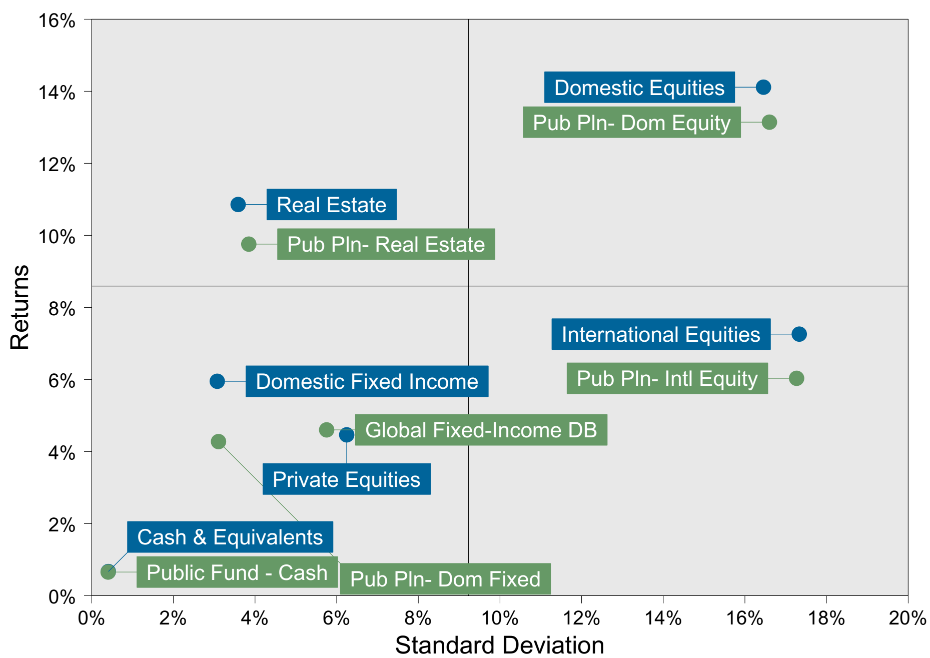
Asset Class Risk and Return

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

Ten Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



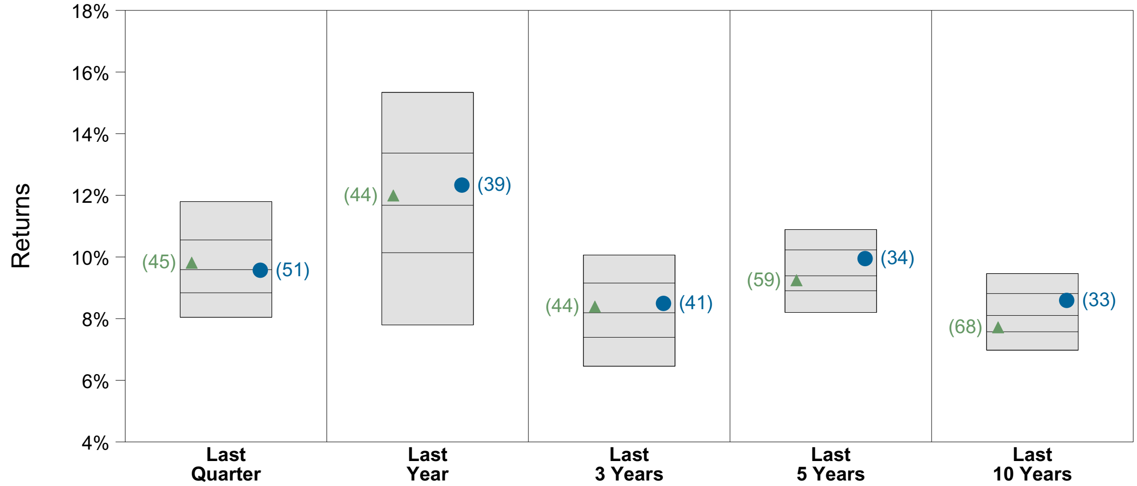
Ten Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

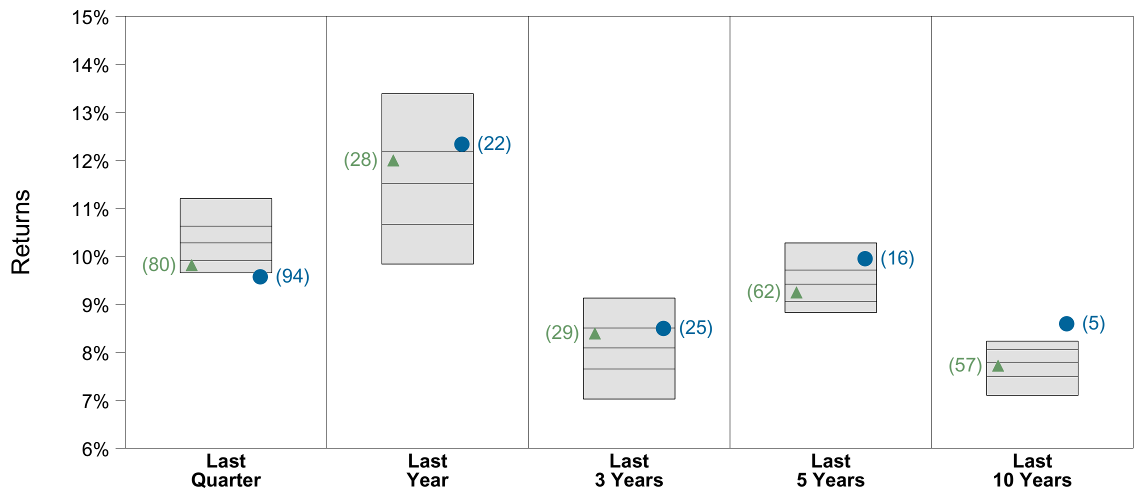
The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended December 31, 2020. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.80	15.34	10.06	10.89	9.46
25th Percentile	10.55	13.37	9.15	10.23	8.81
Median	9.59	11.68	8.19	9.39	8.10
75th Percentile	8.84	10.14	7.39	8.91	7.57
90th Percentile	8.04	7.80	6.46	8.20	6.98
Total Fund ●	9.57	12.33	8.49	9.95	8.59
Policy Target ▲	9.81	12.00	8.39	9.25	7.72

Asset Allocation Adjusted Ranking



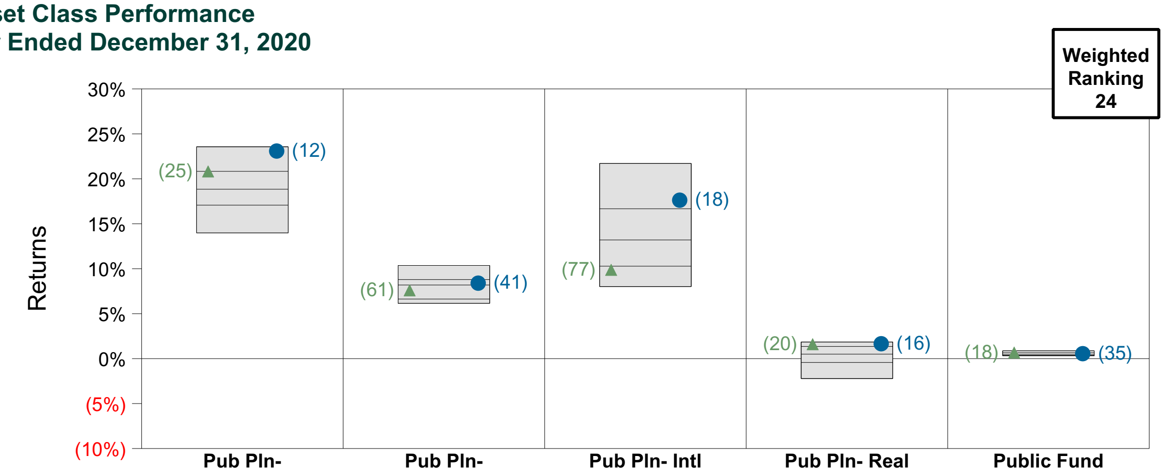
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.20	13.39	9.13	10.28	8.23
25th Percentile	10.63	12.17	8.50	9.71	8.05
Median	10.28	11.52	8.09	9.42	7.78
75th Percentile	9.91	10.66	7.65	9.06	7.49
90th Percentile	9.65	9.84	7.02	8.83	7.10
Total Fund ●	9.57	12.33	8.49	9.95	8.59
Policy Target ▲	9.81	12.00	8.39	9.25	7.72

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

Asset Class Rankings

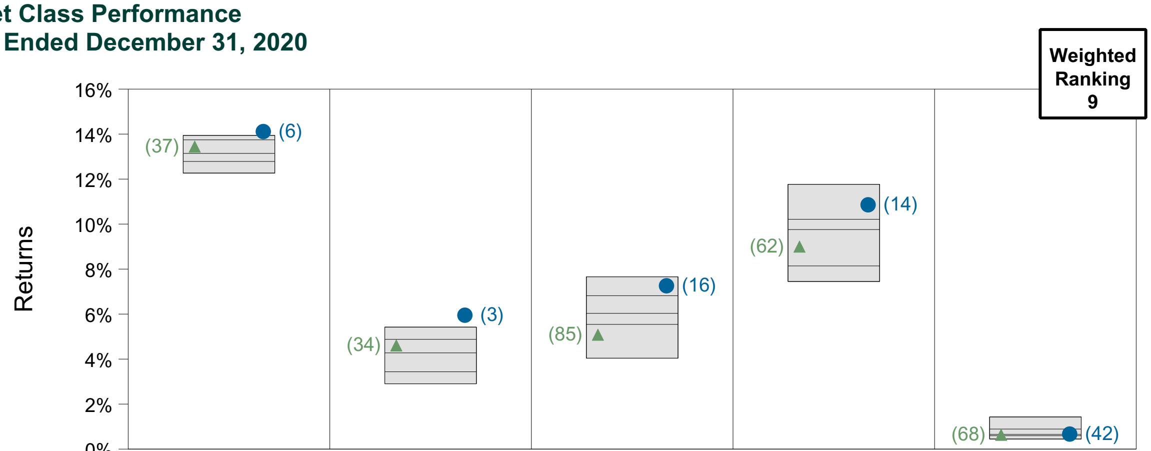
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	23.56	10.36	21.71	1.85	0.87
25th Percentile	20.83	8.79	16.67	1.35	0.65
Median	18.84	8.19	13.20	0.50	0.45
75th Percentile	17.07	6.63	10.28	(0.43)	0.35
90th Percentile	13.98	6.15	8.02	(2.22)	0.31
Asset Class Composite ●	23.09	8.39	17.62	1.66	0.55
Composite Benchmark ▲	20.82	7.59	9.87	1.60	0.67

Total Asset Class Performance
Ten Years Ended December 31, 2020



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	13.94	5.42	7.66	11.77	1.43
25th Percentile	13.74	4.88	6.82	10.21	0.89
Median	13.14	4.28	6.03	9.76	0.65
75th Percentile	12.78	3.44	5.54	8.14	0.60
90th Percentile	12.27	2.90	4.04	7.45	0.45
Asset Class Composite ●	14.11	5.95	7.26	10.86	0.67
Composite Benchmark ▲	13.44	4.61	5.08	9.00	0.64

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Class Allocation

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	**$1,689,253,966**	**57.17%**	**$(120,186,634)**	**$234,544,670**	**$1,574,895,929**	**58.13%**
Public Equities	**$1,533,778,441**	**51.90%**	**$(126,675,830)**	**$221,259,501**	**$1,439,194,770**	**53.13%**
World Equities	**$380,106,112**	**12.86%**	**$(90,966,236)**	**$64,664,827**	**$406,407,521**	**15.00%**
Domestic Equities	**$691,129,062**	**23.39%**	**$(4,936,528)**	**$85,915,086**	**$610,150,504**	**22.52%**
Large Cap	531,195,324	17.98%	(5,344,911)	57,380,385	479,159,849	17.69%
Small Cap	159,933,739	5.41%	408,383	28,534,701	130,990,655	4.84%
International Equities	**$462,543,267**	**15.65%**	**$(30,773,066)**	**$70,679,588**	**$422,636,745**	**15.60%**
Developed	361,579,243	12.24%	(31,458,728)	53,813,458	339,224,513	12.52%
Emerging Markets	100,964,024	3.42%	685,662	16,866,130	83,412,232	3.08%
Private Equities	**$155,475,525**	**5.26%**	**$6,489,196**	**$13,285,170**	**$135,701,159**	**5.01%**
Global Fixed Income	**$759,076,802**	**25.69%**	**$105,585,834**	**$14,395,637**	**$639,095,331**	**23.59%**
Domestic Fixed Income	**$759,076,802**	**25.69%**	**$105,585,834**	**$14,395,637**	**$639,095,331**	**23.59%**
Investment Grade	557,944,512	18.88%	98,286,634	4,830,822	454,827,056	16.79%
Below Investment Grade	201,132,289	6.81%	7,299,199	9,564,816	184,268,274	6.80%
Global Real Assets	**$456,291,627**	**15.44%**	**$(22,665,888)**	**$9,735,264**	**$469,222,251**	**17.32%**
Real Estate	**$271,428,379**	**9.19%**	**$(2,261,538)**	**$3,375,208**	**$270,314,709**	**9.98%**
Other Real Assets	**$184,863,249**	**6.26%**	**$(20,404,349)**	**$6,360,056**	**$198,907,542**	**7.34%**
Infrastructure	129,203,148	4.37%	(20,404,349)	6,182,570	143,424,927	5.29%
Timber	55,660,101	1.88%	0	177,486	55,482,615	2.05%
Cash	**$50,424,145**	**1.71%**	**$24,581,425**	**$9,896**	**$25,832,824**	**0.95%**
Total Fund	**$2,955,046,540**	**100.0%**	**$(12,685,263)**	**$258,685,468**	**$2,709,046,334**	**100.0%**

PLEASE REFER TO PAGES 29-31 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equities					
Gross	15.10%	16.09%	10.01%	12.29%	-
Net	15.03%	15.83%	9.78%	12.05%	-
Weighted Benchmark	16.00%	16.72%	10.42%	12.00%	-
Public Equities					
Gross	15.61%	16.67%	-	-	-
Net	15.54%	16.38%	-	-	-
Weighted Benchmark	16.27%	16.30%	-	-	-
World Equities					
Gross	16.42%	6.62%	5.74%	9.91%	-
Net	16.32%	6.25%	5.38%	9.52%	-
MSCI World	13.96%	15.90%	10.54%	12.19%	9.87%
Domestic Equities					
Gross	13.93%	23.09%	15.48%	15.87%	14.11%
Net	13.87%	22.89%	15.29%	15.68%	13.89%
Weighted Benchmark	17.41%	20.82%	13.83%	15.13%	13.44%
Large Cap					
Gross	12.04%	26.04%	16.87%	16.68%	14.87%
Net	12.01%	25.97%	16.77%	16.56%	14.68%
Benchmark(1)	13.69%	20.96%	14.82%	15.60%	14.08%
Small Cap					
Gross	21.11%	12.40%	10.50%	12.91%	11.48%
Net	20.93%	11.78%	10.04%	12.46%	11.13%
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	11.20%
International Equities					
Gross	17.13%	17.62%	7.43%	11.09%	7.26%
Net	17.06%	17.29%	7.20%	10.87%	6.99%
Weighted Benchmark	16.82%	9.87%	4.72%	8.46%	5.08%
Developed					
Gross	16.34%	15.55%	7.11%	10.19%	7.41%
Net	16.29%	15.30%	6.88%	9.95%	7.13%
Benchmark(2)	15.85%	7.59%	4.22%	7.32%	5.33%
Emerging Markets					
Gross	20.17%	26.39%	8.74%	14.41%	6.25%
Net	20.05%	25.66%	8.53%	14.28%	6.01%
Benchmark(3)	19.70%	18.31%	6.18%	12.81%	3.65%
Private Equities					
Net	9.35%	12.24%	8.21%	6.42%	4.42%

(1) S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.
(2) 50% Hedged EAFE through 3/31/2011; MSCI EAFE through 6/3016; MSCI World ex-US thereafter.
(3) MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

PLEASE REFER TO PAGES 32-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Fixed Income					
Gross	1.95%	8.39%	6.73%	6.87%	-
Net	1.93%	8.26%	6.58%	6.67%	-
Weighted Benchmark	2.41%	7.59%	6.01%	5.79%	-
Domestic Fixed Income					
Gross	1.95%	8.39%	6.45%	6.66%	5.95%
Net	1.93%	8.26%	6.31%	6.48%	5.81%
Weighted Benchmark	2.41%	7.59%	5.66%	5.53%	4.61%
Inv. Grade Fixed Income					
Gross	1.00%	9.53%	6.64%	6.02%	5.45%
Net	0.99%	9.43%	6.54%	5.90%	5.31%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Below Inv. Grade Fixed Income					
Gross	4.88%	5.83%	6.13%	8.39%	7.58%
Net	4.83%	5.61%	5.88%	8.07%	7.20%
Blmbg HY Corp 2% Issue	6.44%	7.05%	6.21%	8.57%	6.79%
Global Real Assets					
Gross	2.17%	3.52%	5.00%	5.86%	-
Net	2.07%	3.03%	4.57%	5.42%	-
Weighted Benchmark	1.05%	1.33%	3.90%	4.37%	-
Real Estate					
Gross	1.41%	1.66%	4.85%	7.00%	10.86%
Net	1.28%	1.04%	4.33%	6.48%	10.32%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Other Real Assets					
Gross	3.41%	6.31%	-	-	-
Net	3.37%	5.99%	-	-	-
Weighted Benchmark	0.94%	1.02%	-	-	-
Infrastructure					
Gross	4.73%	9.06%	6.37%	6.97%	-
Net	4.68%	8.61%	5.91%	6.47%	-
Benchmark(1)	1.06%	1.07%	3.03%	2.65%	-
Timber					
Net	0.32%	(0.12%)	2.80%	0.04%	-
NCREIF Timberland Index	0.58%	0.81%	1.77%	2.30%	4.55%
Cash & Equivalents - Net	**0.03%**	**0.55%**	**1.58%**	**1.26%**	**0.67%**
3-month Treasury Bill	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	9.57%	12.33%	8.49%	9.95%	8.59%
Net	9.51%	12.06%	8.25%	9.68%	8.29%
Target*	9.81%	12.00%	8.39%	9.25%	7.72%

* Current Quarter Target = 18.0% Blmbg Aggregate, 16.8% Russell 1000 Index, 10.5% MSCI World ex US, 10.0% NDTFFR-Private Equity, 10.0% MSCI World, 9.0% NCREIF Total Index, 8.0% Blmbg:HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.6% NCREIF NFI-ODCE Eq Wt Net, 3.6% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.9% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.
(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

PLEASE REFER TO PAGES 32-36 FOR INVESTMENT MANAGER LEVEL RETURNS.

Domestic Equities
Period Ended December 31, 2020

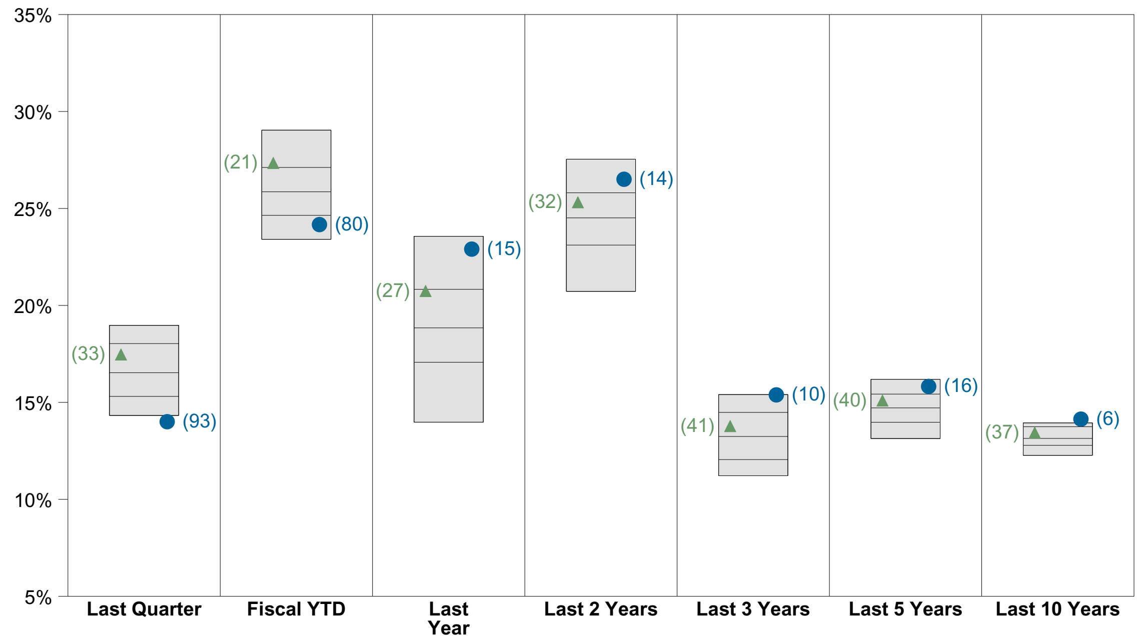
Quarterly Summary and Highlights

- Domestic Equities's portfolio posted a 14.00% return for the quarter placing it in the 93 percentile of the Public Fund - Domestic Equity group for the quarter and in the 15 percentile for the last year.
- Domestic Equities's portfolio underperformed the Domestic Equity Target by 3.47% for the quarter and outperformed the Domestic Equity Target for the year by 2.16%.

Quarterly Asset Growth

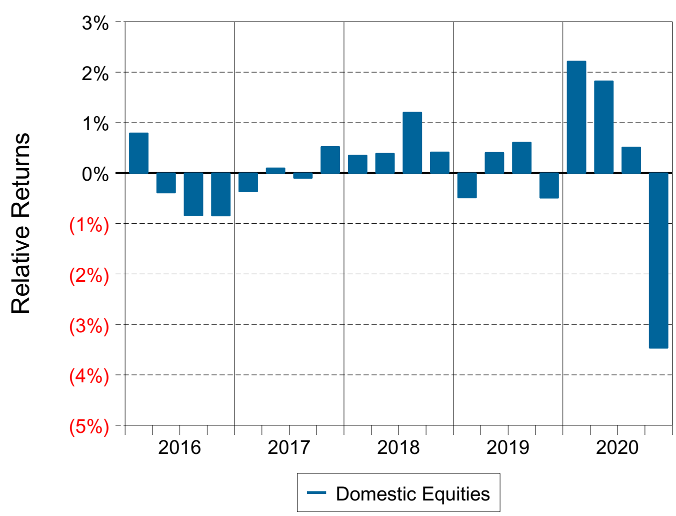
Beginning Market Value	$1,434,686,293
Net New Investment	$-6,062,121
Investment Gains/(Losses)	$201,832,113
Ending Market Value	$1,630,456,285

Performance vs Public Fund - Domestic Equity (Gross)

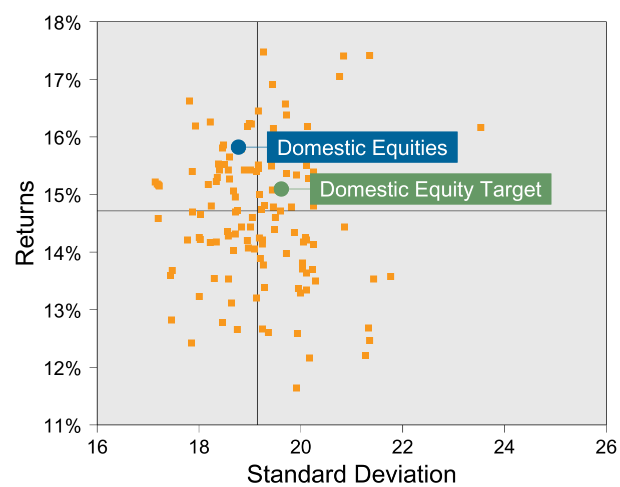


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	18.97	29.04	23.56	27.54	15.40	16.19	13.94
25th Percentile	18.03	27.11	20.83	25.81	14.48	15.43	13.74
Median	16.53	25.86	18.84	24.51	13.24	14.72	13.14
75th Percentile	15.31	24.64	17.07	23.11	12.05	13.97	12.78
90th Percentile	14.33	23.41	13.98	20.72	11.22	13.13	12.27
Domestic Equities ●	14.00	24.17	22.90	26.51	15.39	15.82	14.14
Domestic Equity Target ▲	17.47	27.35	20.74	25.32	13.78	15.10	13.44

Relative Return vs Domestic Equity Target



Public Fund - Domestic Equity (Gross)
Annualized Five Year Risk vs Return



L.A. Capital
Period Ended December 31, 2020

Investment Philosophy

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

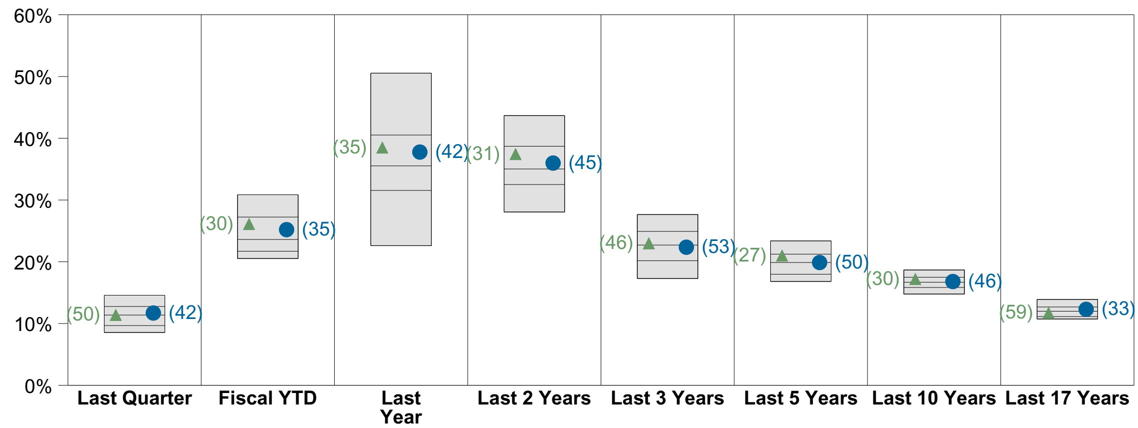
Quarterly Summary and Highlights

- L.A. Capital's portfolio posted a 11.70% return for the quarter placing it in the 42 percentile of the Callan Large Cap Growth group for the quarter and in the 42 percentile for the last year.
- L.A. Capital's portfolio outperformed the Russell 1000 Growth Index by 0.31% for the quarter and underperformed the Russell 1000 Growth Index for the year by 0.73%.

Quarterly Asset Growth

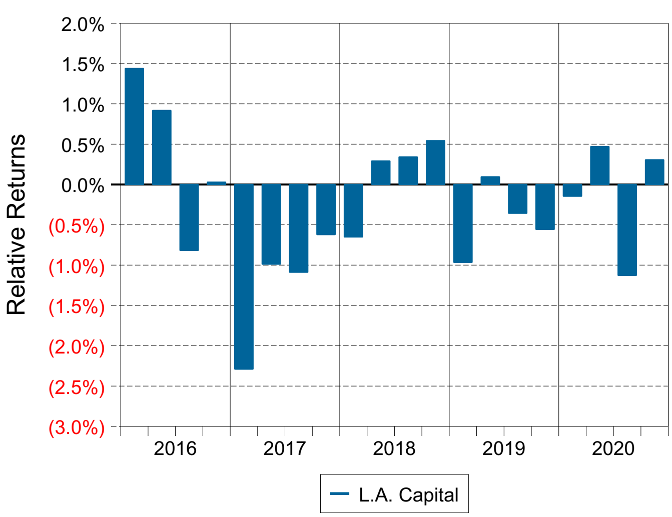
Beginning Market Value	$466,992,391
Net New Investment	$-249,933
Investment Gains/(Losses)	$54,618,470
Ending Market Value	$521,360,927

Performance vs Callan Large Cap Growth (Gross)

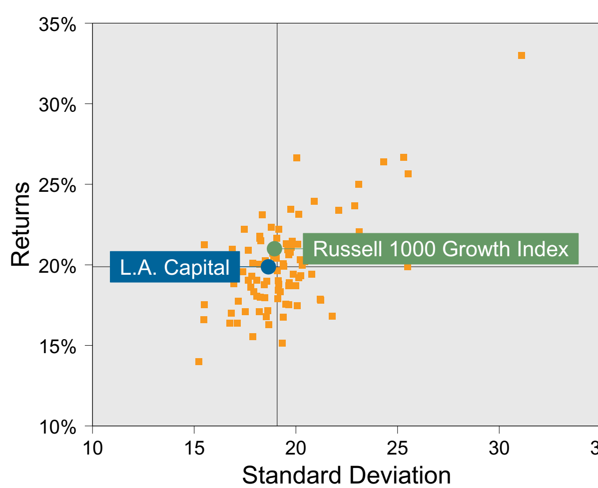


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 17 Years
10th Percentile	14.58	30.86	50.54	43.67	27.65	23.39	18.67	13.90
25th Percentile	12.76	27.24	40.52	38.71	24.92	21.23	17.49	12.68
Median	11.37	23.61	35.53	35.03	22.71	19.88	16.69	11.99
75th Percentile	9.67	21.71	31.55	32.51	20.17	17.98	15.84	11.13
90th Percentile	8.55	20.53	22.61	28.06	17.29	16.81	14.78	10.73
L.A. Capital ●	11.70	25.20	37.76	35.98	22.36	19.88	16.80	12.30
Russell 1000 Growth Index ▲	11.39	26.12	38.49	37.44	22.99	21.00	17.21	11.72

Relative Return vs Russell 1000 Growth Index



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



L.A. Capital Management Enhanced Index
Period Ended December 31, 2020

Investment Philosophy

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

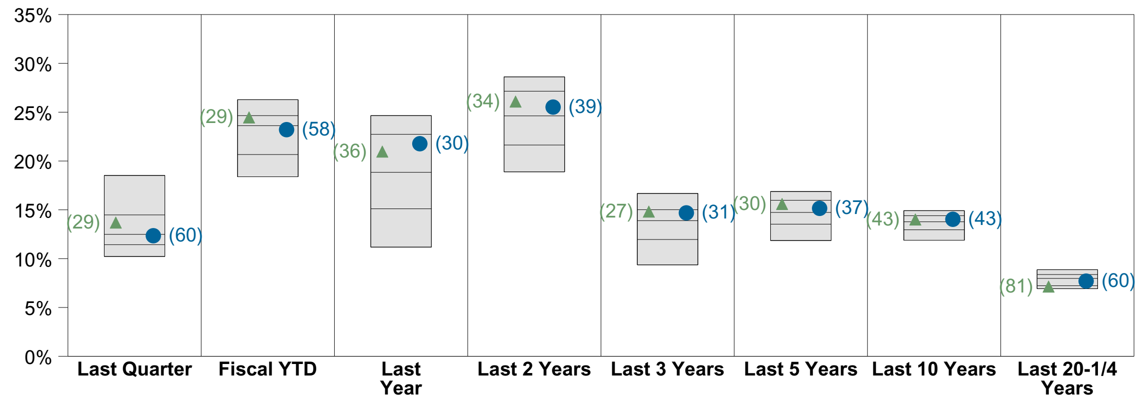
Quarterly Summary and Highlights

- LACM Enhanced Index's portfolio posted a 12.35% return for the quarter placing it in the 60 percentile of the Callan Large Cap Core group for the quarter and in the 30 percentile for the last year.
- LACM Enhanced Index's portfolio underperformed the Russell 1000 Index by 1.35% for the quarter and outperformed the Russell 1000 Index for the year by 0.81%.

Quarterly Asset Growth

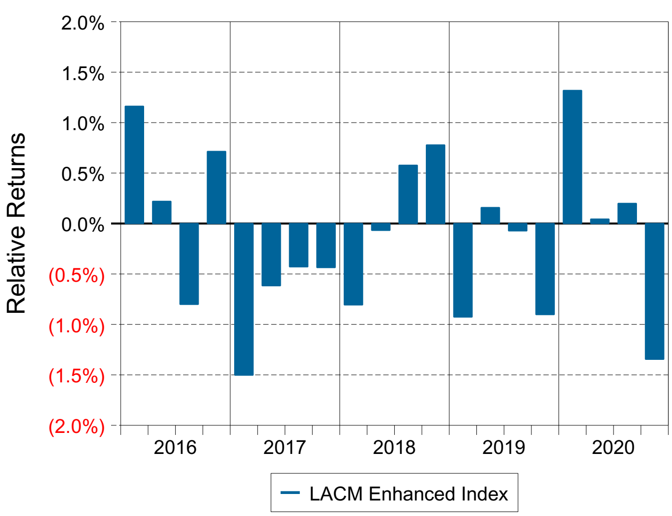
Beginning Market Value	$227,538,464
Net New Investment	$-61,135
Investment Gains/(Losses)	$28,089,351
Ending Market Value	$255,566,680

Performance vs Callan Large Cap Core (Gross)

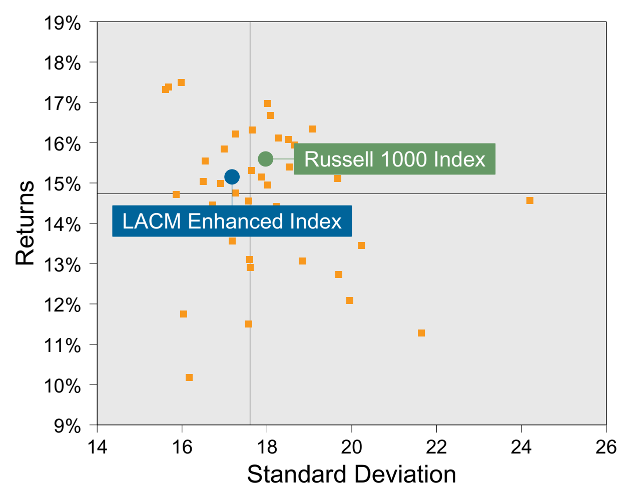


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 20-1/4 Years
10th Percentile	18.52	26.28	24.65	28.62	16.68	16.88	14.92	8.87
25th Percentile	14.48	24.65	22.73	27.15	15.01	15.98	14.40	8.37
Median	12.49	23.62	18.84	24.62	13.89	14.73	13.77	7.98
75th Percentile	11.43	20.66	15.11	21.64	11.96	13.53	12.95	7.23
90th Percentile	10.22	18.39	11.18	18.89	9.36	11.86	11.88	6.92
LACM Enhanced Index ●	12.35	23.21	21.77	25.52	14.69	15.15	14.03	7.70
Russell 1000 Index ▲	13.69	24.46	20.96	26.09	14.82	15.60	14.01	7.14

Relative Return vs Russell 1000 Index



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



Northern Trust AM Enh S&P500
Period Ended December 31, 2020

Investment Philosophy

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

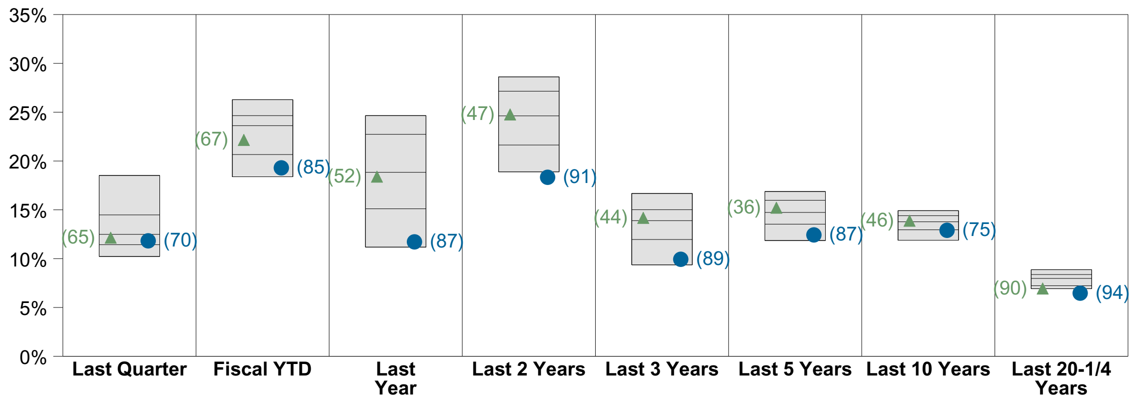
Quarterly Summary and Highlights

- Northern Trust AM Enh S&P500's portfolio posted a 11.83% return for the quarter placing it in the 70 percentile of the Callan Large Cap Core group for the quarter and in the 87 percentile for the last year.
- Northern Trust AM Enh S&P500's portfolio underperformed the S&P 500 Index by 0.32% for the quarter and underperformed the S&P 500 Index for the year by 6.68%.

Quarterly Asset Growth

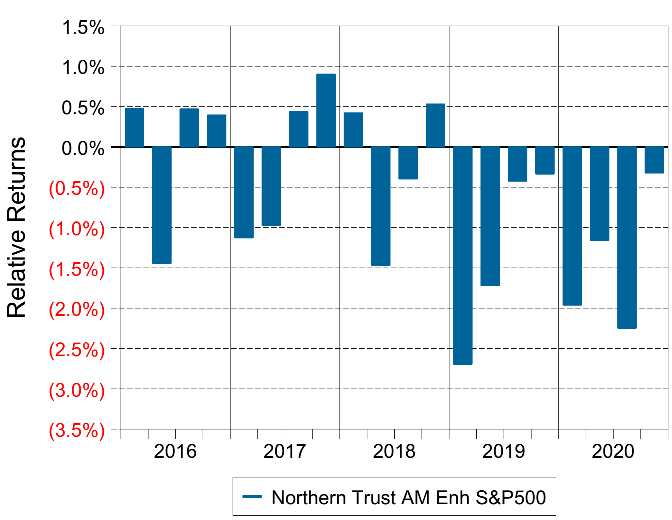
Beginning Market Value	$208,928,376
Net New Investment	$0
Investment Gains/(Losses)	$24,707,015
Ending Market Value	$233,635,391

Performance vs Callan Large Cap Core (Gross)

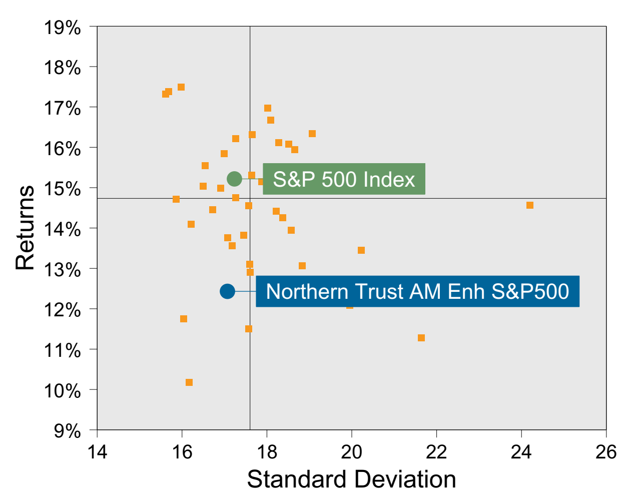


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 20-1/4 Years
10th Percentile	18.52	26.28	24.65	28.62	16.68	16.88	14.92	8.87
25th Percentile	14.48	24.65	22.73	27.15	15.01	15.98	14.40	8.37
Median	12.49	23.62	18.84	24.62	13.89	14.73	13.77	7.98
75th Percentile	11.43	20.66	15.11	21.64	11.96	13.53	12.95	7.23
90th Percentile	10.22	18.39	11.18	18.89	9.36	11.86	11.88	6.92
Northern Trust AM Enh S&P500 ●	11.83	19.30	11.72	18.33	9.94	12.43	12.91	6.47
S&P 500 Index ▲	12.15	22.16	18.40	24.77	14.18	15.22	13.88	6.94

Relative Return vs S&P 500 Index



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



Callan

Parametric Enh S&P 500
Period Ended December 31, 2020

Investment Philosophy

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

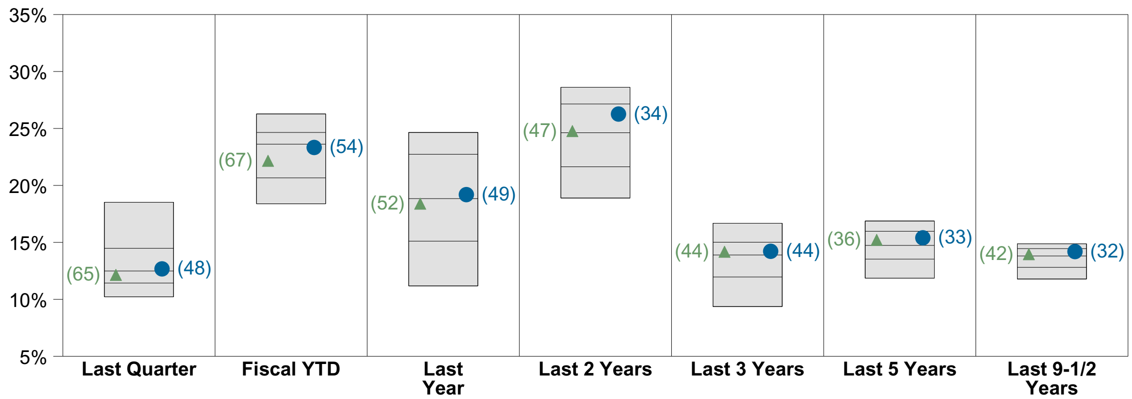
Quarterly Summary and Highlights

- Parametric Enh S&P 500's portfolio posted a 12.67% return for the quarter placing it in the 48 percentile of the Callan Large Cap Core group for the quarter and in the 49 percentile for the last year.
- Parametric Enh S&P 500's portfolio outperformed the S&P 500 Index by 0.53% for the quarter and outperformed the S&P 500 Index for the year by 0.79%.

Quarterly Asset Growth

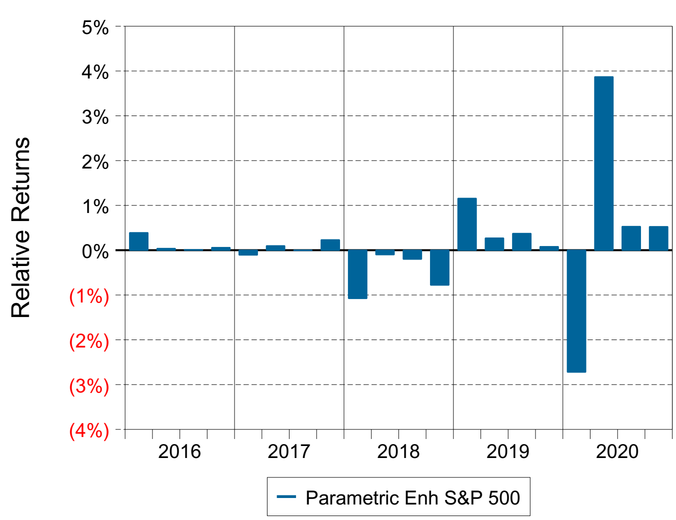
Beginning Market Value	$225,188,317
Net New Investment	$0
Investment Gains/(Losses)	$28,538,730
Ending Market Value	$253,727,047

Performance vs Callan Large Cap Core (Gross)

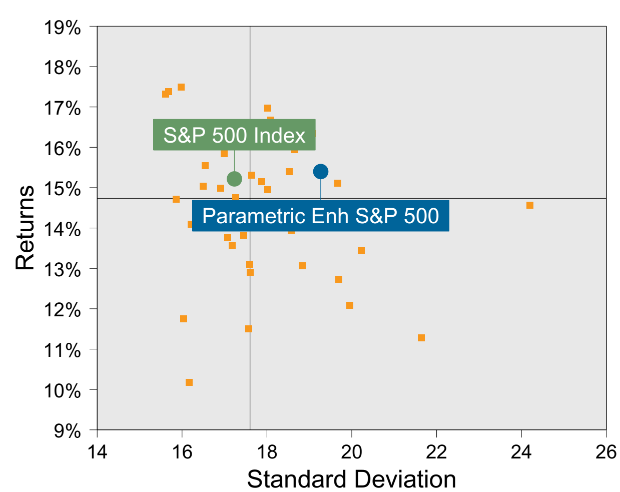


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 9-1/2 Years
10th Percentile	18.52	26.28	24.65	28.62	16.68	16.88	14.88
25th Percentile	14.48	24.65	22.73	27.15	15.01	15.98	14.45
Median	12.49	23.62	18.84	24.62	13.89	14.73	13.81
75th Percentile	11.43	20.66	15.11	21.64	11.96	13.53	12.81
90th Percentile	10.22	18.39	11.18	18.89	9.36	11.86	11.78
Parametric Enh S&P 500 ●	12.67	23.33	19.19	26.26	14.22	15.40	14.19
S&P 500 Index ▲	12.15	22.16	18.40	24.77	14.18	15.22	13.96

Relative Return vs S&P 500 Index



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



Atlanta Capital
Period Ended December 31, 2020

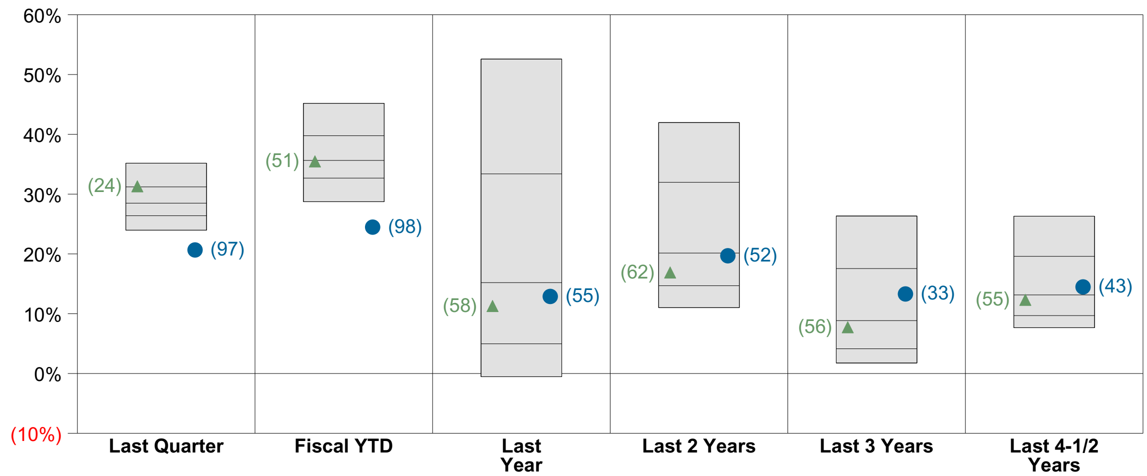
Investment Philosophy
Atlanta believes that high quality companies produce consistently increasing earnings and dividends, thereby providing attractive returns with moderate risk over the long-term.

Quarterly Summary and Highlights
- Atlanta Capital's portfolio posted a 20.66% return for the quarter placing it in the 97 percentile of the Callan Small Capitalization group for the quarter and in the 55 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 10.65% for the quarter and outperformed the S&P 600 Small Cap Index for the year by 1.60%.

Quarterly Asset Growth

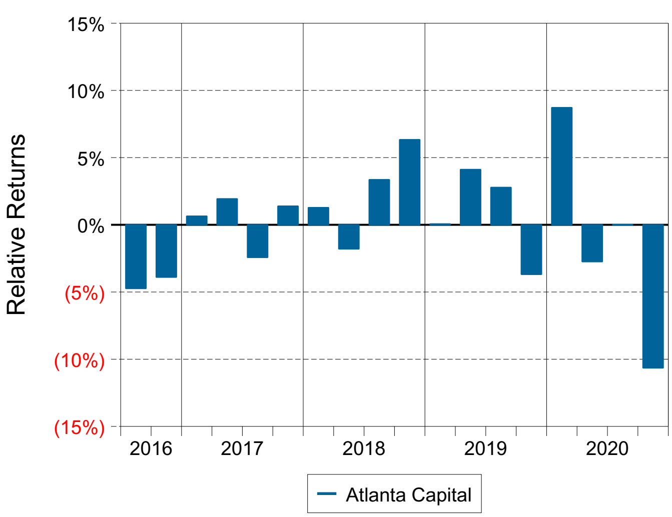
Beginning Market Value	$148,517,456
Net New Investment	$-54,217,672
Investment Gains/(Losses)	$20,118,469
Ending Market Value	$114,418,253

Performance vs Callan Small Capitalization (Gross)

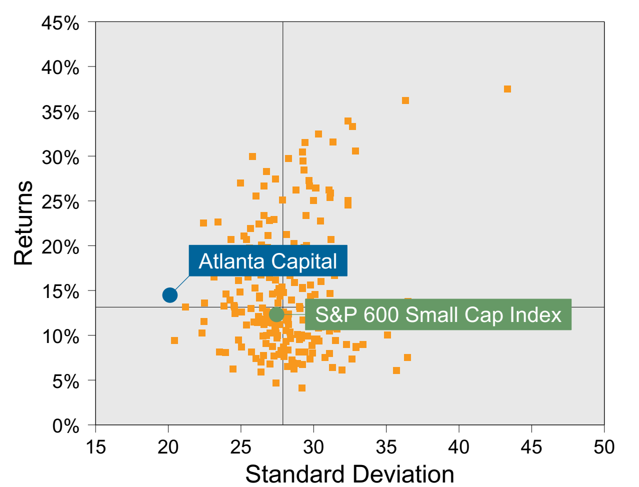


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile	35.17	45.19	52.59	41.97	26.34	26.31
25th Percentile	31.21	39.77	33.38	31.97	17.55	19.59
Median	28.49	35.64	15.20	20.14	8.84	13.14
75th Percentile	26.39	32.68	4.97	14.69	4.14	9.69
90th Percentile	23.97	28.73	(0.54)	11.02	1.76	7.66
Atlanta Capital ●	20.66	24.48	12.89	19.69	13.30	14.48
S&P 600 Small Cap Index ▲	31.31	35.48	11.29	16.89	7.74	12.32

Relative Return vs S&P 600 Small Cap Index



Callan Small Capitalization (Gross)
Annualized Four and One-Half Year Risk vs Return



International Equities
Period Ended December 31, 2020

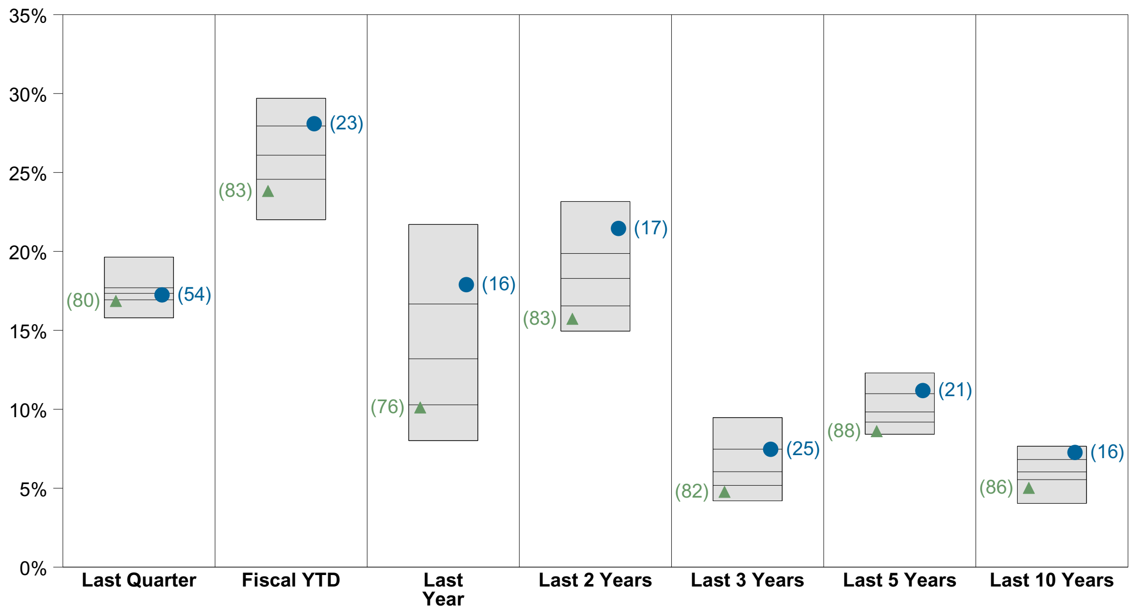
Quarterly Summary and Highlights

- International Equities's portfolio posted a 17.25% return for the quarter placing it in the 54 percentile of the Public Fund - International Equity group for the quarter and in the 16 percentile for the last year.
- International Equities's portfolio outperformed the International Equity Target by 0.39% for the quarter and outperformed the International Equity Target for the year by 7.78%.

Quarterly Asset Growth

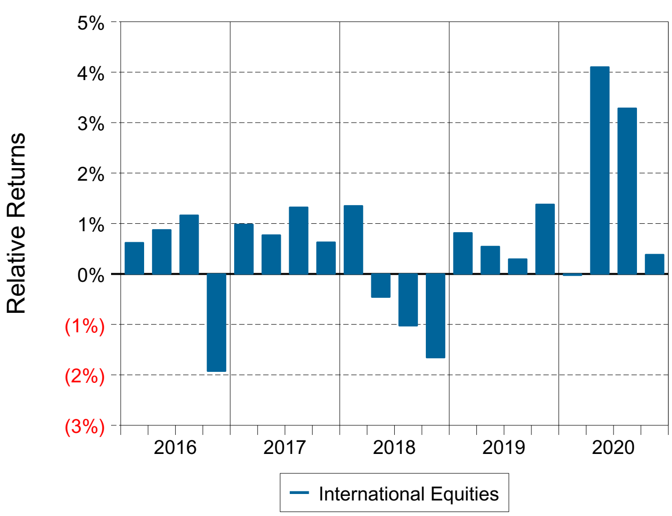
Beginning Market Value	$967,213,491
Net New Investment	$-10,645,853
Investment Gains/(Losses)	$166,373,466
Ending Market Value	$1,122,941,104

Performance vs Public Fund - International Equity (Gross)

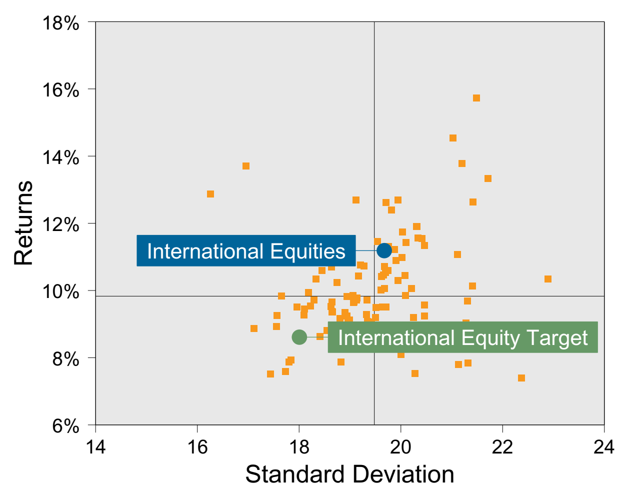


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	19.64	29.70	21.71	23.16	9.47	12.30	7.66
25th Percentile	17.70	27.95	16.67	19.87	7.47	10.99	6.82
Median	17.34	26.09	13.20	18.29	6.05	9.83	6.03
75th Percentile	16.93	24.57	10.28	16.55	5.18	9.19	5.54
90th Percentile	15.79	22.01	8.02	14.95	4.20	8.42	4.04
International Equities ●	17.25	28.09	17.89	21.45	7.47	11.19	7.27
International Equity Target ▲	16.86	23.83	10.12	15.73	4.77	8.61	5.02

Relative Return vs International Equity Target



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



DFA International Small Cap Value Fund
Period Ended December 31, 2020

Investment Philosophy

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

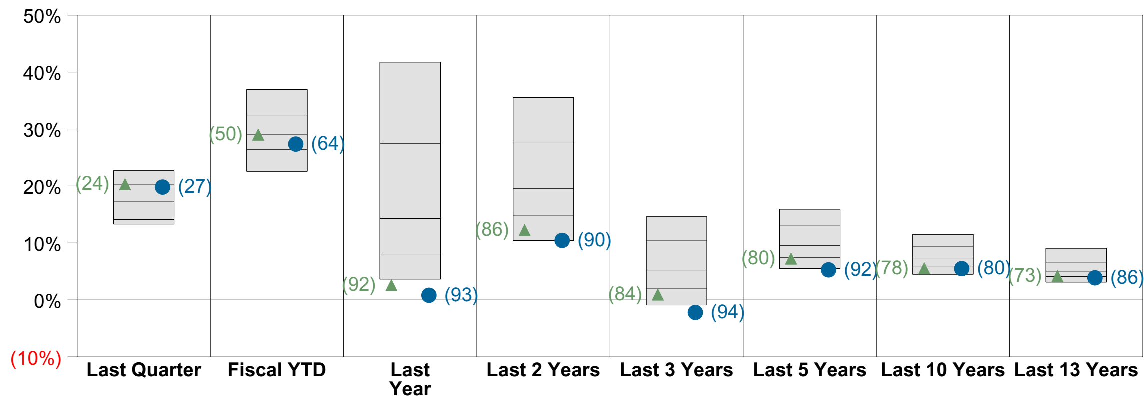
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a 19.81% return for the quarter placing it in the 27 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 93 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 0.49% for the quarter and underperformed the World ex US SC Value for the year by 1.77%.

Quarterly Asset Growth

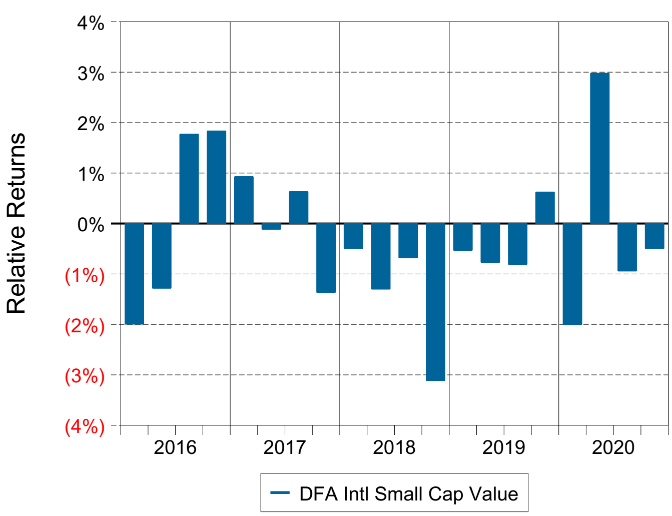
Beginning Market Value	$66,961,412
Net New Investment	$0
Investment Gains/(Losses)	$13,264,548
Ending Market Value	$80,225,959

Performance vs Callan International Small Cap Mut Funds (Net)

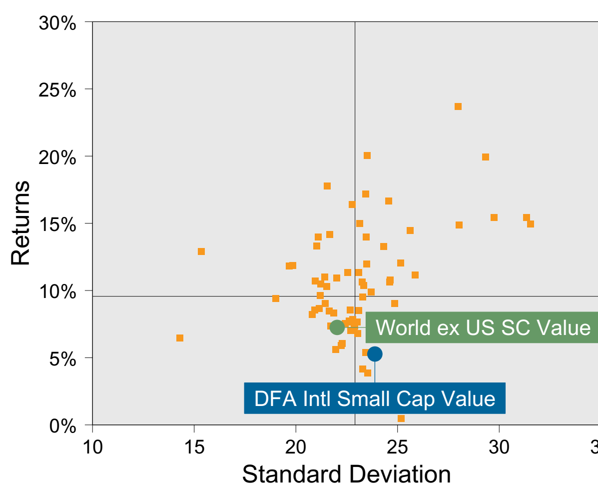


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 13 Years
10th Percentile	22.69	36.94	41.75	35.53	14.61	15.93	11.51	9.07
25th Percentile	20.20	32.29	27.43	27.55	10.38	13.00	9.42	6.62
Median	17.32	28.99	14.29	19.54	5.08	9.57	7.35	5.04
75th Percentile	14.11	26.38	8.05	14.87	1.95	7.41	5.78	4.10
90th Percentile	13.32	22.58	3.65	10.42	(0.90)	5.49	4.50	3.12
DFA Intl Small Cap Value ●	19.81	27.36	0.81	10.45	(2.20)	5.27	5.49	3.88
World ex US SC Value ▲	20.30	29.01	2.58	12.25	0.94	7.25	5.54	4.19

Relative Return vs World ex US SC Value



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



Northern Tr AM Wrld ex US
Period Ended December 31, 2020

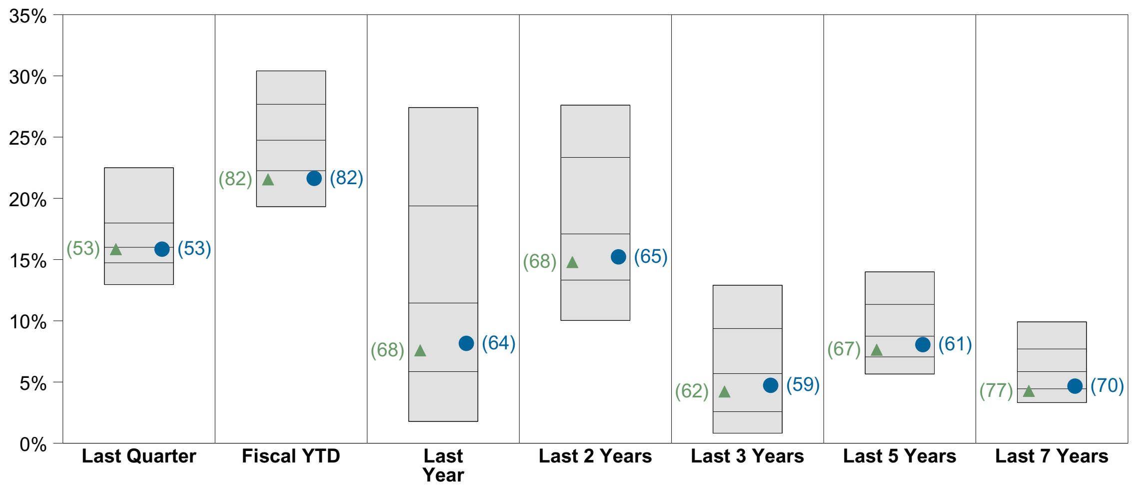
Investment Philosophy
The Fund's objective is to provide investment results that approximate the overall performance of the MSCI World ex-US Equity Index.

Quarterly Summary and Highlights
- Northern Tr AM Wrld ex US's portfolio posted a 15.85% return for the quarter placing it in the 53 percentile of the Callan Non-US Equity group for the quarter and in the 64 percentile for the last year.
- Northern Tr AM Wrld ex US's portfolio outperformed the MSCI World ex US by 0.00% for the quarter and outperformed the MSCI World ex US for the year by 0.57%.

Quarterly Asset Growth

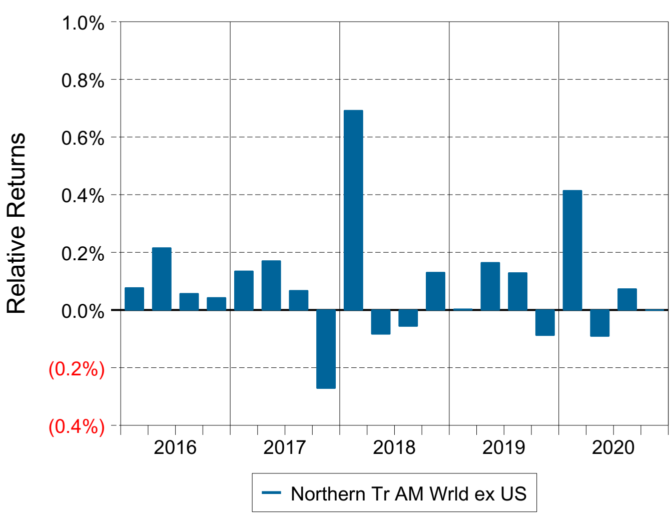
Beginning Market Value	$354,119,016
Net New Investment	$-26,547
Investment Gains/(Losses)	$56,122,540
Ending Market Value	$410,215,009

Performance vs Callan Non-US Equity (Gross)

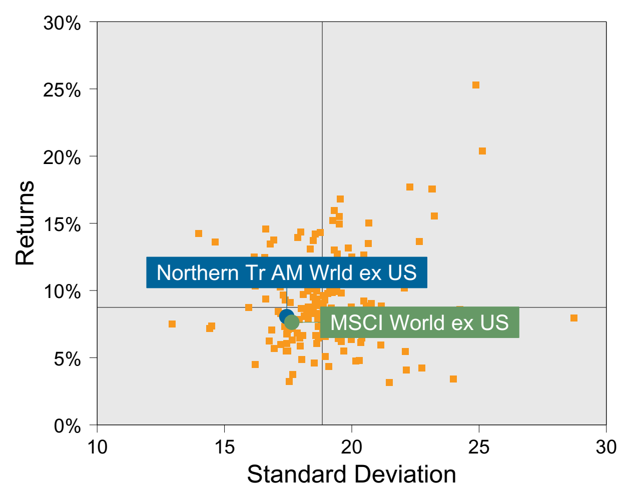


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	22.50	30.41	27.42	27.61	12.91	14.00	9.91
25th Percentile	17.98	27.68	19.38	23.34	9.37	11.34	7.70
Median	16.00	24.75	11.45	17.09	5.69	8.74	5.85
75th Percentile	14.74	22.26	5.85	13.32	2.58	7.05	4.45
90th Percentile	12.96	19.32	1.78	10.03	0.82	5.65	3.32
Northern Tr AM Wrld ex US ●	15.85	21.63	8.16	15.22	4.73	8.05	4.66
MSCI World ex US ▲	15.85	21.55	7.59	14.80	4.22	7.64	4.27

Relative Return vs MSCI World ex US



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



Wellington Management
Period Ended December 31, 2020

Investment Philosophy

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

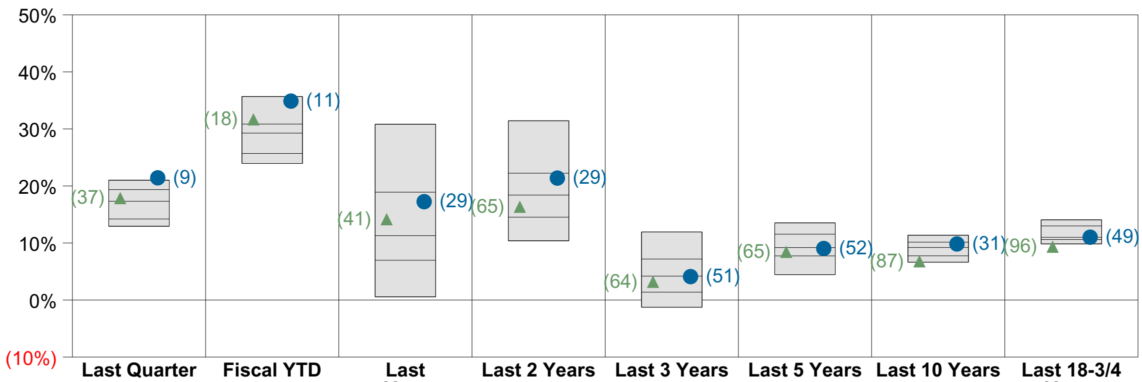
Quarterly Summary and Highlights

- Wellington Management's portfolio posted a 21.43% return for the quarter placing it in the 9 percentile of the Callan International Small Cap group for the quarter and in the 29 percentile for the last year.
- Wellington Management's portfolio outperformed the S&P BMI EPAC <$2 B by 3.57% for the quarter and outperformed the S&P BMI EPAC <$2 B for the year by 3.09%.

Quarterly Asset Growth

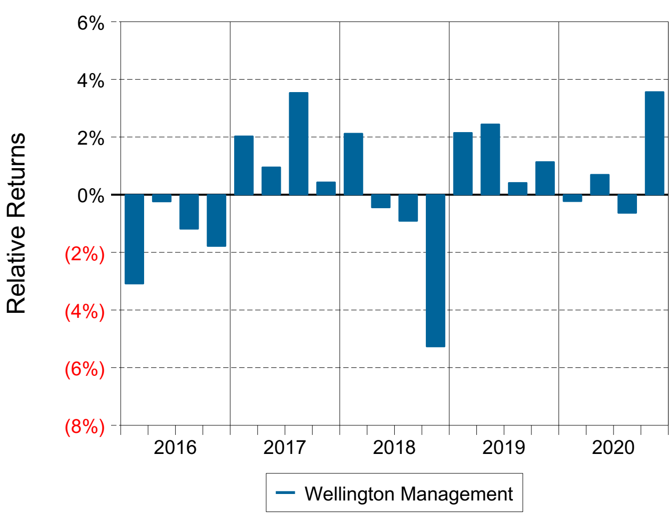
Beginning Market Value	$78,076,803
Net New Investment	$-161,080
Investment Gains/(Losses)	$16,693,157
Ending Market Value	$94,608,880

Performance vs Callan International Small Cap (Gross)

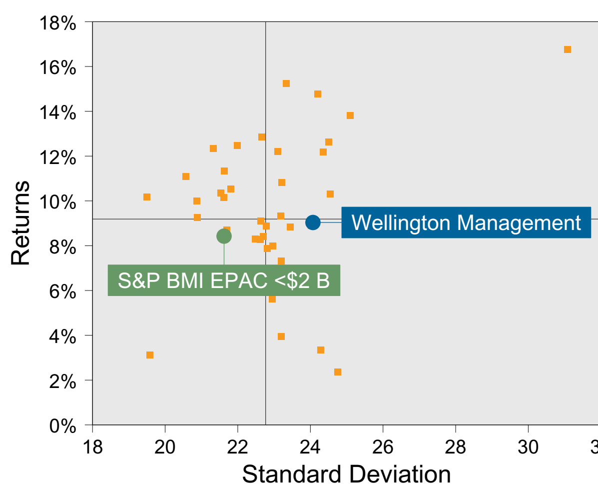


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 18-3/4 Years
10th Percentile	21.02	35.69	30.82	31.43	11.93	13.52	11.37	14.06
25th Percentile	19.36	30.85	18.91	22.24	7.18	11.55	10.15	12.99
Median	17.32	29.27	11.29	18.41	4.19	9.19	9.22	10.99
75th Percentile	14.21	25.70	6.97	14.53	1.38	7.74	7.75	10.60
90th Percentile	12.93	23.94	0.56	10.39	(1.26)	4.45	6.63	9.83
Wellington Management ●	21.43	34.88	17.24	21.38	4.10	9.04	9.83	11.02
S&P BMI EPAC <$2 B ▲	17.86	31.67	14.15	16.34	3.17	8.43	6.76	9.33

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



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



William Blair
Period Ended December 31, 2020

Investment Philosophy

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

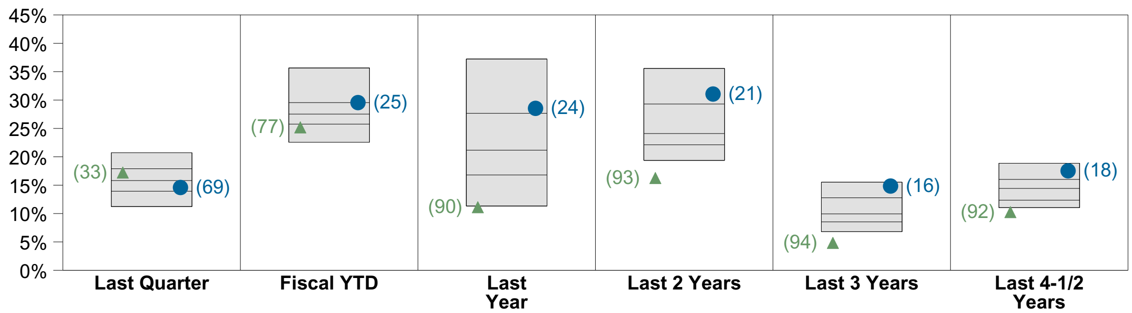
Quarterly Summary and Highlights

- William Blair's portfolio posted a 14.59% return for the quarter placing it in the 69 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 24 percentile for the last year.
- William Blair's portfolio underperformed the MSCI ACWI ex US IMI by 2.63% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 17.42%.

Quarterly Asset Growth

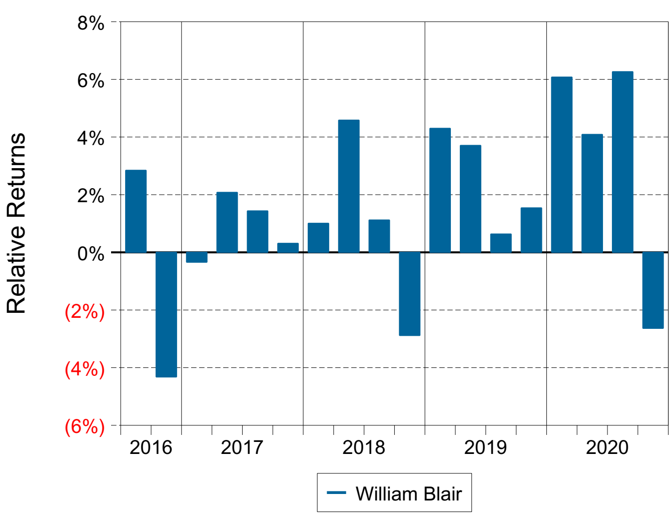
Beginning Market Value	$245,833,238
Net New Investment	$-10,204,822
Investment Gains/(Losses)	$35,481,514
Ending Market Value	$271,109,930

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

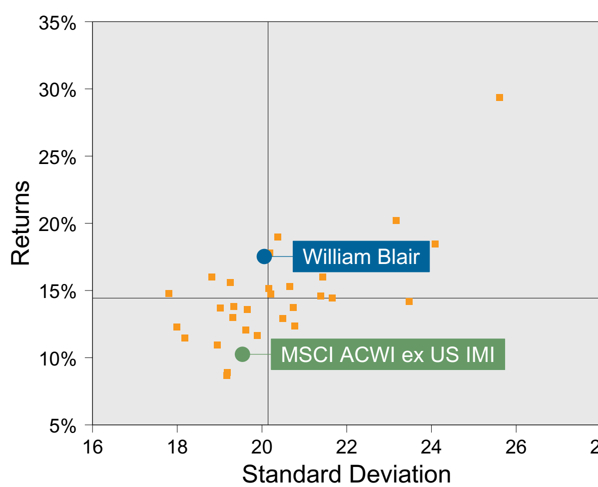


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile	20.72	35.66	37.24	35.58	15.53	18.86
25th Percentile	17.90	29.55	27.66	29.30	12.78	16.02
Median	15.81	27.53	21.17	24.10	9.94	14.43
75th Percentile	13.94	25.76	16.80	22.11	8.53	12.36
90th Percentile	11.23	22.57	11.32	19.36	6.81	11.04
William Blair ●	14.59	29.55	28.54	31.06	14.84	17.53
MSCI ACWI ex US IMI ▲	17.22	25.19	11.12	16.26	4.83	10.25

Relative Return vs MSCI ACWI ex US IMI



Callan Non-US All Country Growth Equity (Gross) Annualized Four and One-Half Year Risk vs Return



Axiom Emerging Markets
Period Ended December 31, 2020

Investment Philosophy

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

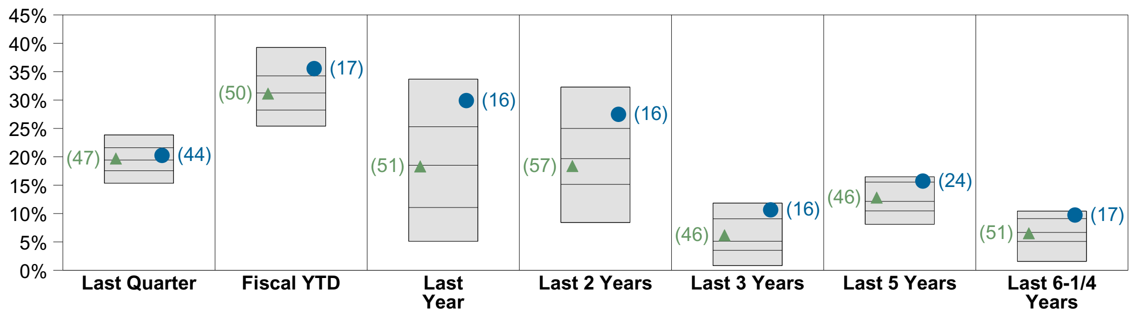
Quarterly Summary and Highlights

- Axiom Emerging Markets's portfolio posted a 20.25% return for the quarter placing it in the 44 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 16 percentile for the last year.
- Axiom Emerging Markets's portfolio outperformed the MSCI EM by 0.55% for the quarter and outperformed the MSCI EM for the year by 11.60%.

Quarterly Asset Growth

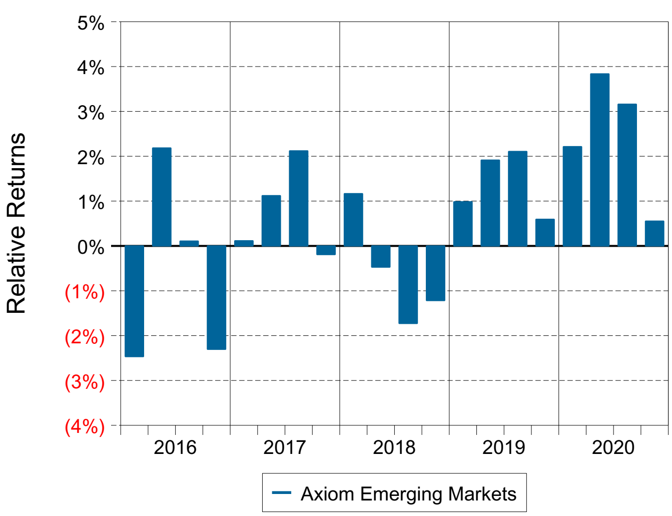
Beginning Market Value	$168,375,037
Net New Investment	$0
Investment Gains/(Losses)	$34,094,480
Ending Market Value	$202,469,518

Performance vs Callan Emerging Markets Equity Mut Funds (Net)

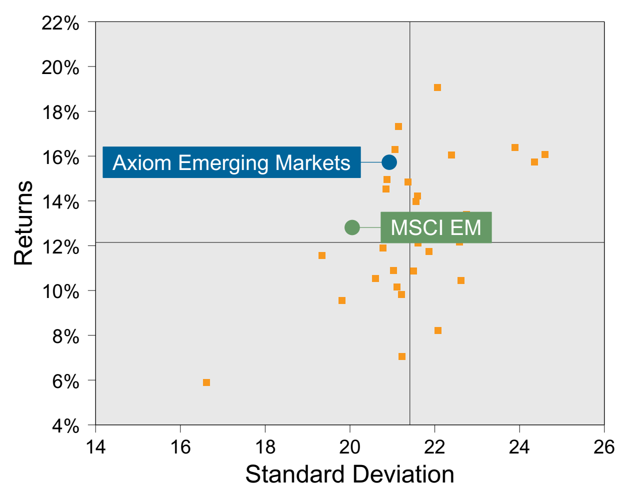


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6-1/4 Years
10th Percentile	23.86	39.28	33.68	32.29	11.84	16.48	10.43
25th Percentile	21.60	34.26	25.30	25.00	9.07	15.54	9.11
Median	19.43	31.25	18.51	19.67	5.12	12.15	6.67
75th Percentile	17.54	28.24	11.06	15.15	3.52	10.46	5.09
90th Percentile	15.35	25.40	5.11	8.41	0.83	8.11	1.57
Axiom Emerging Markets ●	20.25	35.54	29.91	27.49	10.65	15.73	9.74
MSCI EM ▲	19.70	31.14	18.31	18.37	6.18	12.81	6.53

Relative Return vs MSCI EM



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



DFA Emerging Markets
Period Ended December 31, 2020

Investment Philosophy

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

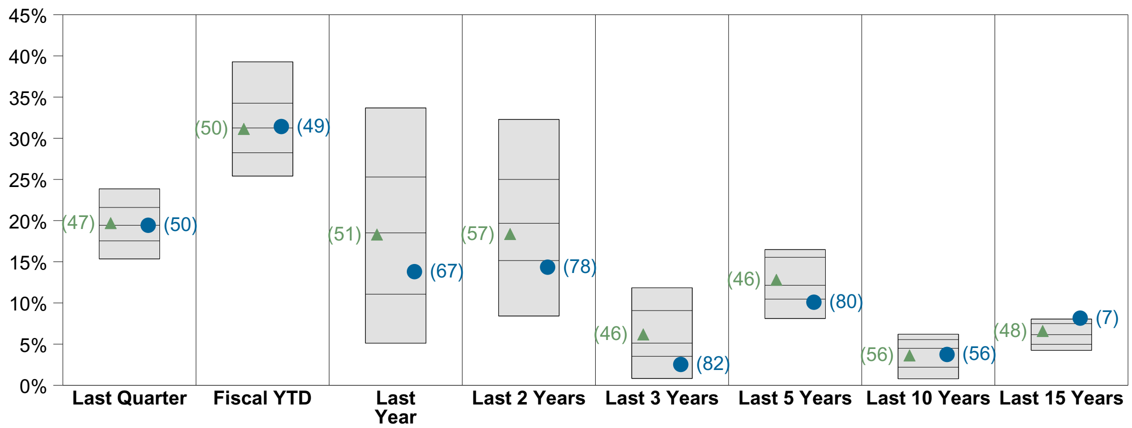
Quarterly Summary and Highlights

- DFA Emerging Markets's portfolio posted a 19.43% return for the quarter placing it in the 50 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 67 percentile for the last year.
- DFA Emerging Markets's portfolio underperformed the MSCI EM by 0.26% for the quarter and underperformed the MSCI EM for the year by 4.50%.

Quarterly Asset Growth

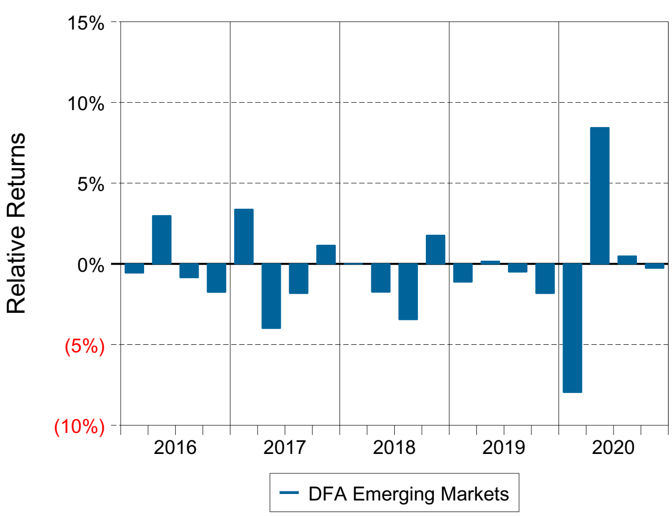
Beginning Market Value	$53,847,985
Net New Investment	$0
Investment Gains/(Losses)	$10,463,824
Ending Market Value	$64,311,809

Performance vs Callan Emerging Markets Equity Mut Funds (Net)

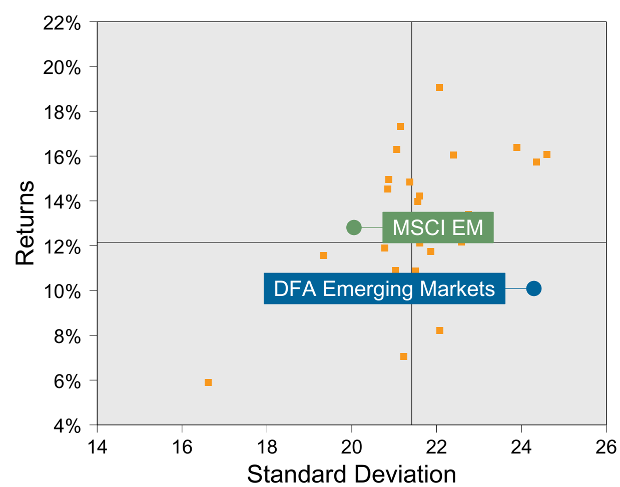


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
10th Percentile	23.86	39.28	33.68	32.29	11.84	16.48	6.20	8.04
25th Percentile	21.60	34.26	25.30	25.00	9.07	15.54	5.55	7.49
Median	19.43	31.25	18.51	19.67	5.12	12.15	4.49	6.15
75th Percentile	17.54	28.24	11.06	15.15	3.52	10.46	2.20	4.98
90th Percentile	15.35	25.40	5.11	8.41	0.83	8.11	0.79	4.24
DFA Emerging Markets ●	19.43	31.43	13.80	14.35	2.53	10.09	3.74	8.16
MSCI EM ▲	19.70	31.14	18.31	18.37	6.18	12.81	3.63	6.59

Relative Return vs MSCI EM



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



EPOCH Investment
Period Ended December 31, 2020

Investment Philosophy

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

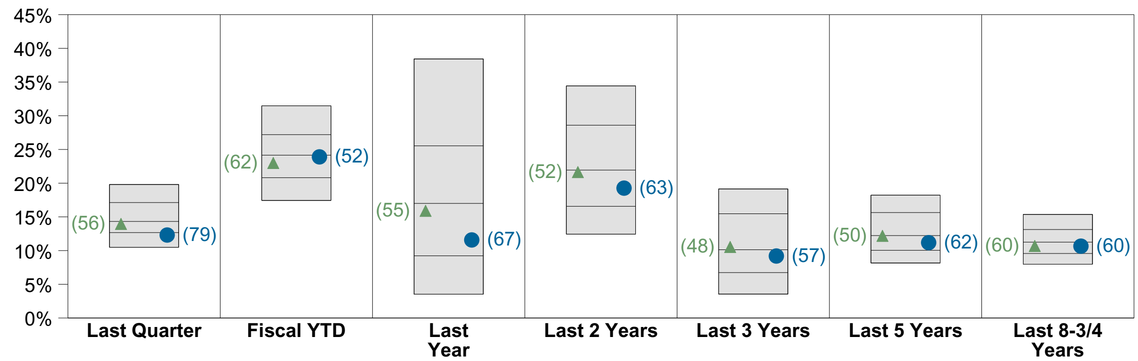
Quarterly Summary and Highlights

- EPOCH Investment's portfolio posted a 12.31% return for the quarter placing it in the 79 percentile of the Callan Global Equity group for the quarter and in the 67 percentile for the last year.
- EPOCH Investment's portfolio underperformed the MSCI World by 1.65% for the quarter and underperformed the MSCI World for the year by 4.32%.

Quarterly Asset Growth

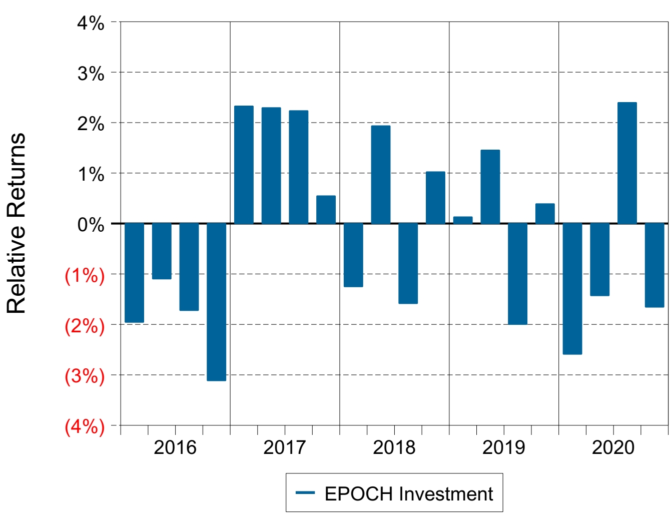
Beginning Market Value	$480,101,539
Net New Investment	$-90,755,934
Investment Gains/(Losses)	$57,234,447
Ending Market Value	$446,580,052

Performance vs Callan Global Equity (Gross)

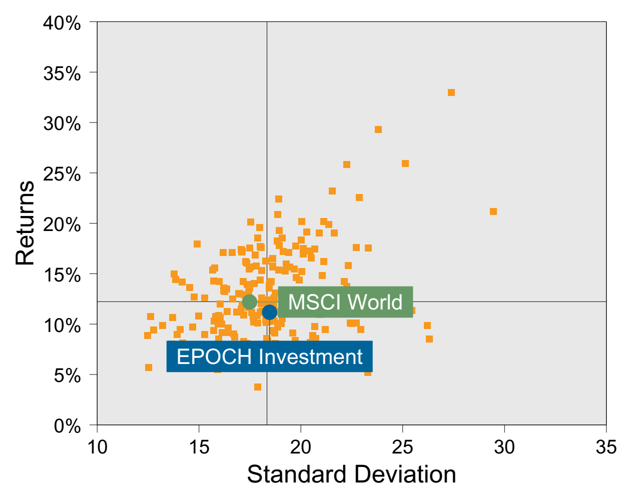


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-3/4 Years
10th Percentile	19.80	31.48	38.43	34.43	19.15	18.23	15.36
25th Percentile	17.12	27.20	25.54	28.60	15.46	15.64	13.12
Median	14.32	24.15	17.00	21.94	10.13	12.23	11.26
75th Percentile	12.67	20.81	9.22	16.57	6.74	10.04	9.57
90th Percentile	10.49	17.44	3.53	12.43	3.55	8.16	7.97
EPOCH Investment ●	12.31	23.90	11.58	19.26	9.19	11.18	10.66
MSCI World ▲	13.96	23.00	15.90	21.64	10.54	12.19	10.69

Relative Return vs MSCI World



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



LSV Asset Management
Period Ended December 31, 2020

Investment Philosophy

The Global Value (ACWI) Equity strategy is managed using quantitative techniques to select individual securities in a risk-controlled, bottom-up approach. Value factors and security selection dominate sector/industry factors as explanators of performance. **The Benchmark is comprised of MSCI ACWI through June 30, 2019; MSCI ACWI IMI Index thereafter.**

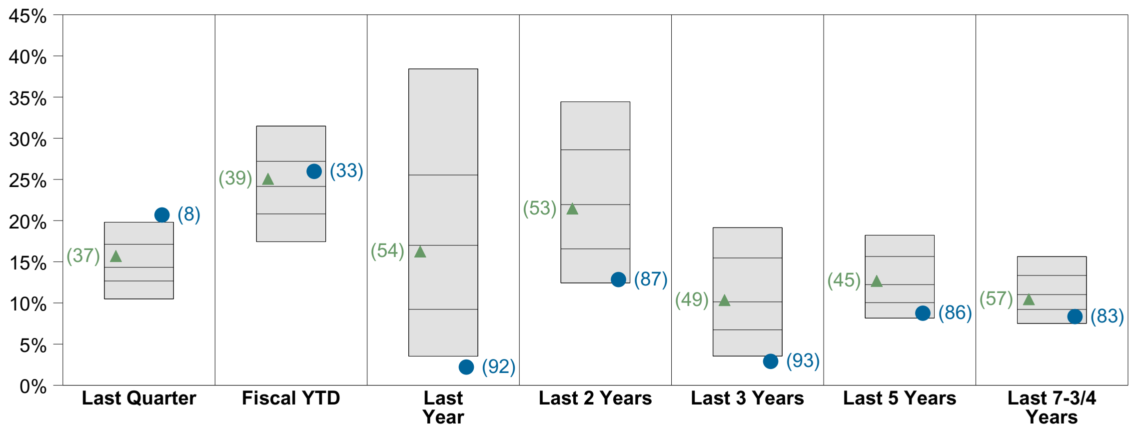
Quarterly Summary and Highlights

- LSV Asset Management's portfolio posted a 20.68% return for the quarter placing it in the 8 percentile of the Callan Global Equity group for the quarter and in the 92 percentile for the last year.
- LSV Asset Management's portfolio outperformed the Benchmark by 4.98% for the quarter and underperformed the Benchmark for the year by 14.04%.

Quarterly Asset Growth

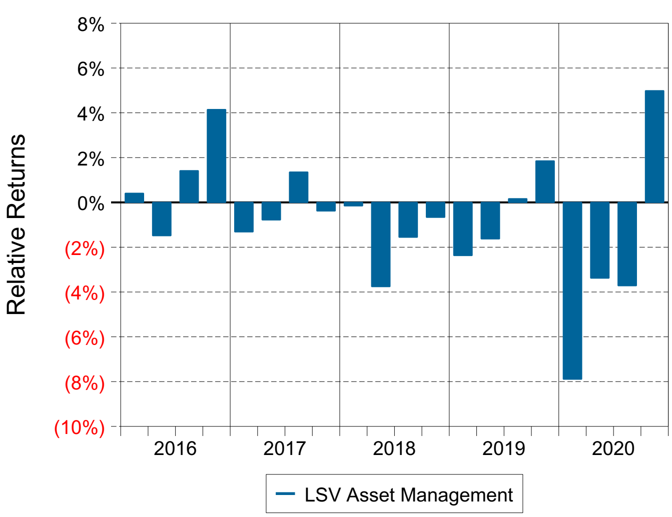
Beginning Market Value	$464,340,085
Net New Investment	$-90,115,904
Investment Gains/(Losses)	$93,950,640
Ending Market Value	$468,174,820

Performance vs Callan Global Equity (Gross)

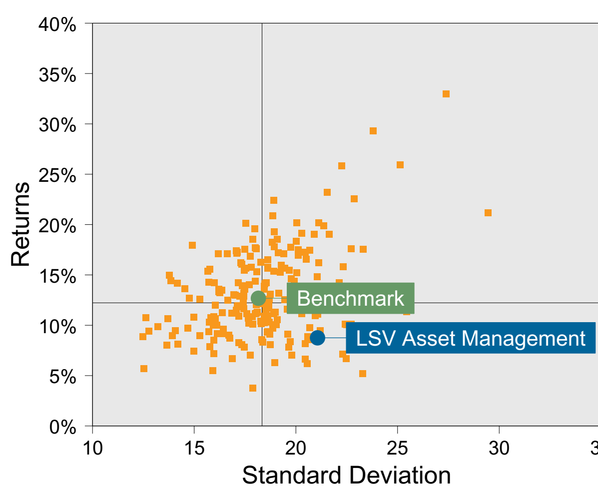


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-3/4 Years
10th Percentile	19.80	31.48	38.43	34.43	19.15	18.23	15.63
25th Percentile	17.12	27.20	25.54	28.60	15.46	15.64	13.34
Median	14.32	24.15	17.00	21.94	10.13	12.23	11.02
75th Percentile	12.67	20.81	9.22	16.57	6.74	10.04	9.21
90th Percentile	10.49	17.44	3.53	12.43	3.55	8.16	7.51
LSV Asset Management ●	20.68	25.98	2.21	12.84	2.91	8.75	8.35
Benchmark ▲	15.70	25.08	16.25	21.47	10.35	12.68	10.46

Relative Return vs Benchmark



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



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 20 Years
Private Equity	**9.35%**	**12.25%**	**8.21%**	**6.42%**	**3.21%**
Adams St Direct Co-Invest Fund	0.55%	(59.13%)	(38.84%)	(25.35%)	-
Adams St Direct Fd 2010	12.92%	12.64%	12.19%	10.55%	-
Adams St 1998 Partnership	0.00%	(0.16%)	2.51%	1.76%	1.74%
Adams St 1999 Partnership	(1.30%)	6.90%	2.05%	1.36%	2.38%
Adams St 2000 Partnership	(3.23%)	(4.32%)	2.55%	2.45%	3.10%
Adams St 2001 Partnership	15.60%	16.23%	6.98%	5.21%	3.94%
Adams St 2002 Partnership	0.38%	1.02%	(5.18%)	3.86%	-
Adams St 2003 Partnership	(0.63%)	(6.96%)	0.21%	3.54%	-
Adams St 2010 Partnership	24.68%	35.76%	23.18%	17.51%	-
Adams St 2008 Fund	11.81%	23.59%	16.21%	15.18%	-
Adams St 1999 Non-US	(1.19%)	0.25%	0.79%	0.88%	5.32%
Adams St 2000 Non-US	(9.27%)	(2.52%)	3.32%	4.22%	3.12%
Adams St 2001 Non-US	0.13%	1.41%	7.56%	1.56%	-
Adams St 2002 Non-US	0.42%	(2.79%)	0.29%	1.44%	-
Adams St 2003 Non-US	0.91%	(7.31%)	(6.53%)	3.43%	-
Adams St 2004 Non-US	4.65%	3.97%	4.74%	4.25%	-
Adams St 2010 Non-US	10.98%	20.92%	18.12%	18.07%	-
Adams St 2010 NonUS Emg	9.02%	14.26%	12.47%	11.76%	-
Adams St 2015 Global Fund	9.66%	19.12%	18.16%	25.48%	-
Adams St 2016 Global Fund	6.45%	15.42%	13.28%	-	-
Adams St 2017 Global Fund	8.21%	18.27%	13.02%	-	-
Adams St 2018 Global Fund	9.40%	21.47%	-	-	-
Adams St 2019 Global Fund	32.16%	93.33%	-	-	-
Adams St BVCF IV Fund	0.00%	(99.61%)	(89.03%)	(73.22%)	(17.89%)
BlackRock	13.09%	12.00%	8.68%	-	-
Sixth Street TAO	3.30%	-	-	-	-
Remaining Misc. Funds*	(0.14%)	(2.03%)	0.35%	(1.13%)	-
Russell 1000 Index	13.69%	20.96%	14.82%	15.60%	7.75%
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	8.74%

* Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.

Domestic Fixed Income
Period Ended December 31, 2020

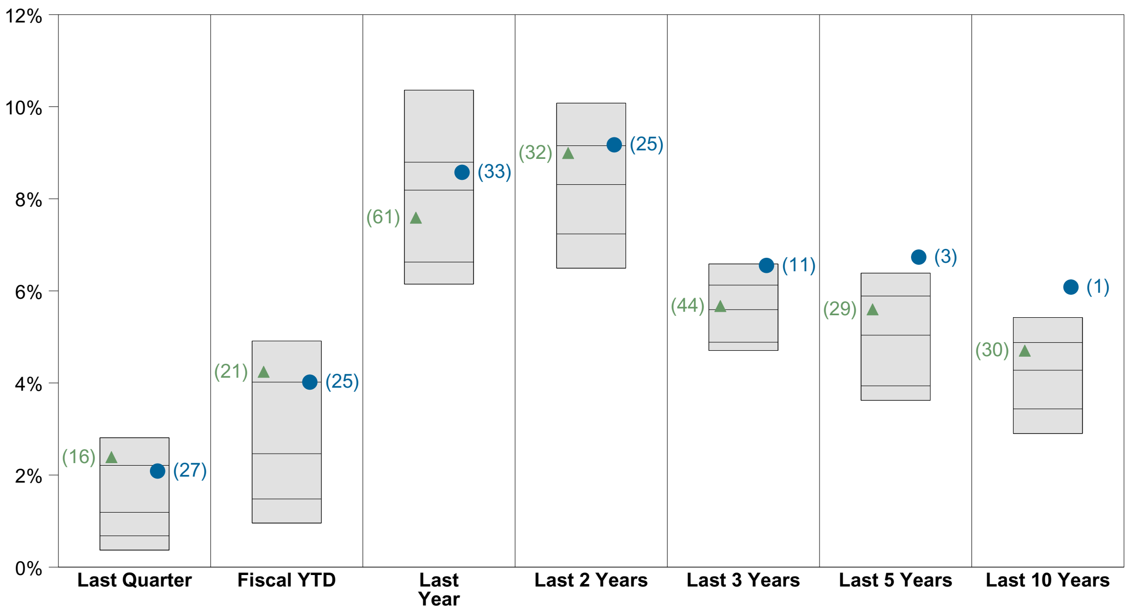
Quarterly Summary and Highlights

- Domestic Fixed Income's portfolio posted a 2.09% return for the quarter placing it in the 27 percentile of the Public Fund - Domestic Fixed group for the quarter and in the 33 percentile for the last year.
- Domestic Fixed Income's portfolio underperformed the Domestic Fixed Income Target by 0.30% for the quarter and outperformed the Domestic Fixed Income Target for the year by 0.98%.

Quarterly Asset Growth

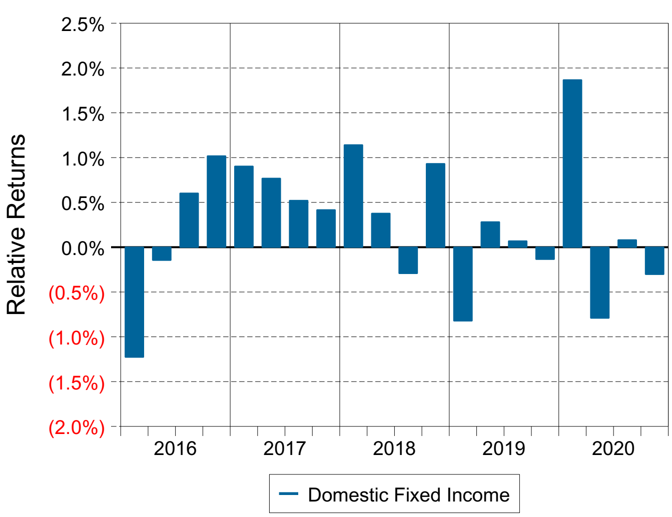
Beginning Market Value	$1,498,526,730
Net New Investment	$162,189,086
Investment Gains/(Losses)	$31,943,611
Ending Market Value	$1,692,659,427

Performance vs Public Fund - Domestic Fixed (Gross)

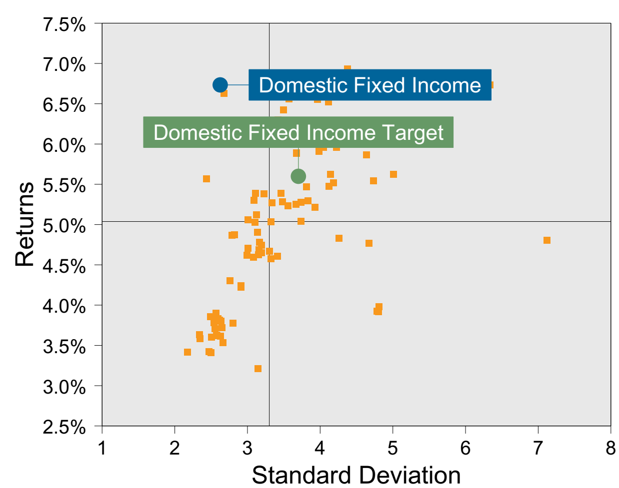


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.81	4.91	10.36	10.08	6.59	6.39	5.42
25th Percentile	2.21	4.02	8.79	9.15	6.13	5.89	4.88
Median	1.19	2.46	8.19	8.31	5.59	5.04	4.28
75th Percentile	0.68	1.48	6.63	7.24	4.88	3.94	3.44
90th Percentile	0.37	0.96	6.15	6.49	4.71	3.62	2.90
Domestic Fixed Income ●	2.09	4.02	8.57	9.17	6.55	6.73	6.08
Domestic Fixed Income Target ▲	2.39	4.24	7.59	8.99	5.67	5.60	4.70

Relative Returns vs Domestic Fixed Income Target



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



Declaration Total Return
Period Ended December 31, 2020

Investment Philosophy

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

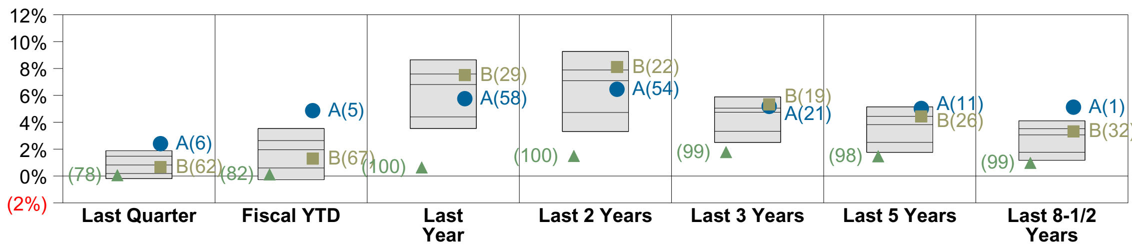
Quarterly Summary and Highlights

- Declaration Total Return’s portfolio posted a 2.41% return for the quarter placing it in the 6 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 58 percentile for the last year.
- Declaration Total Return’s portfolio outperformed the LIBOR - 3 Month by 2.35% for the quarter and outperformed the LIBOR - 3 Month for the year by 5.12%.

Quarterly Asset Growth

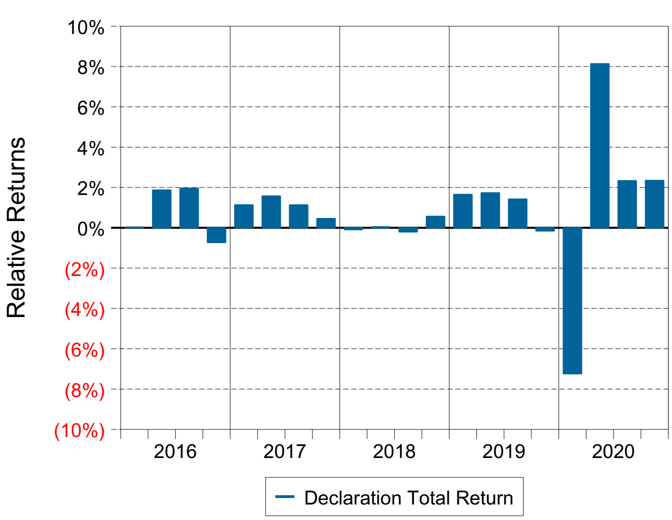
Beginning Market Value	$126,490,042
Net New Investment	$-76,415
Investment Gains/(Losses)	$3,043,587
Ending Market Value	$129,457,214

Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)

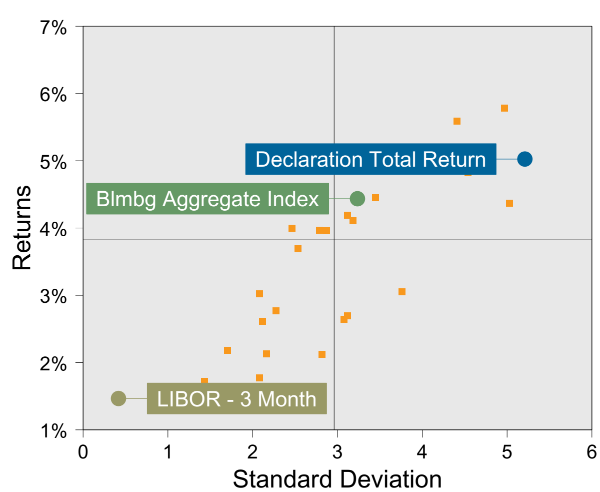


		Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-1/2 Years
10th Percentile		1.88	3.54	8.64	9.27	5.89	5.14	4.11
25th Percentile		1.48	2.64	7.59	7.89	5.05	4.44	3.52
Median		0.82	1.95	6.81	7.09	4.75	3.82	3.06
75th Percentile		0.19	0.60	4.40	4.73	3.33	2.50	1.77
90th Percentile		(0.19)	(0.28)	3.54	3.31	2.50	1.76	1.17
Declaration Total Return	● A	2.41	4.86	5.75	6.45	5.18	5.03	5.12
Blmbg Aggregate Index	■ B	0.67	1.29	7.51	8.11	5.34	4.44	3.32
LIBOR - 3 Month	▲	0.06	0.12	0.64	1.49	1.78	1.47	0.98

Relative Return vs LIBOR - 3 Month



Callan Intermediate Fixed Inc Mut Funds (Net)
Annualized Five Year Risk vs Return



PIMCO DiSCO II
Period Ended December 31, 2020

Investment Philosophy

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

Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 1.80% return for the quarter placing it in the 17 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 99 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Blmbg Aggregate by 1.14% for the quarter and underperformed the Blmbg Aggregate for the year by 3.20%.

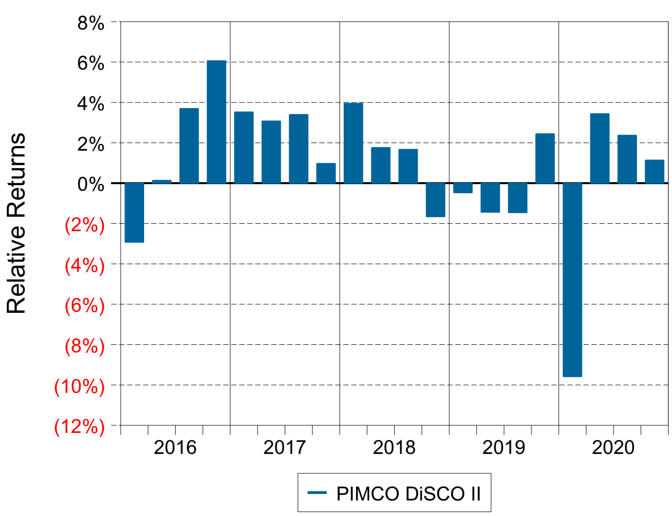
Quarterly Asset Growth

Beginning Market Value	$110,298,882
Net New Investment	$0
Investment Gains/(Losses)	$1,990,259
Ending Market Value	$112,289,141

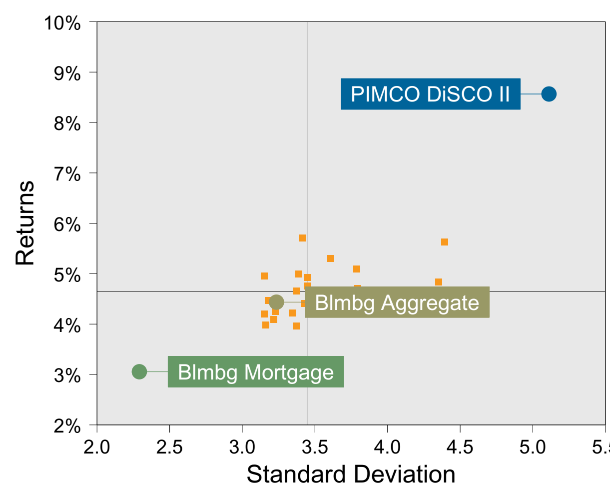
Performance vs Callan Core Bond Mutual Funds (Net)

		Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 9 Years
10th Percentile		2.40	3.95	9.63	9.52	6.00	5.30	4.22
25th Percentile		1.56	2.77	9.11	9.09	5.72	4.88	3.72
Median		1.17	2.20	8.48	8.70	5.51	4.65	3.57
75th Percentile		1.00	1.90	7.92	8.23	5.22	4.31	3.25
90th Percentile		0.62	1.67	7.32	7.93	4.82	4.10	3.12
PIMCO DiSCO II	● A	1.80	4.84	4.31	6.02	5.97	8.57	11.98
Blmbg Mortgage	■ B	0.24	0.36	3.87	5.10	3.71	3.05	2.65
Blmbg Aggregate	▲	0.67	1.29	7.51	8.11	5.34	4.44	3.40

Relative Return vs Blmbg Aggregate



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



PIMCO Core Plus Constrained
Period Ended December 31, 2020

Investment Philosophy

PIMCO's investment process utilizes both "top-down" and "bottom-up" strategies. Top-down strategies focus on duration, yield curve postioning, volatility, and sector rotation. These stretegies are deployed from a macro view of the portfolio driven by their secular outlook of the forces likely to influence the economy and financial markets over the next three to five years and their cyclical views of two- to four-quarter trends. Implementation in portfolios is effected by selecting securities that achieve the designated objectives. Bottom-up strategies drive their security selection process and facilitate the indentification and analysis of undervalued securities.**The product changed from Commingled Fund to Separate Account in March 2014. *Libor-3 month through February 28, 2017; Fund's performance through March 31, 2014; Libor-3 month through June 30, 2018; Bloomberg Aggregate thereafter.**

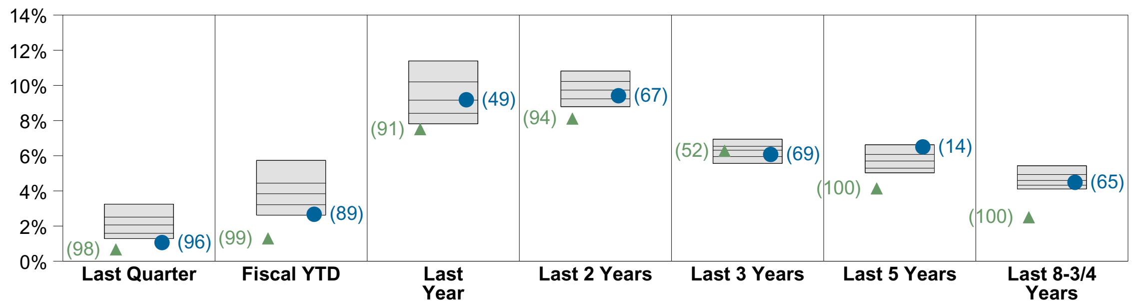
Quarterly Summary and Highlights

- PIMCO Core Plus Constrained's portfolio posted a 1.06% return for the quarter placing it in the 96 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 49 percentile for the last year.
- PIMCO Core Plus Constrained's portfolio outperformed the Blended Benchmark* by 0.39% for the quarter and outperformed the Blended Benchmark* for the year by 1.68%.

Quarterly Asset Growth

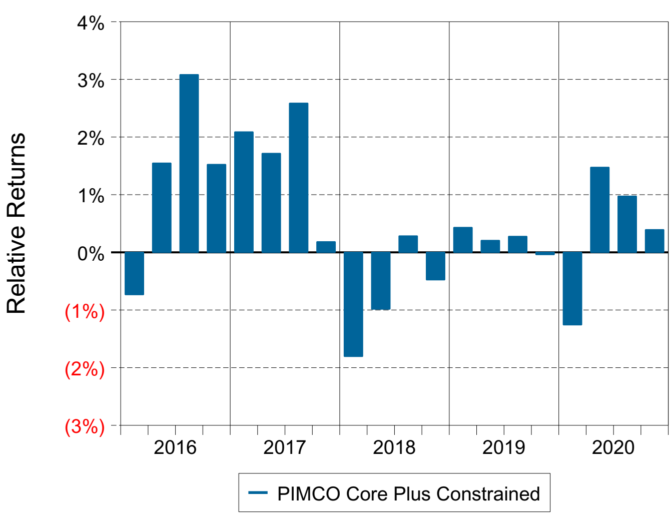
Beginning Market Value	$361,487,061
Net New Investment	$54,895,720
Investment Gains/(Losses)	$3,950,547
Ending Market Value	$420,333,327

Performance vs Callan Core Plus Fixed Income (Gross)

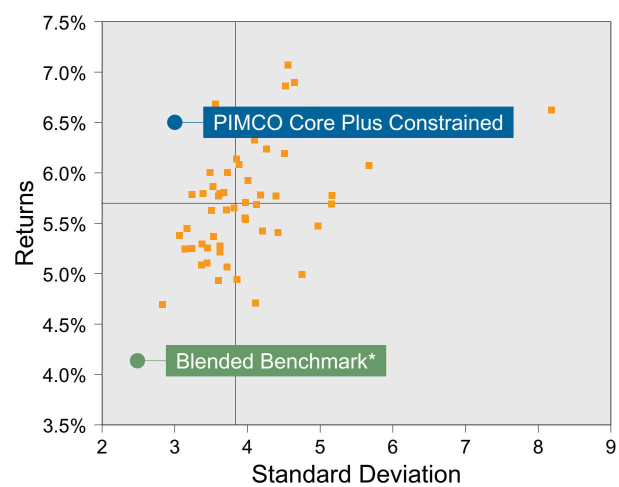


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-3/4 Years
10th Percentile	3.25	5.74	11.39	10.82	6.94	6.62	5.43
25th Percentile	2.51	4.44	10.20	10.23	6.54	6.08	4.93
Median	2.06	3.84	9.16	9.73	6.31	5.70	4.59
75th Percentile	1.59	3.21	8.41	9.24	5.95	5.29	4.32
90th Percentile	1.29	2.62	7.82	8.79	5.56	5.03	4.11
PIMCO Core Plus Constrained ●	1.06	2.67	9.18	9.41	6.07	6.50	4.49
Blended Benchmark* ▲	0.67	1.29	7.51	8.11	6.28	4.14	2.50

Relative Return vs Blended Benchmark*



Callan Core Plus Fixed Income (Gross)
Annualized Five Year Risk vs Return



Prudential Core
Period Ended December 31, 2020

Investment Philosophy

The PGIM Fixed Income Core Fixed Income strategy seeks to provide +60 bps over the Bloomberg Barclays Aggregate Index over a market cycle. The strategy tends to generate its excess return from fairly equal increments of both sector allocation and subsector/security allocation. Duration and yield curve positioning is generally de-emphasized, but will be considered when market opportunities dictate. The primary way they add value is through intensive research-based sector, industry, and security selection. The strategy is predominately investment grade, but may also invest nominally in crossover/high yield bonds and emerging markets debt, when guidelines permit.

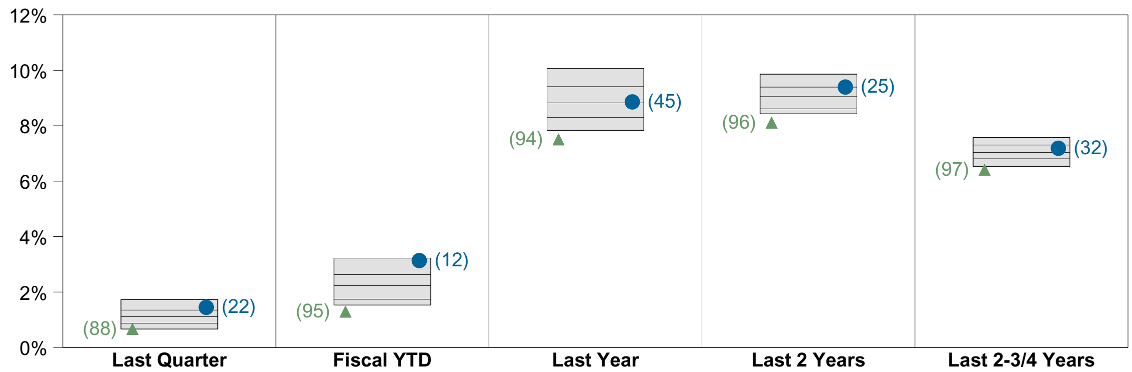
Quarterly Summary and Highlights

- Prudential Core's portfolio posted a 1.45% return for the quarter placing it in the 22 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 45 percentile for the last year.
- Prudential Core's portfolio outperformed the Blmbg Aggregate by 0.78% for the quarter and outperformed the Blmbg Aggregate for the year by 1.35%.

Quarterly Asset Growth

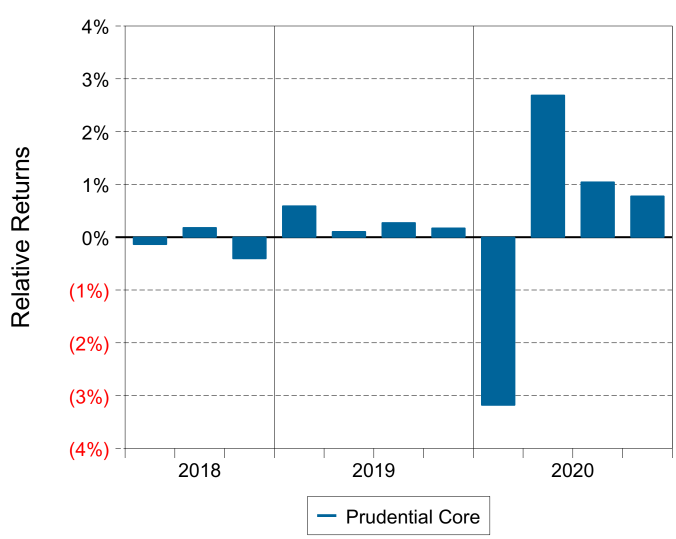
Beginning Market Value	$363,351,758
Net New Investment	$54,898,874
Investment Gains/(Losses)	$5,427,203
Ending Market Value	$423,677,834

Performance vs Callan Core Bond Fixed Income (Gross)

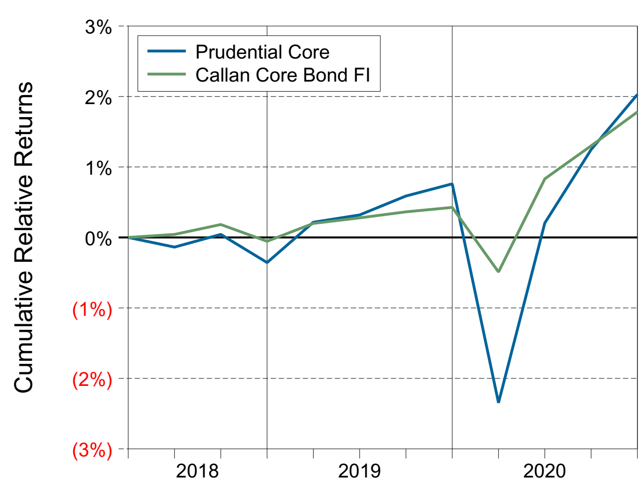


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 2-3/4 Years
10th Percentile	1.73	3.22	10.07	9.86	7.57
25th Percentile	1.35	2.63	9.41	9.39	7.30
Median	1.11	2.23	8.82	9.05	7.04
75th Percentile	0.88	1.74	8.30	8.61	6.81
90th Percentile	0.66	1.53	7.83	8.43	6.53
Prudential Core ●	1.45	3.14	8.86	9.40	7.19
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	6.41

Relative Return vs Blmbg Aggregate



Cumulative Returns vs Blmbg Aggregate



SSgA Long US Treas Index
Period Ended December 31, 2020

Investment Philosophy

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

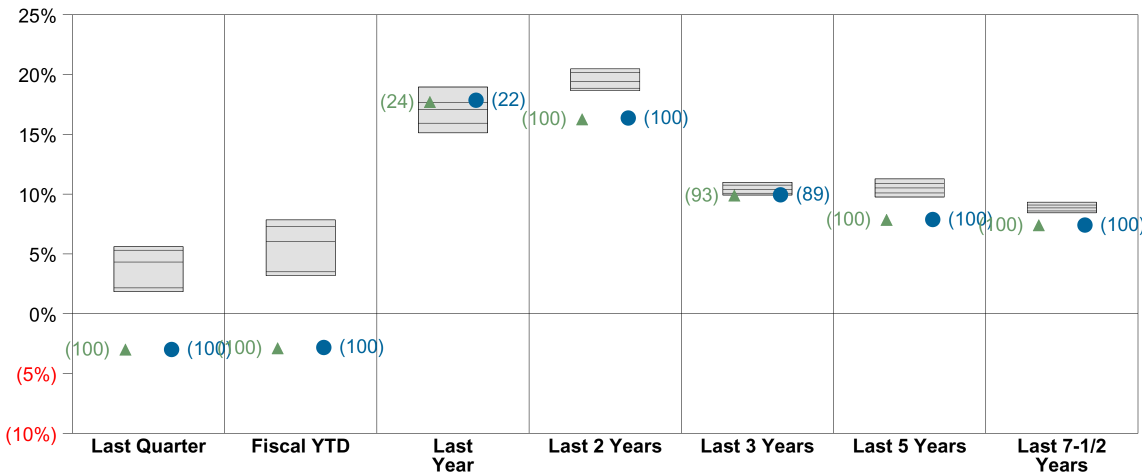
Quarterly Summary and Highlights

- SSgA Long US Treas Index's portfolio posted a (2.99)% return for the quarter placing it in the 100 percentile of the Callan Extended Maturity Fixed Income group for the quarter and in the 22 percentile for the last year.
- SSgA Long US Treas Index's portfolio outperformed the Blmbg:Long Treasury by 0.01% for the quarter and outperformed the Blmbg:Long Treasury for the year by 0.15%.

Quarterly Asset Growth

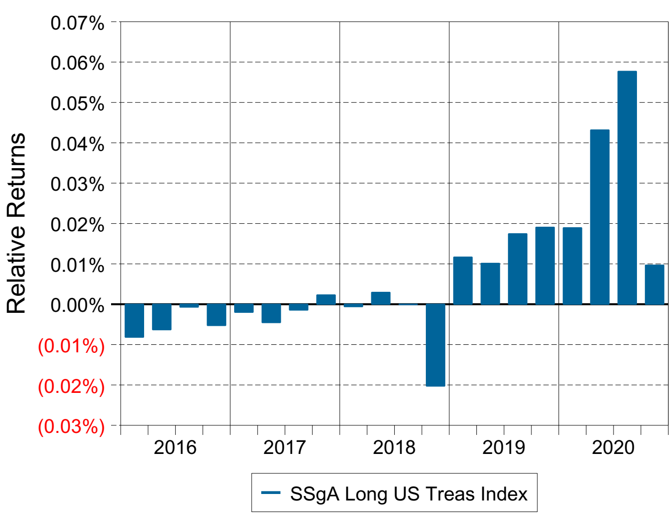
Beginning Market Value	$107,942,499
Net New Investment	$34,996,020
Investment Gains/(Losses)	$-3,224,066
Ending Market Value	$139,714,453

Performance vs Callan Extended Maturity Fixed Income (Gross)

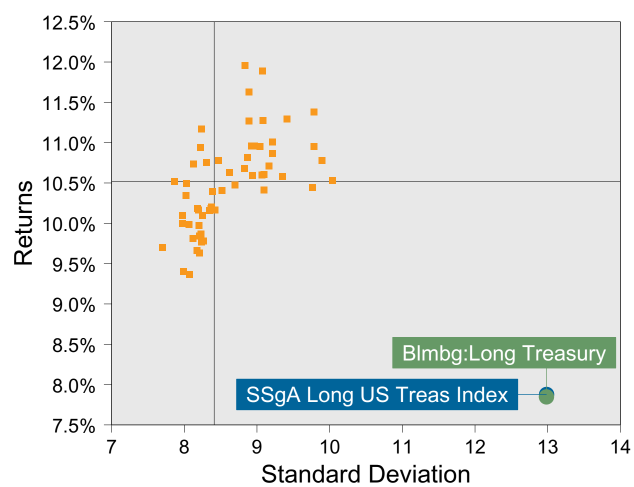


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/2 Years
10th Percentile	5.61	7.85	18.96	20.48	10.99	11.28	9.33
25th Percentile	5.31	7.31	17.68	20.16	10.75	10.90	9.09
Median	4.32	6.03	17.08	19.42	10.40	10.52	8.85
75th Percentile	2.16	3.50	15.93	18.86	10.07	10.10	8.59
90th Percentile	1.84	3.18	15.13	18.65	9.92	9.76	8.44
SSgA Long US Treas Index ●	(2.99)	(2.82)	17.85	16.36	9.94	7.88	7.41
Blmbg:Long Treasury ▲	(3.00)	(2.89)	17.70	16.26	9.88	7.85	7.40

Relative Return vs Blmbg:Long Treasury



Callan Extended Maturity Fixed Income (Gross)
Annualized Five Year Risk vs Return



Ares ND Credit Strategies Fd
Period Ended December 31, 2020

Quarterly Summary and Highlights

- Ares ND Credit Strategies Fd's portfolio posted a 3.68% return for the quarter placing it in the 99 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 89 percentile for the last year.
- Ares ND Credit Strategies Fd's portfolio underperformed the S&P/LSTA Leveraged Loan B Index by 0.10% for the quarter and underperformed the S&P/LSTA Leveraged Loan B Index for the year by 0.51%.

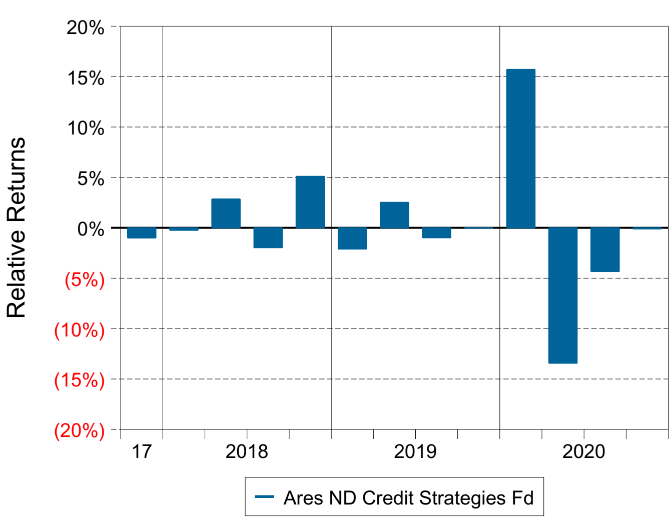
Quarterly Asset Growth

Beginning Market Value	$117,100,737
Net New Investment	$0
Investment Gains/(Losses)	$4,304,896
Ending Market Value	$121,405,633

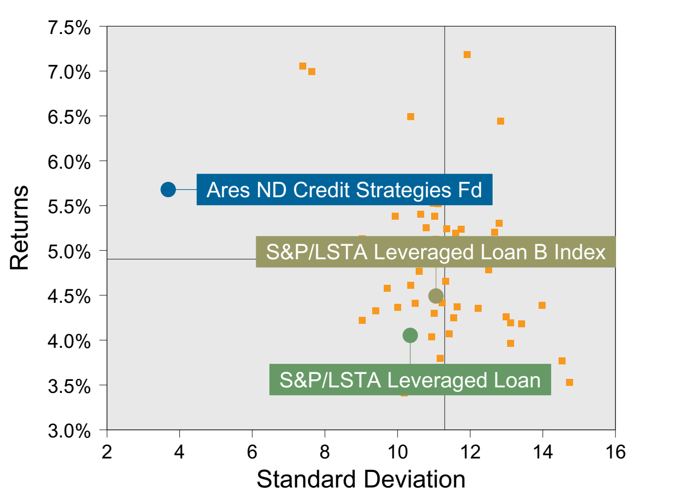
Performance vs Callan High Yield Mutual Funds (Net)

		Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 3-1/4 Years
10th Percentile		7.39	13.07	7.77	11.22	6.46	6.18
25th Percentile		6.83	11.93	6.90	10.37	5.61	5.28
Median		5.99	10.92	5.34	9.71	5.29	4.90
75th Percentile		5.41	10.02	4.50	8.77	4.60	4.31
90th Percentile		4.80	9.03	3.08	8.19	4.20	3.99
Ares ND Credit Strategies Fd	● A	3.68	3.68	3.29	5.79	6.13	5.68
S&P/LSTA Leveraged Loan	■ B	3.81	8.11	3.12	5.85	4.01	4.05
S&P/LSTA Leveraged Loan B Index	▲	3.78	8.27	3.80	6.36	4.50	4.49

Relative Returns vs S&P/LSTA Leveraged Loan B Index



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



Cerberus ND Private Credit Fd
Period Ended December 31, 2020

Investment Philosophy

The investment objective of the LLC is to achieve superior risk-adjusted rates of return primarily through origination of, and investment in, secured debt assets consistent with the Loan Opportunities Strategy of the Cerberus Business Finance lending platform ("CBF", "Cerberus Business Finance" or the "Cerberus Lending Platform"). The Cerberus Lending Platform is a direct origination and lending business focused on providing secured debt primarily to U.S. middle-market companies. The LLC expects to generate both current income and capital appreciation.

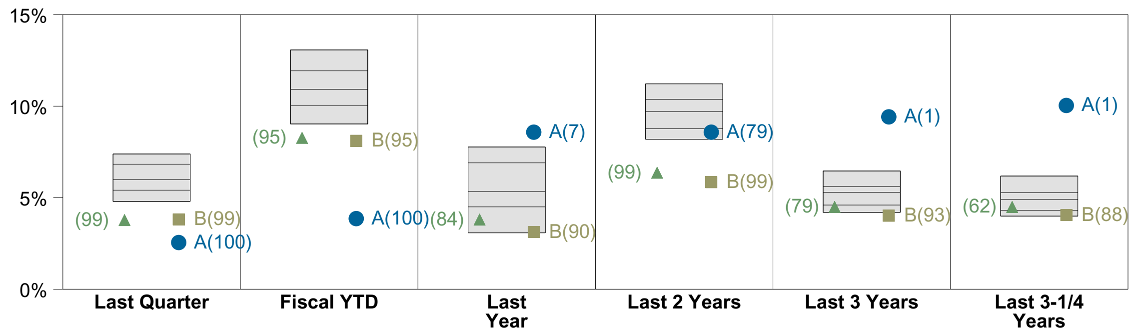
Quarterly Summary and Highlights

- Cerberus ND Private Credit Fd's portfolio posted a 2.55% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 7 percentile for the last year.
- Cerberus ND Private Credit Fd's portfolio underperformed the S&P/LSTA Leveraged Loan B Index by 1.23% for the quarter and outperformed the S&P/LSTA Leveraged Loan B Index for the year by 4.77%.

Quarterly Asset Growth

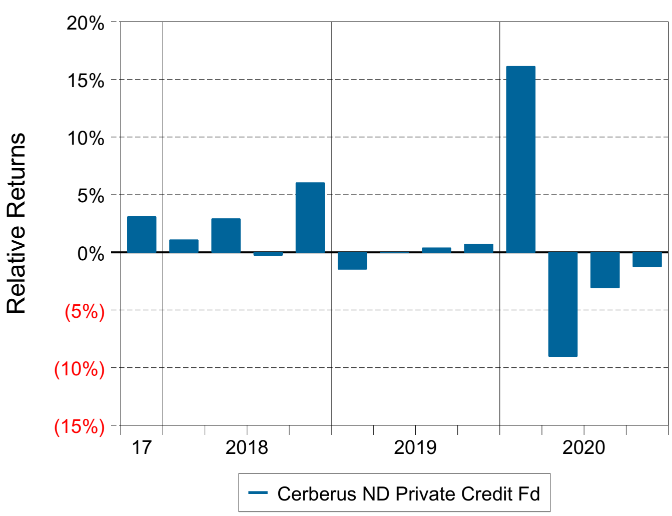
Beginning Market Value	$123,155,292
Net New Investment	$19,250,000
Investment Gains/(Losses)	$3,261,035
Ending Market Value	$145,666,327

Performance vs Callan High Yield Mutual Funds (Net)

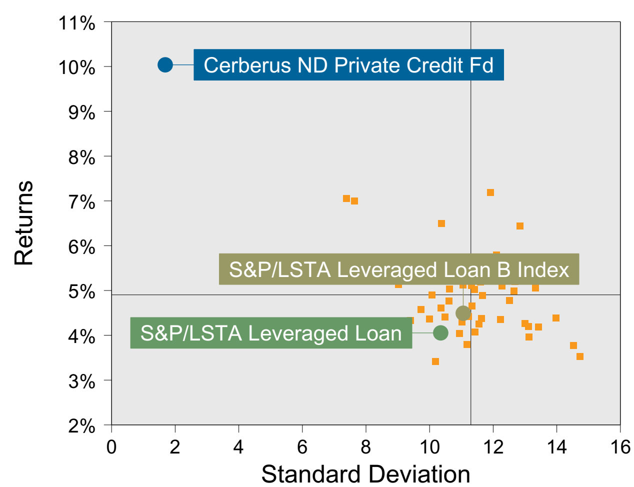


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 3-1/4 Years
10th Percentile	7.39	13.07	7.77	11.22	6.46	6.18
25th Percentile	6.83	11.93	6.90	10.37	5.61	5.28
Median	5.99	10.92	5.34	9.71	5.29	4.90
75th Percentile	5.41	10.02	4.50	8.77	4.60	4.31
90th Percentile	4.80	9.03	3.08	8.19	4.20	3.99
Cerberus ND Private Credit Fd ● A	2.55	3.86	8.58	8.58	9.42	10.04
S&P/LSTA Leveraged Loan ■ B	3.81	8.11	3.12	5.85	4.01	4.05
S&P/LSTA Leveraged Loan B Index ▲	3.78	8.27	3.80	6.36	4.50	4.49

Relative Returns vs S&P/LSTA Leveraged Loan B Index



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



Goldman Sachs 2006 Offshore
Period Ended December 31, 2020

Investment Philosophy

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

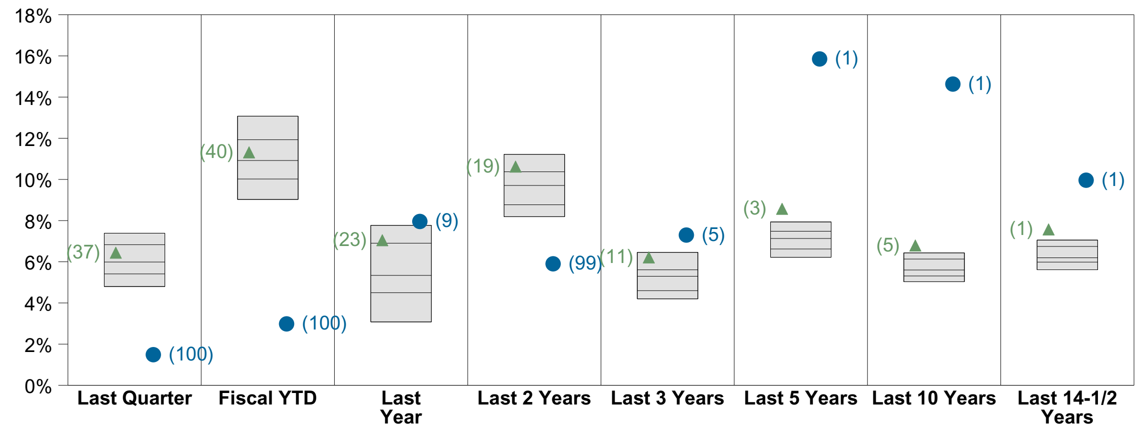
Quarterly Summary and Highlights

- Goldman Sachs's portfolio posted a 1.49% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 9 percentile for the last year.
- Goldman Sachs's portfolio underperformed the Blmbg:HY Corp 2% Iss Cap by 4.95% for the quarter and outperformed the Blmbg:HY Corp 2% Iss Cap for the year by 0.91%.

Quarterly Asset Growth

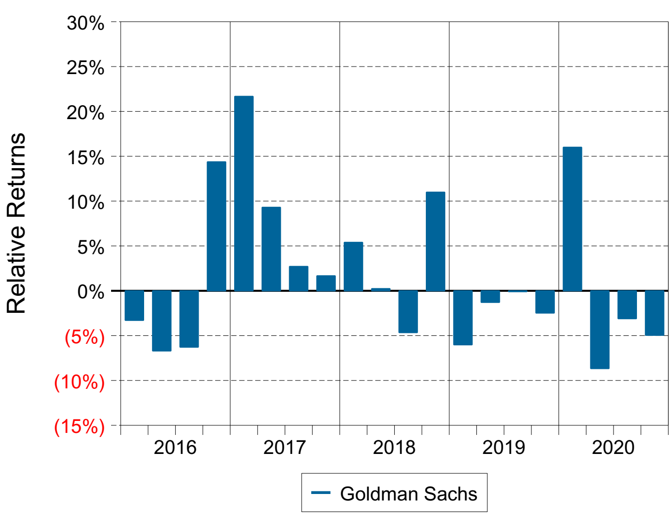
Beginning Market Value	$66,347
Net New Investment	$0
Investment Gains/(Losses)	$986
Ending Market Value	$67,333

Performance vs Callan High Yield Mutual Funds (Net)

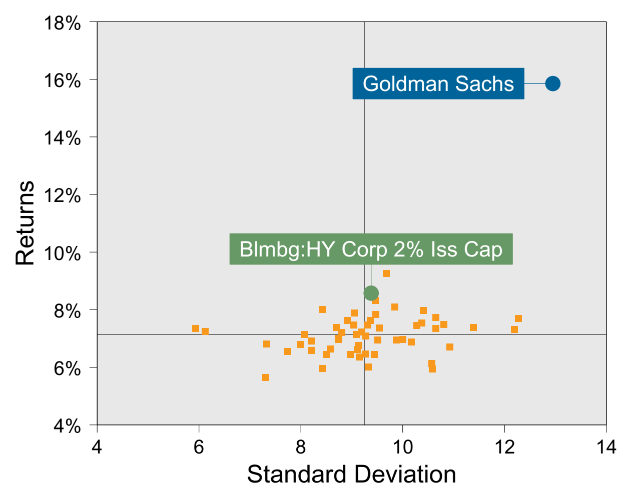


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 14-1/2 Years
10th Percentile	7.39	13.07	7.77	11.22	6.46	7.94	6.43	7.06
25th Percentile	6.83	11.93	6.90	10.37	5.61	7.48	6.13	6.75
Median	5.99	10.92	5.34	9.71	5.29	7.13	5.60	6.19
75th Percentile	5.41	10.02	4.50	8.77	4.60	6.62	5.31	5.98
90th Percentile	4.80	9.03	3.08	8.19	4.20	6.22	5.03	5.61
Goldman Sachs ●	1.49	2.98	7.96	5.90	7.30	15.85	14.63	9.96
Blmbg:HY Corp 2% Iss Cap ▲	6.44	11.32	7.05	10.62	6.21	8.57	6.79	7.57

Relative Return vs Blmbg:HY Corp 2% Iss Cap



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



Goldman Sachs Offshore Fund V
Period Ended December 31, 2020

Investment Philosophy

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

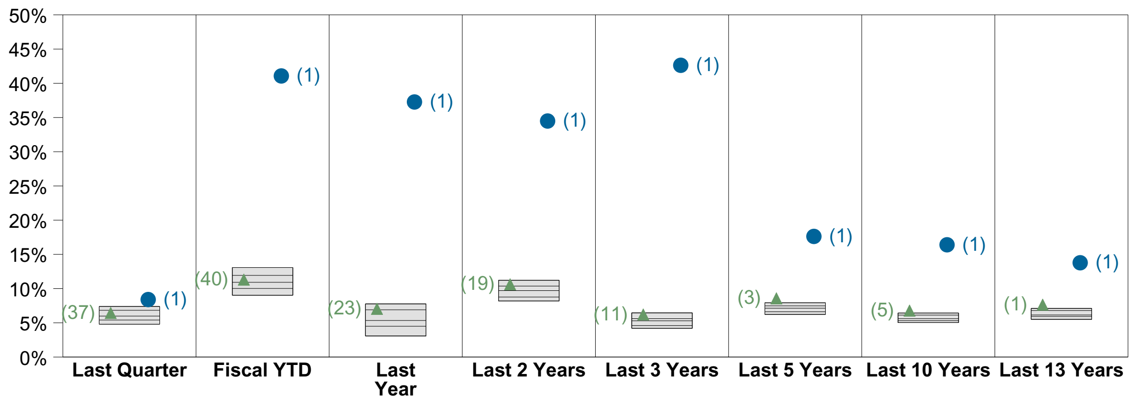
Quarterly Summary and Highlights

- Goldman Sachs Offshore V's portfolio posted a 8.40% return for the quarter placing it in the 1 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 1 percentile for the last year.
- Goldman Sachs Offshore V's portfolio outperformed the Blmbg:HY Corp 2% Iss Cap by 1.96% for the quarter and outperformed the Blmbg:HY Corp 2% Iss Cap for the year by 30.22%.

Quarterly Asset Growth

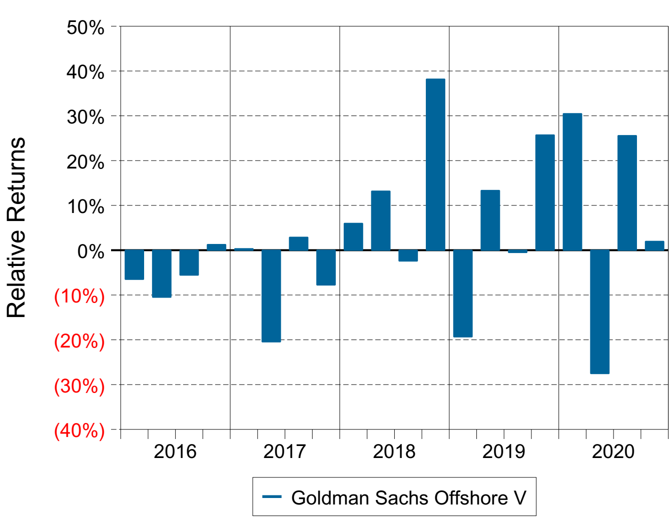
Beginning Market Value	$213,143
Net New Investment	$0
Investment Gains/(Losses)	$17,906
Ending Market Value	$231,049

Performance vs Callan High Yield Mutual Funds (Net)

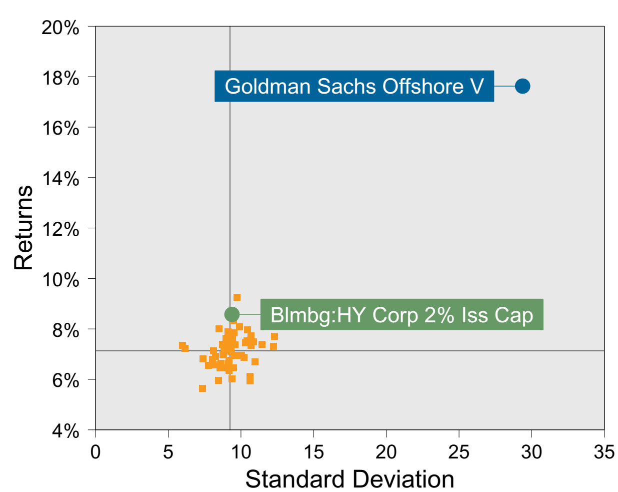


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 13 Years
10th Percentile	7.39	13.07	7.77	11.22	6.46	7.94	6.43	7.10
25th Percentile	6.83	11.93	6.90	10.37	5.61	7.48	6.13	6.79
Median	5.99	10.92	5.34	9.71	5.29	7.13	5.60	6.15
75th Percentile	5.41	10.02	4.50	8.77	4.60	6.62	5.31	5.94
90th Percentile	4.80	9.03	3.08	8.19	4.20	6.22	5.03	5.51
Goldman Sachs Offshore V ●	8.40	41.08	37.27	34.49	42.63	17.63	16.40	13.77
Blmbg:HY Corp 2% Iss Cap ▲	6.44	11.32	7.05	10.62	6.21	8.57	6.79	7.65

Relative Return vs Blmbg:HY Corp 2% Iss Cap



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



Loomis Sayles
Period Ended December 31, 2020

Investment Philosophy

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

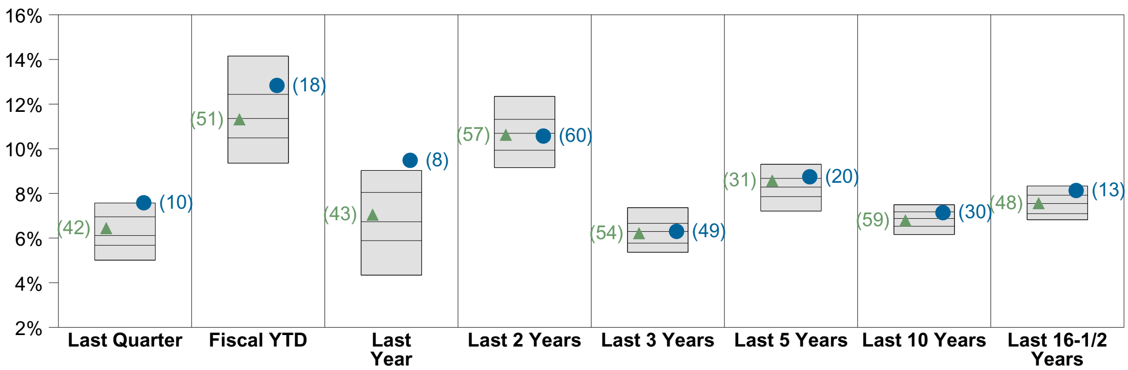
Quarterly Summary and Highlights

- Loomis Sayles's portfolio posted a 7.58% return for the quarter placing it in the 10 percentile of the Callan High Yield Fixed Income group for the quarter and in the 8 percentile for the last year.
- Loomis Sayles's portfolio outperformed the Blmbg:HY Corp 2% Iss Cap by 1.14% for the quarter and outperformed the Blmbg:HY Corp 2% Iss Cap for the year by 2.43%.

Quarterly Asset Growth

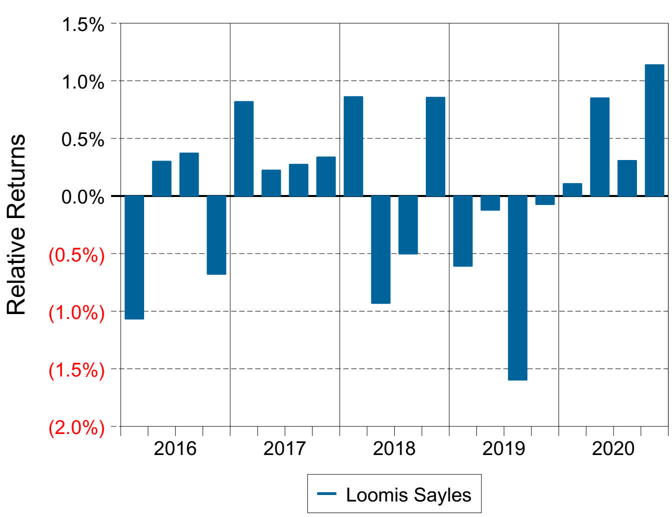
Beginning Market Value	$172,825,108
Net New Investment	$-203,070
Investment Gains/(Losses)	$13,094,038
Ending Market Value	$185,716,077

Performance vs Callan High Yield Fixed Income (Gross)

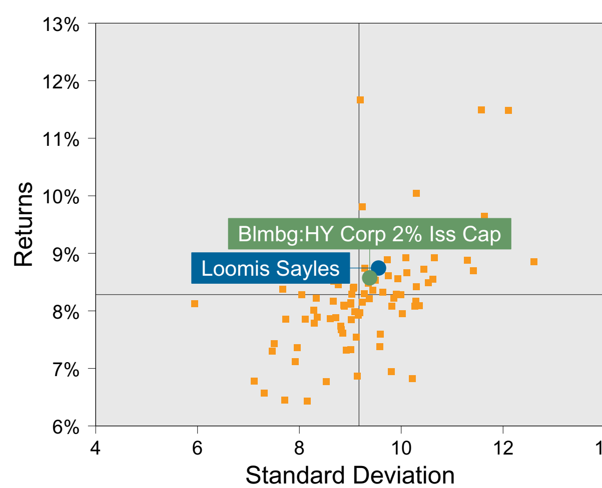


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 16-1/2 Years
10th Percentile	7.57	14.15	9.03	12.35	7.36	9.30	7.49	8.33
25th Percentile	6.95	12.44	8.04	11.32	6.66	8.67	7.18	7.92
Median	6.11	11.36	6.73	10.69	6.29	8.28	6.88	7.55
75th Percentile	5.68	10.49	5.88	9.93	5.77	7.86	6.53	7.09
90th Percentile	5.01	9.36	4.34	9.16	5.36	7.21	6.16	6.82
Loomis Sayles ●	7.58	12.84	9.48	10.57	6.30	8.74	7.14	8.13
Blmbg:HY Corp 2% Iss Cap ▲	6.44	11.32	7.05	10.62	6.21	8.57	6.79	7.56

Relative Return vs Blmbg:HY Corp 2% Iss Cap



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



PIMCO Bravo II Fund
Period Ended December 31, 2020

Investment Philosophy

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

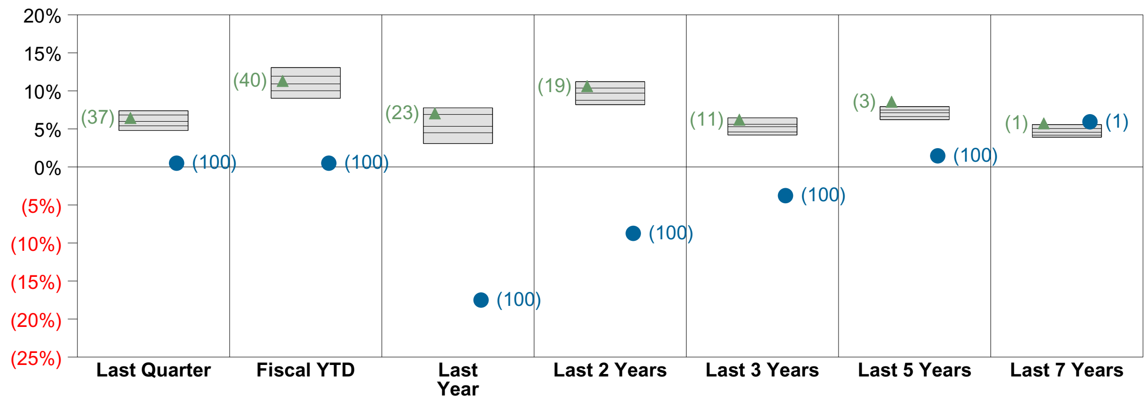
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 0.50% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO Bravo II Fund's portfolio underperformed the Blmbg:HY Corp 2% Iss Cap by 5.95% for the quarter and underperformed the Blmbg:HY Corp 2% Iss Cap for the year by 24.55%.

Quarterly Asset Growth

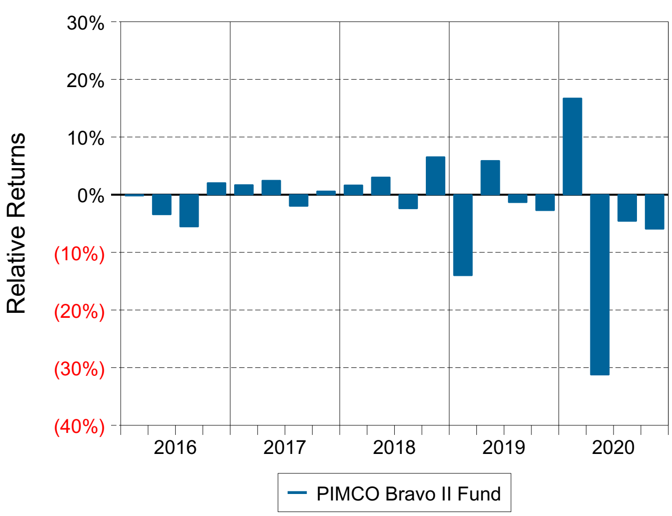
Beginning Market Value	$15,595,861
Net New Investment	$-1,572,043
Investment Gains/(Losses)	$77,220
Ending Market Value	$14,101,038

Performance vs Callan High Yield Mutual Funds (Net)

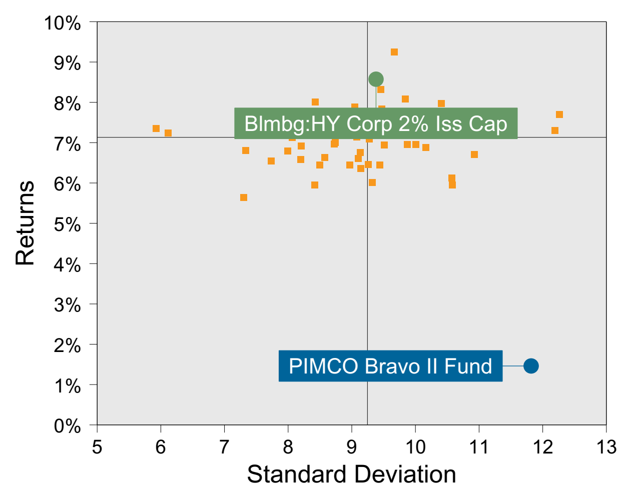


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	7.39	13.07	7.77	11.22	6.46	7.94	5.57
25th Percentile	6.83	11.93	6.90	10.37	5.61	7.48	5.05
Median	5.99	10.92	5.34	9.71	5.29	7.13	4.56
75th Percentile	5.41	10.02	4.50	8.77	4.60	6.62	4.18
90th Percentile	4.80	9.03	3.08	8.19	4.20	6.22	3.91
PIMCO Bravo II Fund ●	0.50	0.50	(17.51)	(8.74)	(3.77)	1.46	5.94
Blmbg:HY Corp 2% Iss Cap ▲	6.44	11.32	7.05	10.62	6.21	8.57	5.73

Relative Return vs Blmbg:HY Corp 2% Iss Cap



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



Real Estate
Period Ended December 31, 2020

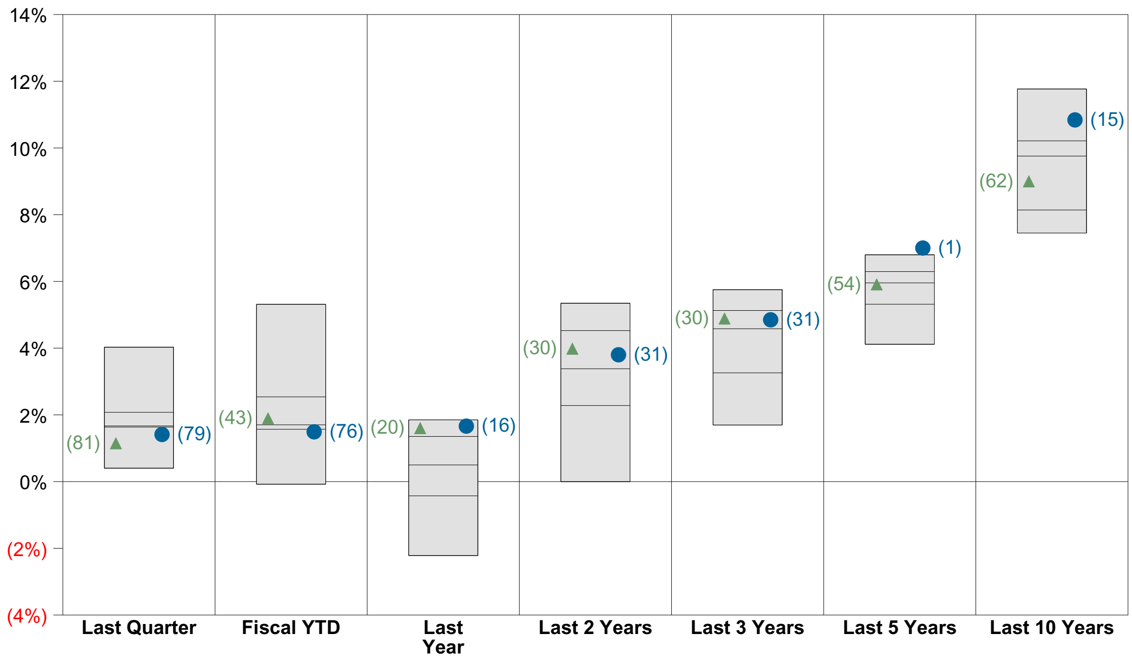
Quarterly Summary and Highlights

- Real Estate's portfolio posted a 1.41% return for the quarter placing it in the 79 percentile of the Public Fund - Real Estate group for the quarter and in the 16 percentile for the last year.
- Real Estate's portfolio outperformed the NCREIF Total Index by 0.27% for the quarter and outperformed the NCREIF Total Index for the year by 0.06%.

Quarterly Asset Growth

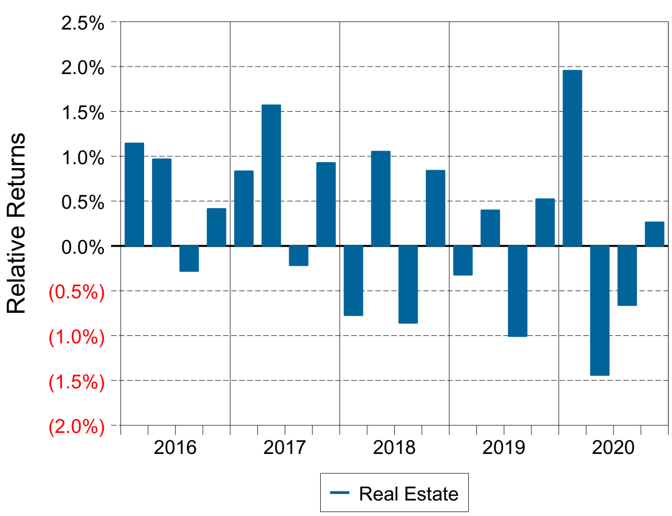
Beginning Market Value	$663,348,823
Net New Investment	$-4,339,696
Investment Gains/(Losses)	$9,399,585
Ending Market Value	$668,408,711

Performance vs Public Fund - Real Estate (Gross)

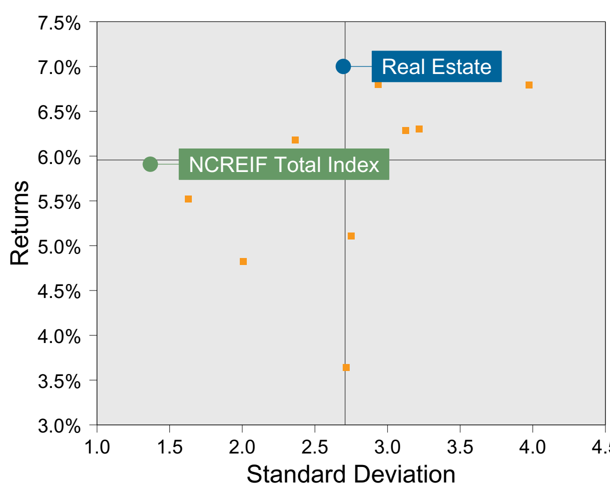


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	4.03	5.31	1.85	5.35	5.75	6.80	11.77
25th Percentile	2.08	2.54	1.35	4.53	5.13	6.29	10.21
Median	1.67	1.70	0.50	3.38	4.58	5.96	9.76
75th Percentile	1.63	1.57	(0.43)	2.28	3.26	5.32	8.14
90th Percentile	0.40	(0.08)	(2.22)	(0.00)	1.70	4.12	7.45
Real Estate ●	1.41	1.49	1.66	3.80	4.85	7.00	10.84
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	9.00

Relative Return vs NCREIF Total Index



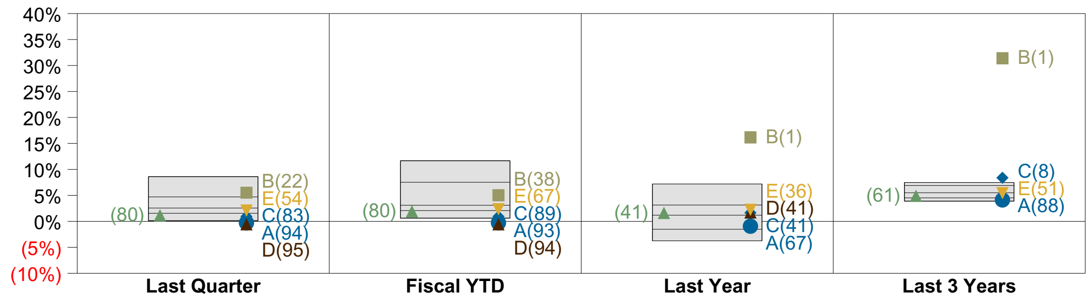
Public Fund - Real Estate (Gross)
Annualized Five Year Risk vs Return



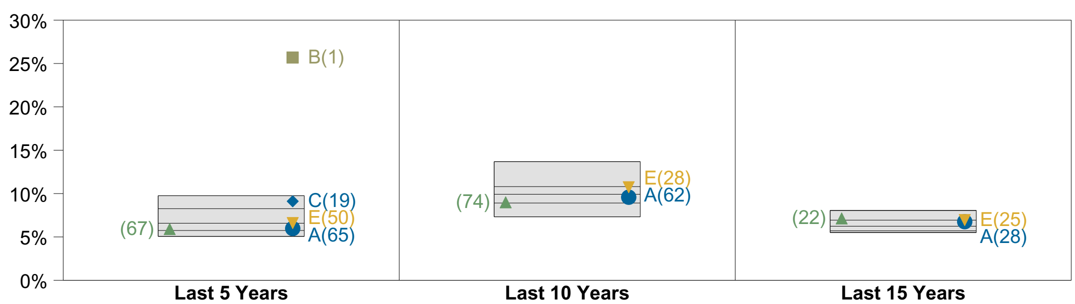
North Dakota State Investment Board Pension Funds
Performance vs Callan Total Domestic Real Estate DB
Periods Ended December 31, 2020

Return Ranking

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



		Last Quarter	Fiscal YTD	Last Year	Last 3 Years
10th Percentile		8.61	11.66	7.19	7.48
25th Percentile		4.70	7.52	3.13	6.90
Median		2.56	3.09	1.18	5.51
75th Percentile		1.55	2.07	(1.52)	4.52
90th Percentile		0.11	0.62	(3.75)	3.89
Invesco Core Real Estate	A	(0.28)	(0.28)	(0.94)	4.12
Invesco Asia RE Fund III	B	5.51	5.01	16.14	31.41
Invesco Value Added Fd IV	C	0.93	0.93	1.65	8.39
Invesco Value Added Fd V	D	(0.58)	(0.58)	1.69	-
JPMorgan Investment	E	2.10	2.34	2.23	5.45
NCREIF Total Index	▲	1.15	1.89	1.60	4.89



		Last 5 Years	Last 10 Years	Last 15 Years
10th Percentile		9.75	13.68	8.05
25th Percentile		8.26	10.80	6.94
Median		6.58	9.92	6.23
75th Percentile		5.74	8.91	5.71
90th Percentile		5.07	7.32	5.51
Invesco Core Real Estate	A	5.97	9.58	6.76
Invesco Asia RE Fund III	B	25.69	-	-
Invesco Value Added Fd IV	C	9.11	-	-
Invesco Value Added Fd V	D	-	-	-
JPMorgan Investment	E	6.59	10.73	6.94
NCREIF Total Index	▲	5.91	9.00	7.14

TIR Teredo
Period Ended December 31, 2020

Investment Philosophy

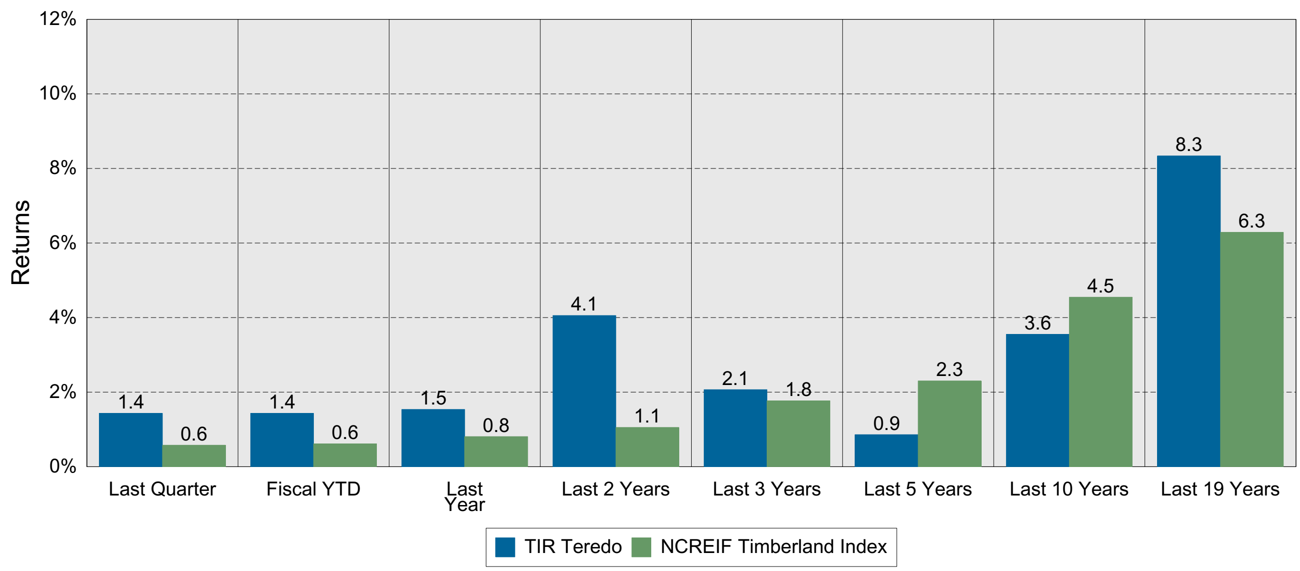
Teredo Timber LLC - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate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

Quarterly Summary and Highlights

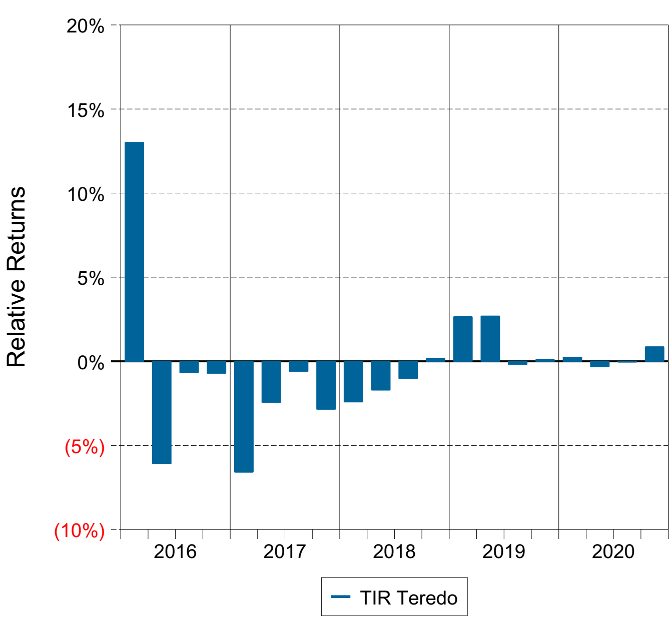
- TIR Teredo's portfolio outperformed the NCREIF Timberland Index by 0.86% for the quarter and outperformed the NCREIF Timberland Index for the year by 0.73%.

Quarterly Asset Growth

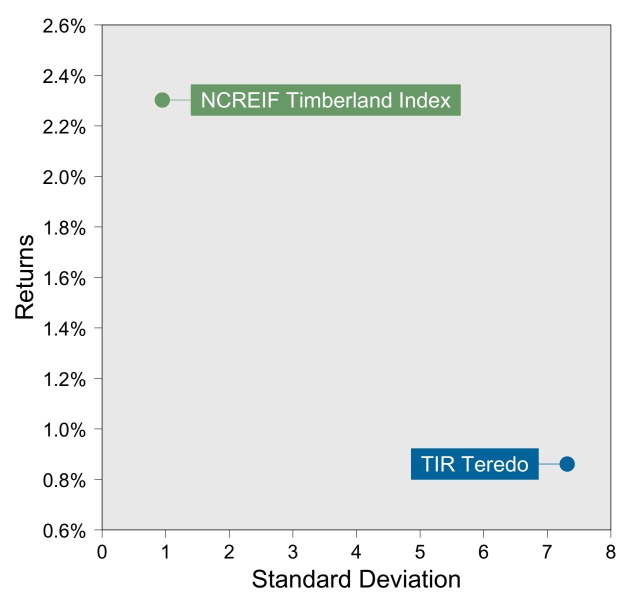
Beginning Market Value	$26,726,922
Net New Investment	$0
Investment Gains/(Losses)	$383,035
Ending Market Value	$27,109,957



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



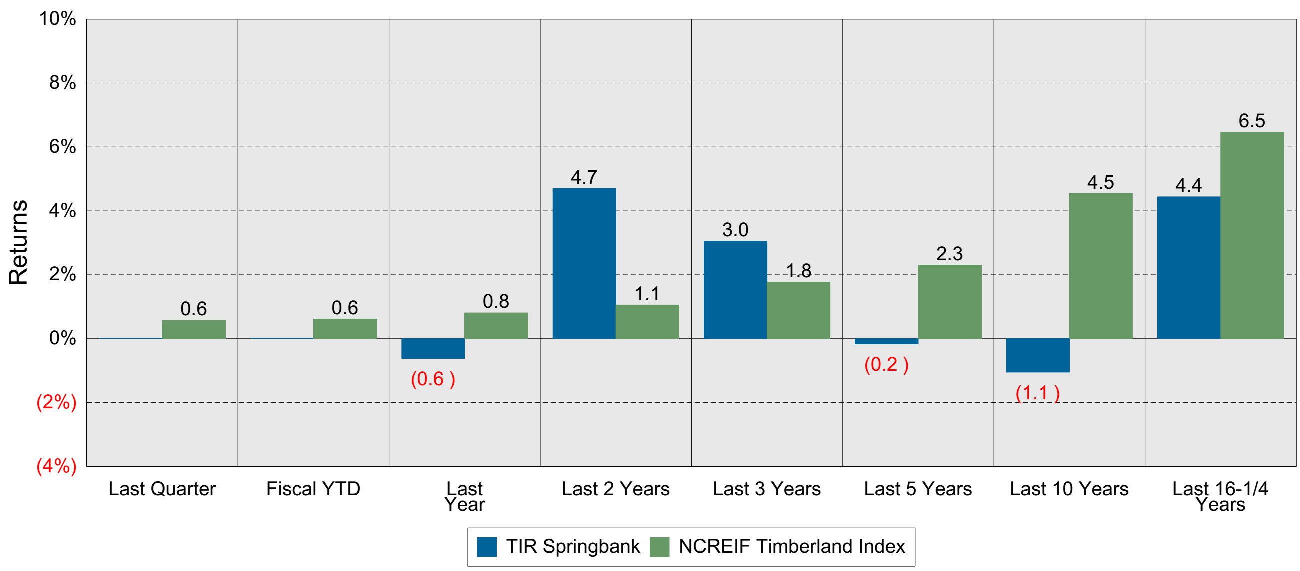
TIR Springbank
Period Ended December 31, 2020

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

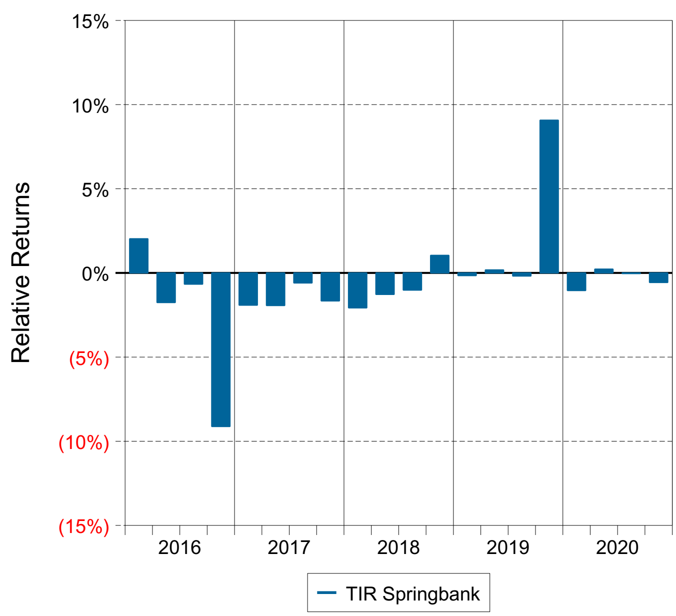
Quarterly Summary and Highlights
- TIR Springbank's portfolio underperformed the NCREIF Timberland Index by 0.57% for the quarter and underperformed the NCREIF Timberland Index for the year by 1.43%.

Quarterly Asset Growth

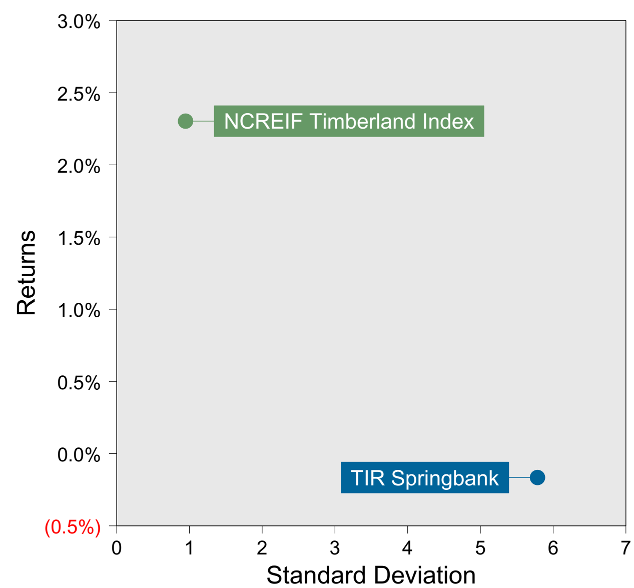
Beginning Market Value	$96,187,056
Net New Investment	$0
Investment Gains/(Losses)	$10,161
Ending Market Value	$96,197,217



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



ISQ Global Infrastructure II
Period Ended December 31, 2020

Investment Philosophy

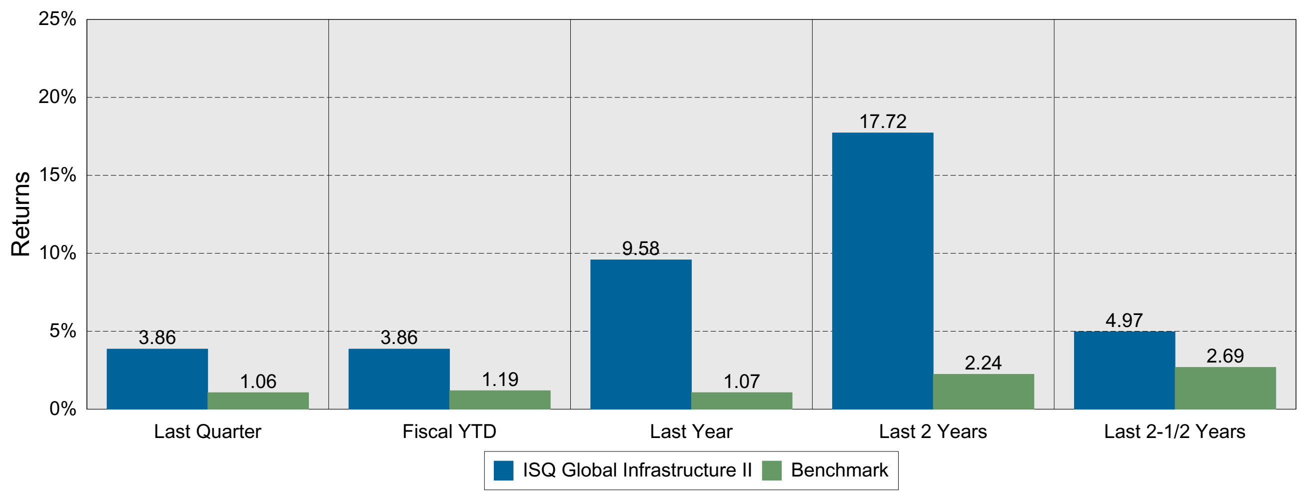
The ISQ Global Infrastructure Fund II seeks to achieve long-term capital appreciation as well as current income through equity and equity related investments in infrastructure and infrastructure related assets located globally, with a focus on North America, Europe, and selected growth economies in Asia and Latin America. The Fund may also invest in debt Securities that have equity-like returns or an equity component, or are related to its equity investments, including without limitation convertible debt, bank loans and participations and other similar instruments. **The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.**

Quarterly Summary and Highlights

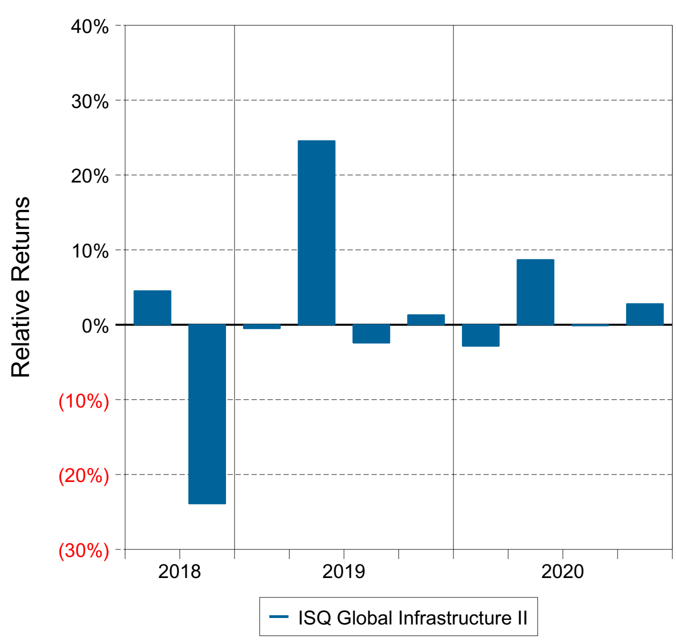
- ISQ Global Infrastructure II's portfolio outperformed the Benchmark by 2.80% for the quarter and outperformed the Benchmark for the year by 8.52%.

Quarterly Asset Growth

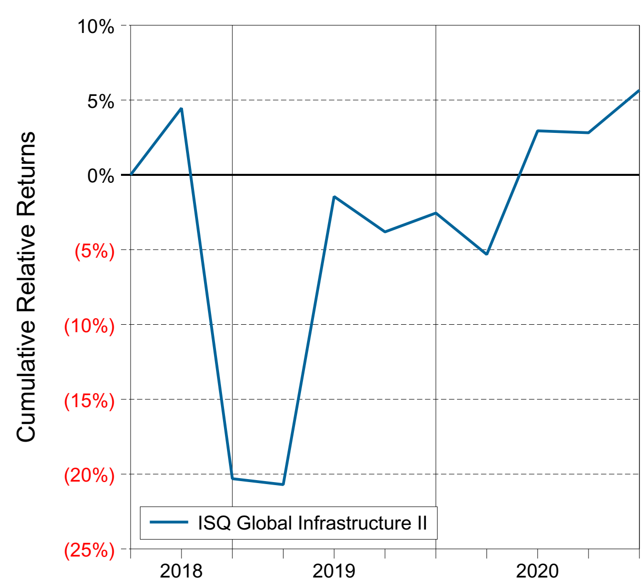
Beginning Market Value	$43,204,927
Net New Investment	$-1,256,197
Investment Gains/(Losses)	$1,668,875
Ending Market Value	$43,617,605



Relative Return vs Benchmark



Cumulative Returns vs Benchmark



The Rohatyn Group
Period Ended December 31, 2020

Investment Philosophy

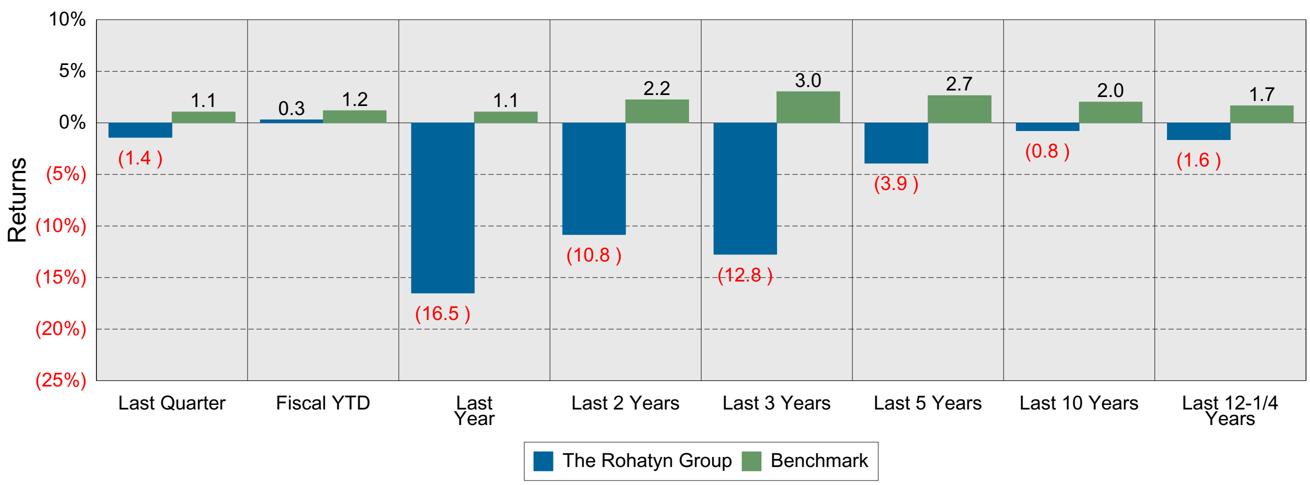
The Rohatyn Group's Asian Infrastructure & Related Resources Opportunity (AIRRO) Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional and renewable sources, communications, water and waste-water, public works, urban development and other "social" infrastructure assets and related resources. The management of the AIRRO Fund was transferred from JP Morgan to The Rohatyn Group in May, 2018. **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

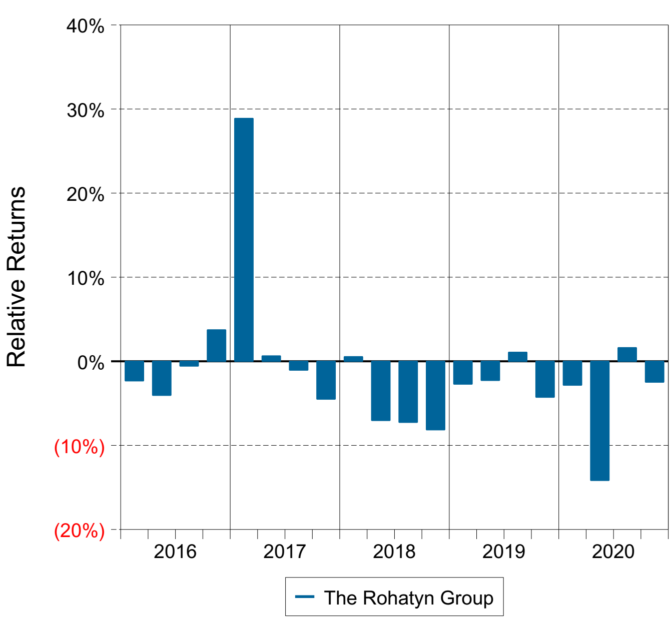
- The Rohatyn Group's portfolio underperformed the Benchmark by 2.48% for the quarter and underperformed the Benchmark for the year by 17.57%.

Quarterly Asset Growth

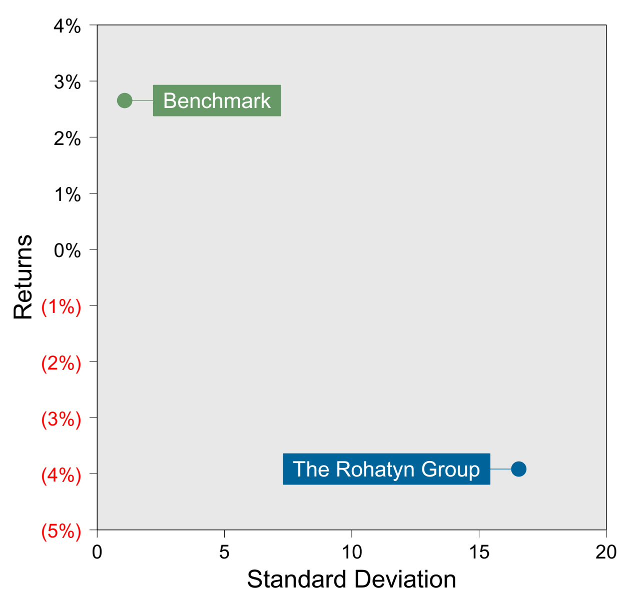
Beginning Market Value	$15,687,795
Net New Investment	$157,582
Investment Gains/(Losses)	$-222,810
Ending Market Value	$15,622,567



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



JPM Infrastructure Fund
Period Ended December 31, 2020

Investment Philosophy

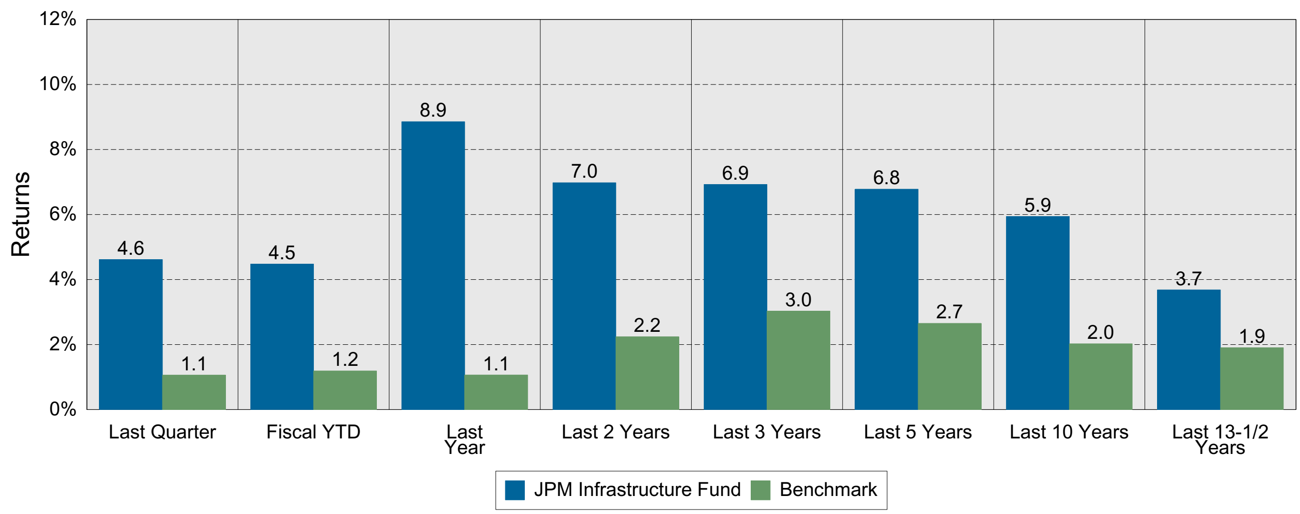
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports. **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

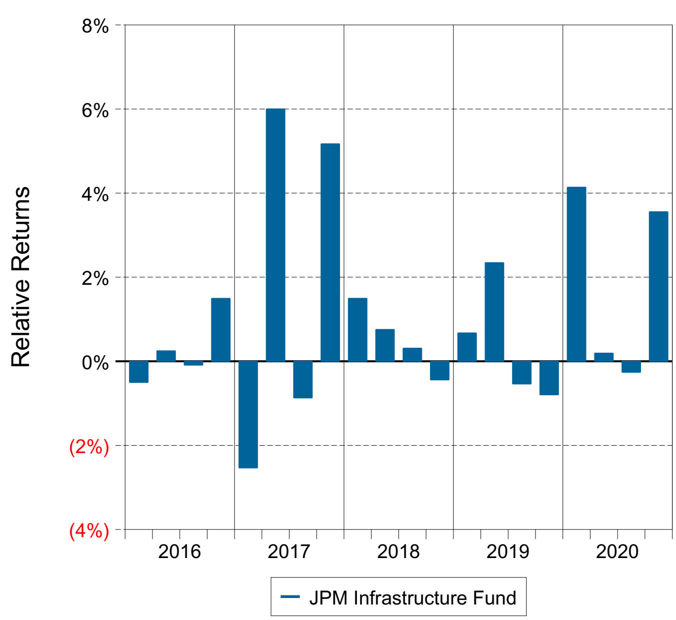
- JPM Infrastructure Fund's portfolio outperformed the Benchmark by 3.55% for the quarter and outperformed the Benchmark for the year by 7.79%.

Quarterly Asset Growth

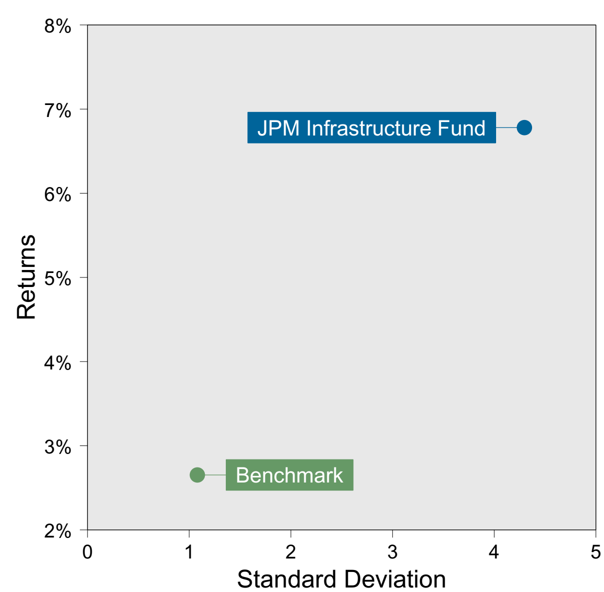
Beginning Market Value	$169,949,190
Net New Investment	$-43,176,095
Investment Gains/(Losses)	$6,791,221
Ending Market Value	$133,564,316



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure
Period Ended December 31, 2020

Investment Philosophy

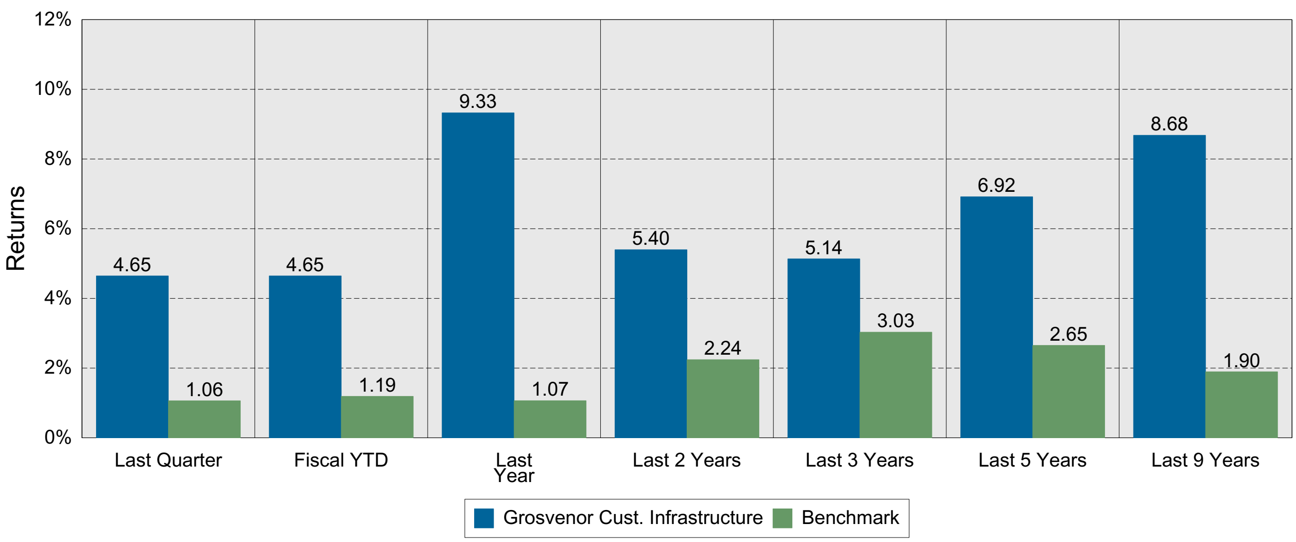
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

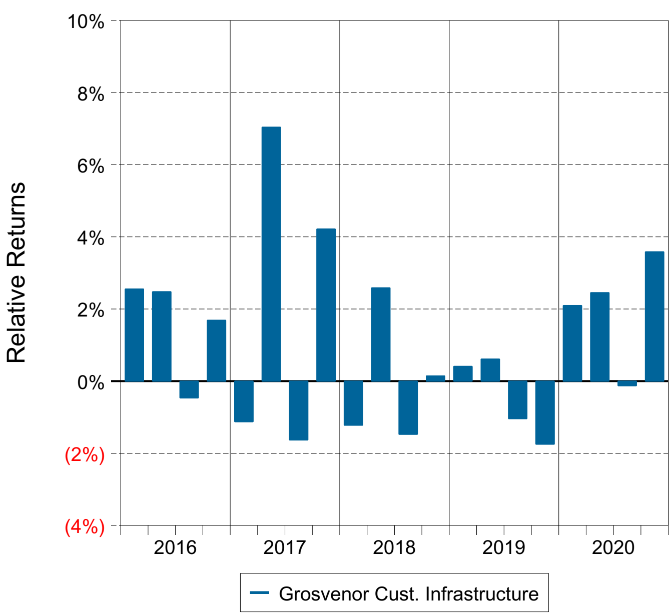
- Grosvenor Cust. Infrastructure's portfolio outperformed the Benchmark by 3.58% for the quarter and outperformed the Benchmark for the year by 8.26%.

Quarterly Asset Growth

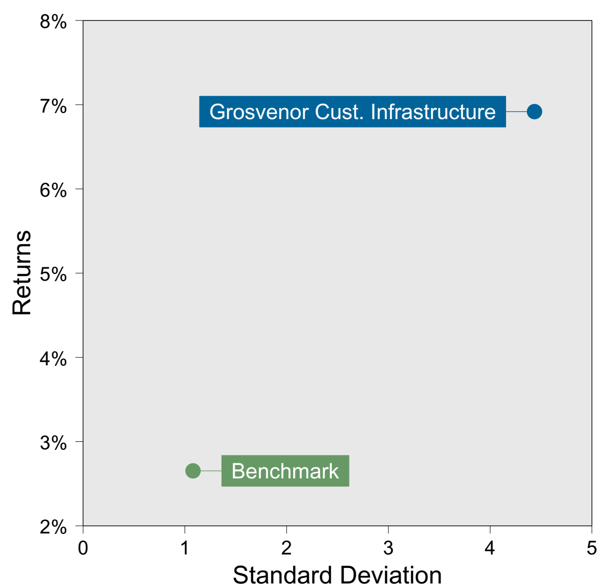
Beginning Market Value	$20,559,066
Net New Investment	$-5,428,320
Investment Gains/(Losses)	$918,996
Ending Market Value	$16,049,742



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure II
Period Ended December 31, 2020

Investment Philosophy

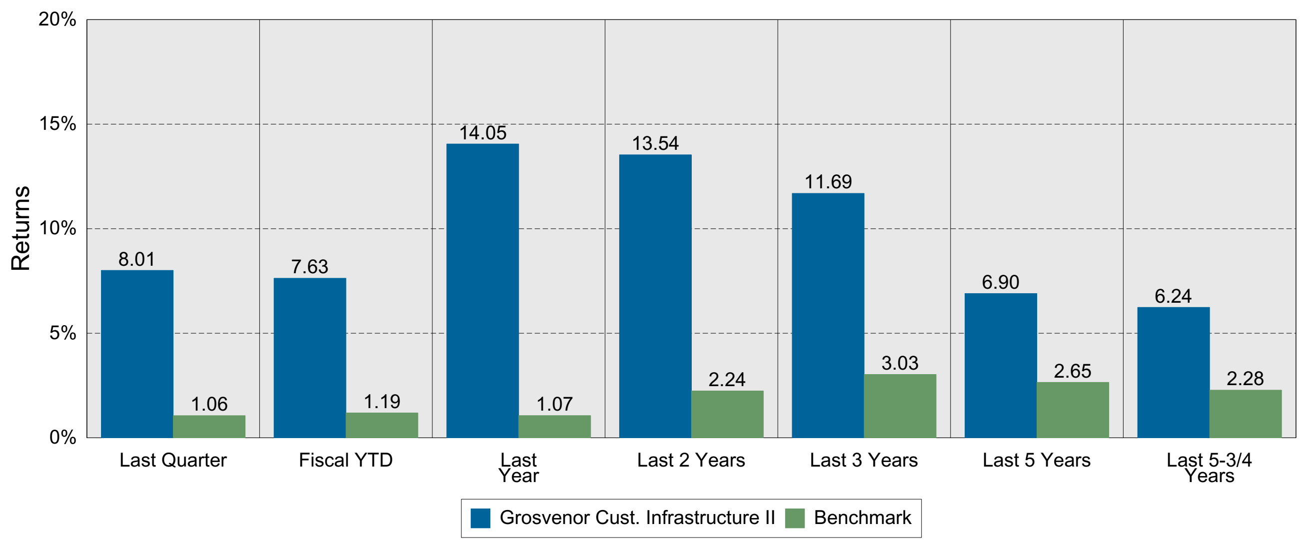
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

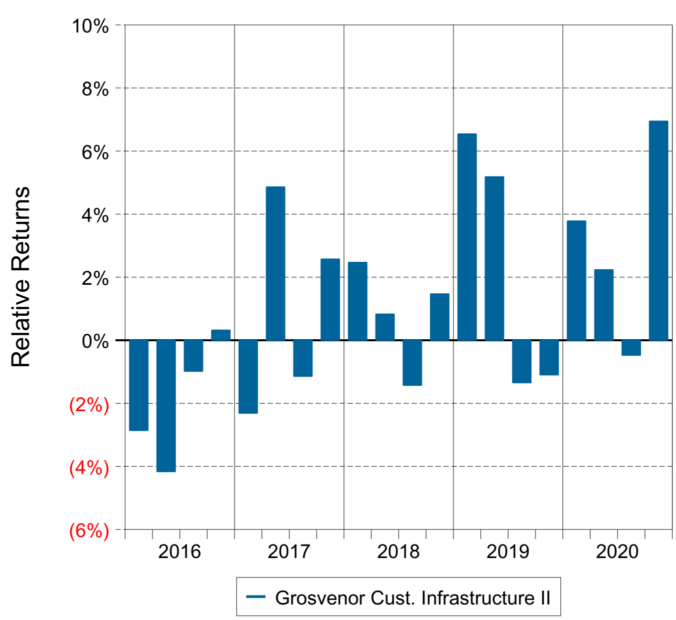
- Grosvenor Cust. Infrastructure II's portfolio outperformed the Benchmark by 6.95% for the quarter and outperformed the Benchmark for the year by 12.99%.

Quarterly Asset Growth

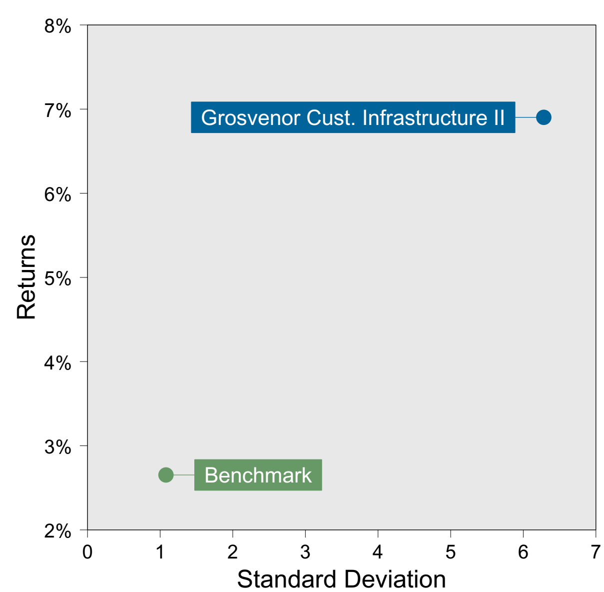
Beginning Market Value	$17,991,162
Net New Investment	$-847,567
Investment Gains/(Losses)	$1,441,805
Ending Market Value	$18,585,400



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Macquarie Infrastructure Fund IV
Period Ended December 31, 2020

Investment Philosophy

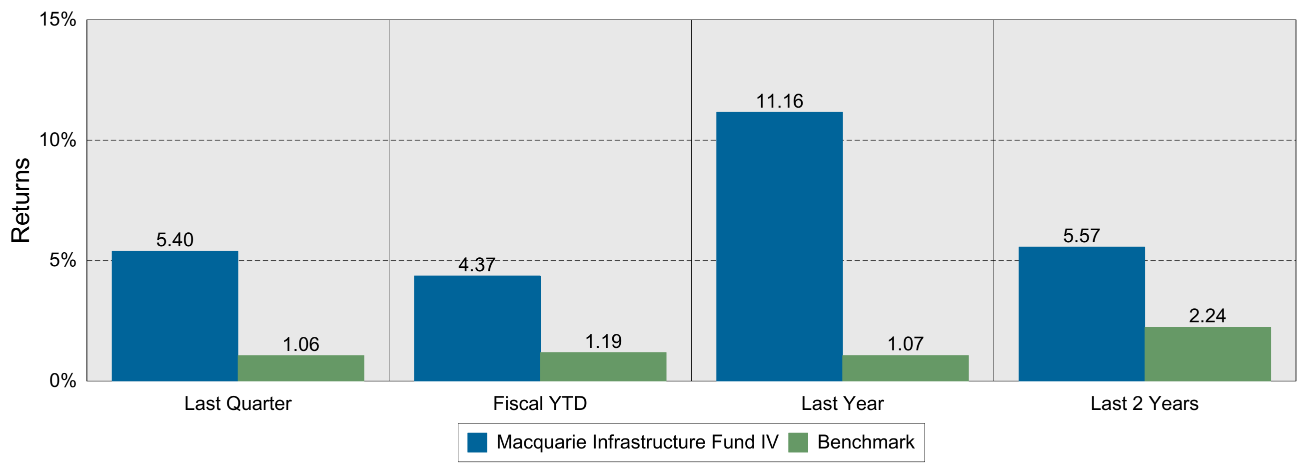
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience will provide a competitive advantage in sourcing and due diligence. Furthermore, the manager will also continue to focus on opportunities where its active management capabilities can add value for investors in terms of enhancing returns and the substantial mitigation and/or elimination of material operational risks. **The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.**

Quarterly Summary and Highlights

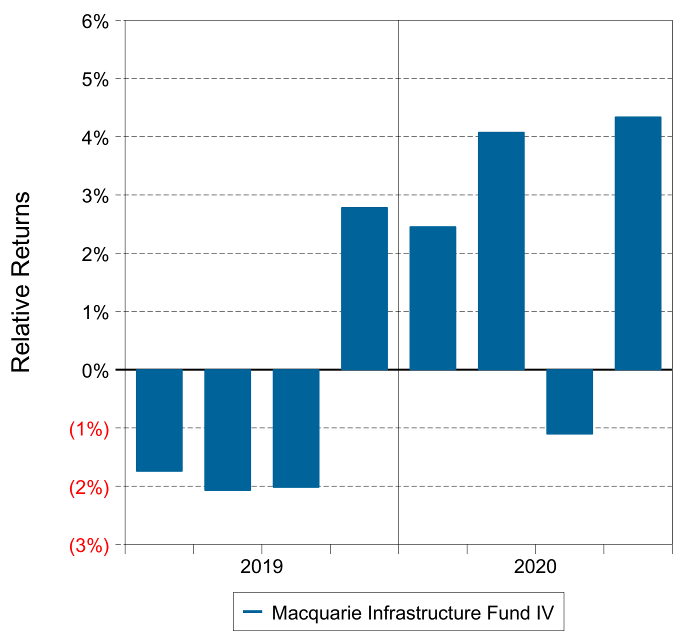
- Macquarie Infrastructure Fund IV's portfolio outperformed the Benchmark by 4.34% for the quarter and outperformed the Benchmark for the year by 10.10%.

Quarterly Asset Growth

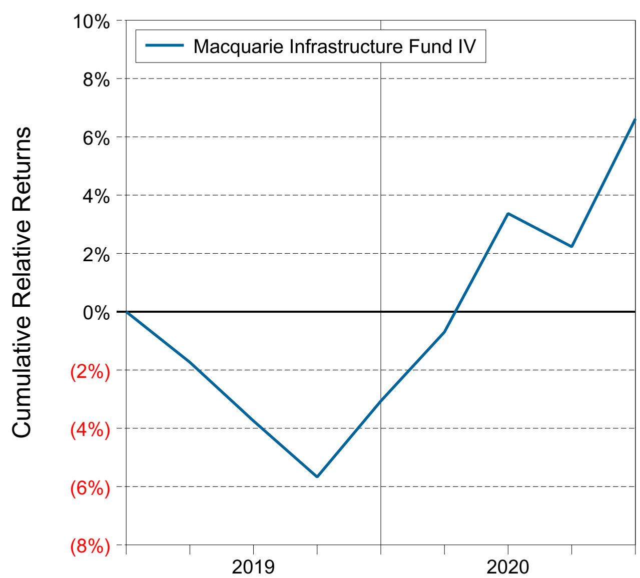
Beginning Market Value	$64,204,843
Net New Investment	$-548,999
Investment Gains/(Losses)	$3,454,757
Ending Market Value	$67,110,601



Relative Return vs Benchmark



Cumulative Returns vs Benchmark



Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit www.callan.com/research-library to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

Under the Hood of Alternative Beta: Hedge Fund Monitor, 3rd Quarter 2020 | In this quarter's *Hedge Fund Monitor,* Jim McKee explains and analyzes the newly introduced set of alternative risk premia (ARP) indices from Bloomberg and Goldman Sachs Asset Management. This index suite can help institutional investors evaluate the performance of their strategies that use ARP solutions.

A Primer on Green Building Certifications | This essay by real assets consultant Aaron Quach examines "green building certifications," which seek to establish standards for sustainability and are used to assess the performance of a building or other commercial real estate project. Real estate investment managers can reduce their carbon footprint by acquiring buildings that are green-certified, obtaining certifications for existing properties, or developing new properties that will be green-certified.

Research Cafe: Private Equity | In this coffee break webinar session, private equity experts Pete Keliuotis and Ashley DeLuce used the results of our exclusive *Private Equity Fees and Terms Study* to provide actionable insights for institutional investors to help them negotiate with private equity managers.

Blog Highlights

Will Boring Still Be Beautiful? | A simple, "boring" glidepath beat a diversified one over the last 10 years. Will that continue?

The Kids Are Alright | Private equity is doing quite well given the disruptions caused by the COVID-19 pandemic.

DOL Issues Final Rule on Selecting Plan Investments | The Department of Labor (DOL) issued its final rule providing guidance to plan sponsors on the financial factors to consider when evaluating plan investments, a follow-up to its proposed environmental, social, and governance (ESG) rule released four months ago. In the final rule, the DOL modified the ESG rule, most notably removing references to ESG and instead focusing on pecuniary versus non-pecuniary factors.

The Private Equity Playbook: Playing Offense | Investors should maintain strong oversight of the in-place private equity program, particularly after periods of disruption.

Macroeconomic Alphabet Soup: V, W, L, U, or K? | While certain sectors of the economy have rebounded more quickly than expected, the trajectory of the recovery is still unclear.

Quarterly Periodicals

Private Equity Trends, 3Q20 | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q20 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 3Q20 | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

Capital Markets Review, 3Q20 | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

Hedge Fund Quarterly, 3Q20 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 3Q20 | In this quarter's edition, Munir Iman provides analysis of the performance of real estate and other real assets in 3Q20.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: callan.com/research-library

Please mark your calendar and look forward to upcoming invitations:

March Workshop—Virtual
A Fresh Look at Fixed Income—Generating Yield in a Zero Interest Rate Environment
March 25, 2021, at 9:00 am

2021 National Conference
Summer 2021

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

Education: By the Numbers

50+	Unique pieces of research the Institute generates each year
525	Attendees (on average) of the Institute's annual National Conference
3,700	Total attendees of the "Callan College" since 1994

Education

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

Introduction to Investments—Virtual
April 13-15, 2021

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It is held over three days with virtual modules of 2.5-3 hours. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $950 per person and includes instruction and digital materials.

Additional information including registration can be found at: callan.com/events/april-intro-college-virtual/

Introduction to Investments—In Person
July 14-15, 2021, in San Francisco

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including dates and registration can be found at: callan.com/events/july-intro-college/

"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
American Century Investments
Amundi Pioneer Asset Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC

Manager Name
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investments
Columbus Circle Investors

Manager Name
Credit Suisse Asset Management
D.E. Shaw Investment Management, L.L.C.
DePrince, Race & Zollo, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Hermes, Inc.
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Hawaiian Bank Wealth Management Division
First Sentier Investors (formerly First State Investments)
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
GCM Grosvenor
Glenmeade Investment Management, LP
GlobeFlex Capital, L.P.
Goldman Sachs
Green Square Capital Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Investment Management Co.
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
Income Research + Management, Inc.
Insight Investment
Intech Investment Management, LLC
Intercontinental Real Estate Corporation
Invesco
Ivy Investments
J.P. Morgan
Janus
Jennison Associates LLC

Manager Name
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Investment Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
Mellon
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Nile Capital Group LLC
Ninety One North America, Inc. (formerly Investec Asset Mgmt.)
Northern Trust Asset Management
Nuveen
P/E Investments
Pacific Investment Management Company
Parametric Portfolio Associates LLC
Pathway Capital Management
Peregrine Capital Management, LLC
Perkins Investment Management
PFM Asset Management LLC
PGIM Fixed Income

Manager Name
PineBridge Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rothschild & Co. Asset Management US
S&P Dow Jones Indices
Schroder Investment Management North America Inc.
SLC Management
Smith Graham & Co. Investment Advisors, L.P.
State Street Global Advisors
Stone Harbor Investment Partners L.P.
Strategic Global Advisors
T. Rowe Price Associates, Inc.
The TCW Group, Inc.

Manager Name
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
USAA Real Estate
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company LLP
Wells Fargo Asset Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC

Callan

December 31, 2020

North Dakota State Investment Board Insurance Trust

Investment Measurement Service Quarterly Review

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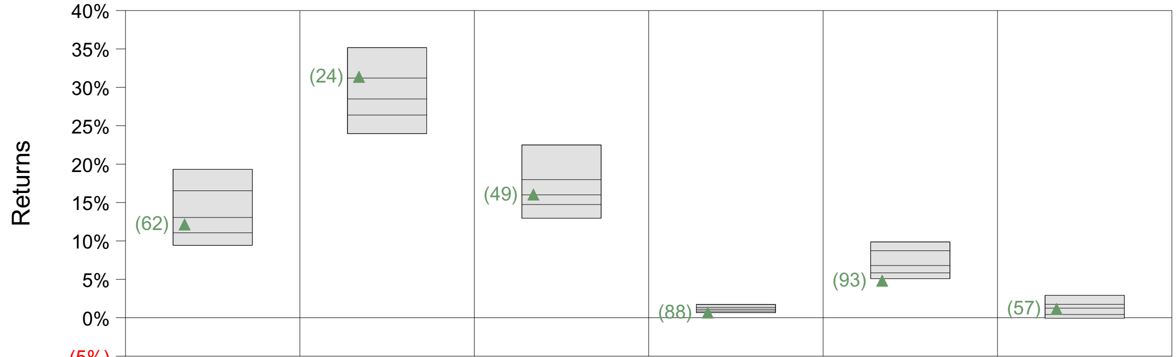
Market Overview

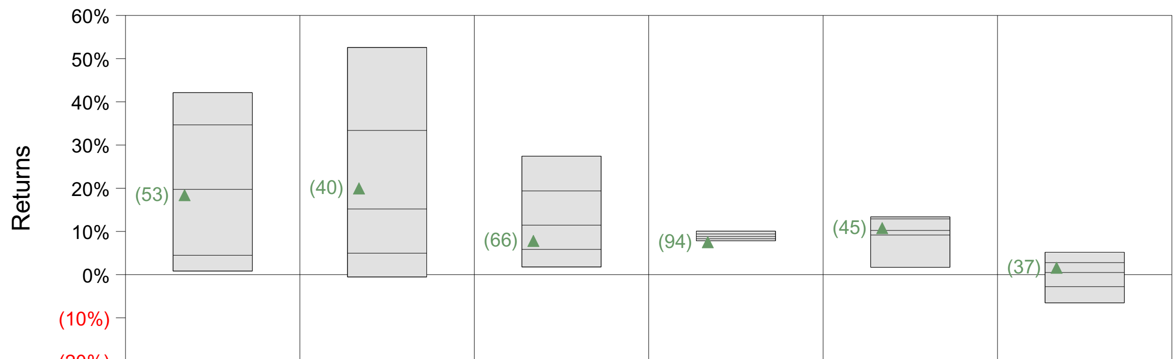
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also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

Range of Separate Account Manager Returns by Asset Class
One Quarter Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	19.33	35.17	22.50	1.73	9.87	2.92
25th Percentile	16.53	31.21	17.98	1.35	8.72	1.75
Median	13.06	28.49	16.00	1.11	6.80	1.25
75th Percentile	11.06	26.39	14.74	0.88	5.85	0.42
90th Percentile	9.43	23.97	12.96	0.66	5.08	(0.07)
Index ▲	12.15	31.37	16.05	0.67	4.82	1.15

Range of Separate Account Manager Returns by Asset Class
One Year Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	42.13	52.59	27.42	10.07	13.38	5.19
25th Percentile	34.66	33.38	19.38	9.41	12.90	2.78
Median	19.74	15.20	11.45	8.82	10.24	0.49
75th Percentile	4.48	4.97	5.85	8.30	9.17	(2.79)
90th Percentile	0.82	(0.54)	1.78	7.83	1.70	(6.53)
Index ▲	18.40	19.96	7.82	7.51	10.78	1.60

Callan Institute

Fourth Quarter 2020

Capital Markets Review

Uneven Recovery Ahead for Years

ECONOMY

2 PAGE

The path to recovery in the U.S. and most developed economies from the pandemic will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets in those countries are not likely to regain their pre-pandemic totals until well into 2022.

Robust Quarter Powers Strong 2020

INSTITUTIONAL INVESTORS

4 PAGE

Institutional investors saw strong gains in 4Q20 and positive results for 2020, despite the pandemic-induced headwinds. While results for 2020 lagged a 60% stocks/40% bonds benchmark, over longer periods investors' returns were on par with the benchmark.

Vaccine Hopes Fuel Double-Digit Gains

EQUITY

6 PAGE

The S&P 500 hit a record high in 4Q20, and was up 12.1% for the quarter and 18.4% for the year. Value outperformed growth in 4Q, but trailed for the year by a wide margin. Vaccine hopes fueled double-digit returns broadly across developed and emerging markets.

Investors Continue Their Hunt for Yield

FIXED INCOME

8 PAGE

The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%. Corporate credit outperformed treasuries as investors hunted for yield. Low rates and asset purchase programs continued to prop up the global bond market.

Hotels, Retail Face Pandemic Headwinds

REAL ESTATE/REAL ASSETS

10 PAGE

Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer. Global REITs gained 13.5% compared to 14.0% for global equities. U.S. REITs rose 11.6%, but they lagged the S&P 500 Index (+12.1%).

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY

12 PAGE

Private equity fared quite well in 2020, all things considered. Diminished activity in 2Q and 3Q mixed with strong gains in 1Q and 4Q. Private equity activity showed tolerable declines for most private M&A measures, but the IPO market had a gangbuster year.

Healthy Returns amid Volatile Markets

HEDGE FUNDS/MACs

13 PAGE

The vigorous but volatile market conditions enabled healthy hedge fund profits from both alpha and beta. The median managers of Callan Multi-Asset Class style groups generated positive returns, gross of fees, consistent with their underlying risk exposures.

Second Straight Quarterly Gain

DEFINED CONTRIBUTION

15 PAGE

The Callan DC Index's gain of 6.0% in 3Q20 comes two quarters after the 15.0% plunge it experienced in 1Q20. The Index is now positive for the year. The Age 45 TDF posted a larger gain, due to its higher equity allocation. Balances also rose, solely from investment returns.

Broad Market Quarterly Returns

U.S. Equity	Global ex-U.S. Equity	U.S. Fixed Income	Global ex-U.S. Fixed Income
Russell 3000	MSCI ACWI ex USA	Bloomberg Barclays Agg	Bloomberg Barclays Gbl ex US
14.7%	17.0%	0.7%	5.1%

Sources: Bloomberg Barclays, FTSE Russell, MSCI

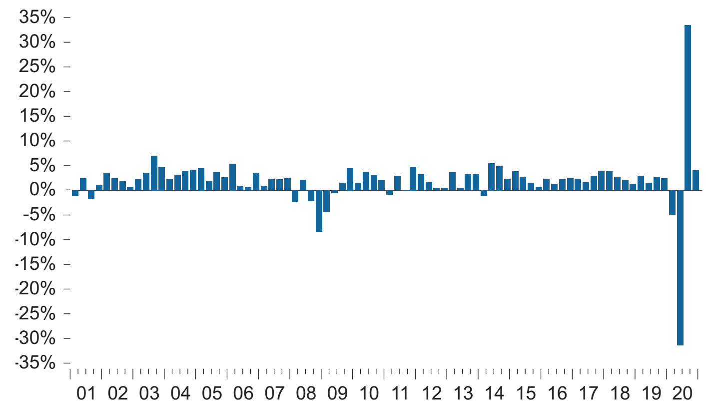
An Uneven Recovery and an Unreliable Narrator

ECONOMY | Jay Kloepfer

The U.S. economy grew at a 4% rate in the fourth quarter of 2020 but finished the year with a 3.5% decline in GDP compared to 2019, the steepest recession in 75(!) years. The plunge in economic activity in 2Q and the sharp rebound in 3Q put into question the reliability of economic data, and GDP in particular, in telling the tale of the true economic impact of the pandemic. The way countries measure GDP varies, especially when it comes to the output of the government sector. Reported GDP plunged in the U.K. far more than in continental Europe or the U.S., but the difference had to do with the valuation of the change in government output. In the U.S., we value government output in large part by looking at how much is spent on government services. Teachers, civil servants, and public health care workers were still paid, even though their activities were severely altered, so government output changed little. In the U.K. and France, data such as the number of hospital procedures, doctor's visits, and pupils in school are used, and this activity fell sharply. Did economic activity really fall farther in the U.K., or are the data not telling the full story?

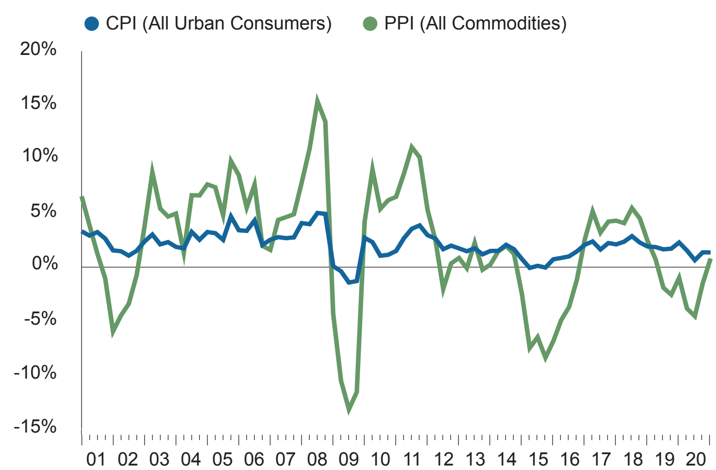
The labor market data also seem to reveal a tale of two cities—or do they? The difference in the benefits offered by different countries to those dislocated by the pandemic are substantial, and seriously bias economic measures such as the number of people employed and unemployment rates. In many euro zone countries, pandemic relief came in the form of subsidies to companies to keep their employees on the payroll. In the U.S., companies furloughed or let go of employees, and the states and federal government used the unemployment benefits system along with direct grants to households via stimulus payments to support these dislocated workers. As a result, unemployment in the U.S. spiked to almost 15% in April, while the unemployment rate in many euro zone countries barely moved. Another complication is that the unemployment rate in the U.S. suggests more slack than there may be in practice. A clue to this mismatch in the data between unemployment and potential capacity is in the data tracking those seeking work. In the U.S., the number seeking jobs usually tracks the unemployment rate very

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

closely. During the pandemic, the number of job seekers barely increased while the unemployment rate quadrupled, suggesting workers are expecting to be rehired into their former jobs or in their former industry.

This focus on the labor market is important for clues as to how the economy will recover and who has been the most affected by the pandemic-induced recession. Since consumption is 70% of GDP in the U.S., the direct tie between employment and income and then spending is vital; that tie has been

blurred by the massive stimulus provided both here and in our trading partners. Stimulus payments directly to industries and individuals, as well as expanded unemployment benefits, have buoyed spending both by consumers within countries and on our traded goods between countries, and prevented an even steeper economic decline than this worst-in-seven-decades experience. Total employment in the U.S. fell by 22 million between January and April, and we have generated 12 million jobs since April to replace them. The problem for the continued recovery is that we are still short millions of jobs, and the rate of job recovery plateaued in October 2020 and remained flat through December.

Employment loss by industry has been wildly variable, and points up just how different the economic impact has been from the stock market's incredible recovery. The sectors that drove the stock market rebound since March—information technology, communications, the sectors of consumer goods and wholesale/retail trade driven by Amazon—suffered little if any employment decline, and in fact employ far fewer people than the sectors that are underrepresented in the stock market and suffered the biggest job losses. Employment in leisure and hospitality fell by 8.2 million during March and April, increased by 4.9 million from May to November, and then declined by over half a million in December as stricter shelter-in-place rules were reinstated prior to the holiday season in many states. Since February 2020, employment in leisure and hospitality is down by 3.9 million, or 22.9 percent. The other big losses were in state and local government, services, manufacturing, and education. These sectors employ many lower-paid, lower-skilled, and part-time workers and often feature a high concentration of female employees. Income inequality during the pandemic has been exacerbated as a result.

The Long-Term View

		Periods Ended 12/31/20			
Index	**4Q20**	**Year**	**5 Yrs**	**10 Yrs**	**25 Yrs**
U.S. Equity					
Russell 3000	14.7	20.9	15.4	13.8	9.7
S&P 500	12.2	18.4	15.2	13.9	9.6
Russell 2000	31.4	20.0	13.3	11.2	9.1
Global ex-U.S. Equity					
MSCI EAFE	16.1	7.8	7.5	5.5	5.0
MSCI ACWI ex USA	17.0	10.7	8.9	4.9	--
MSCI Emerging Markets	19.7	18.3	12.8	3.6	--
MSCI ACWI ex USA Small Cap	18.6	14.2	9.4	6.0	6.5
Fixed Income					
Bloomberg Barclays Agg	0.7	7.5	4.4	3.8	5.2
90-Day T-Bill	0.0	0.7	1.2	0.6	2.3
Bloomberg Barclays Long G/C	1.7	16.1	9.4	8.2	7.4
Bloomberg Barclays Gl Agg ex US	5.1	10.1	4.9	2.0	4.0
Real Estate					
NCREIF Property	1.2	1.6	5.9	9.0	9.1
FTSE Nareit Equity	11.6	-8.0	4.8	8.3	9.6
Alternatives					
CS Hedge Fund	6.4	6.4	4.1	3.8	7.3
Cambridge PE*	10.4	17.9	13.9	13.8	15.1
Bloomberg Commodity	10.2	-3.1	1.0	-6.5	1.0
Gold Spot Price	0.0	24.4	12.3	2.9	6.6
Inflation – CPI-U	0.1	1.4	2.0	1.7	2.1

*Data for most recent period lags by a quarter. Data as of 9/30/20.
Sources: Bloomberg, Bloomberg Barclays, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

The path to recovery in the U.S. and most developed economies will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets are not likely to regain their pre-pandemic job counts until well into 2022, restraining consumer spending and the overall global recovery.

Recent Quarterly Economic Indicators

	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19	2Q19	1Q19
Employment Cost–Total Compensation Growth	2.5%	2.4%	2.7%	2.8%	2.7%	2.8%	2.7%	2.8%
Nonfarm Business–Productivity Growth	-4.8%	5.1%	10.6%	-0.3%	1.6%	0.3%	2.0%	3.7%
GDP Growth	4.0%	33.4%	-32.9%	-5.0%	2.4%	2.6%	1.5%	2.9%
Manufacturing Capacity Utilization	72.7%	70.8%	63.2%	73.9%	75.0%	75.4%	75.5%	76.4%
Consumer Sentiment Index (1966=100)	79.8	75.6	74.0	96.4	97.2	93.8	98.4	94.5

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

Robust Quarterly Gains Power Strong 2020 Returns

INSTITUTIONAL INVESTORS

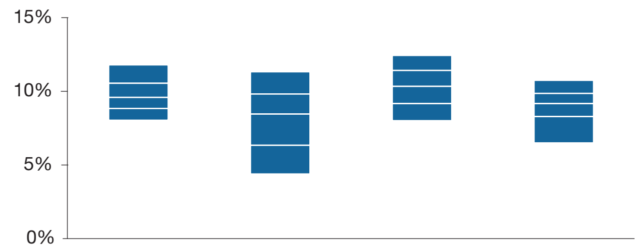
Performance

- All investor types saw robust gains in 4Q20, easily outpacing a 60% stocks/40% bonds benchmark, which rose 7.5%.
- The robust quarterly results pushed their gains for the year into double digits, outpacing global ex-U.S. equities and fixed income, although falling below the 60%/40% benchmark.
- Long-term results continue to be on par with the 60%/40% benchmark and better than bonds or global ex-U.S. equities.
- Nonprofits set the pace for the quarter, while corporate defined benefit (DB) plans top the leader board for most longer-term periods.
- Public DB plans were the best performers over 20 years, but results for all plan types fell in a narrow range.

Broad Issues

- Many institutional investors are re-examining portfolios to adjust for the new environment.
- They are also re-evaluating all asset classes, not just the diversifiers, including fixed income; public equity; hedge funds and liquid alternatives; private equity, private credit, and the notion of private capital; and real assets.
- But the key issue is what to do about fixed income in the lower yield environment.
- Liquidity needs ease but remain top of mind for investors.

Quarterly Returns, Callan Database Groups



	Public Database	Corporate Database	Nonprofit Database	Taft-Hartley Database
10th Percentile	11.8	11.3	12.4	10.8
25th Percentile	10.6	9.8	11.4	9.9
Median	9.6	8.5	10.3	9.2
75th Percentile	8.8	6.3	9.2	8.3
90th Percentile	8.0	4.4	8.0	6.5

Source: Callan

- Investors are also wrestling with whether to rebalance out of growth managers, and U.S. equity, as both growth and large cap U.S. equity crushed value and global ex-U.S. equity. The key question: Rebalance, or ride the risks of style tilt and manager concentration?
- As noted, real assets are under serious review, within DC as well as DB plans. The source of the discomfort is the underperformance of segments like energy, MLPs, and commodities.
- Investors are also trying to determine what can serve as an equity diversifier equal to bonds with the return of zero interest rates.

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Database Group	Quarter	Year-to-date	Year	3 Years	5 Years	10 Years
Public Database	**9.6**	**11.7**	**11.7**	**8.2**	**9.4**	**8.1**
Corporate Database	**8.5**	**13.7**	**13.7**	**9.2**	**10.1**	**8.5**
Nonprofit Database	**10.3**	**12.3**	**12.3**	**8.3**	**9.6**	**8.1**
Taft-Hartley Database	**9.2**	**11.1**	**11.1**	**8.3**	**9.5**	**8.5**
All Institutional Investors	**9.5**	**12.3**	**12.3**	**8.5**	**9.6**	**8.3**
Large (>$1 billion)	**9.3**	**12.4**	**12.4**	**8.6**	**9.7**	**8.4**
Medium ($100mm - $1bn)	**9.4**	**12.3**	**12.3**	**8.6**	**9.7**	**8.3**
Small (<$100 million)	**9.7**	**12.1**	**12.1**	**8.2**	**9.5**	**8.0**

*Returns less than one year are not annualized.

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

Corporate DB Plans

- The plunge in Treasury rates in March 2020 obscured the impact of spread widening. The funded status for corporate DB plans moving down their LDI glidepaths did not take the hit many suffered in the GFC.
- The plunge has not yet derailed the commitment to de-risking, but moves to STRIPS for extra duration are now in question.
- There is likely to be an uptick in termination and risk transfer, and consideration of a pause to further de-risking if rates start to rise.

DC Plans

- Fees continued to be the top issue for DC plan sponsors, as has been true for many quarters.
- DC glidepaths saw an increase in private markets exposures, and higher equity allocations in the mid-career and path landing point (age 80). Greater diversification helps manage the risk with greater return-seeking strategies, while more passive exposure is used to manage fees.
- There was a flurry of rulemaking from the Trump administration in its final months, and many DC plan sponsors and recordkeepers have been moving rapidly to track all the changes, and the potential for them to be undone by the incoming administration.
- DC plan sponsors and recordkeepers are both working rapidly to address lessons learned from the pandemic to alter participant-facing services like enrollment and financial counseling, making them more digital-first.
- Recordkeeper consolidation activity picked up in 4Q20. This will likely point to an increase in recordkeeper searches in the near term.

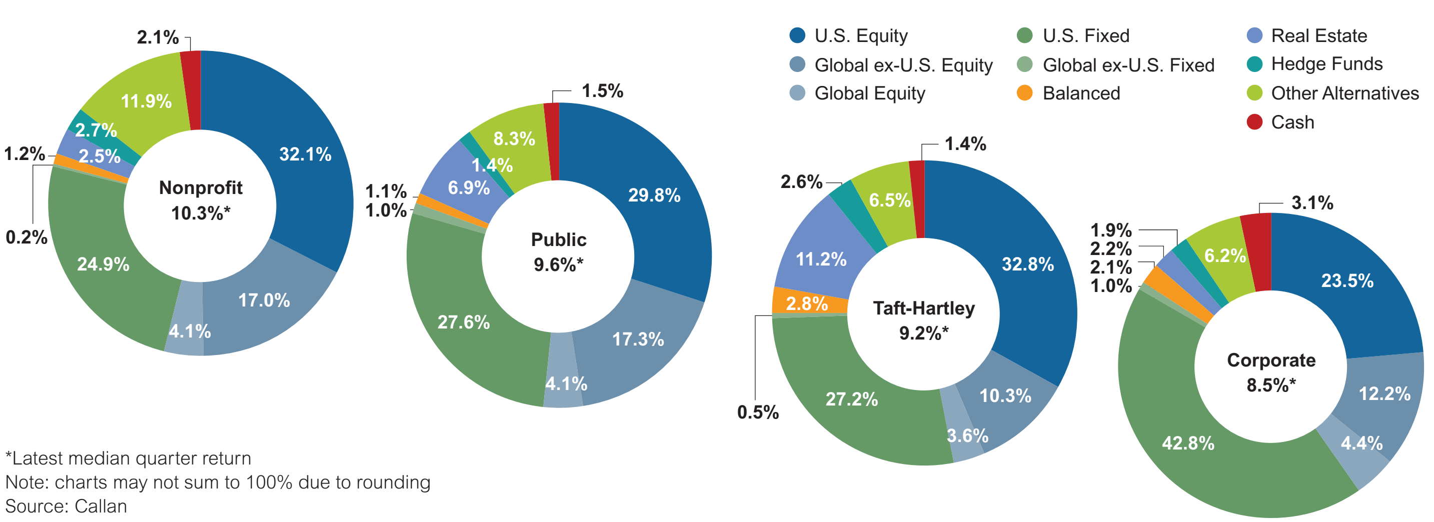
Public DB Plans

- There was a surge in public plan asset allocation reviews and capital markets discussions.
- The "V-shaped" recovery in equities helped calm fears.
- But there are great concerns about lower capital markets assumptions over the next 10 years, which are seriously challenging expectations for funding and solvency; this is a decades-long problem, made worse by the pandemic.
- ROA assumptions have been reduced but face further downward pressure. Weaker return assumptions may derail the expressed desire to bring in risk; there is growing interest in 30-year assumptions to justify more balanced portfolios.
- Liquidity needs and drawdown risks are top of mind. Stress testing is at the forefront of asset/liability studies, focusing on funding, contributions, liquidity, and solvency.

Nonprofits

- Subdued expectations for capital markets returns are challenging both the risk tolerance of endowments/foundations and the sustainability of established spending rates.
- There is growing dissatisfaction with private real assets, hedge funds, and the presence of any fixed income; significant portfolio reconstruction is on the table.

Average Asset Allocation, Callan Database Groups



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

Equity

U.S. Equities

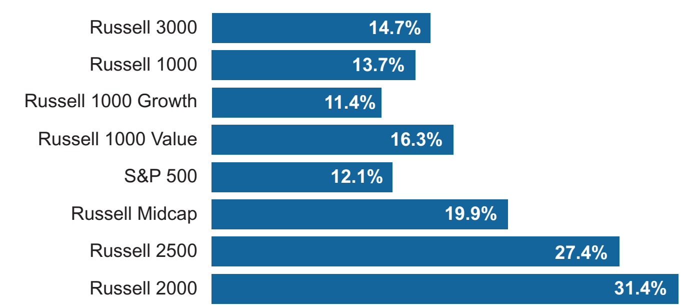
Record highs in 2020

- The S&P 500 Index hit a record high in 4Q20. The Index was up 12.1% for the quarter, bringing the 2020 gain to 18.4%.
- Since its March low, the S&P is up over 70%, with all sectors posting increases greater than 40%.
- 4Q winner: Energy (+28%), but down 34% for the year
- Top 2020 sector: Technology with 44% gain (+12% in 4Q)
- Pandemic has cast a pall over certain sectors while rewarding others: online retail soared 69% in 2020, while hotels/cruise lines, airlines, and retail REITs dropped ~30%.
- Apple, Microsoft, Amazon, Facebook, and Alphabet made up 22% of S&P 500 market cap at year-end, and for 2020, accounted for 12.1% of 18.4% Index return.

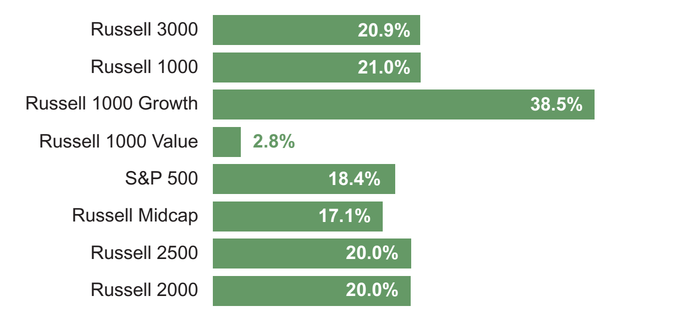
4Q saw shift in market trends

- In 4Q, value outperformed growth across the cap spectrum driven by vaccine progress, political clarity, and further stimulus. For the year, however, value trails growth by a significant margin due to Tech's outperformance.
- Fueled by the prospect of an economic recovery, small cap outperformed large in 4Q but was even on the year. Small value was the best performer for the quarter, but 2020 gain is a mere 4.6%.
- 4Q experienced a shift in YTD 2020 trends, attributed to expectations of broader economic recovery from the vaccine roll-out and the presidential election outcome.
- Cyclical sectors such as Energy, Financials, Industrials, and Materials outperformed during the quarter.

U.S. Equity: Quarterly Returns



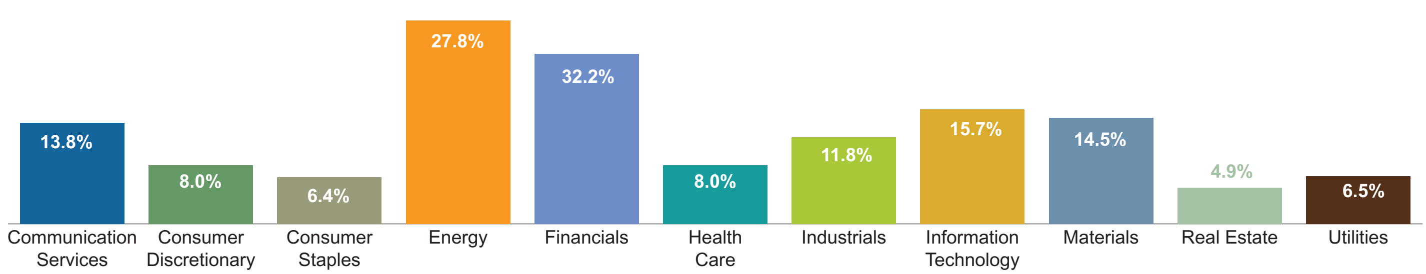
U.S. Equity: One-Year Returns



Sources: FTSE Russell and S&P Dow Jones Indices

- Although stocks with the highest P/E's significantly outperformed for the year, the trend shifted after the vaccine announcement and stocks with zero earnings estimates or P/E's less than 10 shot up.

Quarterly Performance of Industry Sectors



Source: S&P Dow Jones Indices

Global/Global ex-U.S. Equity

Vaccine rollouts extend and expand risk-on rally

- Prospects of global economic recovery propelled by COVID-19 vaccination fueled double-digit returns broadly across developed and emerging markets.
- Expectations of reverting back to normal economic activity by late 2021 enabled risk assets to thrive.
- Emerging markets outperformed developed markets, led by Latam—specifically Brazil.
- Small cap outperformed large as business confidence improved with news of vaccination.

Market rotates to cyclicals

- Positive outlook on reflation trade stoked Energy, Materials, and Financials to drive the market.
- Beta and volatility led factor performance due to market rotation.

U.S. dollar vs. other currencies

- U.S. dollar continued to lose ground as appetite for risk increased with the expectation that a path to global economic recovery is on the horizon.

Growth vs. value

- Value topped growth as sentiment shifted to cyclical sectors.

4Q20 belonged to value; does it have staying power?

- COVID-19 benefited value as the quarter brought news of successful vaccines.
- Financials, Travel, and Energy rebounded.
- MSCI World Growth (+12.4%) trailed MSCI World Value (+15.2%) over the three-month period.
- Even with this divergence of style in 4Q20, growth still outpaced value globally by over 35% for the full year.

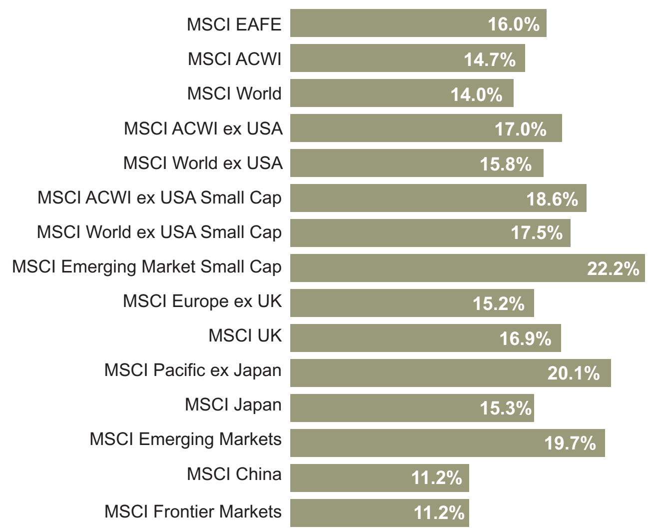
Potential tailwinds for value

- Higher interest rates on the heels of potentially higher inflation with government stimulus and businesses reopening
- Continued rebound of discretionary spending in areas neglected in 2020 as markets reopen: lodging, travel

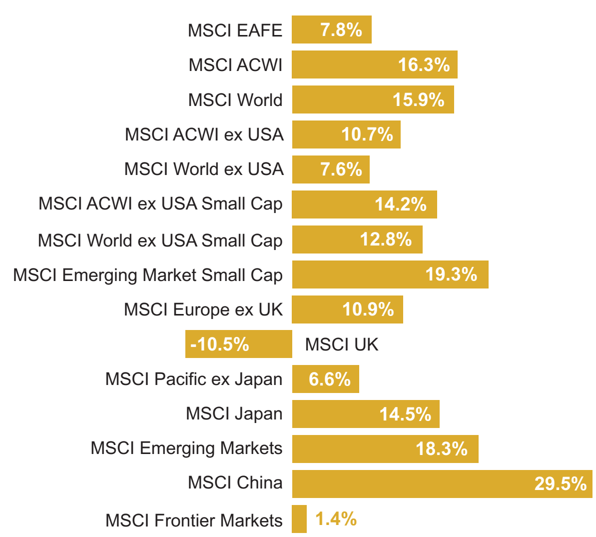
The good news

- Recent dollar weakness supports emerging markets.
- Could continue in 2021, driven by wider U.S. fiscal deficit plus stronger emerging market currencies

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar)



Source: MSCI

Fixed Income

U.S. Fixed Income

Treasury yields rose

- The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 163 bps to 199 bps.
- No rate hikes are expected until at least 2023.

Bloomberg Barclays Aggregate gained slightly

- Corporate credit outperformed treasuries as investors continued to hunt for yield.
- Corporate credit ended the year up 9.9% despite record issuance in 2020.

High yield bonds gained on the quarter as rally extended

- High yield bonds outperformed investment grade (IG) securities in 4Q, returning 6.5%, but trailed IG for the year.
- Leveraged loans gained 3.6% as demand remained strong to finish the year.

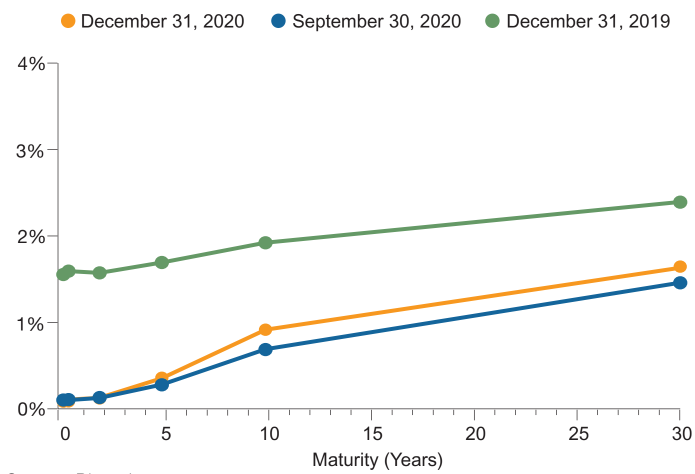
Munis boosted by favorable supply/demand dynamics

- Municipals outperformed Treasuries for the quarter, but remained down for the year.
- Tax-exempt issuance was muted amid strong demand.
- Lower quality outperformed for the quarter; however, higher quality outperformed for the year.

U.S. credit attractive to non-U.S. investors

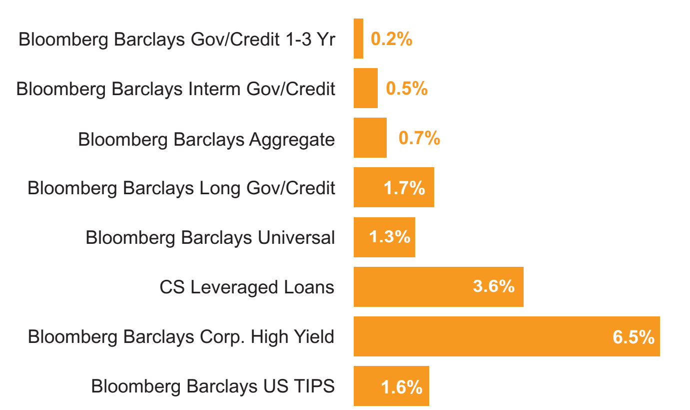
- Central banks globally are adopting a "lower for longer" mindset toward rates.
- 89% of positive yields globally are in the U.S., spurring demand for U.S. corporate credit.
- Lower LIBOR rates have decreased currency hedging costs; combined with a steep Treasury curve, that makes U.S. credit attractive to non-U.S. investors.

U.S. Treasury Yield Curves



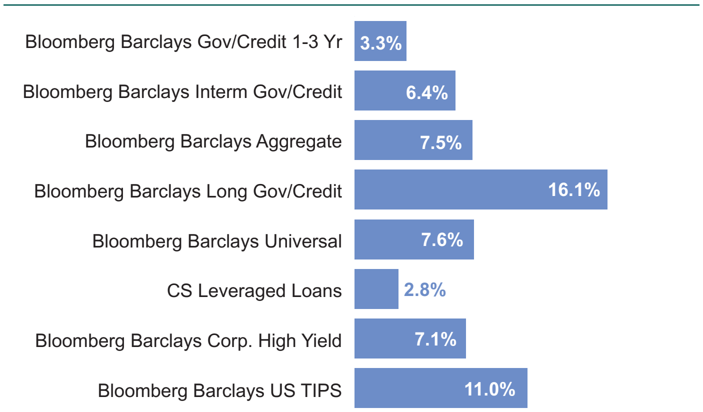
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and Credit Suisse

Implications of U.S. rates rising in 4Q

- U.S. Treasury rates rose in 4Q, most notably in the intermediate and long portions of the yield curve.
- As Democrats won both seats in the Georgia run-off, greater fiscal stimulus is likely. This may lead to further steepening of the yield curve and increased inflation expectations.
- A rising rate environment opens opportunities for floating-rate securities like leveraged loans, and makes securities with shorter durations such as securitized credit more attractive.

Global Fixed Income

Global fixed income rose amid monetary backdrop

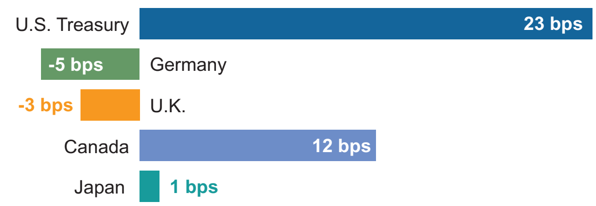
- Low rates and asset purchase programs continued to prop up the global bond market.
- Broad-based U.S. dollar weakness resulting from continued confidence in risk assets dampened hedged returns as the USD lost 4.27% versus the euro, 5.43% versus the British pound, and 2.02% versus the yen.

Emerging market debt ended the year positive

- Emerging market debt indices gained in 4Q20, finishing the year in positive territory amid a global search for yield and renewed growth expectations.
- U.S. dollar-denominated index (EMBI Global Diversified) underperformed local currency emerging market debt as U.S. rates rose; returns were mixed across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) was up significantly, with broad-based gains across constituents.

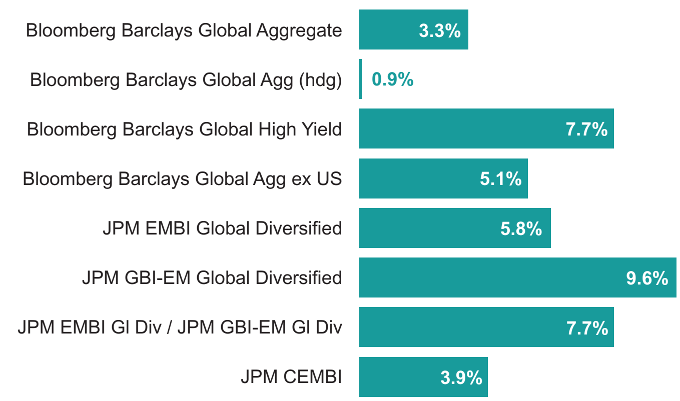
Change in 10-Year Global Government Bond Yields

3Q20 to 4Q20



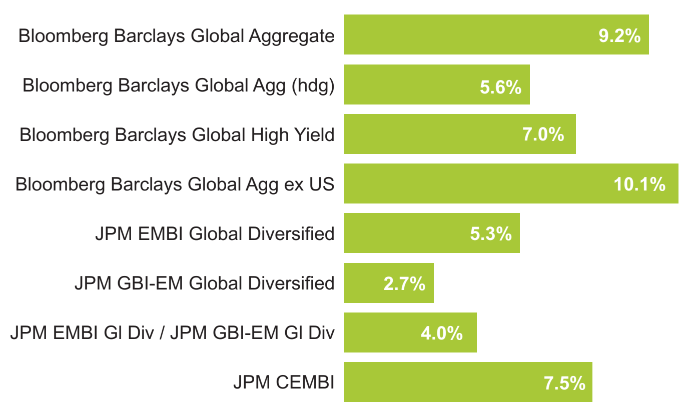
Source: Bloomberg Barclays

Global Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Global Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Hotels, Retail Face Pandemic Headwinds; REITs Gain but Lag Equities

REAL ESTATE/REAL ASSETS | Munir Iman

Pandemic continues to challenge Hotels and Retail

- Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
- Income remains positive except in the Hotel sector.
- Appraisers have more certainty on the pandemic's impact on valuations.
- Return dispersion by manager within the ODCE Index is due to the composition of underlying portfolios.

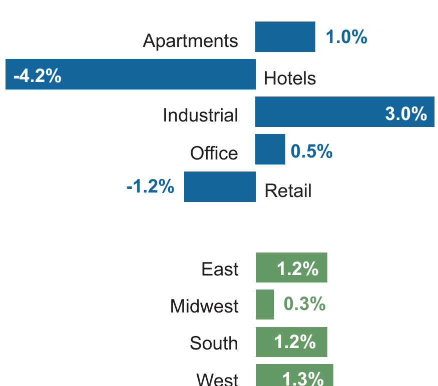
More than $200b of dry power

- U.S. core open end funds have investment queues of roughly $5 billion and exit queues of $20 billion.
- >$200 billion of capital waiting to be deployed in North America
- Majority of dry powder capital in opportunistic, value-add, and debt funds

Fundamentals will continue to be affected

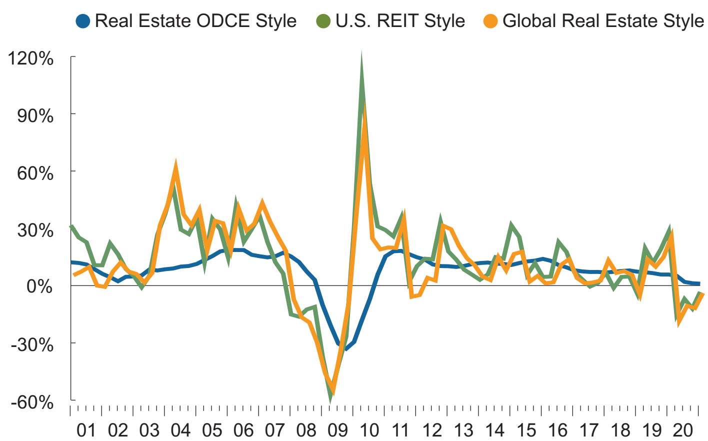
- Vacancy rates for all property types have been or will be affected.
- Net operating income has declined as Retail continues to suffer.
- 4Q20 rent collections showed relatively stable income throughout the quarter in the Industrial, Apartment, and Office sectors. The Retail sector remains challenged, with regional malls affected most heavily.
- Class A/B urban apartments relatively strong, followed by certain types of Industrial and Office
- Supply was in check before the pandemic.

Sector Quarterly Returns by Property Type and Region



Source: NCREIF

Rolling One-Year Returns



Source: Callan

- Construction is limited to finishing up existing projects but has been hampered by shelter-in-place orders and material shortages.
- New construction of preleased industrial and multifamily is occurring.
- Transaction volume dropped off during the quarter, except for multifamily and industrial assets with strong-credit tenants, which are trading at pre-COVID-19 levels.
- Cap rates remained steady during the quarter. The spread between cap rates and 10-year Treasuries is relatively high, leading some market participants to speculate that cap rates will not adjust much. Price discovery is happening and there are limited transactions.
- Callan believes the pandemic may cause a permanent re-pricing of risk across property types. Property types with more reliable cash flows will experience less of a change in cap rates; however, those with less reliable cash flows will see greater adjustments.

Global REITs increased but slightly lagged equities

- Global REITs underperformed slightly in 4Q20, gaining 13.3% compared to 14.0% for global equities (MSCI World).
- U.S. REITs rose 11.6% in 4Q20, lagging the S&P 500 Index, which jumped 12.1%.
- Globally, REITs are trading at a discount to NAV with the exception of those in the U.S., Singapore, and Australia.

– Sectors are mixed, between trading at a discount or premium.
– Ongoing volatility in REIT share prices offers opportunities to purchase mispriced securities, individual assets from REIT owners, and discounted debt, as well as lend to companies and/or execute take-privates of public companies.

Investment opportunities: real estate

– Primary opportunity: purchase of mispriced publicly traded real estate, both equity and debt
– Emerging opportunity: purchase of mezzanine loans from forced sellers
– The pandemic continues to impact real estate assets across Europe, with the Retail and Office sectors the first to undergo write-downs. Transaction activity has not yet meaningfully bounced back, as price discovery is still underway.

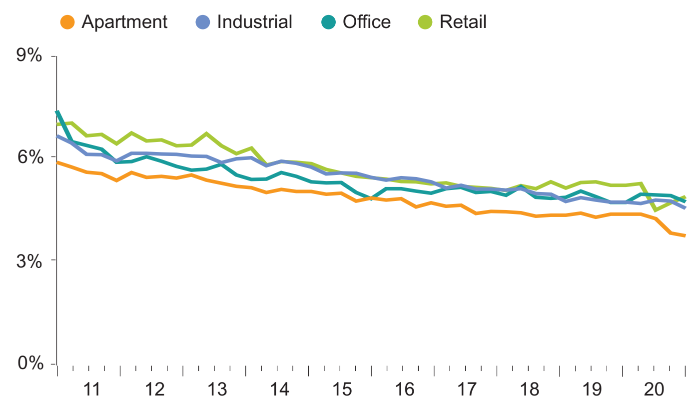
Investment opportunities: infrastructure

– Strong performance from communications assets has drawn increased interest from infrastructure investors, and in some cases real estate investors for data centers.
– Most infrastructure investment continues to be focused in OECD countries in North America and Europe. Some managers are sponsoring Asia-focused funds.

Investment opportunities: timberland and farmland

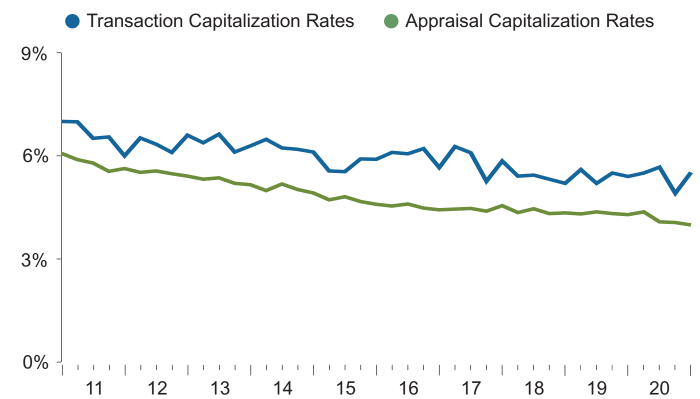
– Investment in farmland may increase if it proves to be a true diversifier in the pandemic.
– Institutional investment in timber has been waning for several years. The pandemic is unlikely to turn that tide.

NCREIF Capitalization Rates by Property Type



Source: NCREIF. Capitalization rates (net operating income / current market value (or sale price)) are appraisal-based.

NCREIF Transaction and Appraisal Capitalization Rates



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

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Private Real Assets	Quarter	Year to Date	Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	**1.3**	**1.0**	**1.0**	**4.6**	**5.9**	**9.1**	**5.5**
NFI-ODCE (value wt net)	1.1	0.3	0.3	4.0	5.3	8.9	5.5
NCREIF Property	1.2	1.6	1.6	4.9	5.9	9.0	7.1
NCREIF Farmland	0.6	1.7	1.7	3.9	5.0	10.1	11.2
NCREIF Timberland	0.6	0.8	0.8	1.8	2.3	4.6	5.4
Public Real Estate							
Global Real Estate Style	**11.4**	**-3.9**	**-3.9**	**4.6**	**5.8**	**7.5**	**5.7**
FTSE EPRA Nareit Developed	13.3	-9.0	-9.0	1.5	3.7	5.4	--
Global ex-U.S. Real Estate Style	**12.7**	**-0.9**	**-0.9**	**5.4**	**6.3**	**7.2**	**5.9**
FTSE EPRA Nareit Dev ex US	13.9	-7.1	-7.1	1.7	5.0	4.5	--
U.S. REIT Style	**9.8**	**-3.2**	**-3.2**	**5.8**	**6.4**	**9.5**	**7.4**
EPRA Nareit Equity REITs	11.6	-8.0	-8.0	3.4	4.8	8.3	6.5

*Returns less than one year are not annualized.
Sources: Callan, FTSE Russell, NCREIF

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY | Gary Robertson

Given travel restrictions and the move to video due diligence "on-sites," global private equity fundraising held up amazingly well in 2020. The same can be said for the volumes of underlying portfolio company investments and exits. Private equity market liquidity showed a quickening pace in the final quarter, which is expected to carry to 2021.

In 2020, private equity partnerships holding final closes raised $645 billion globally across 1,163 partnerships (unless otherwise noted, PitchBook provided all data cited). The dollar amount declined only 12% from 2019's near record total, and the number of funds raised fell 34%. 4Q20 finished strong with final closes totaling $197 billion, up 74% from 3Q. The number of funds totaled 295, up 22%.

Funds Closed 1/1/20 to 12/31/20

Strategy	No. of Funds	Amt ($mm)	Share
Venture Capital	592	110,362	17%
Growth Equity	99	49,493	8%
Buyouts	273	285,346	44%
Mezzanine Debt	18	21,362	3%
Distressed	34	40,149	6%
Energy	4	6,216	1%
Secondary and Other	79	103,814	16%
Fund-of-Funds	64	27,814	4%
Totals	**1,163**	**644,556**	**100%**

Source: PitchBook (Figures may not total due to rounding.)

New buyout investments for 2020 totaled 7,575, down 20% from 2019. Dollar volume fell 36% to $441 billion. The fourth quarter saw 2,223 new investments, a 23% increase, and dollar volume jumped 20% to $116 billion.

The year produced 32,198 rounds of new investment in venture capital (VC) companies, down 19% from 2019. Announced volume of $326 billion was up 18%. 4Q saw 7,227 new rounds, a 4% decline, and dollar volume rose 9% to $96 billion.

Last year also saw 1,791 buyout-backed private M&A exits, down 31% from 2019, with proceeds of $373 billion, down 42%. 4Q had 497 private exits, up 29%, with proceeds of $117 billion, up 144%. IPOs were strong for both venture capital and buyouts. The year's 144 buyout-backed IPOs increased 16% from 2019, with proceeds of $58 billion, up 71%. 4Q buyout-backed IPOs numbered 62, a jump of 32% from 3Q, with $24 billion of proceeds, up 60%.

Venture-backed M&A exits for the year totaled 1,788, down 18% from 2019. Announced dollar volume of $108 billion was down 19%. The final quarter had 473 exits, up 9%, and announced value of $46 billion vaulted 171%. The year's 391 venture-backed IPOs jumped 46% from 2019, with proceeds of $76 billion, up 65%. There were 115 VC-backed offerings in 4Q, a 17% drop, and the $26 billion of proceeds dropped 21% from 3Q.

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/20*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	11.1	27.9	20.8	14.6	16.6	12.3	6.0	26.6
Growth Equity	12.4	25.8	19.2	16.4	14.7	13.5	11.3	15.1
All Buyouts	10.8	15.6	13.4	14.3	14.0	12.4	11.9	13.2
Mezzanine	5.5	7.5	9.0	10.0	11.5	10.5	8.4	9.8
Credit Opportunities	3.5	-1.8	2.7	5.6	8.2	8.5	9.4	9.5
Control Distressed	7.8	5.9	5.8	8.5	10.3	9.6	10.3	10.7
All Private Equity	**10.5**	**18.1**	**14.7**	**13.9**	**13.9**	**12.1**	**10.0**	**14.1**
S&P 500	8.9	15.2	12.3	14.2	13.7	9.2	6.4	9.3
Russell 3000	14.7	20.9	14.5	15.4	13.8	10.0	7.8	9.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices
*Most recent data available at time of publication

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

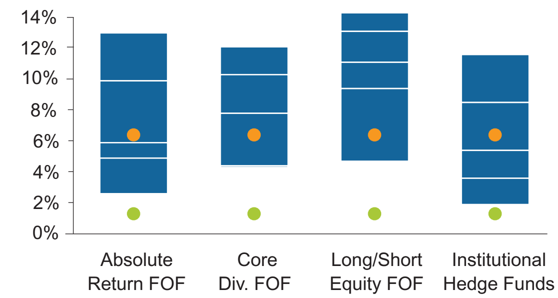
Hedge Funds Vaccinated Against Risk

HEDGE FUNDS/MACs | Jim McKee

The vigorous but volatile market conditions fed by continuing central bank liquidity enabled healthy hedge fund profits from both alpha and beta. As a proxy of asset-weighted hedge fund performance, the Credit Suisse Hedge Fund Index (CS HFI) surged 6.4% in 4Q20, its strongest quarterly gain since 2009. Representing actual hedge fund portfolios net of all fees and expenses, the median manager in the Callan Hedge Fund-of-Funds (FOF) Peer Group advanced 8.5%.

All strategies within the CS HFI were positive. Frenzied corporate issuance, whether equity, credit, or blank checks in the form of SPACs, particularly enriched Risk Arbitrage (+11.3%) and Event-Driven Multi-Strategy (+10.7%). Revived hopes for downtrodden credits benefited Distressed (+9.2%), marking the strategy's best quarterly gain since its 1994 inception. Riding the equity wave higher with an average 0.5 beta exposure, Long-Short Equity added 7.6%.

Hedge Fund Style Group Returns



	Absolute Return FOF	Core Div. FOF	Long/Short Equity FOF	Institutional Hedge Funds
10th Percentile	13.0	12.1	14.3	11.6
25th Percentile	9.9	10.3	13.1	8.5
Median	5.9	7.8	11.1	5.4
75th Percentile	4.9	4.4	9.4	3.6
90th Percentile	2.6	4.3	4.7	1.9
CS Hedge Fund ●	6.4	6.4	6.4	6.4
90-Day T-Bill +5% ●	1.3	1.3	1.3	1.3

Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/20

Hedge Fund Universe	Quarter	Year	3 Years	5 Years	10 Years	15Years
Callan Institutional Hedge Fund Peer Group	**5.4**	**6.8**	**5.1**	**5.9**	**5.7**	**6.9**
Callan Fund-of-Funds Peer Group	**8.5**	**13.1**	**6.5**	**5.7**	**5.0**	**4.8**
Callan Absolute Return FOF Style	**5.9**	**4.4**	**3.8**	**4.1**	**4.3**	**4.2**
Callan Core Diversified FOF Style	**7.8**	**12.4**	**5.7**	**5.2**	**4.7**	**4.6**
Callan Long/Short Equity FOF Style	**11.1**	**17.9**	**8.1**	**7.3**	**6.2**	**5.5**
BB GS Cross Asset Risk Premia 6% Vol Idx	1.2	-4.3	2.3	3.2	5.1	5.9
Credit Suisse Hedge Fund	6.4	6.4	4.0	4.1	3.8	4.7
CS Convertible Arbitrage	4.2	10.3	5.2	5.5	4.1	4.8
CS Distressed	9.2	3.8	1.2	3.4	3.6	4.4
CS Emerging Markets	5.6	12.2	4.6	6.9	4.7	5.7
CS Equity Market Neutral	0.7	1.7	-0.6	0.3	1.6	-0.9
CS Event-Driven Multi	10.7	6.9	4.1	3.9	2.5	4.7
CS Fixed Income Arb	3.3	3.6	3.6	4.3	4.6	4.0
CS Global Macro	6.0	6.5	5.5	4.4	4.1	6.0
CS Long/Short Equity	7.6	7.9	4.9	4.8	5.0	5.5
CS Managed Futures	5.9	1.9	1.2	-0.1	0.6	2.8
CS Multi-Strategy	5.1	5.6	3.9	4.6	5.7	5.6
CS Risk Arbitrage	11.3	16.0	6.8	6.4	3.9	4.5
HFRI Asset Wtd Composite	7.6	2.8	3.2	3.8	3.7	--
90-Day T-Bill + 5%	1.3	5.7	6.6	6.2	5.6	6.2

*Net of fees. Sources: Bloomberg Barclays GSAM, Callan, Credit Suisse, Hedge Fund Research

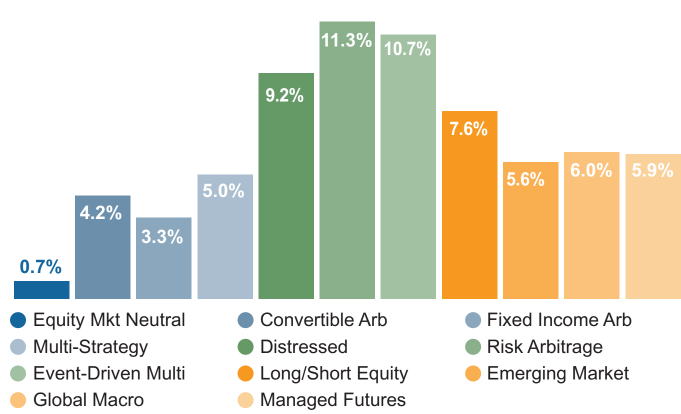
Within Callan's Hedge FOF Peer Group, market exposures differentiated performance in the quarter. Fed by the equity rally as well as stock dispersion within it, the median Callan Long/Short Equity FOF (+11.1%) easily beat the Callan Absolute Return FOF (+5.9%), which benefited from tightening spreads in equity, credit, and event arbitrage. With diversifying exposures to both non-directional and directional styles, the Core Diversified FOF gained 7.8%.

Tracking 50 of the largest, broadly diversified hedge funds with low-beta exposure to equity markets, the median manager in the Callan Institutional Hedge Fund (CIHF) Peer Group gained 5.4% in 4Q. For the year, the median manager was up 6.8%. Those funds focused on hedged credit led, on average, others focused more on equities, rates, and cross-asset strategies in the quarter, but lagged those others for the full year.

Measuring the performance of these alternative risk premia in the quarter, the Bloomberg GSAM Risk Premia Index gained 1.2% based upon a 6% volatility target. Within the underlying styles of the Index's alternative risk premia, Currency Carry (+3.7%), U.S. Equity Value (+3.6%), and Currency Trend (+3.6%) were the big beneficiaries of the quarter's cyclical risk-on rotation.

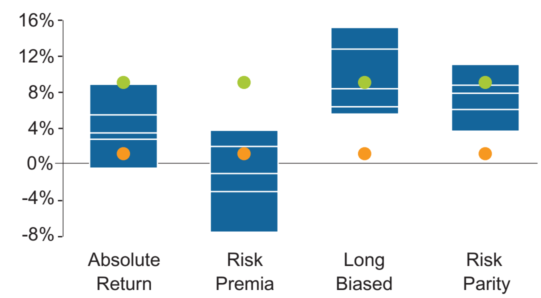
Within Callan's database of liquid alternative solutions, the median managers of Callan Multi-Asset Class (MAC) style groups generated positive returns, gross of fees, consistent with their underlying risk exposures. For example, the Callan Risk Parity MAC, which typically targets equal risk-weighted allocations across asset classes with leverage, gained 7.9%, slightly trailing the more equity risk-oriented benchmark of 60% MSCI ACWI and 40% Bloomberg Barclays US Aggregate Bond Index (+9.1%). Given its usually long equity bias within a dynamic asset allocation framework, the Callan Long-Biased MAC (+8.4%) also marginally underperformed the 60%/40% index. The median Callan Risk Premia MAC fell 1.0%, reflecting its levered exposures to uncorrelated alternative risk premia (such as those in the Bloomberg GSAM Risk Premia Index). As the most conservative MAC style focused on non-directional strategies of long and short asset class exposures, the Callan Absolute Return MAC earned 3.5%.

Credit Suisse Hedge Fund Strategy Returns



Source: Credit Suisse

MAC Style Group Returns



	Absolute Return	Risk Premia	Long Biased	Risk Parity
10th Percentile	8.9	3.8	15.2	11.1
25th Percentile	5.5	2.0	12.8	8.8
Median	3.5	-1.0	8.4	7.9
75th Percentile	2.8	-3.0	6.4	6.1
90th Percentile	-0.4	-7.5	5.6	3.7
BB GS Cross Asset Risk Premia (6%v) ●	1.2	1.2	1.2	1.2
60% MSCI ACWI/ 40% BB Barclays Agg ●	9.1	9.1	9.1	9.1

Sources: Bloomberg Barclays, Callan, Eurekahedge, S&P Dow Jones Indices

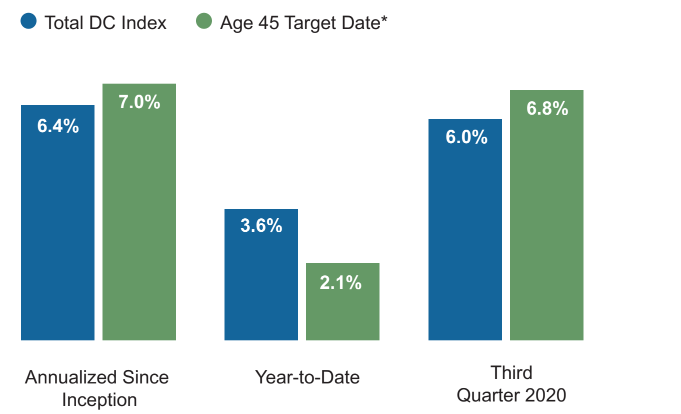
Index Posts Second Straight Quarterly Gain

DEFINED CONTRIBUTION | Patrick Wisdom

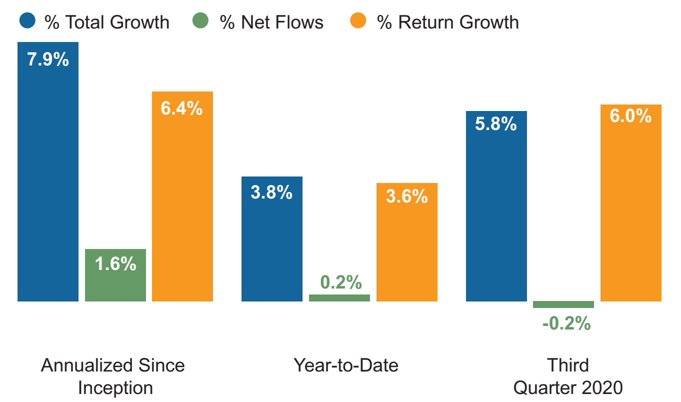
- The Callan DC Index™ rose 6.0% in 3Q20, the second straight quarter of gains after a 15.0% 1Q20 plunge. The increase propelled the Index to a gain year to date (3.6%). The Age 45 Target Date Fund (analogous to the 2040 vintage) posted a larger quarterly gain (6.8%), attributable to its higher allocation to equity.
- Balances within the DC Index rose by 5.8%. Investment returns (6.0%) were the sole driver of the growth, while net flows (-0.2%) had a small, negative effect.
- Target date funds typically get the largest net inflows, but they received only 12.5% of quarterly inflows as investors gravitated to relatively safer asset classes such as U.S. fixed income (36.9%) and stable value (30.7%).
- U.S. large cap (-45.1%) and U.S. small/mid cap (-38.9%) had the largest net outflows.
- Turnover (i.e., net transfer activity levels within DC plans) increased in 3Q, rising to 0.75% from the previous quarter's 0.37%.
- The Index's overall allocation to equity increased slightly to 68.8% from the previous quarter's 68.4%. U.S. large cap saw the largest percentage increase in allocation, rising by 60 basis points to 26.0%. U.S. small/mid cap had the largest percentage decrease, to 7.4% from 7.7% in 2Q.
- The prevalence of a money market offering (49.1%) increased by 1.4 percentage points from 2Q20. The percentage of plans offering a balanced fund (47.4%) dipped by more than 3 percentage points.
- For plans with more than $1 billion in assets, the average asset-weighted fee decreased by 2 basis points to 0.27%. Plans with less than $500 million in assets saw a slightly larger fee decrease of 4 bps to 0.33%, while the fee for plans with assets between $500 million and $1 billion remained steady at 0.36%.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of over 100 plans, representing nearly $300 billion in assets. The Index is updated quarterly and is available on Callan's website.

Investment Performance



Growth Sources



Net Cash Flow Analysis (3Q20)
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
U.S. Fixed Income	36.91%
Stable Value	30.67%
U.S. Smid Cap	-38.89%
U.S. Large Cap	-45.14%
Total Turnover**	**0.75%**

Data provided here is the most recent available at time of publication.
Source: Callan DC Index
Note: DC Index inception date is January 2006.

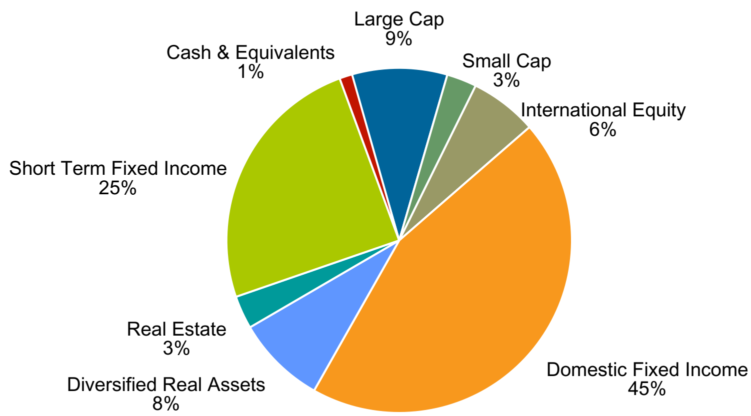
* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

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

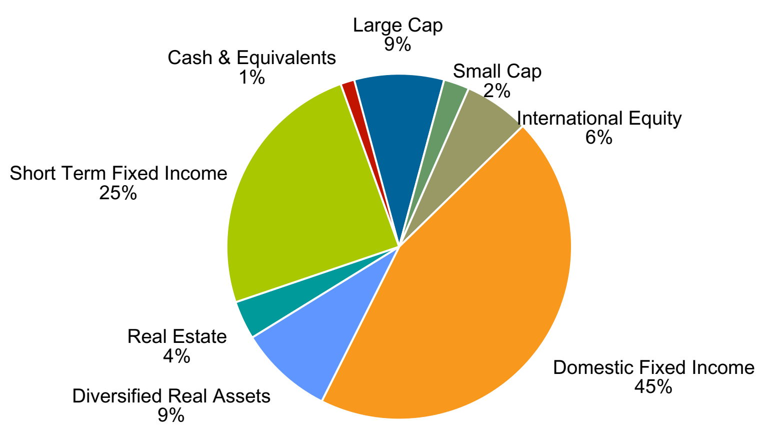
Actual vs Target Asset Allocation
As of December 31, 2020

The first chart below shows the Fund's asset allocation as of December 31, 2020. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



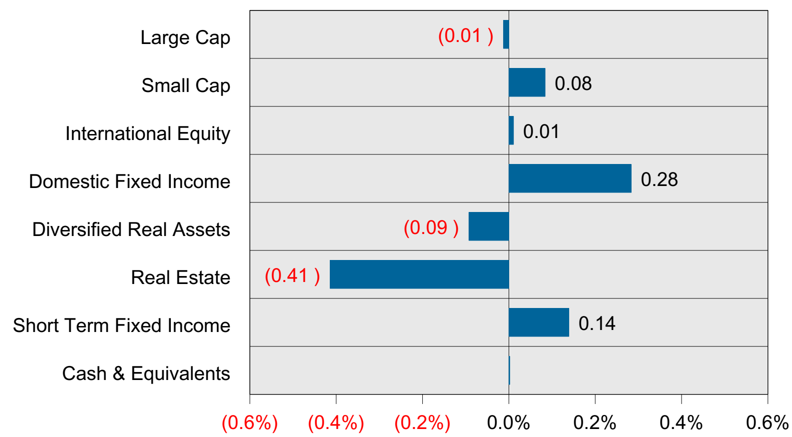
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	283,905	9.0%	8.5%	0.5%	14,708
Small Cap	87,146	2.8%	2.4%	0.3%	10,556
International Equity	200,223	6.3%	6.1%	0.3%	8,042
Domestic Fixed Income	1,406,232	44.6%	44.7%	(0.1%)	(2,611)
Diversified Real Assets	265,840	8.4%	8.8%	(0.3%)	(10,541)
Real Estate	96,926	3.1%	3.6%	(0.5%)	(16,433)
Short Term Fixed Income	778,365	24.7%	24.7%	(0.0%)	(0)
Cash & Equivalents	36,473	1.2%	1.3%	(0.1%)	(3,721)
Total	3,155,111	100.0%	100.0%		

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

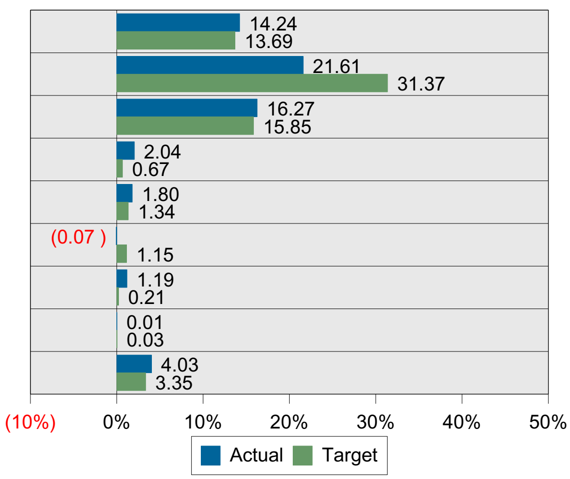
Quarterly Total Fund Relative Attribution - December 31, 2020

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

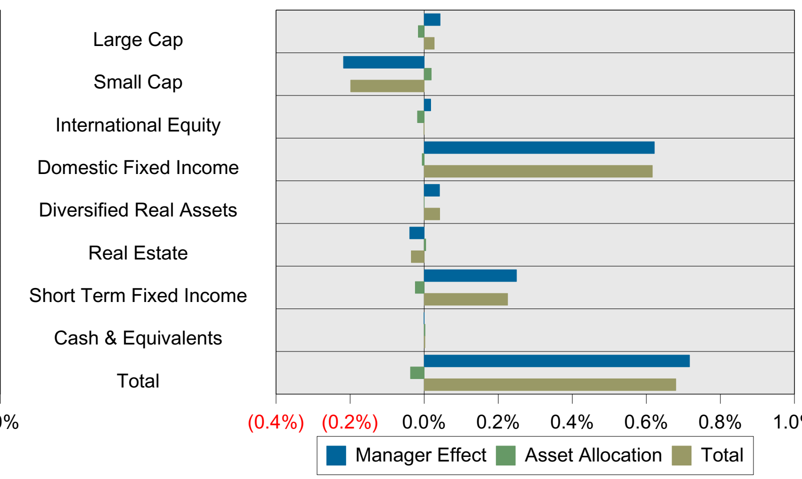
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2020

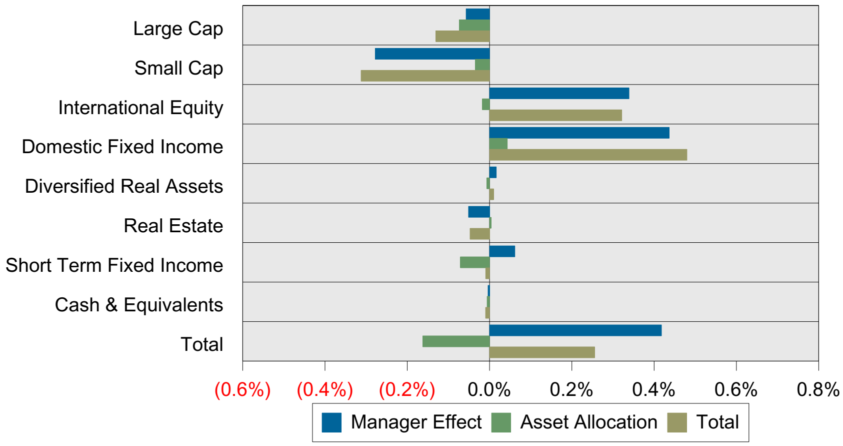
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	14.24%	13.69%	0.04%	(0.02%)	0.03%
Small Cap	2%	2%	21.61%	31.37%	(0.22%)	0.02%	(0.20%)
International Equity	6%	6%	16.27%	15.85%	0.02%	(0.02%)	(0.00%)
Domestic Fixed Income	45%	44%	2.04%	0.67%	0.62%	(0.01%)	0.62%
Diversified Real Assets	9%	9%	1.80%	1.34%	0.04%	0.00%	0.04%
Real Estate	3%	4%	(0.07%)	1.15%	(0.04%)	0.00%	(0.03%)
Short Term Fixed Income	25%	25%	1.19%	0.21%	0.25%	(0.02%)	0.23%
Cash & Equivalents	1%	1%	0.01%	0.03%	(0.00%)	0.00%	0.00%
Total			**4.03% =**	**3.35% +**	**0.72% +**	**(0.04%)**	**0.68%**

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

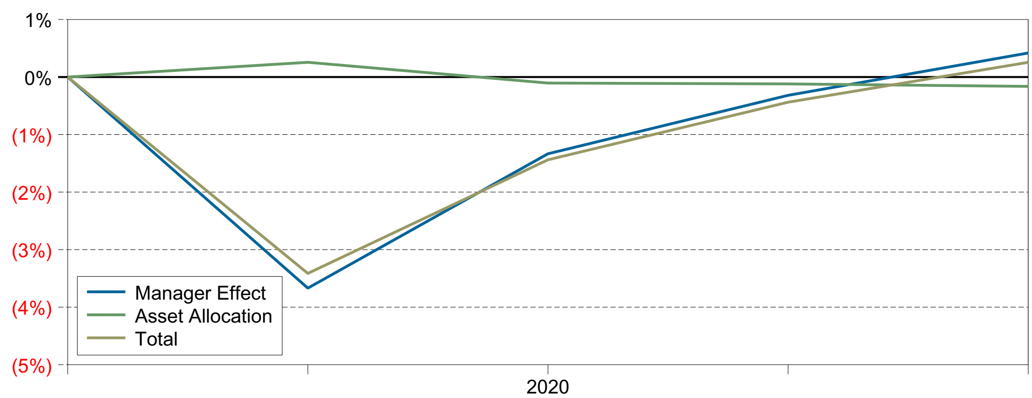
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	19.93%	20.96%	(0.06%)	(0.07%)	(0.13%)
Small Cap	2%	2%	8.77%	19.96%	(0.28%)	(0.03%)	(0.31%)
International Equity	6%	6%	13.19%	7.59%	0.34%	(0.02%)	0.32%
Domestic Fixed Income	45%	44%	8.64%	7.51%	0.44%	0.04%	0.48%
Diversified Real Assets	9%	9%	7.32%	7.11%	0.02%	(0.01%)	0.01%
Real Estate	3%	4%	(0.06%)	1.60%	(0.05%)	0.00%	(0.05%)
Short Term Fixed Income	25%	25%	3.61%	3.33%	0.06%	(0.07%)	(0.01%)
Cash & Equivalents	1%	1%	0.44%	0.67%	(0.00%)	(0.01%)	(0.01%)
Total			**8.35% =**	**8.10% +**	**0.42% +**	**(0.16%)**	**0.26%**

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

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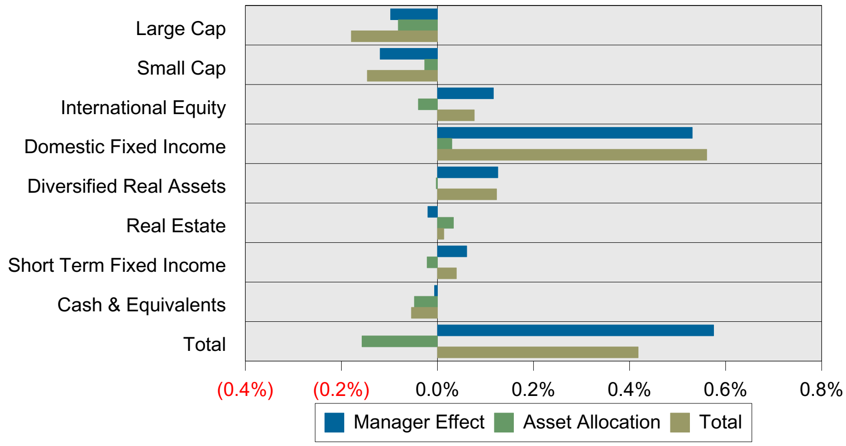
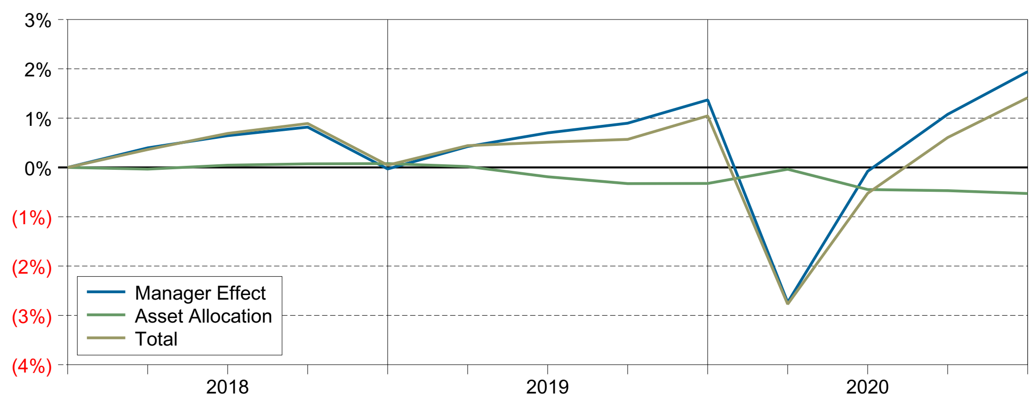
Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

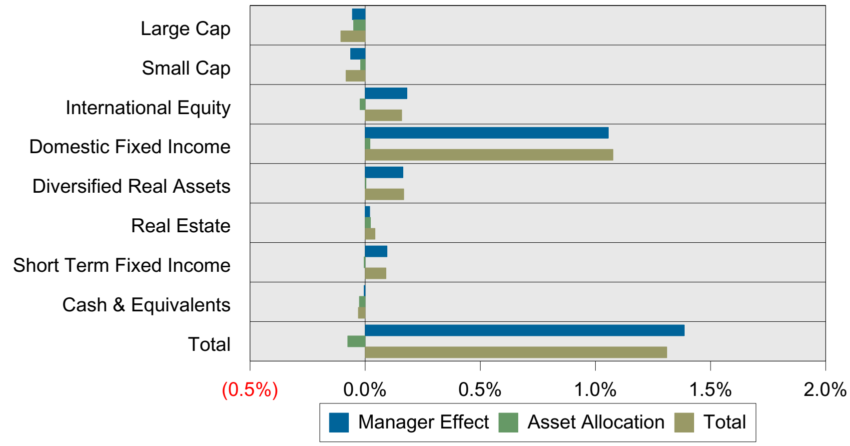
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	9%	13.68%	14.82%	(0.10%)	(0.08%)	(0.18%)
Small Cap	3%	3%	5.85%	10.25%	(0.12%)	(0.03%)	(0.15%)
International Equity	7%	7%	5.95%	4.22%	0.12%	(0.04%)	0.08%
Domestic Fixed Income	49%	49%	6.48%	5.34%	0.53%	0.03%	0.56%
Diversified Real Assets	10%	10%	5.73%	4.61%	0.13%	(0.00%)	0.12%
Real Estate	4%	4%	3.95%	4.89%	(0.02%)	0.03%	0.01%
Short Term Fixed Income	14%	14%	3.37%	2.98%	0.06%	(0.02%)	0.04%
Cash & Equivalents	3%	3%	1.42%	1.60%	(0.01%)	(0.05%)	(0.05%)
Total			**6.40% =**	**5.98% +**	**0.58% +**	**(0.16%)**	**0.42%**

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

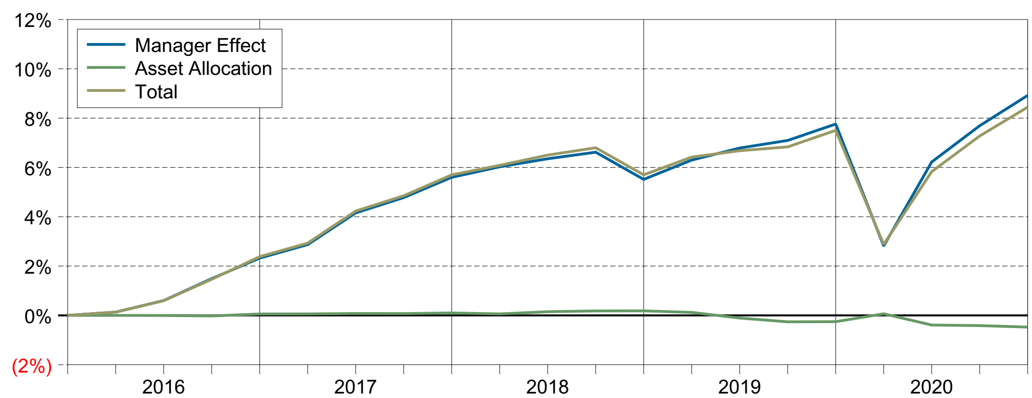
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

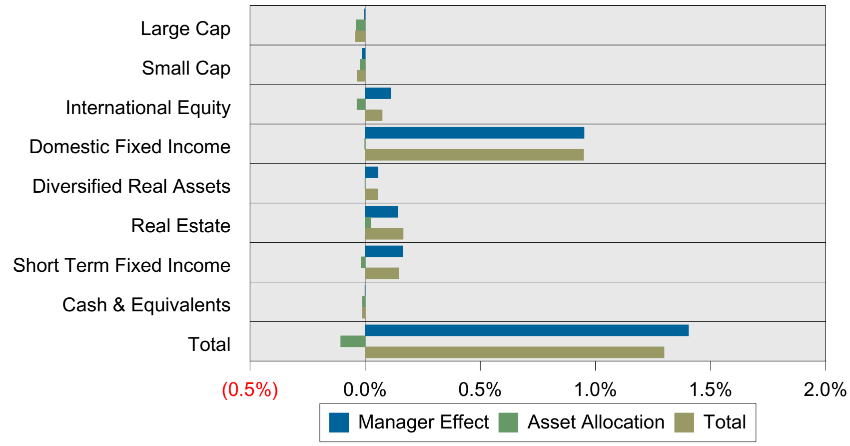
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	14.93%	15.60%	(0.06%)	(0.05%)	(0.11%)
Small Cap	3%	3%	10.84%	13.26%	(0.06%)	(0.02%)	(0.08%)
International Equity	7%	7%	9.85%	7.32%	0.18%	(0.02%)	0.16%
Domestic Fixed Income	49%	49%	6.65%	4.44%	1.06%	0.02%	1.08%
Diversified Real Assets	11%	11%	5.76%	4.37%	0.16%	0.00%	0.17%
Real Estate	5%	4%	5.88%	5.91%	0.02%	0.02%	0.04%
Short Term Fixed Income	13%	13%	2.69%	2.10%	0.09%	(0.00%)	0.09%
Cash & Equivalents	3%	3%	1.06%	1.20%	(0.00%)	(0.03%)	(0.03%)
Total			**7.22% =**	**5.91% +**	**1.39% +**	**(0.08%)**	**1.31%**

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

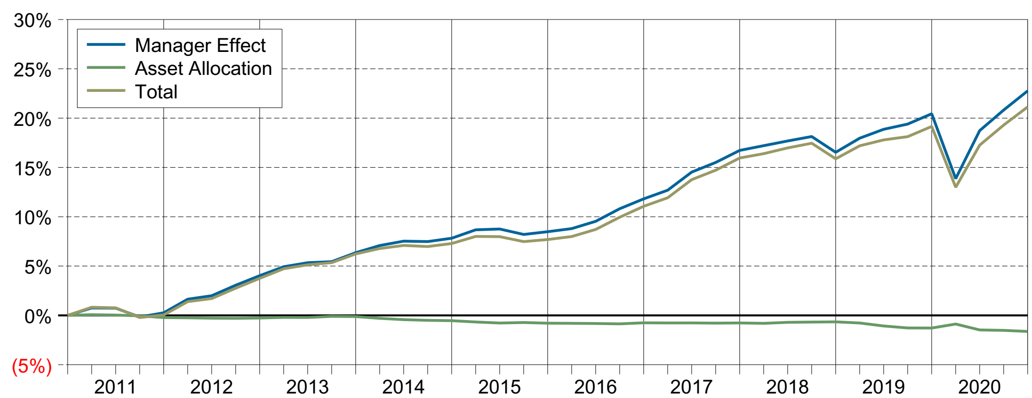
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

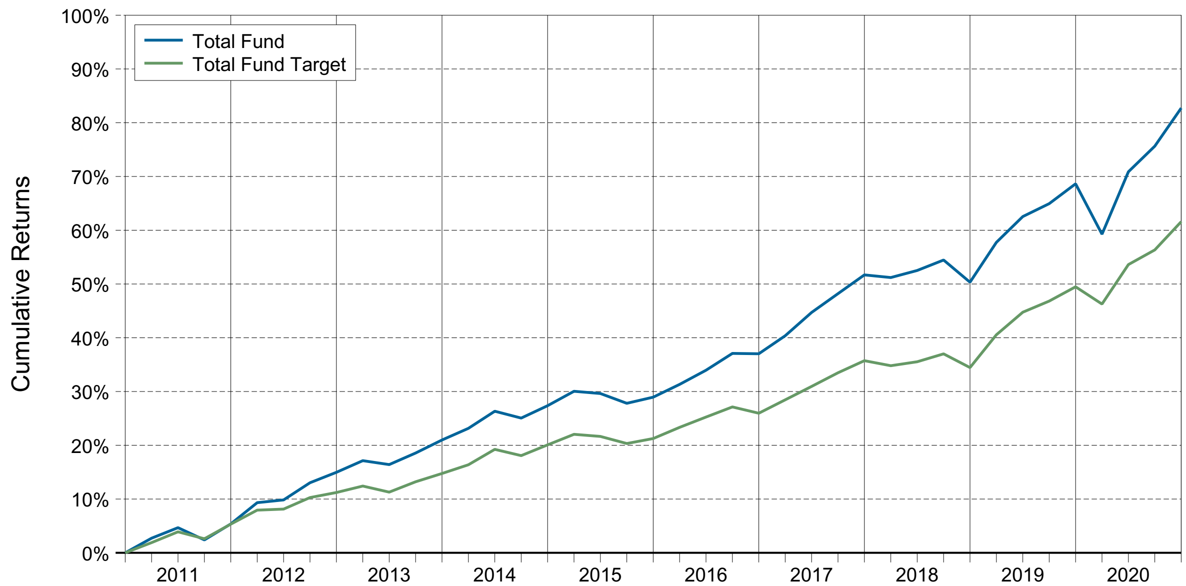
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	14.10%	14.08%	(0.00%)	(0.04%)	(0.04%)
Small Cap	3%	3%	10.66%	11.20%	(0.01%)	(0.02%)	(0.04%)
International Equity	7%	7%	7.12%	5.33%	0.11%	(0.04%)	0.07%
Domestic Fixed Income	42%	42%	6.22%	3.84%	0.95%	(0.00%)	0.95%
Diversified Real Assets	11%	12%	4.74%	3.98%	0.06%	(0.00%)	0.05%
Real Estate	5%	4%	12.11%	9.00%	0.14%	0.02%	0.16%
Short Term Fixed Income	19%	19%	1.96%	1.29%	0.16%	(0.02%)	0.15%
Cash & Equivalents	3%	3%	0.60%	0.64%	(0.00%)	(0.01%)	(0.01%)
Total			**6.21%** =	**4.92%** +	**1.40%** +	**(0.11%)**	**1.30%**

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

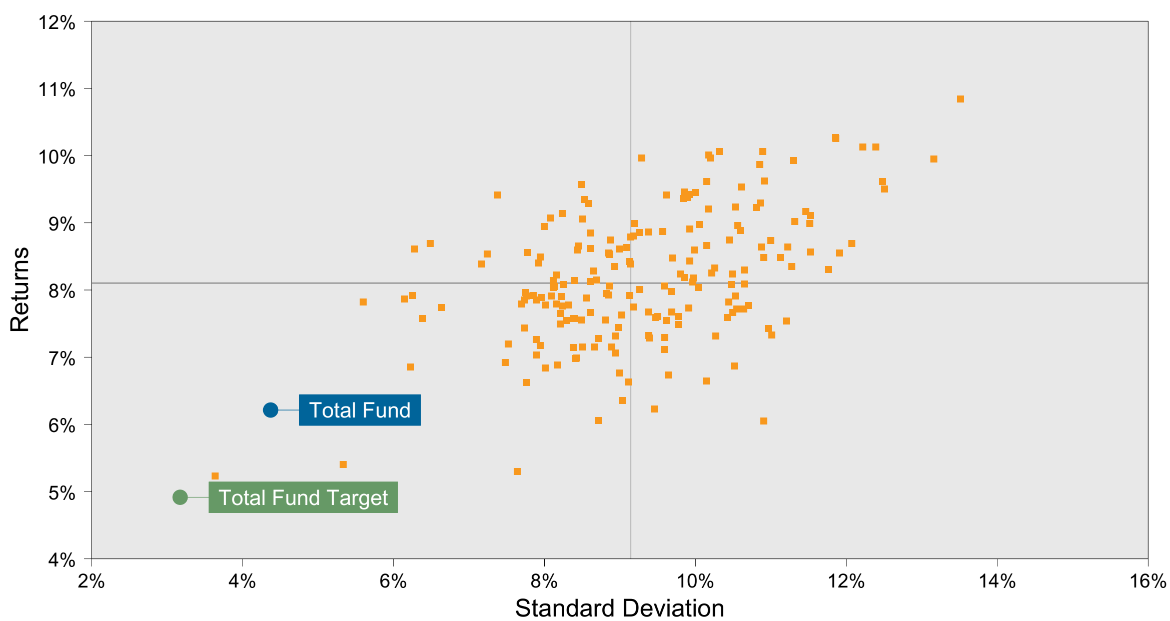
Cumulative Performance Relative to Target

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

Cumulative Returns Actual vs Target



Ten Year Annualized Risk vs Return



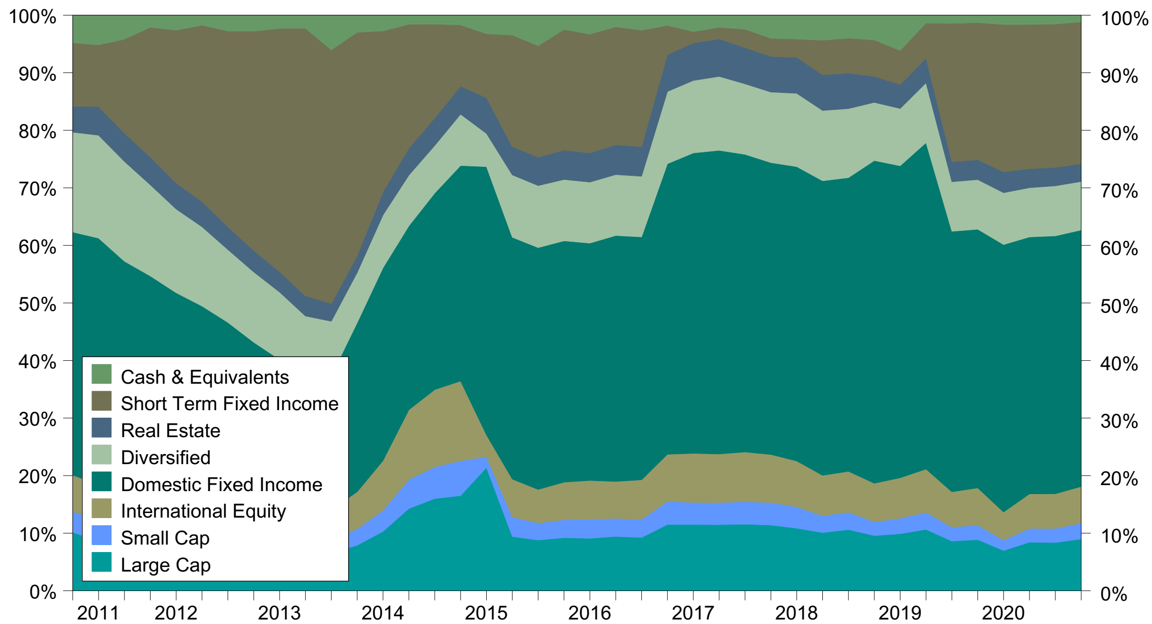
Squares represent membership of the Callan Public Fund Sponsor Database

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

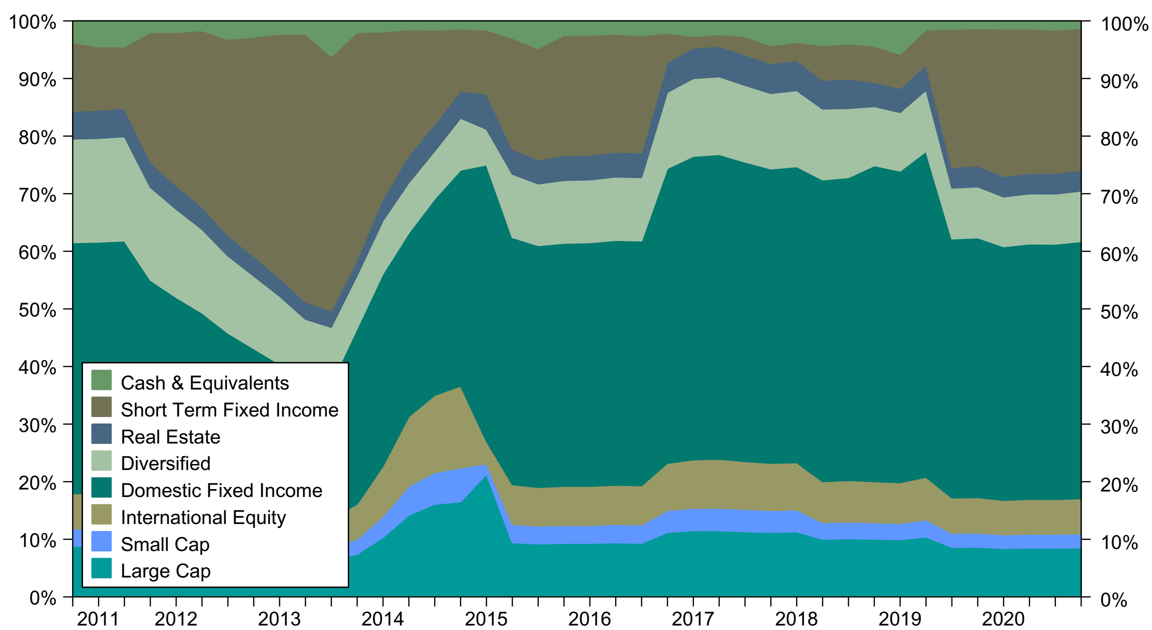
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

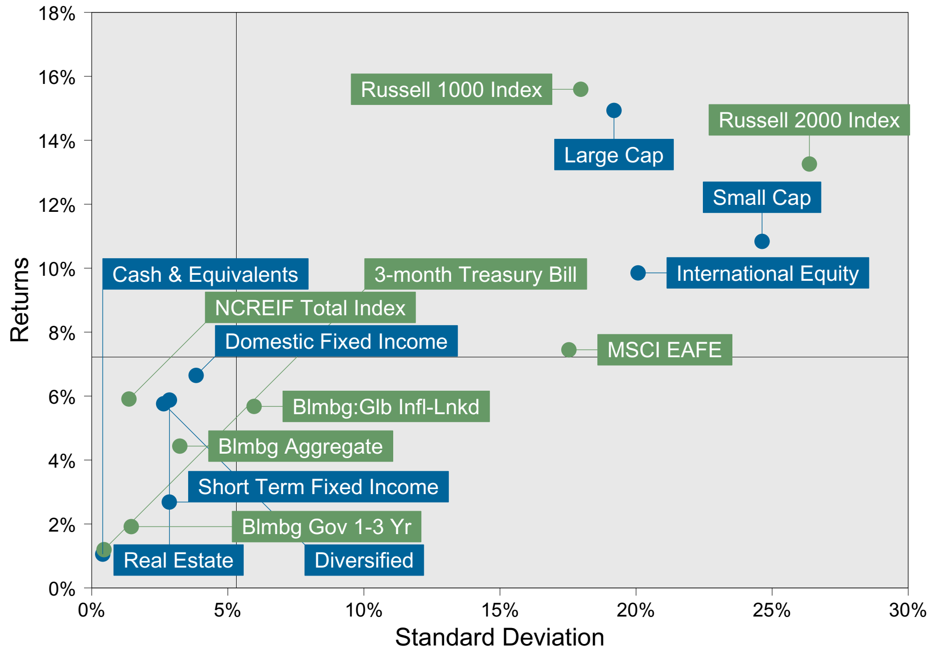


* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

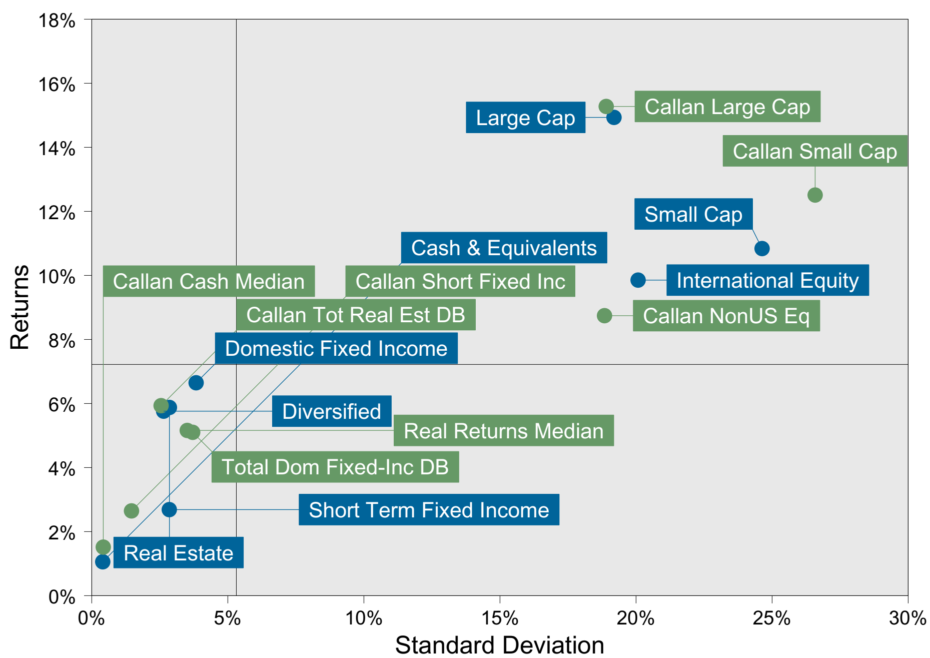
Asset Class Risk and Return

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

Five Year Annualized Risk vs Return
Asset Classes vs Benchmark Indices



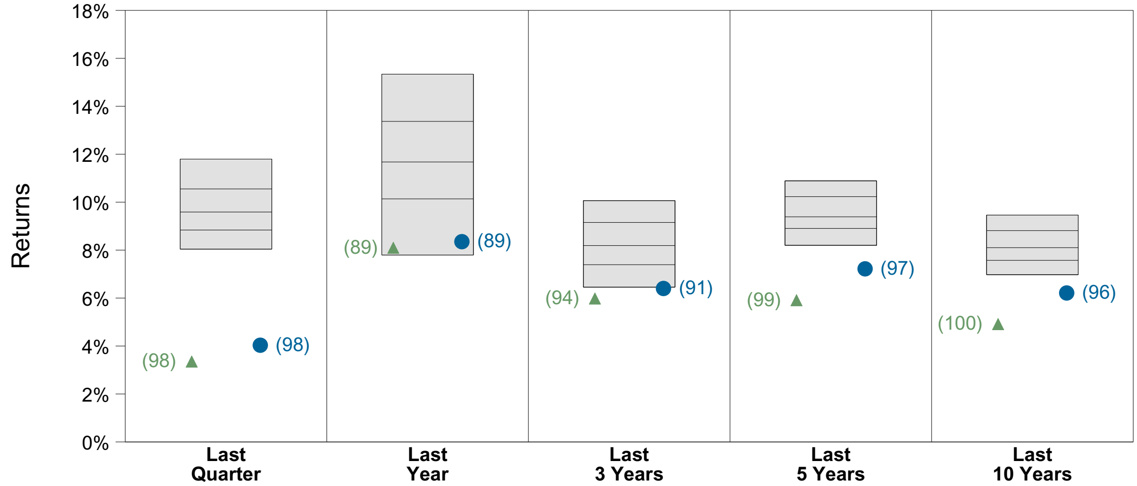
Five Year Annualized Risk vs Return
Asset Classes vs Asset Class Median



Total Fund Ranking

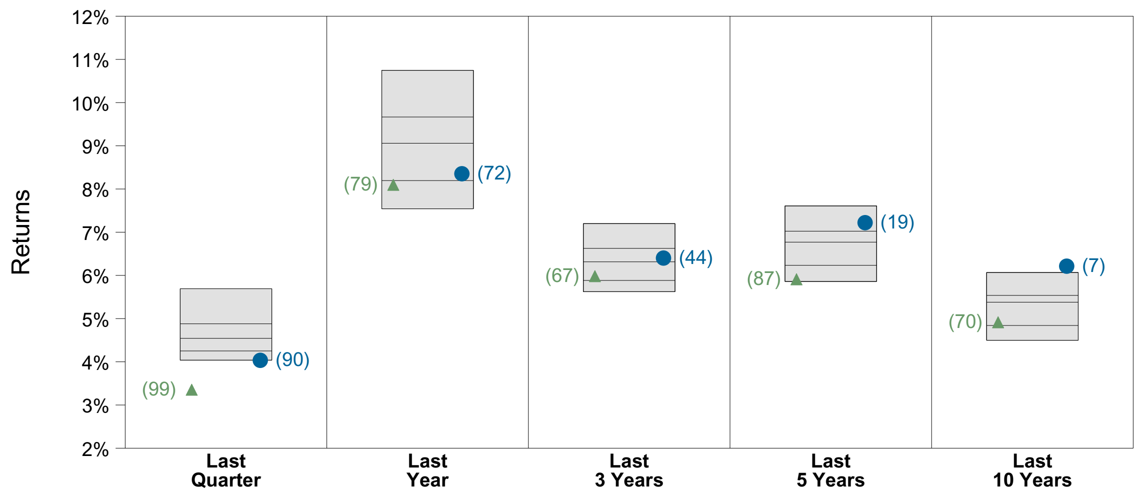
The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended December 31, 2020. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	11.80	15.34	10.06	10.89	9.46
25th Percentile	10.55	13.37	9.15	10.23	8.81
Median	9.59	11.68	8.19	9.39	8.10
75th Percentile	8.84	10.14	7.39	8.91	7.57
90th Percentile	8.04	7.80	6.46	8.20	6.98
Total Fund ●	4.03	8.35	6.40	7.22	6.21
Policy Target ▲	3.35	8.10	5.98	5.91	4.92

Asset Allocation Adjusted Ranking



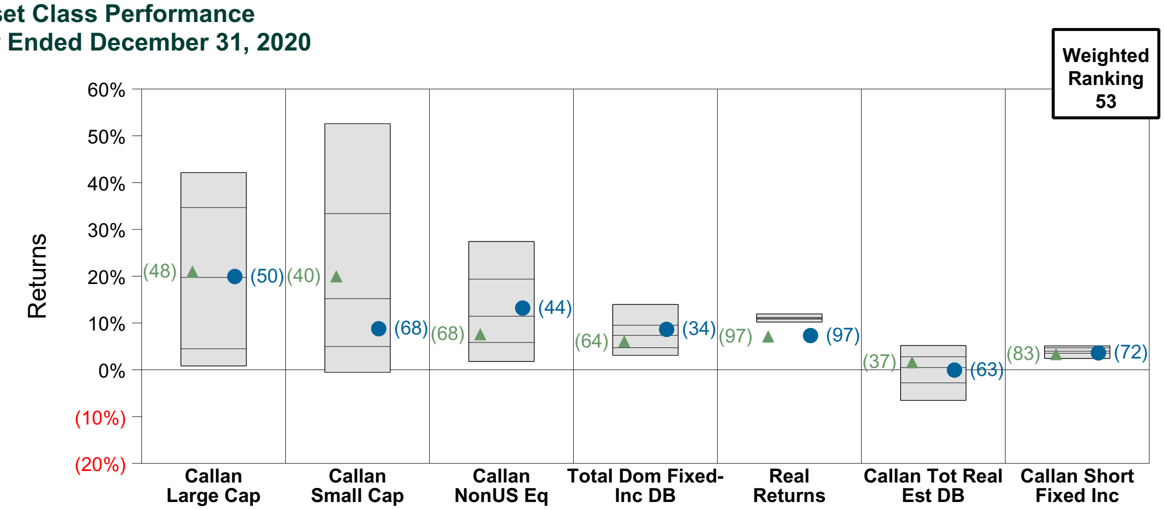
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	5.69	10.75	7.20	7.61	6.07
25th Percentile	4.88	9.67	6.63	7.02	5.54
Median	4.54	9.06	6.31	6.77	5.38
75th Percentile	4.25	8.19	5.88	6.23	4.84
90th Percentile	4.04	7.54	5.62	5.86	4.50
Total Fund ●	4.03	8.35	6.40	7.22	6.21
Policy Target ▲	3.35	8.10	5.98	5.91	4.92

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

Asset Class Rankings

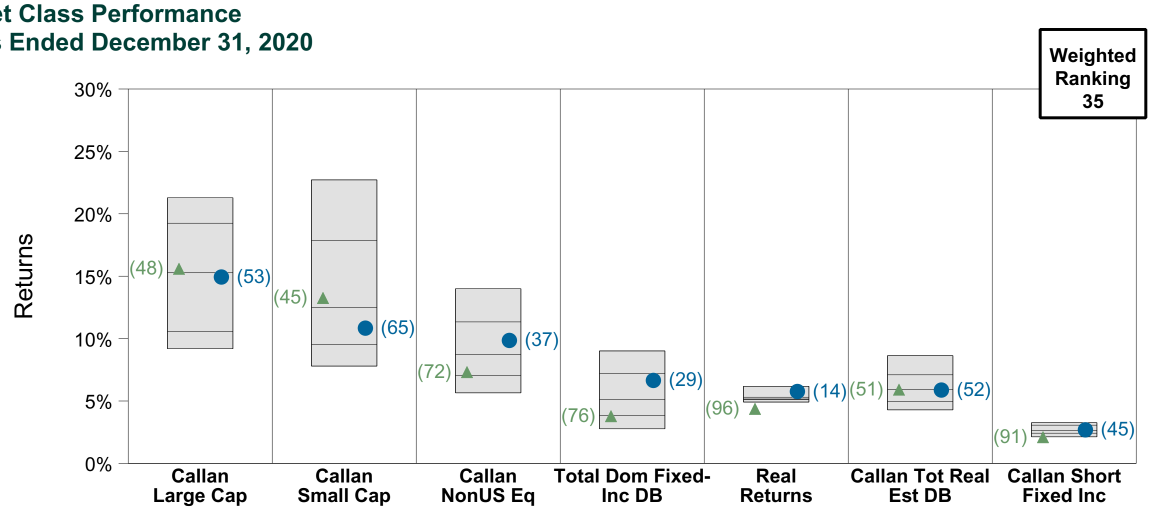
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Short Fixed Inc
10th Percentile	42.13	52.59	27.42	13.97	11.94	5.19	5.11
25th Percentile	34.66	33.38	19.38	9.53	11.20	2.78	4.69
Median	19.74	15.20	11.45	7.36	11.01	0.49	3.98
75th Percentile	4.48	4.97	5.85	4.72	10.82	(2.79)	3.54
90th Percentile	0.82	(0.54)	1.78	3.09	10.19	(6.53)	2.42
Asset Class Composite ●	19.93	8.77	13.19	8.64	7.32	(0.06)	3.61
Composite Benchmark ▲	20.96	19.96	7.59	6.03	7.11	1.60	3.33

Total Asset Class Performance
Five Years Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Short Fixed Inc
10th Percentile	21.29	22.72	14.00	9.01	6.18	8.63	3.26
25th Percentile	19.25	17.88	11.34	7.19	5.30	7.10	3.06
Median	15.28	12.51	8.74	5.10	5.16	5.93	2.65
75th Percentile	10.56	9.51	7.05	3.83	5.10	4.98	2.42
90th Percentile	9.19	7.80	5.65	2.77	4.91	4.29	2.13
Asset Class Composite ●	14.93	10.84	9.85	6.65	5.76	5.88	2.69
Composite Benchmark ▲	15.60	13.26	7.32	3.78	4.37	5.91	2.10

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equity	**$571,274,322**	**18.11%**	**$(25,285,747)**	**$81,565,419**	**$514,994,650**	**16.85%**
Domestic Equity	**$371,050,899**	**11.76%**	**$(11,145,922)**	**$51,927,582**	**$330,269,239**	**10.80%**
Large Cap	**$283,905,398**	**9.00%**	**$(8,103,123)**	**$36,240,995**	**$255,767,525**	**8.37%**
Parametric Large Cap	58,404,701	1.85%	(4,000,000)	6,881,640	55,523,061	1.82%
L.A. Capital Large Cap Growth	88,604,830	2.81%	(4,044,329)	9,649,506	82,999,654	2.72%
L.A. Capital Enhanced	63,374,173	2.01%	(14,473)	6,951,895	56,436,751	1.85%
LSV Large Cap Value	73,521,693	2.33%	(44,321)	12,757,955	60,808,059	1.99%
Small Cap	**$87,145,501**	**2.76%**	**$(3,042,799)**	**$15,686,587**	**$74,501,714**	**2.44%**
Atlanta Capital	27,394,258	0.87%	(9,046,450)	4,748,147	31,692,560	1.04%
Parametric Small Cap	0	0.00%	(43,596,341)	787,192	42,809,149	1.40%
PIMCO RAE	435	0.00%	(8)	439	4	0.00%
Riverbridge Small Cap Growth	30,414,727	0.96%	24,800,000	5,614,727	-	-
Sycamore Small Cap Value	29,336,082	0.93%	24,800,000	4,536,082	-	-
International Equity	**$200,223,423**	**6.35%**	**$(14,139,825)**	**$29,637,837**	**$184,725,412**	**6.04%**
DFA Int'l Small Cap Value	22,558,760	0.71%	0	3,729,862	18,828,898	0.62%
LSV Intl Value	66,570,258	2.11%	(58,886)	9,768,009	56,861,135	1.86%
Vanguard Intl Explorer Fund	20,703,476	0.66%	0	3,275,436	17,428,040	0.57%
William Blair	90,390,929	2.86%	(14,080,939)	12,864,530	91,607,339	3.00%
Domestic Fixed Income	**$1,406,232,147**	**44.57%**	**$8,726,759**	**$27,894,119**	**$1,369,611,269**	**44.81%**
Declaration Total Return	99,146,887	3.14%	(58,524)	2,330,981	96,874,430	3.17%
PIMCO Core Plus Constrained	195,234,526	6.19%	(55,941)	2,188,542	193,101,926	6.32%
PIMCO DiSCO II	46,598,862	1.48%	0	825,395	45,773,467	1.50%
PIMCO Bravo II Fund	7,204,185	0.23%	(803,152)	39,449	7,967,888	0.26%
Prudential	372,394,455	11.80%	1,809,716	8,943,330	361,641,408	11.83%
SSgA US Govt Credit Bd Idx	198,151,905	6.28%	3,992,845	1,589,942	192,569,118	6.30%
Wells Capital	119,944,762	3.80%	(54,912)	6,135,155	113,864,519	3.73%
Western Asset Management	367,556,564	11.65%	3,896,727	5,841,324	357,818,513	11.71%
Global Real Assets	**$362,765,836**	**11.50%**	**$(5,437,986)**	**$4,686,039**	**$363,517,784**	**11.89%**
Real Estate	**$96,926,265**	**3.07%**	**$(844,247)**	**$(65,260)**	**$97,835,772**	**3.20%**
Invesco Core Real Estate	50,501,514	1.60%	(412,256)	(143,163)	51,056,933	1.67%
JP Morgan RE Inc & Growth	46,424,751	1.47%	(431,991)	77,903	46,778,838	1.53%
Diversified	**$265,839,571**	**8.43%**	**$(4,593,740)**	**$4,751,299**	**$265,682,012**	**8.69%**
Western Asset TIPS	164,937,602	5.23%	(45,369)	2,782,670	162,200,300	5.31%
JP Morgan Infrastructure	40,984,697	1.30%	(794,349)	1,648,565	40,130,482	1.31%
Eastern Timber Opportunities	51,892,399	1.64%	(1,039,862)	(139,435)	53,071,696	1.74%
Grosvenor Cust. Infrastructure	8,024,873	0.25%	(2,714,160)	459,499	10,279,534	0.34%
Short Term Fixed Income	**$778,365,183**	**24.67%**	**$7,782,478**	**$9,121,095**	**$761,461,611**	**24.91%**
Barings Active Short Duration	387,402,033	12.28%	4,080,900	7,130,827	376,190,306	12.31%
JP Morgan Short Term Bonds	390,963,150	12.39%	3,701,577	1,990,268	385,271,305	12.60%
Cash	**$36,473,372**	**1.16%**	**$(10,654,707)**	**$5,108**	**$47,122,970**	**1.54%**
Northern Trust Cash Account	16,202,694	0.51%	(10,654,707)	0	26,857,402	0.88%
Bank of ND	20,270,677	0.64%	0	5,108	20,265,569	0.66%
Total Fund	**$3,155,110,859**	**100.0%**	**$(24,869,204)**	**$123,271,779**	**$3,056,708,284**	**100.0%**

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equity					
Gross	16.03%	15.95%	-	-	-
Net	15.94%	15.69%	-	-	-
Weighted Benchmark	16.90%	16.08%	-	-	-
Domestic Equity					
Gross	15.90%	17.43%	12.02%	14.13%	13.32%
Net	15.82%	17.23%	11.84%	13.91%	13.06%
Weighted Benchmark	17.46%	20.95%	-	-	-
Large Cap					
Gross	14.24%	19.93%	13.68%	14.93%	14.10%
Net	14.19%	19.81%	13.51%	14.74%	13.89%
Benchmark(1)	13.69%	20.96%	14.82%	15.60%	14.08%
Parametric Clifton Large Cap - Gross	12.59%	18.83%	14.16%	15.35%	14.17%
Parametric Clifton Large Cap - Net	12.59%	19.12%	14.25%	15.36%	14.09%
S&P 500 Index	12.15%	18.40%	14.18%	15.22%	13.88%
L.A. Capital - Gross	11.74%	37.71%	22.41%	19.82%	16.69%
L.A. Capital - Net	11.68%	37.44%	22.16%	19.58%	16.46%
Russell 1000 Growth Index	11.39%	38.49%	22.99%	21.00%	17.21%
L.A. Capital Enhanced - Gross	12.32%	22.03%	14.76%	15.28%	14.04%
L.A. Capital Enhanced - Net	12.29%	21.90%	14.63%	15.14%	13.90%
Russell 1000 Index	13.69%	20.96%	14.82%	15.60%	14.01%
LSV Asset Management - Gross	20.99%	(1.16%)	2.54%	8.39%	10.89%
LSV Asset Management - Net	20.91%	(1.45%)	2.25%	8.07%	10.57%
Russell 1000 Value Index	16.25%	2.80%	6.07%	9.74%	10.50%
Small Cap					
Gross	21.61%	8.77%	5.85%	10.84%	10.66%
Net	21.41%	8.32%	5.61%	10.55%	10.29%
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	11.20%
Atlanta Capital - Gross	20.51%	14.48%	-	-	-
Atlanta Capital - Net	20.31%	14.09%	-	-	-
S&P 600 Small Cap Index	31.31%	11.29%	7.74%	12.37%	11.92%
International Equity					
Gross	16.27%	13.19%	5.95%	9.85%	7.12%
Net	16.18%	12.85%	5.63%	9.52%	6.77%
Benchmark(2)	15.85%	7.59%	4.22%	7.32%	5.33%
DFA Intl Small Cap Value - Net	19.81%	0.81%	(2.20%)	5.27%	5.49%
World ex US SC Va	20.30%	2.58%	0.94%	7.25%	5.54%
LSV Asset Management - Gross	17.20%	(1.83%)	(1.00%)	5.22%	5.02%
LSV Asset Management - Net	17.08%	(2.22%)	(1.38%)	4.81%	4.60%
Benchmark(3)	16.05%	7.82%	4.28%	7.45%	5.39%
Vanguard Intl Explorer Fund - Net	18.79%	15.08%	2.60%	8.04%	6.71%
BMI, EPAC, <$2 B	17.86%	14.15%	3.17%	8.43%	6.76%
William Blair - Gross	14.49%	28.37%	14.76%	-	-
William Blair - Net	14.39%	27.90%	14.33%	-	-
MSCI ACWI ex US IMI	17.22%	11.12%	4.83%	8.98%	5.06%

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

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Fixed Income					
Gross	2.04%	8.64%	6.48%	6.65%	6.22%
Net	2.01%	8.50%	6.36%	6.52%	6.08%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Declaration Total Return - Net	2.41%	5.76%	5.19%	5.03%	-
Libor-3 Month	0.06%	0.64%	1.78%	1.47%	0.89%
PIMCO Core Plus Cons. - Gross	1.13%	9.62%	-	-	-
PIMCO Core Plus Cons. - Net	1.10%	9.41%	-	-	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
PIMCO DiSCO II - Net	1.80%	4.38%	5.99%	8.58%	-
PIMCO Bravo II Fund - Net	0.50%	(17.51%)	(3.77%)	1.46%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Prudential - Gross	2.51%	9.67%	6.73%	6.56%	5.81%
Prudential - Net	2.45%	9.44%	6.49%	6.31%	5.59%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Wells Capital - Gross	5.39%	12.17%	8.55%	8.55%	7.00%
Wells Capital - Net	5.34%	11.96%	8.37%	8.37%	6.80%
Blmbg Credit Baa	4.03%	9.43%	7.35%	7.48%	5.89%
Western Asset - Gross	1.65%	8.14%	6.26%	5.94%	5.41%
Western Asset - Net	1.62%	8.01%	6.14%	5.81%	5.26%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
SSgA US Govt Cr Bd Idx - Gross	0.82%	9.13%	6.07%	5.04%	-
SSgA US Govt Cr Bd Idx - Net	0.82%	9.11%	6.05%	5.02%	-
Blmbg Govt/Credit Bd	0.82%	8.93%	5.97%	4.98%	4.19%
Global Real Assets					
Gross	1.30%	5.23%	-	-	-
Net	1.25%	4.96%	-	-	-
Weighted Benchmark	1.28%	5.49%	-	-	-
Real Estate					
Gross	(0.07%)	(0.06%)	3.95%	5.88%	12.11%
Net	(0.16%)	(0.50%)	3.43%	5.29%	11.26%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Invesco Core Real Estate - Gross	(0.28%)	(0.93%)	4.14%	5.98%	-
Invesco Core Real Estate - Net	(0.36%)	(1.26%)	3.81%	5.63%	-
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
JP Morgan - Gross	0.17%	0.91%	3.70%	5.72%	12.30%
JP Morgan - Net	0.05%	0.35%	2.99%	4.92%	11.22%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

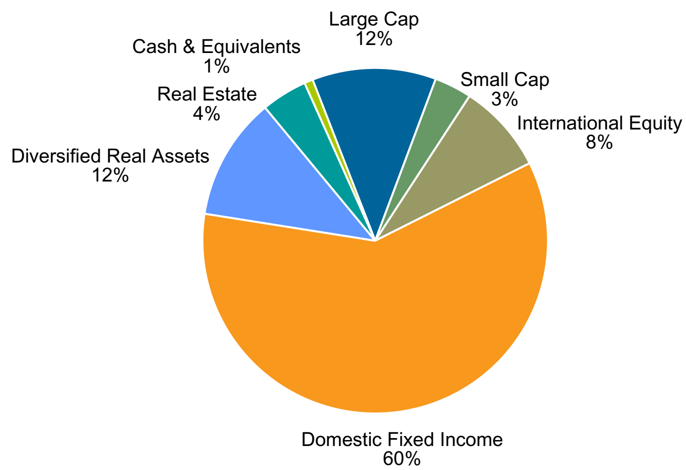
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Diversified					
Gross	1.80%	7.32%	5.73%	5.76%	4.74%
Net	1.77%	7.12%	5.50%	5.51%	4.44%
Weighted Benchmark	1.34%	7.11%	4.61%	4.37%	3.98%
Western Asset TIPS - Gross	1.72%	11.04%	4.90%	5.32%	3.86%
Western Asset TIPS - Net	1.69%	10.91%	4.78%	5.19%	3.72%
Benchmark(1)	1.63%	11.54%	5.44%	5.77%	4.13%
JP Morgan Infrastructure - Gross	4.11%	9.05%	7.46%	7.42%	6.70%
JP Morgan Infrastructure - Net	4.00%	8.24%	6.74%	6.67%	5.75%
Benchmark(2)	1.06%	1.07%	3.03%	2.65%	2.03%
Eastern Timber Opportunities - Net	(0.26%)	(4.04%)	3.87%	3.05%	3.31%
NCREIF Timberland Index	0.58%	0.81%	1.77%	2.30%	4.55%
Grosvenor Cust. Infrastructure - Net	4.65%	9.33%	5.14%	6.92%	-
Benchmark(2)	1.06%	1.07%	3.03%	2.65%	2.03%
Short Term Fixed Income					
Gross	1.19%	3.61%	3.37%	2.69%	1.96%
Net	1.16%	3.49%	3.26%	2.52%	1.82%
Benchmark(3)	0.21%	3.33%	2.98%	2.10%	1.29%
Barings Active Short Duration - Gross	1.88%	2.52%	-	-	-
Barings Active Short Duration - Net	1.84%	2.40%	-	-	-
Blmbg Gov/Cred 1-3 Yr	0.21%	3.33%	2.98%	2.21%	1.60%
JP Morgan Short Term Bds - Gross	0.51%	4.71%	3.63%	2.66%	-
JP Morgan Short Term Bds - Net	0.49%	4.58%	3.53%	2.51%	-
Blmbg Gov/Credit 1-3 Yr	0.21%	3.33%	2.98%	2.21%	1.60%
Cash & Equivalents - Net	**0.01%**	**0.44%**	**1.42%**	**1.06%**	**0.60%**
Cash Account- Net	0.00%	0.35%	1.34%	0.97%	0.55%
Bank of ND - Net	0.03%	0.56%	1.54%	-	-
90 Day Treasury Bills	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	4.03%	8.35%	6.40%	7.22%	6.21%
Net	3.99%	8.18%	6.24%	7.04%	6.01%
Target*	3.35%	8.10%	5.98%	5.91%	4.92%

* Current Quarter Target = 44.7% Blmbg Aggregate, 24.7% Blmbg Gov/Cred 1-3 Yr, 8.8% NDSIB INS DRA Weighted Benchmark, 8.5% Russell 1000 Index, 6.1% MSCI World ex US, 3.6% NCREIF Total Index, 2.4% Russell 2000 Index and 1.3% 3-month Treasury Bill.
(1) Blmbg US TIPS through 12/31/2009; Blmbg Global Inflation-Linked through 10/31/18; Blmbg US Government Inflation Bond Index thereafter.
(2) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.
(3) Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter.

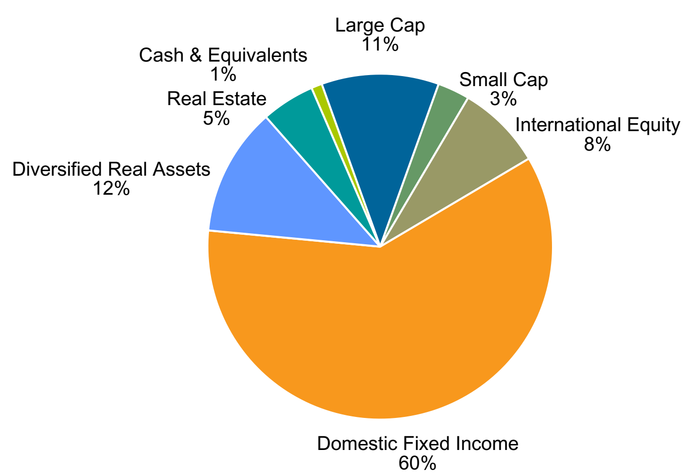
Actual vs Target Asset Allocation
As of December 31, 2020

The first chart below shows the Fund's asset allocation as of December 31, 2020. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



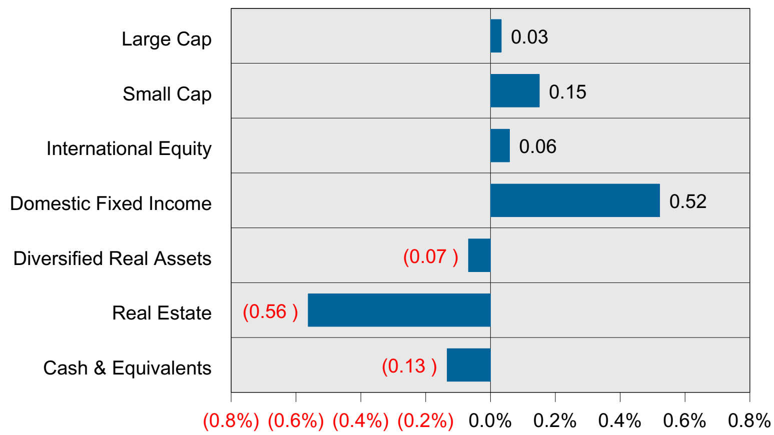
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	263,594	11.6%	11.0%	0.6%	14,660
Small Cap	78,526	3.5%	3.0%	0.5%	10,635
International Equity	189,099	8.4%	8.0%	0.4%	8,056
Domestic Fixed Income	1,355,150	59.9%	60.0%	(0.1%)	(2,672)
Diversified Real Assets	261,034	11.5%	12.0%	(0.5%)	(10,531)
Real Estate	96,722	4.3%	5.0%	(0.7%)	(16,430)
Cash & Equivalents	18,912	0.8%	1.0%	(0.2%)	(3,718)
Total	2,263,037	100.0%	100.0%		

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

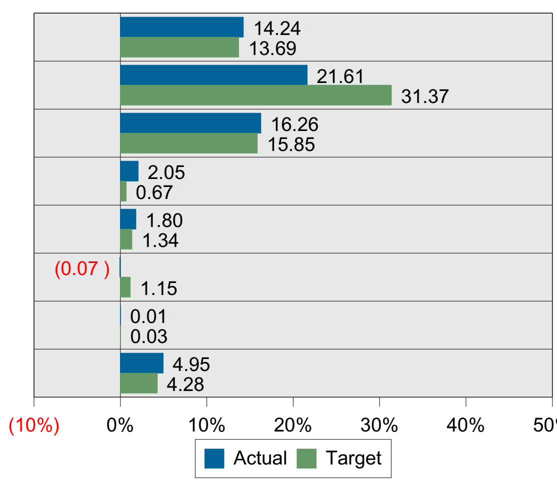
Quarterly Total Fund Relative Attribution - December 31, 2020

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

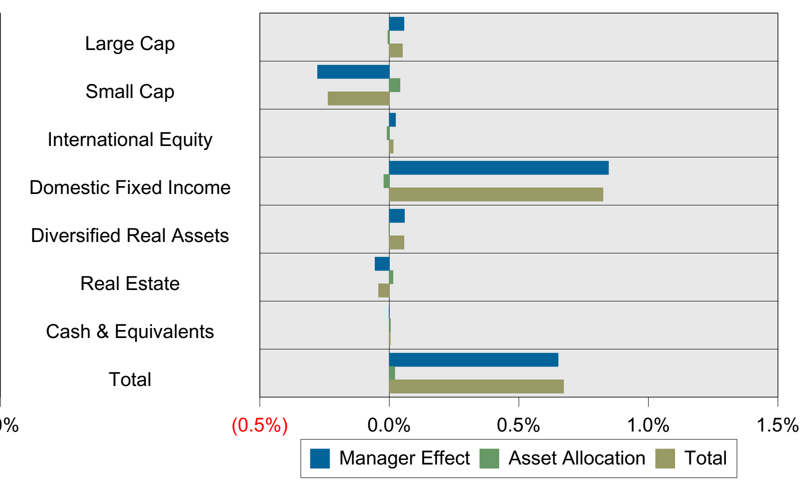
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2020

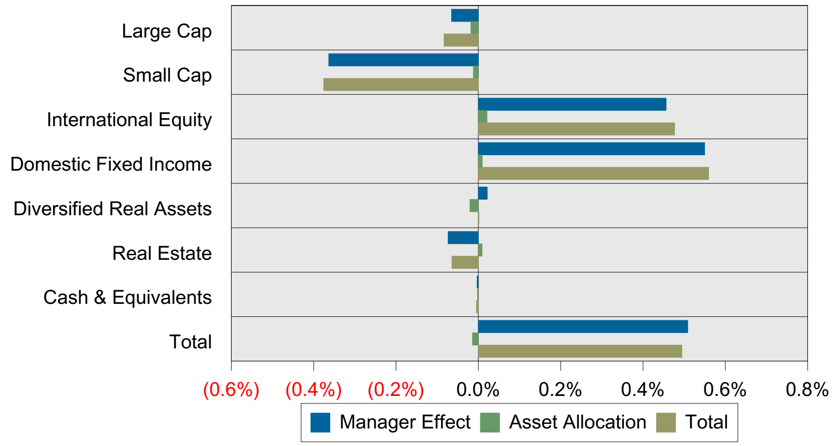
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	14.24%	13.69%	0.06%	(0.01%)	0.05%
Small Cap	3%	3%	21.61%	31.37%	(0.28%)	0.04%	(0.24%)
International Equity	8%	8%	16.26%	15.85%	0.02%	(0.01%)	0.02%
Domestic Fixed Income	61%	60%	2.05%	0.67%	0.85%	(0.02%)	0.82%
Diversified Real Assets	12%	12%	1.80%	1.34%	0.06%	(0.00%)	0.06%
Real Estate	4%	5%	(0.07%)	1.15%	(0.06%)	0.01%	(0.04%)
Cash & Equivalents	1%	1%	0.01%	0.03%	(0.00%)	0.00%	0.00%
Total			**4.95% =**	**4.28% +**	**0.65% +**	**0.02%**	**0.67%**

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

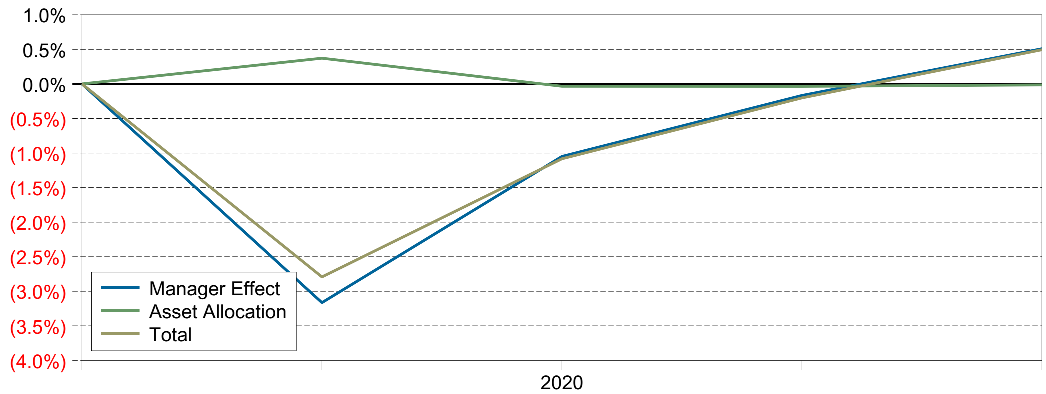
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

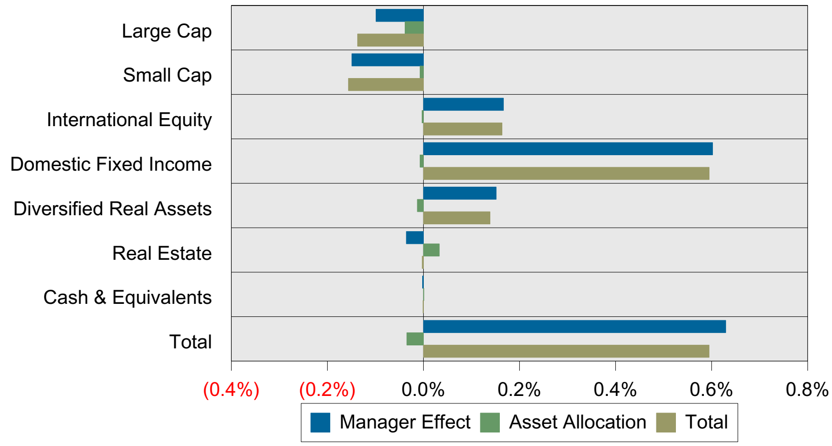
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	19.98%	20.96%	(0.06%)	(0.02%)	(0.08%)
Small Cap	3%	3%	8.40%	19.96%	(0.36%)	(0.01%)	(0.38%)
International Equity	8%	8%	13.19%	7.59%	0.46%	0.02%	0.48%
Domestic Fixed Income	61%	60%	8.65%	7.51%	0.55%	0.01%	0.56%
Diversified Real Assets	12%	12%	7.31%	7.10%	0.02%	(0.02%)	0.00%
Real Estate	5%	5%	(0.06%)	1.60%	(0.07%)	0.01%	(0.06%)
Cash & Equivalents	1%	1%	0.44%	0.67%	(0.00%)	(0.00%)	(0.00%)
Total			**10.03% =**	**9.54% +**	**0.51% +**	**(0.01%)**	**0.49%**

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

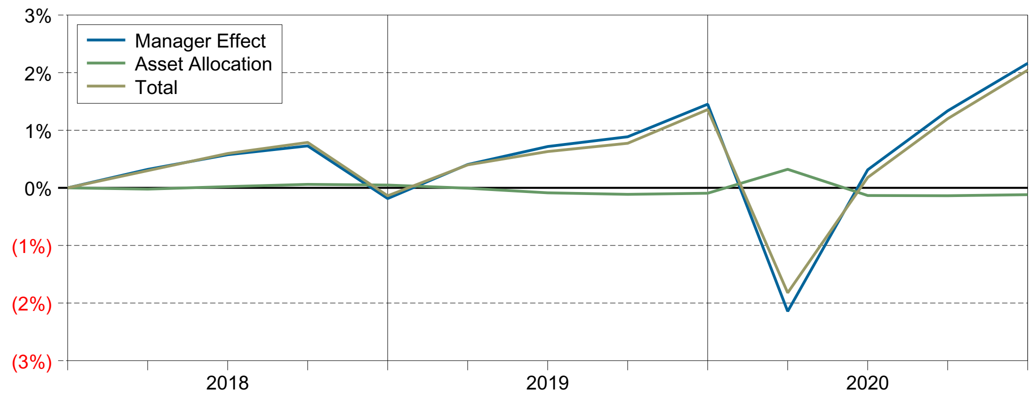
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

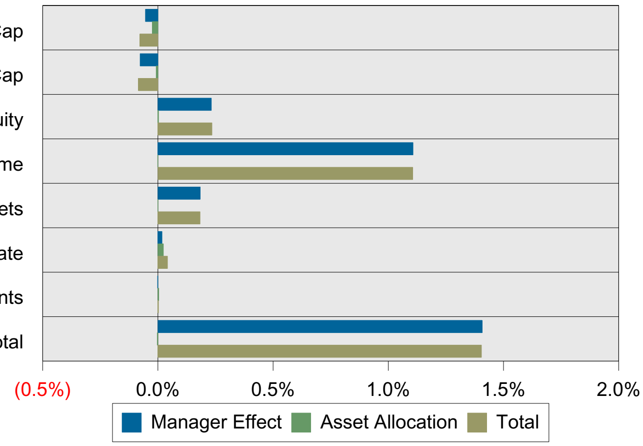
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	13.75%	14.82%	(0.10%)	(0.04%)	(0.14%)
Small Cap	3%	3%	5.72%	10.25%	(0.15%)	(0.01%)	(0.16%)
International Equity	8%	8%	5.99%	4.22%	0.17%	(0.00%)	0.16%
Domestic Fixed Income	59%	59%	6.44%	5.34%	0.60%	(0.01%)	0.59%
Diversified Real Assets	13%	13%	5.74%	4.60%	0.15%	(0.01%)	0.14%
Real Estate	5%	5%	3.95%	4.89%	(0.04%)	0.03%	(0.00%)
Cash & Equivalents	1%	1%	1.42%	1.60%	(0.00%)	0.00%	(0.00%)
Total			**7.31% =**	**6.71% +**	**0.63% +**	**(0.03%)**	**0.59%**

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

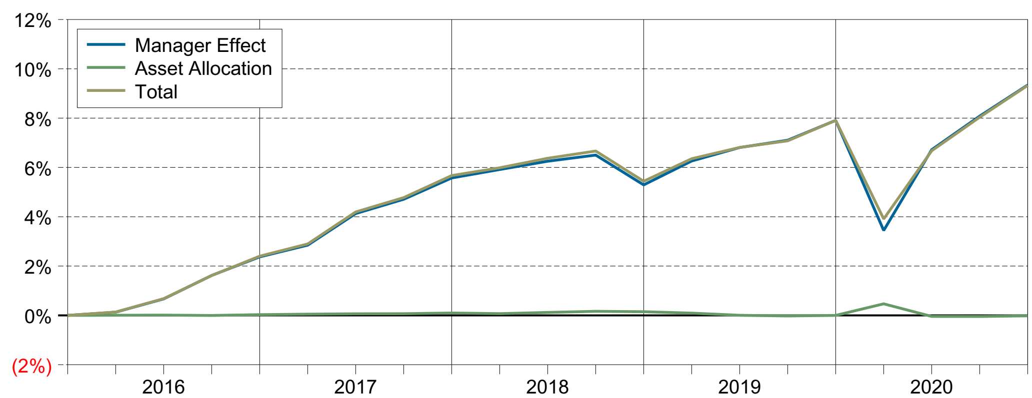
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

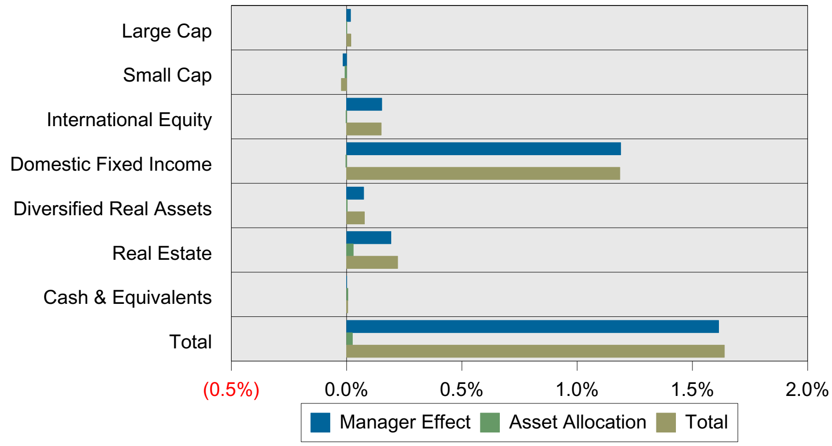
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	12%	11%	14.99%	15.60%	(0.05%)	(0.02%)	(0.08%)
Small Cap	3%	3%	10.75%	13.26%	(0.08%)	(0.01%)	(0.08%)
International Equity	8%	8%	9.88%	7.32%	0.23%	0.00%	0.23%
Domestic Fixed Income	56%	56%	6.50%	4.44%	1.11%	(0.00%)	1.11%
Diversified Real Assets	13%	14%	5.78%	4.44%	0.18%	(0.00%)	0.18%
Real Estate	6%	6%	5.88%	5.91%	0.02%	0.02%	0.04%
Cash & Equivalents	1%	1%	1.06%	1.20%	(0.00%)	0.00%	0.00%
Total			**8.05% =**	**6.65% +**	**1.41% +**	**(0.00%)**	**1.40%**

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

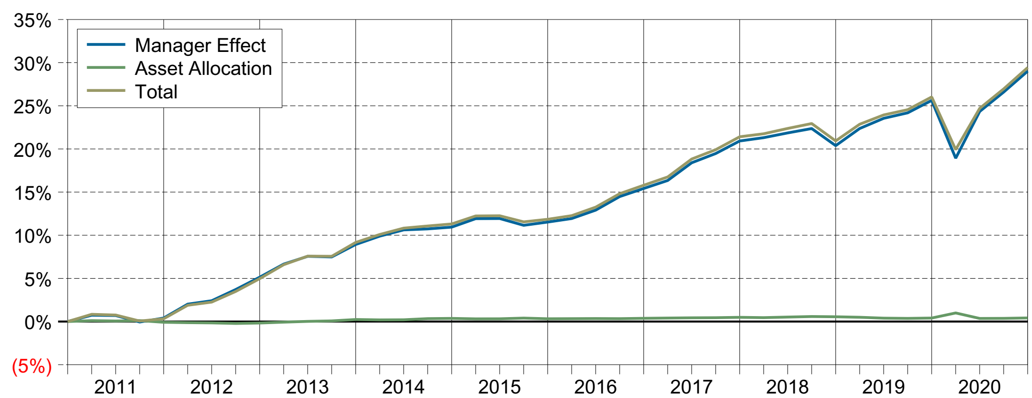
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



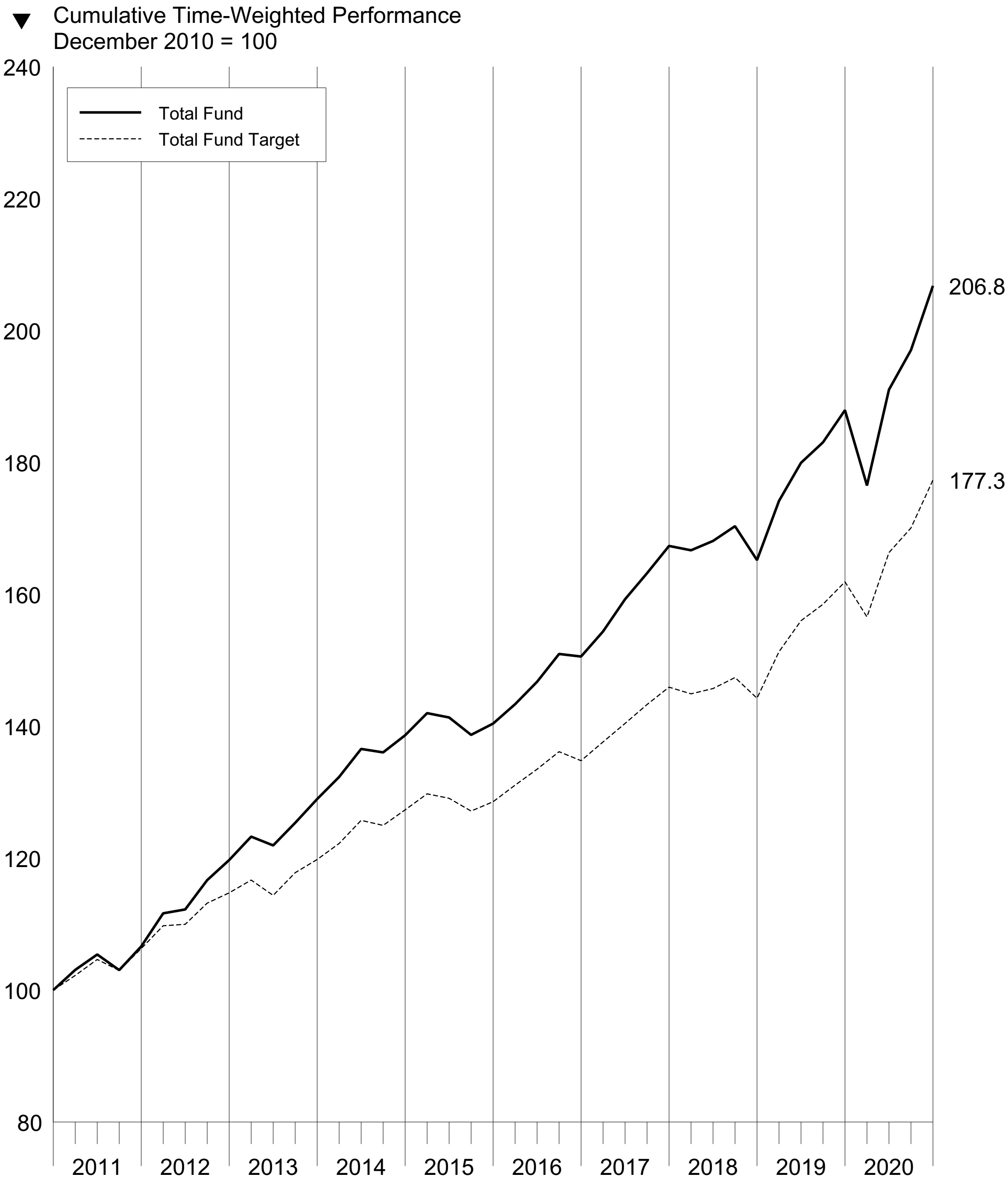
Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	14.12%	14.01%	0.02%	0.00%	0.02%
Small Cap	4%	3%	10.63%	11.20%	(0.02%)	(0.01%)	(0.02%)
International Equity	8%	8%	7.07%	5.33%	0.15%	(0.00%)	0.15%
Domestic Fixed Income	54%	54%	6.11%	3.84%	1.19%	(0.00%)	1.19%
Diversified Real Assets	16%	17%	4.83%	4.22%	0.07%	0.00%	0.08%
Real Estate	6%	6%	12.10%	9.00%	0.19%	0.03%	0.22%
Cash & Equivalents	1%	1%	0.60%	0.64%	(0.00%)	0.01%	0.01%
Total			**7.54% =**	**5.90% +**	**1.61% +**	**0.02%**	**1.64%**

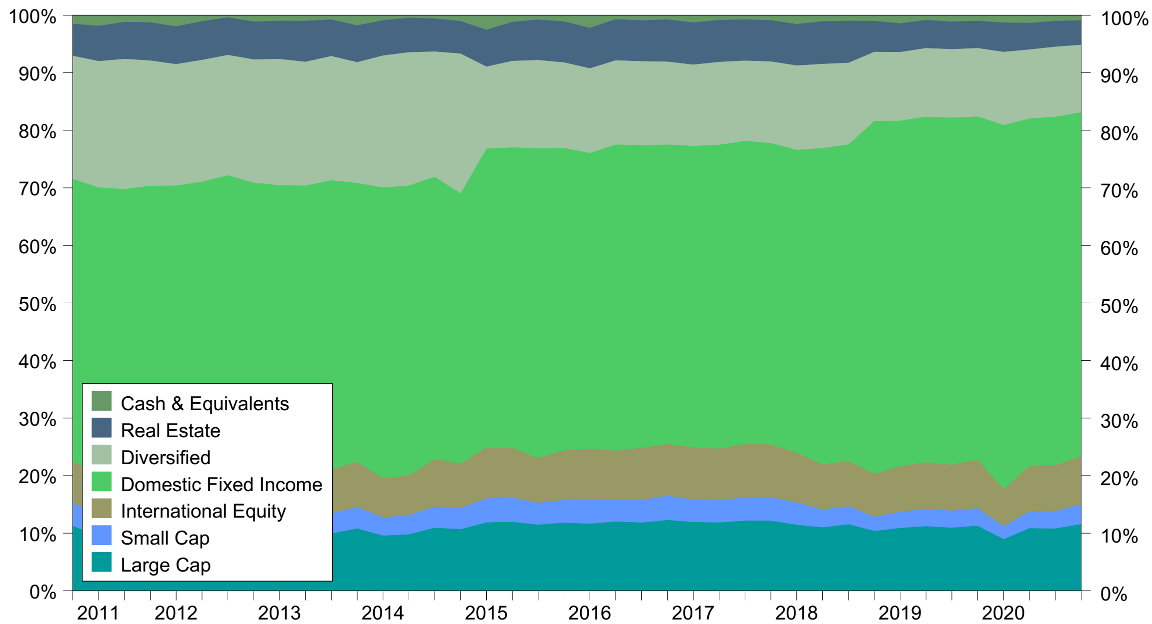
* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.


Cumulative Time-Weighted Performance
December 2010 = 100
Total Fund
Total Fund Target
240
220
200
180
160
140
120
100
80
206.8
177.3
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

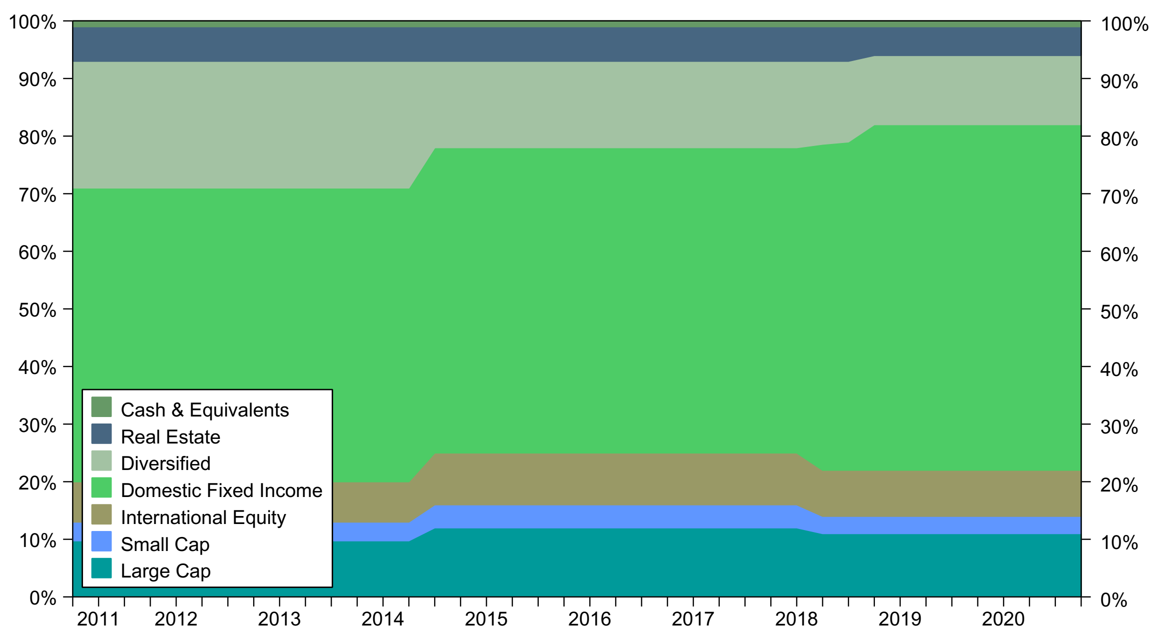
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

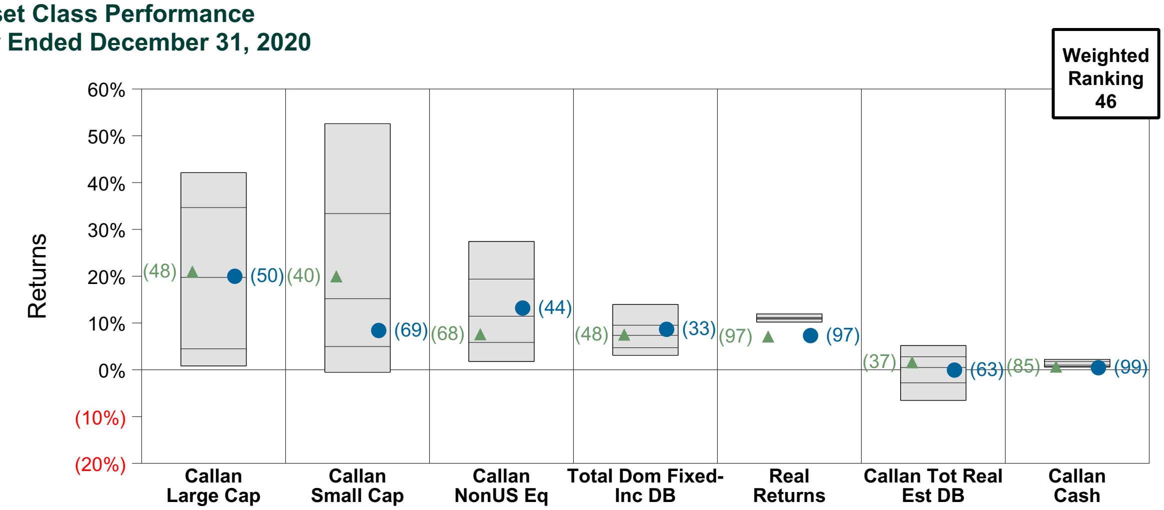


* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

Asset Class Rankings

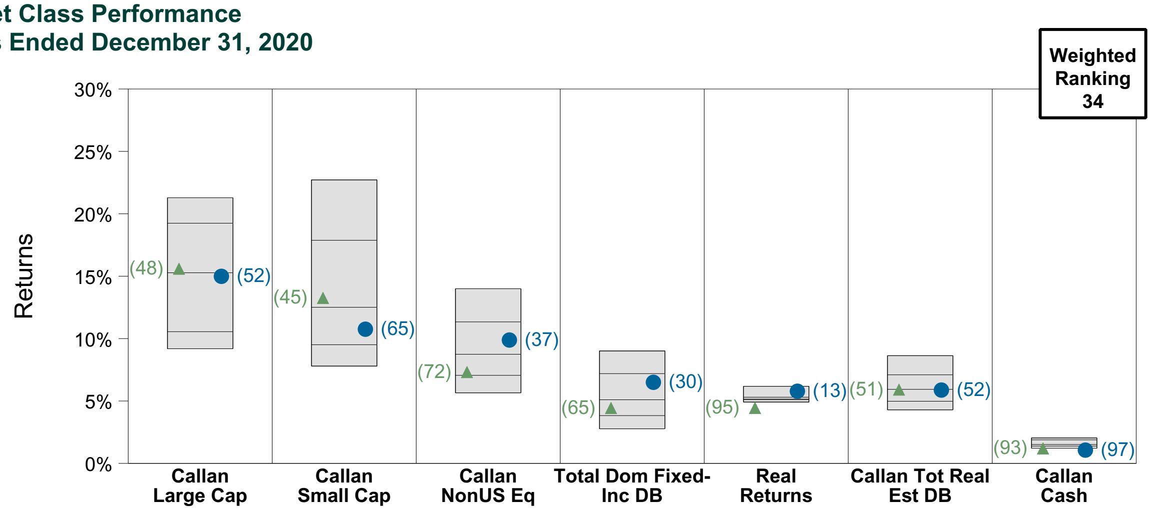
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	42.13	52.59	27.42	13.97	11.94	5.19	2.24
25th Percentile	34.66	33.38	19.38	9.53	11.20	2.78	1.78
Median	19.74	15.20	11.45	7.36	11.01	0.49	1.01
75th Percentile	4.48	4.97	5.85	4.72	10.82	(2.79)	0.74
90th Percentile	0.82	(0.54)	1.78	3.09	10.19	(6.53)	0.57
Asset Class Composite ●	19.98	8.40	13.19	8.65	7.31	(0.06)	0.44
Composite Benchmark ▲	20.96	19.96	7.59	7.51	7.10	1.60	0.67

Total Asset Class Performance
Five Years Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	21.29	22.72	14.00	9.01	6.18	8.63	2.04
25th Percentile	19.25	17.88	11.34	7.19	5.30	7.10	1.89
Median	15.28	12.51	8.74	5.10	5.16	5.93	1.52
75th Percentile	10.56	9.51	7.05	3.83	5.10	4.98	1.39
90th Percentile	9.19	7.80	5.65	2.77	4.91	4.29	1.21
Asset Class Composite ●	14.99	10.75	9.88	6.50	5.78	5.88	1.06
Composite Benchmark ▲	15.60	13.26	7.32	4.44	4.44	5.91	1.20

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Class Allocation

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equity	**$531,218,719**	**23.47%**	**$(21,784,687)**	**$75,705,833**	**$477,297,573**	**21.91%**
Domestic Equity	**$342,119,564**	**15.12%**	**$(8,693,942)**	**$47,730,040**	**$303,083,466**	**13.91%**
Large Cap	263,593,924	11.65%	(6,782,594)	33,580,940	236,795,578	10.87%
Small Cap	78,525,640	3.47%	(1,911,348)	14,149,100	66,287,888	3.04%
International Equity	**$189,099,155**	**8.36%**	**$(13,090,745)**	**$27,975,793**	**$174,214,107**	**8.00%**
Domestic Fixed Income	**$1,355,150,293**	**59.88%**	**$6,731,162**	**$26,921,790**	**$1,321,497,341**	**60.67%**
Global Real Assets	**$357,755,625**	**15.81%**	**$(5,561,897)**	**$4,606,413**	**$358,711,109**	**16.47%**
Real Estate	96,722,022	4.27%	(853,059)	(65,129)	97,640,210	4.48%
Diversified	261,033,604	11.53%	(4,708,838)	4,671,542	261,070,899	11.99%
Cash	**$18,912,452**	**0.84%**	**$(1,893,331)**	**$2,196**	**$20,803,587**	**0.96%**
Total Fund	**$2,263,037,089**	**100.0%**	**$(22,508,752)**	**$107,236,232**	**$2,178,309,609**	**100.0%**

PLEASE REFER TO PAGE 30 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Asset Class Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

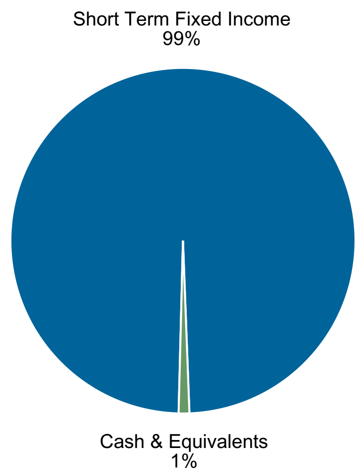
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Global Equity					
Gross	15.97%	15.96%	-	-	-
Net	15.90%	15.71%	-	-	-
Weighted Benchmark	16.81%	15.99%	-	-	-
Domestic Equity					
Gross	15.80%	17.47%	12.09%	14.18%	13.36%
Net	15.72%	17.27%	11.91%	13.97%	13.11%
Weighted Benchmark	17.34%	20.95%	-	-	-
Large Cap					
Gross	14.24%	19.98%	13.75%	14.99%	14.12%
Net	14.19%	19.86%	13.58%	14.80%	13.92%
Benchmark(1)	13.69%	20.96%	14.82%	15.60%	14.08%
Small Cap					
Gross	21.61%	8.40%	5.72%	10.75%	10.63%
Net	21.41%	7.94%	5.48%	10.46%	10.25%
Russell 2000	31.37%	19.96%	10.25%	13.26%	11.20%
International Equity					
Gross	16.26%	13.19%	5.99%	9.88%	7.07%
Net	16.18%	12.86%	5.67%	9.55%	6.71%
Benchmark(2)	15.85%	7.59%	4.22%	7.32%	5.33%
Domestic Fixed Income					
Gross	2.05%	8.65%	6.44%	6.50%	6.11%
Net	2.02%	8.51%	6.31%	6.37%	5.96%
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.84%
Global Real Assets					
Gross	1.29%	5.21%	-	-	-
Net	1.24%	4.93%	-	-	-
Weighted Benchmark	1.28%	5.46%	-	-	-
Real Estate					
Gross	(0.07%)	(0.06%)	3.95%	5.88%	12.10%
Net	(0.16%)	(0.50%)	3.43%	5.29%	11.26%
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	9.00%
Diversified					
Gross	1.80%	7.31%	5.74%	5.78%	4.83%
Net	1.77%	7.11%	5.52%	5.53%	4.53%
Weighted Benchmark	1.34%	7.10%	4.60%	4.44%	4.22%
Cash & Equivalents - Net	**0.01%**	**0.44%**	**1.42%**	**1.06%**	**0.60%**
90 Day Treasury Bills	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	4.95%	10.03%	7.31%	8.05%	7.54%
Net	4.90%	9.85%	7.12%	7.84%	7.29%
Target*	4.28%	9.54%	6.71%	6.65%	5.90%

* Current Quarter Target = 60.0% Blmbg Aggregate, 12.0% NDSIB WSI DRA Weighted Benchmark, 11.0% Russell 1000 Index, 8.0% MSCI World ex US, 5.0% NCREIF Total Index, 3.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.
(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.
(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US thereafter.
PLEASE REFER TO PAGE 31-33 FOR INVESTMENT MANAGER LEVEL RETURNS.

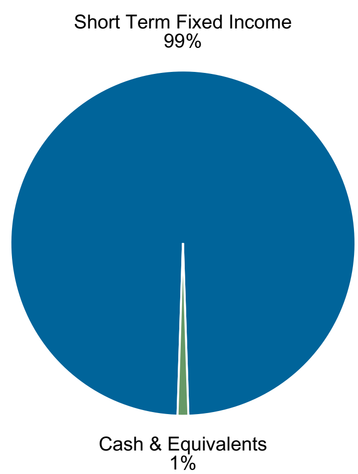
Actual vs Target Asset Allocation
As of December 31, 2020

The first chart below shows the Fund’s asset allocation as of December 31, 2020. The second chart shows the Fund’s target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation

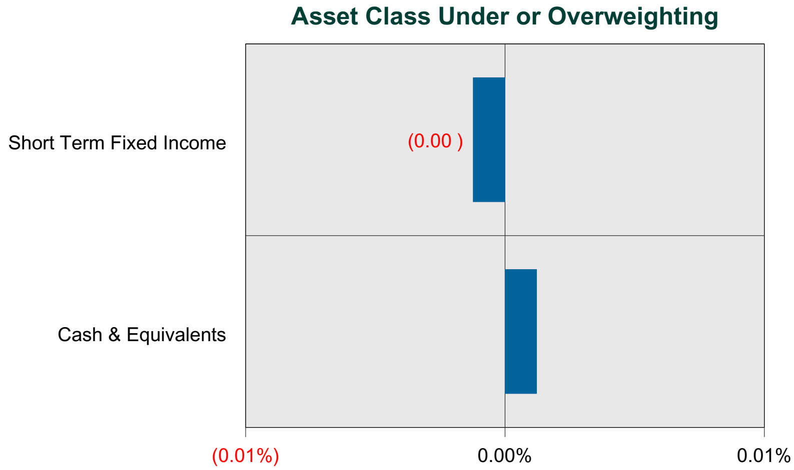


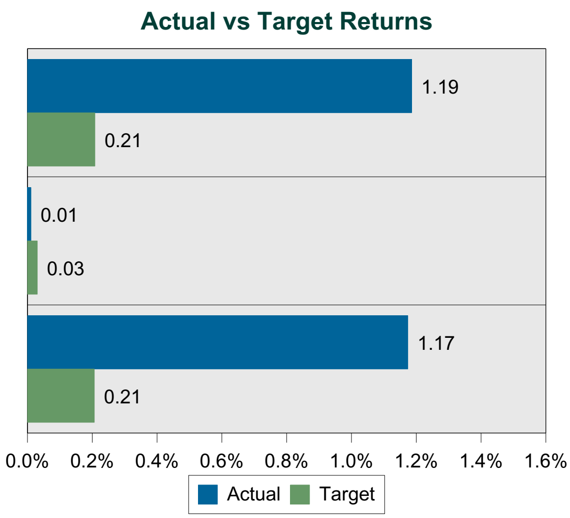
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Short Term Fixed Income	739,685	99.0%	99.0%	0.0%	5
Cash & Equivalents	7,467	1.0%	1.0%	(0.0%)	(5)
Total	747,151	100.0%	100.0%		

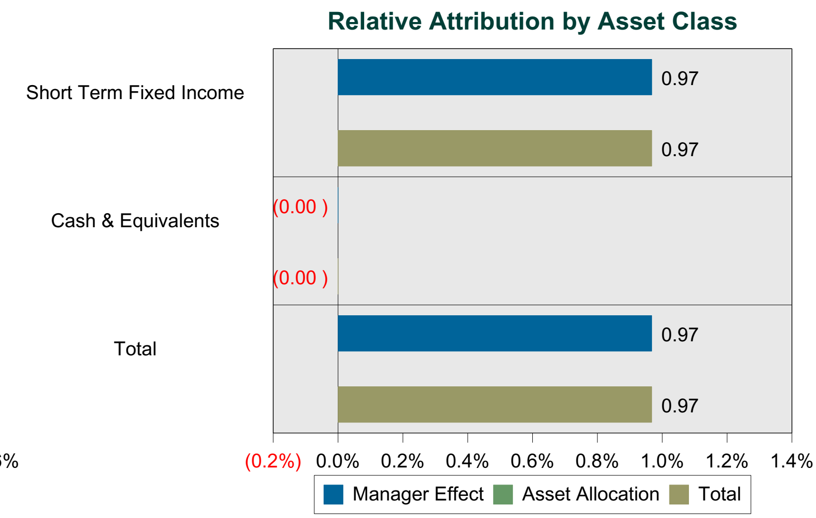
* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

Quarterly Total Fund Relative Attribution - December 31, 2020

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







Relative Attribution Effects for Quarter ended December 31, 2020

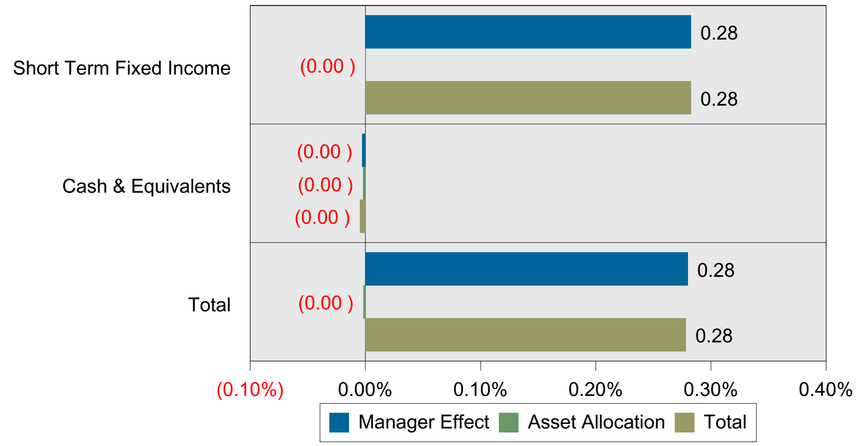
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Income	99%	99%	1.19%	0.21%	0.97%	0.00%	0.97%
Cash & Equivalents	1%	1%	0.01%	0.03%	(0.00%)	0.00%	(0.00%)
Total			**1.17% =**	**0.21% +**	**0.97% +**	**0.00%**	**0.97%**

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

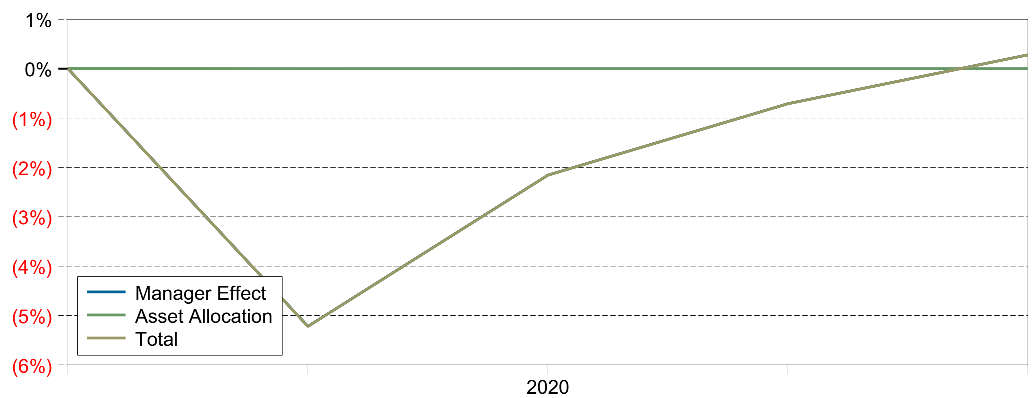
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

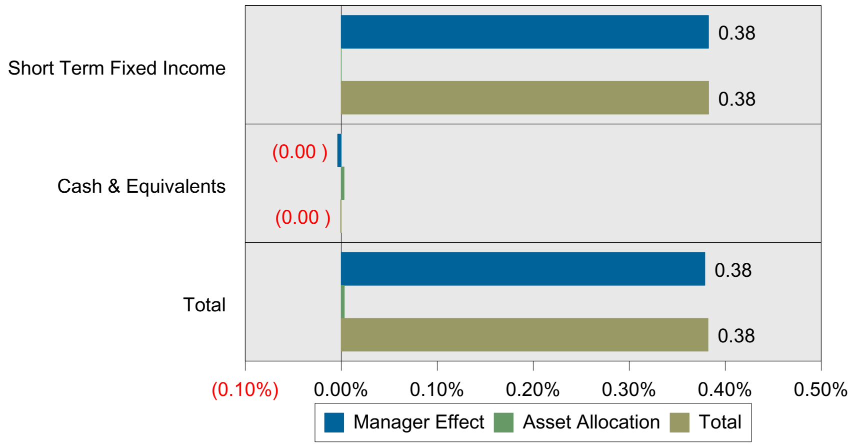
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return		Target Return		Manager Effect		Asset Allocation	Total Relative Return
Short Term Fixed Income	99%	99%	3.61%		3.33%		0.28%		(0.00%)	0.28%
Cash & Equivalents	1%	1%	0.44%		0.67%		(0.00%)		(0.00%)	(0.00%)
Total			**3.58%**	**=**	**3.30%**	**+**	**0.28%**	**+**	**(0.00%)**	**0.28%**

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

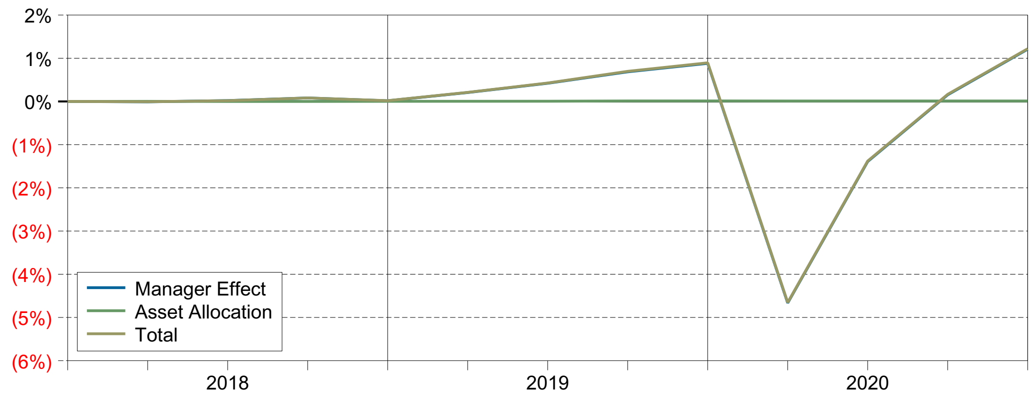
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

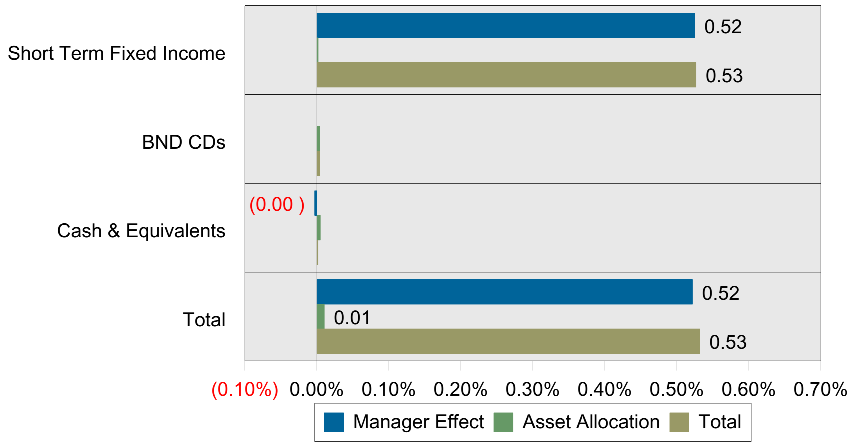
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Income	98%	98%	3.37%	2.98%	0.38%	0.00%	0.38%
Cash & Equivalents	2%	2%	1.42%	1.60%	(0.00%)	0.00%	(0.00%)
Total			**3.35% =**	**2.97% +**	**0.38% +**	**0.00%**	**0.38%**

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

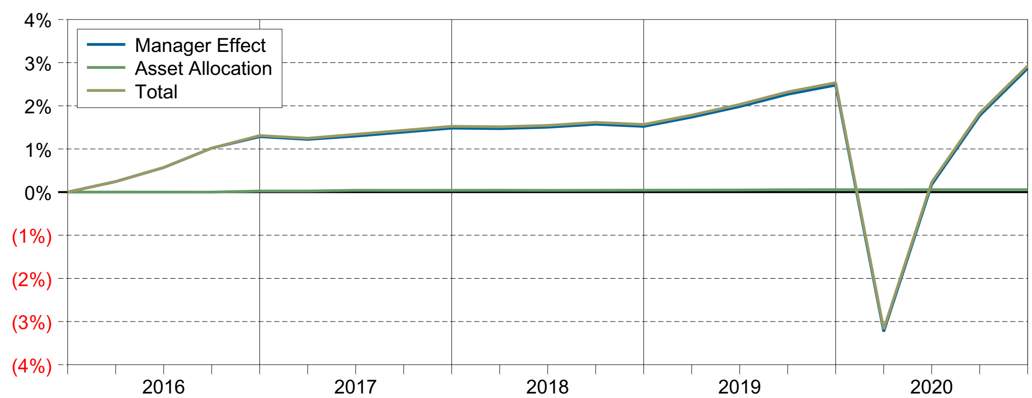
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

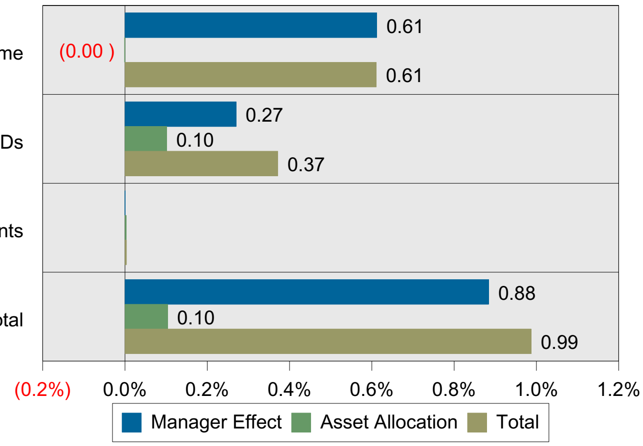
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Income	93%	93%	2.68%	2.10%	0.52%	0.00%	0.53%
BND CDs	4%	4%	-	-	0.00%	0.00%	0.00%
Cash & Equivalents	3%	3%	1.06%	1.20%	(0.00%)	0.00%	0.00%
Total			**2.68% =**	**2.15% +**	**0.52% +**	**0.01%**	**0.53%**

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

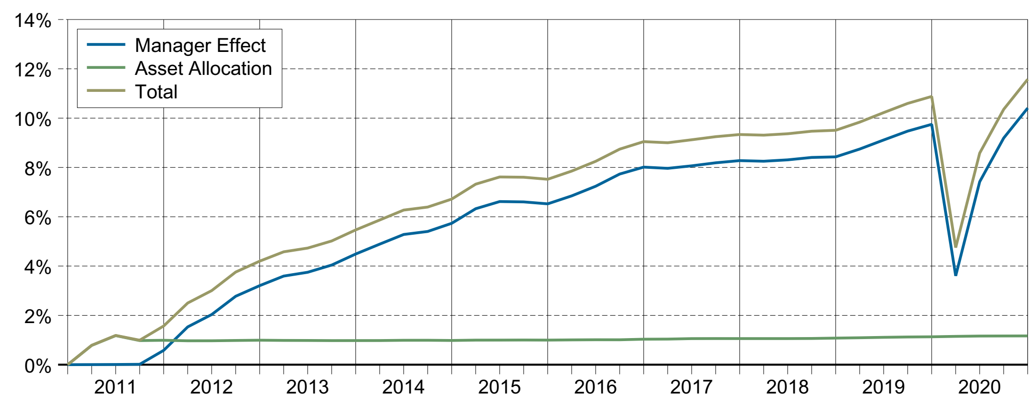
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

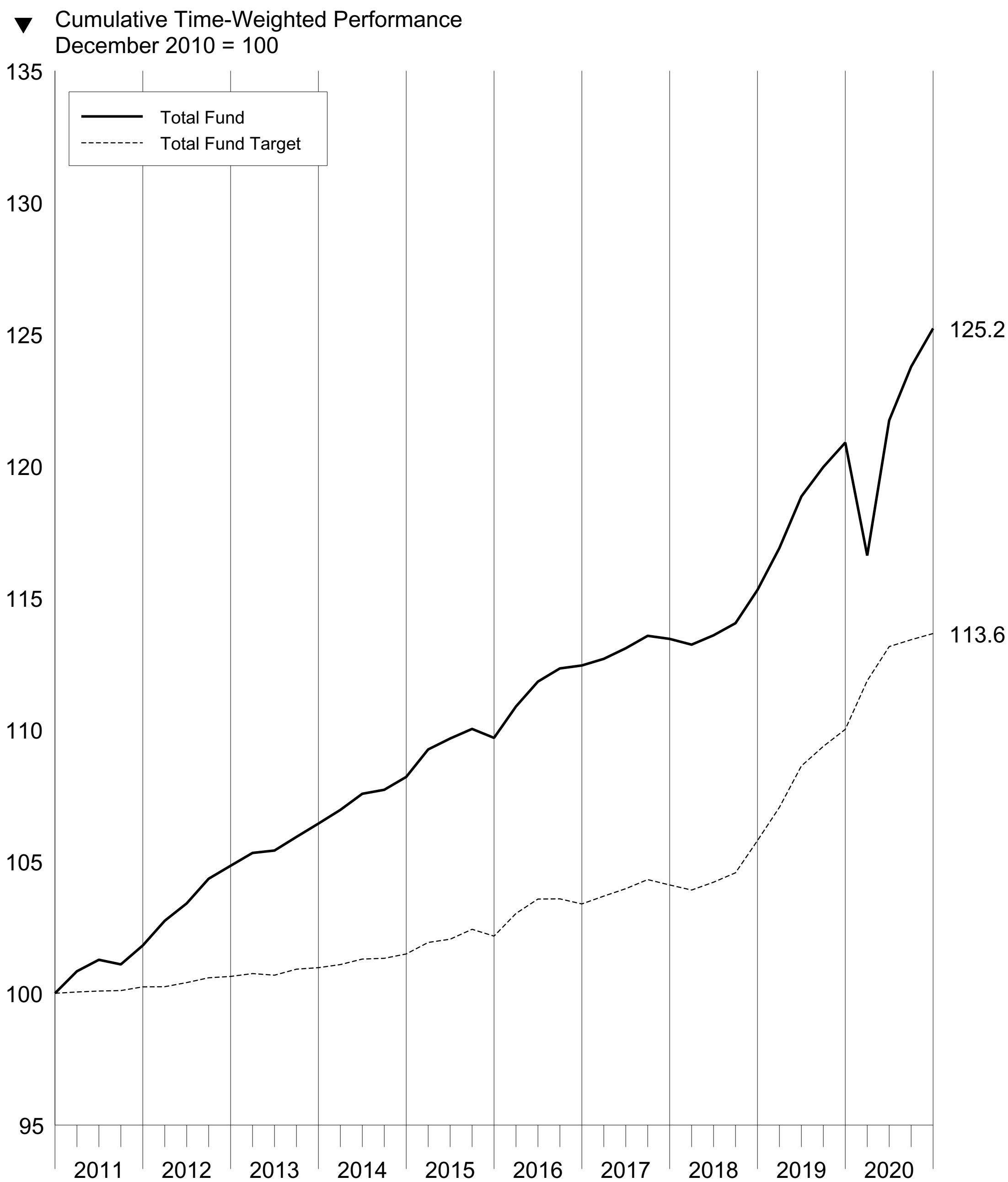


Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Income	84%	79%	2.03%	1.28%	0.61%	(0.00%)	0.61%
BND CDs	13%	11%	-	-	0.27%	0.10%	0.37%
Cash & Equivalents	3%	10%	0.60%	0.64%	0.00%	0.00%	0.00%
Total			**2.27% =**	**1.29% +**	**0.88% +**	**0.10%**	**0.99%**

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

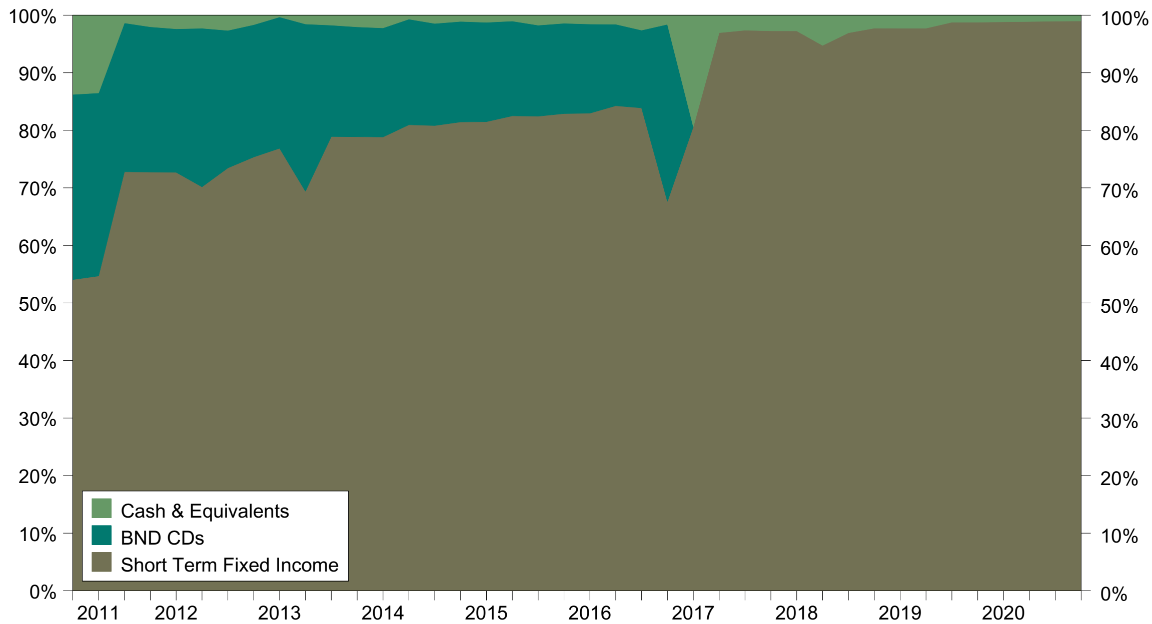
NDSIB - Budget Stabilization Fund
Cumulative Results



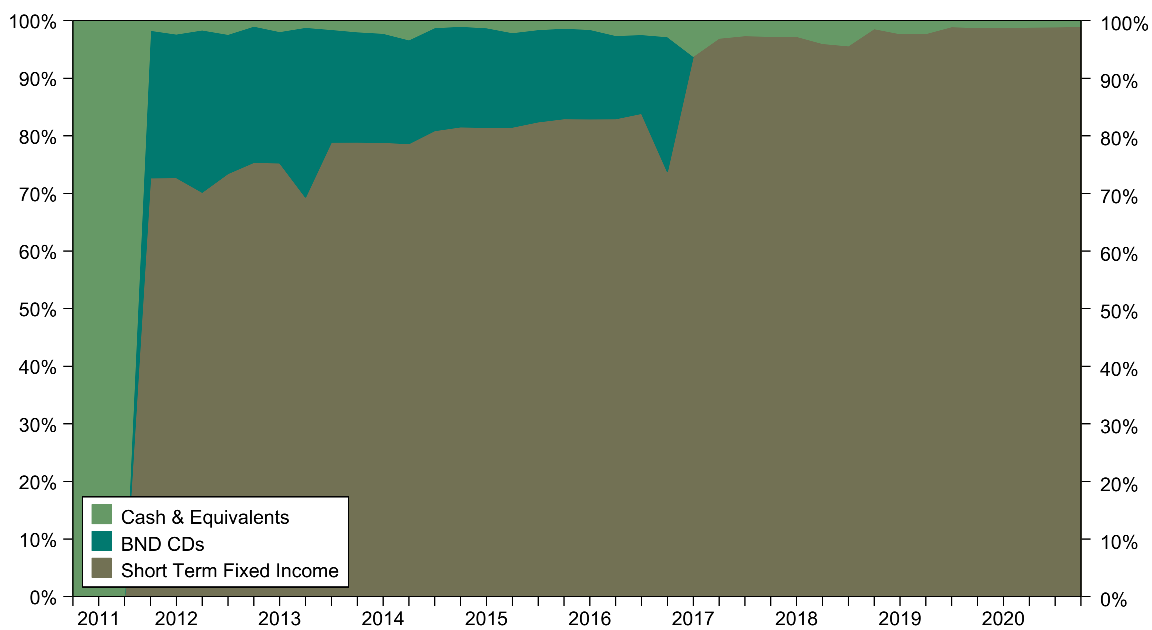
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation



* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Class Allocation

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Short Term Fixed Income	$739,684,694	99.00%	$(121,713)	$8,670,998	$731,135,409	98.98%
Cash & Equivalents	$7,466,775	1.00%	$(92,185)	$816	$7,558,144	1.02%
Total Fund	$747,151,469	100.0%	$(213,898)	$8,671,814	$738,693,553	100.0%

PLEASE REFER TO PAGE 30 FOR INVESTMENT MANAGER LEVEL ASSET ALLOCATION.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Short Term Fixed Income					
Gross	1.19%	3.61%	3.37%	2.68%	2.03%
Net	1.16%	3.49%	3.26%	2.51%	1.89%
Blended Benchmark(1)	0.21%	3.33%	2.98%	2.10%	-
Cash & Equivalents - Net	**0.01%**	**0.44%**	**1.42%**	**1.06%**	**0.60%**
3-month Treasury Bill	0.03%	0.67%	1.60%	1.20%	0.64%
Total Fund					
Gross	1.17%	3.58%	3.35%	2.68%	2.27%
Net	1.15%	3.45%	3.24%	2.53%	2.15%
Target*	0.21%	3.30%	2.97%	2.15%	1.29%

* Current Quarter Target = 99.0% Blmbg Gov/Cred 1-3 Yr and 1.0% 3-month Treasury Bill.
(1) Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter.

PLEASE REFER TO PAGES 31-33 FOR INVESTMENT MANAGER LEVEL RETURNS.

Large Cap
Period Ended December 31, 2020

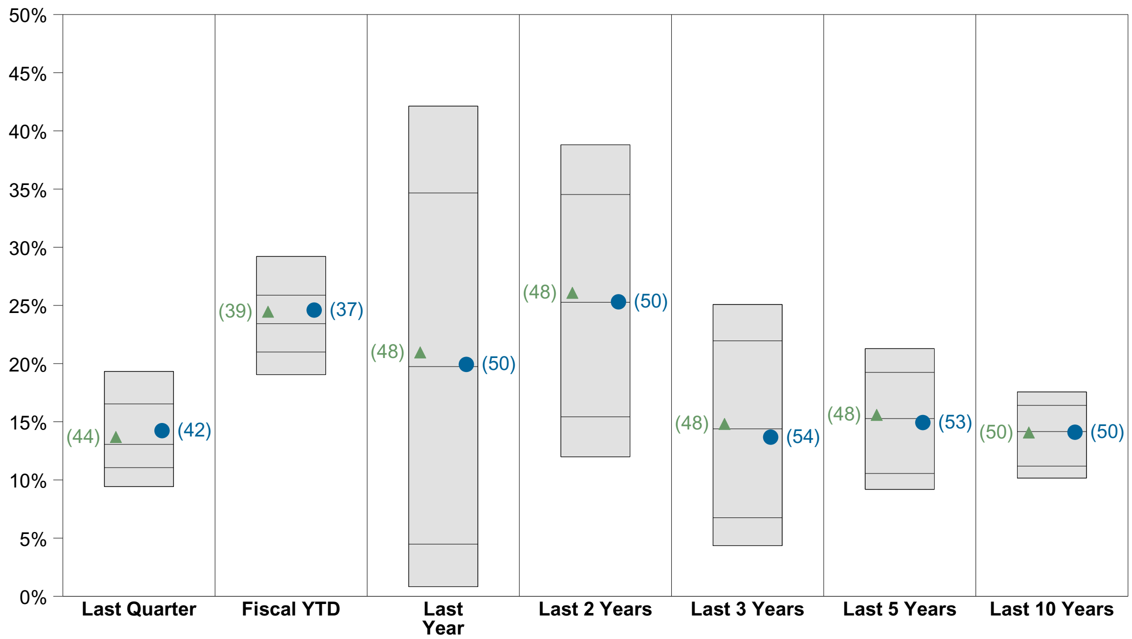
Quarterly Summary and Highlights

- Large Cap's portfolio posted a 14.24% return for the quarter placing it in the 42 percentile of the Callan Large Capitalization group for the quarter and in the 50 percentile for the last year.
- Large Cap's portfolio outperformed the Large Cap Equity Target by 0.55% for the quarter and underperformed the Large Cap Equity Target for the year by 1.03%.

Quarterly Asset Growth

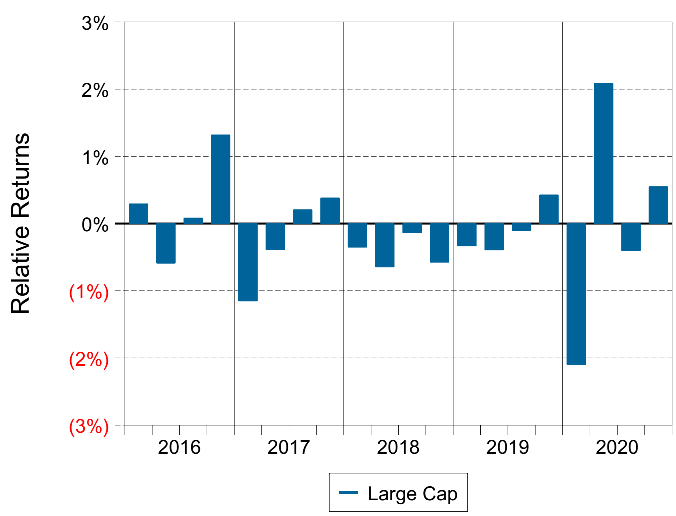
Beginning Market Value	$255,767,525
Net New Investment	$-8,103,123
Investment Gains/(Losses)	$36,240,995
Ending Market Value	$283,905,398

Performance vs Callan Large Capitalization (Gross)

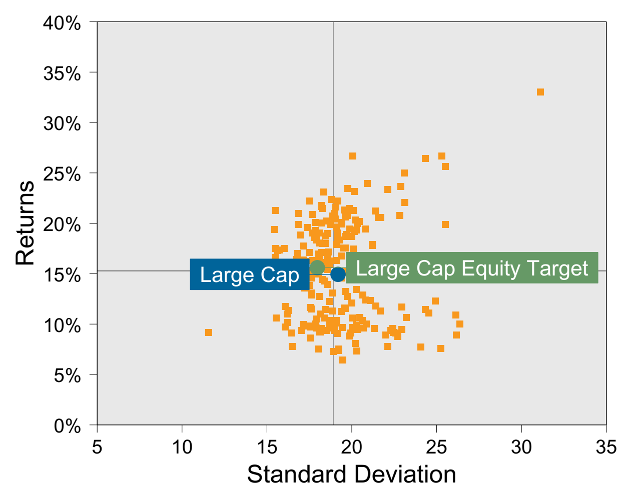


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	19.33	29.22	42.13	38.81	25.08	21.29	17.57
25th Percentile	16.53	25.88	34.66	34.53	21.96	19.25	16.41
Median	13.06	23.43	19.74	25.27	14.39	15.28	14.16
75th Percentile	11.06	21.00	4.48	15.42	6.75	10.56	11.19
90th Percentile	9.43	19.05	0.82	11.99	4.35	9.19	10.16
Large Cap ●	14.24	24.60	19.93	25.31	13.68	14.93	14.10
Large Cap Equity Target ▲	13.69	24.46	20.96	26.09	14.82	15.60	14.08

Relative Return vs Large Cap Equity Target



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



Parametric Large Cap
Period Ended December 31, 2020

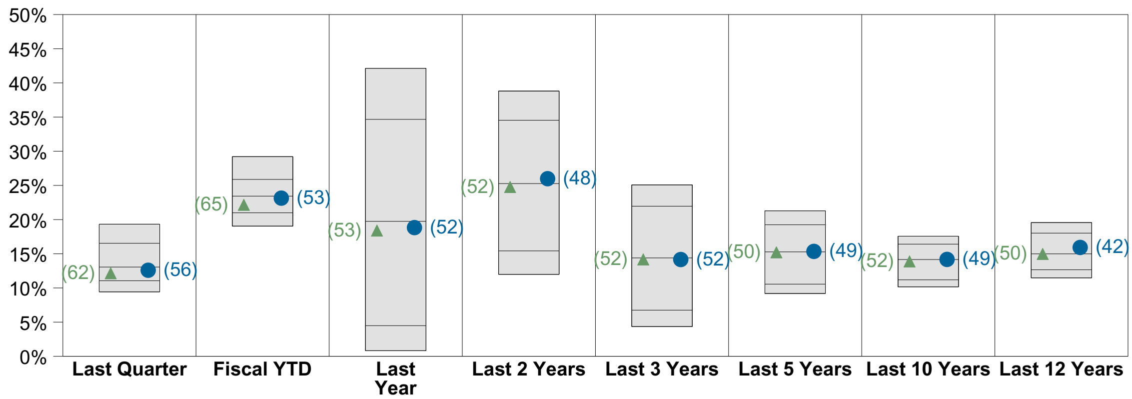
Investment Philosophy
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed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

Quarterly Summary and Highlights
- Parametric Large Cap's portfolio posted a 12.59% return for the quarter placing it in the 56 percentile of the Callan Large Capitalization group for the quarter and in the 52 percentile for the last year.
- Parametric Large Cap's portfolio outperformed the S&P 500 Index by 0.44% for the quarter and outperformed the S&P 500 Index for the year by 0.43%.

Quarterly Asset Growth

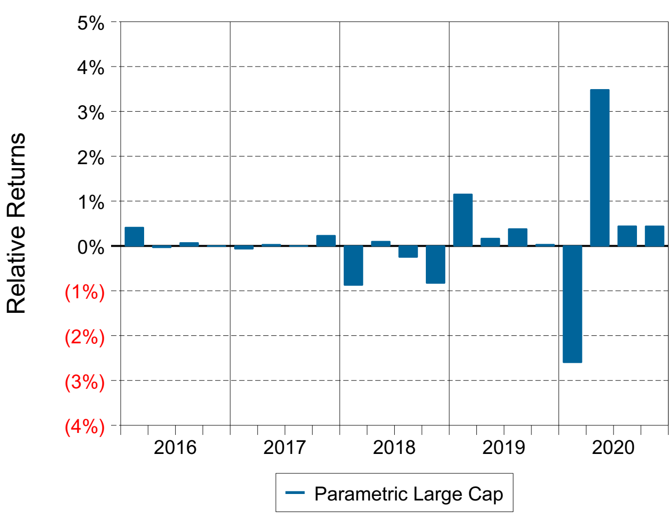
Beginning Market Value	$55,523,061
Net New Investment	$-4,000,000
Investment Gains/(Losses)	$6,881,640
Ending Market Value	$58,404,701

Performance vs Callan Large Capitalization (Gross)

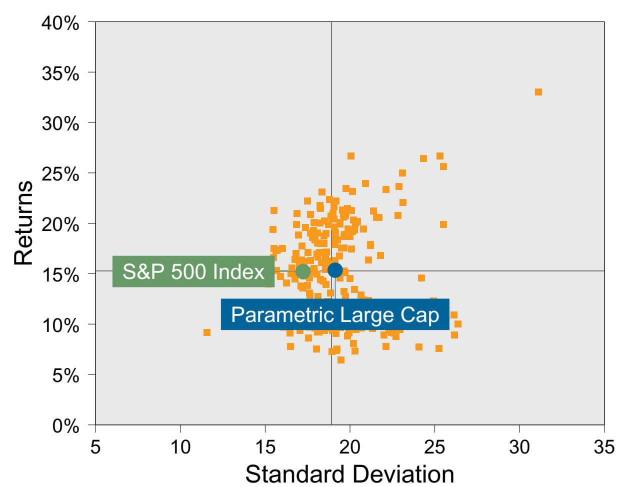


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 12 Years
10th Percentile	19.33	29.22	42.13	38.81	25.08	21.29	17.57	19.57
25th Percentile	16.53	25.88	34.66	34.53	21.96	19.25	16.41	18.02
Median	13.06	23.43	19.74	25.27	14.39	15.28	14.16	14.99
75th Percentile	11.06	21.00	4.48	15.42	6.75	10.56	11.19	12.66
90th Percentile	9.43	19.05	0.82	11.99	4.35	9.19	10.16	11.47
Parametric Large Cap ●	12.59	23.14	18.83	25.98	14.16	15.35	14.17	15.93
S&P 500 Index ▲	12.15	22.16	18.40	24.77	14.18	15.22	13.88	14.98

Relative Return vs S&P 500 Index



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



L.A. Capital
Period Ended December 31, 2020

Investment Philosophy

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

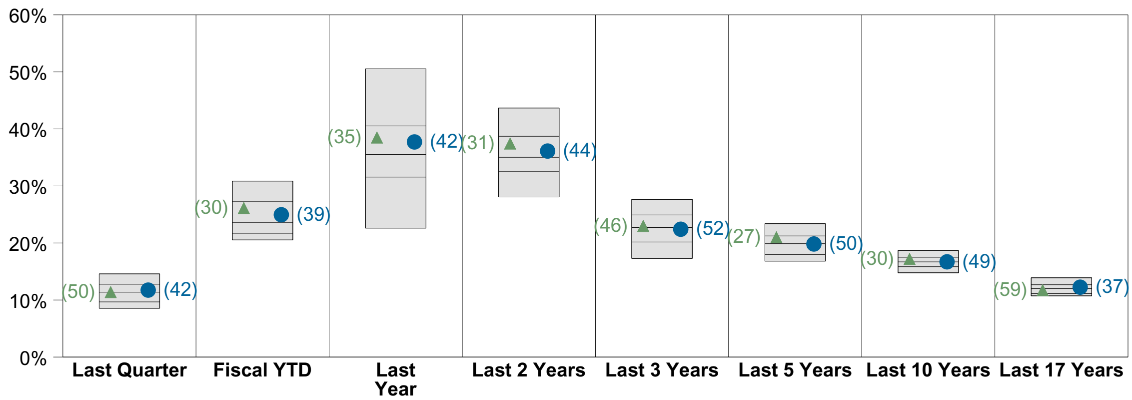
Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 11.74% return for the quarter placing it in the 42 percentile of the Callan Large Cap Growth group for the quarter and in the 42 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 0.35% for the quarter and underperformed the Russell 1000 Growth Index for the year by 0.78%.

Quarterly Asset Growth

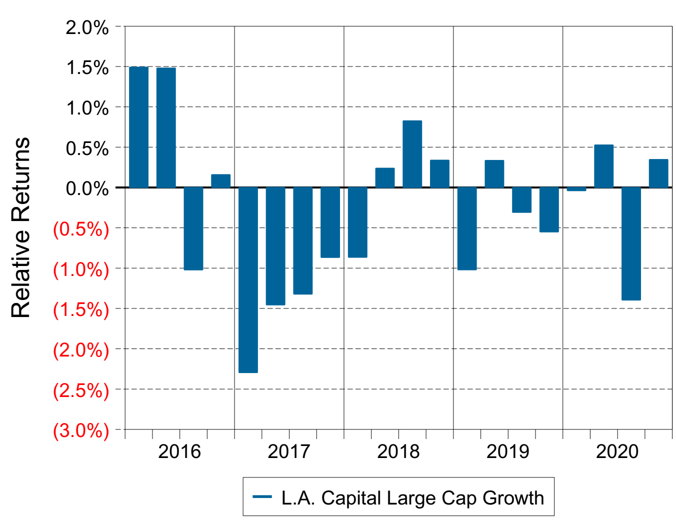
Beginning Market Value	$82,999,654
Net New Investment	$-4,044,329
Investment Gains/(Losses)	$9,649,506
Ending Market Value	$88,604,830

Performance vs Callan Large Cap Growth (Gross)

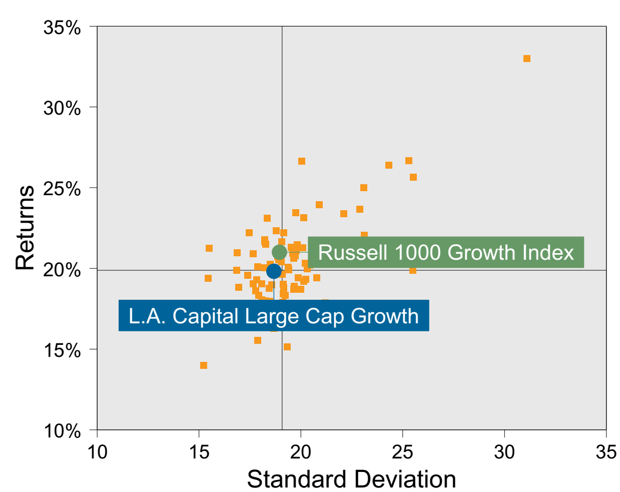


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 17 Years
10th Percentile	14.58	30.86	50.54	43.67	27.65	23.39	18.67	13.90
25th Percentile	12.76	27.24	40.52	38.71	24.92	21.23	17.49	12.68
Median	11.37	23.61	35.53	35.03	22.71	19.88	16.69	11.99
75th Percentile	9.67	21.71	31.55	32.51	20.17	17.98	15.84	11.13
90th Percentile	8.55	20.53	22.61	28.06	17.29	16.81	14.78	10.73
L.A. Capital Large Cap Growth ●	11.74	24.95	37.71	36.12	22.41	19.82	16.69	12.25
Russell 1000 Growth Index ▲	11.39	26.12	38.49	37.44	22.99	21.00	17.21	11.72

Relative Return vs Russell 1000 Growth Index



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



L.A. Capital Enhanced
Period Ended December 31, 2020

Investment Philosophy

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

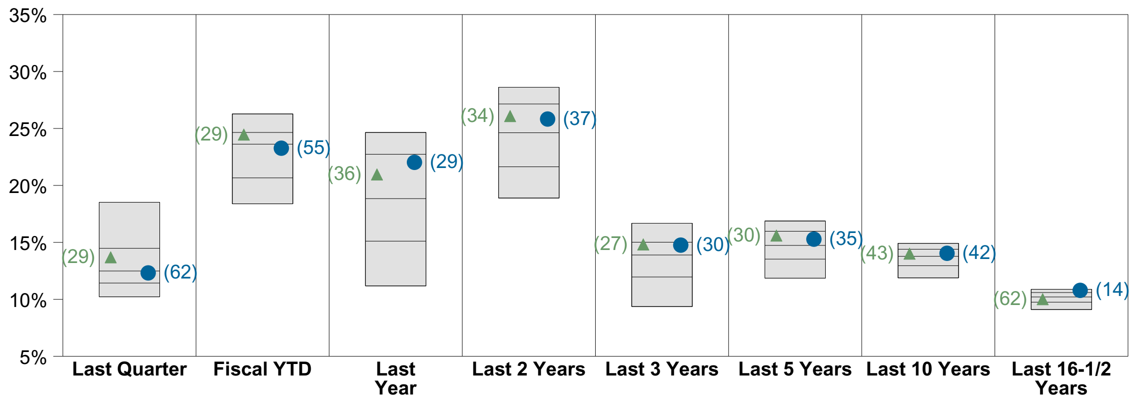
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 12.32% return for the quarter placing it in the 62 percentile of the Callan Large Cap Core group for the quarter and in the 29 percentile for the last year.
- L.A. Capital Enhanced's portfolio underperformed the Russell 1000 Index by 1.37% for the quarter and outperformed the Russell 1000 Index for the year by 1.06%.

Quarterly Asset Growth

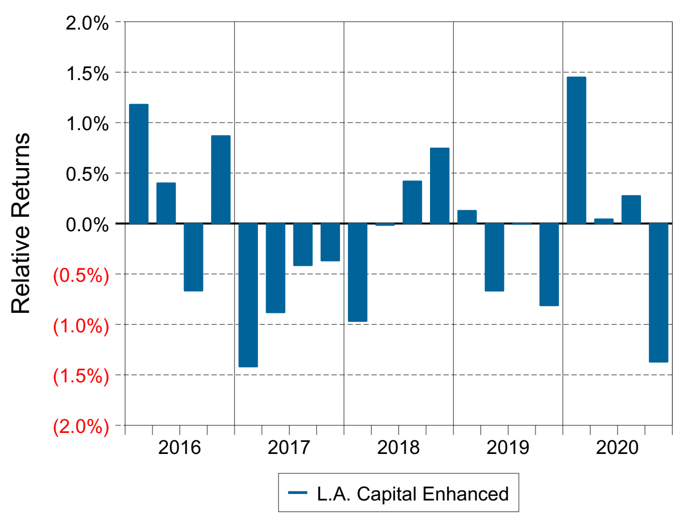
Beginning Market Value	$56,436,751
Net New Investment	$-14,473
Investment Gains/(Losses)	$6,951,895
Ending Market Value	$63,374,173

Performance vs Callan Large Cap Core (Gross)

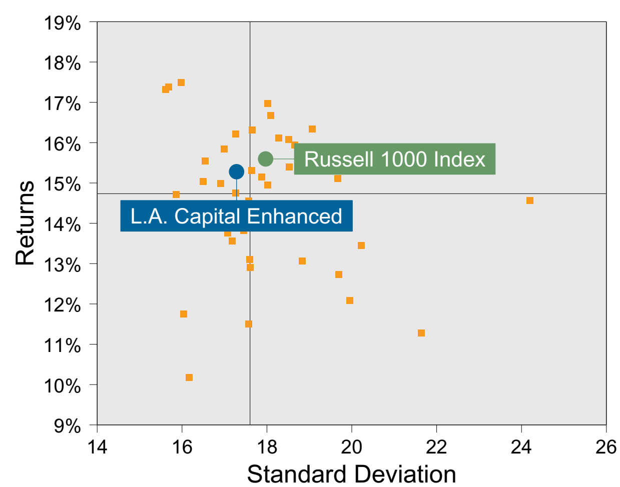


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 16-1/2 Years
10th Percentile	18.52	26.28	24.65	28.62	16.68	16.88	14.92	10.88
25th Percentile	14.48	24.65	22.73	27.15	15.01	15.98	14.40	10.60
Median	12.49	23.62	18.84	24.62	13.89	14.73	13.77	10.21
75th Percentile	11.43	20.66	15.11	21.64	11.96	13.53	12.95	9.75
90th Percentile	10.22	18.39	11.18	18.89	9.36	11.86	11.88	9.10
L.A. Capital Enhanced ●	12.32	23.27	22.03	25.83	14.76	15.28	14.04	10.79
Russell 1000 Index ▲	13.69	24.46	20.96	26.09	14.82	15.60	14.01	10.02

Relative Return vs Russell 1000 Index



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



LSV Asset Management
Period Ended December 31, 2020

Investment Philosophy

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

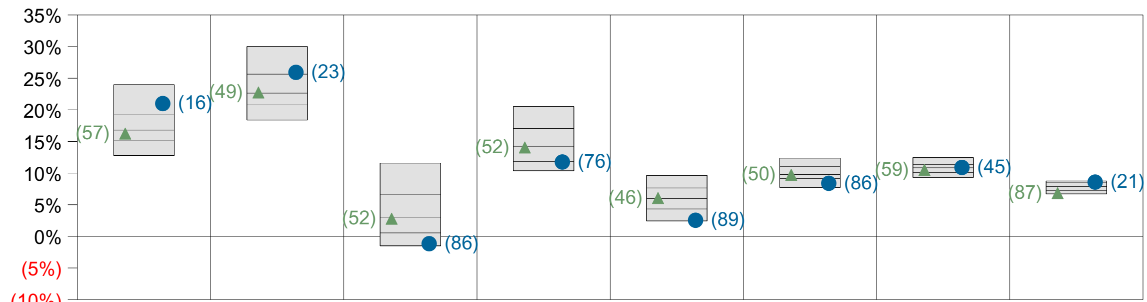
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 20.99% return for the quarter placing it in the 16 percentile of the Callan Large Cap Value group for the quarter and in the 86 percentile for the last year.
- LSV Large Cap Value's portfolio outperformed the Russell 1000 Value Index by 4.74% for the quarter and underperformed the Russell 1000 Value Index for the year by 3.96%.

Quarterly Asset Growth

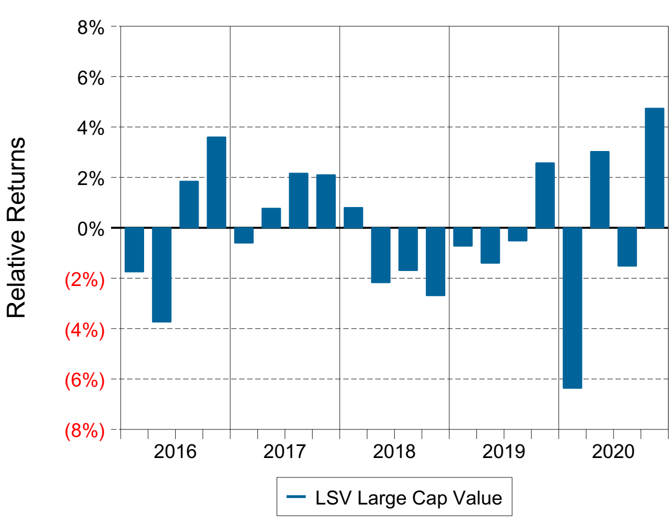
Beginning Market Value	$60,808,059
Net New Investment	$-44,321
Investment Gains/(Losses)	$12,757,955
Ending Market Value	$73,521,693

Performance vs Callan Large Cap Value (Gross)

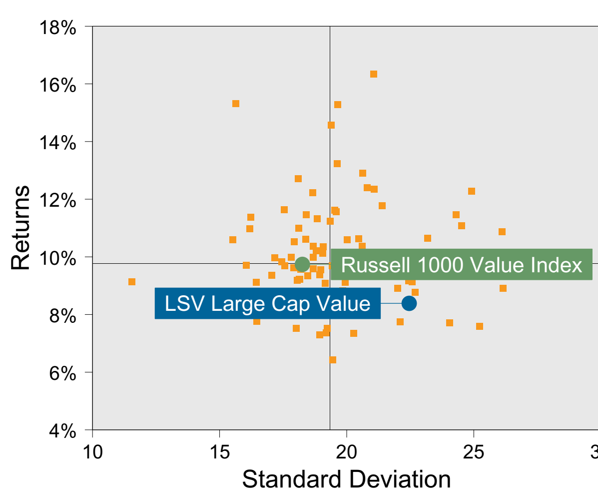


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 22-1/2 Years
10th Percentile	23.97	30.00	11.58	20.52	9.63	12.37	12.44	8.75
25th Percentile	19.20	25.64	6.65	17.05	7.65	11.06	11.38	8.55
Median	16.80	22.64	3.04	14.24	5.98	9.77	10.84	7.89
75th Percentile	15.10	20.78	0.55	11.85	4.33	9.15	10.11	7.27
90th Percentile	12.78	18.39	(1.50)	10.36	2.43	7.73	9.32	6.71
LSV Large Cap Value ●	20.99	25.92	(1.16)	11.75	2.54	8.39	10.89	8.58
Russell 1000 Value Index ▲	16.25	22.75	2.80	14.05	6.07	9.74	10.50	6.84

Relative Return vs Russell 1000 Value Index



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



Small Cap
Period Ended December 31, 2020

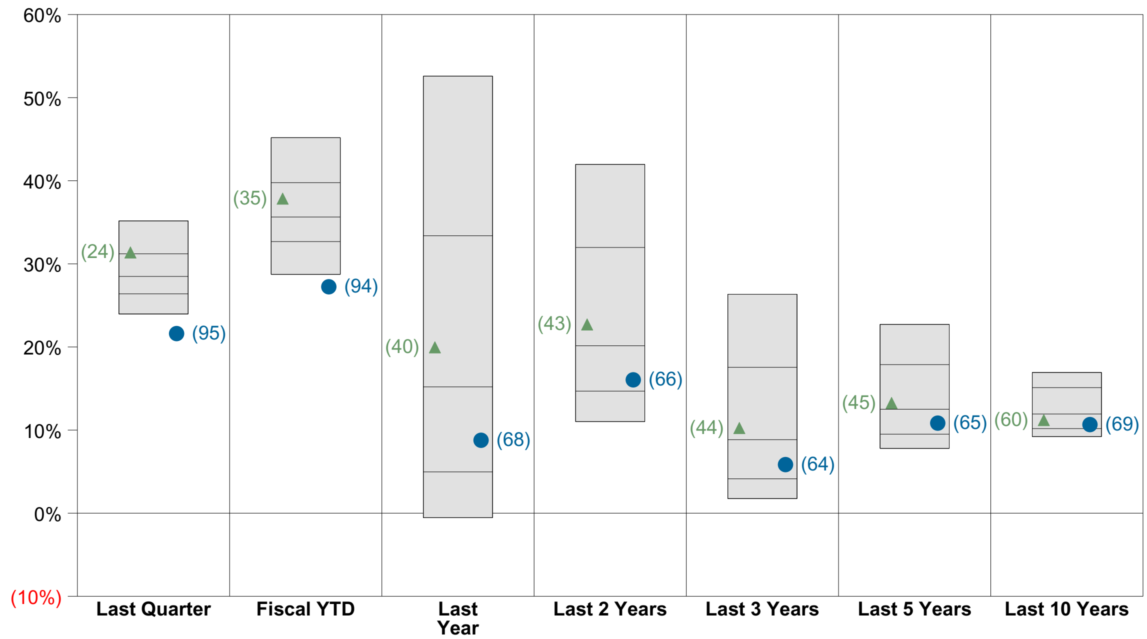
Quarterly Summary and Highlights

- Small Cap's portfolio posted a 21.61% return for the quarter placing it in the 95 percentile of the Callan Small Capitalization group for the quarter and in the 68 percentile for the last year.
- Small Cap's portfolio underperformed the Small Cap Equity Target by 9.76% for the quarter and underperformed the Small Cap Equity Target for the year by 11.19%.

Quarterly Asset Growth

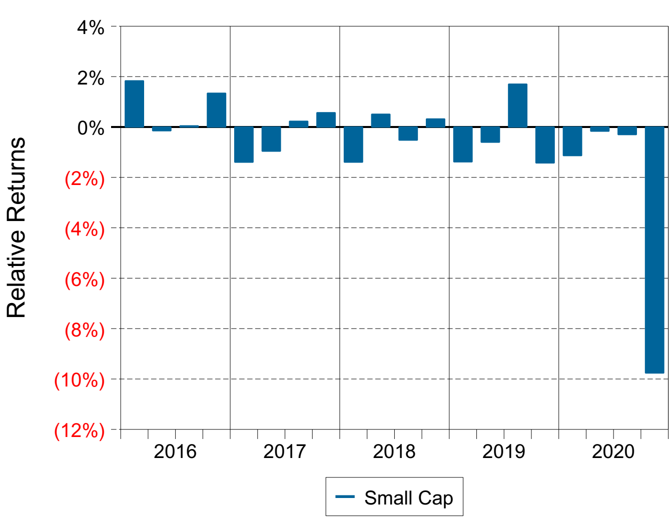
Beginning Market Value	$74,501,714
Net New Investment	$-3,042,799
Investment Gains/(Losses)	$15,686,587
Ending Market Value	$87,145,501

Performance vs Callan Small Capitalization (Gross)

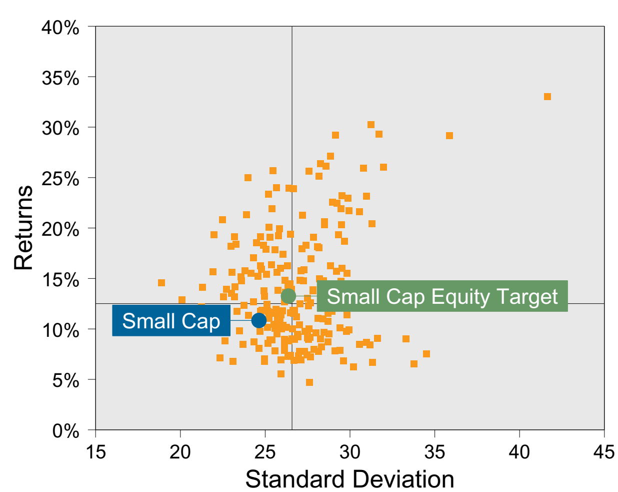


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	35.17	45.19	52.59	41.97	26.34	22.72	16.93
25th Percentile	31.21	39.77	33.38	31.97	17.55	17.88	15.11
Median	28.49	35.64	15.20	20.14	8.84	12.51	11.93
75th Percentile	26.39	32.68	4.97	14.69	4.14	9.51	10.18
90th Percentile	23.97	28.73	(0.54)	11.02	1.76	7.80	9.21
Small Cap ●	21.61	27.24	8.77	16.04	5.85	10.84	10.66
Small Cap Equity Target ▲	31.37	37.85	19.96	22.71	10.25	13.26	11.20

Relative Return vs Small Cap Equity Target



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



Atlanta Capital
Period Ended December 31, 2020

Investment Philosophy

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

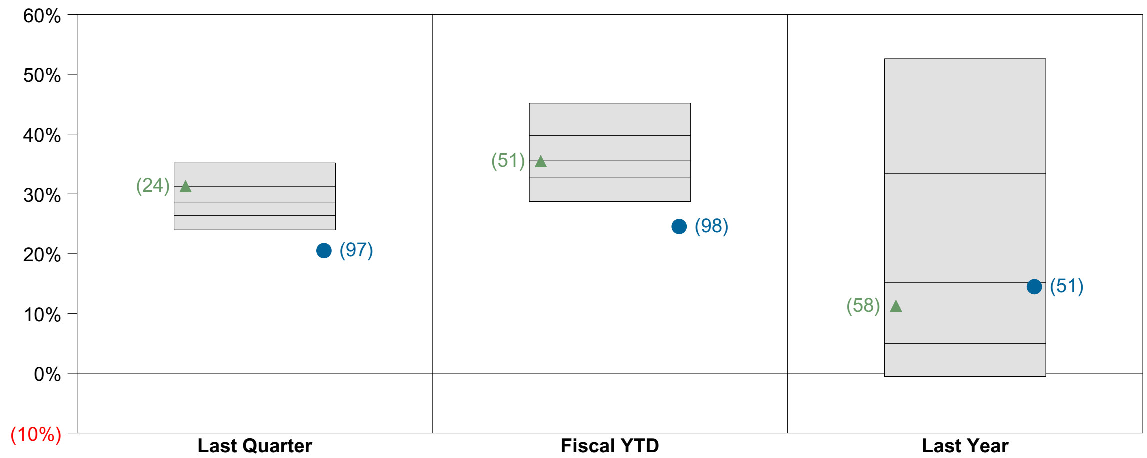
Quarterly Summary and Highlights

- Atlanta Capital's portfolio posted a 20.51% return for the quarter placing it in the 97 percentile of the Callan Small Capitalization group for the quarter and in the 51 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 10.80% for the quarter and outperformed the S&P 600 Small Cap Index for the year by 3.19%.

Quarterly Asset Growth

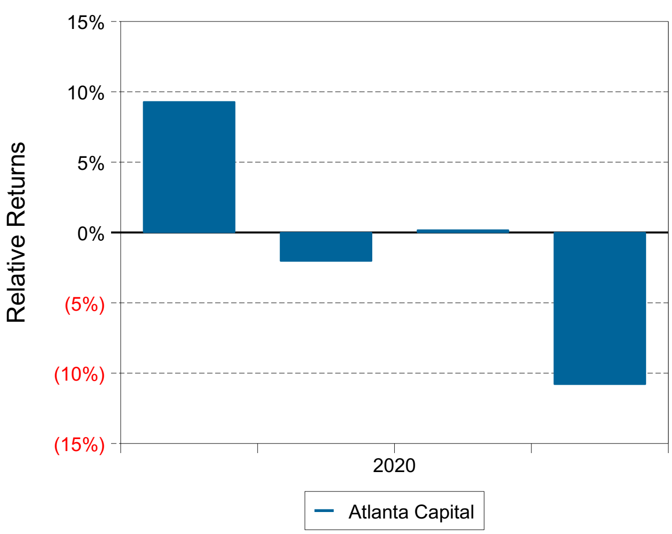
Beginning Market Value	$31,692,560
Net New Investment	$-9,046,450
Investment Gains/(Losses)	$4,748,147
Ending Market Value	$27,394,258

Performance vs Callan Small Capitalization (Gross)

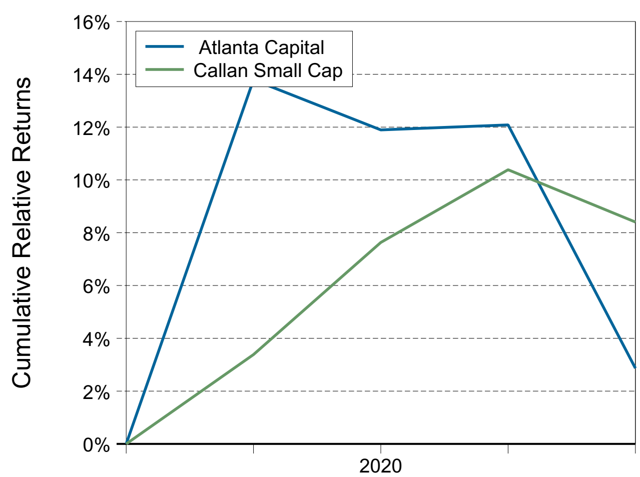


	Last Quarter	Fiscal YTD	Last Year
10th Percentile	35.17	45.19	52.59
25th Percentile	31.21	39.77	33.38
Median	28.49	35.64	15.20
75th Percentile	26.39	32.68	4.97
90th Percentile	23.97	28.73	(0.54)
Atlanta Capital ●	20.51	24.55	14.48
S&P 600 Small Cap Index ▲	31.31	35.48	11.29

Relative Return vs S&P 600 Small Cap Index



Cumulative Returns vs S&P 600 Small Cap Index



International Equity
Period Ended December 31, 2020

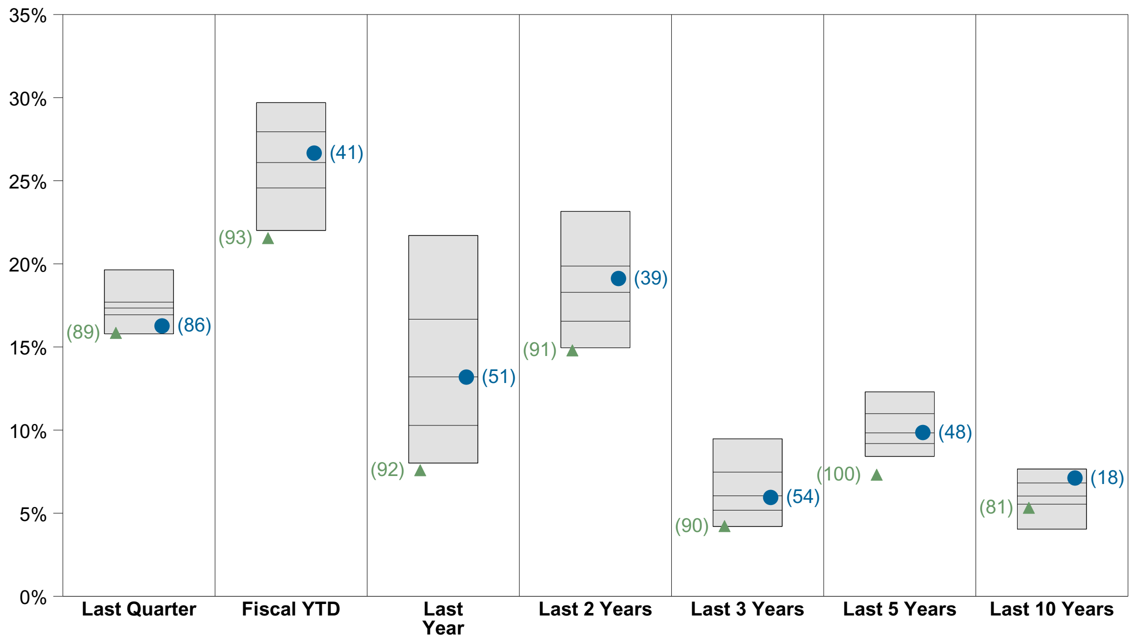
Quarterly Summary and Highlights

- International Equity's portfolio posted a 16.27% return for the quarter placing it in the 86 percentile of the Public Fund - International Equity group for the quarter and in the 51 percentile for the last year.
- International Equity's portfolio outperformed the International Equity Target by 0.42% for the quarter and outperformed the International Equity Target for the year by 5.60%.

Quarterly Asset Growth

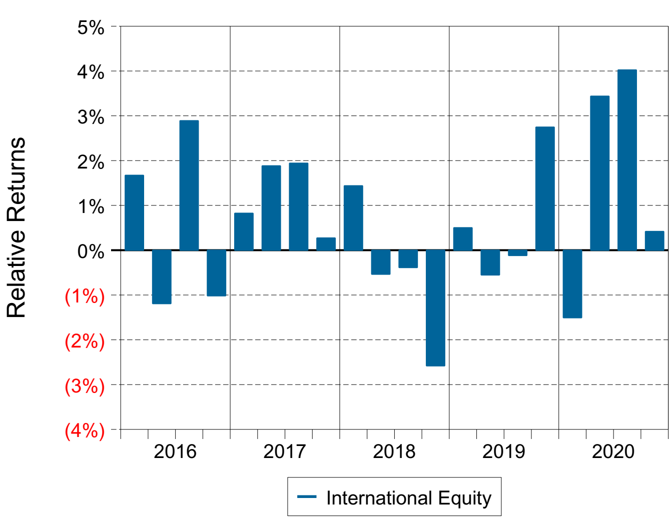
Beginning Market Value	$184,725,412
Net New Investment	$-14,139,825
Investment Gains/(Losses)	$29,637,837
Ending Market Value	$200,223,423

Performance vs Public Fund - International Equity (Gross)

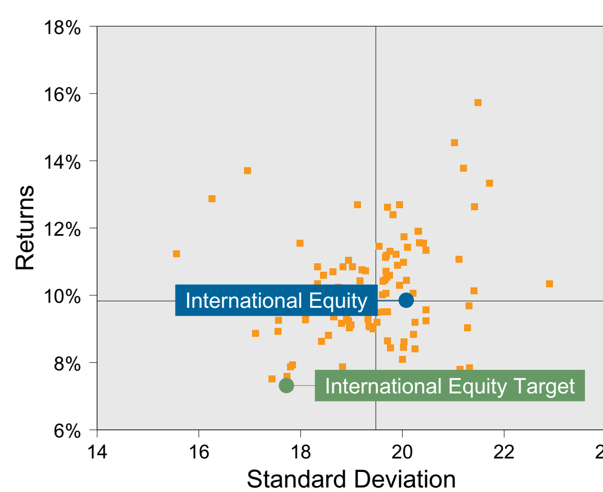


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	19.64	29.70	21.71	23.16	9.47	12.30	7.66
25th Percentile	17.70	27.95	16.67	19.87	7.47	10.99	6.82
Median	17.34	26.09	13.20	18.29	6.05	9.83	6.03
75th Percentile	16.93	24.57	10.28	16.55	5.18	9.19	5.54
90th Percentile	15.79	22.01	8.02	14.95	4.20	8.42	4.04
International Equity ●	16.27	26.66	13.19	19.12	5.95	9.85	7.12
International Equity Target ▲	15.85	21.55	7.59	14.80	4.22	7.32	5.33

Relative Return vs International Equity Target



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



DFA Intl Small Cap Value
Period Ended December 31, 2020

Investment Philosophy

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

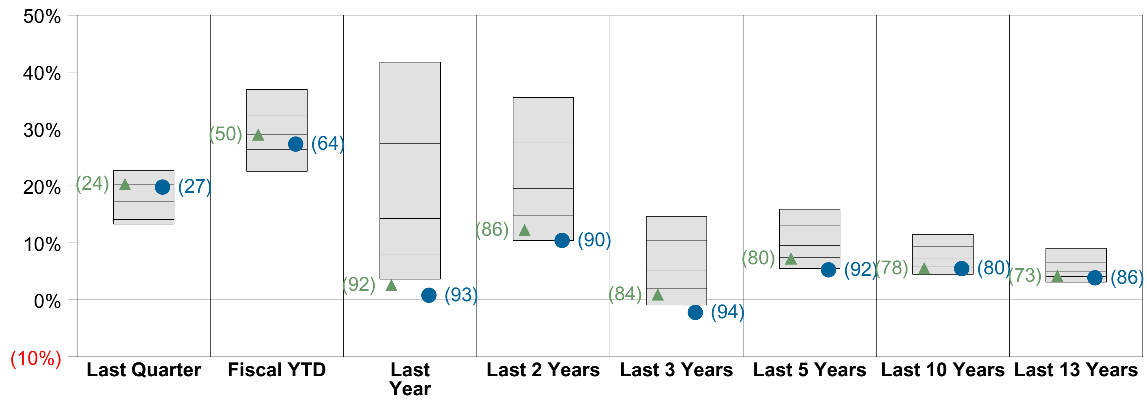
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a 19.81% return for the quarter placing it in the 27 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 93 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 0.49% for the quarter and underperformed the World ex US SC Value for the year by 1.77%.

Quarterly Asset Growth

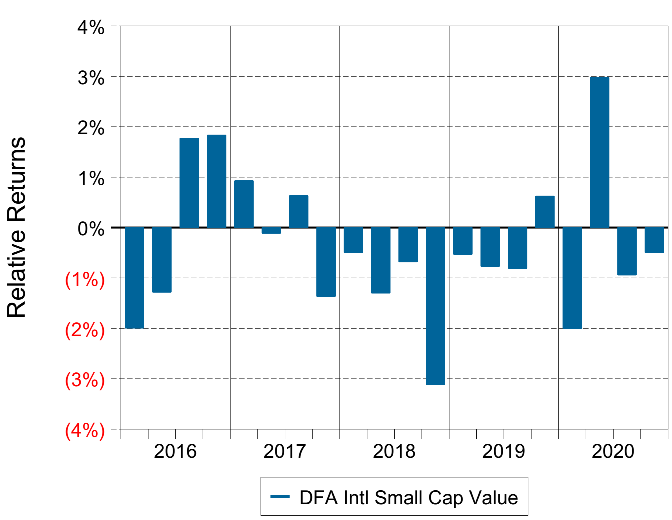
Beginning Market Value	$18,828,898
Net New Investment	$0
Investment Gains/(Losses)	$3,729,862
Ending Market Value	$22,558,760

Performance vs Callan International Small Cap Mut Funds (Net)

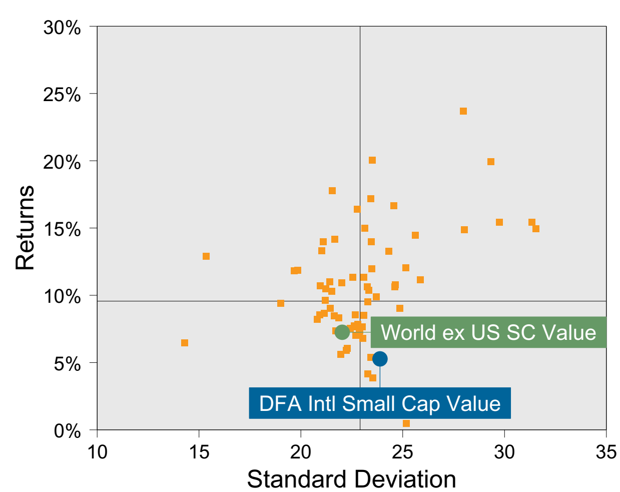


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 13 Years
10th Percentile	22.69	36.94	41.75	35.53	14.61	15.93	11.51	9.07
25th Percentile	20.20	32.29	27.43	27.55	10.38	13.00	9.42	6.62
Median	17.32	28.99	14.29	19.54	5.08	9.57	7.35	5.04
75th Percentile	14.11	26.38	8.05	14.87	1.95	7.41	5.78	4.10
90th Percentile	13.32	22.58	3.65	10.42	(0.90)	5.49	4.50	3.12
DFA Intl Small Cap Value ●	19.81	27.36	0.81	10.45	(2.20)	5.27	5.49	3.88
World ex US SC Value ▲	20.30	29.01	2.58	12.25	0.94	7.25	5.54	4.19

Relative Return vs World ex US SC Value



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



LSV Intl Value
Period Ended December 31, 2020

Investment Philosophy

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

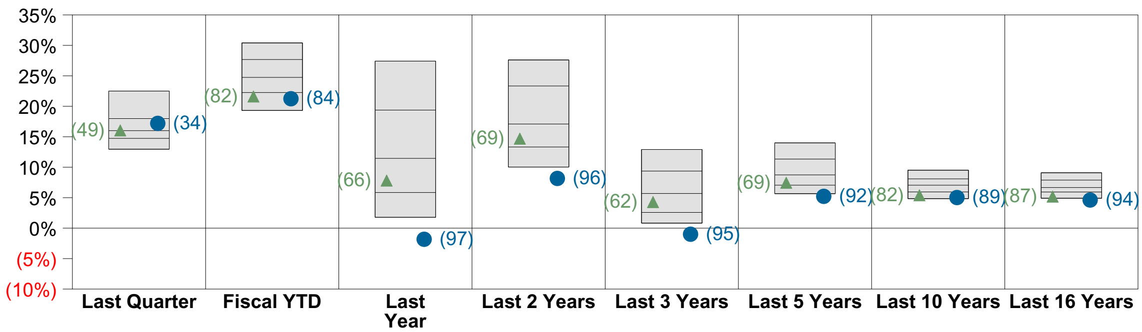
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a 17.20% return for the quarter placing it in the 34 percentile of the Callan Non-US Equity group for the quarter and in the 97 percentile for the last year.
- LSV Intl Value's portfolio outperformed the Benchmark by 1.15% for the quarter and underperformed the Benchmark for the year by 9.64%.

Quarterly Asset Growth

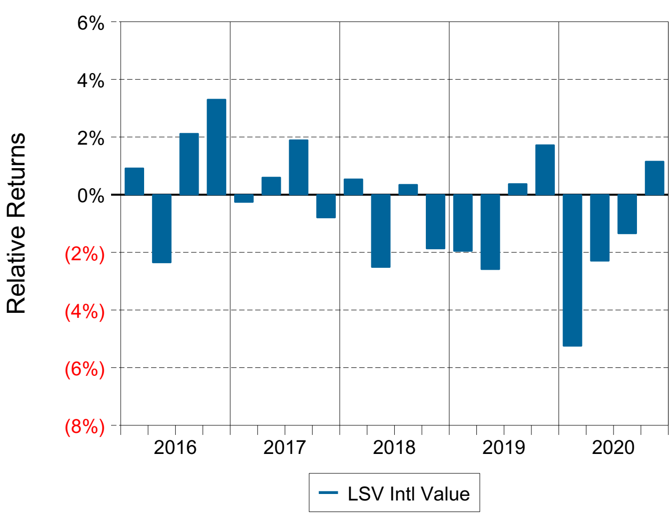
Beginning Market Value	$56,861,135
Net New Investment	$-58,886
Investment Gains/(Losses)	$9,768,009
Ending Market Value	$66,570,258

Performance vs Callan Non-US Equity (Gross)

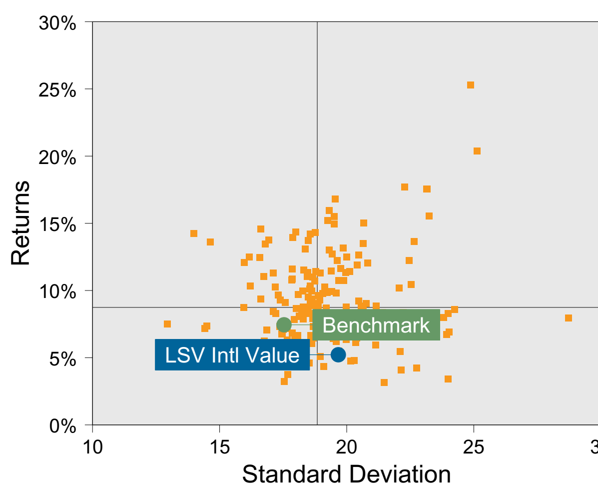


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 16 Years
10th Percentile	22.50	30.41	27.42	27.61	12.91	14.00	9.52	9.09
25th Percentile	17.98	27.68	19.38	23.34	9.37	11.34	8.09	7.88
Median	16.00	24.75	11.45	17.09	5.69	8.74	7.05	6.67
75th Percentile	14.74	22.26	5.85	13.32	2.58	7.05	5.94	5.93
90th Percentile	12.96	19.32	1.78	10.03	0.82	5.65	4.84	4.91
LSV Intl Value ●	17.20	21.24	(1.83)	8.16	(1.00)	5.22	5.02	4.61
Benchmark ▲	16.05	21.61	7.82	14.70	4.28	7.45	5.39	5.19

Relative Return vs Benchmark



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



Vanguard Intl Explorer Fund
Period Ended December 31, 2020

Investment Philosophy

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

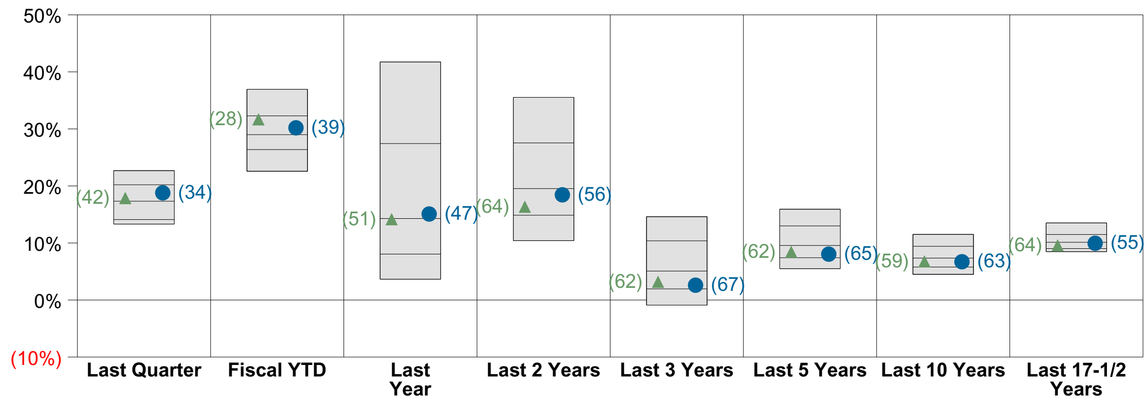
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a 18.79% return for the quarter placing it in the 34 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 47 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <$2 B by 0.93% for the quarter and outperformed the S&P BMI EPAC <$2 B for the year by 0.93%.

Quarterly Asset Growth

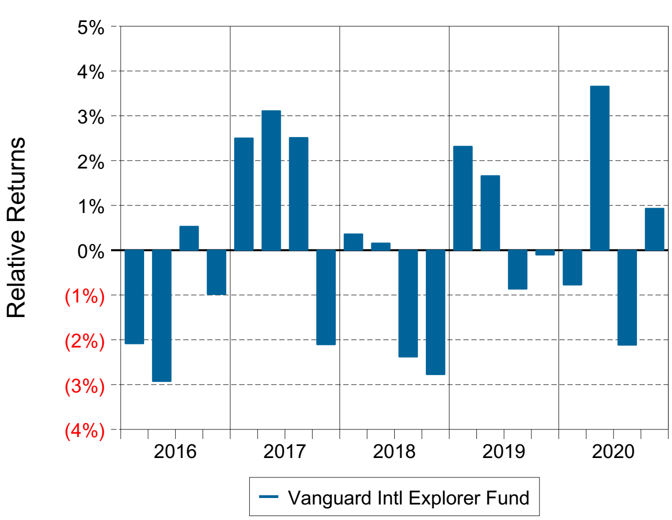
Beginning Market Value	$17,428,040
Net New Investment	$0
Investment Gains/(Losses)	$3,275,436
Ending Market Value	$20,703,476

Performance vs Callan International Small Cap Mut Funds (Net)

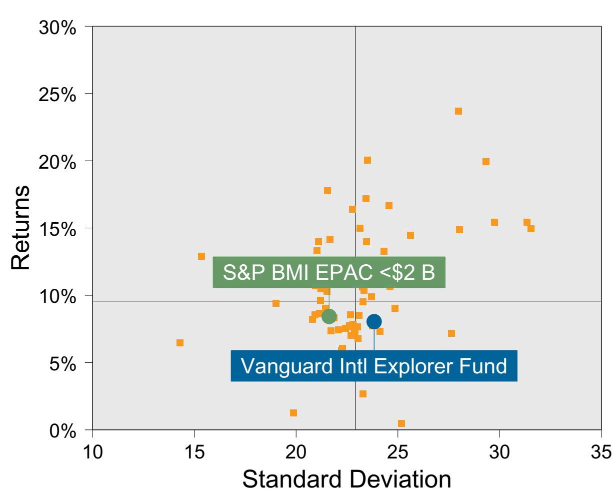


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 17-1/2 Years
10th Percentile	22.69	36.94	41.75	35.53	14.61	15.93	11.51	13.52
25th Percentile	20.20	32.29	27.43	27.55	10.38	13.00	9.42	11.49
Median	17.32	28.99	14.29	19.54	5.08	9.57	7.35	10.12
75th Percentile	14.11	26.38	8.05	14.87	1.95	7.41	5.78	9.02
90th Percentile	13.32	22.58	3.65	10.42	(0.90)	5.49	4.50	8.48
Vanguard Intl Explorer Fund ●	18.79	30.19	15.08	18.45	2.60	8.04	6.71	9.95
S&P BMI EPAC <$2 B ▲	17.86	31.67	14.15	16.34	3.17	8.43	6.76	9.56

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



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



William Blair
Period Ended December 31, 2020

Investment Philosophy

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

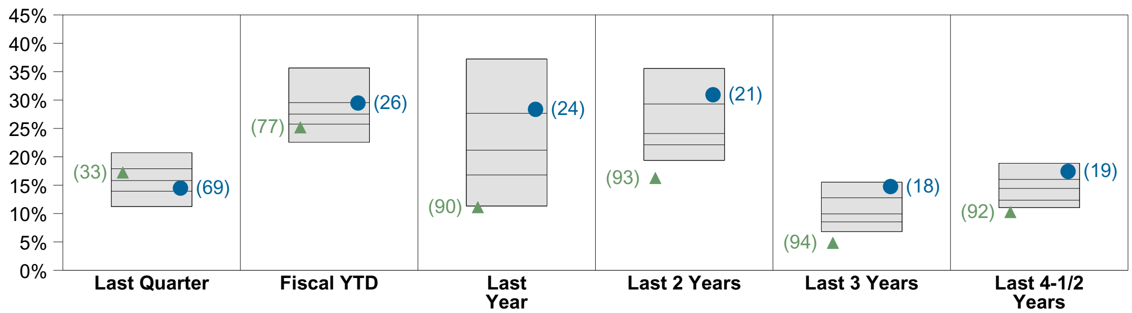
Quarterly Summary and Highlights

- William Blair's portfolio posted a 14.49% return for the quarter placing it in the 69 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 24 percentile for the last year.
- William Blair's portfolio underperformed the MSCI ACWI ex US IMI by 2.74% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 17.25%.

Quarterly Asset Growth

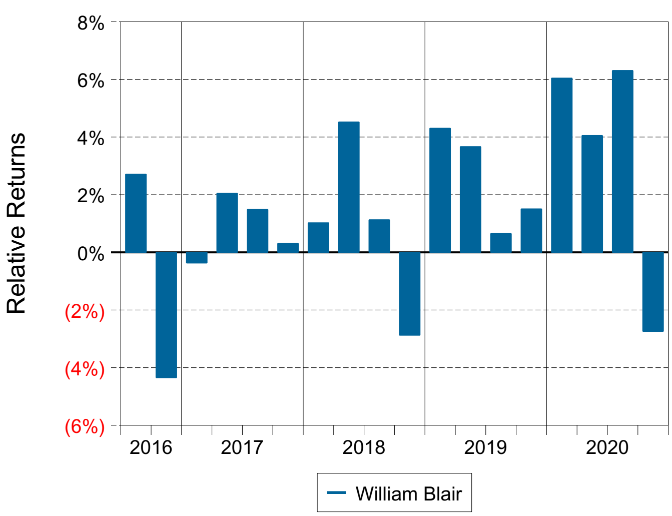
Beginning Market Value	$91,607,339
Net New Investment	$-14,080,939
Investment Gains/(Losses)	$12,864,530
Ending Market Value	$90,390,929

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

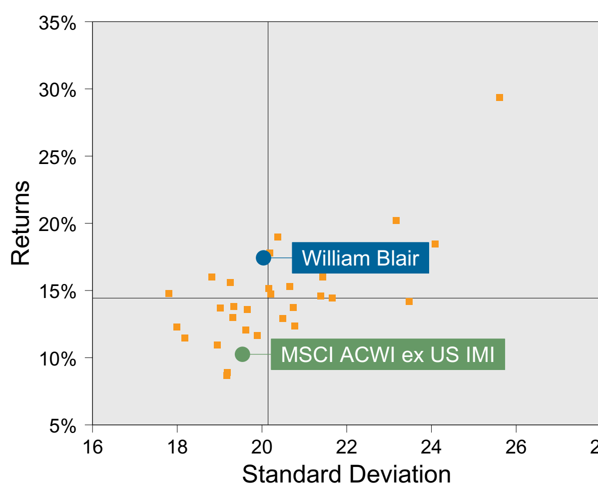


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile	20.72	35.66	37.24	35.58	15.53	18.86
25th Percentile	17.90	29.55	27.66	29.30	12.78	16.02
Median	15.81	27.53	21.17	24.10	9.94	14.43
75th Percentile	13.94	25.76	16.80	22.11	8.53	12.36
90th Percentile	11.23	22.57	11.32	19.36	6.81	11.04
William Blair ●	14.49	29.48	28.37	30.93	14.76	17.43
MSCI ACWI ex US IMI ▲	17.22	25.19	11.12	16.26	4.83	10.25

Relative Return vs MSCI ACWI ex US IMI



Callan Non-US All Country Growth Equity (Gross)
Annualized Four and One-Half Year Risk vs Return



Domestic Fixed Income
Period Ended December 31, 2020

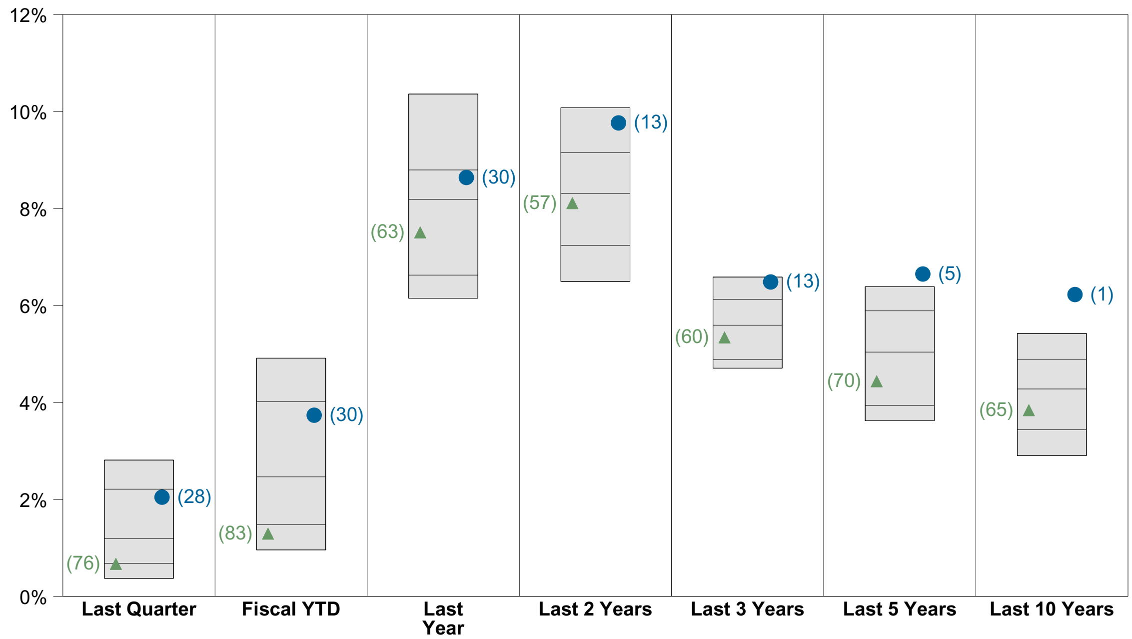
Quarterly Summary and Highlights

- Domestic Fixed Income's portfolio posted a 2.04% return for the quarter placing it in the 28 percentile of the Public Fund - Domestic Fixed group for the quarter and in the 30 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Blmbg Aggregate by 1.38% for the quarter and outperformed the Blmbg Aggregate for the year by 1.13%.

Quarterly Asset Growth

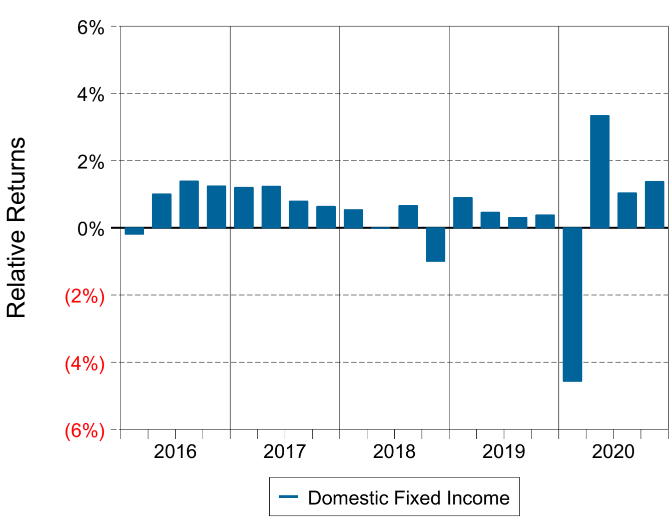
Beginning Market Value	$1,369,611,269
Net New Investment	$8,726,759
Investment Gains/(Losses)	$27,894,119
Ending Market Value	$1,406,232,147

Performance vs Public Fund - Domestic Fixed (Gross)

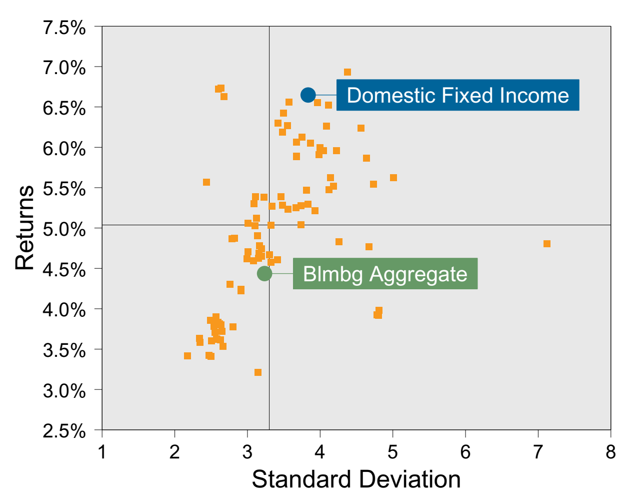


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.81	4.91	10.36	10.08	6.59	6.39	5.42
25th Percentile	2.21	4.02	8.79	9.15	6.13	5.89	4.88
Median	1.19	2.46	8.19	8.31	5.59	5.04	4.28
75th Percentile	0.68	1.48	6.63	7.24	4.88	3.94	3.44
90th Percentile	0.37	0.96	6.15	6.49	4.71	3.62	2.90
Domestic Fixed Income ●	2.04	3.74	8.64	9.76	6.48	6.65	6.22
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	3.84

Relative Return vs Blmbg Aggregate



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



Declaration Total Return
Period Ended December 31, 2020

Investment Philosophy

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

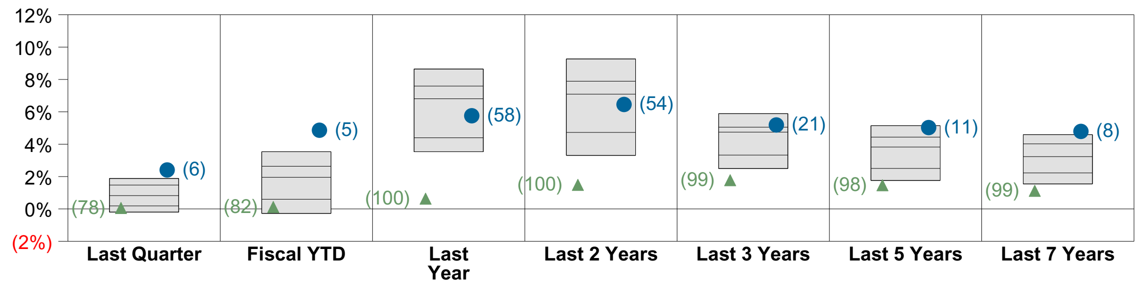
Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 2.41% return for the quarter placing it in the 6 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 58 percentile for the last year.
- Declaration Total Return's portfolio outperformed the LIBOR - 3 Month by 2.35% for the quarter and outperformed the LIBOR - 3 Month for the year by 5.12%.

Quarterly Asset Growth

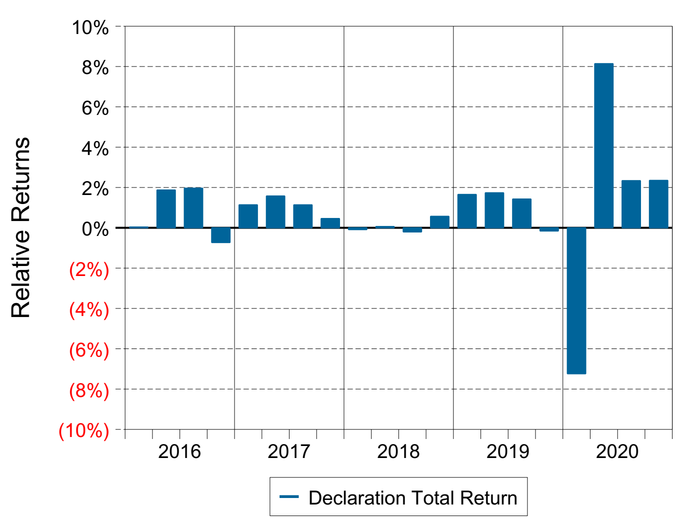
Beginning Market Value	$96,874,430
Net New Investment	$-58,524
Investment Gains/(Losses)	$2,330,981
Ending Market Value	$99,146,887

Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)

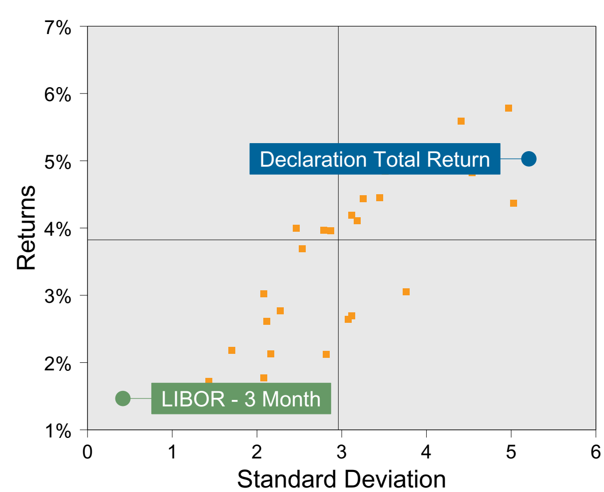


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	1.88	3.54	8.64	9.27	5.89	5.14	4.59
25th Percentile	1.48	2.64	7.59	7.89	5.05	4.44	4.02
Median	0.82	1.95	6.81	7.09	4.75	3.82	3.23
75th Percentile	0.19	0.60	4.40	4.73	3.33	2.50	2.23
90th Percentile	(0.19)	(0.28)	3.54	3.31	2.50	1.76	1.55
Declaration Total Return ●	2.41	4.86	5.76	6.46	5.19	5.03	4.79
LIBOR - 3 Month ▲	0.06	0.12	0.64	1.49	1.78	1.47	1.12

Relative Return vs LIBOR - 3 Month



Callan Intermediate Fixed Inc Mut Funds (Net)
Annualized Five Year Risk vs Return



PIMCO Core Plus Constrained
Period Ended December 31, 2020

Investment Philosophy

PIMCO's investment process utilizes both "top-down" and "bottom-up" strategies. Top-down strategies focus on duration, yield curve postioning, volatility, and sector rotation. These stretegies are deployed from a macro view of the portfolio driven by their secular outlook of the forces likely to influence the economy and financial markets over the next three to five years and their cyclical views of two- to four-quarter trends. Implementation in portfolios is effected by selecting securities that achieve the designated objectives. Bottom-up strategies drive their security selection process and facilitate the indentification and analysis of undervalued securities.

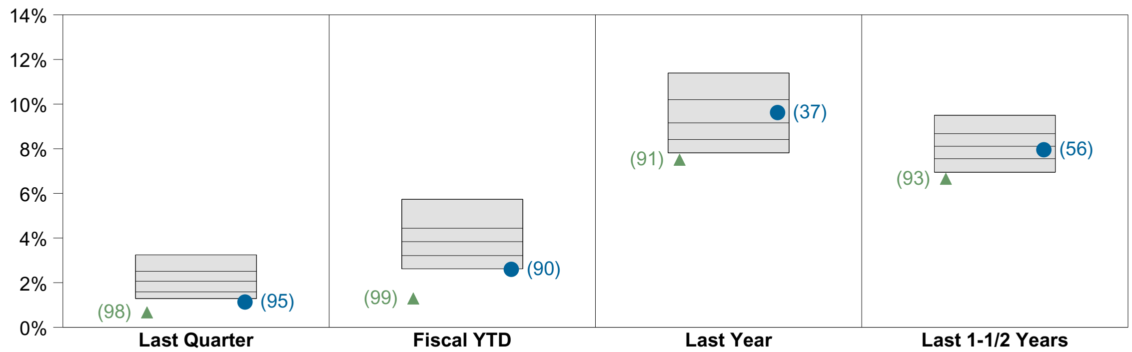
Quarterly Summary and Highlights

- PIMCO Core Plus Constrained's portfolio posted a 1.13% return for the quarter placing it in the 95 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 37 percentile for the last year.
- PIMCO Core Plus Constrained's portfolio outperformed the Blmbg Aggregate by 0.46% for the quarter and outperformed the Blmbg Aggregate for the year by 2.12%.

Quarterly Asset Growth

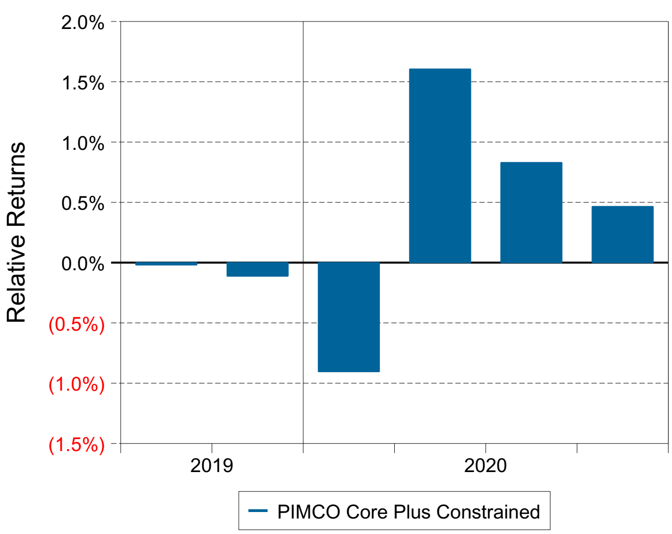
Beginning Market Value	$193,101,926
Net New Investment	$-55,941
Investment Gains/(Losses)	$2,188,542
Ending Market Value	$195,234,526

Performance vs Callan Core Plus Fixed Income (Gross)

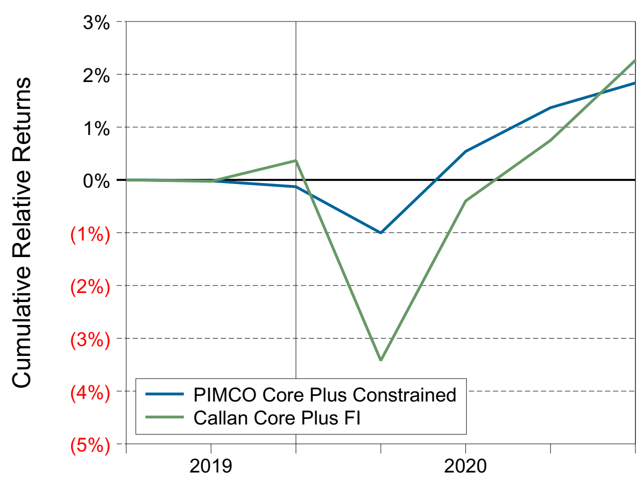


	Last Quarter	Fiscal YTD	Last Year	Last 1-1/2 Years
10th Percentile	3.25	5.74	11.39	9.50
25th Percentile	2.51	4.44	10.20	8.68
Median	2.06	3.84	9.16	8.11
75th Percentile	1.59	3.21	8.41	7.55
90th Percentile	1.29	2.62	7.82	6.95
PIMCO Core Plus Constrained ●	1.13	2.60	9.62	7.95
Blmbg Aggregate ▲	0.67	1.29	7.51	6.65

Relative Return vs Blmbg Aggregate



Cumulative Returns vs Blmbg Aggregate



PIMCO DiSCO II
Period Ended December 31, 2020

Investment Philosophy

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

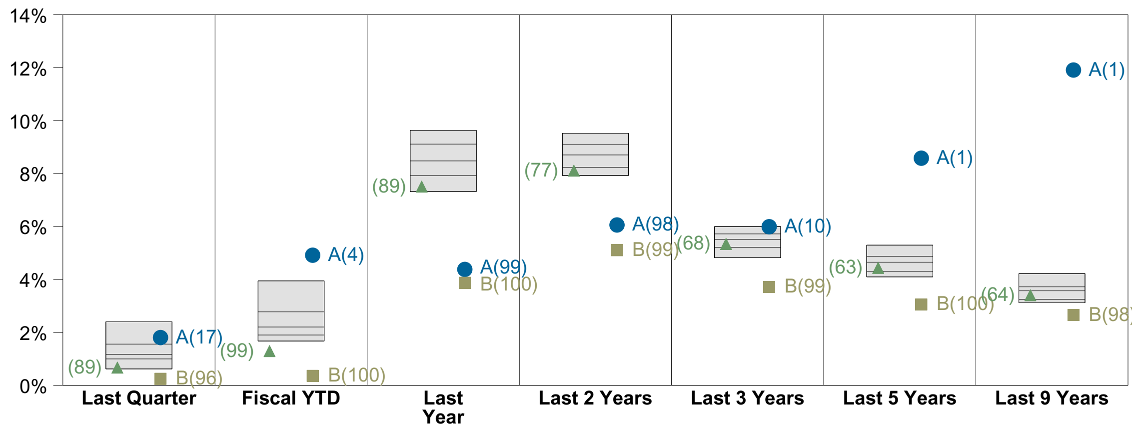
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 1.80% return for the quarter placing it in the 17 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 99 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Blmbg Aggregate by 1.13% for the quarter and underperformed the Blmbg Aggregate for the year by 3.13%.

Quarterly Asset Growth

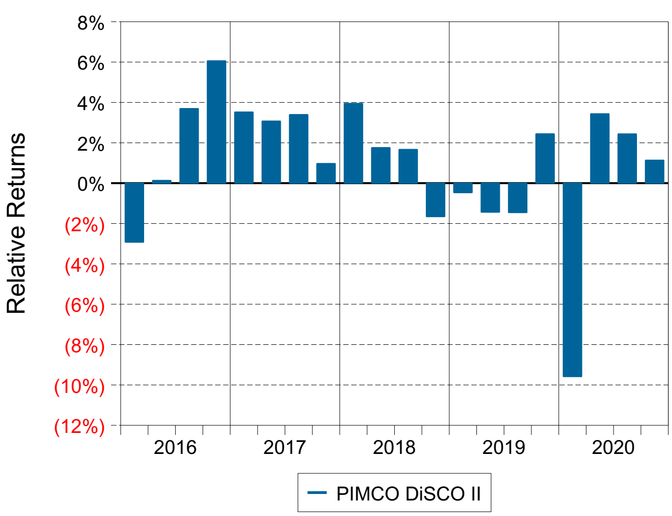
Beginning Market Value	$45,773,467
Net New Investment	$0
Investment Gains/(Losses)	$825,395
Ending Market Value	$46,598,862

Performance vs Callan Core Bond Mutual Funds (Net)

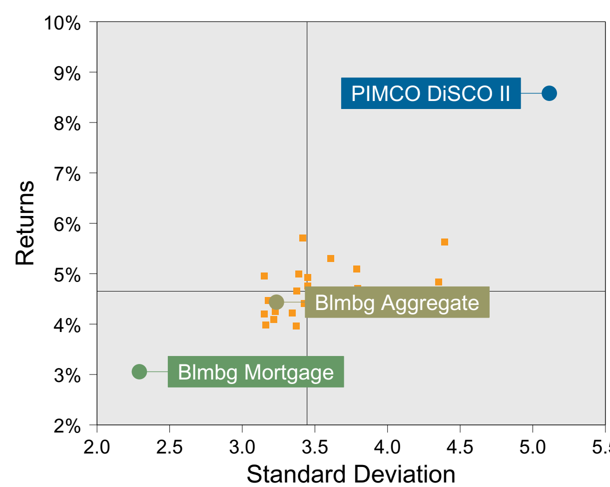


		Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 9 Years
10th Percentile		2.40	3.95	9.63	9.52	6.00	5.30	4.22
25th Percentile		1.56	2.77	9.11	9.09	5.72	4.88	3.72
Median		1.17	2.20	8.48	8.70	5.51	4.65	3.57
75th Percentile		1.00	1.90	7.92	8.23	5.22	4.31	3.25
90th Percentile		0.62	1.67	7.32	7.93	4.82	4.10	3.12
PIMCO DiSCO II	● A	1.80	4.91	4.38	6.06	5.99	8.58	11.91
Blmbg Mortgage	■ B	0.24	0.36	3.87	5.10	3.71	3.05	2.65
Blmbg Aggregate	▲	0.67	1.29	7.51	8.11	5.34	4.44	3.40

Relative Return vs Blmbg Aggregate



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



PIMCO Bravo II Fund
Period Ended December 31, 2020

Investment Philosophy

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

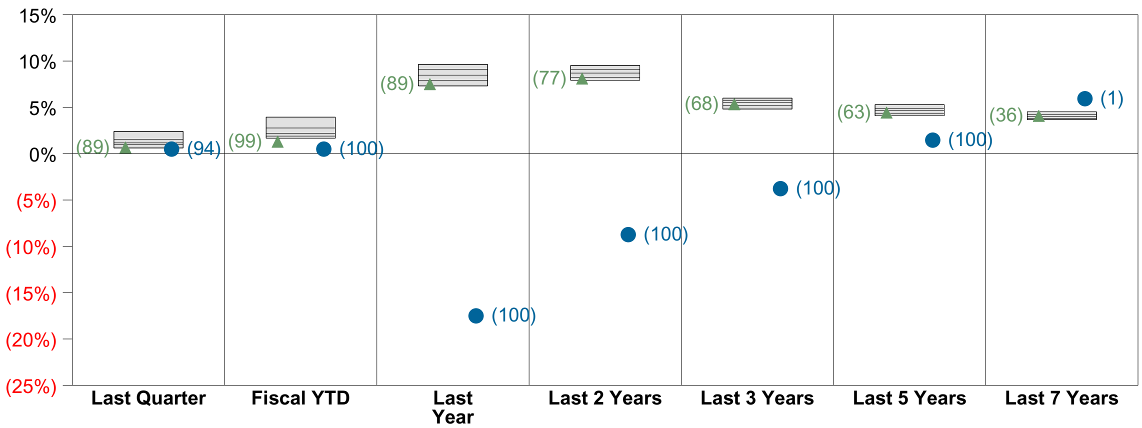
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 0.50% return for the quarter placing it in the 94 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO Bravo II Fund's portfolio underperformed the Blmbg Aggregate by 0.17% for the quarter and underperformed the Blmbg Aggregate for the year by 25.01%.

Quarterly Asset Growth

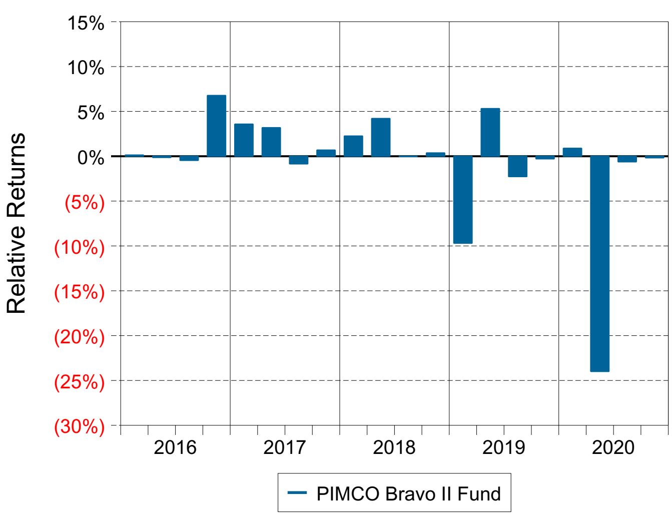
Beginning Market Value	$7,967,888
Net New Investment	$-803,152
Investment Gains/(Losses)	$39,449
Ending Market Value	$7,204,185

Performance vs Callan Core Bond Mutual Funds (Net)

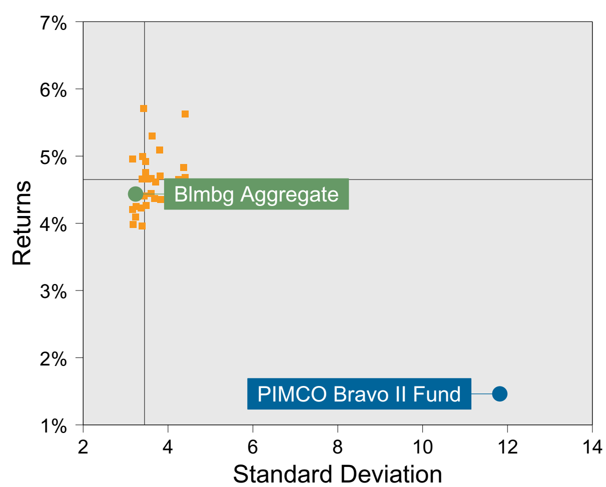


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	2.40	3.95	9.63	9.52	6.00	5.30	4.52
25th Percentile	1.56	2.77	9.11	9.09	5.72	4.88	4.23
Median	1.17	2.20	8.48	8.70	5.51	4.65	4.02
75th Percentile	1.00	1.90	7.92	8.23	5.22	4.31	3.81
90th Percentile	0.62	1.67	7.32	7.93	4.82	4.10	3.67
PIMCO Bravo II Fund ●	0.50	0.50	(17.51)	(8.74)	(3.77)	1.46	5.94
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	4.09

Relative Return vs Blmbg Aggregate



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



Prudential Core Plus
Period Ended December 31, 2020

Investment Philosophy

PGIM Fixed Income's Core Plus Strategy is an actively-managed strategy that seeks +150 bps over the Bloomberg Barclays U.S. Aggregate Bond Index or similar benchmark annualized over a market cycle (three to five years.) The Strategy seeks about half of its excess return from active sector allocation and up to one-third each from subsector/security selection and duration/yield curve/currencies, depending on market opportunities.

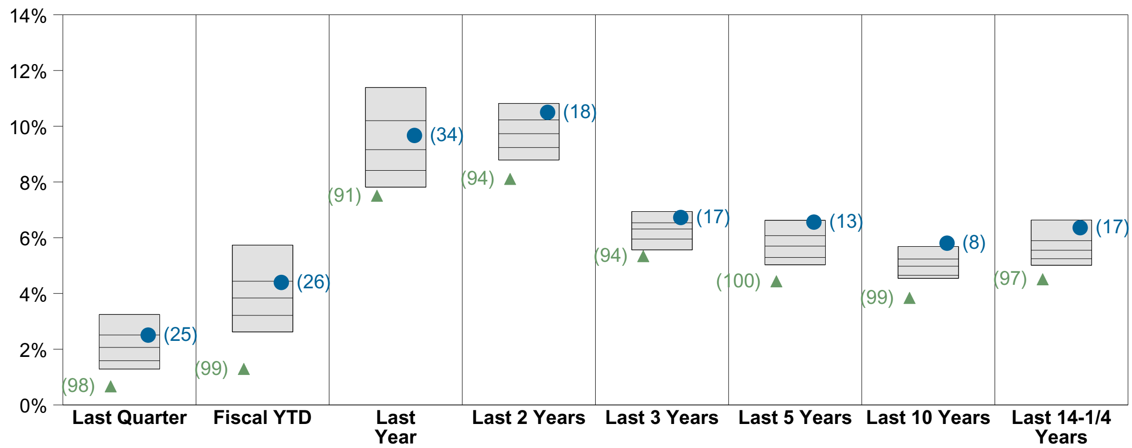
Quarterly Summary and Highlights

- Prudential Core Plus's portfolio posted a 2.51% return for the quarter placing it in the 25 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 34 percentile for the last year.
- Prudential Core Plus's portfolio outperformed the Blmbg Aggregate by 1.84% for the quarter and outperformed the Blmbg Aggregate for the year by 2.16%.

Quarterly Asset Growth

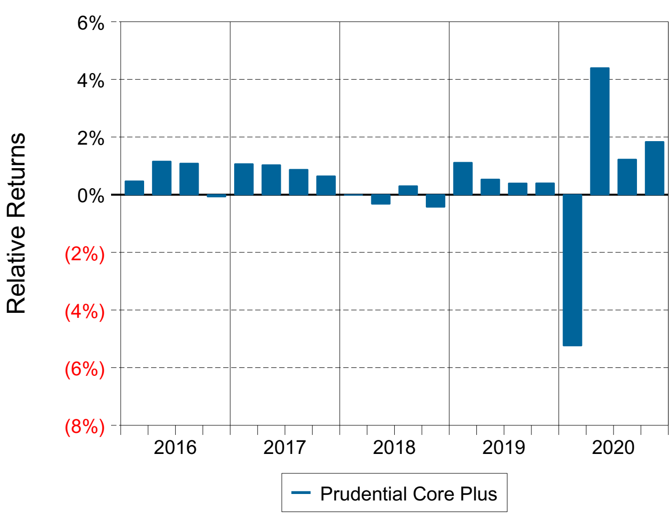
Beginning Market Value	$361,641,408
Net New Investment	$1,809,716
Investment Gains/(Losses)	$8,943,330
Ending Market Value	$372,394,455

Performance vs Callan Core Plus Fixed Income (Gross)

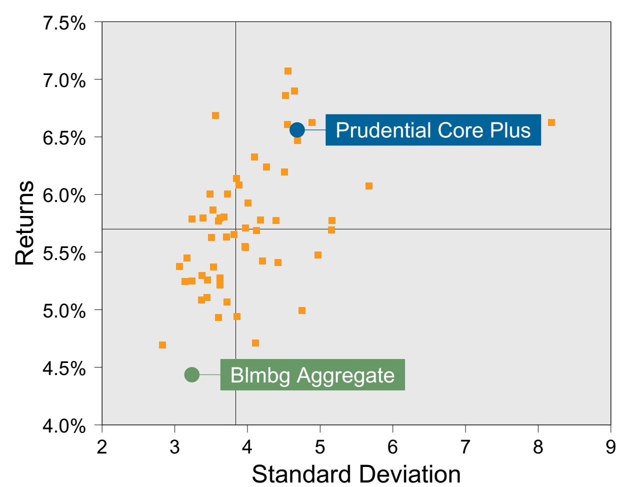


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 14-1/4 Years
10th Percentile	3.25	5.74	11.39	10.82	6.94	6.62	5.68	6.63
25th Percentile	2.51	4.44	10.20	10.23	6.54	6.08	5.24	5.89
Median	2.06	3.84	9.16	9.73	6.31	5.70	4.98	5.55
75th Percentile	1.59	3.21	8.41	9.24	5.95	5.29	4.65	5.25
90th Percentile	1.29	2.62	7.82	8.79	5.56	5.03	4.54	5.01
Prudential Core Plus ●	2.51	4.40	9.67	10.50	6.73	6.56	5.81	6.36
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	3.84	4.51

Relative Return vs Blmbg Aggregate



Callan Core Plus Fixed Income (Gross)
Annualized Five Year Risk vs Return



SSgA US Govt Cr Bd Index
Period Ended December 31, 2020

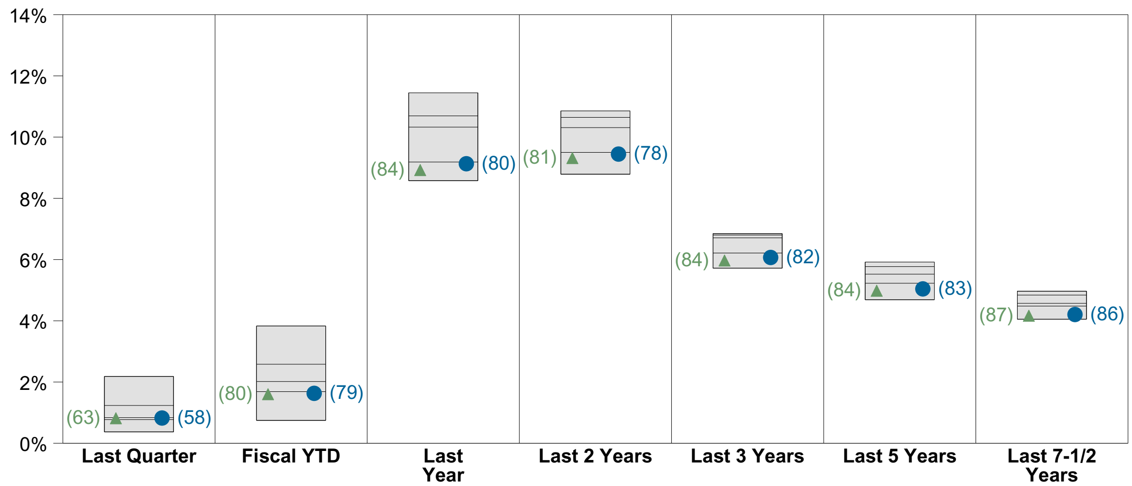
Investment Philosophy
The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Government/Credit Bond Index over the long term.

Quarterly Summary and Highlights
- SSgA US Govt Cr Bd Index's portfolio posted a 0.82% return for the quarter placing it in the 58 percentile of the Callan Government/Credit group for the quarter and in the 80 percentile for the last year.
- SSgA US Govt Cr Bd Index's portfolio outperformed the Blmbg Gov/Credit by 0.01% for the quarter and outperformed the Blmbg Gov/Credit for the year by 0.20%.

Quarterly Asset Growth

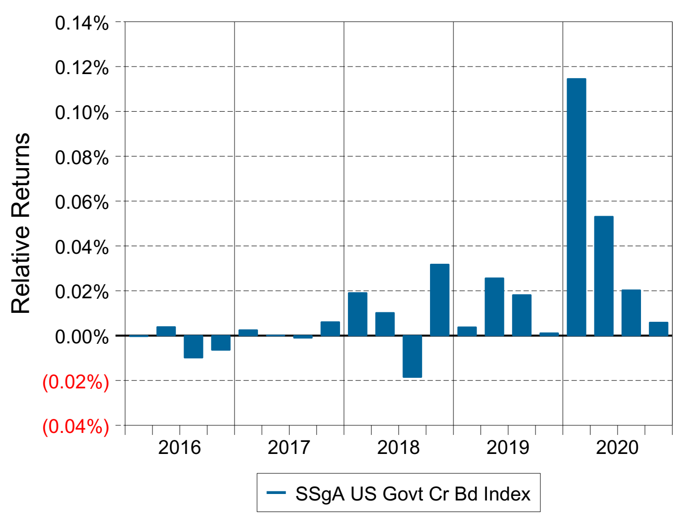
Beginning Market Value	$192,569,118
Net New Investment	$3,992,845
Investment Gains/(Losses)	$1,589,942
Ending Market Value	$198,151,905

Performance vs Callan Government/Credit (Gross)

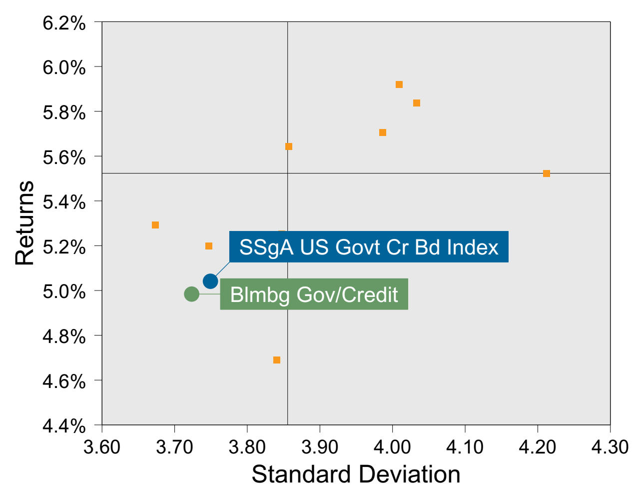


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/2 Years
10th Percentile	2.18	3.83	11.45	10.86	6.85	5.92	4.97
25th Percentile	1.23	2.58	10.69	10.64	6.80	5.77	4.84
Median	0.84	2.02	10.33	10.31	6.71	5.52	4.57
75th Percentile	0.77	1.69	9.19	9.50	6.21	5.23	4.48
90th Percentile	0.37	0.75	8.58	8.79	5.72	4.69	4.05
SSgA US Govt Cr Bd Index ●	0.82	1.63	9.13	9.45	6.07	5.04	4.21
Blmbg Gov/Credit ▲	0.82	1.60	8.93	9.32	5.97	4.98	4.17

Relative Return vs Blmbg Gov/Credit



Callan Government/Credit (Gross)
Annualized Five Year Risk vs Return



Wells Capital
Period Ended December 31, 2020

Investment Philosophy

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

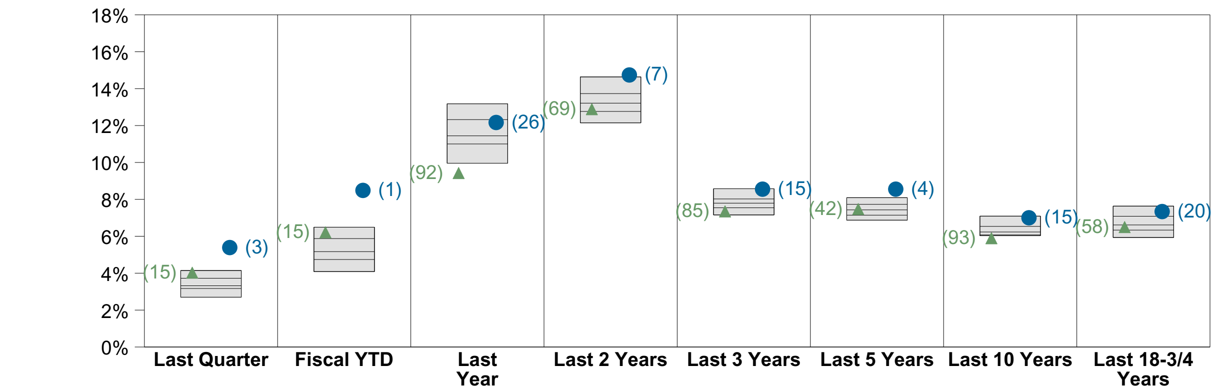
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 5.39% return for the quarter placing it in the 3 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 26 percentile for the last year.
- Wells Capital's portfolio outperformed the Blmbg Credit Baa by 1.36% for the quarter and outperformed the Blmbg Credit Baa for the year by 2.74%.

Quarterly Asset Growth

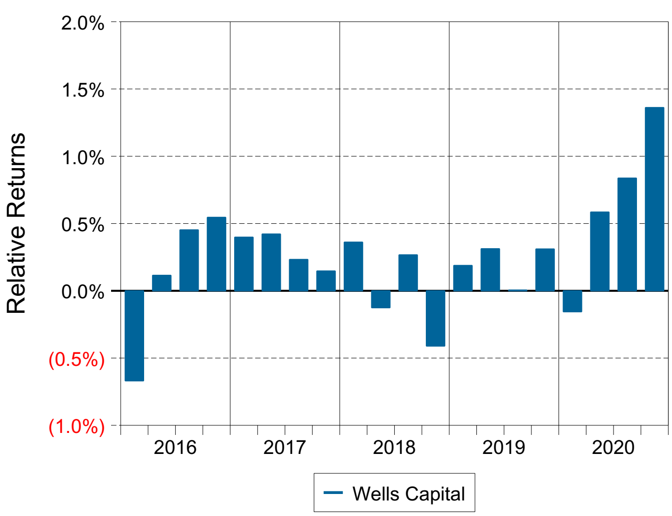
Beginning Market Value	$113,864,519
Net New Investment	$-54,912
Investment Gains/(Losses)	$6,135,155
Ending Market Value	$119,944,762

Performance vs Callan Investment Grade Credit Fixed Inc (Gross)

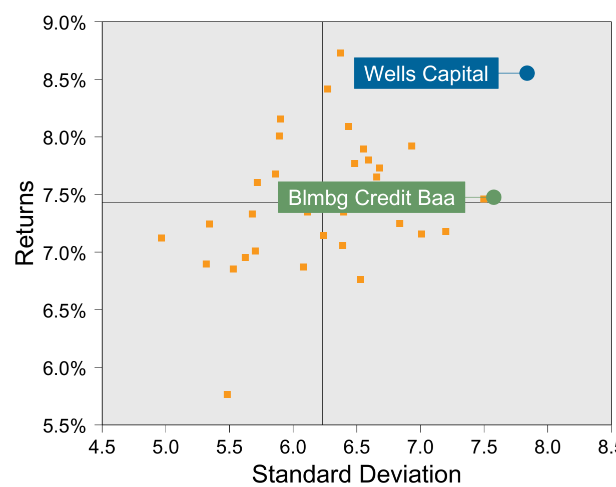


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 18-3/4 Years
10th Percentile	4.14	6.49	13.18	14.64	8.58	8.09	7.09	7.63
25th Percentile	3.73	5.88	12.32	13.73	8.02	7.73	6.54	7.09
Median	3.32	5.17	11.44	13.21	7.79	7.43	6.23	6.61
75th Percentile	3.17	4.74	11.00	12.77	7.54	7.14	6.08	6.33
90th Percentile	2.70	4.09	9.96	12.15	7.16	6.87	6.03	5.93
Wells Capital ●	5.39	8.49	12.17	14.74	8.55	8.55	7.00	7.34
Blmbg Credit Baa ▲	4.03	6.21	9.43	12.89	7.35	7.48	5.89	6.50

Relative Return vs Blmbg Credit Baa



Callan Investment Grade Credit Fixed Inc (Gross) Annualized Five Year Risk vs Return



Western Asset Management Company
Period Ended December 31, 2020

Investment Philosophy

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

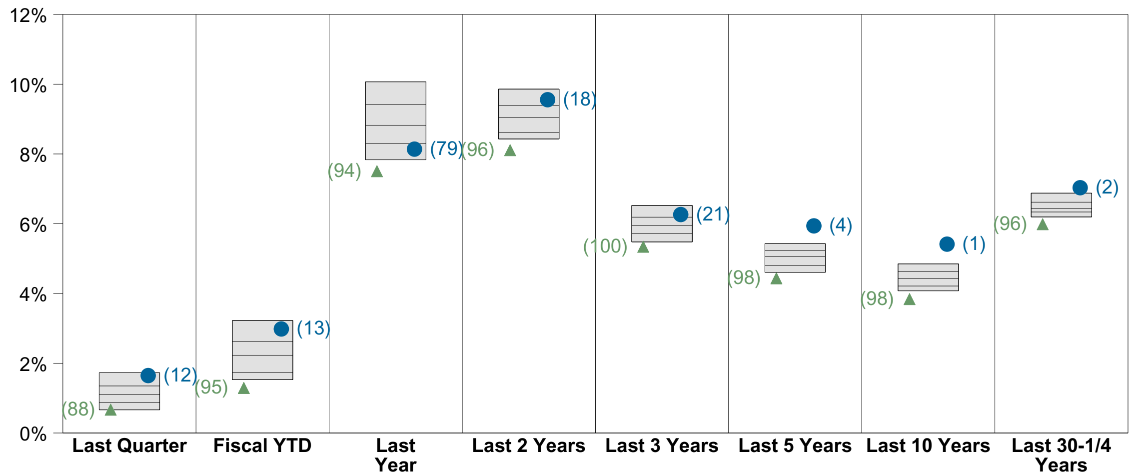
Quarterly Summary and Highlights

- Western Asset's portfolio posted a 1.65% return for the quarter placing it in the 12 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 79 percentile for the last year.
- Western Asset's portfolio outperformed the Blmbg Aggregate by 0.98% for the quarter and outperformed the Blmbg Aggregate for the year by 0.63%.

Quarterly Asset Growth

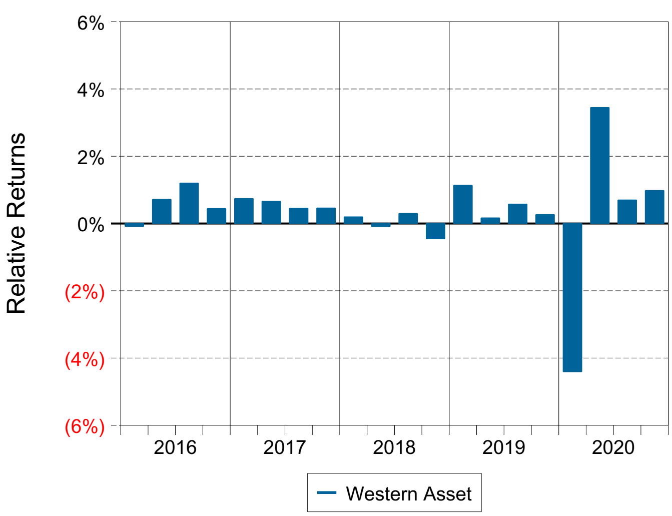
Beginning Market Value	$357,818,513
Net New Investment	$3,896,727
Investment Gains/(Losses)	$5,841,324
Ending Market Value	$367,556,564

Performance vs Callan Core Bond Fixed Income (Gross)

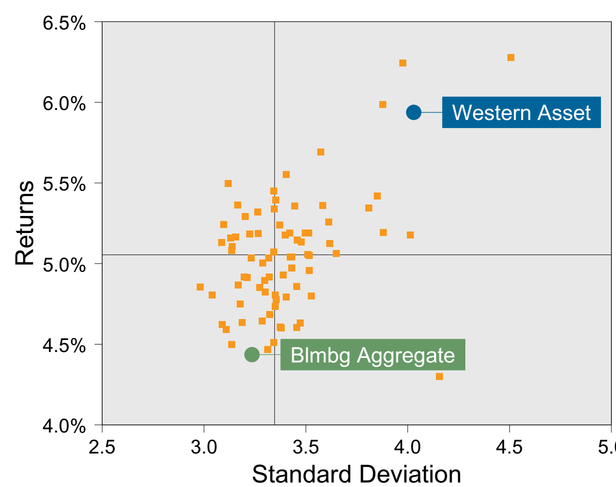


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 30-1/4 Years
10th Percentile	1.73	3.22	10.07	9.86	6.52	5.43	4.85	6.88
25th Percentile	1.35	2.63	9.41	9.39	6.19	5.23	4.63	6.62
Median	1.11	2.23	8.82	9.05	5.94	5.05	4.43	6.44
75th Percentile	0.88	1.74	8.30	8.61	5.72	4.81	4.21	6.34
90th Percentile	0.66	1.53	7.83	8.43	5.48	4.61	4.08	6.19
Western Asset ●	1.65	2.98	8.14	9.56	6.26	5.94	5.41	7.03
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	3.84	5.99

Relative Return vs Blmbg Aggregate



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



Real Estate
Period Ended December 31, 2020

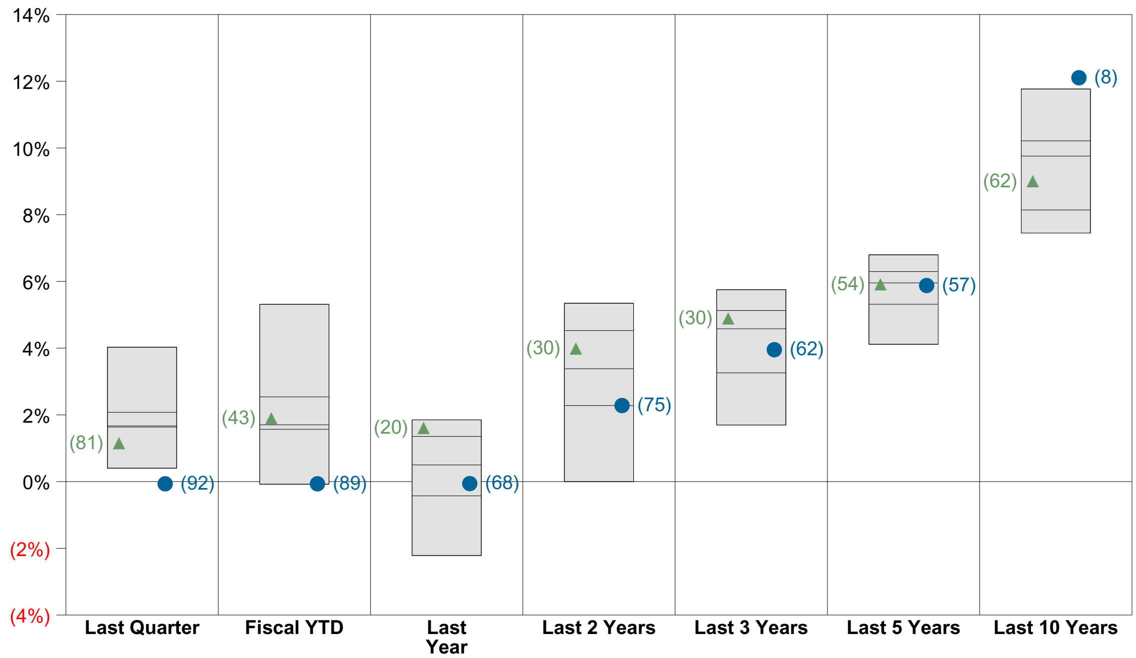
Quarterly Summary and Highlights

- Real Estate's portfolio posted a (0.07)% return for the quarter placing it in the 92 percentile of the Public Fund - Real Estate group for the quarter and in the 68 percentile for the last year.
- Real Estate's portfolio underperformed the NCREIF Total Index by 1.21% for the quarter and underperformed the NCREIF Total Index for the year by 1.66%.

Quarterly Asset Growth

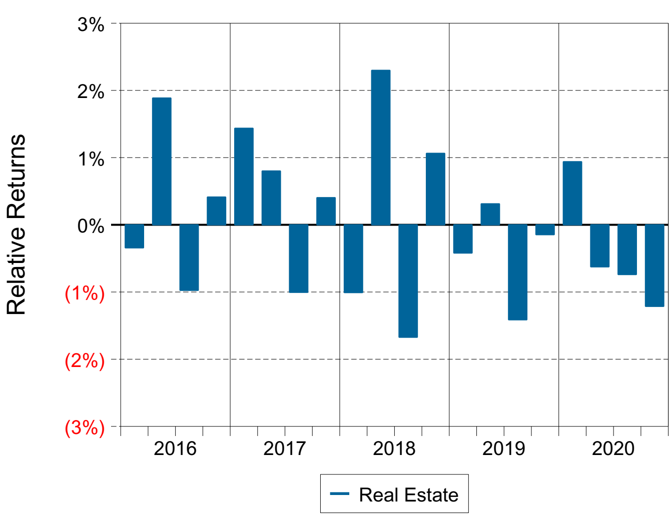
Beginning Market Value	$97,835,772
Net New Investment	$-844,247
Investment Gains/(Losses)	$-65,260
Ending Market Value	$96,926,265

Performance vs Public Fund - Real Estate (Gross)

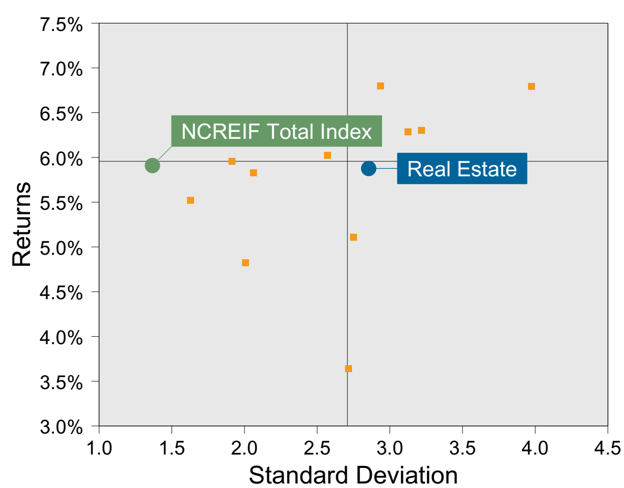


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	4.03	5.31	1.85	5.35	5.75	6.80	11.77
25th Percentile	2.08	2.54	1.35	4.53	5.13	6.29	10.21
Median	1.67	1.70	0.50	3.38	4.58	5.96	9.76
75th Percentile	1.63	1.57	(0.43)	2.28	3.26	5.32	8.14
90th Percentile	0.40	(0.08)	(2.22)	(0.00)	1.70	4.12	7.45
Real Estate ●	(0.07)	(0.07)	(0.06)	2.28	3.95	5.88	12.11
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	9.00

Relative Return vs NCREIF Total Index



Public Fund - Real Estate (Gross)
Annualized Five Year Risk vs Return



Invesco Core Real Estate
Period Ended December 31, 2020

Investment Philosophy

IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

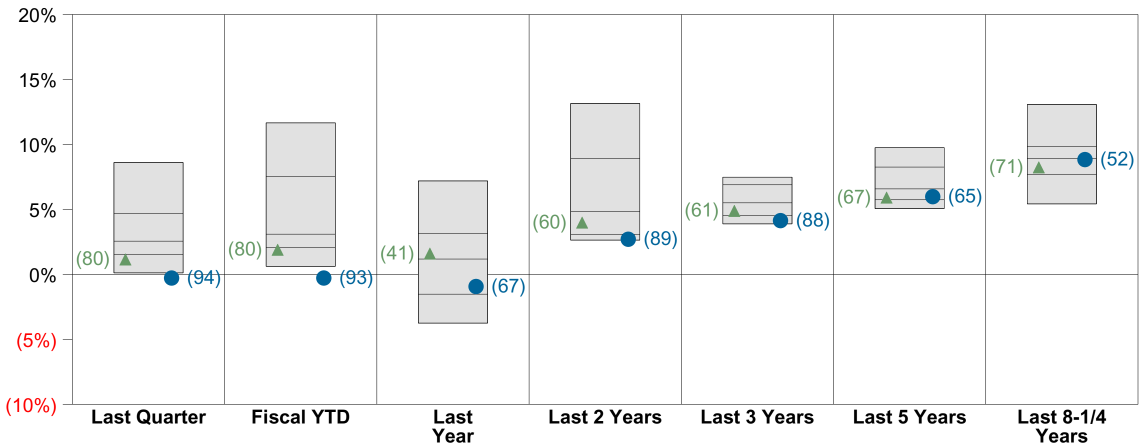
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a (0.28)% return for the quarter placing it in the 94 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 67 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF Total Index by 1.43% for the quarter and underperformed the NCREIF Total Index for the year by 2.53%.

Quarterly Asset Growth

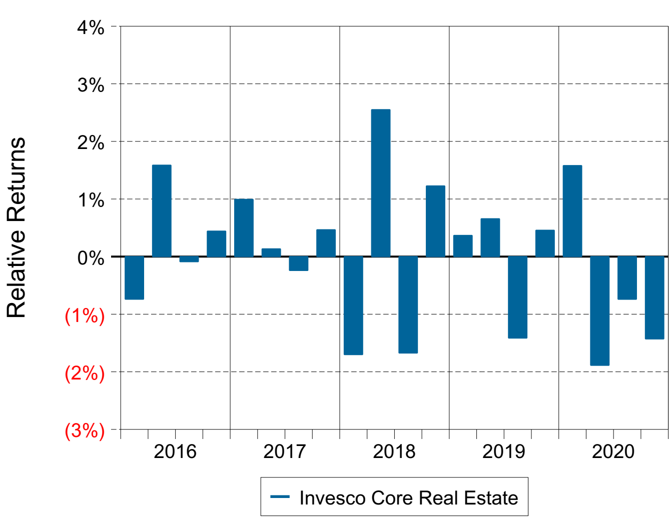
Beginning Market Value	$51,056,933
Net New Investment	$-412,256
Investment Gains/(Losses)	$-143,163
Ending Market Value	$50,501,514

Performance vs Callan Total Domestic Real Estate DB (Gross)

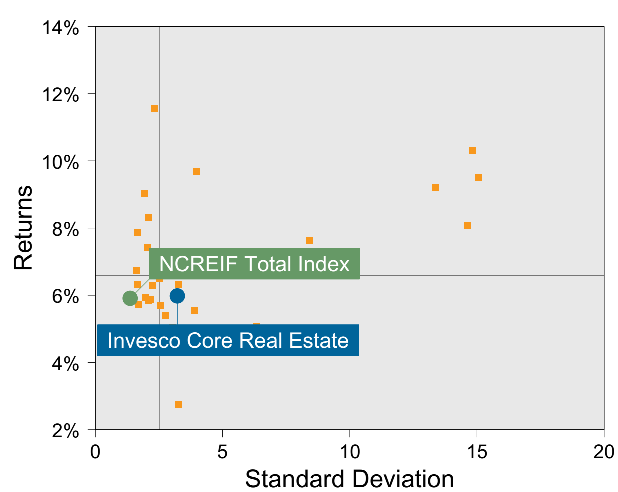


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 8-1/4 Years
10th Percentile	8.61	11.66	7.19	13.15	7.48	9.75	13.08
25th Percentile	4.70	7.52	3.13	8.93	6.90	8.26	9.84
Median	2.56	3.09	1.18	4.85	5.51	6.58	8.93
75th Percentile	1.55	2.07	(1.52)	3.09	4.52	5.74	7.71
90th Percentile	0.11	0.62	(3.75)	2.64	3.89	5.07	5.43
Invesco Core Real Estate ●	(0.28)	(0.28)	(0.93)	2.70	4.14	5.98	8.84
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	8.24

Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return



JP Morgan Real Estate
Period Ended December 31, 2020

Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

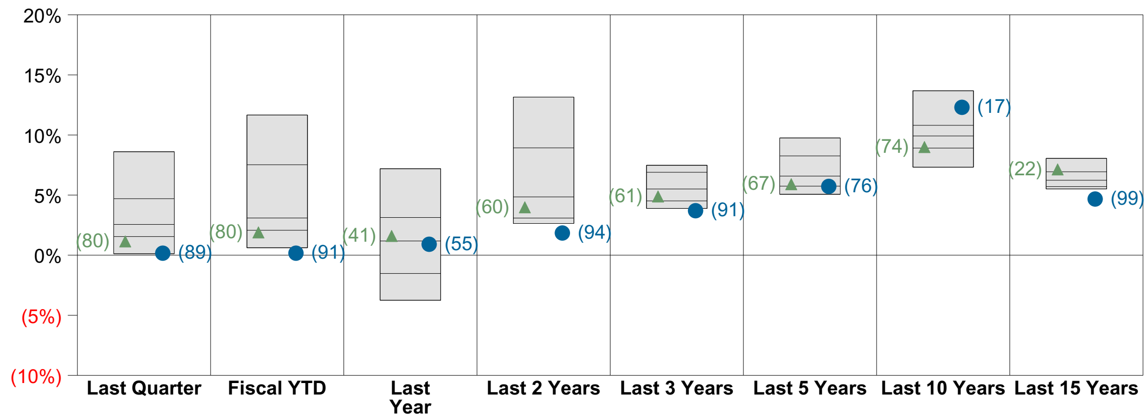
Quarterly Summary and Highlights

- JP Morgan Real Estate's portfolio posted a 0.17% return for the quarter placing it in the 89 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 55 percentile for the last year.
- JP Morgan Real Estate's portfolio underperformed the NCREIF Total Index by 0.98% for the quarter and underperformed the NCREIF Total Index for the year by 0.69%.

Quarterly Asset Growth

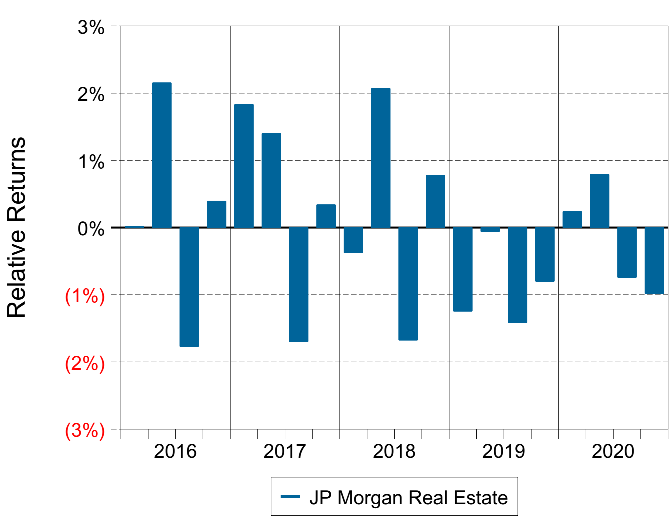
Beginning Market Value	$46,778,838
Net New Investment	$-431,991
Investment Gains/(Losses)	$77,903
Ending Market Value	$46,424,751

Performance vs Callan Total Domestic Real Estate DB (Gross)

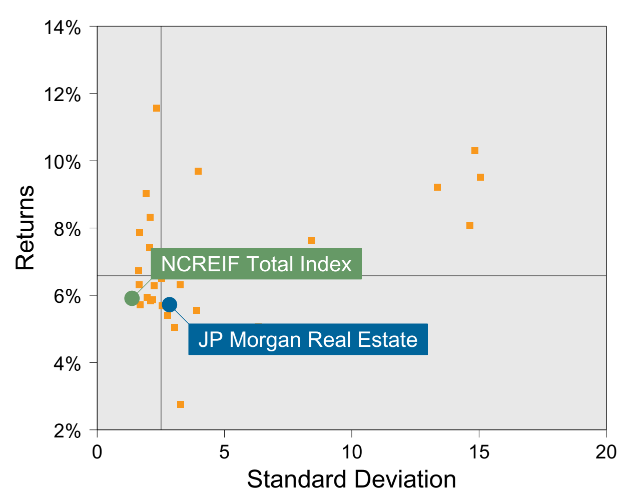


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
10th Percentile	8.61	11.66	7.19	13.15	7.48	9.75	13.68	8.05
25th Percentile	4.70	7.52	3.13	8.93	6.90	8.26	10.80	6.94
Median	2.56	3.09	1.18	4.85	5.51	6.58	9.92	6.23
75th Percentile	1.55	2.07	(1.52)	3.09	4.52	5.74	8.91	5.71
90th Percentile	0.11	0.62	(3.75)	2.64	3.89	5.07	7.32	5.51
JP Morgan Real Estate ●	0.17	0.17	0.91	1.84	3.70	5.72	12.30	4.67
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	9.00	7.14

Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return



Western Asset TIPS
Period Ended December 31, 2020

Investment Philosophy

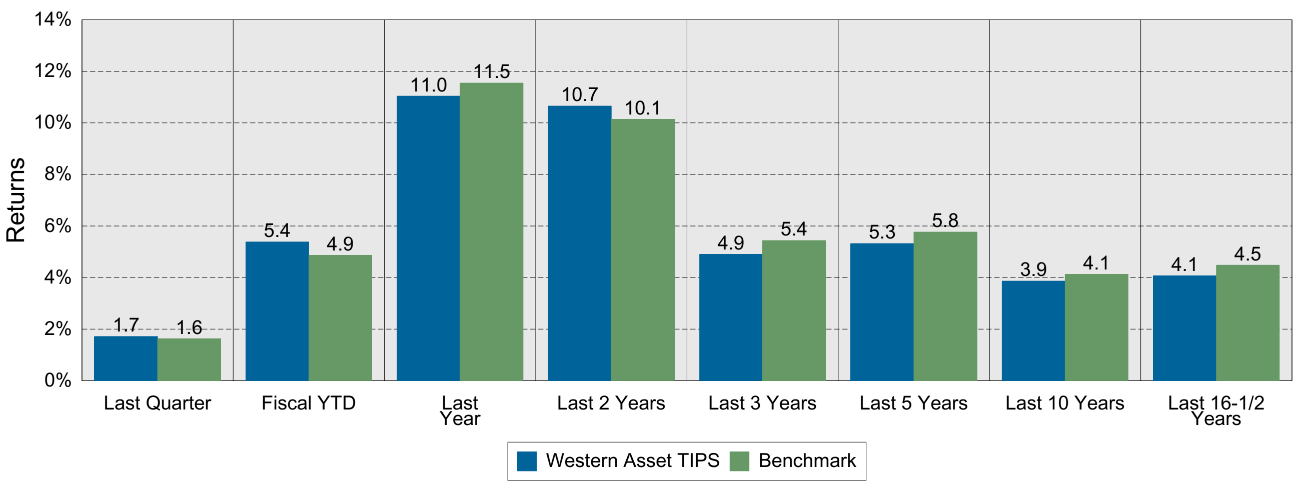
The Western Asset US TIPS Full Discretion strategy is an inflation-protected strategy that aims to maximize total return and add value through duration and curve positioning, sector allocation, and security selection, while approximating benchmark risk. The strategy invests in a diversified portfolio using higher-yielding inflation-protected instruments with a bias toward Treasury Inflation-Protected Securities (TIPS). Opportunistic investments include high-yield, emerging markets, non-dollar securities, commodities and bank loans that may also be employed using derivatives. **Benchmark: Bloomberg US TIPS through 12/31/2009; Bloomberg Global Inflation-Linked through 10/31/2018; Bloomberg US Govt Inflation Linked Bond Index thereafter.**

Quarterly Summary and Highlights

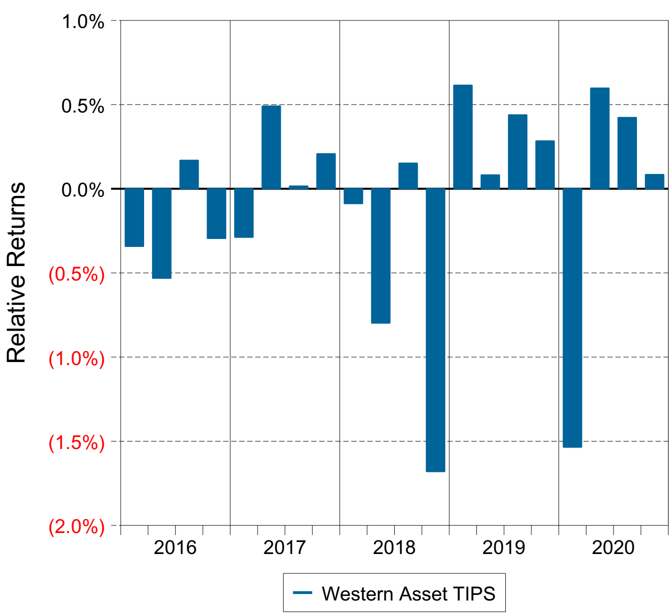
- Western Asset TIPS's portfolio outperformed the Benchmark by 0.08% for the quarter and underperformed the Benchmark for the year by 0.51%.

Quarterly Asset Growth

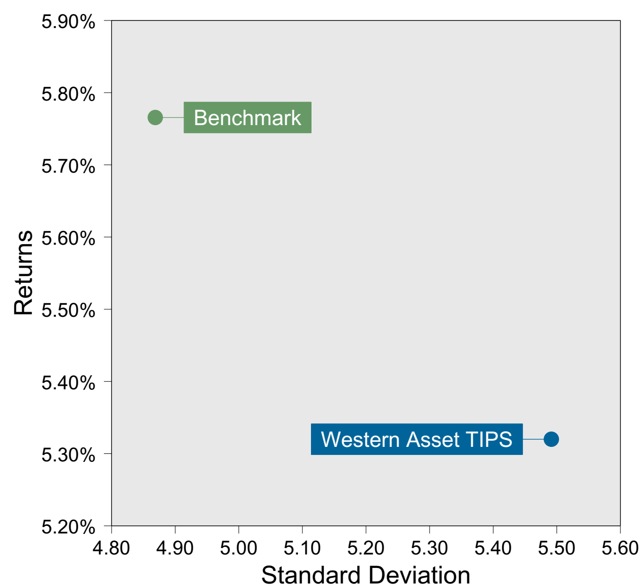
Beginning Market Value	$162,200,300
Net New Investment	$-45,369
Investment Gains/(Losses)	$2,782,670
Ending Market Value	$164,937,602



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Eastern Timber Opportunities
Period Ended December 31, 2020

Investment Philosophy

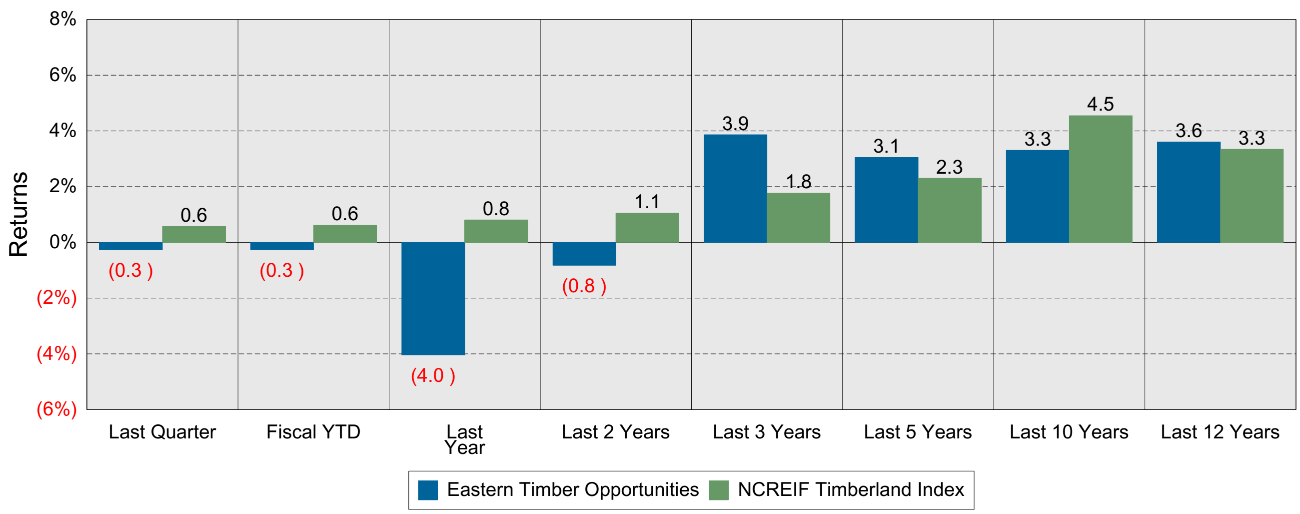
The investment objective of the Eastern Timberland Opportunities fund is to provide competitive timberland investment returns from Eastern US timberland investments by pursuing management strategies to increase timber production and land values through the investment term. TIR will maximize timber values within the portfolio with the application of intensive forest management techniques to accelerate the growth in timber volume and movement into higher value product categories. Additional value will be captured by realizing higher and better use opportunities for select timberland properties throughout the portfolio.

Quarterly Summary and Highlights

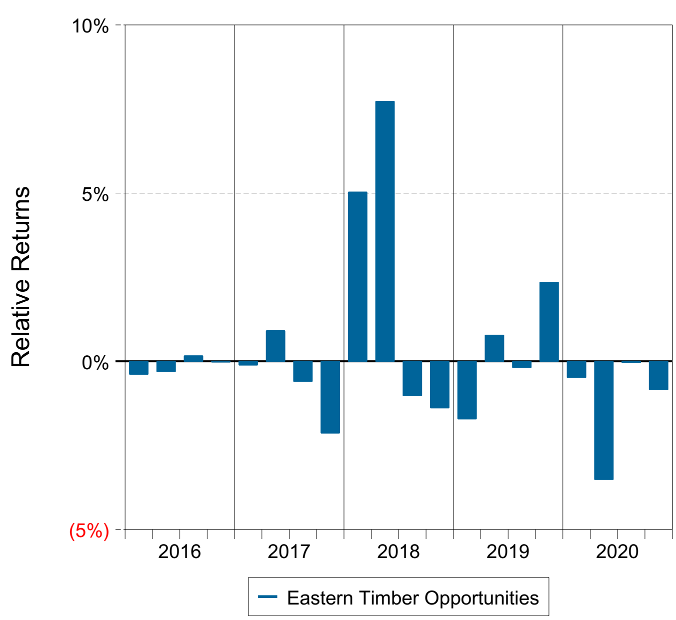
- Eastern Timber Opportunities's portfolio underperformed the NCREIF Timberland Index by 0.84% for the quarter and underperformed the NCREIF Timberland Index for the year by 4.85%.

Quarterly Asset Growth

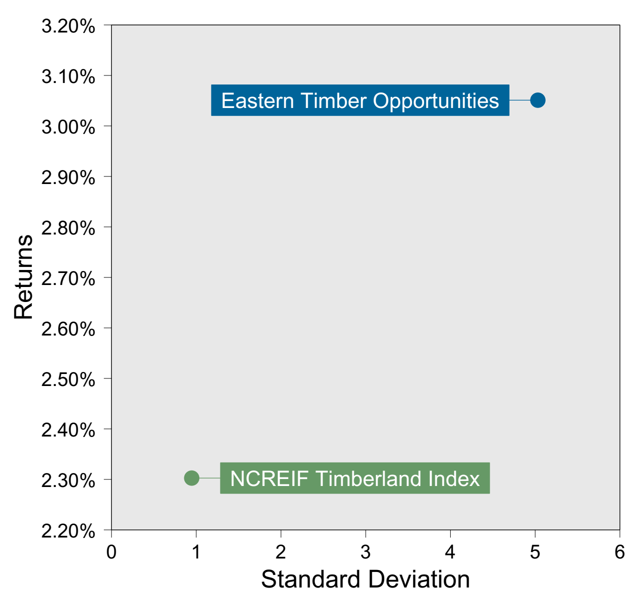
Beginning Market Value	$53,071,696
Net New Investment	$-1,039,862
Investment Gains/(Losses)	$-139,435
Ending Market Value	$51,892,399



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



JP Morgan Infrastructure
Period Ended December 31, 2020

Investment Philosophy

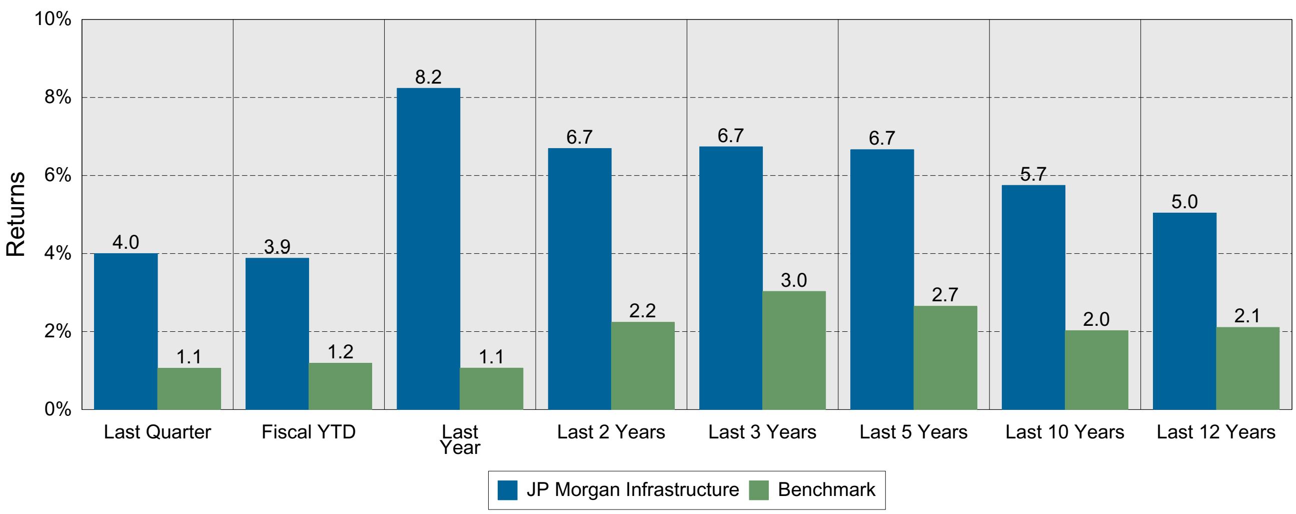
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports. **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

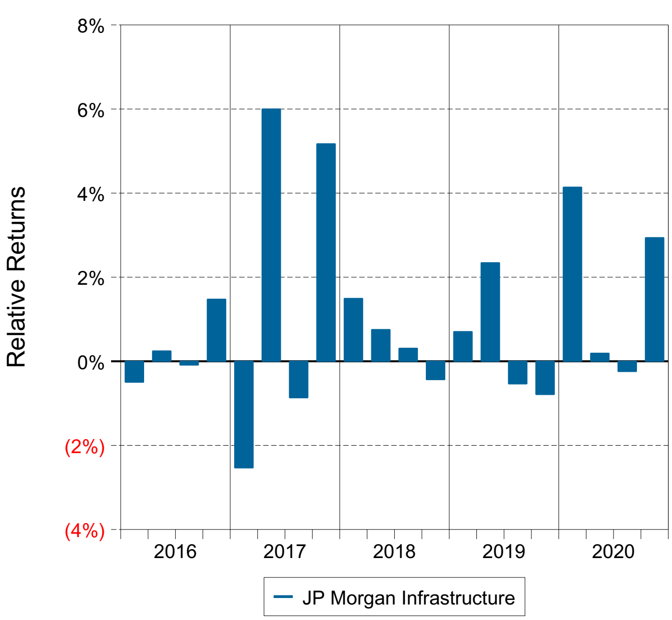
- JP Morgan Infrastructure's portfolio outperformed the Benchmark by 2.94% for the quarter and outperformed the Benchmark for the year by 7.17%.

Quarterly Asset Growth

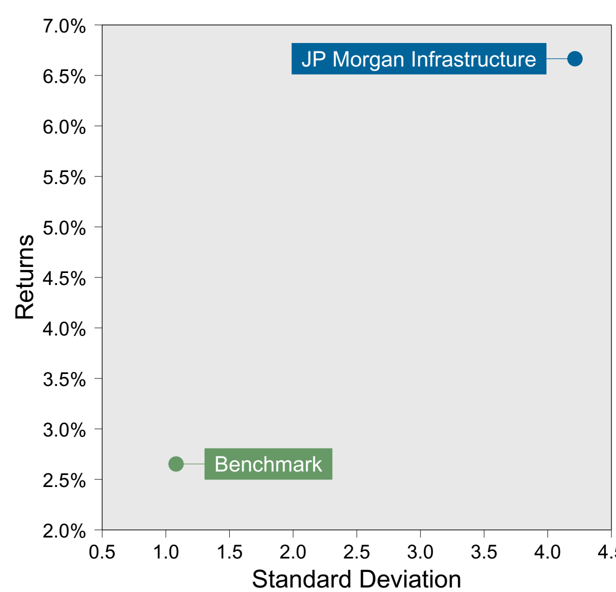
Beginning Market Value	$40,130,482
Net New Investment	$-750,738
Investment Gains/(Losses)	$1,604,954
Ending Market Value	$40,984,697



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure
Period Ended December 31, 2020

Investment Philosophy

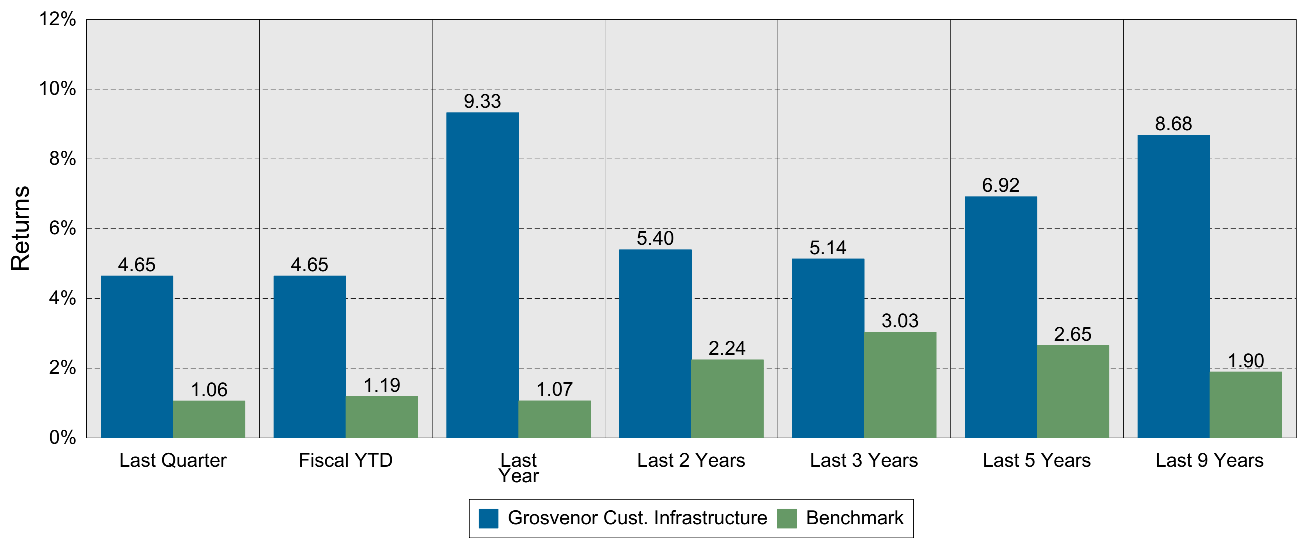
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

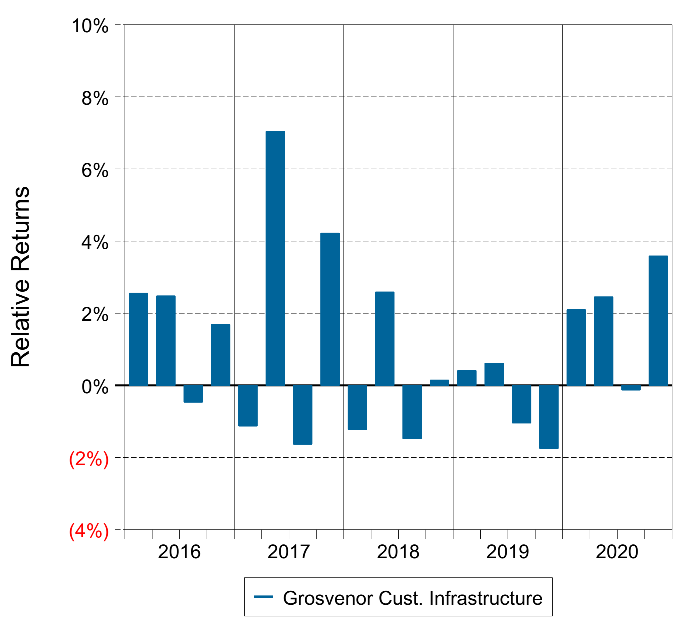
- Grosvenor Cust. Infrastructure's portfolio outperformed the Benchmark by 3.58% for the quarter and outperformed the Benchmark for the year by 8.26%.

Quarterly Asset Growth

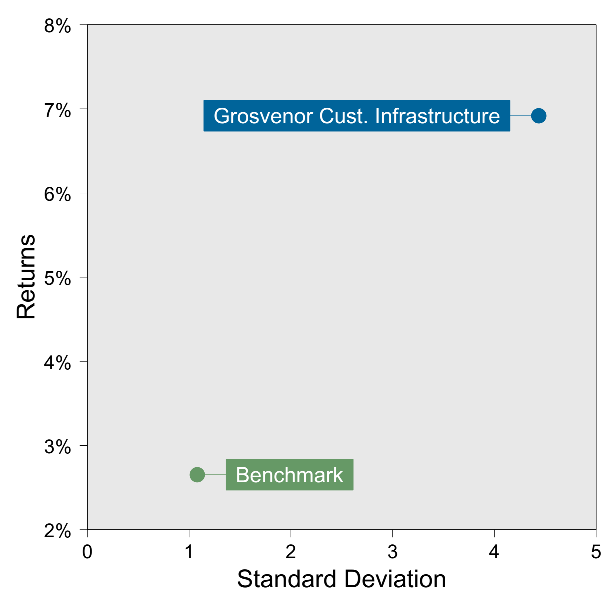
Beginning Market Value	$10,279,534
Net New Investment	$-2,714,160
Investment Gains/(Losses)	$459,499
Ending Market Value	$8,024,873



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Short Term Fixed Income
Period Ended December 31, 2020

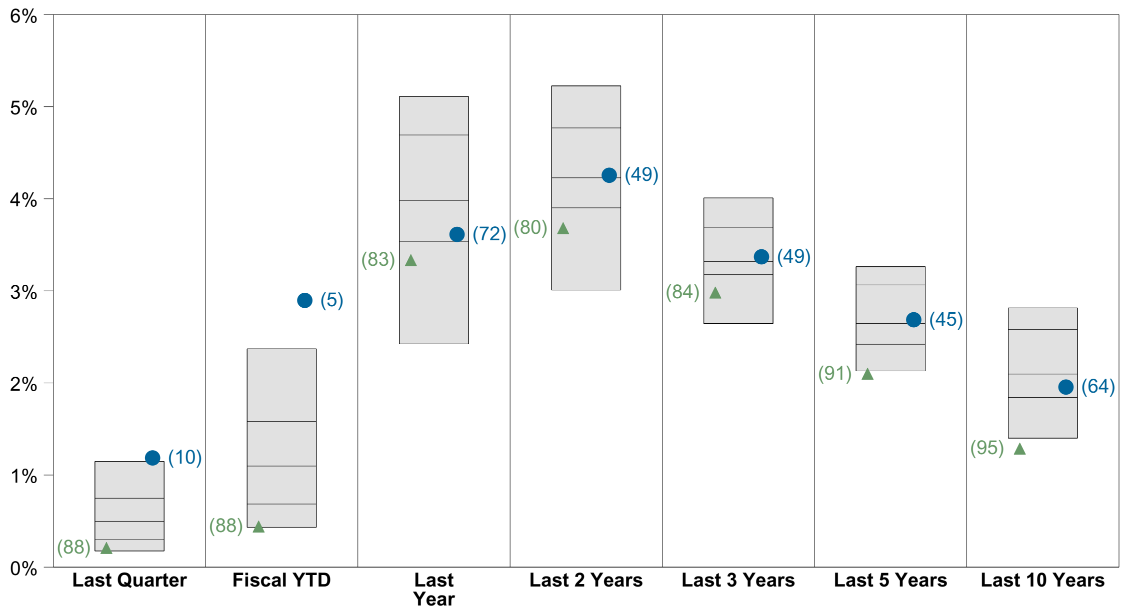
Quarterly Summary and Highlights

- Short Term Fixed Income's portfolio posted a 1.19% return for the quarter placing it in the 10 percentile of the Callan Short Term Fixed Income group for the quarter and in the 72 percentile for the last year.
- Short Term Fixed Income's portfolio outperformed the Short Term Fixed Target by 0.98% for the quarter and outperformed the Short Term Fixed Target for the year by 0.28%.

Quarterly Asset Growth

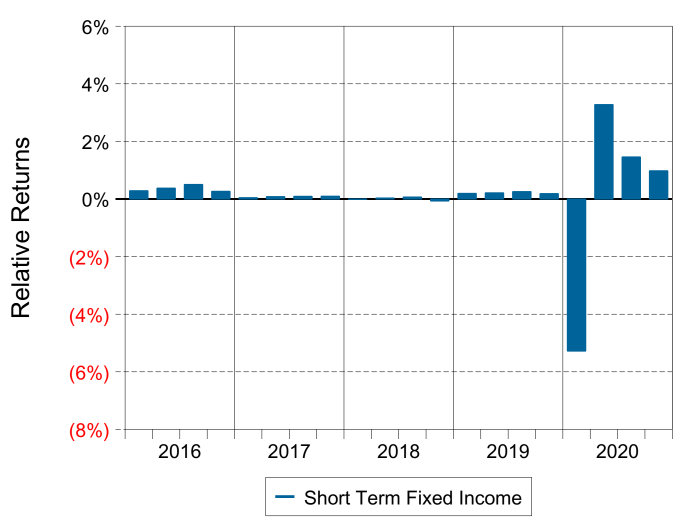
Beginning Market Value	$761,461,611
Net New Investment	$7,782,478
Investment Gains/(Losses)	$9,121,095
Ending Market Value	$778,365,183

Performance vs Callan Short Term Fixed Income (Gross)

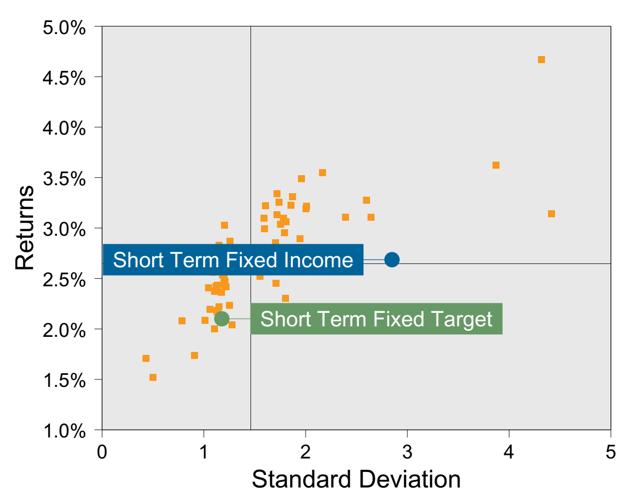


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	1.15	2.37	5.11	5.23	4.01	3.26	2.81
25th Percentile	0.75	1.58	4.69	4.77	3.69	3.06	2.58
Median	0.50	1.10	3.98	4.23	3.32	2.65	2.10
75th Percentile	0.30	0.69	3.54	3.90	3.18	2.42	1.84
90th Percentile	0.18	0.43	2.42	3.01	2.65	2.13	1.40
Short Term Fixed Income ●	1.19	2.90	3.61	4.26	3.37	2.69	1.96
Short Term Fixed Target ▲	0.21	0.44	3.33	3.68	2.98	2.10	1.29

Relative Return vs Short Term Fixed Target



Callan Short Term Fixed Income (Gross)
Annualized Five Year Risk vs Return



Barings Active Short Duration
Period Ended December 31, 2020

Investment Philosophy

Babson's Active Short Duration team employs a total return management style, which dynamically adjusts duration in response to actual yield curve conditions. The approach seeks to take advantage of a variety of relative value opportunities, predominantly in the investment grade universe, which should provide steady income and potential capital appreciation. Value is also added through security selection. The end result is a high quality/short duration portfolio that has historically captured most of the returns of moderate duration bonds.

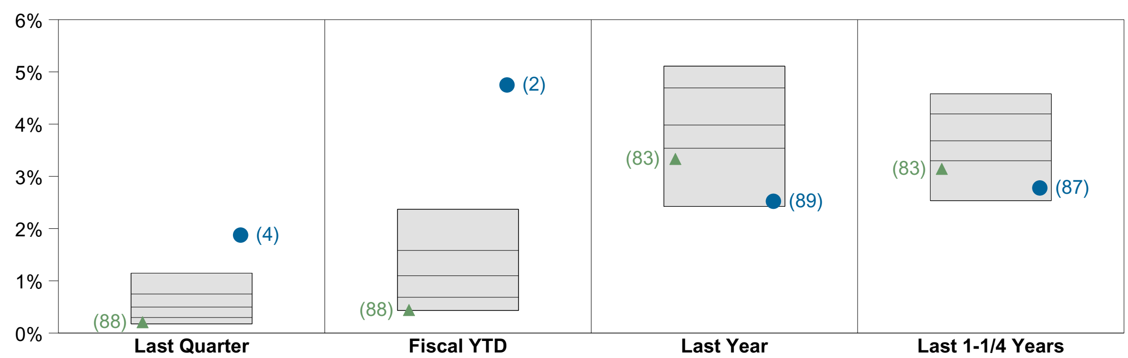
Quarterly Summary and Highlights

- Barings Active Short Duration's portfolio posted a 1.88% return for the quarter placing it in the 4 percentile of the Callan Short Term Fixed Income group for the quarter and in the 89 percentile for the last year.
- Barings Active Short Duration's portfolio outperformed the Blmbg Gov/Cred 1-3 Yr by 1.67% for the quarter and underperformed the Blmbg Gov/Cred 1-3 Yr for the year by 0.81%.

Quarterly Asset Growth

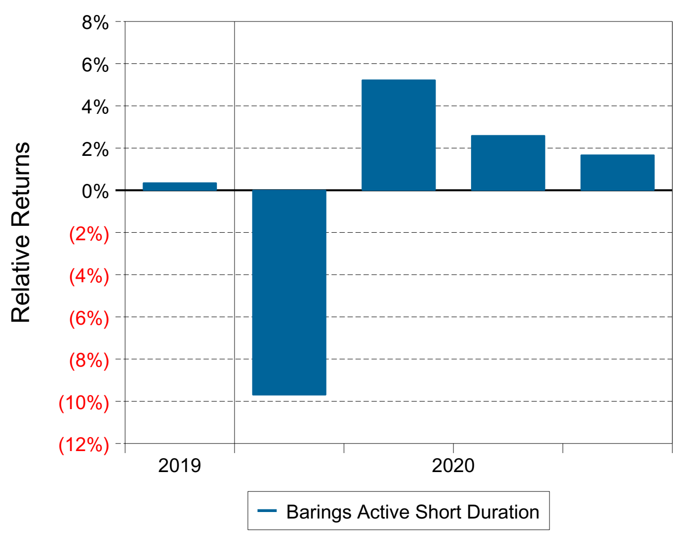
Beginning Market Value	$376,190,306
Net New Investment	$4,080,900
Investment Gains/(Losses)	$7,130,827
Ending Market Value	$387,402,033

Performance vs Callan Short Term Fixed Income (Gross)

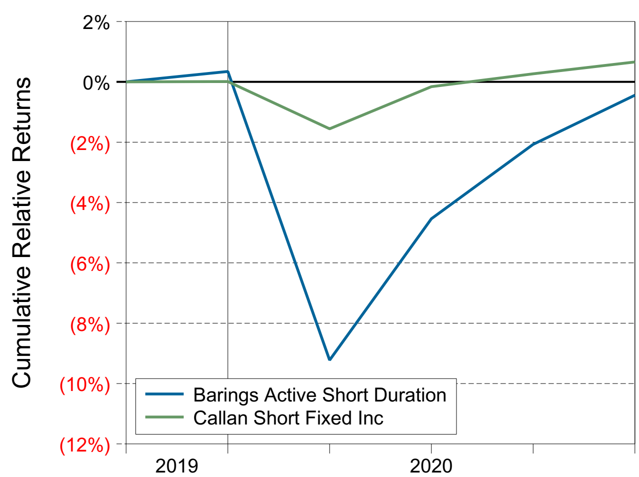


	Last Quarter	Fiscal YTD	Last Year	Last 1-1/4 Years
10th Percentile	1.15	2.37	5.11	4.58
25th Percentile	0.75	1.58	4.69	4.20
Median	0.50	1.10	3.98	3.68
75th Percentile	0.30	0.69	3.54	3.30
90th Percentile	0.18	0.43	2.42	2.53
Barings Active Short Duration ●	1.88	4.75	2.52	2.78
Blmbg Gov/Cred 1-3 Yr ▲	0.21	0.44	3.33	3.14

Relative Return vs Blmbg Gov/Cred 1-3 Yr



Cumulative Returns vs Blmbg Gov/Cred 1-3 Yr



JP Morgan Short Term Bonds
Period Ended December 31, 2020

Investment Philosophy

The investment objective of this account is to outperform the Barclays Capital 1-3 year Government/Credit Index while maintaining total return risk similar to that of the benchmark as measured over a market cycle. The weighted average effective duration of the portfolio will typically remain within +/- 30% of the benchmark.

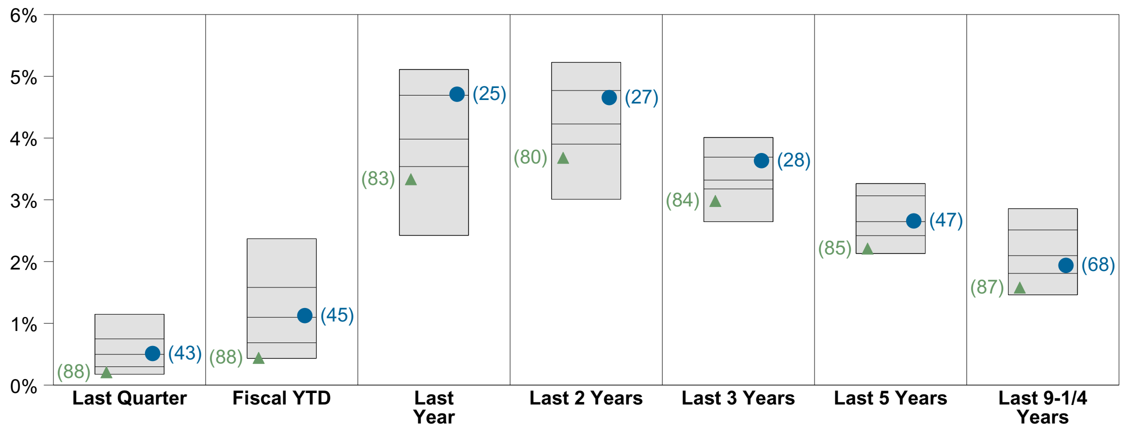
Quarterly Summary and Highlights

- JP Morgan Short Term Bonds's portfolio posted a 0.51% return for the quarter placing it in the 43 percentile of the Callan Short Term Fixed Income group for the quarter and in the 25 percentile for the last year.
- JP Morgan Short Term Bonds's portfolio outperformed the Blmbg Gov/Cred 1-3 Yr by 0.30% for the quarter and outperformed the Blmbg Gov/Cred 1-3 Yr for the year by 1.38%.

Quarterly Asset Growth

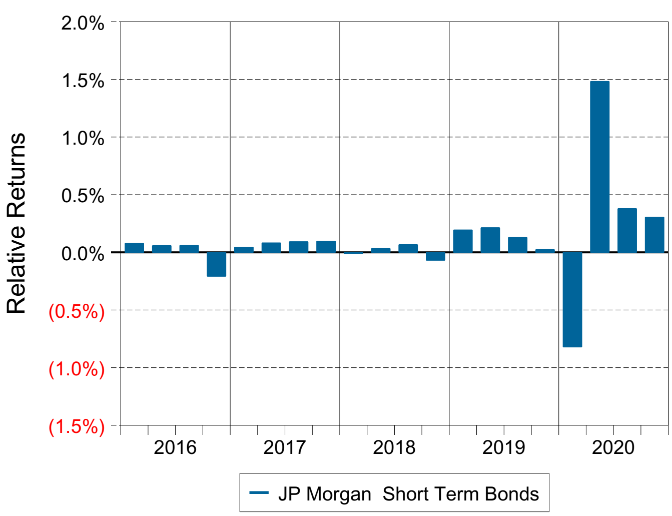
Beginning Market Value	$385,271,305
Net New Investment	$3,701,577
Investment Gains/(Losses)	$1,990,268
Ending Market Value	$390,963,150

Performance vs Callan Short Term Fixed Income (Gross)

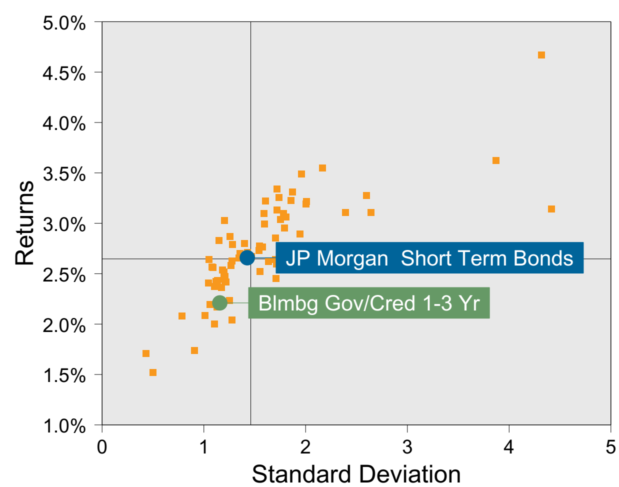


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 9-1/4 Years
10th Percentile	1.15	2.37	5.11	5.23	4.01	3.26	2.86
25th Percentile	0.75	1.58	4.69	4.77	3.69	3.06	2.51
Median	0.50	1.10	3.98	4.23	3.32	2.65	2.10
75th Percentile	0.30	0.69	3.54	3.90	3.18	2.42	1.81
90th Percentile	0.18	0.43	2.42	3.01	2.65	2.13	1.46
JP Morgan Short Term Bonds ●	0.51	1.13	4.71	4.66	3.63	2.66	1.94
Blmbg Gov/Cred 1-3 Yr ▲	0.21	0.44	3.33	3.68	2.98	2.21	1.58

Relative Return vs Blmbg Gov/Cred 1-3 Yr



Callan Short Term Fixed Income (Gross)
Annualized Five Year Risk vs Return



Callan Institute

Education

4th Quarter 2020

Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit www.callan.com/research-library to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

Under the Hood of Alternative Beta: Hedge Fund Monitor, 3rd Quarter 2020 | In this quarter's *Hedge Fund Monitor,* Jim McKee explains and analyzes the newly introduced set of alternative risk premia (ARP) indices from Bloomberg and Goldman Sachs Asset Management. This index suite can help institutional investors evaluate the performance of their strategies that use ARP solutions.

A Primer on Green Building Certifications | This essay by real assets consultant Aaron Quach examines "green building certifications," which seek to establish standards for sustainability and are used to assess the performance of a building or other commercial real estate project. Real estate investment managers can reduce their carbon footprint by acquiring buildings that are green-certified, obtaining certifications for existing properties, or developing new properties that will be green-certified.

Research Cafe: Private Equity | In this coffee break webinar session, private equity experts Pete Keliuotis and Ashley DeLuce used the results of our exclusive *Private Equity Fees and Terms Study* to provide actionable insights for institutional investors to help them negotiate with private equity managers.

Blog Highlights

Will Boring Still Be Beautiful? | A simple, "boring" glidepath beat a diversified one over the last 10 years. Will that continue?

The Kids Are Alright | Private equity is doing quite well given the disruptions caused by the COVID-19 pandemic.

DOL Issues Final Rule on Selecting Plan Investments | The Department of Labor (DOL) issued its final rule providing guidance to plan sponsors on the financial factors to consider when evaluating plan investments, a follow-up to its proposed environmental, social, and governance (ESG) rule released four months ago. In the final rule, the DOL modified the ESG rule, most notably removing references to ESG and instead focusing on pecuniary versus non-pecuniary factors.

The Private Equity Playbook: Playing Offense | Investors should maintain strong oversight of the in-place private equity program, particularly after periods of disruption.

Macroeconomic Alphabet Soup: V, W, L, U, or K? | While certain sectors of the economy have rebounded more quickly than expected, the trajectory of the recovery is still unclear.

Quarterly Periodicals

Private Equity Trends, 3Q20 | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q20 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 3Q20 | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

Capital Markets Review, 3Q20 | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

Hedge Fund Quarterly, 3Q20 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 3Q20 | In this quarter's edition, Munir Iman provides analysis of the performance of real estate and other real assets in 3Q20.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: callan.com/research-library

Please mark your calendar and look forward to upcoming invitations:

March Workshop—Virtual
A Fresh Look at Fixed Income—Generating Yield in a Zero Interest Rate Environment
March 25, 2021, at 9:00 am

2021 National Conference
Summer 2021

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

Education: By the Numbers

50+	Unique pieces of research the Institute generates each year
525	Attendees (on average) of the Institute's annual National Conference
3,700	Total attendees of the "Callan College" since 1994

Education

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

Introduction to Investments—Virtual
April 13-15, 2021

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It is held over three days with virtual modules of 2.5-3 hours. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $950 per person and includes instruction and digital materials.

Additional information including registration can be found at: callan.com/events/april-intro-college-virtual/

Introduction to Investments—In Person
July 14-15, 2021, in San Francisco

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including dates and registration can be found at: callan.com/events/july-intro-college/

"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
American Century Investments
Amundi Pioneer Asset Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC

Manager Name
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investments
Columbus Circle Investors

Manager Name
Credit Suisse Asset Management
D.E. Shaw Investment Management, L.L.C.
DePrince, Race & Zollo, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Hermes, Inc.
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Hawaiian Bank Wealth Management Division
First Sentier Investors (formerly First State Investments)
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
GCM Grosvenor
Glenmeade Investment Management, LP
GlobeFlex Capital, L.P.
Goldman Sachs
Green Square Capital Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Investment Management Co.
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
Income Research + Management, Inc.
Insight Investment
Intech Investment Management, LLC
Intercontinental Real Estate Corporation
Invesco
Ivy Investments
J.P. Morgan
Janus
Jennison Associates LLC

Manager Name
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Investment Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
Mellon
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Nile Capital Group LLC
Ninety One North America, Inc. (formerly Investec Asset Mgmt.)
Northern Trust Asset Management
Nuveen
P/E Investments
Pacific Investment Management Company
Parametric Portfolio Associates LLC
Pathway Capital Management
Peregrine Capital Management, LLC
Perkins Investment Management
PFM Asset Management LLC
PGIM Fixed Income

Manager Name
PineBridge Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rothschild & Co. Asset Management US
S&P Dow Jones Indices
Schroder Investment Management North America Inc.
SLC Management
Smith Graham & Co. Investment Advisors, L.P.
State Street Global Advisors
Stone Harbor Investment Partners L.P.
Strategic Global Advisors
T. Rowe Price Associates, Inc.
The TCW Group, Inc.

Manager Name
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
USAA Real Estate
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company LLP
Wells Fargo Asset Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC

Callan

December 31, 2020

North Dakota State Investment Board Legacy Fund

Investment Measurement Service Quarterly Review

Table of Contents
December 31, 2020

Table of Contents
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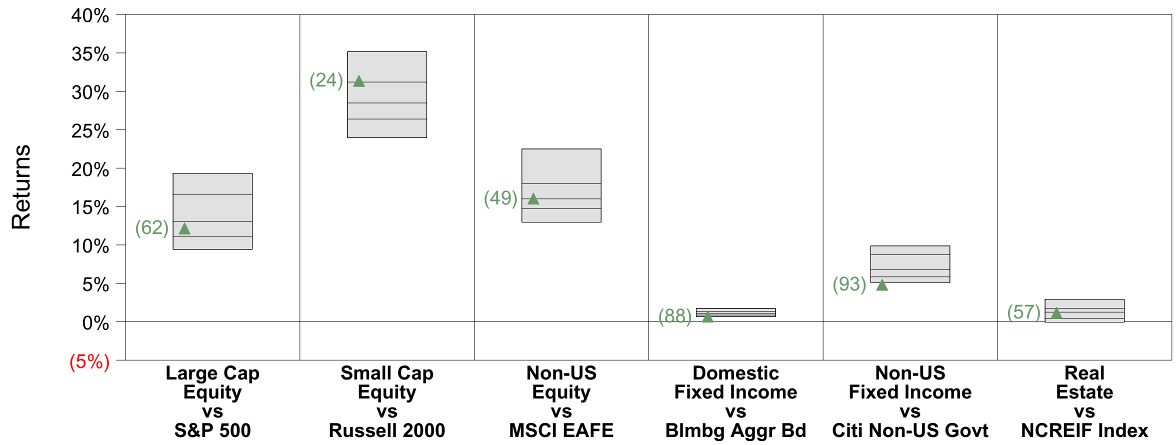
Market Overview
Active Management vs Index Returns

Market Overview

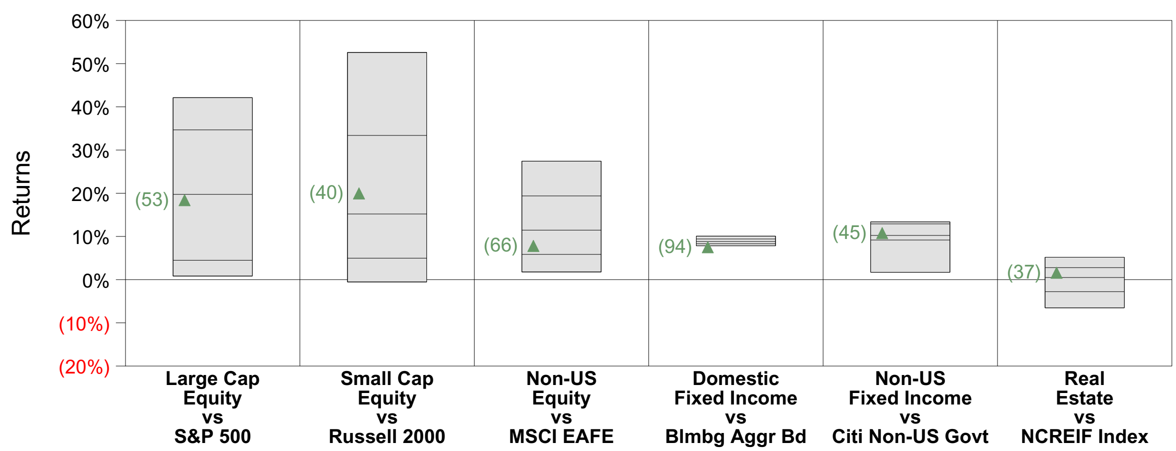
The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also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

Range of Separate Account Manager Returns by Asset Class
One Quarter Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	19.33	35.17	22.50	1.73	9.87	2.92
25th Percentile	16.53	31.21	17.98	1.35	8.72	1.75
Median	13.06	28.49	16.00	1.11	6.80	1.25
75th Percentile	11.06	26.39	14.74	0.88	5.85	0.42
90th Percentile	9.43	23.97	12.96	0.66	5.08	(0.07)
Index ▲	12.15	31.37	16.05	0.67	4.82	1.15

Range of Separate Account Manager Returns by Asset Class
One Year Ended December 31, 2020



	Large Cap Equity vs S&P 500	Small Cap Equity vs Russell 2000	Non-US Equity vs MSCI EAFE	Domestic Fixed Income vs Blmbg Aggr Bd	Non-US Fixed Income vs Citi Non-US Govt	Real Estate vs NCREIF Index
10th Percentile	42.13	52.59	27.42	10.07	13.38	5.19
25th Percentile	34.66	33.38	19.38	9.41	12.90	2.78
Median	19.74	15.20	11.45	8.82	10.24	0.49
75th Percentile	4.48	4.97	5.85	8.30	9.17	(2.79)
90th Percentile	0.82	(0.54)	1.78	7.83	1.70	(6.53)
Index ▲	18.40	19.96	7.82	7.51	10.78	1.60

Callan Institute

Fourth Quarter 2020

Capital Markets Review

Uneven Recovery Ahead for Years

ECONOMY

2 PAGE

The path to recovery in the U.S. and most developed economies from the pandemic will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets in those countries are not likely to regain their pre-pandemic totals until well into 2022.

Robust Quarter Powers Strong 2020

INSTITUTIONAL INVESTORS

4 PAGE

Institutional investors saw strong gains in 4Q20 and positive results for 2020, despite the pandemic-induced headwinds. While results for 2020 lagged a 60% stocks/40% bonds benchmark, over longer periods investors' returns were on par with the benchmark.

Vaccine Hopes Fuel Double-Digit Gains

EQUITY

6 PAGE

The S&P 500 hit a record high in 4Q20, and was up 12.1% for the quarter and 18.4% for the year. Value outperformed growth in 4Q, but trailed for the year by a wide margin. Vaccine hopes fueled double-digit returns broadly across developed and emerging markets.

Investors Continue Their Hunt for Yield

FIXED INCOME

8 PAGE

The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%. Corporate credit outperformed treasuries as investors hunted for yield. Low rates and asset purchase programs continued to prop up the global bond market.

Hotels, Retail Face Pandemic Headwinds

REAL ESTATE/REAL ASSETS

10 PAGE

Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer. Global REITs gained 13.5% compared to 14.0% for global equities. U.S. REITs rose 11.6%, but they lagged the S&P 500 Index (+12.1%).

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY

12 PAGE

Private equity fared quite well in 2020, all things considered. Diminished activity in 2Q and 3Q mixed with strong gains in 1Q and 4Q. Private equity activity showed tolerable declines for most private M&A measures, but the IPO market had a gangbuster year.

Healthy Returns amid Volatile Markets

HEDGE FUNDS/MACs

13 PAGE

The vigorous but volatile market conditions enabled healthy hedge fund profits from both alpha and beta. The median managers of Callan Multi-Asset Class style groups generated positive returns, gross of fees, consistent with their underlying risk exposures.

Second Straight Quarterly Gain

DEFINED CONTRIBUTION

15 PAGE

The Callan DC Index's gain of 6.0% in 3Q20 comes two quarters after the 15.0% plunge it experienced in 1Q20. The Index is now positive for the year. The Age 45 TDF posted a larger gain, due to its higher equity allocation. Balances also rose, solely from investment returns.

Broad Market Quarterly Returns

U.S. Equity Russell 3000	Global ex-U.S. Equity MSCI ACWI ex USA	U.S. Fixed Income Bloomberg Barclays Agg	Global ex-U.S. Fixed Income Bloomberg Barclays Gbl ex US
14.7%	17.0%	0.7%	5.1%

Sources: Bloomberg Barclays, FTSE Russell, MSCI

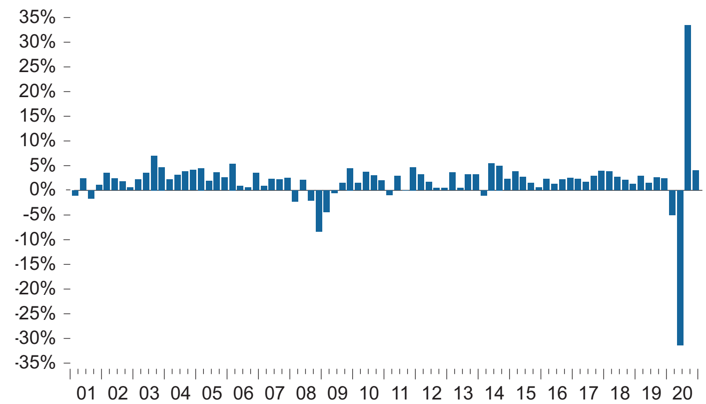
An Uneven Recovery and an Unreliable Narrator

ECONOMY | Jay Kloepfer

The U.S. economy grew at a 4% rate in the fourth quarter of 2020 but finished the year with a 3.5% decline in GDP compared to 2019, the steepest recession in 75(!) years. The plunge in economic activity in 2Q and the sharp rebound in 3Q put into question the reliability of economic data, and GDP in particular, in telling the tale of the true economic impact of the pandemic. The way countries measure GDP varies, especially when it comes to the output of the government sector. Reported GDP plunged in the U.K. far more than in continental Europe or the U.S., but the difference had to do with the valuation of the change in government output. In the U.S., we value government output in large part by looking at how much is spent on government services. Teachers, civil servants, and public health care workers were still paid, even though their activities were severely altered, so government output changed little. In the U.K. and France, data such as the number of hospital procedures, doctor's visits, and pupils in school are used, and this activity fell sharply. Did economic activity really fall farther in the U.K., or are the data not telling the full story?

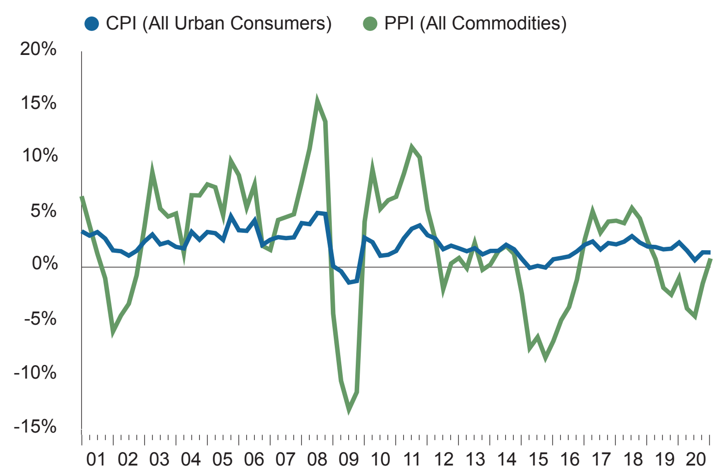
The labor market data also seem to reveal a tale of two cities—or do they? The difference in the benefits offered by different countries to those dislocated by the pandemic are substantial, and seriously bias economic measures such as the number of people employed and unemployment rates. In many euro zone countries, pandemic relief came in the form of subsidies to companies to keep their employees on the payroll. In the U.S., companies furloughed or let go of employees, and the states and federal government used the unemployment benefits system along with direct grants to households via stimulus payments to support these dislocated workers. As a result, unemployment in the U.S. spiked to almost 15% in April, while the unemployment rate in many euro zone countries barely moved. Another complication is that the unemployment rate in the U.S. suggests more slack than there may be in practice. A clue to this mismatch in the data between unemployment and potential capacity is in the data tracking those seeking work. In the U.S., the number seeking jobs usually tracks the unemployment rate very closely. During the pandemic, the number of job seekers barely increased while the unemployment rate quadrupled, suggesting workers are expecting to be rehired into their former jobs or in their former industry.

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

This focus on the labor market is important for clues as to how the economy will recover and who has been the most affected by the pandemic-induced recession. Since consumption is 70% of GDP in the U.S., the direct tie between employment and income and then spending is vital; that tie has been

blurred by the massive stimulus provided both here and in our trading partners. Stimulus payments directly to industries and individuals, as well as expanded unemployment benefits, have buoyed spending both by consumers within countries and on our traded goods between countries, and prevented an even steeper economic decline than this worst-in-seven-decades experience. Total employment in the U.S. fell by 22 million between January and April, and we have generated 12 million jobs since April to replace them. The problem for the continued recovery is that we are still short millions of jobs, and the rate of job recovery plateaued in October 2020 and remained flat through December.

Employment loss by industry has been wildly variable, and points up just how different the economic impact has been from the stock market's incredible recovery. The sectors that drove the stock market rebound since March—information technology, communications, the sectors of consumer goods and wholesale/retail trade driven by Amazon—suffered little if any employment decline, and in fact employ far fewer people than the sectors that are underrepresented in the stock market and suffered the biggest job losses. Employment in leisure and hospitality fell by 8.2 million during March and April, increased by 4.9 million from May to November, and then declined by over half a million in December as stricter shelter-in-place rules were reinstated prior to the holiday season in many states. Since February 2020, employment in leisure and hospitality is down by 3.9 million, or 22.9 percent. The other big losses were in state and local government, services, manufacturing, and education. These sectors employ many lower-paid, lower-skilled, and part-time workers and often feature a high concentration of female employees. Income inequality during the pandemic has been exacerbated as a result.

The Long-Term View

Index	4Q20	Periods Ended 12/31/20 Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	14.7	20.9	15.4	13.8	9.7
S&P 500	12.2	18.4	15.2	13.9	9.6
Russell 2000	31.4	20.0	13.3	11.2	9.1
Global ex-U.S. Equity					
MSCI EAFE	16.1	7.8	7.5	5.5	5.0
MSCI ACWI ex USA	17.0	10.7	8.9	4.9	--
MSCI Emerging Markets	19.7	18.3	12.8	3.6	--
MSCI ACWI ex USA Small Cap	18.6	14.2	9.4	6.0	6.5
Fixed Income					
Bloomberg Barclays Agg	0.7	7.5	4.4	3.8	5.2
90-Day T-Bill	0.0	0.7	1.2	0.6	2.3
Bloomberg Barclays Long G/C	1.7	16.1	9.4	8.2	7.4
Bloomberg Barclays Gl Agg ex US	5.1	10.1	4.9	2.0	4.0
Real Estate					
NCREIF Property	1.2	1.6	5.9	9.0	9.1
FTSE Nareit Equity	11.6	-8.0	4.8	8.3	9.6
Alternatives					
CS Hedge Fund	6.4	6.4	4.1	3.8	7.3
Cambridge PE*	10.4	17.9	13.9	13.8	15.1
Bloomberg Commodity	10.2	-3.1	1.0	-6.5	1.0
Gold Spot Price	0.0	24.4	12.3	2.9	6.6
Inflation – CPI-U	0.1	1.4	2.0	1.7	2.1

*Data for most recent period lags by a quarter. Data as of 9/30/20.
Sources: Bloomberg, Bloomberg Barclays, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

The path to recovery in the U.S. and most developed economies will likely see the level of GDP regain its pre-pandemic peak in mid-2021, but the job markets are not likely to regain their pre-pandemic job counts until well into 2022, restraining consumer spending and the overall global recovery.

Recent Quarterly Economic Indicators

	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19	2Q19	1Q19
Employment Cost–Total Compensation Growth	2.5%	2.4%	2.7%	2.8%	2.7%	2.8%	2.7%	2.8%
Nonfarm Business–Productivity Growth	-4.8%	5.1%	10.6%	-0.3%	1.6%	0.3%	2.0%	3.7%
GDP Growth	4.0%	33.4%	-32.9%	-5.0%	2.4%	2.6%	1.5%	2.9%
Manufacturing Capacity Utilization	72.7%	70.8%	63.2%	73.9%	75.0%	75.4%	75.5%	76.4%
Consumer Sentiment Index (1966=100)	79.8	75.6	74.0	96.4	97.2	93.8	98.4	94.5

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

Robust Quarterly Gains Power Strong 2020 Returns

INSTITUTIONAL INVESTORS

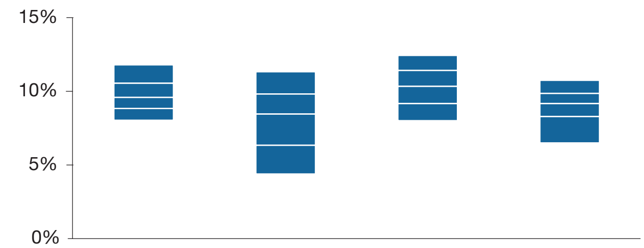
Performance

- All investor types saw robust gains in 4Q20, easily outpacing a 60% stocks/40% bonds benchmark, which rose 7.5%.
- The robust quarterly results pushed their gains for the year into double digits, outpacing global ex-U.S. equities and fixed income, although falling below the 60%/40% benchmark.
- Long-term results continue to be on par with the 60%/40% benchmark and better than bonds or global ex-U.S. equities.
- Nonprofits set the pace for the quarter, while corporate defined benefit (DB) plans top the leader board for most longer-term periods.
- Public DB plans were the best performers over 20 years, but results for all plan types fell in a narrow range.

Broad Issues

- Many institutional investors are re-examining portfolios to adjust for the new environment.
- They are also re-evaluating all asset classes, not just the diversifiers, including fixed income; public equity; hedge funds and liquid alternatives; private equity, private credit, and the notion of private capital; and real assets.
- But the key issue is what to do about fixed income in the lower yield environment.
- Liquidity needs ease but remain top of mind for investors.

Quarterly Returns, Callan Database Groups



	Public Database	Corporate Database	Nonprofit Database	Taft-Hartley Database
10th Percentile	11.8	11.3	12.4	10.8
25th Percentile	10.6	9.8	11.4	9.9
Median	9.6	8.5	10.3	9.2
75th Percentile	8.8	6.3	9.2	8.3
90th Percentile	8.0	4.4	8.0	6.5

Source: Callan

- Investors are also wrestling with whether to rebalance out of growth managers, and U.S. equity, as both growth and large cap U.S. equity crushed value and global ex-U.S. equity. The key question: Rebalance, or ride the risks of style tilt and manager concentration?
- As noted, real assets are under serious review, within DC as well as DB plans. The source of the discomfort is the underperformance of segments like energy, MLPs, and commodities.
- Investors are also trying to determine what can serve as an equity diversifier equal to bonds with the return of zero interest rates.

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Database Group	Quarter	Year-to-date	Year	3 Years	5 Years	10 Years
Public Database	**9.6**	**11.7**	**11.7**	**8.2**	**9.4**	**8.1**
Corporate Database	**8.5**	**13.7**	**13.7**	**9.2**	**10.1**	**8.5**
Nonprofit Database	**10.3**	**12.3**	**12.3**	**8.3**	**9.6**	**8.1**
Taft-Hartley Database	**9.2**	**11.1**	**11.1**	**8.3**	**9.5**	**8.5**
All Institutional Investors	**9.5**	**12.3**	**12.3**	**8.5**	**9.6**	**8.3**
Large (>$1 billion)	**9.3**	**12.4**	**12.4**	**8.6**	**9.7**	**8.4**
Medium ($100mm - $1bn)	**9.4**	**12.3**	**12.3**	**8.6**	**9.7**	**8.3**
Small (<$100 million)	**9.7**	**12.1**	**12.1**	**8.2**	**9.5**	**8.0**

*Returns less than one year are not annualized.

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

Corporate DB Plans

- The plunge in Treasury rates in March 2020 obscured the impact of spread widening. The funded status for corporate DB plans moving down their LDI glidepaths did not take the hit many suffered in the GFC.
- The plunge has not yet derailed the commitment to de-risking, but moves to STRIPS for extra duration are now in question.
- There is likely to be an uptick in termination and risk transfer, and consideration of a pause to further de-risking if rates start to rise.

DC Plans

- Fees continued to be the top issue for DC plan sponsors, as has been true for many quarters.
- DC glidepaths saw an increase in private markets exposures, and higher equity allocations in the mid-career and path landing point (age 80). Greater diversification helps manage the risk with greater return-seeking strategies, while more passive exposure is used to manage fees.
- There was a flurry of rulemaking from the Trump administration in its final months, and many DC plan sponsors and recordkeepers have been moving rapidly to track all the changes, and the potential for them to be undone by the incoming administration.
- DC plan sponsors and recordkeepers are both working rapidly to address lessons learned from the pandemic to alter participant-facing services like enrollment and financial counseling, making them more digital-first.
- Recordkeeper consolidation activity picked up in 4Q20. This will likely point to an increase in recordkeeper searches in the near term.

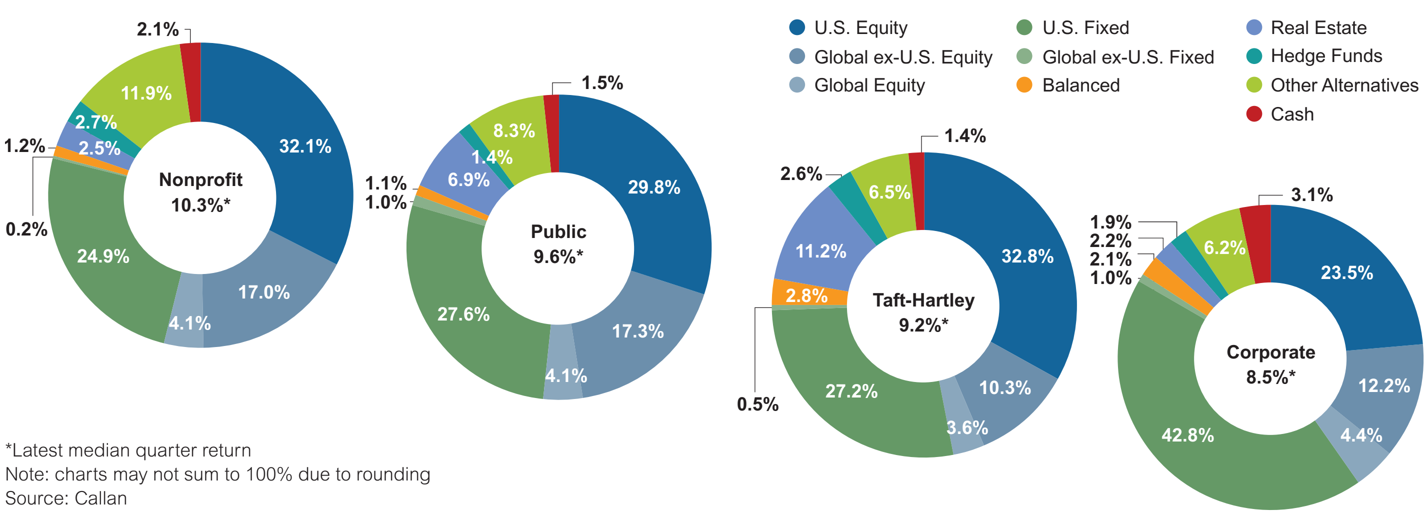
Public DB Plans

- There was a surge in public plan asset allocation reviews and capital markets discussions.
- The "V-shaped" recovery in equities helped calm fears.
- But there are great concerns about lower capital markets assumptions over the next 10 years, which are seriously challenging expectations for funding and solvency; this is a decades-long problem, made worse by the pandemic.
- ROA assumptions have been reduced but face further downward pressure. Weaker return assumptions may derail the expressed desire to bring in risk; there is growing interest in 30-year assumptions to justify more balanced portfolios.
- Liquidity needs and drawdown risks are top of mind. Stress testing is at the forefront of asset/liability studies, focusing on funding, contributions, liquidity, and solvency.

Nonprofits

- Subdued expectations for capital markets returns are challenging both the risk tolerance of endowments/foundations and the sustainability of established spending rates.
- There is growing dissatisfaction with private real assets, hedge funds, and the presence of any fixed income; significant portfolio reconstruction is on the table.

Average Asset Allocation, Callan Database Groups



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

Equity

U.S. Equities

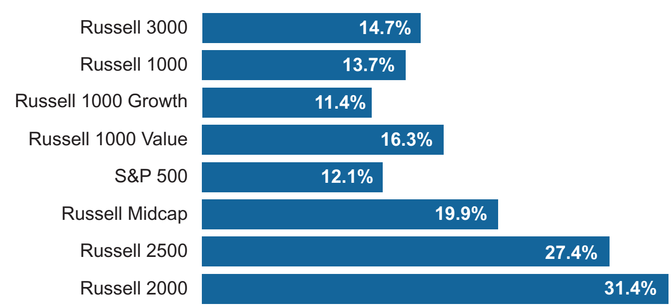
Record highs in 2020

- The S&P 500 Index hit a record high in 4Q20. The Index was up 12.1% for the quarter, bringing the 2020 gain to 18.4%.
- Since its March low, the S&P is up over 70%, with all sectors posting increases greater than 40%.
- 4Q winner: Energy (+28%), but down 34% for the year
- Top 2020 sector: Technology with 44% gain (+12% in 4Q)
- Pandemic has cast a pall over certain sectors while rewarding others: online retail soared 69% in 2020, while hotels/cruise lines, airlines, and retail REITs dropped ~30%.
- Apple, Microsoft, Amazon, Facebook, and Alphabet made up 22% of S&P 500 market cap at year-end, and for 2020, accounted for 12.1% of 18.4% Index return.

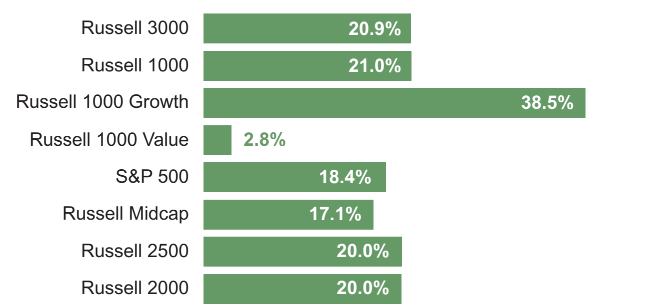
4Q saw shift in market trends

- In 4Q, value outperformed growth across the cap spectrum driven by vaccine progress, political clarity, and further stimulus. For the year, however, value trails growth by a significant margin due to Tech's outperformance.
- Fueled by the prospect of an economic recovery, small cap outperformed large in 4Q but was even on the year. Small value was the best performer for the quarter, but 2020 gain is a mere 4.6%.
- 4Q experienced a shift in YTD 2020 trends, attributed to expectations of broader economic recovery from the vaccine roll-out and the presidential election outcome.
- Cyclical sectors such as Energy, Financials, Industrials, and Materials outperformed during the quarter.

U.S. Equity: Quarterly Returns



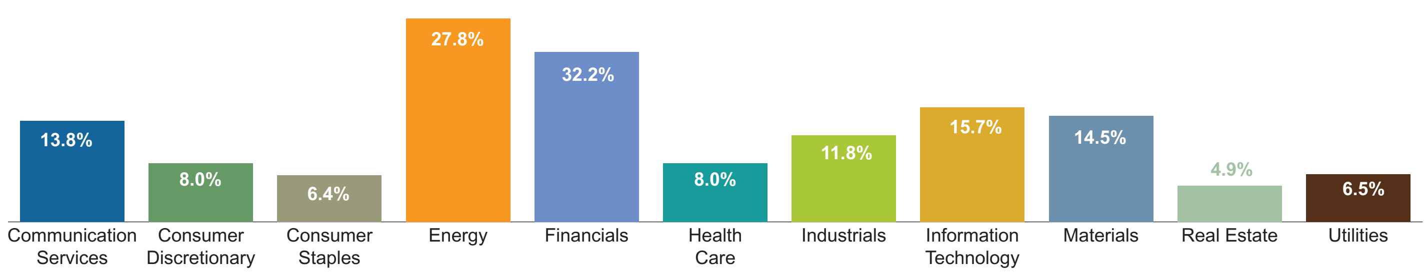
U.S. Equity: One-Year Returns



Sources: FTSE Russell and S&P Dow Jones Indices

- Although stocks with the highest P/E's significantly outperformed for the year, the trend shifted after the vaccine announcement and stocks with zero earnings estimates or P/E's less than 10 shot up.

Quarterly Performance of Industry Sectors



Source: S&P Dow Jones Indices

Global/Global ex-U.S. Equity

Vaccine rollouts extend and expand risk-on rally

- Prospects of global economic recovery propelled by COVID-19 vaccination fueled double-digit returns broadly across developed and emerging markets.
- Expectations of reverting back to normal economic activity by late 2021 enabled risk assets to thrive.
- Emerging markets outperformed developed markets, led by Latam—specifically Brazil.
- Small cap outperformed large as business confidence improved with news of vaccination.

Market rotates to cyclicals

- Positive outlook on reflation trade stoked Energy, Materials, and Financials to drive the market.
- Beta and volatility led factor performance due to market rotation.

U.S. dollar vs. other currencies

- U.S. dollar continued to lose ground as appetite for risk increased with the expectation that a path to global economic recovery is on the horizon.

Growth vs. value

- Value topped growth as sentiment shifted to cyclical sectors.

4Q20 belonged to value; does it have staying power?

- COVID-19 benefited value as the quarter brought news of successful vaccines.
- Financials, Travel, and Energy rebounded.
- MSCI World Growth (+12.4%) trailed MSCI World Value (+15.2%) over the three-month period.
- Even with this divergence of style in 4Q20, growth still outpaced value globally by over 35% for the full year.

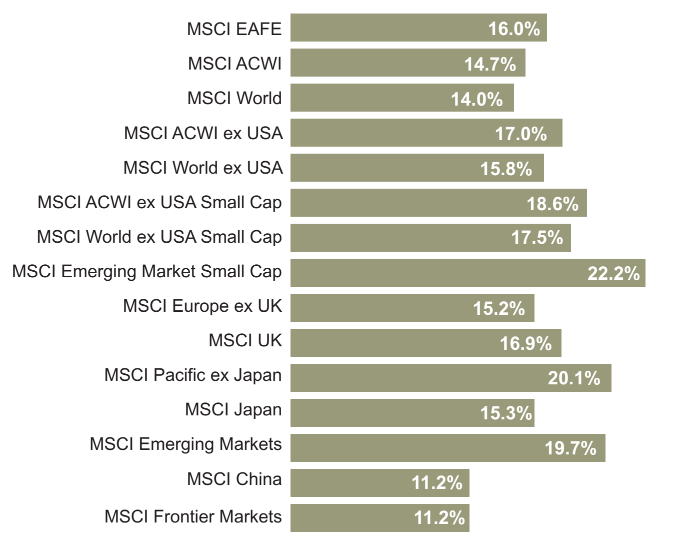
Potential tailwinds for value

- Higher interest rates on the heels of potentially higher inflation with government stimulus and businesses reopening
- Continued rebound of discretionary spending in areas neglected in 2020 as markets reopen: lodging, travel

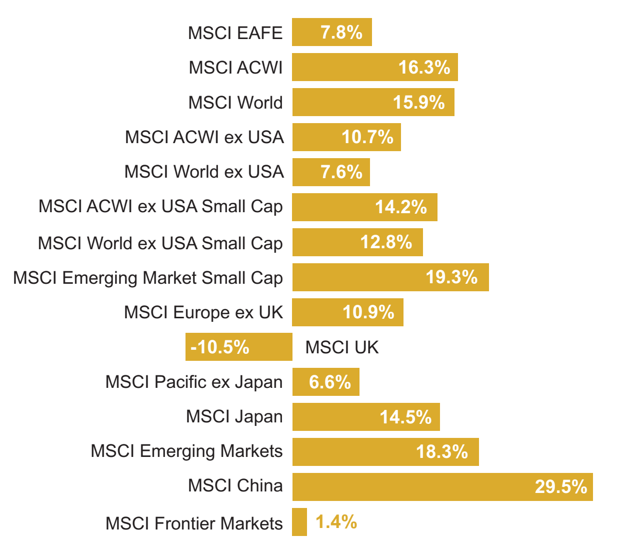
The good news

- Recent dollar weakness supports emerging markets.
- Could continue in 2021, driven by wider U.S. fiscal deficit plus stronger emerging market currencies

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar)



Source: MSCI

Fixed Income

U.S. Fixed Income

Treasury yields rose

- The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 163 bps to 199 bps.
- No rate hikes are expected until at least 2023.

Bloomberg Barclays Aggregate gained slightly

- Corporate credit outperformed treasuries as investors continued to hunt for yield.
- Corporate credit ended the year up 9.9% despite record issuance in 2020.

High yield bonds gained on the quarter as rally extended

- High yield bonds outperformed investment grade (IG) securities in 4Q, returning 6.5%, but trailed IG for the year.
- Leveraged loans gained 3.6% as demand remained strong to finish the year.

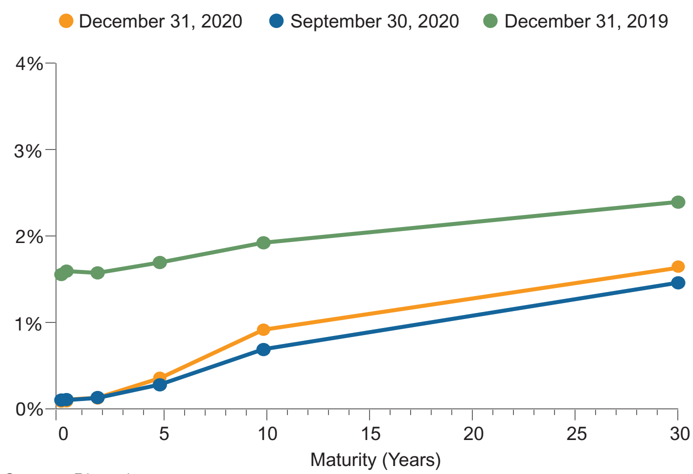
Munis boosted by favorable supply/demand dynamics

- Municipals outperformed Treasuries for the quarter, but remained down for the year.
- Tax-exempt issuance was muted amid strong demand.
- Lower quality outperformed for the quarter; however, higher quality outperformed for the year.

U.S. credit attractive to non-U.S. investors

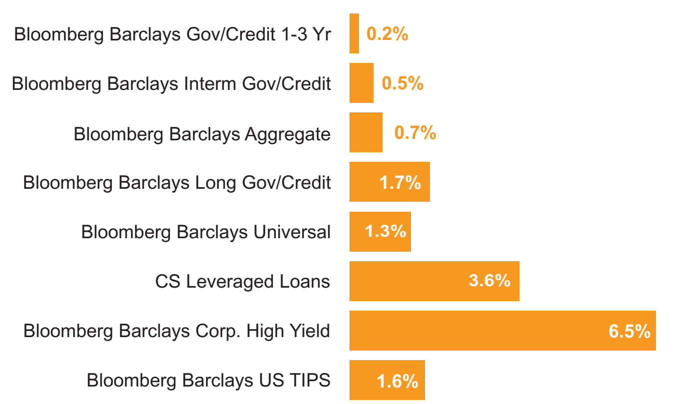
- Central banks globally are adopting a "lower for longer" mindset toward rates.
- 89% of positive yields globally are in the U.S., spurring demand for U.S. corporate credit.
- Lower LIBOR rates have decreased currency hedging costs; combined with a steep Treasury curve, that makes U.S. credit attractive to non-U.S. investors.

U.S. Treasury Yield Curves



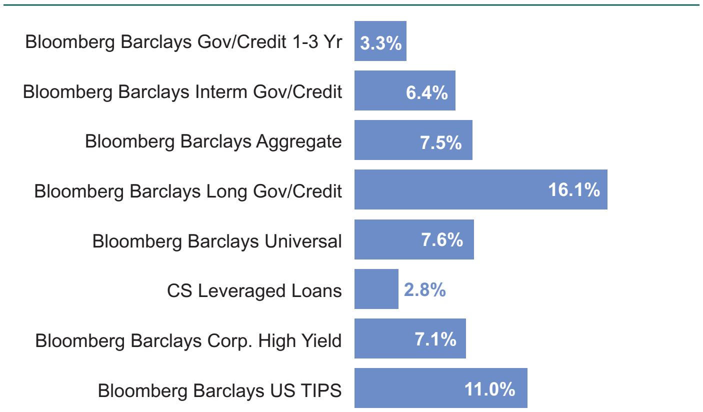
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and Credit Suisse

Implications of U.S. rates rising in 4Q

- U.S. Treasury rates rose in 4Q, most notably in the intermediate and long portions of the yield curve.
- As Democrats won both seats in the Georgia run-off, greater fiscal stimulus is likely. This may lead to further steepening of the yield curve and increased inflation expectations.
- A rising rate environment opens opportunities for floating-rate securities like leveraged loans, and makes securities with shorter durations such as securitized credit more attractive.

Global Fixed Income

Global fixed income rose amid monetary backdrop

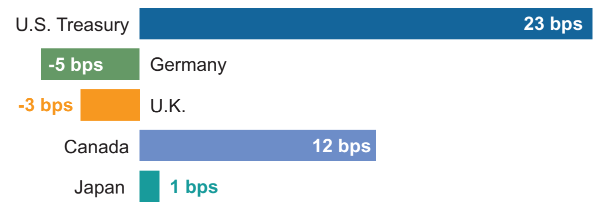
- Low rates and asset purchase programs continued to prop up the global bond market.
- Broad-based U.S. dollar weakness resulting from continued confidence in risk assets dampened hedged returns as the USD lost 4.27% versus the euro, 5.43% versus the British pound, and 2.02% versus the yen.

Emerging market debt ended the year positive

- Emerging market debt indices gained in 4Q20, finishing the year in positive territory amid a global search for yield and renewed growth expectations.
- U.S. dollar-denominated index (EMBI Global Diversified) underperformed local currency emerging market debt as U.S. rates rose; returns were mixed across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) was up significantly, with broad-based gains across constituents.

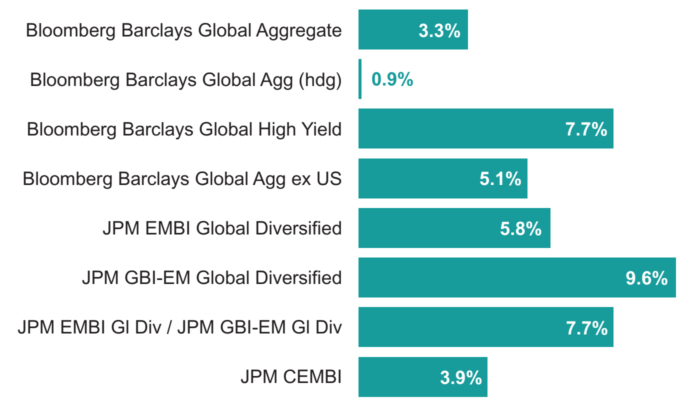
Change in 10-Year Global Government Bond Yields

3Q20 to 4Q20



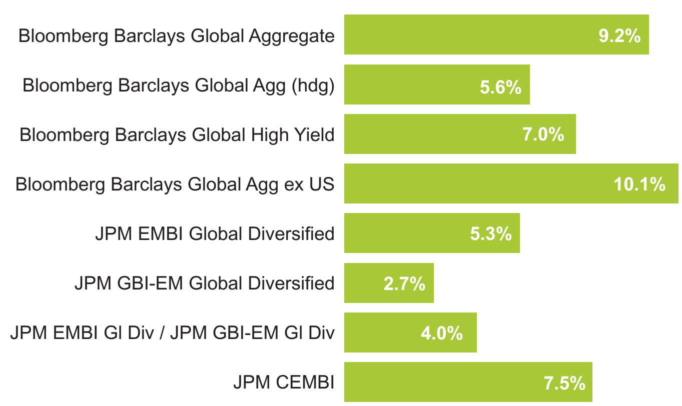
Source: Bloomberg Barclays

Global Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Global Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Hotels, Retail Face Pandemic Headwinds; REITs Gain but Lag Equities

REAL ESTATE/REAL ASSETS | Munir Iman

Pandemic continues to challenge Hotels and Retail

– Hotels and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
– Income remains positive except in the Hotel sector.
– Appraisers have more certainty on the pandemic's impact on valuations.
– Return dispersion by manager within the ODCE Index is due to the composition of underlying portfolios.

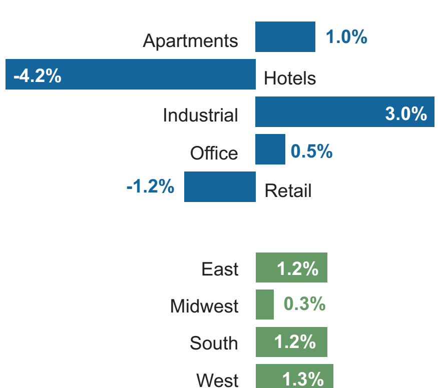
More than $200b of dry power

– U.S. core open end funds have investment queues of roughly $5 billion and exit queues of $20 billion.
– >$200 billion of capital waiting to be deployed in North America
– Majority of dry powder capital in opportunistic, value-add, and debt funds

Fundamentals will continue to be affected

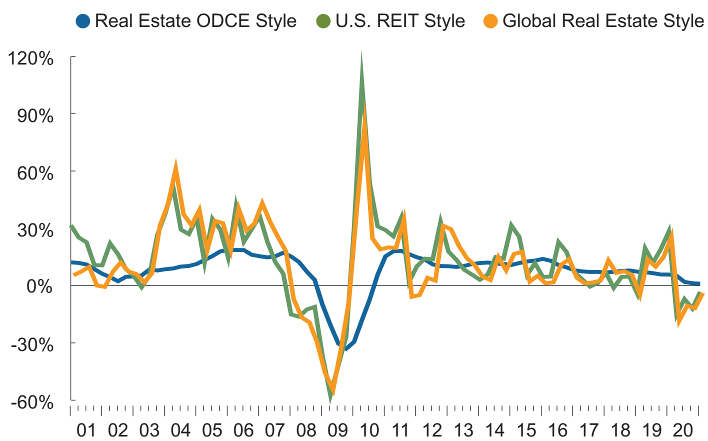
– Vacancy rates for all property types have been or will be affected.
– Net operating income has declined as Retail continues to suffer.
– 4Q20 rent collections showed relatively stable income throughout the quarter in the Industrial, Apartment, and Office sectors. The Retail sector remains challenged, with regional malls affected most heavily.
– Class A/B urban apartments relatively strong, followed by certain types of Industrial and Office
– Supply was in check before the pandemic.

Sector Quarterly Returns by Property Type and Region



Source: NCREIF

Rolling One-Year Returns



Source: Callan

– Construction is limited to finishing up existing projects but has been hampered by shelter-in-place orders and material shortages.
– New construction of preleased industrial and multifamily is occurring.
– Transaction volume dropped off during the quarter, except for multifamily and industrial assets with strong-credit tenants, which are trading at pre-COVID-19 levels.
– Cap rates remained steady during the quarter. The spread between cap rates and 10-year Treasuries is relatively high, leading some market participants to speculate that cap rates will not adjust much. Price discovery is happening and there are limited transactions.
– Callan believes the pandemic may cause a permanent re-pricing of risk across property types. Property types with more reliable cash flows will experience less of a change in cap rates; however, those with less reliable cash flows will see greater adjustments.

Global REITs increased but slightly lagged equities

– Global REITs underperformed slightly in 4Q20, gaining 13.3% compared to 14.0% for global equities (MSCI World).
– U.S. REITs rose 11.6% in 4Q20, lagging the S&P 500 Index, which jumped 12.1%.
– Globally, REITs are trading at a discount to NAV with the exception of those in the U.S., Singapore, and Australia.

- Sectors are mixed, between trading at a discount or premium.
- Ongoing volatility in REIT share prices offers opportunities to purchase mispriced securities, individual assets from REIT owners, and discounted debt, as well as lend to companies and/or execute take-privates of public companies.

Investment opportunities: real estate

- Primary opportunity: purchase of mispriced publicly traded real estate, both equity and debt
- Emerging opportunity: purchase of mezzanine loans from forced sellers
- The pandemic continues to impact real estate assets across Europe, with the Retail and Office sectors the first to undergo write-downs. Transaction activity has not yet meaningfully bounced back, as price discovery is still underway.

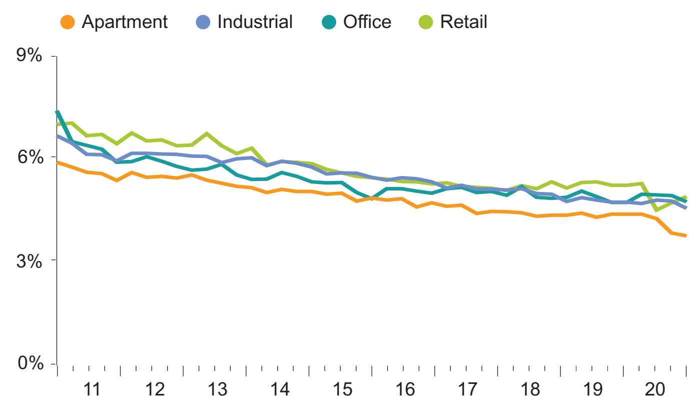
Investment opportunities: infrastructure

- Strong performance from communications assets has drawn increased interest from infrastructure investors, and in some cases real estate investors for data centers.
- Most infrastructure investment continues to be focused in OECD countries in North America and Europe. Some managers are sponsoring Asia-focused funds.

Investment opportunities: timberland and farmland

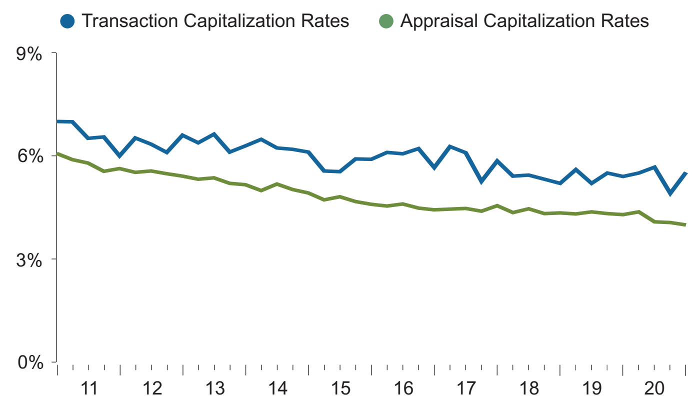
- Investment in farmland may increase if it proves to be a true diversifier in the pandemic.
- Institutional investment in timber has been waning for several years. The pandemic is unlikely to turn that tide.

NCREIF Capitalization Rates by Property Type



Source: NCREIF. Capitalization rates (net operating income / current market value (or sale price)) are appraisal-based.

NCREIF Transaction and Appraisal Capitalization Rates



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

Callan Database Median and Index Returns* for Periods Ended 12/31/20

Private Real Assets	Quarter	Year to Date	Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	**1.3**	**1.0**	**1.0**	**4.6**	**5.9**	**9.1**	**5.5**
NFI-ODCE (value wt net)	1.1	0.3	0.3	4.0	5.3	8.9	5.5
NCREIF Property	1.2	1.6	1.6	4.9	5.9	9.0	7.1
NCREIF Farmland	0.6	1.7	1.7	3.9	5.0	10.1	11.2
NCREIF Timberland	0.6	0.8	0.8	1.8	2.3	4.6	5.4
Public Real Estate							
Global Real Estate Style	**11.4**	**-3.9**	**-3.9**	**4.6**	**5.8**	**7.5**	**5.7**
FTSE EPRA Nareit Developed	13.3	-9.0	-9.0	1.5	3.7	5.4	--
Global ex-U.S. Real Estate Style	**12.7**	**-0.9**	**-0.9**	**5.4**	**6.3**	**7.2**	**5.9**
FTSE EPRA Nareit Dev ex US	13.9	-7.1	-7.1	1.7	5.0	4.5	--
U.S. REIT Style	**9.8**	**-3.2**	**-3.2**	**5.8**	**6.4**	**9.5**	**7.4**
EPRA Nareit Equity REITs	11.6	-8.0	-8.0	3.4	4.8	8.3	6.5

*Returns less than one year are not annualized.
Sources: Callan, FTSE Russell, NCREIF

Roller-Coaster Ride Ends on a High Note

PRIVATE EQUITY | Gary Robertson

Given travel restrictions and the move to video due diligence "on-sites," global private equity fundraising held up amazingly well in 2020. The same can be said for the volumes of underlying portfolio company investments and exits. Private equity market liquidity showed a quickening pace in the final quarter, which is expected to carry to 2021.

In 2020, private equity partnerships holding final closes raised $645 billion globally across 1,163 partnerships (unless otherwise noted, PitchBook provided all data cited). The dollar amount declined only 12% from 2019's near record total, and the number of funds raised fell 34%. 4Q20 finished strong with final closes totaling $197 billion, up 74% from 3Q. The number of funds totaled 295, up 22%.

Funds Closed 1/1/20 to 12/31/20

Strategy	No. of Funds	Amt ($mm)	Share
Venture Capital	592	110,362	17%
Growth Equity	99	49,493	8%
Buyouts	273	285,346	44%
Mezzanine Debt	18	21,362	3%
Distressed	34	40,149	6%
Energy	4	6,216	1%
Secondary and Other	79	103,814	16%
Fund-of-Funds	64	27,814	4%
Totals	**1,163**	**644,556**	**100%**

Source: PitchBook (Figures may not total due to rounding.)

New buyout investments for 2020 totaled 7,575, down 20% from 2019. Dollar volume fell 36% to $441 billion. The fourth quarter saw 2,223 new investments, a 23% increase, and dollar volume jumped 20% to $116 billion.

The year produced 32,198 rounds of new investment in venture capital (VC) companies, down 19% from 2019. Announced volume of $326 billion was up 18%. 4Q saw 7,227 new rounds, a 4% decline, and dollar volume rose 9% to $96 billion.

Last year also saw 1,791 buyout-backed private M&A exits, down 31% from 2019, with proceeds of $373 billion, down 42%. 4Q had 497 private exits, up 29%, with proceeds of $117 billion, up 144%. IPOs were strong for both venture capital and buyouts. The year's 144 buyout-backed IPOs increased 16% from 2019, with proceeds of $58 billion, up 71%. 4Q buyout-backed IPOs numbered 62, a jump of 32% from 3Q, with $24 billion of proceeds, up 60%.

Venture-backed M&A exits for the year totaled 1,788, down 18% from 2019. Announced dollar volume of $108 billion was down 19%. The final quarter had 473 exits, up 9%, and announced value of $46 billion vaulted 171%. The year's 391 venture-backed IPOs jumped 46% from 2019, with proceeds of $76 billion, up 65%. There were 115 VC-backed offerings in 4Q, a 17% drop, and the $26 billion of proceeds dropped 21% from 3Q.

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/20*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	11.1	27.9	20.8	14.6	16.6	12.3	6.0	26.6
Growth Equity	12.4	25.8	19.2	16.4	14.7	13.5	11.3	15.1
All Buyouts	10.8	15.6	13.4	14.3	14.0	12.4	11.9	13.2
Mezzanine	5.5	7.5	9.0	10.0	11.5	10.5	8.4	9.8
Credit Opportunities	3.5	-1.8	2.7	5.6	8.2	8.5	9.4	9.5
Control Distressed	7.8	5.9	5.8	8.5	10.3	9.6	10.3	10.7
All Private Equity	**10.5**	**18.1**	**14.7**	**13.9**	**13.9**	**12.1**	**10.0**	**14.1**
S&P 500	8.9	15.2	12.3	14.2	13.7	9.2	6.4	9.3
Russell 3000	14.7	20.9	14.5	15.4	13.8	10.0	7.8	9.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices
*Most recent data available at time of publication

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

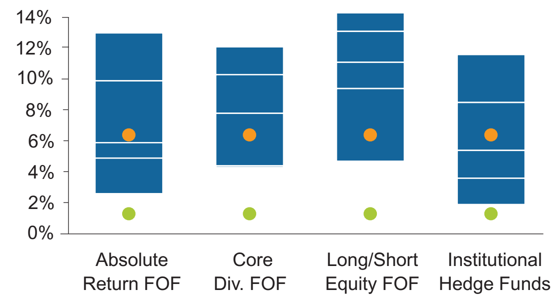
Hedge Funds Vaccinated Against Risk

HEDGE FUNDS/MACs | Jim McKee

The vigorous but volatile market conditions fed by continuing central bank liquidity enabled healthy hedge fund profits from both alpha and beta. As a proxy of asset-weighted hedge fund performance, the Credit Suisse Hedge Fund Index (CS HFI) surged 6.4% in 4Q20, its strongest quarterly gain since 2009. Representing actual hedge fund portfolios net of all fees and expenses, the median manager in the Callan Hedge Fund-of-Funds (FOF) Peer Group advanced 8.5%.

All strategies within the CS HFI were positive. Frenzied corporate issuance, whether equity, credit, or blank checks in the form of SPACs, particularly enriched Risk Arbitrage (+11.3%) and Event-Driven Multi-Strategy (+10.7%). Revived hopes for downtrodden credits benefited Distressed (+9.2%), marking the strategy's best quarterly gain since its 1994 inception. Riding the equity wave higher with an average 0.5 beta exposure, Long-Short Equity added 7.6%.

Hedge Fund Style Group Returns



	Absolute Return FOF	Core Div. FOF	Long/Short Equity FOF	Institutional Hedge Funds
10th Percentile	13.0	12.1	14.3	11.6
25th Percentile	9.9	10.3	13.1	8.5
Median	5.9	7.8	11.1	5.4
75th Percentile	4.9	4.4	9.4	3.6
90th Percentile	2.6	4.3	4.7	1.9
CS Hedge Fund ●	6.4	6.4	6.4	6.4
90-Day T-Bill +5% ●	1.3	1.3	1.3	1.3

Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/20

Hedge Fund Universe	Quarter	Year	3 Years	5 Years	10 Years	15Years
Callan Institutional Hedge Fund Peer Group	**5.4**	**6.8**	**5.1**	**5.9**	**5.7**	**6.9**
Callan Fund-of-Funds Peer Group	**8.5**	**13.1**	**6.5**	**5.7**	**5.0**	**4.8**
Callan Absolute Return FOF Style	**5.9**	**4.4**	**3.8**	**4.1**	**4.3**	**4.2**
Callan Core Diversified FOF Style	**7.8**	**12.4**	**5.7**	**5.2**	**4.7**	**4.6**
Callan Long/Short Equity FOF Style	**11.1**	**17.9**	**8.1**	**7.3**	**6.2**	**5.5**
BB GS Cross Asset Risk Premia 6% Vol Idx	1.2	-4.3	2.3	3.2	5.1	5.9
Credit Suisse Hedge Fund	6.4	6.4	4.0	4.1	3.8	4.7
CS Convertible Arbitrage	4.2	10.3	5.2	5.5	4.1	4.8
CS Distressed	9.2	3.8	1.2	3.4	3.6	4.4
CS Emerging Markets	5.6	12.2	4.6	6.9	4.7	5.7
CS Equity Market Neutral	0.7	1.7	-0.6	0.3	1.6	-0.9
CS Event-Driven Multi	10.7	6.9	4.1	3.9	2.5	4.7
CS Fixed Income Arb	3.3	3.6	3.6	4.3	4.6	4.0
CS Global Macro	6.0	6.5	5.5	4.4	4.1	6.0
CS Long/Short Equity	7.6	7.9	4.9	4.8	5.0	5.5
CS Managed Futures	5.9	1.9	1.2	-0.1	0.6	2.8
CS Multi-Strategy	5.1	5.6	3.9	4.6	5.7	5.6
CS Risk Arbitrage	11.3	16.0	6.8	6.4	3.9	4.5
HFRI Asset Wtd Composite	7.6	2.8	3.2	3.8	3.7	--
90-Day T-Bill + 5%	1.3	5.7	6.6	6.2	5.6	6.2

*Net of fees. Sources: Bloomberg Barclays GSAM, Callan, Credit Suisse, Hedge Fund Research

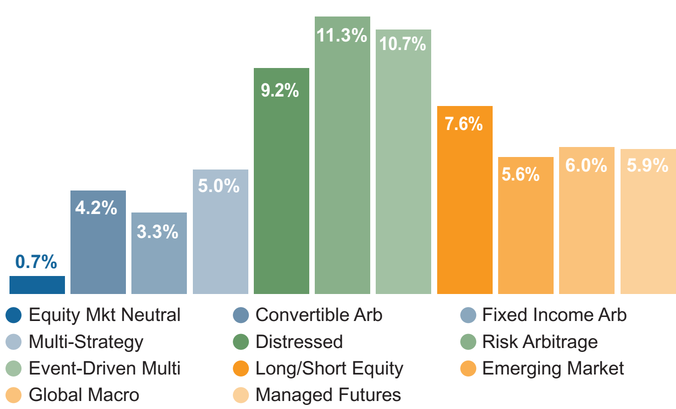
Within Callan's Hedge FOF Peer Group, market exposures differentiated performance in the quarter. Fed by the equity rally as well as stock dispersion within it, the median Callan Long/Short Equity FOF (+11.1%) easily beat the Callan Absolute Return FOF (+5.9%), which benefited from tightening spreads in equity, credit, and event arbitrage. With diversifying exposures to both non-directional and directional styles, the Core Diversified FOF gained 7.8%.

Tracking 50 of the largest, broadly diversified hedge funds with low-beta exposure to equity markets, the median manager in the Callan Institutional Hedge Fund (CIHF) Peer Group gained 5.4% in 4Q. For the year, the median manager was up 6.8%. Those funds focused on hedged credit led, on average, others focused more on equities, rates, and cross-asset strategies in the quarter, but lagged those others for the full year.

Measuring the performance of these alternative risk premia in the quarter, the Bloomberg GSAM Risk Premia Index gained 1.2% based upon a 6% volatility target. Within the underlying styles of the Index's alternative risk premia, Currency Carry (+3.7%), U.S. Equity Value (+3.6%), and Currency Trend (+3.6%) were the big beneficiaries of the quarter's cyclical risk-on rotation.

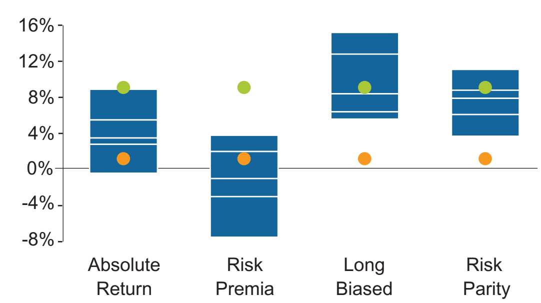
Within Callan's database of liquid alternative solutions, the median managers of Callan Multi-Asset Class (MAC) style groups generated positive returns, gross of fees, consistent with their underlying risk exposures. For example, the Callan Risk Parity MAC, which typically targets equal risk-weighted allocations across asset classes with leverage, gained 7.9%, slightly trailing the more equity risk-oriented benchmark of 60% MSCI ACWI and 40% Bloomberg Barclays US Aggregate Bond Index (+9.1%). Given its usually long equity bias within a dynamic asset allocation framework, the Callan Long-Biased MAC (+8.4%) also marginally underperformed the 60%/40% index. The median Callan Risk Premia MAC fell 1.0%, reflecting its levered exposures to uncorrelated alternative risk premia (such as those in the Bloomberg GSAM Risk Premia Index). As the most conservative MAC style focused on non-directional strategies of long and short asset class exposures, the Callan Absolute Return MAC earned 3.5%.

Credit Suisse Hedge Fund Strategy Returns



Source: Credit Suisse

MAC Style Group Returns



	Absolute Return	Risk Premia	Long Biased	Risk Parity
10th Percentile	8.9	3.8	15.2	11.1
25th Percentile	5.5	2.0	12.8	8.8
Median	3.5	-1.0	8.4	7.9
75th Percentile	2.8	-3.0	6.4	6.1
90th Percentile	-0.4	-7.5	5.6	3.7
BB GS Cross Asset Risk Premia (6%v) ●	1.2	1.2	1.2	1.2
60% MSCI ACWI/ 40% BB Barclays Agg ●	9.1	9.1	9.1	9.1

Sources: Bloomberg Barclays, Callan, Eurekahedge, S&P Dow Jones Indices

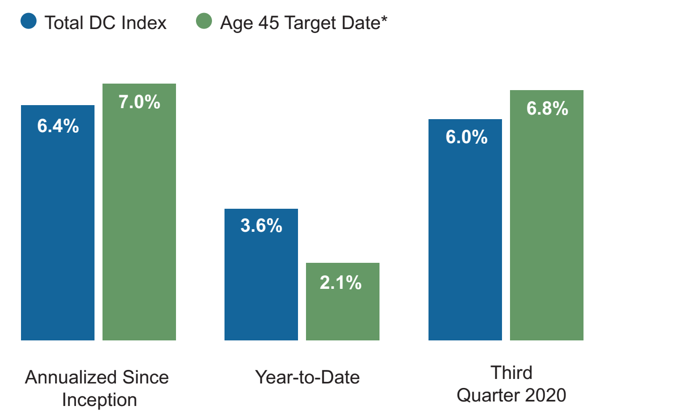
Index Posts Second Straight Quarterly Gain

DEFINED CONTRIBUTION | Patrick Wisdom

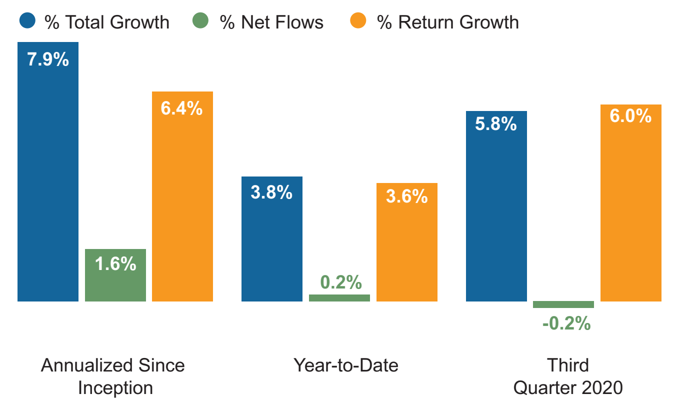
- The Callan DC Index™ rose 6.0% in 3Q20, the second straight quarter of gains after a 15.0% 1Q20 plunge. The increase propelled the Index to a gain year to date (3.6%). The Age 45 Target Date Fund (analogous to the 2040 vintage) posted a larger quarterly gain (6.8%), attributable to its higher allocation to equity.
- Balances within the DC Index rose by 5.8%. Investment returns (6.0%) were the sole driver of the growth, while net flows (-0.2%) had a small, negative effect.
- Target date funds typically get the largest net inflows, but they received only 12.5% of quarterly inflows as investors gravitated to relatively safer asset classes such as U.S. fixed income (36.9%) and stable value (30.7%).
- U.S. large cap (-45.1%) and U.S. small/mid cap (-38.9%) had the largest net outflows.
- Turnover (i.e., net transfer activity levels within DC plans) increased in 3Q, rising to 0.75% from the previous quarter's 0.37%.
- The Index's overall allocation to equity increased slightly to 68.8% from the previous quarter's 68.4%. U.S. large cap saw the largest percentage increase in allocation, rising by 60 basis points to 26.0%. U.S. small/mid cap had the largest percentage decrease, to 7.4% from 7.7% in 2Q.
- The prevalence of a money market offering (49.1%) increased by 1.4 percentage points from 2Q20. The percentage of plans offering a balanced fund (47.4%) dipped by more than 3 percentage points.
- For plans with more than $1 billion in assets, the average asset-weighted fee decreased by 2 basis points to 0.27%. Plans with less than $500 million in assets saw a slightly larger fee decrease of 4 bps to 0.33%, while the fee for plans with assets between $500 million and $1 billion remained steady at 0.36%.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of over 100 plans, representing nearly $300 billion in assets. The Index is updated quarterly and is available on Callan's website.

Investment Performance



Growth Sources



Net Cash Flow Analysis (3Q20)
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
U.S. Fixed Income	36.91%
Stable Value	30.67%
U.S. Smid Cap	-38.89%
U.S. Large Cap	-45.14%
Total Turnover**	**0.75%**

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

Note: DC Index inception date is January 2006.

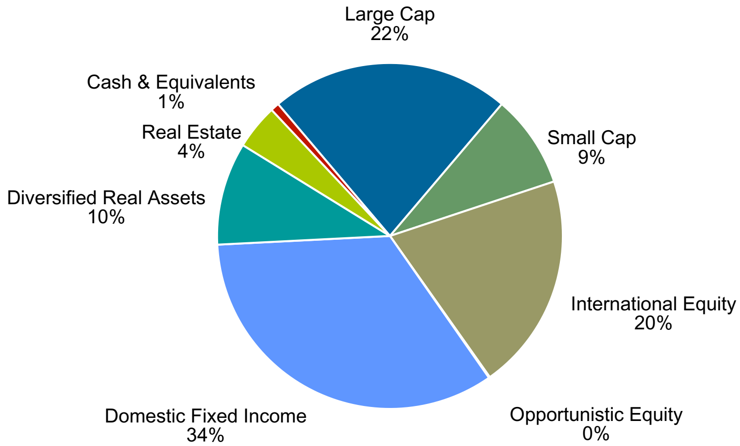
* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

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

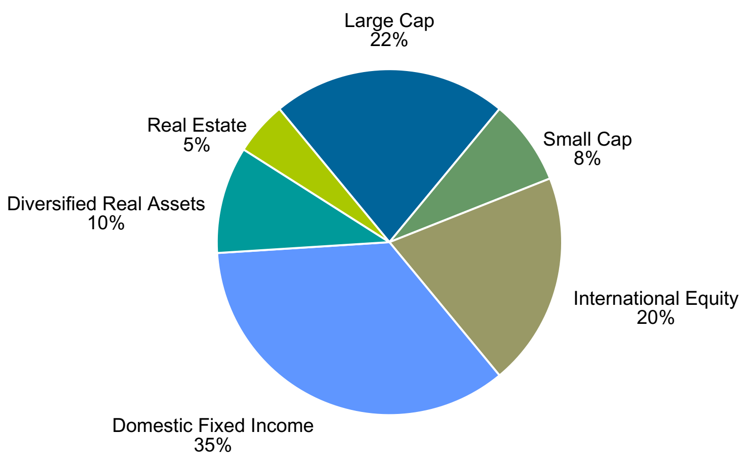
Actual vs Target Asset Allocation
As of December 31, 2020

The first chart below shows the Fund's asset allocation as of December 31, 2020. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation

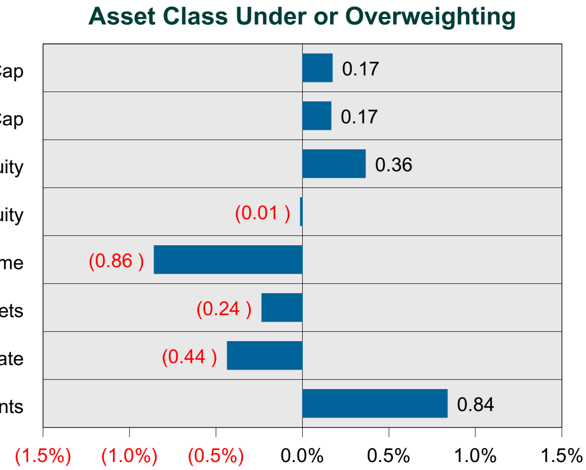


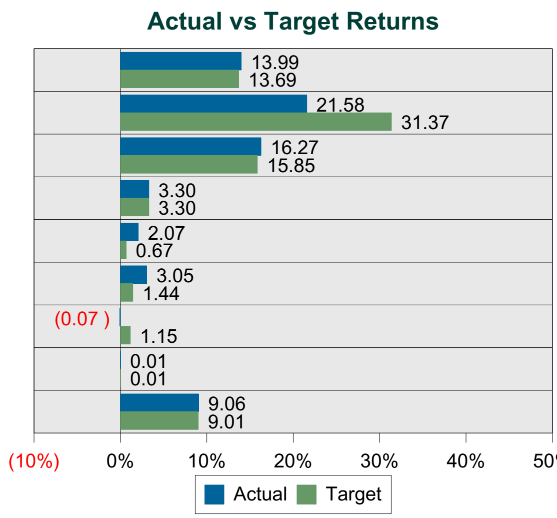
Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Large Cap	1,825,140	22.4%	22.0%	0.4%	29,936
Small Cap	710,467	8.7%	8.0%	0.7%	57,665
International Equity	1,660,137	20.3%	20.0%	0.3%	28,134
Opportunistic Equity	7,161	0.1%	0.0%	0.1%	7,161
Domestic Fixed Income	2,764,120	33.9%	35.0%	(1.1%)	(91,886)
Diversified Real Assets	783,509	9.6%	10.0%	(0.4%)	(32,493)
Real Estate	344,182	4.2%	5.0%	(0.8%)	(63,819)
Cash & Equivalents	65,301	0.8%	0.0%	0.8%	65,301
Total	8,160,015	100.0%	100.0%		

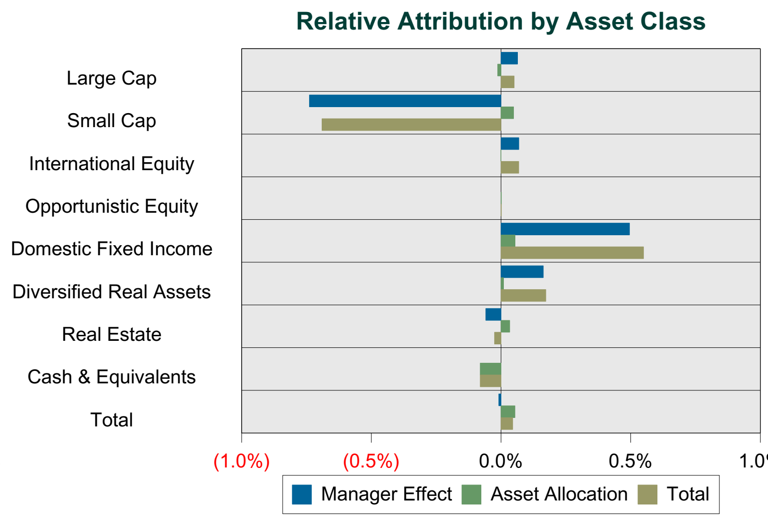
* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

Quarterly Total Fund Relative Attribution - December 31, 2020

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







Relative Attribution Effects for Quarter ended December 31, 2020

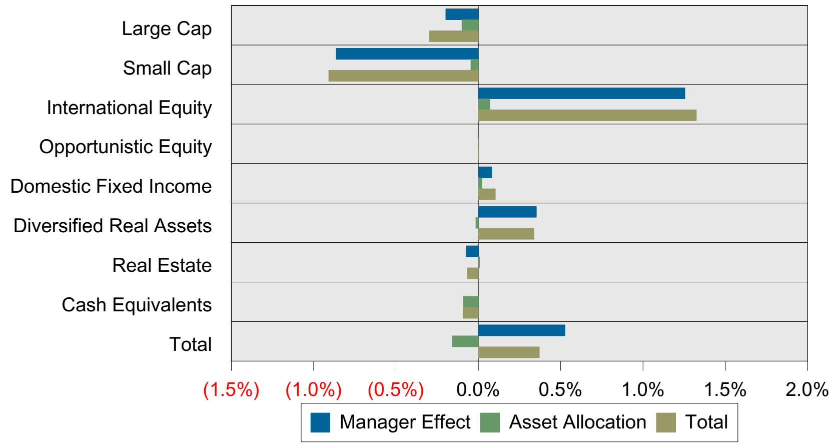
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	13.99%	13.69%	0.06%	(0.01%)	0.05%
Small Cap	8%	8%	21.58%	31.37%	(0.74%)	0.05%	(0.69%)
International Equity	20%	20%	16.27%	15.85%	0.07%	(0.00%)	0.07%
Opportunistic Equity	0%	0%	3.30%	3.30%	0.00%	0.00%	0.00%
Domestic Fixed Income	34%	35%	2.07%	0.67%	0.50%	0.05%	0.55%
Diversified Real Assets	10%	10%	3.05%	1.44%	0.16%	0.01%	0.17%
Real Estate	5%	5%	(0.07%)	1.15%	(0.06%)	0.03%	(0.03%)
Cash & Equivalents	1%	0%	0.01%	0.01%	0.00%	(0.08%)	(0.08%)
Total			**9.06% =**	**9.01% +**	**(0.01%) +**	**0.05%**	**0.05%**

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

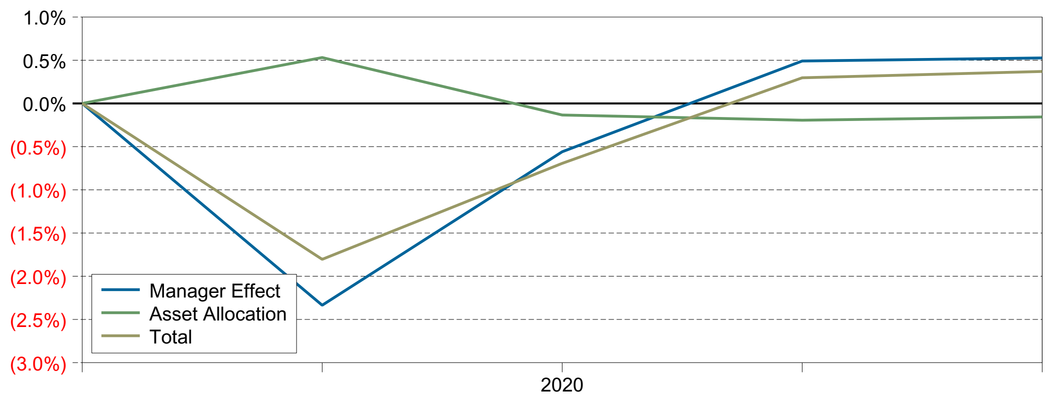
Cumulative Total Fund Relative Attribution - December 31, 2020

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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

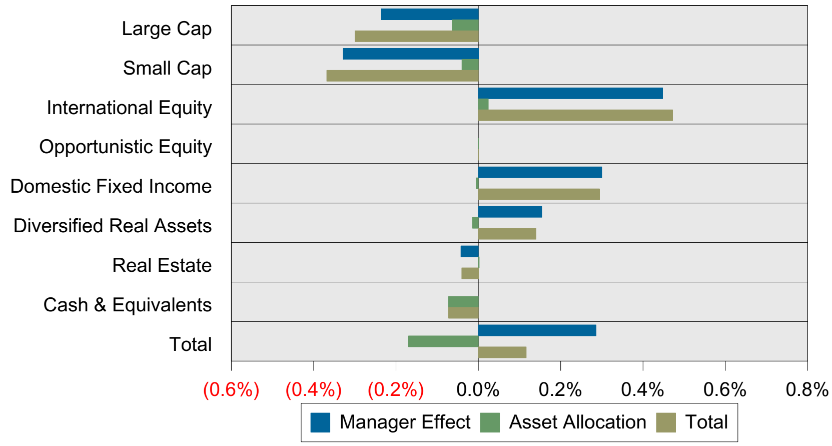
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	19.81%	20.96%	(0.20%)	(0.10%)	(0.30%)
Small Cap	8%	8%	9.63%	19.96%	(0.86%)	(0.05%)	(0.91%)
International Equity	20%	20%	13.68%	7.59%	1.25%	0.07%	1.32%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	35%	35%	8.32%	7.51%	0.08%	0.02%	0.10%
Diversified Real Assets	10%	10%	10.97%	7.36%	0.35%	(0.01%)	0.34%
Real Estate	5%	5%	(0.02%)	1.60%	(0.07%)	0.01%	(0.07%)
Cash Equivalents	1%	0%	0.42%	0.42%	0.00%	(0.09%)	(0.09%)
Total			**12.44% =**	**12.07% +**	**0.53% +**	**(0.16%)**	**0.37%**

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

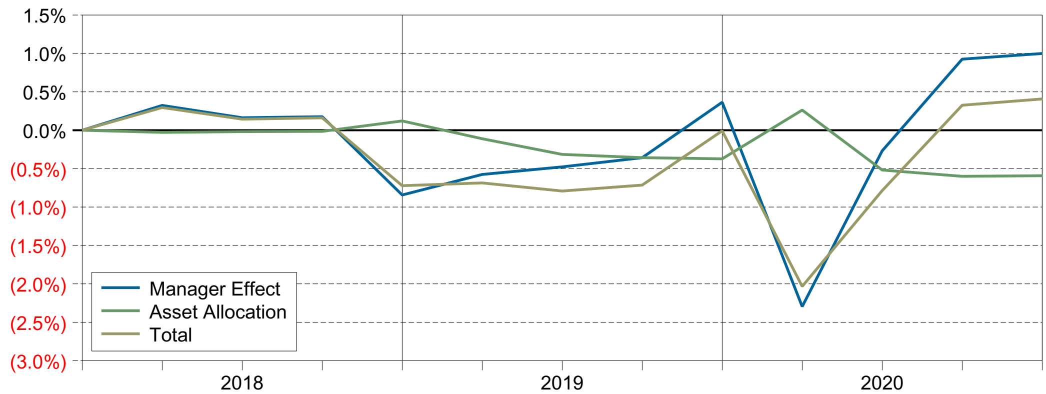
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

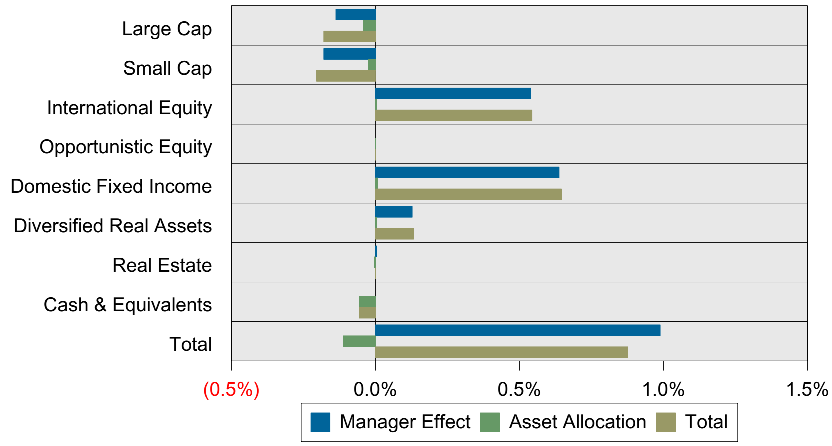
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	13.61%	14.82%	(0.24%)	(0.06%)	(0.30%)
Small Cap	8%	8%	6.39%	10.25%	(0.33%)	(0.04%)	(0.37%)
International Equity	20%	20%	6.28%	4.22%	0.45%	0.02%	0.47%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	35%	35%	6.43%	5.34%	0.30%	(0.01%)	0.29%
Diversified Real Assets	10%	10%	5.94%	4.37%	0.15%	(0.01%)	0.14%
Real Estate	5%	5%	3.89%	4.89%	(0.04%)	0.00%	(0.04%)
Cash & Equivalents	1%	0%	1.41%	1.41%	0.00%	(0.07%)	(0.07%)
Total			**8.09% =**	**7.97% +**	**0.29% +**	**(0.17%)**	**0.12%**

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

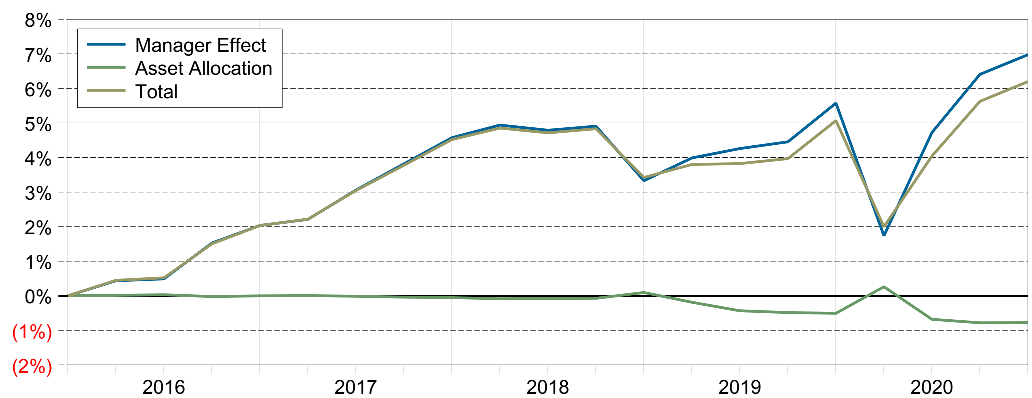
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

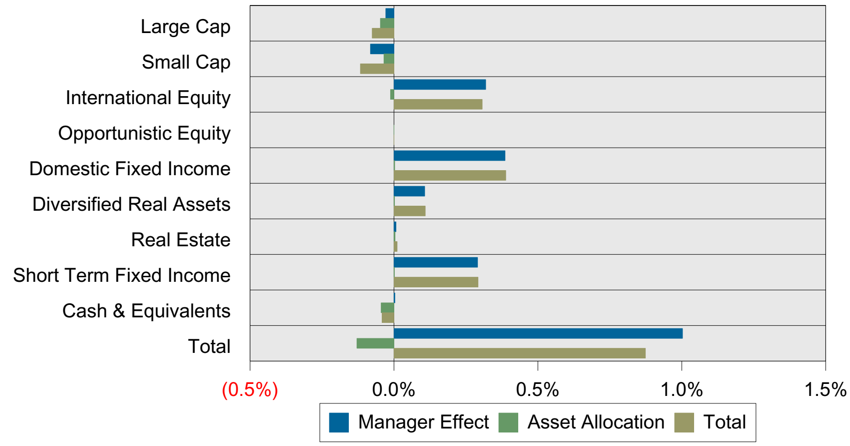
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	14.90%	15.60%	(0.14%)	(0.04%)	(0.18%)
Small Cap	8%	8%	11.14%	13.26%	(0.18%)	(0.02%)	(0.20%)
International Equity	20%	20%	9.94%	7.32%	0.54%	0.00%	0.54%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	35%	35%	6.38%	4.44%	0.64%	0.01%	0.65%
Diversified Real Assets	10%	10%	5.97%	4.64%	0.13%	0.00%	0.13%
Real Estate	5%	5%	5.83%	5.91%	0.00%	(0.00%)	(0.00%)
Cash & Equivalents	1%	0%	1.06%	1.06%	0.00%	(0.06%)	(0.06%)
Total			**9.48% =**	**8.60% +**	**0.99% +**	**(0.11%)**	**0.88%**

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

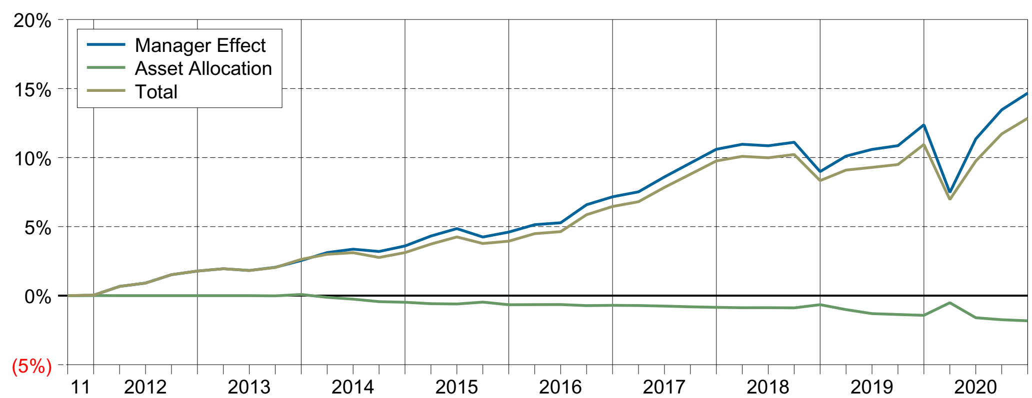
Cumulative Total Fund Relative Attribution - December 31, 2020

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

Nine and One-Quarter Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Nine and One-Quarter Year Annualized Relative Attribution Effects

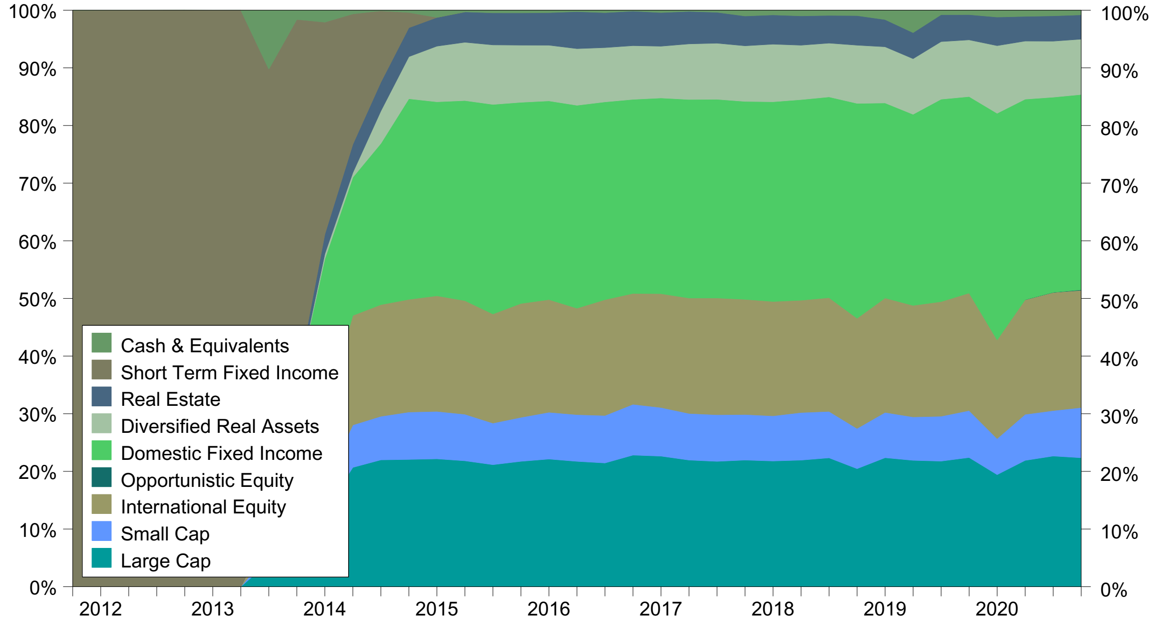
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	16%	16%	-	-	(0.03%)	(0.05%)	(0.08%)
Small Cap	6%	6%	-	-	(0.08%)	(0.03%)	(0.12%)
International Equity	15%	15%	-	-	0.32%	(0.01%)	0.31%
Opportunistic Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income	26%	26%	-	-	0.39%	0.00%	0.39%
Diversified Real Assets	7%	7%	-	-	0.11%	0.00%	0.11%
Real Estate	4%	4%	-	-	0.01%	0.00%	0.01%
Short Term Fixed Income	24%	25%	-	-	0.29%	0.00%	0.29%
Cash & Equivalents	3%	2%	0.61%	0.61%	0.00%	(0.04%)	(0.04%)
Total			**6.21% =**	**5.34% +**	**1.00% +**	**(0.13%)**	**0.87%**

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

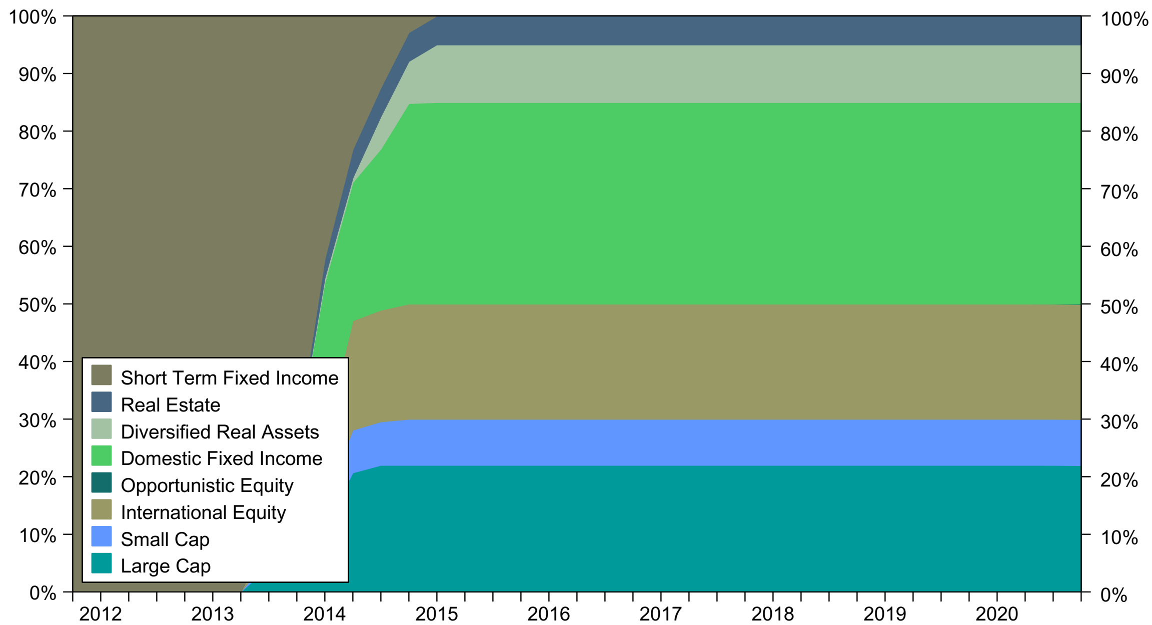
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

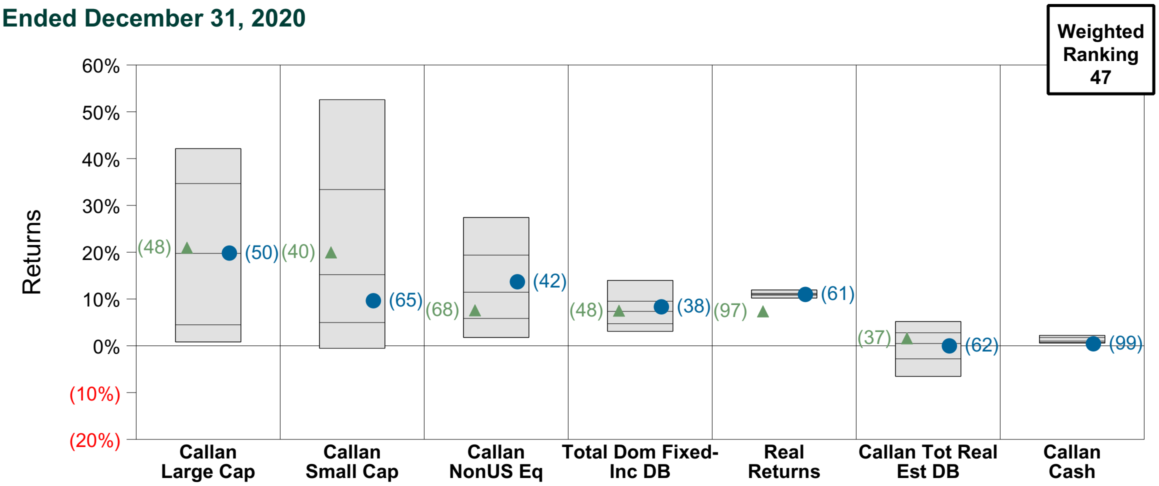


* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

Asset Class Rankings

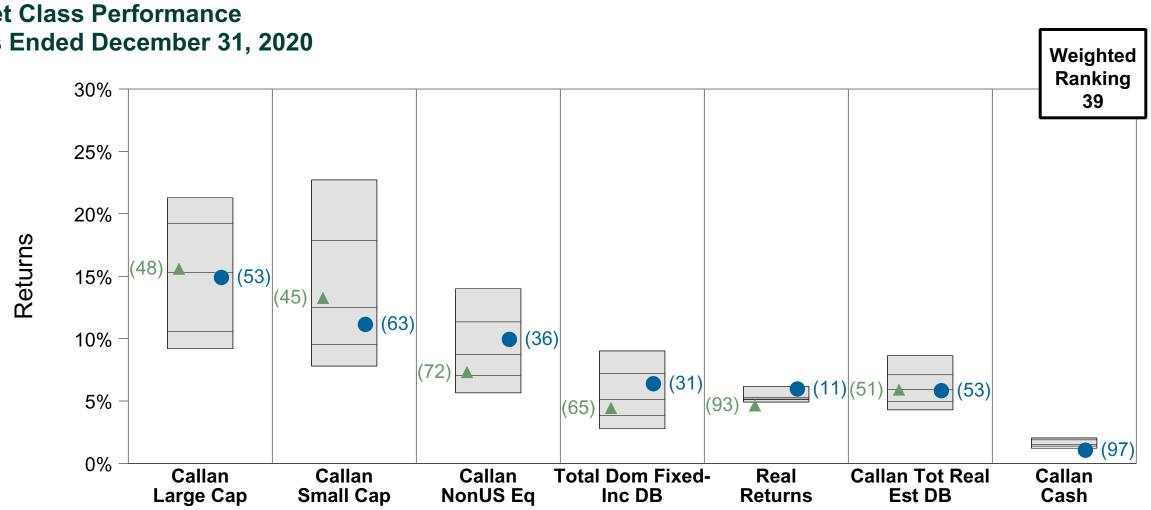
The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used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

Total Asset Class Performance
One Year Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	42.13	52.59	27.42	13.97	11.94	5.19	2.24
25th Percentile	34.66	33.38	19.38	9.53	11.20	2.78	1.78
Median	19.74	15.20	11.45	7.36	11.01	0.49	1.01
75th Percentile	4.48	4.97	5.85	4.72	10.82	(2.79)	0.74
90th Percentile	0.82	(0.54)	1.78	3.09	10.19	(6.53)	0.57
Asset Class Composite ●	19.81	9.63	13.68	8.32	10.97	(0.02)	0.42
Composite Benchmark ▲	20.96	19.96	7.59	7.51	7.36	1.60	-

Total Asset Class Performance
Five Years Ended December 31, 2020



	Callan Large Cap	Callan Small Cap	Callan NonUS Eq	Total Dom Fixed-Inc DB	Real Returns	Callan Tot Real Est DB	Callan Cash
10th Percentile	21.29	22.72	14.00	9.01	6.18	8.63	2.04
25th Percentile	19.25	17.88	11.34	7.19	5.30	7.10	1.89
Median	15.28	12.51	8.74	5.10	5.16	5.93	1.52
75th Percentile	10.56	9.51	7.05	3.83	5.10	4.98	1.39
90th Percentile	9.19	7.80	5.65	2.77	4.91	4.29	1.21
Asset Class Composite ●	14.90	11.14	9.94	6.38	5.97	5.83	1.06
Composite Benchmark ▲	15.60	13.26	7.32	4.44	4.64	5.91	-

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.

Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2020, with the distribution as of September 30, 2020. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Class Allocation

	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equity	**$4,202,904,223**	**51.51%**	**$(173,781,632)**	**$598,066,072**	**$3,778,619,783**	**51.06%**
Domestic Equity	**$2,535,606,208**	**31.07%**	**$(79,162,705)**	**$354,134,413**	**$2,260,634,499**	**30.55%**
Large Cap	**$1,825,139,525**	**22.37%**	**$(78,683,975)**	**$226,840,319**	**$1,676,983,181**	**22.66%**
L.A. Capital Enhanced	412,903,505	5.06%	(16,618,131)	47,522,502	381,999,134	5.16%
L.A. Capital Large Cap Growth	597,158,443	7.32%	(36,793,597)	63,203,742	570,748,297	7.71%
Parametric Large Cap	366,352,714	4.49%	(25,000,000)	40,679,674	350,673,041	4.74%
LSV Large Cap Value	448,724,864	5.50%	(272,248)	75,434,402	373,562,710	5.05%
Small Cap	**$710,466,682**	**8.71%**	**$(478,729)**	**$127,294,094**	**$583,651,318**	**7.89%**
Atlanta Capital	224,106,148	2.75%	(39,430,613)	37,959,739	225,577,022	3.05%
Parametric SmallCap	6	0.00%	(364,848,081)	6,773,820	358,074,267	4.84%
PIMCO RAE	35	0.00%	(35)	41	29	0.00%
Riverbridge Small Cap Growth	247,599,130	3.03%	201,900,000	45,699,130	-	-
Sycamore Small Cap Value	238,761,363	2.93%	201,900,000	36,861,363	-	-
International Equity	**$1,660,137,490**	**20.34%**	**$(101,097,606)**	**$243,946,531**	**$1,517,288,566**	**20.50%**
DFA Intl SmallCap Value	176,135,801	2.16%	0	29,122,266	147,013,535	1.99%
LSV Intl Value	516,778,417	6.33%	(429,928)	76,227,926	440,980,419	5.96%
Vanguard Intl Explorer Fund	181,092,833	2.22%	0	28,650,164	152,442,669	2.06%
William Blair	786,130,440	9.63%	(100,667,678)	109,946,175	776,851,943	10.50%
Opportunistic Equity	**$7,160,525**	**0.09%**	**$6,478,679**	**$(14,872)**	**$696,718**	**0.01%**
Sixth Street TAO	7,160,525	0.09%	6,478,679	(14,872)	696,718	0.01%
Domestic Fixed Income	**$2,764,119,570**	**33.87%**	**$204,607,940**	**$53,784,087**	**$2,505,727,543**	**33.86%**
Ares ND Credit Strategies Fd	80,937,088	0.99%	0	2,869,930	78,067,158	1.05%
BND CDs	45,584,998	0.56%	(41,563,100)	423,456	86,724,642	1.17%
Cerberus ND Private Credit Fd	116,687,521	1.43%	15,750,000	2,668,120	98,269,401	1.33%
Declaration Total Return	205,208,297	2.51%	(121,129)	4,824,523	200,504,903	2.71%
PIMCO Bravo II	6,896,853	0.08%	(768,889)	37,767	7,627,975	0.10%
PIMCO DiSCO II	60,859,820	0.75%	0	1,079,958	59,779,862	0.81%
Prudential	828,483,288	10.15%	94,122,094	17,175,530	717,185,664	9.69%
SSgA US Govt Credit Bd Idx	403,872,464	4.95%	57,487,371	3,130,658	343,254,435	4.64%
Wells Capital	206,515,875	2.53%	(94,584)	10,483,339	196,127,120	2.65%
Western Asset Management	809,073,367	9.92%	79,796,178	11,090,806	718,186,383	9.70%
Global Real Assets	**$1,127,690,479**	**13.82%**	**$61,739,057**	**$21,973,231**	**$1,043,978,191**	**14.11%**
Real Estate	**$344,181,873**	**4.22%**	**$19,607,893**	**$(231,255)**	**$324,805,235**	**4.39%**
Invesco Core Real Estate	172,062,232	2.11%	(136,596)	(484,513)	172,683,342	2.33%
JP Morgan RE Inc & Growth	172,119,641	2.11%	19,744,490	253,258	152,121,893	2.06%
Diversified	**$783,508,606**	**9.60%**	**$42,131,164**	**$22,204,486**	**$719,172,956**	**9.72%**
Western Asset TIPS	488,955,759	5.99%	37,873,005	8,273,949	442,808,805	5.98%
ISQ Global Infrastructure II	50,328,007	0.62%	(1,449,456)	1,925,624	49,851,839	0.67%
JP Morgan Infrastructure	109,739,116	1.34%	(2,126,920)	4,414,136	107,451,900	1.45%
Grosvenor Cust. Infrastructure	46,463,503	0.57%	(2,118,916)	3,604,518	44,977,901	0.61%
Macquarie Infrastructure Fund IV	77,435,309	0.95%	(633,460)	3,986,258	74,082,511	1.00%
Macquarie Infrastructure Fund V	10,586,912	0.13%	10,586,912	0	-	-
Cash	**$65,300,695**	**0.80%**	**$(6,828,117)**	**$7,443**	**$72,121,369**	**0.97%**
Northern Trust Cash Account	47,192,313	0.58%	1,608,783	(69)	45,583,599	0.62%
Bank of ND	18,108,383	0.22%	(8,436,900)	7,513	26,537,770	0.36%
Total Fund	**$8,160,014,967**	**100.0%**	**$85,737,248**	**$673,830,833**	**$7,400,446,886**	**100.0%**

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 9-1/4 Years
Global Equity					
Gross	16.11%	15.72%	-	-	-
Net	16.01%	15.41%	-	-	-
Weighted Benchmark	17.28%	15.50%	-	-	-
Domestic Equity					
Gross	15.99%	17.08%	11.69%	13.94%	-
Net	15.91%	16.81%	11.49%	13.71%	-
Weighted Benchmark	18.24%	20.94%	-	-	-
Large Cap					
Gross	13.99%	19.81%	13.61%	14.90%	-
Net	13.94%	19.67%	13.44%	14.71%	-
Russell 1000 Index	13.69%	20.96%	14.82%	15.60%	16.44%
L.A. Capital Enhanced - Gross	12.52%	22.07%	14.76%	15.10%	-
L.A. Capital Enhanced - Net	12.48%	21.93%	14.62%	14.95%	-
Russell 1000 Index	13.69%	20.96%	14.82%	15.60%	16.44%
L.A. Capital LargeCap Growth - Gross	11.64%	37.68%	22.02%	19.56%	-
L.A. Capital LargeCap Growth - Net	11.58%	37.41%	21.78%	19.32%	-
Russell 1000 Growth Index	11.39%	38.49%	22.99%	21.00%	19.69%
Parametric Clifton Large Cap - Gross	12.69%	18.77%	14.23%	15.35%	-
Parametric Clifton Large Cap - Net	12.69%	18.98%	14.30%	15.35%	-
S&P 500 Index	12.15%	18.40%	14.18%	15.22%	16.23%
LSV Large Cap Value - Gross	20.20%	(0.90%)	3.00%	8.89%	-
LSV Large Cap Value - Net	20.12%	(1.18%)	2.71%	8.58%	-
Russell 1000 Value Index	16.25%	2.80%	6.07%	9.74%	12.85%
Small Cap					
Gross	21.58%	9.63%	6.39%	11.14%	-
Net	21.38%	9.05%	6.12%	10.85%	-
Russell 2000 Index	31.37%	19.96%	10.25%	13.26%	14.45%
Atlanta Capital - Gross	20.16%	13.78%	-	-	-
Atlanta Capital - Net	19.98%	13.41%	-	-	-
S&P 600 Small Cap Index	31.31%	11.29%	7.74%	12.37%	14.78%
International Equity					
Gross	16.27%	13.68%	6.28%	9.94%	-
Net	16.19%	13.35%	5.96%	9.61%	-
Benchmark(1)	15.85%	7.59%	4.22%	7.32%	7.77%
DFA Intl Small Cap Value	19.81%	0.81%	(2.20%)	5.27%	-
World ex US SC Va	20.30%	2.58%	0.94%	7.25%	8.16%
LSV Intl Value - Gross	17.31%	(1.85%)	(0.77%)	5.22%	-
LSV Intl Value - Net	17.19%	(2.23%)	(1.14%)	4.82%	-
MSCI EAFE Index	16.05%	7.82%	4.28%	7.45%	7.84%
Vanguard Intl Explorer Fund	18.79%	15.08%	2.60%	8.04%	-
BMI, EPAC, <$2 B	17.86%	14.15%	3.17%	8.43%	9.26%
William Blair - Gross	14.53%	28.49%	14.86%	-	-
William Blair - Net	14.44%	28.03%	14.44%	-	-
MSCI ACWI ex US IMI	17.22%	11.12%	4.83%	8.98%	7.63%
Opportunistic Equity					
Net	3.30%	-	-	-	-
Weighted Benchmark(2)	5.11%	-	-	-	-
Sixth Street TAO - Net	3.30%	-	-	-	-
Benchmark(2)	5.11%	-	-	-	-

(1) MSCI EAFE through 6/30/2016 and MSCI World ex-US thereafter.
(2) 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 9-1/4 Years
Domestic Fixed Income					
Gross	2.07%	8.32%	6.43%	6.38%	-
Net	2.04%	8.21%	6.31%	6.26%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.44%
Ares ND Credit Strategies Fd - Net	3.68%	3.29%	6.13%	-	-
Cerberus ND Private Credit Fd - Net	2.61%	8.81%	9.49%	-	-
S&P/LSTA Leveraged Loan B	3.78%	3.80%	4.50%	5.68%	5.24%
BND CDs - Net	0.66%	2.47%	3.04%	-	-
Declaration Total Return - Net	2.41%	5.75%	5.18%	5.03%	-
Libor-3 Month	0.06%	0.64%	1.78%	1.47%	0.94%
PIMCO Bravo II - Net(1)	0.50%	(17.51%)	(3.77%)	1.46%	-
PIMCO DiSCO II - Net (1)	1.81%	4.18%	5.93%	8.54%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.44%
Prudential - Gross	2.27%	10.03%	6.95%	6.77%	-
Prudential - Net	2.22%	9.81%	6.73%	6.53%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.44%
Wells Capital - Gross	5.35%	12.23%	8.55%	8.49%	-
Wells Capital - Net	5.30%	12.02%	8.36%	8.30%	-
Blmbg Credit Baa	4.03%	9.43%	7.35%	7.48%	5.85%
Western Asset - Gross	1.44%	8.29%	6.35%	5.93%	-
Western Asset - Net	1.42%	8.17%	6.22%	5.80%	-
Blmbg Aggregate	0.67%	7.51%	5.34%	4.44%	3.44%
SSgA US Govt Credit Bd Idx - Gross	0.81%	9.14%	6.07%	5.04%	-
SSgA US Govt Credit Bd Idx - Net	0.81%	9.13%	6.05%	5.02%	-
Blmbg Govt/Credit Bd	0.82%	8.93%	5.97%	4.98%	3.72%

(1) Prior to 7/1/2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning 7/1/2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 9-1/4 Years
Global Real Assets					
Gross	2.05%	7.44%	-	-	-
Net	1.99%	7.14%	-	-	-
Weighted Benchmark	1.34%	5.42%	-	-	-
Real Estate					
Gross	(0.07%)	(0.02%)	3.89%	5.83%	-
Net	(0.16%)	(0.46%)	3.38%	5.25%	-
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	8.53%
Invesco Core Real Estate - Gross	(0.28%)	(0.94%)	4.12%	5.97%	-
Invesco Core Real Estate - Net	(0.36%)	(1.27%)	3.80%	5.63%	-
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	8.53%
JP Morgan RE Inc & Growth - Gross	0.15%	0.89%	3.68%	5.72%	-
JP Morgan RE Inc & Growth - Net	0.05%	0.34%	2.98%	4.92%	-
NCREIF Total Index	1.15%	1.60%	4.89%	5.91%	8.53%
Diversified					
Gross	3.05%	10.97%	5.94%	5.97%	-
Net	3.01%	10.75%	5.72%	5.72%	-
Weighted Benchmark	1.44%	7.36%	4.37%	4.64%	-
Western Asset TIPS - Gross	1.80%	11.17%	4.95%	5.35%	-
Western Asset TIPS - Net	1.77%	11.04%	4.83%	5.22%	-
Benchmark(3)	1.63%	11.54%	5.44%	5.77%	3.65%
JP Morgan Infrastructure - Gross	4.11%	9.05%	7.44%	7.39%	-
JP Morgan Infrastructure - Net	3.98%	8.18%	6.69%	6.63%	-
Grosvenor Cust. Infrastructure - Net	8.01%	14.05%	11.69%	6.90%	-
Benchmark(1)	1.06%	1.07%	3.03%	2.65%	1.77%
Macquarie Infrastructure Fd IV - Net	5.40%	11.16%	-	-	-
ISQ Global Infrastructure II - Net	3.86%	9.58%	-	-	-
Benchmark(2)	1.06%	1.07%	-	-	-
Cash & Equivalents - Net	**0.01%**	**0.42%**	**1.41%**	**1.06%**	**0.61%**
NT Cash Account - Net	(0.00%)	0.34%	-	-	-
Bank of ND - Net	0.03%	0.56%	-	-	-
90 Day Treasury Bills	0.03%	0.67%	1.60%	1.20%	0.68%
Total Fund					
Gross	9.06%	12.44%	8.09%	9.48%	6.21%
Net	9.00%	12.22%	7.88%	9.25%	6.02%
Target*	9.01%	12.07%	7.97%	8.60%	5.34%

* Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.1% NDLEG-Opportunistic Equity.
(1) CPI-W through 6/30/2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.
(2) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.
(3) Blmbg Global Inflation-Linked through 10/31/2018 and Blmbg US Govt Inflation Linked Bond Index thereafter.

Domestic Equity
Period Ended December 31, 2020

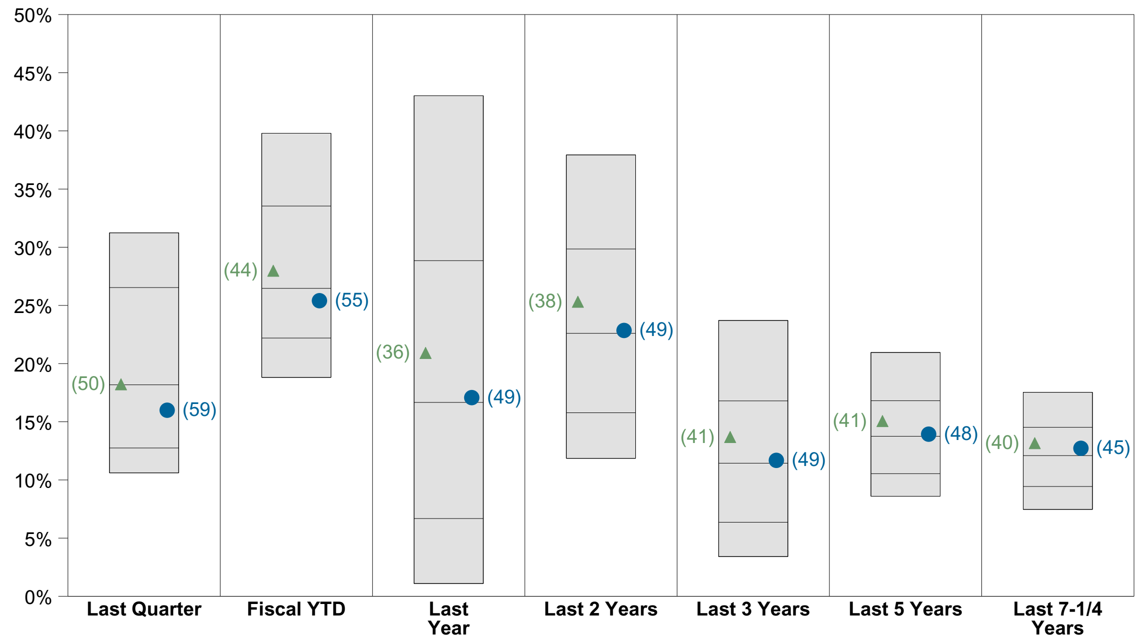
Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 15.99% return for the quarter placing it in the 59 percentile of the Total Domestic Equity Database group for the quarter and in the 49 percentile for the last year.
- Domestic Equity's portfolio underperformed the Domestic Equity Target by 2.23% for the quarter and underperformed the Domestic Equity Target for the year by 3.84%.

Quarterly Asset Growth

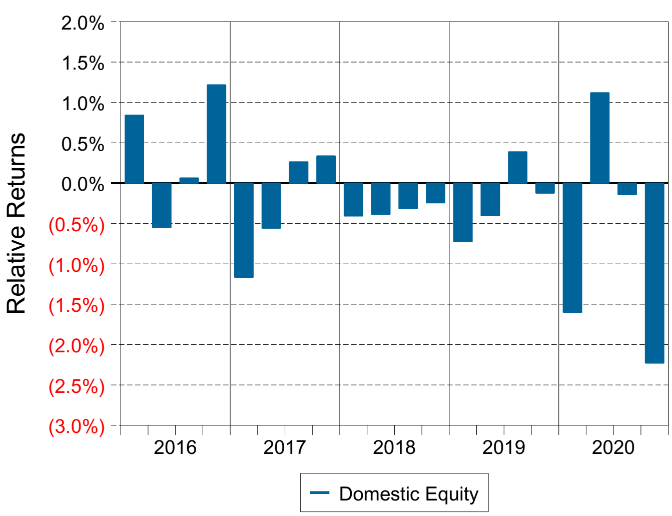
Beginning Market Value	$2,260,634,499
Net New Investment	$-79,162,705
Investment Gains/(Losses)	$354,134,413
Ending Market Value	$2,535,606,208

Performance vs Total Domestic Equity Database (Gross)

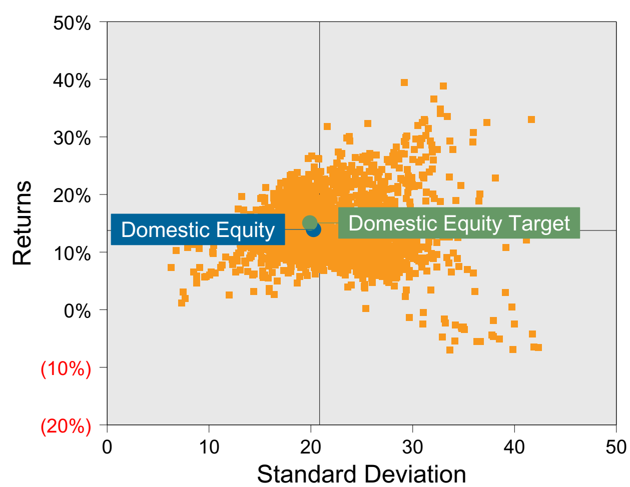


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	31.24	39.80	43.02	37.94	23.71	20.96	17.53
25th Percentile	26.53	33.54	28.85	29.85	16.79	16.81	14.52
Median	18.18	26.47	16.66	22.60	11.44	13.75	12.09
75th Percentile	12.75	22.20	6.68	15.78	6.36	10.54	9.44
90th Percentile	10.61	18.81	1.10	11.85	3.42	8.60	7.47
Domestic Equity ●	15.99	25.41	17.08	22.85	11.69	13.94	12.72
Domestic Equity Target ▲	18.22	27.98	20.92	25.32	13.69	15.06	13.16

Relative Return vs Domestic Equity Target



Total Domestic Equity Database (Gross)
Annualized Five Year Risk vs Return



Parametric Large Cap
Period Ended December 31, 2020

Investment Philosophy

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

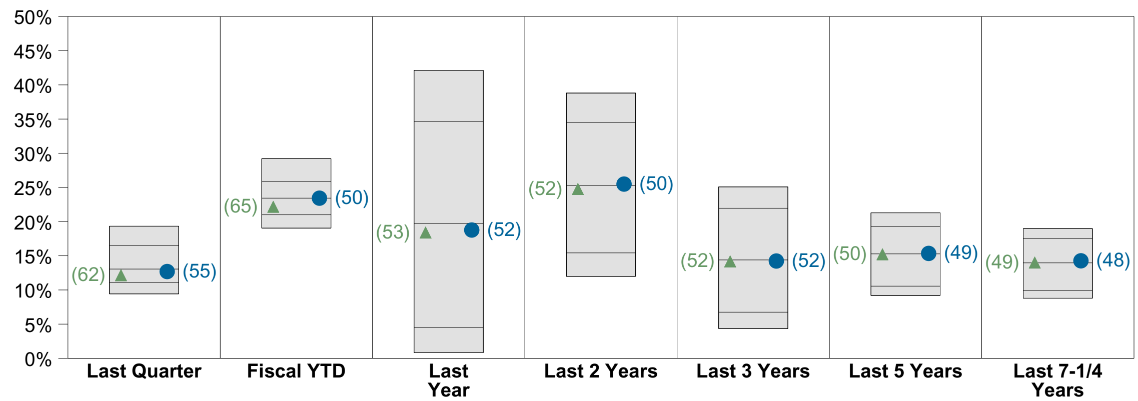
Quarterly Summary and Highlights

- Parametric Large Cap's portfolio posted a 12.69% return for the quarter placing it in the 55 percentile of the Callan Large Capitalization group for the quarter and in the 52 percentile for the last year.
- Parametric Large Cap's portfolio outperformed the S&P 500 Index by 0.54% for the quarter and outperformed the S&P 500 Index for the year by 0.37%.

Quarterly Asset Growth

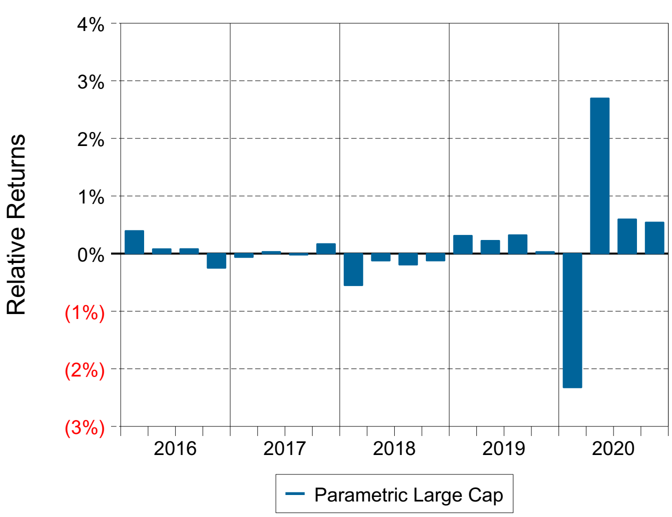
Beginning Market Value	$350,673,041
Net New Investment	$-25,000,000
Investment Gains/(Losses)	$40,679,674
Ending Market Value	$366,352,714

Performance vs Callan Large Capitalization (Gross)

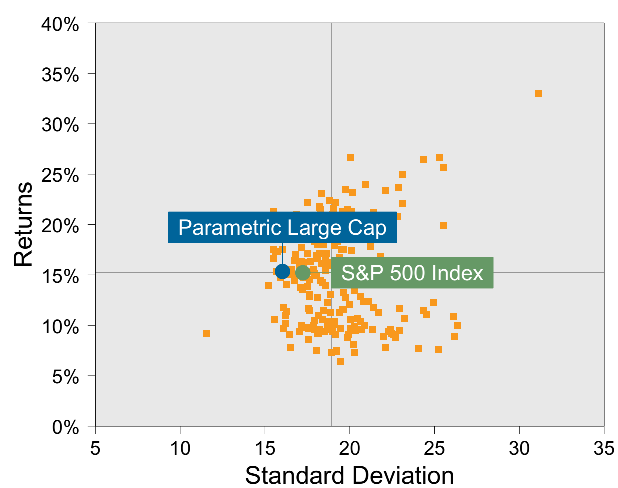


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	19.33	29.22	42.13	38.81	25.08	21.29	18.98
25th Percentile	16.53	25.88	34.66	34.53	21.96	19.25	17.54
Median	13.06	23.43	19.74	25.27	14.39	15.28	13.96
75th Percentile	11.06	21.00	4.48	15.42	6.75	10.56	9.94
90th Percentile	9.43	19.05	0.82	11.99	4.35	9.19	8.79
Parametric Large Cap ●	12.69	23.43	18.77	25.49	14.23	15.35	14.26
S&P 500 Index ▲	12.15	22.16	18.40	24.77	14.18	15.22	14.00

Relative Return vs S&P 500 Index



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



L.A. Capital
Period Ended December 31, 2020

Investment Philosophy

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

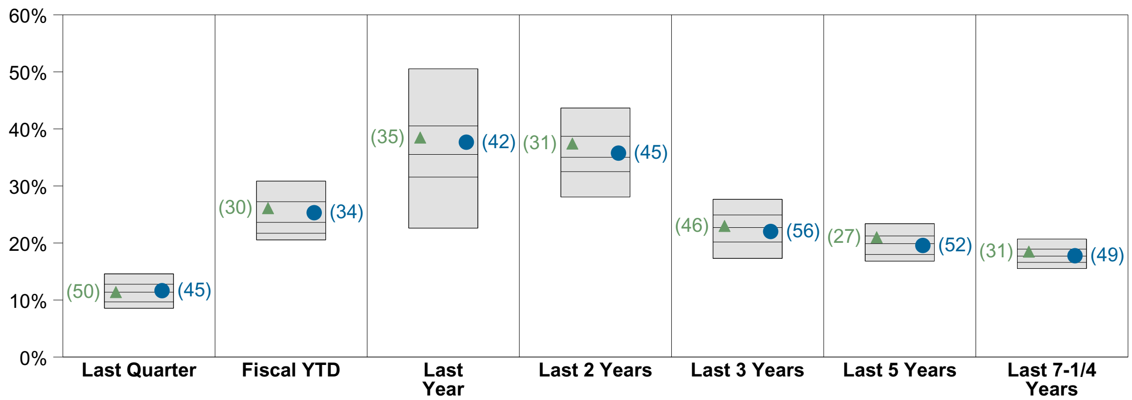
Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 11.64% return for the quarter placing it in the 45 percentile of the Callan Large Cap Growth group for the quarter and in the 42 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 0.25% for the quarter and underperformed the Russell 1000 Growth Index for the year by 0.82%.

Quarterly Asset Growth

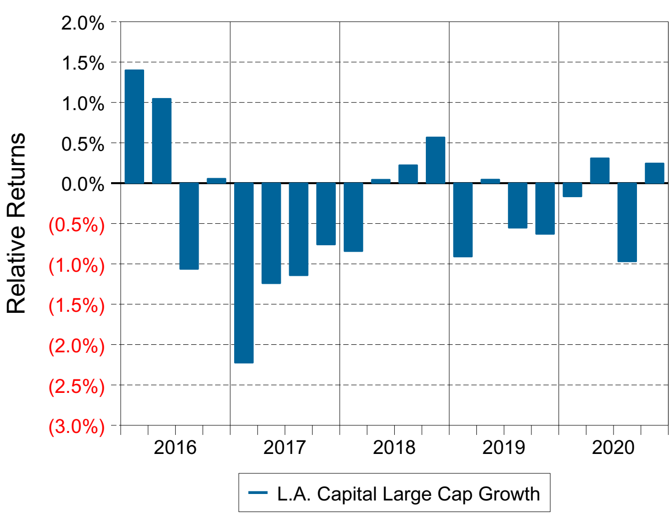
Beginning Market Value	$570,748,297
Net New Investment	$-36,793,597
Investment Gains/(Losses)	$63,203,742
Ending Market Value	$597,158,443

Performance vs Callan Large Cap Growth (Gross)

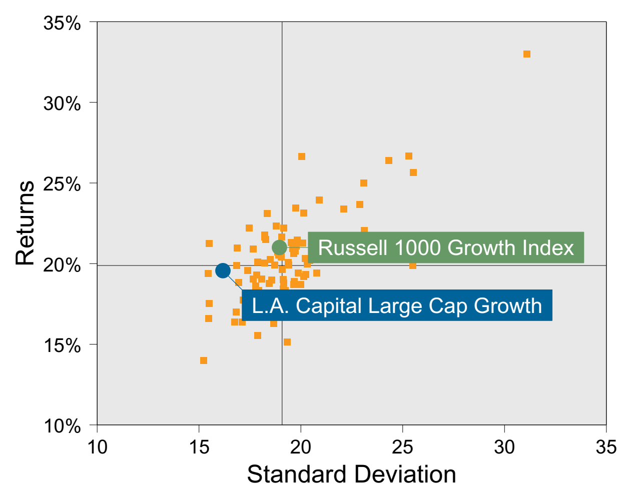


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	14.58	30.86	50.54	43.67	27.65	23.39	20.69
25th Percentile	12.76	27.24	40.52	38.71	24.92	21.23	18.92
Median	11.37	23.61	35.53	35.03	22.71	19.88	17.70
75th Percentile	9.67	21.71	31.55	32.51	20.17	17.98	16.60
90th Percentile	8.55	20.53	22.61	28.06	17.29	16.81	15.52
L.A. Capital Large Cap Growth ●	11.64	25.31	37.68	35.76	22.02	19.56	17.76
Russell 1000 Growth Index ▲	11.39	26.12	38.49	37.44	22.99	21.00	18.49

Relative Return vs Russell 1000 Growth Index



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



L.A. Capital Enhanced
Period Ended December 31, 2020

Investment Philosophy

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

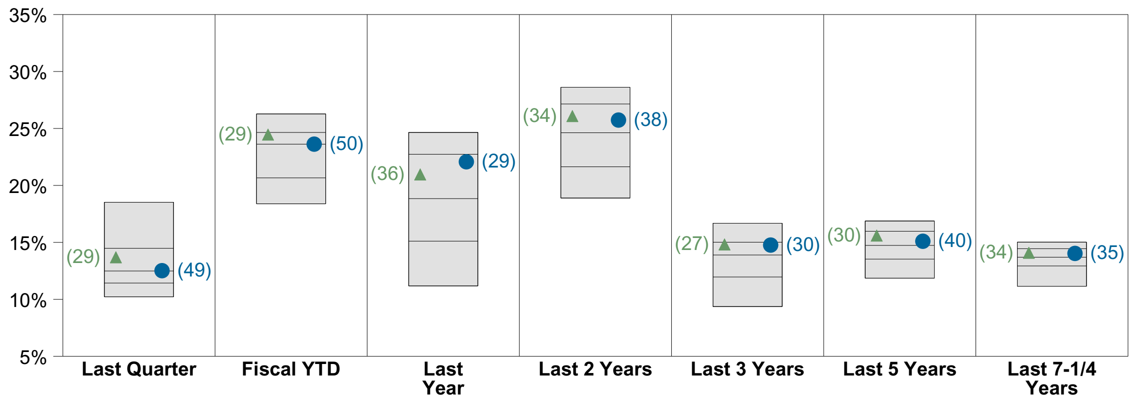
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 12.52% return for the quarter placing it in the 49 percentile of the Callan Large Cap Core group for the quarter and in the 29 percentile for the last year.
- L.A. Capital Enhanced's portfolio underperformed the Russell 1000 Index by 1.17% for the quarter and outperformed the Russell 1000 Index for the year by 1.11%.

Quarterly Asset Growth

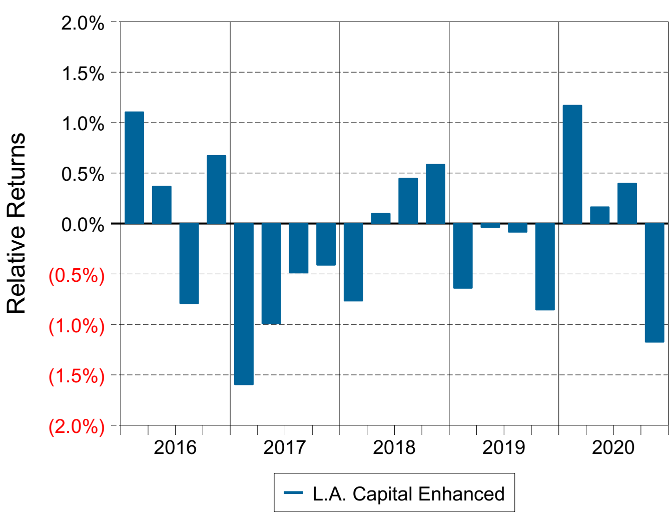
Beginning Market Value	$381,999,134
Net New Investment	$-16,618,131
Investment Gains/(Losses)	$47,522,502
Ending Market Value	$412,903,505

Performance vs Callan Large Cap Core (Gross)

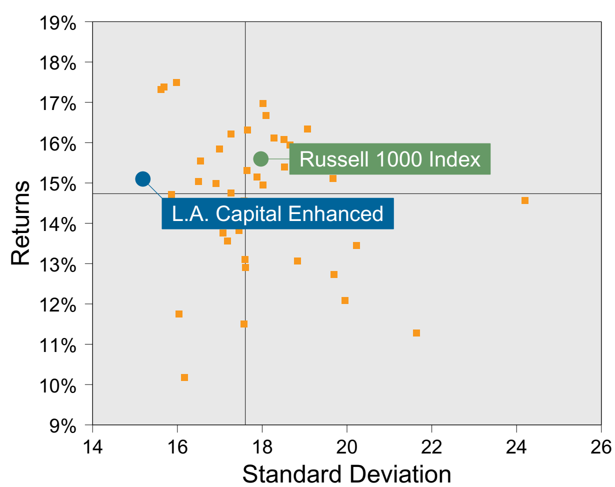


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	18.52	26.28	24.65	28.62	16.68	16.88	15.02
25th Percentile	14.48	24.65	22.73	27.15	15.01	15.98	14.45
Median	12.49	23.62	18.84	24.62	13.89	14.73	13.70
75th Percentile	11.43	20.66	15.11	21.64	11.96	13.53	12.93
90th Percentile	10.22	18.39	11.18	18.89	9.36	11.86	11.15
L.A. Capital Enhanced ●	12.52	23.62	22.07	25.74	14.76	15.10	14.03
Russell 1000 Index ▲	13.69	24.46	20.96	26.09	14.82	15.60	14.09

Relative Return vs Russell 1000 Index



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



LSV Asset Management
Period Ended December 31, 2020

Investment Philosophy

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

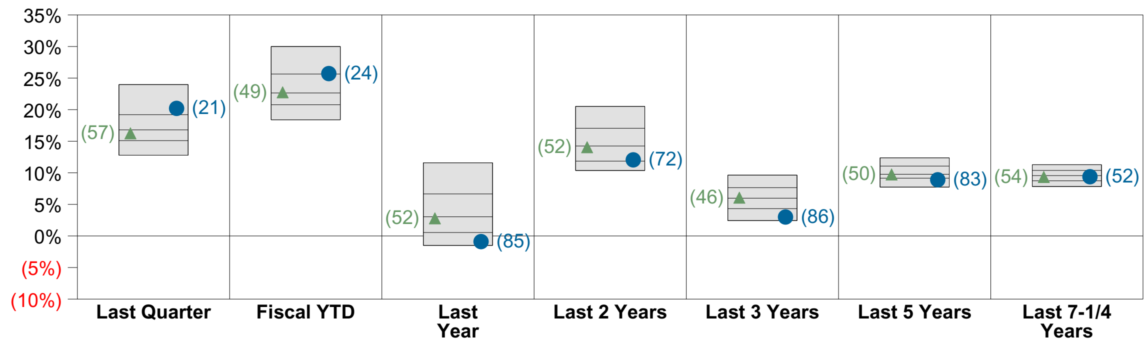
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 20.20% return for the quarter placing it in the 21 percentile of the Callan Large Cap Value group for the quarter and in the 85 percentile for the last year.
- LSV Large Cap Value's portfolio outperformed the Russell 1000 Value Index by 3.95% for the quarter and underperformed the Russell 1000 Value Index for the year by 3.69%.

Quarterly Asset Growth

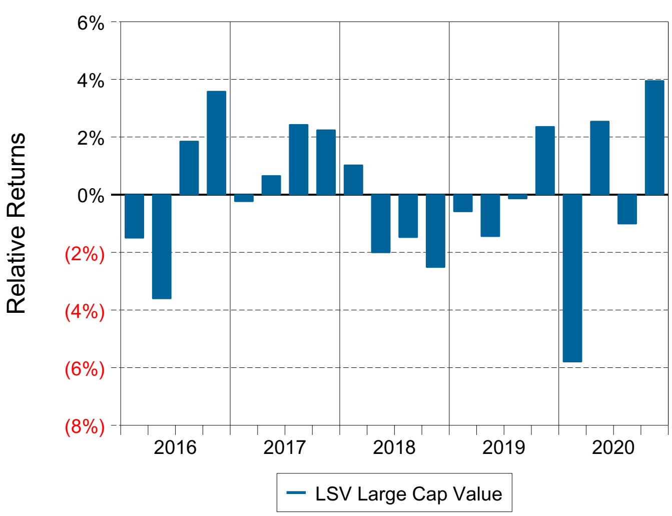
Beginning Market Value	$373,562,710
Net New Investment	$-272,248
Investment Gains/(Losses)	$75,434,402
Ending Market Value	$448,724,864

Performance vs Callan Large Cap Value (Gross)

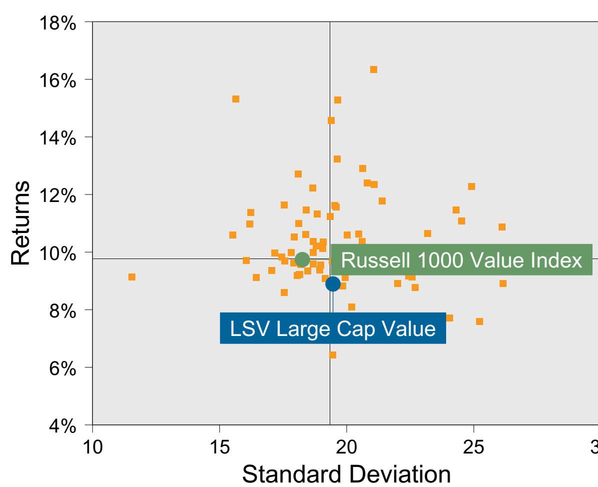


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	23.97	30.00	11.58	20.52	9.63	12.37	11.29
25th Percentile	19.20	25.64	6.65	17.05	7.65	11.06	10.37
Median	16.80	22.64	3.04	14.24	5.98	9.77	9.56
75th Percentile	15.10	20.78	0.55	11.85	4.33	9.15	8.73
90th Percentile	12.78	18.39	(1.50)	10.36	2.43	7.73	7.83
LSV Large Cap Value ●	20.20	25.71	(0.90)	12.05	3.00	8.89	9.38
Russell 1000 Value Index ▲	16.25	22.75	2.80	14.05	6.07	9.74	9.34

Relative Return vs Russell 1000 Value Index



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



Atlanta Capital
Period Ended December 31, 2020

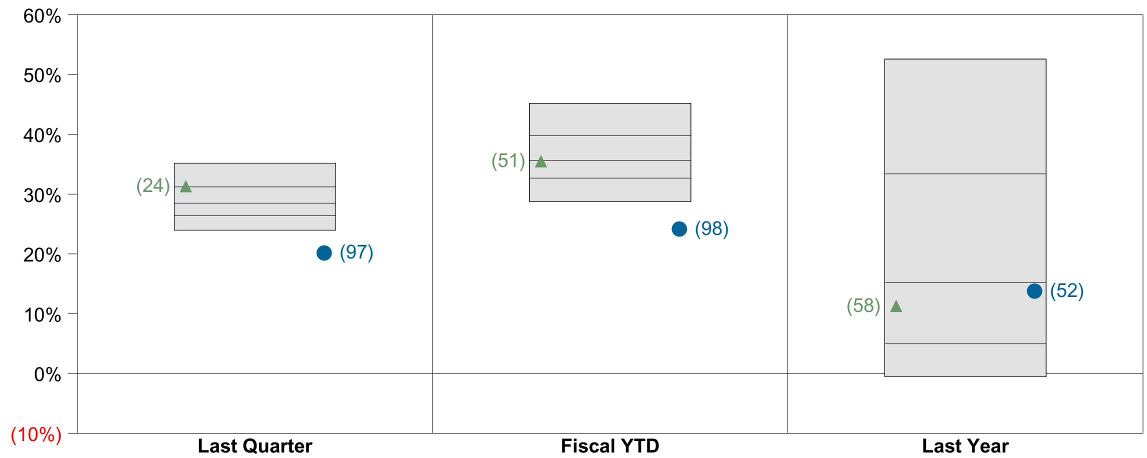
Investment Philosophy
Atlanta believes that high quality companies produce consistently increasing earnings and dividends, thereby providing attractive returns with moderate risk over the long-term.

Quarterly Summary and Highlights
- Atlanta Capital's portfolio posted a 20.16% return for the quarter placing it in the 97 percentile of the Callan Small Capitalization group for the quarter and in the 52 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 11.15% for the quarter and outperformed the S&P 600 Small Cap Index for the year by 2.49%.

Quarterly Asset Growth

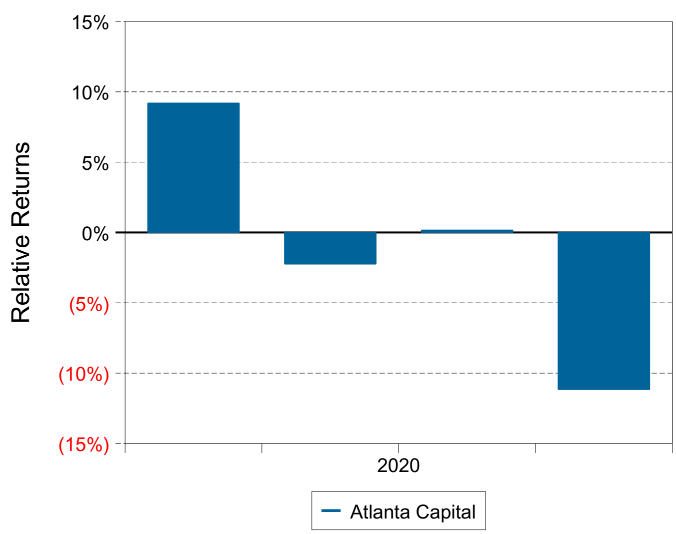
Beginning Market Value	$225,577,022
Net New Investment	$-39,430,613
Investment Gains/(Losses)	$37,959,739
Ending Market Value	$224,106,148

Performance vs Callan Small Capitalization (Gross)

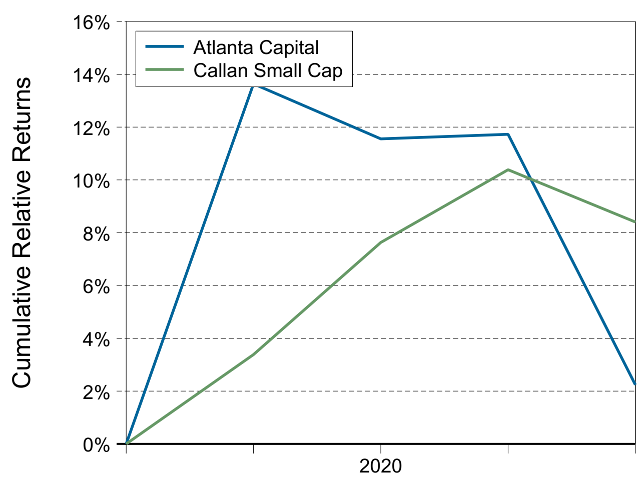


	Last Quarter	Fiscal YTD	Last Year
10th Percentile	35.17	45.19	52.59
25th Percentile	31.21	39.77	33.38
Median	28.49	35.64	15.20
75th Percentile	26.39	32.68	4.97
90th Percentile	23.97	28.73	(0.54)
Atlanta Capital ●	20.16	24.16	13.78
S&P 600 Small Cap Index ▲	31.31	35.48	11.29

Relative Return vs S&P 600 Small Cap Index



Cumulative Returns vs S&P 600 Small Cap Index



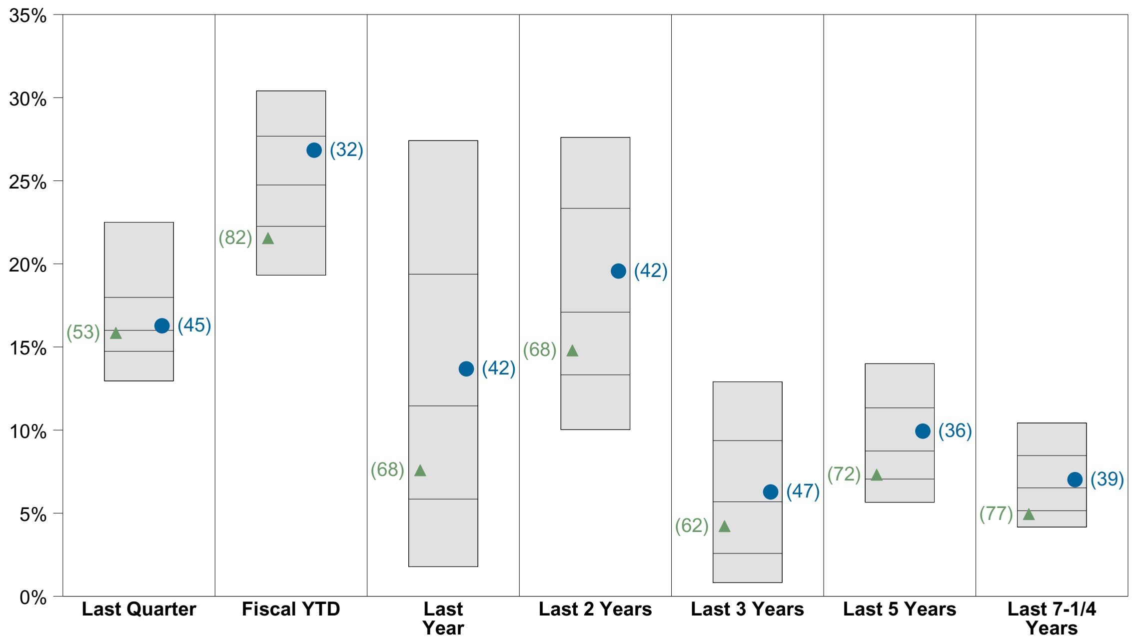
Quarterly Summary and Highlights

- International Equity's portfolio posted a 16.27% return for the quarter placing it in the 45 percentile of the Callan Non-US Equity group for the quarter and in the 42 percentile for the last year.
- International Equity's portfolio outperformed the International Equity Target by 0.43% for the quarter and outperformed the International Equity Target for the year by 6.10%.

Quarterly Asset Growth

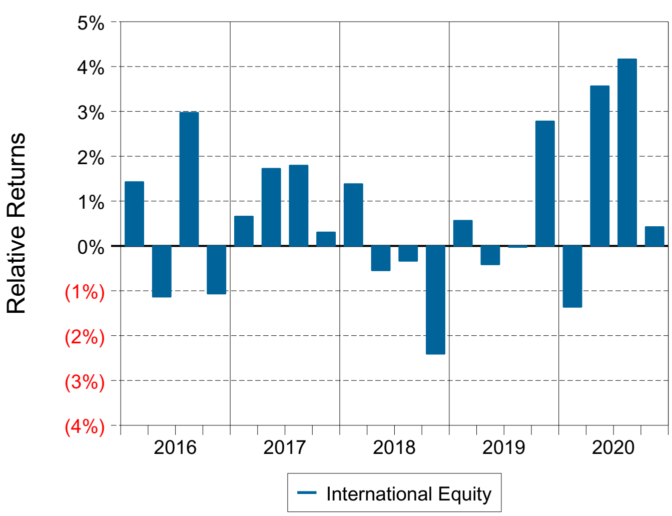
Beginning Market Value	$1,517,288,566
Net New Investment	$-101,097,606
Investment Gains/(Losses)	$243,946,531
Ending Market Value	$1,660,137,490

Performance vs Callan Non-US Equity (Gross)

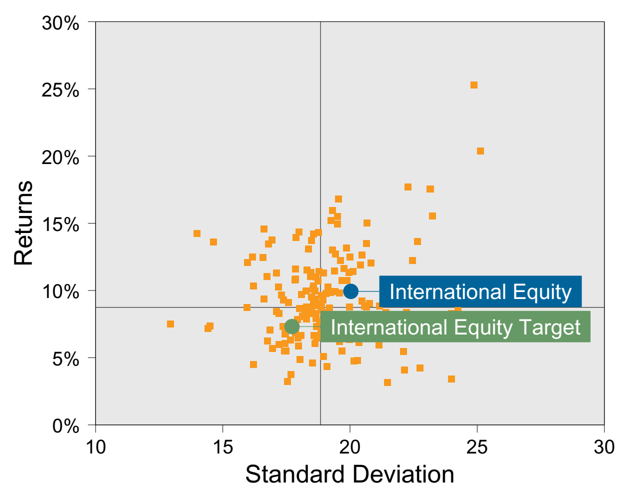


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	22.50	30.41	27.42	27.61	12.91	14.00	10.43
25th Percentile	17.98	27.68	19.38	23.34	9.37	11.34	8.47
Median	16.00	24.75	11.45	17.09	5.69	8.74	6.52
75th Percentile	14.74	22.26	5.85	13.32	2.58	7.05	5.15
90th Percentile	12.96	19.32	1.78	10.03	0.82	5.65	4.17
International Equity ●	16.27	26.84	13.68	19.57	6.28	9.94	7.02
International Equity Target ▲	15.85	21.55	7.59	14.80	4.22	7.32	4.95

Relative Return vs International Equity Target



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



DFA Intl Small Cap Value
Period Ended December 31, 2020

Investment Philosophy

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

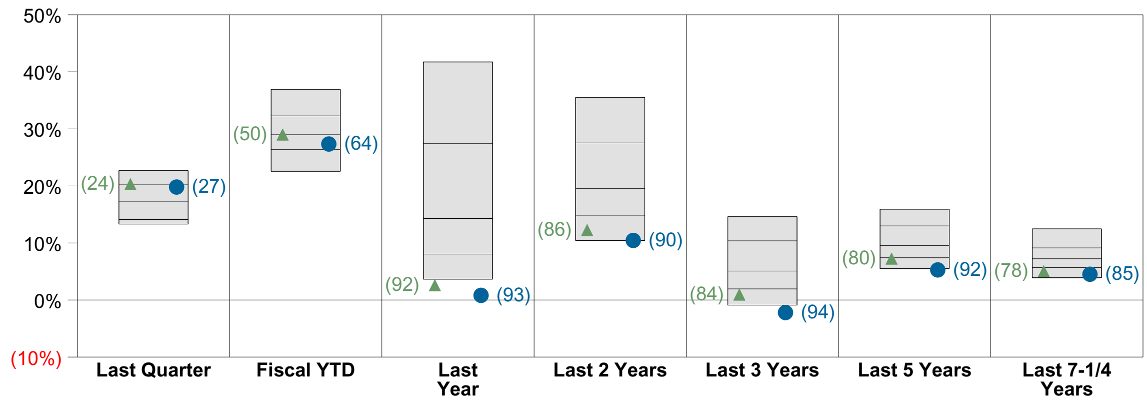
Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a 19.81% return for the quarter placing it in the 27 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 93 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 0.49% for the quarter and underperformed the World ex US SC Value for the year by 1.77%.

Quarterly Asset Growth

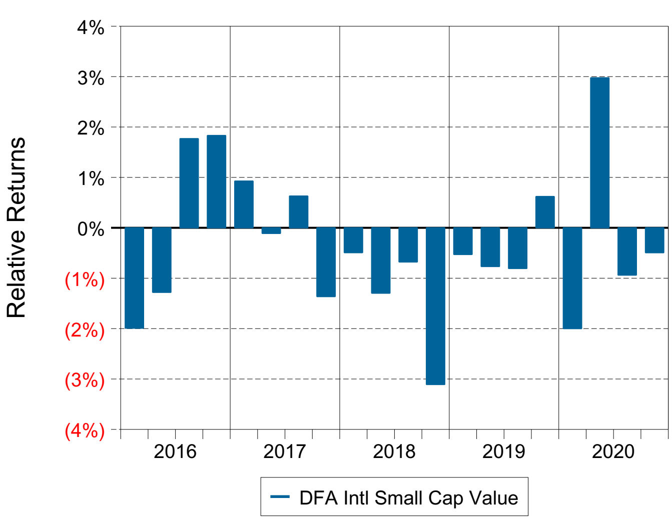
Beginning Market Value	$147,013,535
Net New Investment	$0
Investment Gains/(Losses)	$29,122,266
Ending Market Value	$176,135,801

Performance vs Callan International Small Cap Mut Funds (Net)

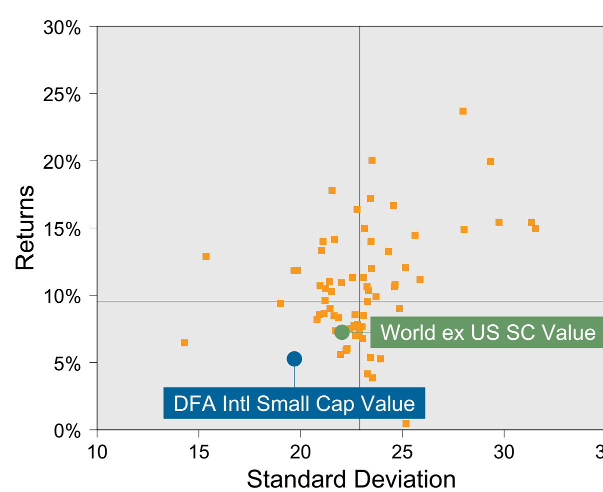


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	22.69	36.94	41.75	35.53	14.61	15.93	12.48
25th Percentile	20.20	32.29	27.43	27.55	10.38	13.00	9.14
Median	17.32	28.99	14.29	19.54	5.08	9.57	7.24
75th Percentile	14.11	26.38	8.05	14.87	1.95	7.41	5.70
90th Percentile	13.32	22.58	3.65	10.42	(0.90)	5.49	3.91
DFA Intl Small Cap Value ●	19.81	27.36	0.81	10.45	(2.20)	5.27	4.52
World ex US SC Value ▲	20.30	29.01	2.58	12.25	0.94	7.25	5.03

Relative Return vs World ex US SC Value



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



LSV Intl Value
Period Ended December 31, 2020

Investment Philosophy

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

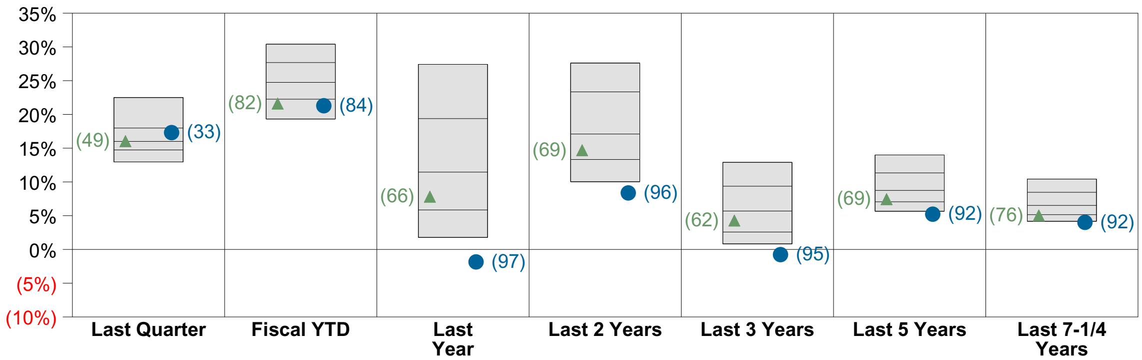
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a 17.31% return for the quarter placing it in the 33 percentile of the Callan Non-US Equity group for the quarter and in the 97 percentile for the last year.
- LSV Intl Value's portfolio outperformed the MSCI EAFE by 1.26% for the quarter and underperformed the MSCI EAFE for the year by 9.66%.

Quarterly Asset Growth

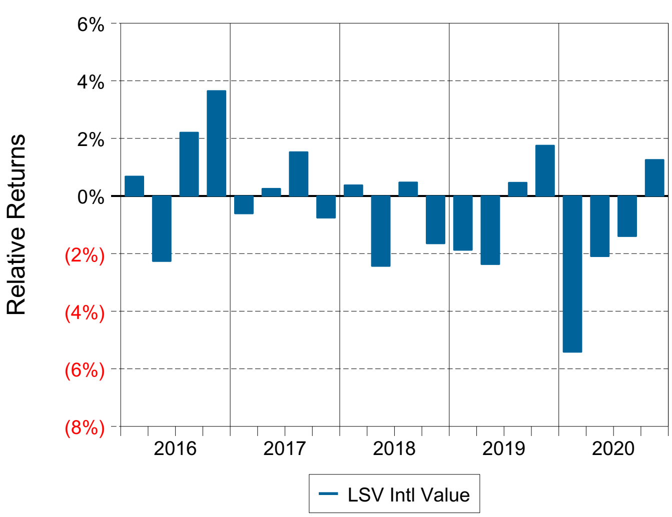
Beginning Market Value	$440,980,419
Net New Investment	$-429,928
Investment Gains/(Losses)	$76,227,926
Ending Market Value	$516,778,417

Performance vs Callan Non-US Equity (Gross)

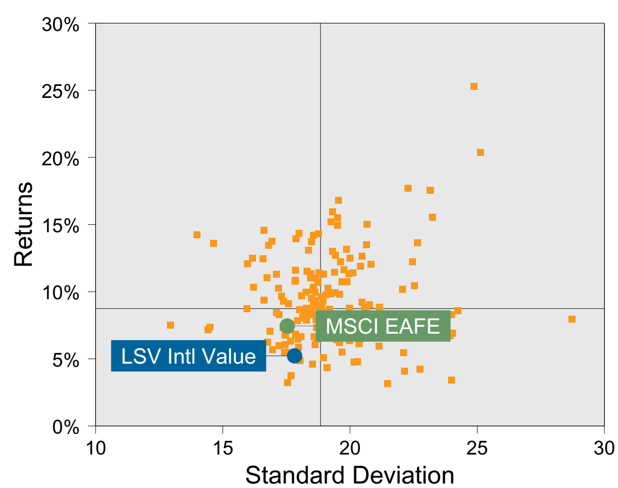


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	22.50	30.41	27.42	27.61	12.91	14.00	10.43
25th Percentile	17.98	27.68	19.38	23.34	9.37	11.34	8.47
Median	16.00	24.75	11.45	17.09	5.69	8.74	6.52
75th Percentile	14.74	22.26	5.85	13.32	2.58	7.05	5.15
90th Percentile	12.96	19.32	1.78	10.03	0.82	5.65	4.17
LSV Intl Value ●	17.31	21.29	(1.85)	8.37	(0.77)	5.22	4.01
MSCI EAFE ▲	16.05	21.61	7.82	14.70	4.28	7.45	5.04

Relative Return vs MSCI EAFE



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



Vanguard Intl Explorer Fund
Period Ended December 31, 2020

Investment Philosophy

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

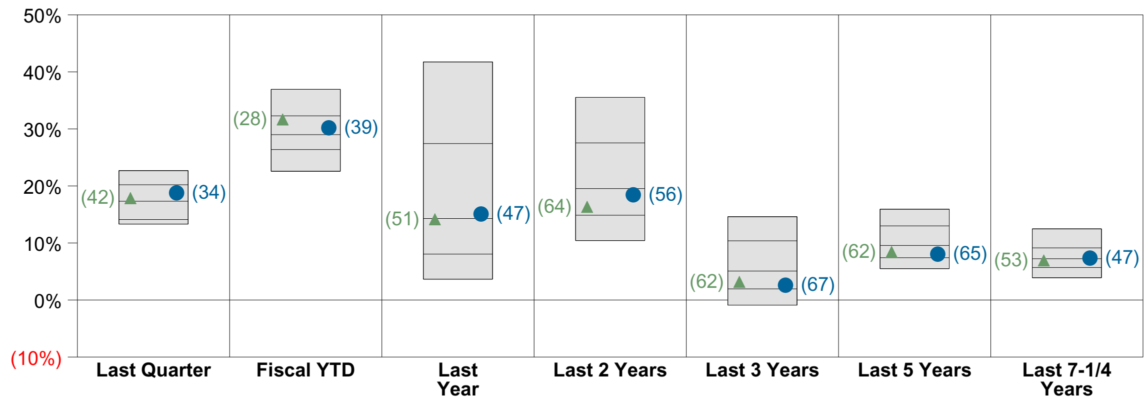
Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a 18.79% return for the quarter placing it in the 34 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 47 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <$2 B by 0.93% for the quarter and outperformed the S&P BMI EPAC <$2 B for the year by 0.93%.

Quarterly Asset Growth

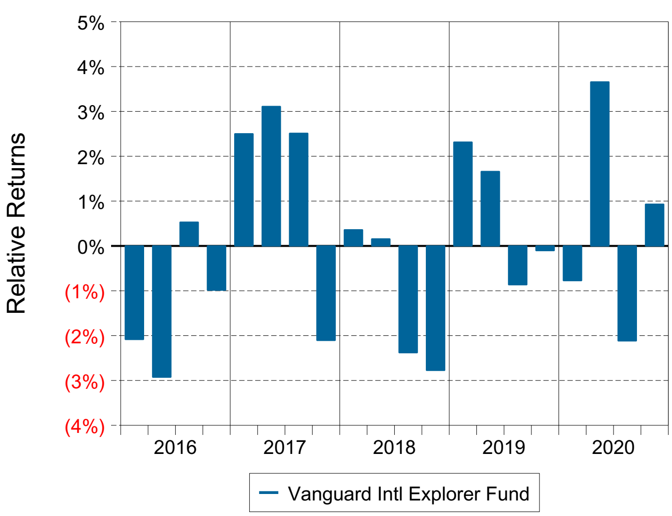
Beginning Market Value	$152,442,669
Net New Investment	$0
Investment Gains/(Losses)	$28,650,164
Ending Market Value	$181,092,833

Performance vs Callan International Small Cap Mut Funds (Net)

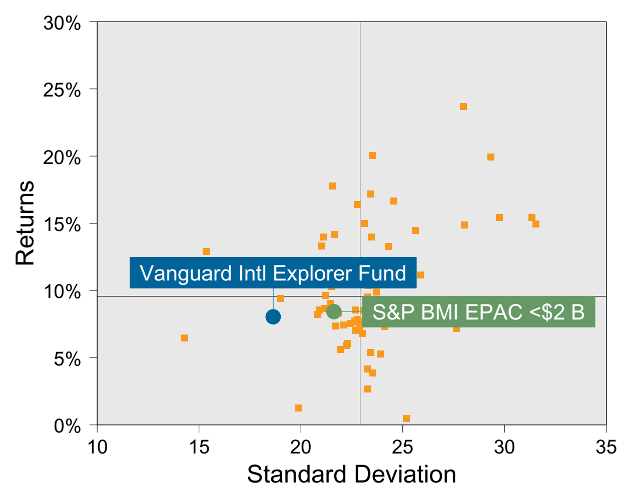


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	22.69	36.94	41.75	35.53	14.61	15.93	12.48
25th Percentile	20.20	32.29	27.43	27.55	10.38	13.00	9.14
Median	17.32	28.99	14.29	19.54	5.08	9.57	7.24
75th Percentile	14.11	26.38	8.05	14.87	1.95	7.41	5.70
90th Percentile	13.32	22.58	3.65	10.42	(0.90)	5.49	3.91
Vanguard Intl Explorer Fund ●	18.79	30.19	15.08	18.45	2.60	8.04	7.35
S&P BMI EPAC <$2 B ▲	17.86	31.67	14.15	16.34	3.17	8.43	6.94

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



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



William Blair
Period Ended December 31, 2020

Investment Philosophy

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

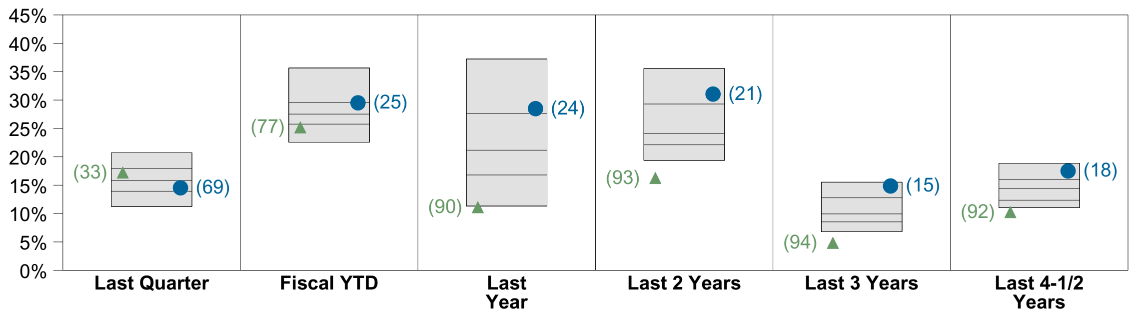
Quarterly Summary and Highlights

- William Blair's portfolio posted a 14.53% return for the quarter placing it in the 69 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 24 percentile for the last year.
- William Blair's portfolio underperformed the MSCI ACWI ex US IMI by 2.69% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 17.37%.

Quarterly Asset Growth

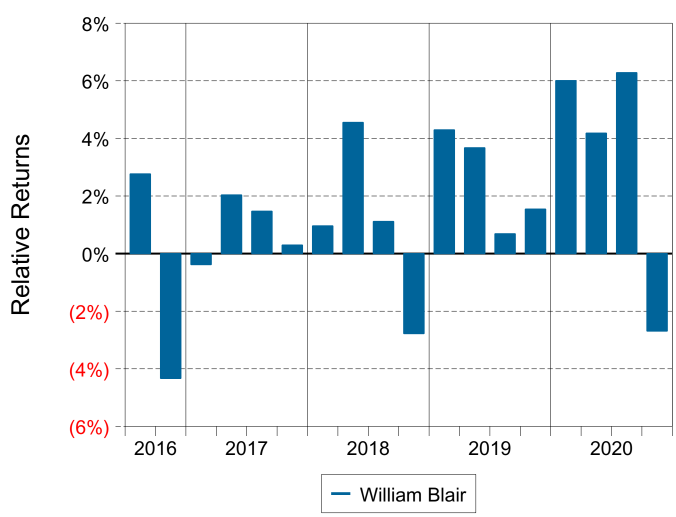
Beginning Market Value	$776,851,943
Net New Investment	$-100,667,678
Investment Gains/(Losses)	$109,946,175
Ending Market Value	$786,130,440

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

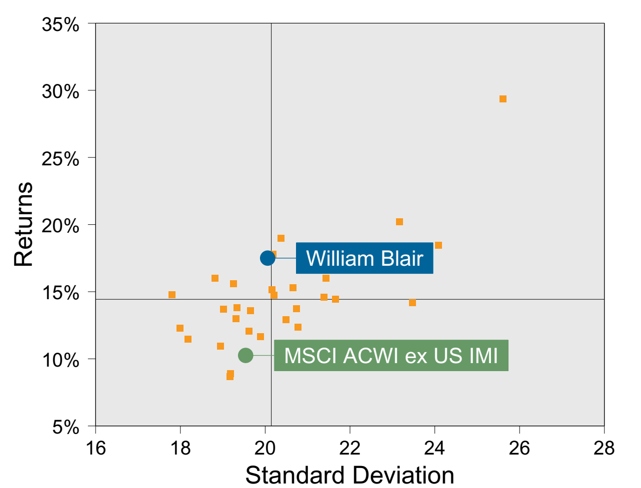


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 4-1/2 Years
10th Percentile	20.72	35.66	37.24	35.58	15.53	18.86
25th Percentile	17.90	29.55	27.66	29.30	12.78	16.02
Median	15.81	27.53	21.17	24.10	9.94	14.43
75th Percentile	13.94	25.76	16.80	22.11	8.53	12.36
90th Percentile	11.23	22.57	11.32	19.36	6.81	11.04
William Blair ●	14.53	29.51	28.49	31.05	14.86	17.50
MSCI ACWI ex US IMI ▲	17.22	25.19	11.12	16.26	4.83	10.25

Relative Return vs MSCI ACWI ex US IMI



Callan Non-US All Country Growth Equity (Gross) Annualized Four and One-Half Year Risk vs Return



Sixth Street TAO
Period Ended December 31, 2020

Investment Philosophy

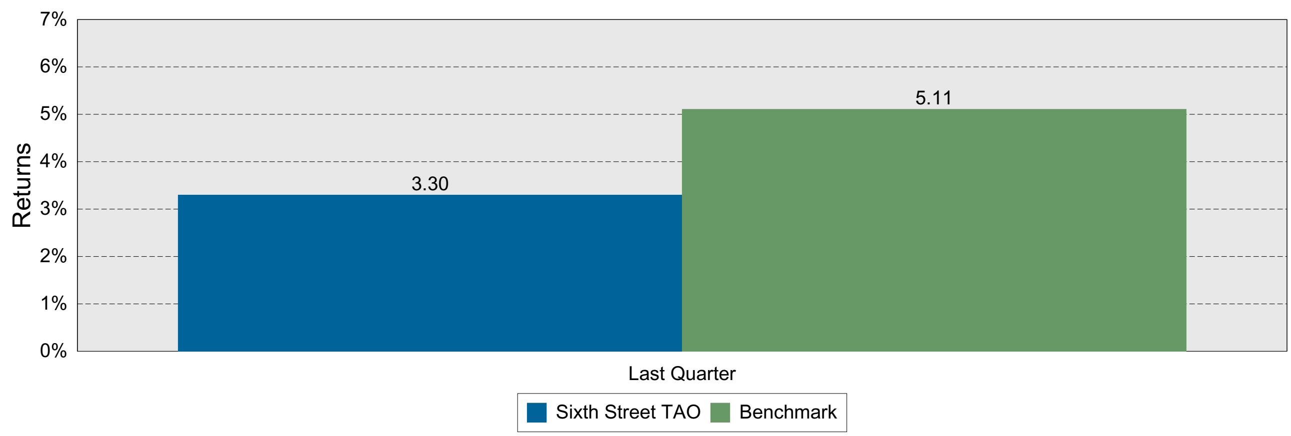
Sixth Street Partners' TAO strategy is an opportunistics, theme-driven multi-strategy credit mandate that seeks to leverage the firm's entire credit platform by investing in theme-driven liquid and less liquid investments across a broad array of credit-oriented opportunities. The strategy invests in opportunities sourced across the firm that feature attractive risk/reward profiles but do not fit the investment mandates of SSP's Special Situations, Direct Lending and Fundamental Strategies platforms, thereby carrying the moniker "Adjacent Opportunities". These opportunities can be an outgrowth of certain conditions: non-control positions with attractive risk-reward profiles; higher return, low money multiples due to short duration situations; and longer duration opportunities with low macroeconomic correlations. **The Benchmark is comprised of 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.**

Quarterly Summary and Highlights

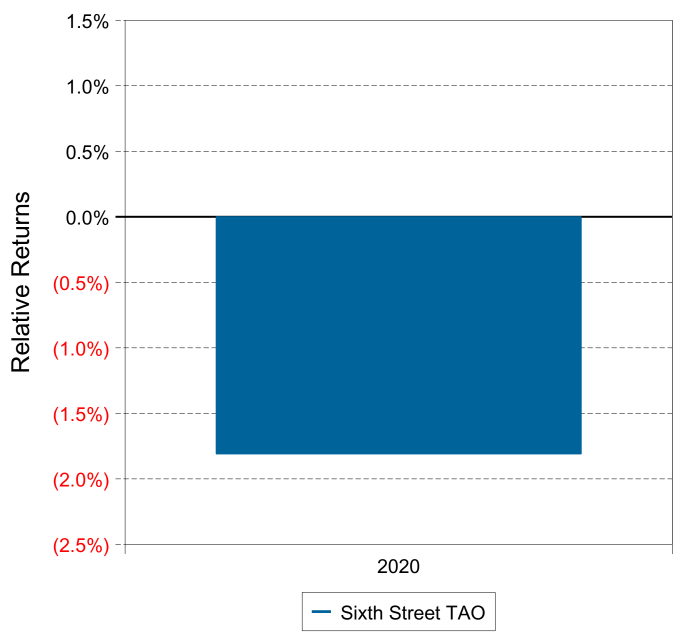
- Sixth Street TAO's portfolio underperformed the Benchmark by 1.81% for the quarter.

Quarterly Asset Growth

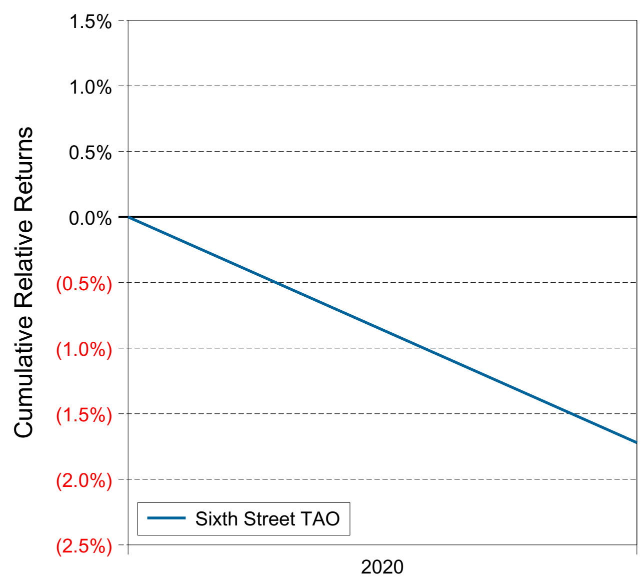
Beginning Market Value	$696,718
Net New Investment	$6,478,679
Investment Gains/(Losses)	$-14,872
Ending Market Value	$7,160,525



Relative Return vs Benchmark



Cumulative Returns vs Benchmark



Domestic Fixed Income
Period Ended December 31, 2020

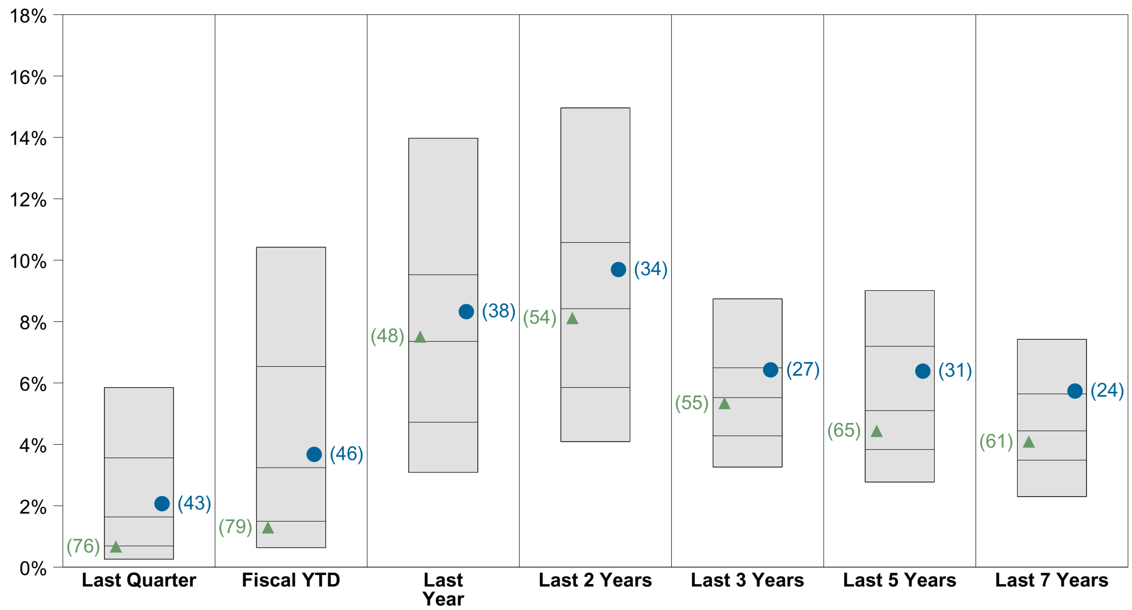
Quarterly Summary and Highlights

- Domestic Fixed Income's portfolio posted a 2.07% return for the quarter placing it in the 43 percentile of the Total Domestic Fixed-Inc Database group for the quarter and in the 38 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Income Target by 1.40% for the quarter and outperformed the Domestic Fixed Income Target for the year by 0.82%.

Quarterly Asset Growth

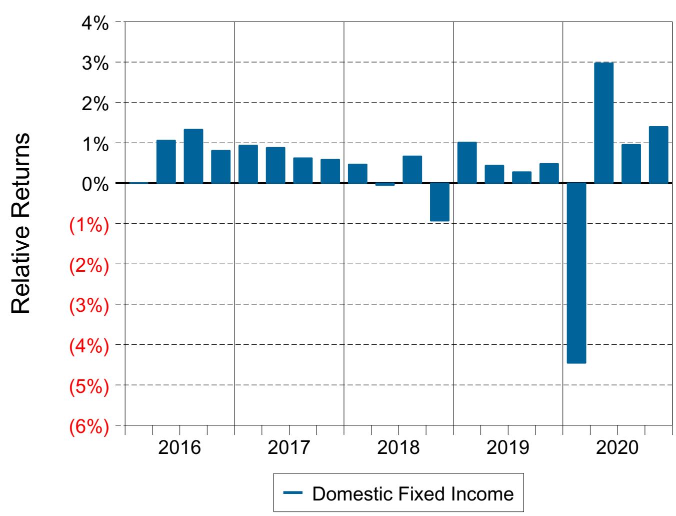
Beginning Market Value	$2,505,727,543
Net New Investment	$204,607,940
Investment Gains/(Losses)	$53,784,087
Ending Market Value	$2,764,119,570

Performance vs Total Domestic Fixed-Inc Database (Gross)

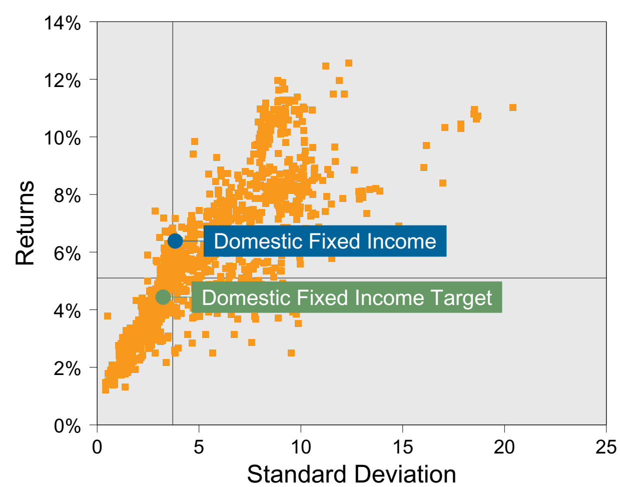


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	5.85	10.42	13.97	14.96	8.74	9.01	7.42
25th Percentile	3.56	6.54	9.53	10.57	6.49	7.19	5.64
Median	1.63	3.24	7.36	8.42	5.52	5.10	4.44
75th Percentile	0.69	1.49	4.72	5.85	4.28	3.83	3.49
90th Percentile	0.26	0.63	3.09	4.09	3.26	2.77	2.30
Domestic Fixed Income ●	2.07	3.67	8.32	9.70	6.43	6.38	5.74
Domestic Fixed Income Target ▲	0.67	1.29	7.51	8.11	5.34	4.44	4.09

Relative Returns vs Domestic Fixed Income Target



Total Domestic Fixed-Inc Database (Gross) Annualized Five Year Risk vs Return



Ares ND Credit Strategies Fd
Period Ended December 31, 2020

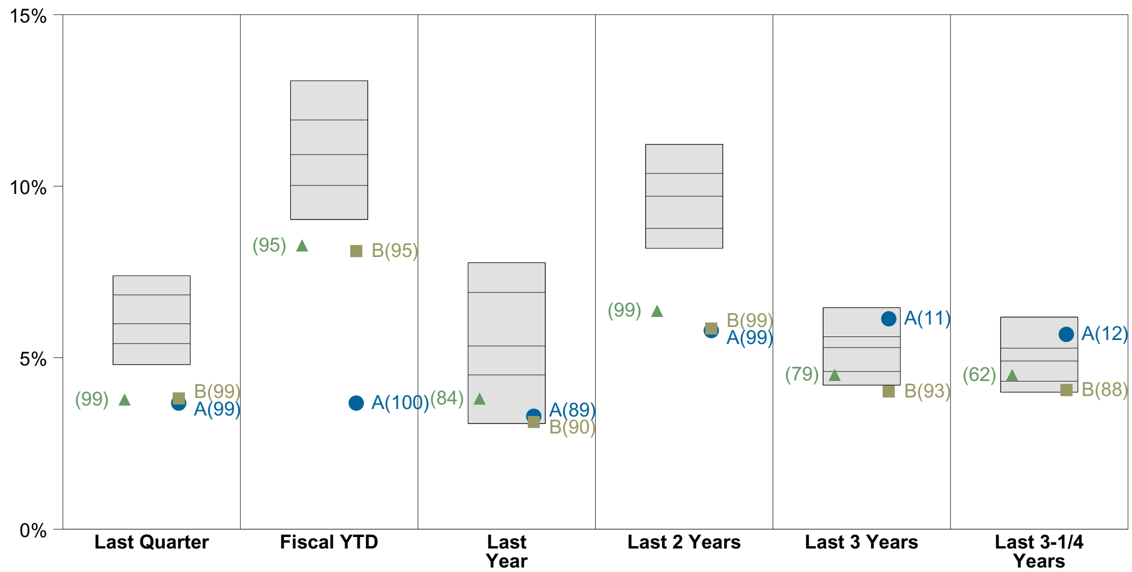
Quarterly Summary and Highlights

- Ares ND Credit Strategies Fd's portfolio posted a 3.68% return for the quarter placing it in the 99 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 89 percentile for the last year.
- Ares ND Credit Strategies Fd's portfolio underperformed the S&P/LSTA Leveraged Loan B Index by 0.10% for the quarter and underperformed the S&P/LSTA Leveraged Loan B Index for the year by 0.51%.

Quarterly Asset Growth

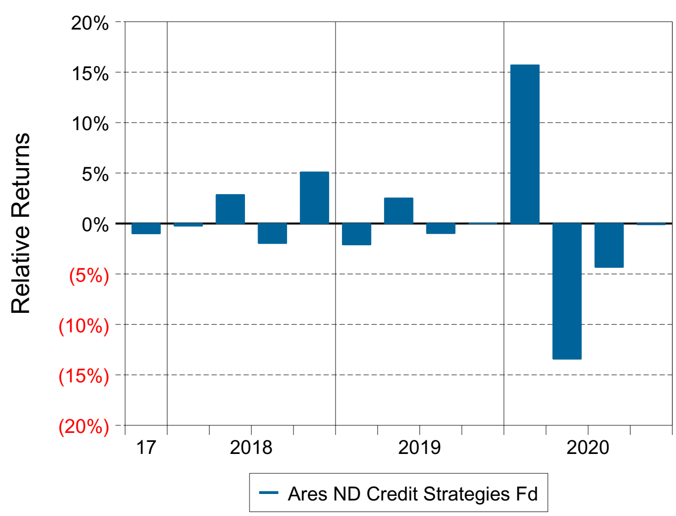
Beginning Market Value	$78,067,158
Net New Investment	$0
Investment Gains/(Losses)	$2,869,930
Ending Market Value	$80,937,088

Performance vs Callan High Yield Mutual Funds (Net)

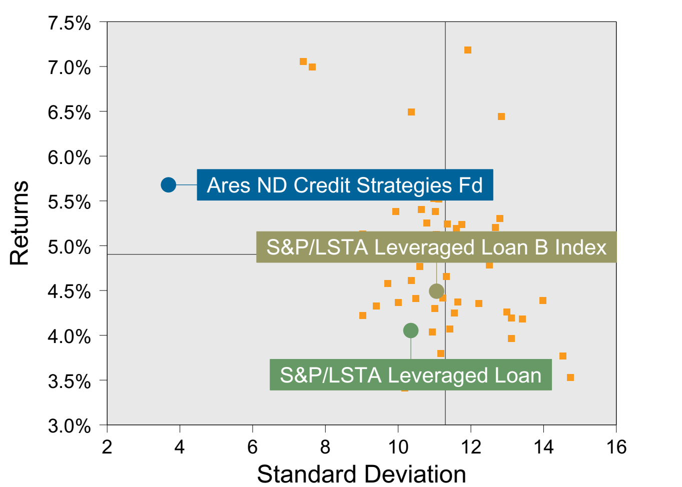


		Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 3-1/4 Years
10th Percentile		7.39	13.07	7.77	11.22	6.46	6.18
25th Percentile		6.83	11.93	6.90	10.37	5.61	5.28
Median		5.99	10.92	5.34	9.71	5.29	4.90
75th Percentile		5.41	10.02	4.50	8.77	4.60	4.31
90th Percentile		4.80	9.03	3.08	8.19	4.20	3.99
Ares ND Credit Strategies Fd	● A	3.68	3.68	3.29	5.79	6.13	5.68
S&P/LSTA Leveraged Loan	■ B	3.81	8.11	3.12	5.85	4.01	4.05
S&P/LSTA Leveraged Loan B Index	▲	3.78	8.27	3.80	6.36	4.50	4.49

Relative Returns vs S&P/LSTA Leveraged Loan B Index



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



Cerberus ND Private Credit Fd
Period Ended December 31, 2020

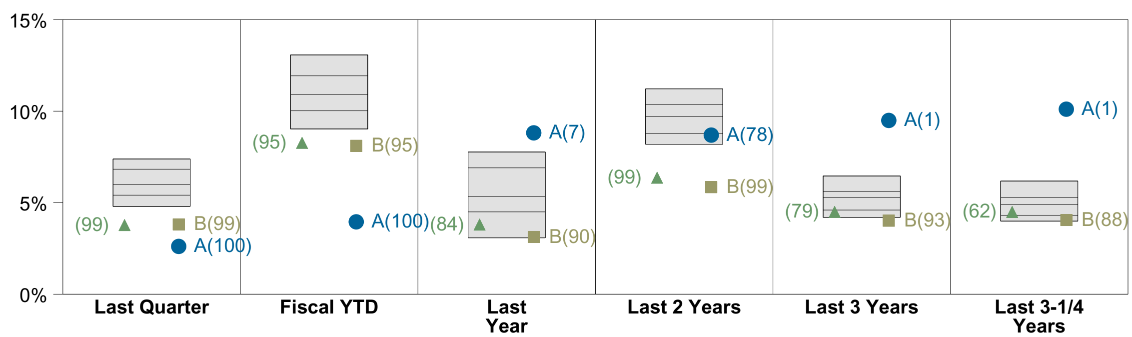
Investment Philosophy
The investment objective of the LLC is to achieve superior risk-adjusted rates of return primarily through origination of, and investment in, secured debt assets consistent with the Loan Opportunities Strategy of the Cerberus Business Finance lending platform ("CBF", "Cerberus Business Finance" or the "Cerberus Lending Platform"). The Cerberus Lending Platform is a direct origination and lending business focused on providing secured debt primarily to U.S. middle-market companies. The LLC expects to generate both current income and capital appreciation.

Quarterly Summary and Highlights
- Cerberus ND Private Credit Fd’s portfolio posted a 2.61% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 7 percentile for the last year.
- Cerberus ND Private Credit Fd’s portfolio underperformed the S&P/LSTA Leveraged Loan B Index by 1.17% for the quarter and outperformed the S&P/LSTA Leveraged Loan B Index for the year by 5.01%.

Quarterly Asset Growth

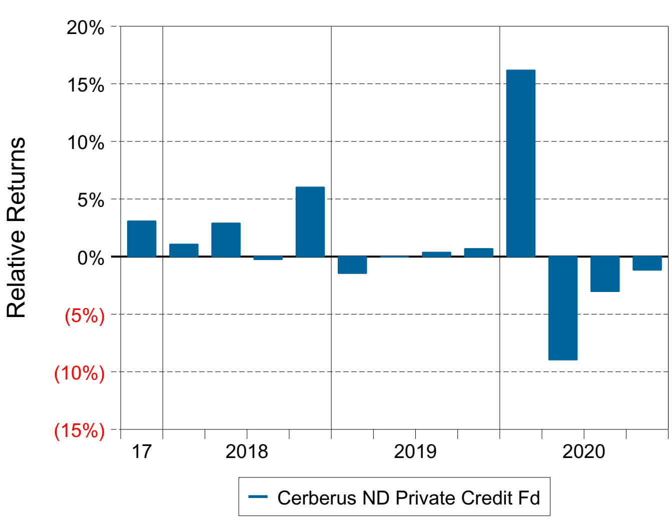
Beginning Market Value	$98,269,401
Net New Investment	$15,750,000
Investment Gains/(Losses)	$2,668,120
Ending Market Value	$116,687,521

Performance vs Callan High Yield Mutual Funds (Net)

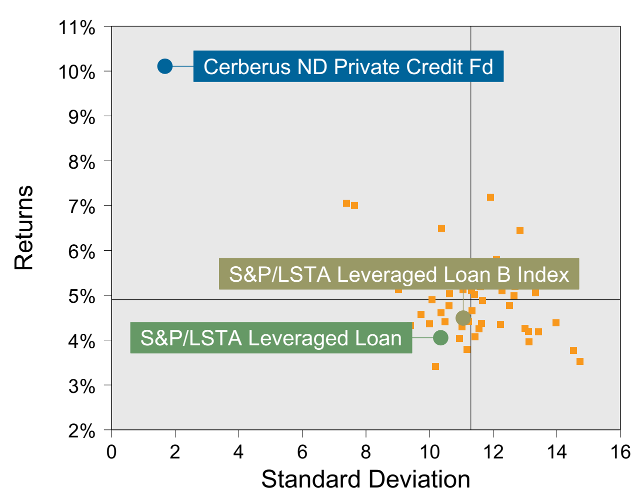


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 3-1/4 Years
10th Percentile	7.39	13.07	7.77	11.22	6.46	6.18
25th Percentile	6.83	11.93	6.90	10.37	5.61	5.28
Median	5.99	10.92	5.34	9.71	5.29	4.90
75th Percentile	5.41	10.02	4.50	8.77	4.60	4.31
90th Percentile	4.80	9.03	3.08	8.19	4.20	3.99
Cerberus ND Private Credit Fd ● A	2.61	3.95	8.81	8.69	9.49	10.11
S&P/LSTA Leveraged Loan ■ B	3.81	8.11	3.12	5.85	4.01	4.05
S&P/LSTA Leveraged Loan B Index ▲	3.78	8.27	3.80	6.36	4.50	4.49

Relative Returns vs S&P/LSTA Leveraged Loan B Index



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



Declaration Total Return
Period Ended December 31, 2020

Investment Philosophy

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

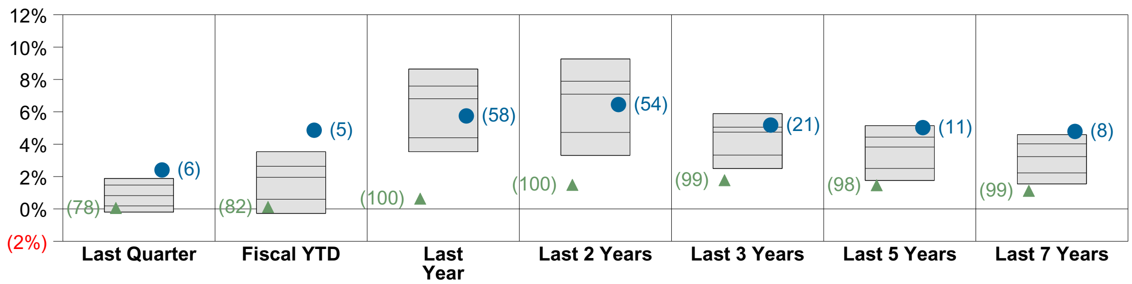
Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 2.41% return for the quarter placing it in the 6 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 58 percentile for the last year.
- Declaration Total Return's portfolio outperformed the LIBOR - 3 Month by 2.35% for the quarter and outperformed the LIBOR - 3 Month for the year by 5.11%.

Quarterly Asset Growth

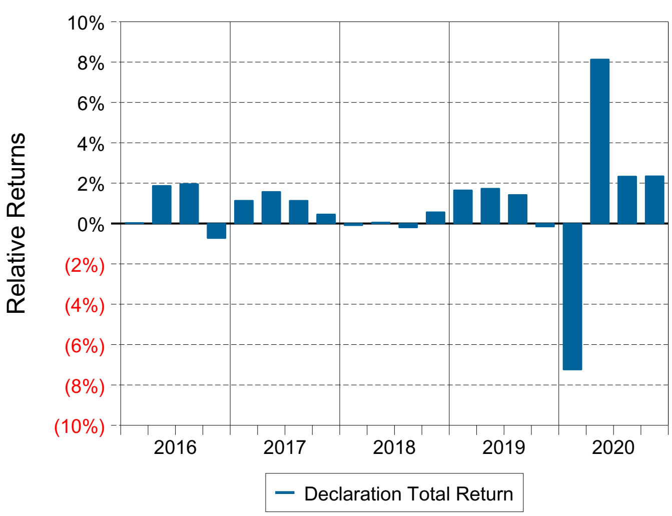
Beginning Market Value	$200,504,903
Net New Investment	$-121,129
Investment Gains/(Losses)	$4,824,523
Ending Market Value	$205,208,297

Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)

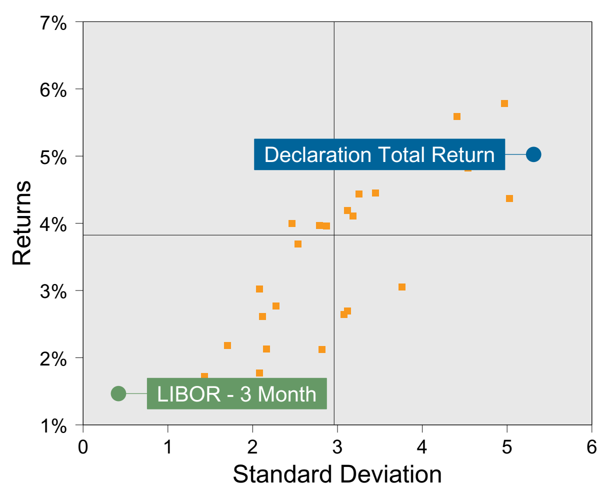


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	1.88	3.54	8.64	9.27	5.89	5.14	4.59
25th Percentile	1.48	2.64	7.59	7.89	5.05	4.44	4.02
Median	0.82	1.95	6.81	7.09	4.75	3.82	3.23
75th Percentile	0.19	0.60	4.40	4.73	3.33	2.50	2.23
90th Percentile	(0.19)	(0.28)	3.54	3.31	2.50	1.76	1.55
Declaration Total Return ●	2.41	4.86	5.75	6.45	5.18	5.03	4.79
LIBOR - 3 Month ▲	0.06	0.12	0.64	1.49	1.78	1.47	1.12

Relative Return vs LIBOR - 3 Month



Callan Intermediate Fixed Inc Mut Funds (Net)
Annualized Five Year Risk vs Return



PIMCO Bravo II
Period Ended December 31, 2020

Investment Philosophy

The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe. **Prior to July 1, 2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.**

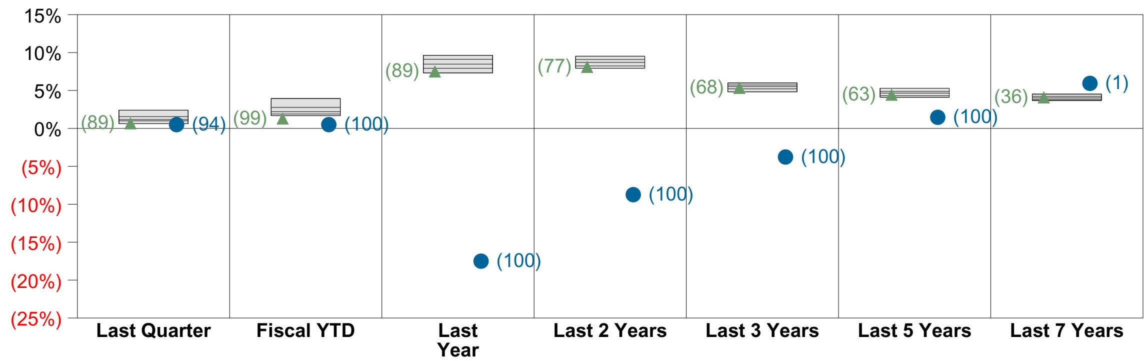
Quarterly Summary and Highlights

- PIMCO Bravo II's portfolio posted a 0.50% return for the quarter placing it in the 94 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO Bravo II's portfolio underperformed the Blmbg Aggregate by 0.17% for the quarter and underperformed the Blmbg Aggregate for the year by 25.01%.

Quarterly Asset Growth

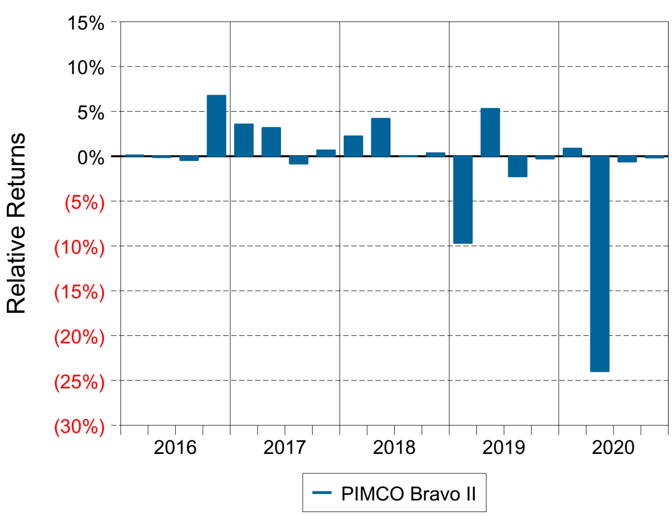
Beginning Market Value	$7,627,975
Net New Investment	$-768,889
Investment Gains/(Losses)	$37,767
Ending Market Value	$6,896,853

Performance vs Callan Core Bond Mutual Funds (Net)

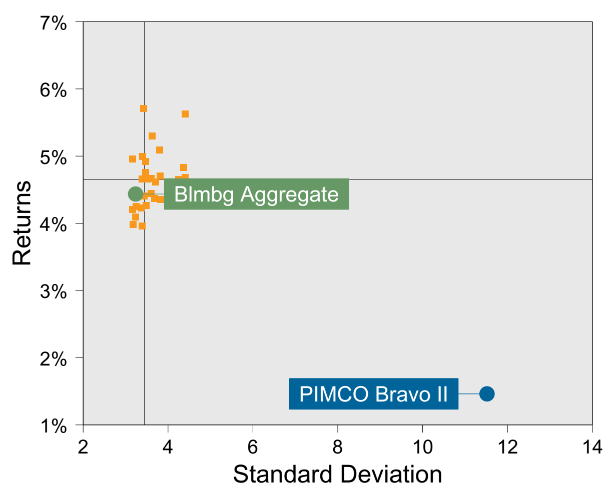


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	2.40	3.95	9.63	9.52	6.00	5.30	4.52
25th Percentile	1.56	2.77	9.11	9.09	5.72	4.88	4.23
Median	1.17	2.20	8.48	8.70	5.51	4.65	4.02
75th Percentile	1.00	1.90	7.92	8.23	5.22	4.31	3.81
90th Percentile	0.62	1.67	7.32	7.93	4.82	4.10	3.67
PIMCO Bravo II ●	0.50	0.50	(17.51)	(8.74)	(3.77)	1.46	5.94
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	4.09

Relative Return vs Blmbg Aggregate



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



PIMCO DiSCO II
Period Ended December 31, 2020

Investment Philosophy

The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors. **Prior to July 1, 2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.**

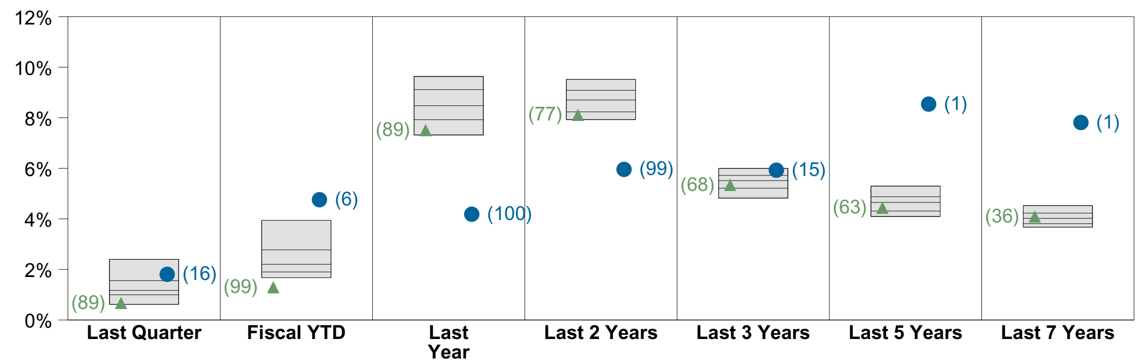
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 1.81% return for the quarter placing it in the 16 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Blmbg Aggregate by 1.14% for the quarter and underperformed the Blmbg Aggregate for the year by 3.32%.

Quarterly Asset Growth

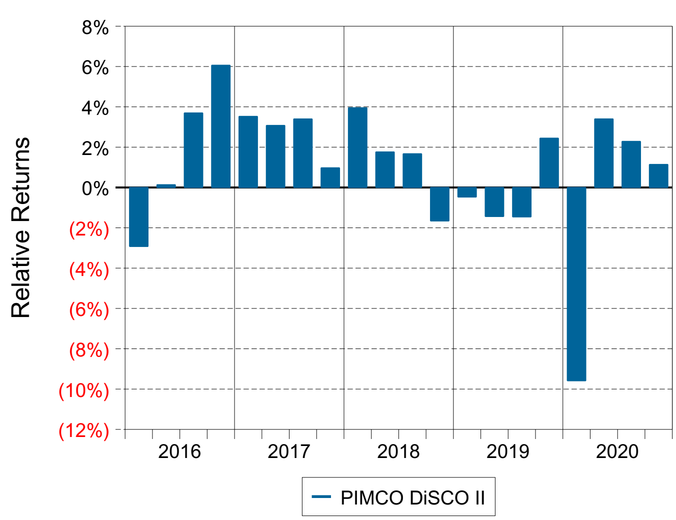
Beginning Market Value	$59,779,862
Net New Investment	$0
Investment Gains/(Losses)	$1,079,958
Ending Market Value	$60,859,820

Performance vs Callan Core Bond Mutual Funds (Net)

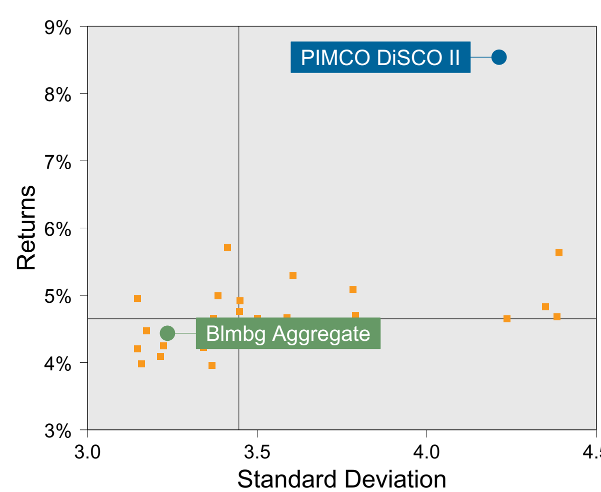


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	2.40	3.95	9.63	9.52	6.00	5.30	4.52
25th Percentile	1.56	2.77	9.11	9.09	5.72	4.88	4.23
Median	1.17	2.20	8.48	8.70	5.51	4.65	4.02
75th Percentile	1.00	1.90	7.92	8.23	5.22	4.31	3.81
90th Percentile	0.62	1.67	7.32	7.93	4.82	4.10	3.67
PIMCO DiSCO II ●	1.81 (16)	4.76 (6)	4.18 (100)	5.96 (99)	5.93 (15)	8.54 (1)	7.81 (1)
Blmbg Aggregate ▲	0.67 (89)	1.29 (99)	7.51 (89)	8.11 (77)	5.34 (68)	4.44 (63)	4.09 (36)

Relative Return vs Blmbg Aggregate



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



Investment Philosophy

PGIM Fixed Income's Core Plus Strategy is an actively-managed strategy that seeks +150 bps over the Bloomberg Barclays U.S. Aggregate Bond Index or similar benchmark annualized over a market cycle (three to five years.) The Strategy seeks about half of its excess return from active sector allocation and up to one-third each from subsector/security selection and duration/yield curve/currencies, depending on market opportunities.

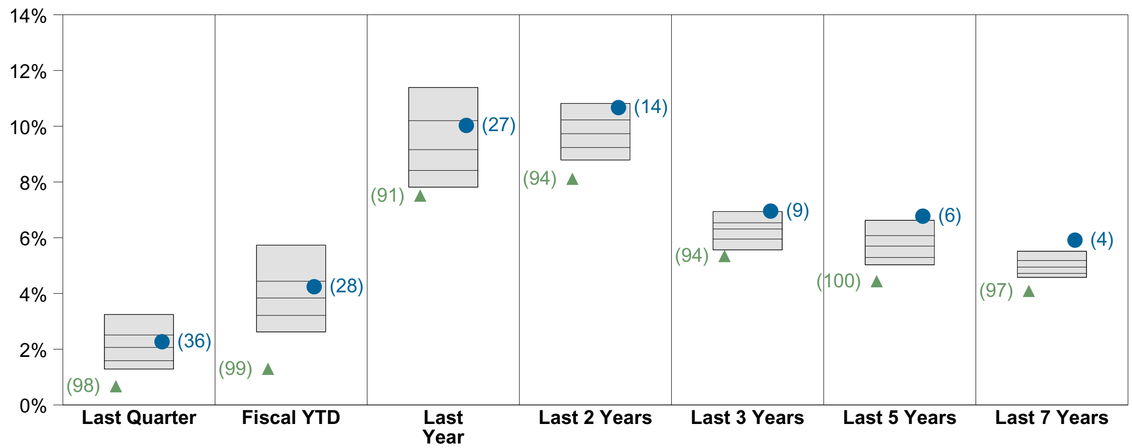
Quarterly Summary and Highlights

- Prudential's portfolio posted a 2.27% return for the quarter placing it in the 36 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 27 percentile for the last year.
- Prudential's portfolio outperformed the Blmbg Aggregate by 1.60% for the quarter and outperformed the Blmbg Aggregate for the year by 2.52%.

Quarterly Asset Growth

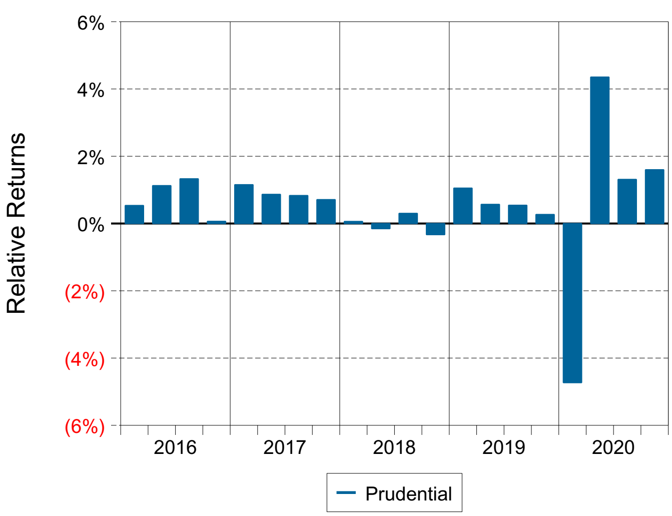
Beginning Market Value	$717,185,664
Net New Investment	$94,122,094
Investment Gains/(Losses)	$17,175,530
Ending Market Value	$828,483,288

Performance vs Callan Core Plus Fixed Income (Gross)

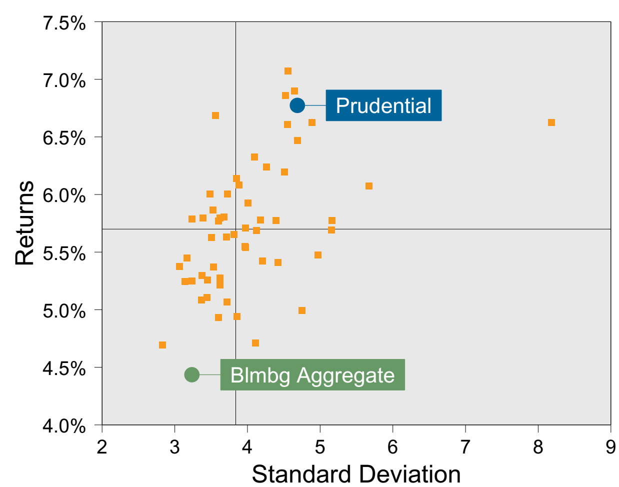


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	3.25	5.74	11.39	10.82	6.94	6.62	5.51
25th Percentile	2.51	4.44	10.20	10.23	6.54	6.08	5.18
Median	2.06	3.84	9.16	9.73	6.31	5.70	4.94
75th Percentile	1.59	3.21	8.41	9.24	5.95	5.29	4.72
90th Percentile	1.29	2.62	7.82	8.79	5.56	5.03	4.58
Prudential ●	2.27	4.24	10.03	10.67	6.95	6.77	5.91
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	4.09

Relative Return vs Blmbg Aggregate



Callan Core Plus Fixed Income (Gross) Annualized Five Year Risk vs Return



SSgA US Govt Credit Bd Idx
Period Ended December 31, 2020

Investment Philosophy

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

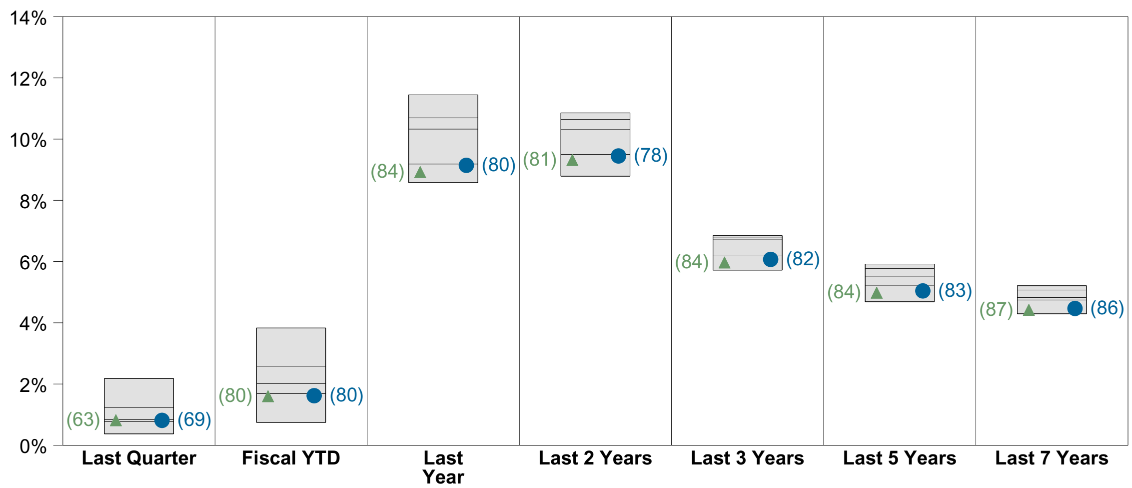
Quarterly Summary and Highlights

- SSgA US Govt Credit Bd Idx's portfolio posted a 0.81% return for the quarter placing it in the 69 percentile of the Callan Government/Credit group for the quarter and in the 80 percentile for the last year.
- SSgA US Govt Credit Bd Idx's portfolio underperformed the Blmbg Gov/Credit by 0.01% for the quarter and outperformed the Blmbg Gov/Credit for the year by 0.22%.

Quarterly Asset Growth

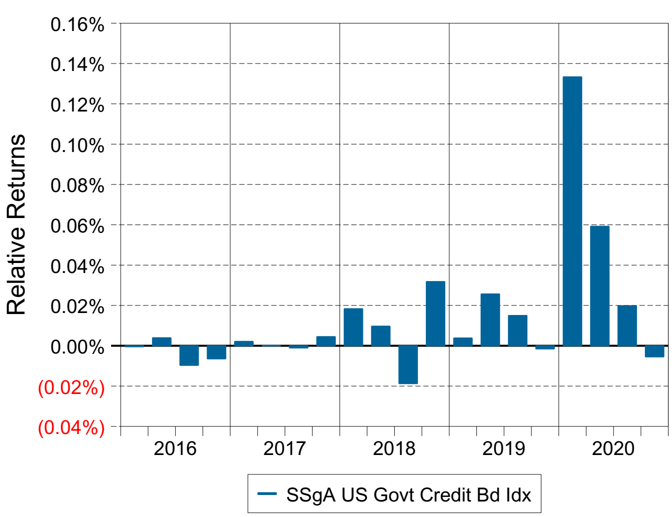
Beginning Market Value	$343,254,435
Net New Investment	$57,487,371
Investment Gains/(Losses)	$3,130,658
Ending Market Value	$403,872,464

Performance vs Callan Government/Credit (Gross)

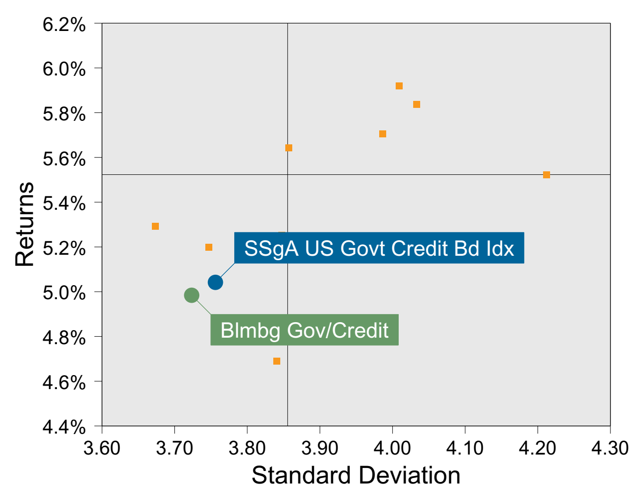


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	2.18	3.83	11.45	10.86	6.85	5.92	5.21
25th Percentile	1.23	2.58	10.69	10.64	6.80	5.77	5.07
Median	0.84	2.02	10.33	10.31	6.71	5.52	4.83
75th Percentile	0.77	1.69	9.19	9.50	6.21	5.23	4.74
90th Percentile	0.37	0.75	8.58	8.79	5.72	4.69	4.29
SSgA US Govt Credit Bd Idx ●	0.81	1.62	9.14	9.45	6.07	5.04	4.47
Blmbg Gov/Credit ▲	0.82	1.60	8.93	9.32	5.97	4.98	4.42

Relative Return vs Blmbg Gov/Credit



Callan Government/Credit (Gross)
Annualized Five Year Risk vs Return



Wells Capital
Period Ended December 31, 2020

Investment Philosophy

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

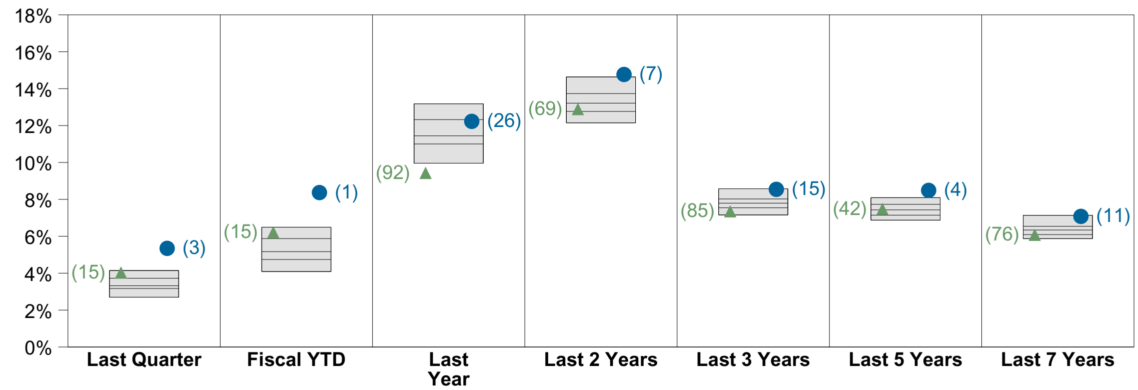
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 5.35% return for the quarter placing it in the 3 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 26 percentile for the last year.
- Wells Capital's portfolio outperformed the Blmbg Credit Baa by 1.32% for the quarter and outperformed the Blmbg Credit Baa for the year by 2.80%.

Quarterly Asset Growth

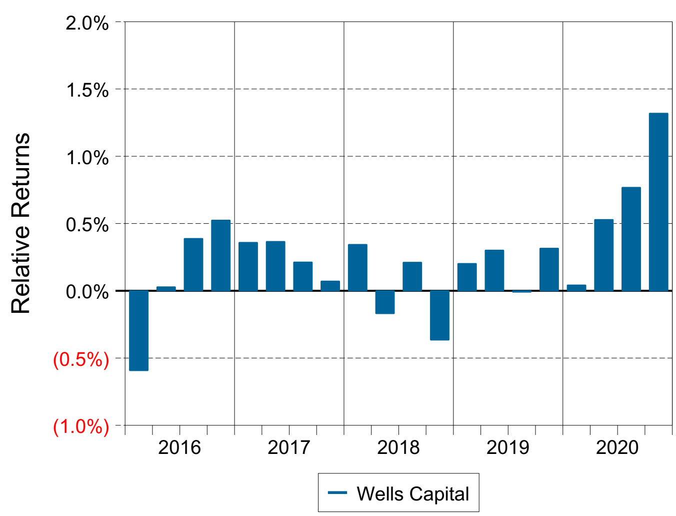
Beginning Market Value	$196,127,120
Net New Investment	$-94,584
Investment Gains/(Losses)	$10,483,339
Ending Market Value	$206,515,875

Performance vs Callan Investment Grade Credit Fixed Inc (Gross)

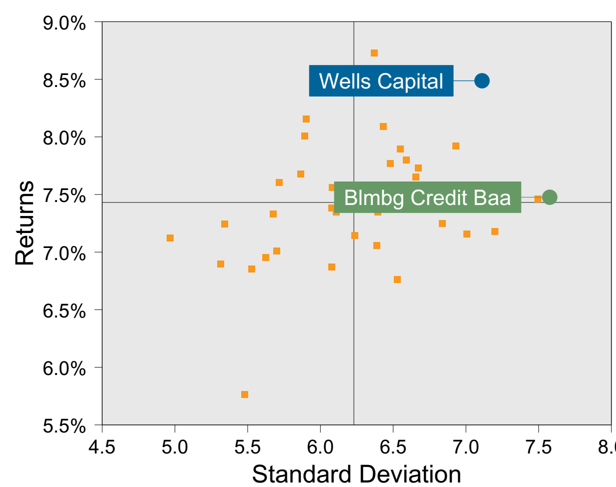


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	4.14	6.49	13.18	14.64	8.58	8.09	7.14
25th Percentile	3.73	5.88	12.32	13.73	8.02	7.73	6.54
Median	3.32	5.17	11.44	13.21	7.79	7.43	6.34
75th Percentile	3.17	4.74	11.00	12.77	7.54	7.14	6.09
90th Percentile	2.70	4.09	9.96	12.15	7.16	6.87	5.87
Wells Capital ●	5.35	8.37	12.23	14.77	8.55	8.49	7.08
Blmbg Credit Baa ▲	4.03	6.21	9.43	12.89	7.35	7.48	6.08

Relative Return vs Blmbg Credit Baa



Callan Investment Grade Credit Fixed Inc (Gross) Annualized Five Year Risk vs Return



Western Asset Management Company
Period Ended December 31, 2020

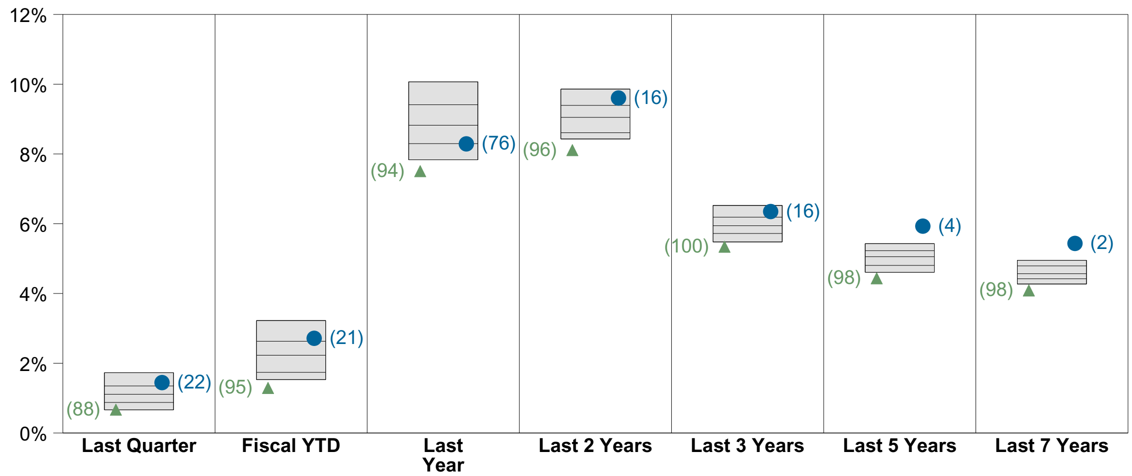
Investment Philosophy
Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

Quarterly Summary and Highlights
- Western Asset's portfolio posted a 1.44% return for the quarter placing it in the 22 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 76 percentile for the last year.
- Western Asset's portfolio outperformed the Blmbg Aggregate by 0.78% for the quarter and outperformed the Blmbg Aggregate for the year by 0.78%.

Quarterly Asset Growth

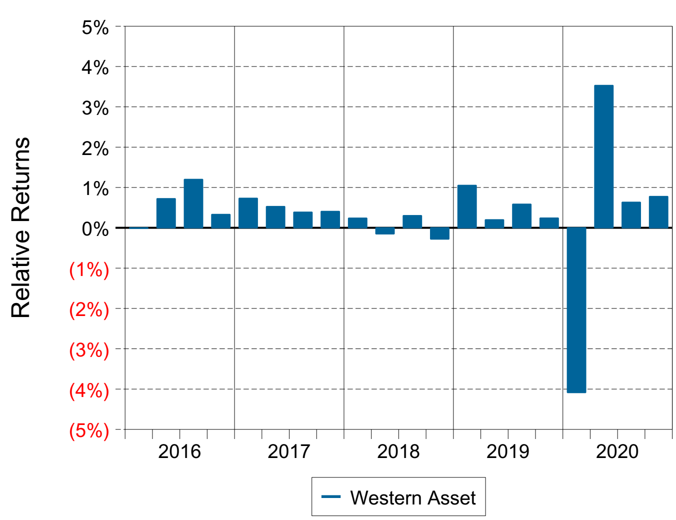
Beginning Market Value	$718,186,383
Net New Investment	$79,796,178
Investment Gains/(Losses)	$11,090,806
Ending Market Value	$809,073,367

Performance vs Callan Core Bond Fixed Income (Gross)

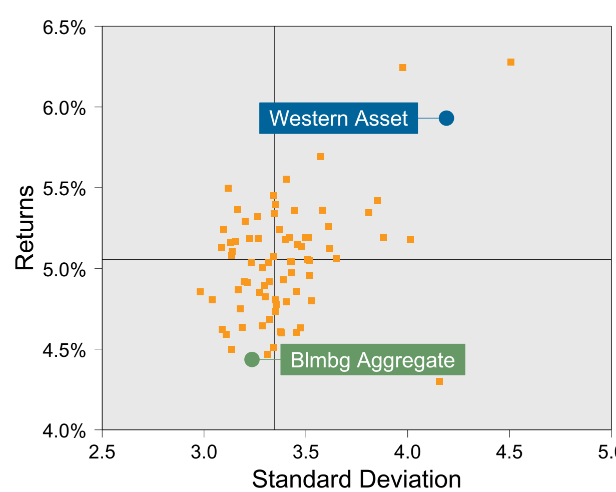


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	1.73	3.22	10.07	9.86	6.52	5.43	4.95
25th Percentile	1.35	2.63	9.41	9.39	6.19	5.23	4.79
Median	1.11	2.23	8.82	9.05	5.94	5.05	4.57
75th Percentile	0.88	1.74	8.30	8.61	5.72	4.81	4.42
90th Percentile	0.66	1.53	7.83	8.43	5.48	4.61	4.27
Western Asset ●	1.44	2.71	8.29	9.60	6.35	5.93	5.43
Blmbg Aggregate ▲	0.67	1.29	7.51	8.11	5.34	4.44	4.09

Relative Return vs Blmbg Aggregate



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



Invesco Core Real Estate
Period Ended December 31, 2020

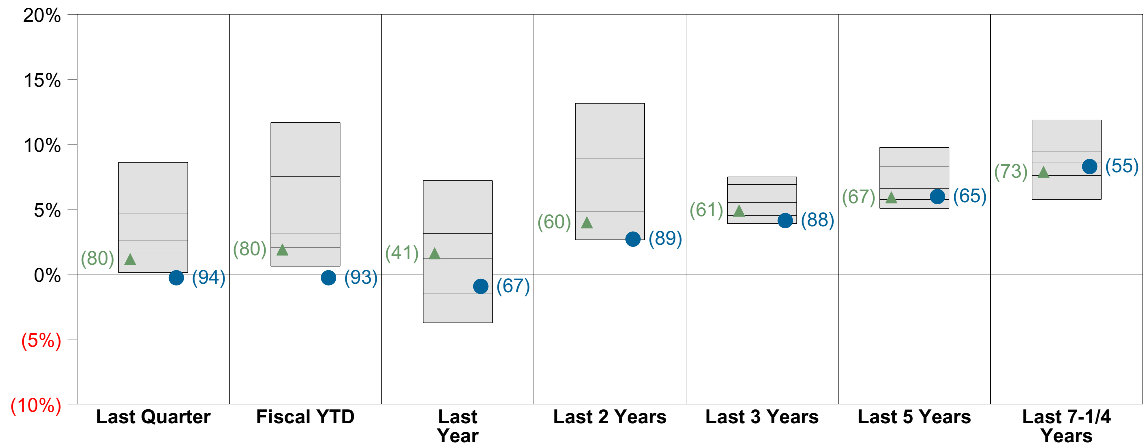
Investment Philosophy
IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

Quarterly Summary and Highlights
- Invesco Core Real Estate's portfolio posted a (0.28)% return for the quarter placing it in the 94 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 67 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF Total Index by 1.43% for the quarter and underperformed the NCREIF Total Index for the year by 2.54%.

Quarterly Asset Growth

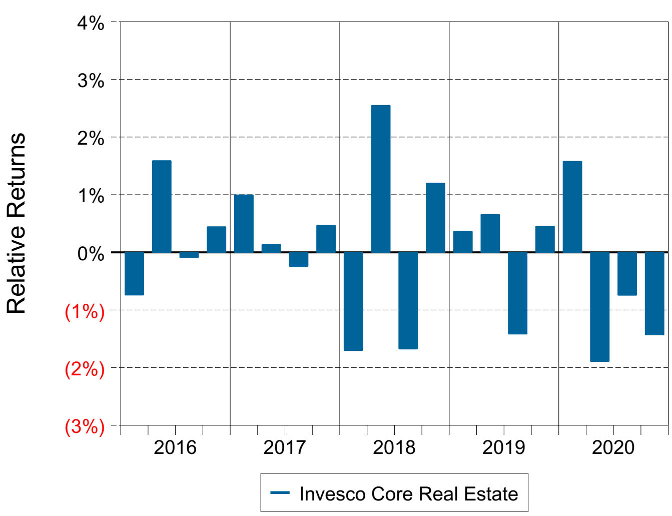
Beginning Market Value	$172,683,342
Net New Investment	$-136,596
Investment Gains/(Losses)	$-484,513
Ending Market Value	$172,062,232

Performance vs Callan Total Domestic Real Estate DB (Gross)

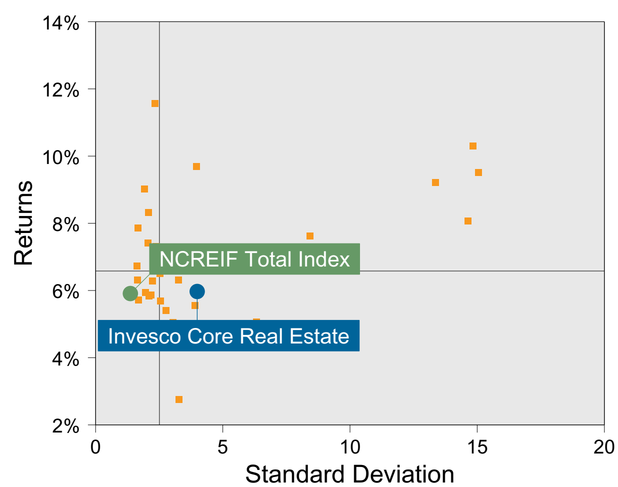


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	8.61	11.66	7.19	13.15	7.48	9.75	11.86
25th Percentile	4.70	7.52	3.13	8.93	6.90	8.26	9.47
Median	2.56	3.09	1.18	4.85	5.51	6.58	8.56
75th Percentile	1.55	2.07	(1.52)	3.09	4.52	5.74	7.59
90th Percentile	0.11	0.62	(3.75)	2.64	3.89	5.07	5.75
Invesco Core Real Estate ●	(0.28)	(0.28)	(0.94)	2.69	4.12	5.97	8.28
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	7.87

Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return



JP Morgan RE Inc & Growth
Period Ended December 31, 2020

Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

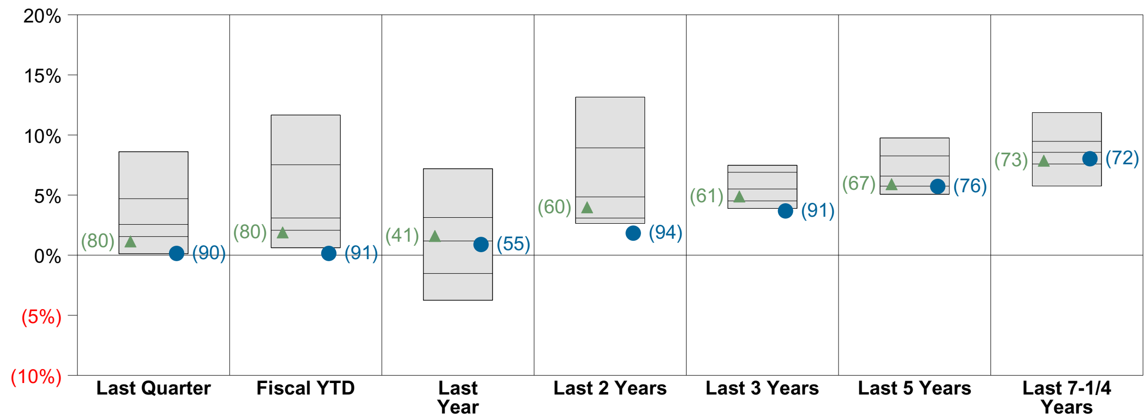
Quarterly Summary and Highlights

- JP Morgan RE Inc & Growth's portfolio posted a 0.15% return for the quarter placing it in the 90 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 55 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio underperformed the NCREIF Total Index by 1.00% for the quarter and underperformed the NCREIF Total Index for the year by 0.71%.

Quarterly Asset Growth

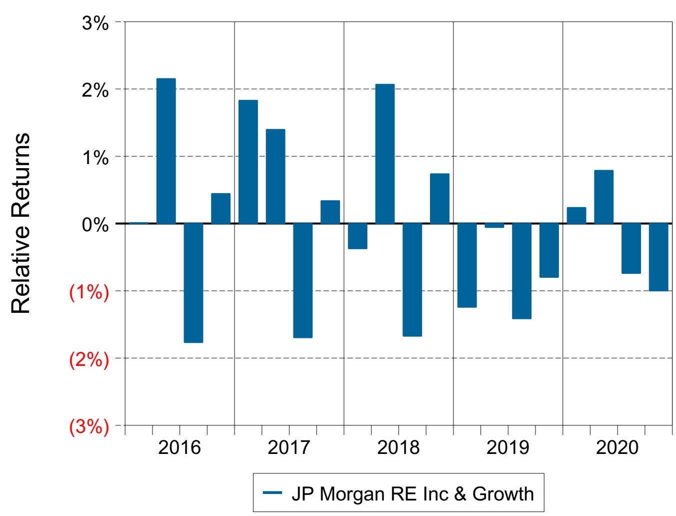
Beginning Market Value	$152,121,893
Net New Investment	$19,744,490
Investment Gains/(Losses)	$253,258
Ending Market Value	$172,119,641

Performance vs Callan Total Domestic Real Estate DB (Gross)

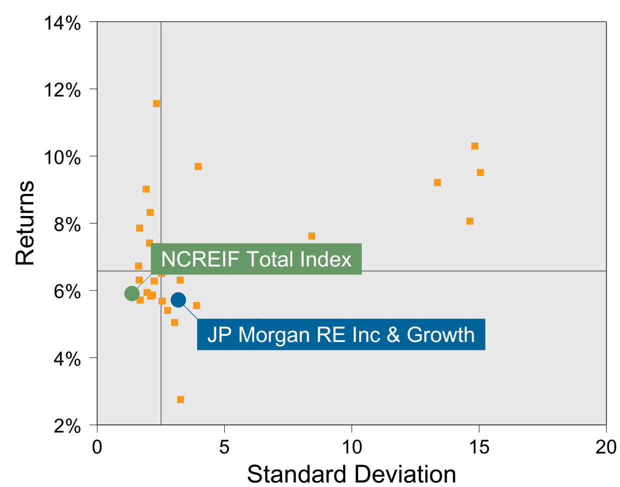


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	8.61	11.66	7.19	13.15	7.48	9.75	11.86
25th Percentile	4.70	7.52	3.13	8.93	6.90	8.26	9.47
Median	2.56	3.09	1.18	4.85	5.51	6.58	8.56
75th Percentile	1.55	2.07	(1.52)	3.09	4.52	5.74	7.59
90th Percentile	0.11	0.62	(3.75)	2.64	3.89	5.07	5.75
JP Morgan RE Inc & Growth ●	0.15	0.15	0.89	1.83	3.68	5.72	8.02
NCREIF Total Index ▲	1.15	1.89	1.60	3.98	4.89	5.91	7.87

Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return



Western Asset TIPS
Period Ended December 31, 2020

Investment Philosophy

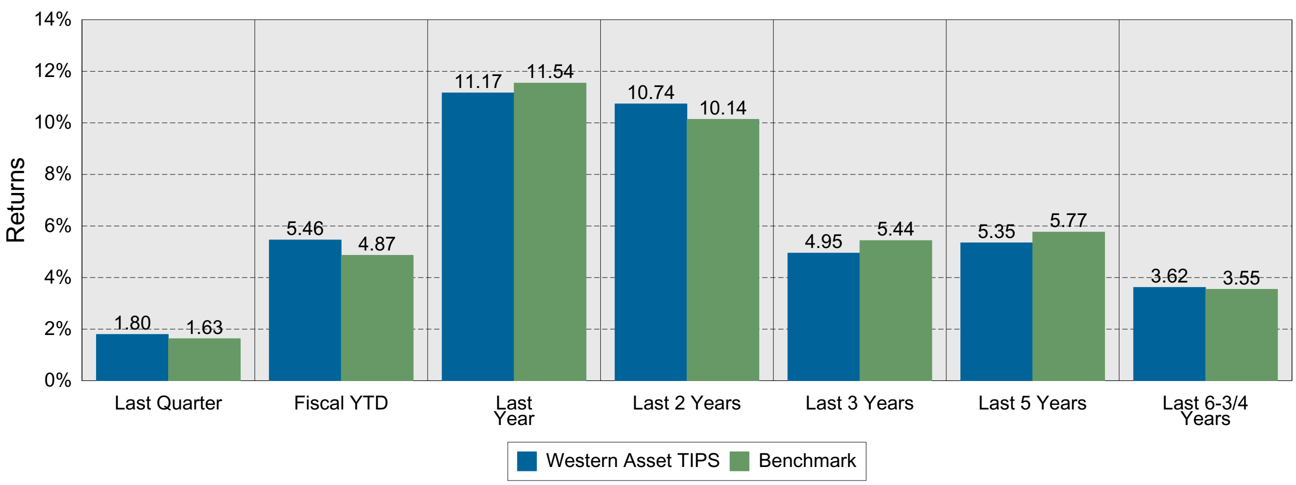
The Western Asset US TIPS Full Discretion strategy is an inflation-protected strategy that aims to maximize total return and add value through duration and curve positioning, sector allocation, and security selection, while approximating benchmark risk. The strategy invests in a diversified portfolio using higher-yielding inflation-protected instruments with a bias toward Treasury Inflation-Protected Securities (TIPS). Opportunistic investments include high-yield, emerging markets, non-dollar securities, commodities and bank loans that may also be employed using derivatives. **Benchmark: Bloomberg US TIPS through 12/31/2009; Bloomberg Global Inflation-Linked through 10/31/2018; Bloomberg US Govt Inflation Linked Bond Index thereafter.**

Quarterly Summary and Highlights

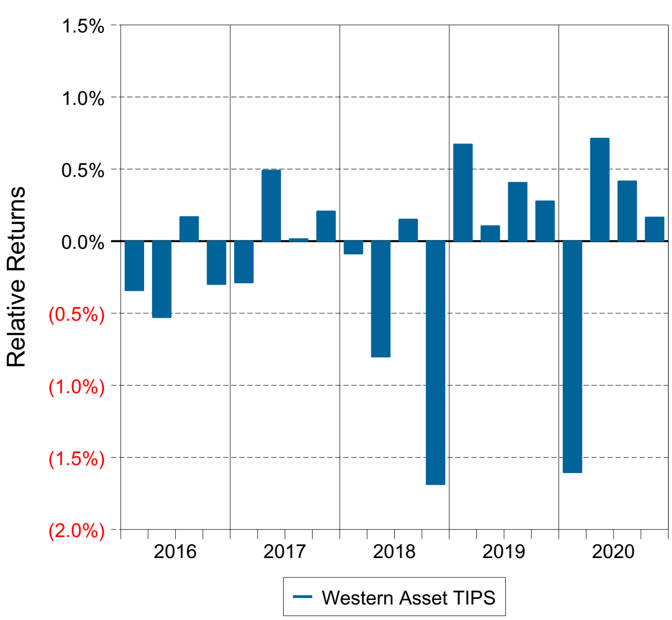
- Western Asset TIPS's portfolio outperformed the Benchmark by 0.17% for the quarter and underperformed the Benchmark for the year by 0.38%.

Quarterly Asset Growth

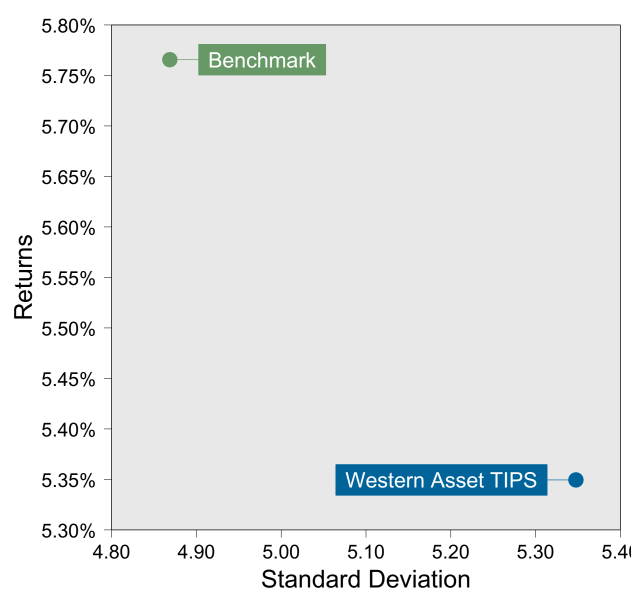
Beginning Market Value	$442,808,805
Net New Investment	$37,873,005
Investment Gains/(Losses)	$8,273,949
Ending Market Value	$488,955,759



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



ISQ Global Infrastructure II
Period Ended December 31, 2020

Investment Philosophy

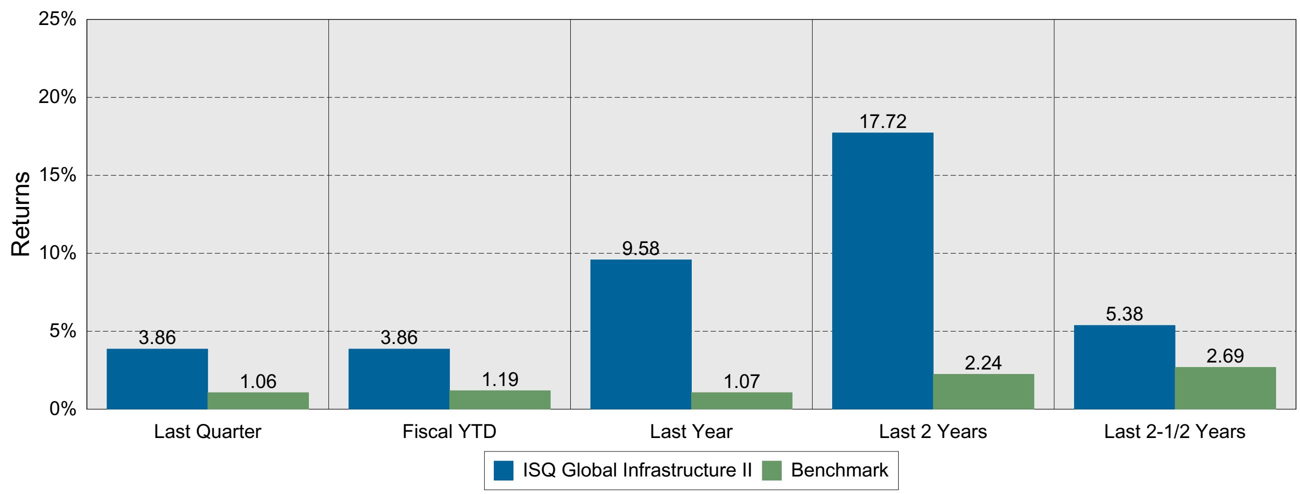
The ISQ Global Infrastructure Fund II seeks to achieve long-term capital appreciation as well as current income through equity and equity related investments in infrastructure and infrastructure related assets located globally, with a focus on North America, Europe, and selected growth economies in Asia and Latin America. The Fund may also invest in debt Securities that have equity-like returns or an equity component, or are related to its equity investments, including without limitation convertible debt, bank loans and participations and other similar instruments. **The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.**

Quarterly Summary and Highlights

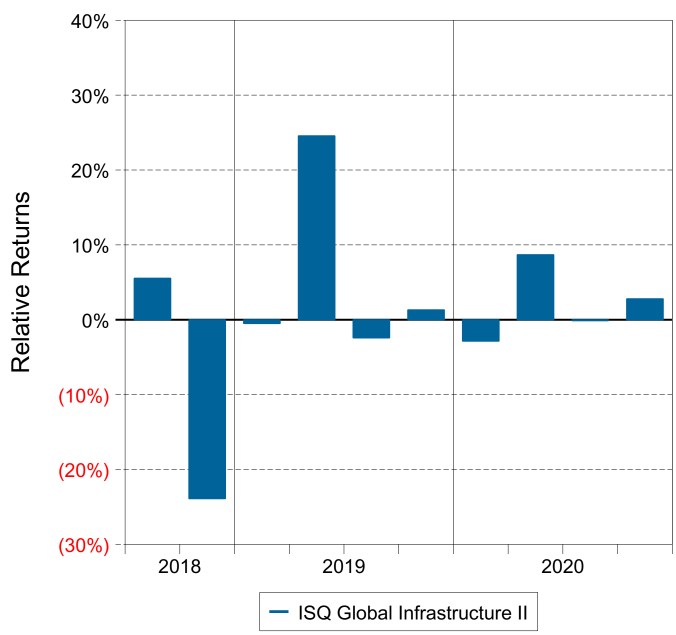
- ISQ Global Infrastructure II's portfolio outperformed the Benchmark by 2.80% for the quarter and outperformed the Benchmark for the year by 8.52%.

Quarterly Asset Growth

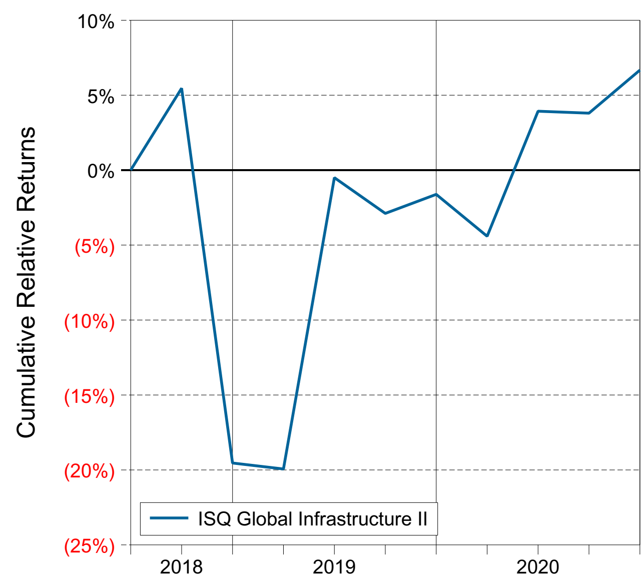
Beginning Market Value	$49,851,839
Net New Investment	$-1,449,456
Investment Gains/(Losses)	$1,925,624
Ending Market Value	$50,328,007



Relative Return vs Benchmark



Cumulative Returns vs Benchmark



JP Morgan Infrastructure
Period Ended December 31, 2020

Investment Philosophy

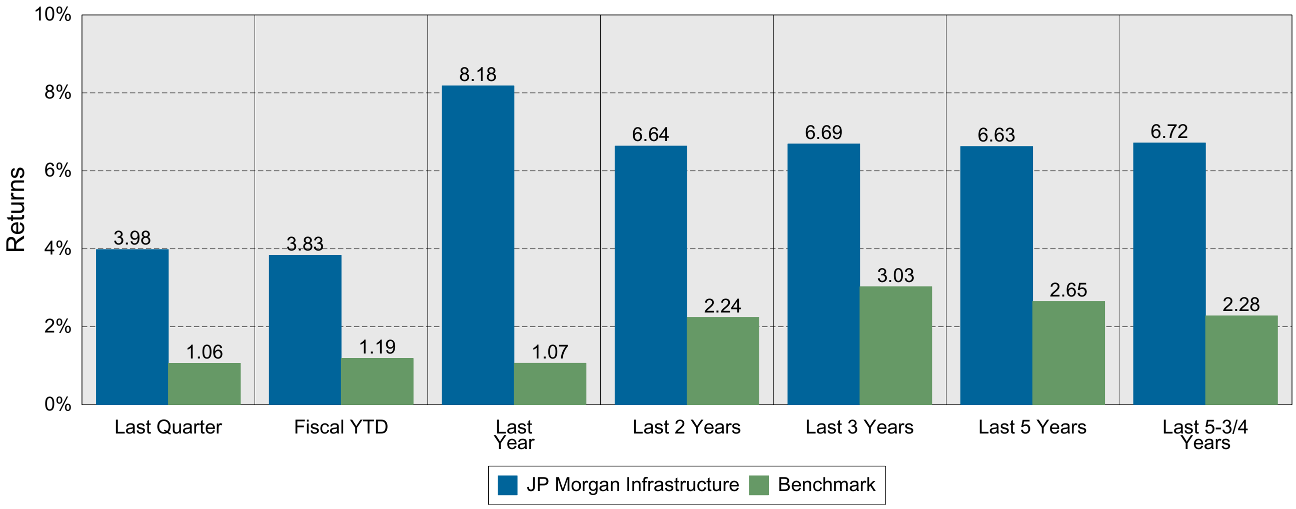
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports. **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

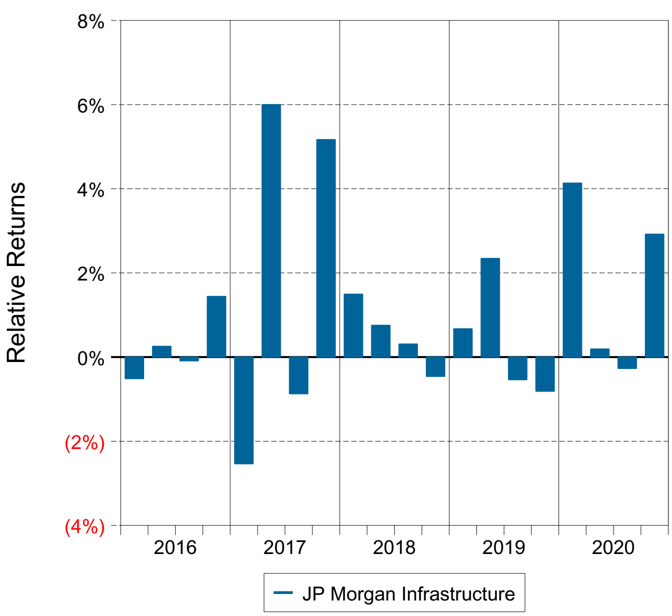
- JP Morgan Infrastructure's portfolio outperformed the Benchmark by 2.92% for the quarter and outperformed the Benchmark for the year by 7.12%.

Quarterly Asset Growth

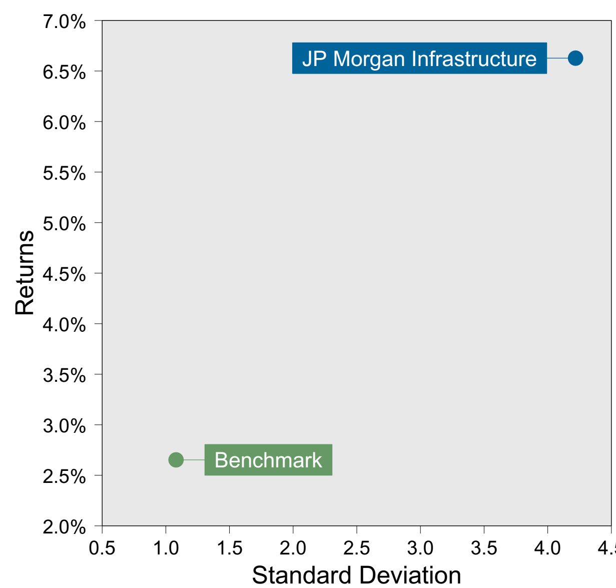
Beginning Market Value	$107,451,900
Net New Investment	$-1,989,238
Investment Gains/(Losses)	$4,276,454
Ending Market Value	$109,739,116



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure
Period Ended December 31, 2020

Investment Philosophy

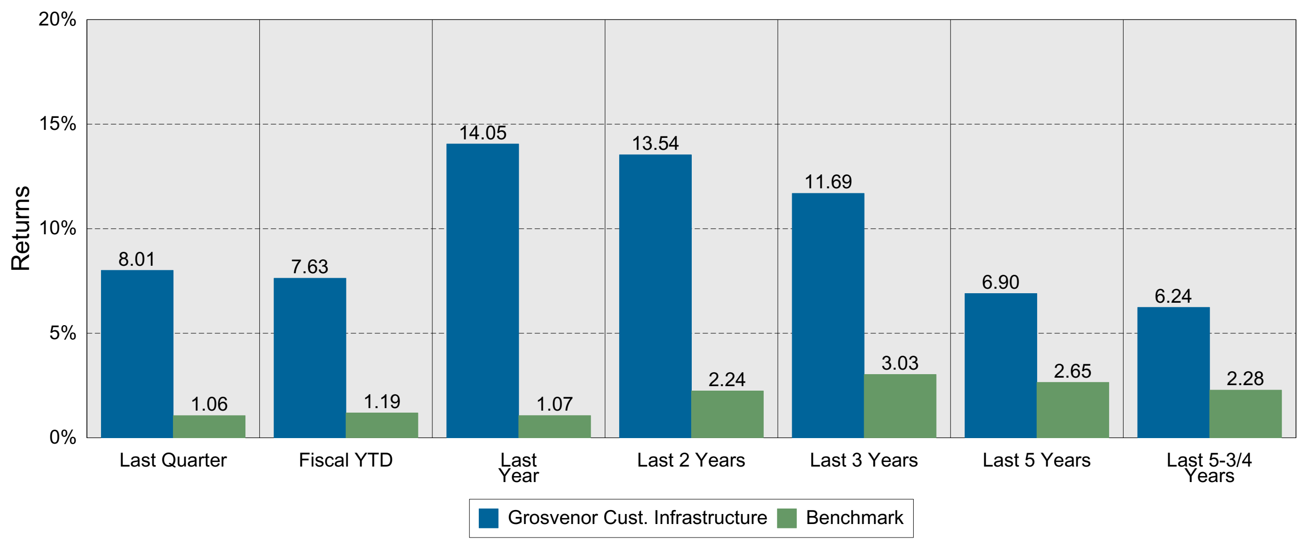
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). **The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.**

Quarterly Summary and Highlights

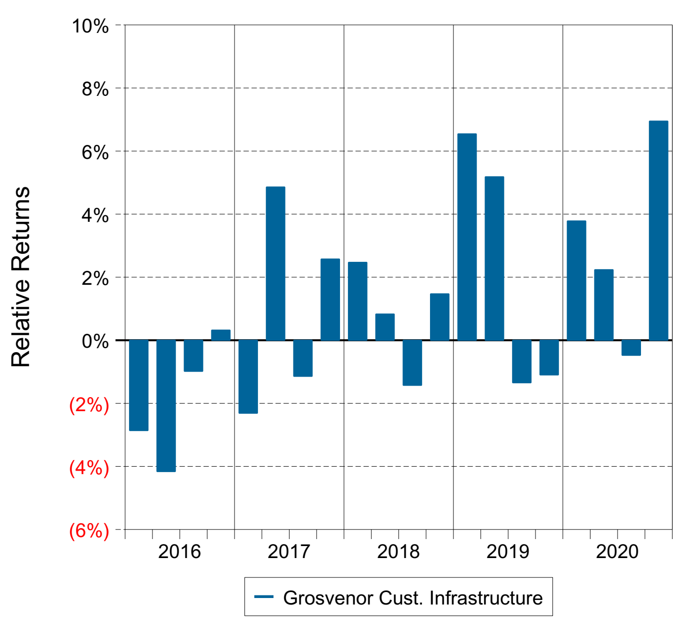
- Grosvenor Cust. Infrastructure's portfolio outperformed the Benchmark by 6.95% for the quarter and outperformed the Benchmark for the year by 12.99%.

Quarterly Asset Growth

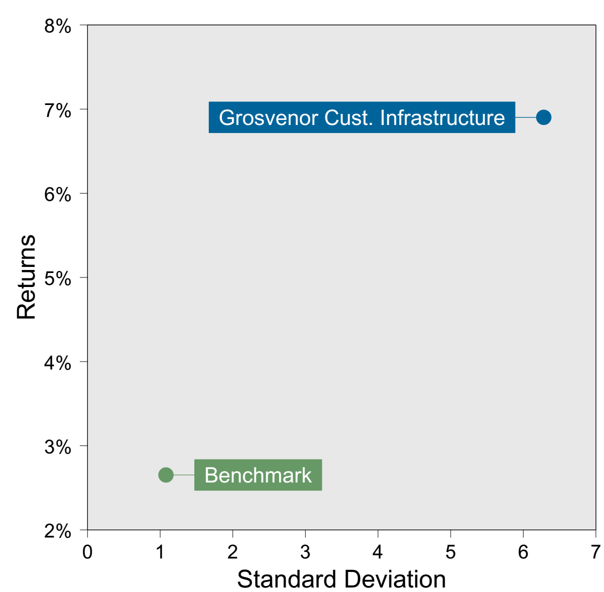
Beginning Market Value	$44,977,901
Net New Investment	$-2,118,916
Investment Gains/(Losses)	$3,604,518
Ending Market Value	$46,463,503



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Macquarie Infrastructure Fund IV
Period Ended December 31, 2020

Investment Philosophy

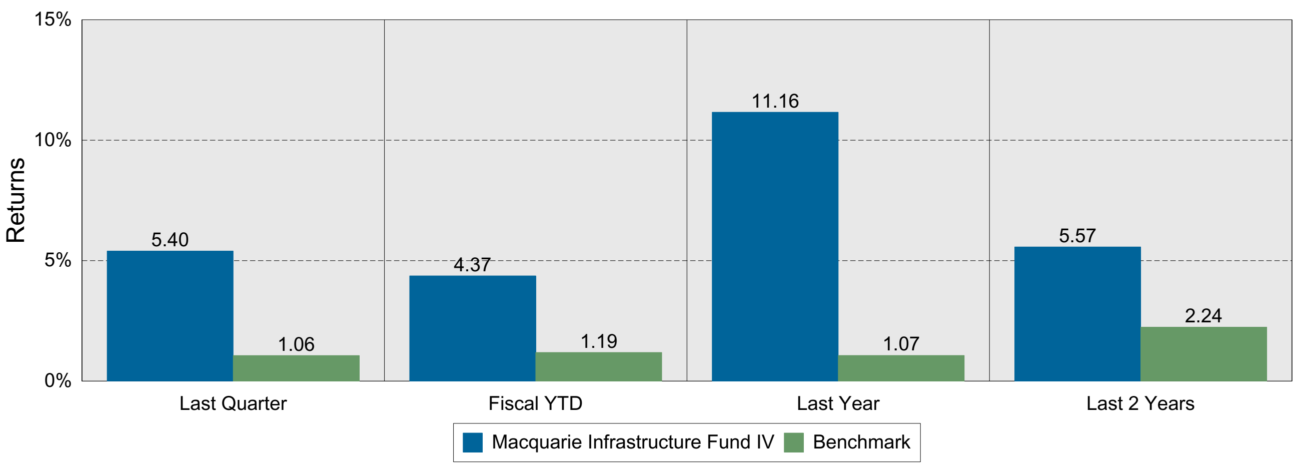
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience will provide a competitive advantage in sourcing and due diligence. Furthermore, the manager will also continue to focus on opportunities where its active management capabilities can add value for investors in terms of enhancing returns and the substantial mitigation and/or elimination of material operational risks. **The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.**

Quarterly Summary and Highlights

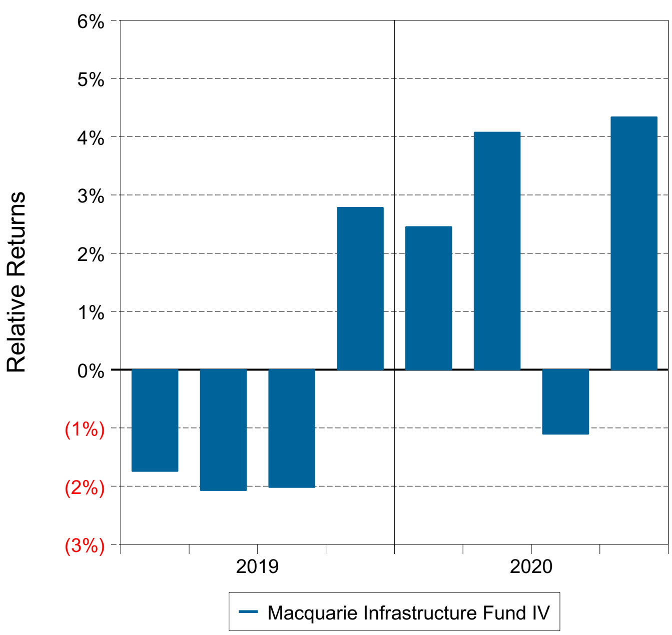
- Macquarie Infrastructure Fund IV's portfolio outperformed the Benchmark by 4.34% for the quarter and outperformed the Benchmark for the year by 10.10%.

Quarterly Asset Growth

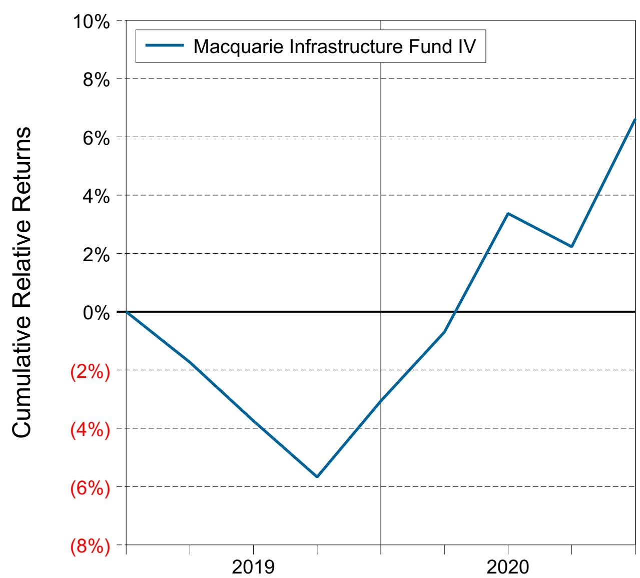
Beginning Market Value	$74,082,511
Net New Investment	$-633,460
Investment Gains/(Losses)	$3,986,258
Ending Market Value	$77,435,309



Relative Return vs Benchmark



Cumulative Returns vs Benchmark



Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit www.callan.com/research-library to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

Under the Hood of Alternative Beta: Hedge Fund Monitor, 3rd Quarter 2020 | In this quarter's *Hedge Fund Monitor,* Jim McKee explains and analyzes the newly introduced set of alternative risk premia (ARP) indices from Bloomberg and Goldman Sachs Asset Management. This index suite can help institutional investors evaluate the performance of their strategies that use ARP solutions.

A Primer on Green Building Certifications | This essay by real assets consultant Aaron Quach examines "green building certifications," which seek to establish standards for sustainability and are used to assess the performance of a building or other commercial real estate project. Real estate investment managers can reduce their carbon footprint by acquiring buildings that are green-certified, obtaining certifications for existing properties, or developing new properties that will be green-certified.

Research Cafe: Private Equity | In this coffee break webinar session, private equity experts Pete Keliuotis and Ashley DeLuce used the results of our exclusive *Private Equity Fees and Terms Study* to provide actionable insights for institutional investors to help them negotiate with private equity managers.

Blog Highlights

Will Boring Still Be Beautiful? | A simple, "boring" glidepath beat a diversified one over the last 10 years. Will that continue?

The Kids Are Alright | Private equity is doing quite well given the disruptions caused by the COVID-19 pandemic.

DOL Issues Final Rule on Selecting Plan Investments | The Department of Labor (DOL) issued its final rule providing guidance to plan sponsors on the financial factors to consider when evaluating plan investments, a follow-up to its proposed environmental, social, and governance (ESG) rule released four months ago. In the final rule, the DOL modified the ESG rule, most notably removing references to ESG and instead focusing on pecuniary versus non-pecuniary factors.

The Private Equity Playbook: Playing Offense | Investors should maintain strong oversight of the in-place private equity program, particularly after periods of disruption.

Macroeconomic Alphabet Soup: V, W, L, U, or K? | While certain sectors of the economy have rebounded more quickly than expected, the trajectory of the recovery is still unclear.

Quarterly Periodicals

Private Equity Trends, 3Q20 | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q20 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 3Q20 | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

Capital Markets Review, 3Q20 | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

Hedge Fund Quarterly, 3Q20 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 3Q20 | In this quarter's edition, Munir Iman provides analysis of the performance of real estate and other real assets in 3Q20.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: callan.com/research-library

Please mark your calendar and look forward to upcoming invitations:

March Workshop—Virtual
A Fresh Look at Fixed Income—Generating Yield in a Zero Interest Rate Environment
March 25, 2021, at 9:00 am

2021 National Conference
Summer 2021

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

Education: By the Numbers

50+	Unique pieces of research the Institute generates each year
525	Attendees (on average) of the Institute's annual National Conference
3,700	Total attendees of the "Callan College" since 1994

Education

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

Introduction to Investments—Virtual
April 13-15, 2021

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It is held over three days with virtual modules of 2.5-3 hours. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $950 per person and includes instruction and digital materials.

Additional information including registration can be found at: callan.com/events/april-intro-college-virtual/

Introduction to Investments—In Person
July 14-15, 2021, in San Francisco

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is $2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including dates and registration can be found at: callan.com/events/july-intro-college/

"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
American Century Investments
Amundi Pioneer Asset Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC

Manager Name
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investments
Columbus Circle Investors

Manager Name
Credit Suisse Asset Management
D.E. Shaw Investment Management, L.L.C.
DePrince, Race & Zollo, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Hermes, Inc.
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Hawaiian Bank Wealth Management Division
First Sentier Investors (formerly First State Investments)
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
GCM Grosvenor
Glenmeade Investment Management, LP
GlobeFlex Capital, L.P.
Goldman Sachs
Green Square Capital Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Investment Management Co.
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
Income Research + Management, Inc.
Insight Investment
Intech Investment Management, LLC
Intercontinental Real Estate Corporation
Invesco
Ivy Investments
J.P. Morgan
Janus
Jennison Associates LLC

Manager Name
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Investment Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
Mellon
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Nile Capital Group LLC
Ninety One North America, Inc. (formerly Investec Asset Mgmt.)
Northern Trust Asset Management
Nuveen
P/E Investments
Pacific Investment Management Company
Parametric Portfolio Associates LLC
Pathway Capital Management
Peregrine Capital Management, LLC
Perkins Investment Management
PFM Asset Management LLC
PGIM Fixed Income

Manager Name
PineBridge Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rothschild & Co. Asset Management US
S&P Dow Jones Indices
Schroder Investment Management North America Inc.
SLC Management
Smith Graham & Co. Investment Advisors, L.P.
State Street Global Advisors
Stone Harbor Investment Partners L.P.
Strategic Global Advisors
T. Rowe Price Associates, Inc.
The TCW Group, Inc.

Manager Name
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
USAA Real Estate
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company LLP
Wells Fargo Asset Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC

Board Action Requested

TO: State Investment Board

FROM: Dave Hunter

DATE: February 22, 2021

SUBJECT: Governance Review Wrap-Up – Cover Memo

The Board may complete their annual review of the SIB Governance Manual this month including a review of best practices in public fund board oversight of in-state investment programs. At the conclusion of our board discussion, the SIB may make a motion to accept the recommended "*technical revisions*" to update SIB membership and Term Expiration dates as shown on Exhibit E-1 below. Alternatively, the Board may make a motion to recommend other changes. All SIB recommended changes, other than "*technical revisions"* referenced above, will be brought forward for further discussion and formally approved at our next regularly scheduled board meeting, assuming no additional changes are recommended.

EXHIBIT E-I

State Investment Board (SIB) Members 2020-2021:

Position	Incumbent	Designation	Term Expiration
Lt. Governor	Brent Sanford	Statutory	12/31/24
State Treasurer	Thomas Beadle	Statutory	12/31/24
State Insurance Commissioner	Jon Godfread	Statutory	12/31/24
Commissioner University & School Lands	Jodi Smith	Statutory	open
Executive Director Workforce Safety & Insurance	Bryan Klipfel	Statutory	open
Trustee, TFFR	Toni Gumeringer	Appointed by TFFR Board	6/30/24
Trustee, TFFR	Rob Lech	Appointed by TFFR Board	6/30/25
Trustee, TFFR	Mel Olson	Appointed by TFFR Board	6/30/23
Trustee, PERS	Adam Miller	Appointed by PERS Board	6/30/22
Trustee, PERS	Troy Seibel	Appointed by PERS Board	6/30/21
Trustee, PERS	Yvonne Smith	Appointed by PERS Board	6/30/24

Mosaic Governance Advisors
Key Governance Points

Why does good governance matter?

Studies have shown that good governance has a materially positive impact on generating incremental income for plan beneficiaries by producing above benchmark returns versus passive investments, whereas poor governance is commonly associated with public funds producing lower actual net returns versus passive strategies[1]. In RIO's opinion, SIB clients have benefitted from strong board governance principles as evidenced by 99% of our clients generating net investment returns which exceed their policy benchmarks. As example, Legacy Fund earned a net return that exceeded its policy benchmark by 0.65% in the last 5-years ended 12/31/20 (e.g. 9.25% versus 8.60% = 0.65%). **Based on $5 billion of investments and 0.65% of excess return, the Legacy Fund earned over $150 million on incremental income in the last 5-years by adhering to strong board governance principles and supported by prudent investment due diligence practices** (e.g. Legacy average balance of over $5 billion x 0.65% of excess return = $32.5 million per year times 5 years = $162.5 million). *As another example, Legacy Fund earned roughly $70 million of incremental income from the prudent use of active investment management in the last six months given that actual net investment returns of 14.37% exceeded policy benchmark of 13.32% by over 1% (e.g. Legacy Balance of $7 billion x 1% excess return = $70 million). In this later example, the Legacy Fund earned net investment income of $1+ billion in the last six months of which over $930 million (or 93%) was driven by asset allocation and $70 million (or 7%) was due to the SIB's successful use of active investment management in the last half of 2020.*

1 The Pension Governance Deficit – By Ambachtsheer, Capelle, and Lum – Fall 2008 *Rotman International Journal of Pension Management*
Governance Matters: Improving Pension Plan Board Effectiveness by Chris Merker, PdD. Published January 2018 in *Benefits Magazine*

Key Factors in Good Governance

1) **Development of a board self-improvement culture;**
2) **Clear understanding of the board's mission and its investment beliefs; and**
3) **Clarity of board and staff roles about delegation of management responsibilities.**

<u>The SIB adheres to key factors in good governance as evidenced by</u>:

1) the Board engaging in a self-assessment survey every year since 2016;
2) the Board and RIO conducting an annual Governance Manual review and confirming our mission statement that "*SIB clients receive investment returns, consistent with their investment policies and market variables, in a cost effective manner and under the prudent investor rule*";
3) maintaining a "*fundamental investment belief*" that active investment management can improve client outcomes over the long-term by generating materially positive incremental income to help them achieve their own stated investment goals; and
4) confirming SIB oversight responsibility of agency operations as documented in the "Executive Limitations Audit" as directed by the SIB Audit Committee.

Constructing Prudent Due Diligence When Considering an In-State Investment Program

What is the State Investment Board's fiduciary responsibility?

"The SIB has a fiduciary responsibility to our SIB clients and their beneficiaries. A fiduciary is a person or organization that acts on behalf of another person or persons, putting their client' interest ahead of their own, with a duty to preserve good faith and trust. Being a fiduciary thus requires being bound both legally and ethically to act in the other's best interests." – Investopedia.com

For Fiduciaries, Good = Process

It is essential for fiduciaries to have a process that is defensible, repeatable and documented and that provides evidence of diligence undertaking in fulfilling their fiduciary role.

The process does not guarantee a specific outcome.

Used consistently and correctly, it increases the likelihood of achieving objectives set by fiduciaries on behalf of beneficiaries.

When considering investment policy changes, RIO believes the SIB and our SIB client boards, consistently seek to maintain high fiduciary standards by conducting a prudent due diligence process that is defensible, repeatable and documented. Recent examples include PERS and TFFR boards engaging Callan to conduct asset liability studies to confirm their own current asset allocation policies are consistent with their long-term investment objectives in a prudent, diligent and cost effective manner. The Legacy Fund Advisory Board also seeks to adhere to these high fiduciary standards by engaging Callan to conduct a comprehensive asset liability study in addition to the SIB directing RIO and Callan to offer board education on best practices and market standards when expanding an in-state investment program by inviting leading investment firms with significant experience in developing economically targeted investment program with other states to present to the SIB over the last six months (and next month).

SIB Consideration of Annual Board Governance Retreat

Since 2015, the SIB has invited leading experts in the field of board governance and investment education to present at our July board meetings (excluding July of 2020 due to COVID). Prior presenters on public fund board governance and investment education have included:

Dr. Keith Ambachtsheer - Director Emeritus International Centre for Pension Management, Rothman School of Management, University of Toronto (2015)

Ms. Jeanna Cullins - Aon Hewitt Fiduciary Practice Services Leader; and Ms. Janilyn Murtha – Assistant Attorney General (2016)

Mr. Ron Peyton, Callan Executive Chairman; Mr. Paul Erlendson - Callan SVP; Mr. Alex Browning – Callan VP; and Mr. John Pirone – Callan SVP (2017)

Mr. William Priest – Epoch CEO & Co-CIO; Mr. Jeffrey Ulness – Epoch Managing Director, Mr. Paul Erlendson – Callan SVP; and Mr. Alex Browning – Callan VP (2018)

Ms. Angela Rodell, Alaska Permanent Fund Corporation Executive Director (2019); and Ms. Amy McDuffee – Mosaic President & Founder (2019 and 2020)

If the SIB concurs, RIO will invite another leading industry expert to offer board education on relevant investment topics at our next annual Board Retreat on Friday, July 23, 2021.

RETIREMENT AND INVESTMENT OFFICE
Internal Audit
2020-2021 2nd Quarter Audit Activities Report
October 1, 2020 – December 31, 2020

The audit objective of Internal Audit is twofold: first, to provide comprehensive, practical audit coverage of the Retirement and Investment Office (RIO) programs; second, to assist RIO management and the State Investment Board (SIB) by conducting special reviews or audits.

Audit coverage is based on the July 1, 2020 through June 30, 2021 work plan approved by the SIB Audit Committee. The audit activities undertaken are consistent with the Internal Audit charter and goals, and the goals of RIO. To the extent possible, our audits are being carried out in accordance with the International Standards for the Professional Practice of Internal Auditing. Audit effort is being directed to the needs of RIO and the concerns of management and the SIB Audit Committee.

Investment and Agency Audit Activities

- **Executive Limitation Audit**

On an annual basis, Internal Audit reviews the Executive Director/CIO's level of compliance with SIB Governance Manual Executive Limitation Policies A- 1 through A-11. The Executive Limitations Audit was started in December 2020.

The audit has been completed and the report is issued in February 2021 which has been included with the February Audit Committee materials.

- **External Audit Support**

Internal Audit provided support to our external audit partners, CliftonLarsonAllen (CLA), during the GASB 68 Census Data Audits. CLA GASB 68 Census Data Audit work concluded in October. Internal Audit worked with the external audit partners on reconciling GASB 68 census testing data. Internal audit also spent time reviewing the financial statement audit and CAFR that was issued.

The fiscal year 2020 RIO/TFFR Financial Statements Audit was issued and presented by CLA at the November, 2020 Audit Committee meeting. The report for the GASB 68 Schedules of Employer Allocations and Pension Amounts by Employer was issued by CLA in December of 2020 which has been included in the February Audit Committee material.

- **Administrative Policy Review**

The Deputy Executive Director/Chief Retirement Officer, Supervisor of Administrative Services /Office Manager, and Supervisor of Internal Auditor are meeting regularly to revise the administrative policy manual for RIO staff. The policies are then forwarded to the Executive Director/Chief Investment Officer for final review, then reviewed by managers before presented to staff. Policies completed in the second quarter are Teleworking, Overtime & Compensatory Time, and Flexible Time Policy.

As part of an ongoing effort to improve certain HR functions for state agencies, a universal set of employment policies is being developed. The intent is to improve understanding of workplace expectations and requirements by these simplified, standardized policies. RIO has also adopted the majority of these universal policies.

- **Cash Management and Rebalancing Audit**

A review of procedures for cash management and rebalancing of investment allocations was initiated. A sample of rebalancing of asset allocations, wire transactions, and bank fees will be selected and confirmed. Also, a sample of client requests will also be reviewed for timeliness and accuracy. Lastly, a review of staff access and authorization will be reviewed and confirmed.

This audit was started in March 2020; however, do to COVID-19 it was temporarily put on hold. Since then the SIB has hired Parametric to help with rebalancing the portfolio. Due to the changes, internal audit staff is working with fiscal management staff to understand the changes and re-scope the audit.

This audit is currently in progress.

- **Internal Control Assessment**

Internal audit is working on an internal control guideline assessment put forth by North Dakota Office of Management and Budget. This is an overall assessment on processes for state agencies.

This assessment is currently in progress.

Retirement Program Audit Activities

- **TFFR Employer Salary Reviews**

Internal Audit examines employer reporting to the Teachers' Fund for Retirement (TFFR) to determine whether retirement salaries and contributions reported for members of TFFR for accuracy with the definition of salary as it appears in the TFFR Employer Guide. Other reporting procedures reviewed during the audit process are calculation of service hours and eligibility for TFFR membership. A written report is issued after each review is completed to Retirement Services.

Status of TFFR Employer Audits as of December 31, 2020:

  - The Minot Employer audit was completed and the report issued Nov 2020.
  - There are no other audits in progress.

- **Salary Verification Audit**

On an annual basis Internal Audit verifies retirement salaries and contributions reported to TFFR for the prior fiscal year for 65 randomly selected member accounts from 60 different employers. The sample has been selected, notifications for information have been requested and information has been returned by the employers. The reconcilement of salaries is scheduled to start during the third quarter.

This audit is currently in progress. An update on the progress of the Audit is included in the February Audit materials.

- **Pension Administration System Upgrade**

The Supervisor of Internal Audit was asked to join the PAS Committee. The RFP for hiring a consultant went out in June. The first two weeks of July, the Supervisor of Internal Audit helped evaluate the proposals that were received. A consultant was selected and a contract was negotiated in October 2020. RIO moved to Stage I for the PAS project.

Multiple committees were formed by the Deputy Executive Director/Retirement Officer in order to prepare for Stage I of PAS. The Supervisor of Internal Audit attended several meetings with TFFR staff on the pros and cons on existing TFFR procedures and wishes, wants, and efficiencies for the future operations. The Internal Auditor attended several meetings with the Retirement Program Manager, the Supervisor of Administrative Services and the Deputy Executive Director/Retirement Officer to discuss pros, cons, and risks associated with existing procedures and wants, wishes, and efficiencies for the future.

The kickoff with the consultant, Segal, started October 26, 2020. IA attended many meetings on TFFR processes with the consultants and RIO staff the last week of October and month of November. The month of December software demonstrations were presented virtually by ten companies. After reviewing the demonstrations, staff members provided lists with their wants and wishes for the new system for member/employer processing. A consolidated list was developed and given to Segal for use. in the development of the RFP.

Administrative Activities

The Supervisor of Internal Audit attended the monthly RIO staff meetings, monthly RIO manager's meetings, divisional meetings, two SIB meetings, and two TFFR meeting. The Internal Audit staff member attended the monthly RIO staff meetings, divisional meetings, and two TFFR meetings.

Professional Development/CE/General Education

The Supervisor of Internal Audit participated in training with the rest of the management team of RIO on strength training and how to work together. Both IA staff attended staff training on Fiduciary responsibility and open records.

Internal Audit attended the virtual Public Pension Financial Forum Annual Conference (P2F2) for education and training starting Oct. 16th and ending Oct. 30th. Sessions were held daily with up to 35 CPES to earn. P2F2 included members from the Association of Public Pension Fund Auditors.

Sessions were classified as Pension 101, Personal Development, General Accounting, Investment Accounting, and Employer Reporting. General session classes included the following topics: fraud, the effects of COVID on pension systems, Accounting Best Practices, Nonverbal Communication, Actuarial Funding, Business Continuity with the Pandemic, updates with GASB, and Stress and Time Management Skills.
annual conference.

MEMORANDUM

TO: **State Investment Board (SIB)**
State Investment Board (SIB) Audit Committee
David Hunter, Executive Director/CIO

FROM: **Sara Sauter, Supervisor of Internal Audit**

DATE: **February 25, 2021**

SUBJECT: **Executive Limitations Final Audit Report**

Internal Audit has completed the annual review of the Executive Director/CIO's level of compliance with State Investment Board (SIB) Governance Manual Executive Limitation policies for the calendar year beginning January 1, 2020 and ending December 31, 2020.

The policies reviewed during the course of the audit were:

- General Executive Constraint (A-1)
- Staff Relations (A-2)
- Relating to Public and Government (A-3)
- Budgeting (A-4)
- Financial Condition (A-5)
- Communication and Counsel to the Board (A-6)
- Asset Protection (A-7)
- Compensation and Benefits (A-8)
- Conflict of Interest (A-9)
- Code of Conduct (A-10)
- Unrelated Business Interests (A-11)

Internal Audit is sufficiently satisfied that the Executive Director/CIO was in compliance with SIB Governance Manual Executive Limitation Policies A-1 through A-11 during calendar year 2020.

RETIREMENT AND INVESTMENT OFFICE
INTERNAL AUDIT
EXECUTIVE LIMITATIONS AUDIT REPORT
January 1, 2020 – December 31, 2020

Executive Limitations – General Executive Constraint (A-1)

The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-1:

- Executive Team Members – Communication Questionnaires
- State Investment Board (SIB) Meeting Agendas, Materials, and Minutes

The executive team indicated that frequent communication occurs regarding board and executive issues and processes. Executive team members believe they are well informed and not lacking pertinent or relevant information. The executive team continues to demonstrate great cohesiveness. There is still a consensus regarding the most important issues facing the organization. Executive team members overwhelmingly agree that the depth of knowledge and experience currently held by executive staff will insulate the organization from any risk associated with the sudden loss of executive services.

Executive Limitations – Staff Relations (A-2)

The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-2:

- RIO Administrative Manual and Employee Acknowledgements
- RIO Termination Checklist, Exit Interview, and Employee Termination Documents
- 2020 Employee Survey Results
- 2020 SIB Executive Review Committee Survey, Results, and Meeting Minutes

RIO maintains an Administrative Manual which includes personnel rules for staff, provides for the effective handling of grievances, and protects against wrongful conditions or violations of state and federal law. All staff members signed acknowledgements indicating that they reviewed and understood all policies contained within the Administrative Manual. Staff and SIB survey responses were generally positive regarding staff relations.

Executive Limitations – Relating to Public and Government (A-3)

The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-3:

- 2020 SIB Client Satisfaction Survey and Responses
- RIO Administrative Manual (Media Policy), Media Inquiry, and Open Records Request
- 2020 SIB Executive Review Committee Survey, Results, and Meeting Minutes

SIB clients were asked to rate the services provided by RIO staff on behalf of the SIB. A score of 3.39 was received on a 4.0 weighted average scale. Comments received were generally positive and indicated clients have a great deal of trust in staff, staff is knowledgeable and helpful. The Executive Director/CIO routinely responds to media requests and open records requests. The requests reviewed revealed that information provided by staff was accurate and when applicable distinguished between fact and personal opinion. Members of the SIB overwhelmingly agreed that the Executive Director/CIO effectively promotes the SIB and provides necessary information to various stakeholders, constituencies,

Executive Limitations – Relating to Public and Government (A-3) (continued)
political subdivisions, and the state legislature. This is most often accomplished with appropriately timed and relevant communications, presentations, and general discussions.

Executive Limitations – Budgeting (A-4) and Financial Condition (A-5)
The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-4 and A-5:

- RIO 2021-2023 Biennium Budget and Other Supporting Documentation
- Budget and Financial Condition Quarterly Monitoring Reports – SIB Meeting Materials
- 2020 Executive Review Committee Survey, Results, and Meeting Minutes
- 2021-2023 Budget Guidelines

A review of the quarterly monitoring reports for fiscal year 2020 revealed that RIO operated well within budget and had not made any expenditure which exceeded the appropriation authorized by the legislature. This confirms that the budget planning process currently used by RIO is adequate and results in the development of credible expense projections. RIO submitted the 2021-2023 biennial budget that was within the governor's guideline. During calendar year 2020, RIO did not reduce the level of service of any programs nor request the assistance of the Emergency Commission. Continuing appropriations are reviewed by third parties, one of the largest expenditures is related to investment management fees and consulting expenses. Staff has been successful in reducing overall investment management fees to 0.45% in fiscal year 2020 (from 0.84% in fiscal 2010). SIB members surveyed indicated they are satisfied with the Executive Director/CIO's budgeting actions and RIO's overall financial condition.

Executive Limitations – Communication and Counsel to the Board (A-6)
The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-6:

- 2020 SIB Executive Review Committee Survey, Results, and Meeting Minutes
- SIB Governance Manual Policy C-4 (Monitoring Executive Performance Policy)
- SIB Meeting Agendas, Materials, and Minutes – Calendar Year 2020

SIB members indicated that the Executive Director/CIO routinely provides information to assist in decision making, board education, updates on current issues, and timely problem identification. The Executive Director/CIO also adequately monitors investment performance, managers, and strategies. The Executive Director/CIO met all reporting requirements detailed in SIB Governance Manual Policy C-4.

Executive Limitations – Asset Protection (A-7)
The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-7:

- State Fire and Tornado Fund Insurance Policy – FY 2020 and FY 2021
- OMB/Risk Management – Risk Management Fund Manual
- State Bonding Fund – Commercial Blanket Bond – CY 2020
- RIO Financial Audit - Fiscal Year Ended June 30, 2020
- SIB Executive Review Committee Survey, Results, and Meeting Minutes
- SIB Meeting Agendas, Materials, and Minutes – Nov 20, 2020

RIO has obtained adequate insurance to protect against theft and casualty losses as well as to protect against liability losses to board members, staff, and the organization. All RIO personnel who have access

Executive Limitations – Asset Protection (A-7) (continued)

to funds are properly bonded. External auditors confirmed that funds are received, processed, and distributed under controls which are sufficient to meet State Auditor standards. The financial audit for the fiscal year ended June 30, 2020 received a clean unmodified opinion. In March 2020, a global pandemic started and is still in progress as of today. This resulted in a sharp decline in the market, effecting all clients. This has impacted the ability to meet the benchmarks of a 3 and 5-year period. Each client's asset allocation has determined how much their funds were affected by the pandemic. However, there was a significant correction in the market during the calendar year. Many of the funds have recouped the losses from the market downfall in March 2020.

Executive Limitations – Compensation and Benefits (A-8)

The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-8:

- OMB ND Salary Ranges – July 1, 2020
- RIO Salaries & Pay Grades
- SIB Executive Review Committee – Executive Director/CIO Performance Review
- ND Administrative Code, Chapter 04-07-02
- SIB Meeting Agenda, Materials, and Minutes – June 26, 2020

A review of available documents confirmed that compensation and benefits for staff are in compliance with the ND Administrative Code, Chapter 04-07-02. Current salary and benefits for the Executive Director/CIO are consistent with the recommendations of the SIB Executive Review Committee.

Executive Limitations – General Executive Constraint (A-1), Conflict of Interest (A-9), Code of Conduct (A-10), and Unrelated Business Interests (A-11)

The following documents were reviewed and found to support the Executive Director/CIO's compliance with Executive Limitation A-1, A-9, A-10, and A-11:

- 2020 Executive Limitation/CIO Effectiveness Survey and Results
- 2020 Executive Review Committee Survey and Results
- SIB Governance Manual Policy A-9 and Conflict of Interest Statement
- SIB Meeting Agenda, Materials, and Minutes – Feb 28, 2020 and July 26, 2020
- SIB Audit Committee Agenda, Materials, and Minutes – Feb 27, 2020

The Executive Director/CIO affirmed understanding of the Executive Limitation Conflict of Interest Policy (A-9) located within the SIB Governance Manual. Executive team members independently confirmed that they are not aware of any actual or perceived conflicts of interest concerning the Executive Director/CIO. SIB members indicated they believe the Executive Director/CIO maintains high fiduciary standards and adheres to all laws, rules, policies, procedures, and professional ethics. Staff overwhelmingly believes that the Executive Director/CIO demonstrates integrity and sets an example for others to follow.

AGENDA ITEM IV.C.

Board Acceptance Requested

To: **State Investment Board**

From: Dave Hunter

Date: February 19, 2021

RE: **Executive Review Committee Update**

SIB Governance Manual C-4 on Monitoring Executive Performance states that "Each March the board will conduct a formal evaluation of the Executive Director / Investment Officer. This evaluation will be based on accomplishments of *Ends* and *Compliance with Executive Limitations*.

On January 22, the SIB Chair re-appointed a three-member Executive Review Committee (ERC) of Ms. Yvonne Smith, Mr. Mel Olson and Mr. Adam Miller to review the board's evaluation and make a recommendation to the full board concerning the salary for the Executive Director / Investment Office in May.

A listing of SIB which served on the ERC in prior years is summarized below:

Year	SIB Executive Review Committee Members
2021	**Ms. Yvonne Smith, Mr. Mel Olson, Mr. Adam Miller**
2020	Ms. Yvonne Smith, Mr. Mel Olson, Mr. Adam Miller
2019	Ms. Yvonne Smith, Dr. Rob Lech, Mr. Mel Olson
2018	Ms. Yvonne Smith, Dr. Rob Lech, Land Commissioner Jodi Smith
2017	Lt. Gov. Sanford, Ms. Yvonne Smith, Mr. Mike Sandal, Ms. Cindy Ternes
2016	Lt. Gov. Wrigley, Dr. Rob Lech, Mr. Mike Sandal
2015	Dr. Rob Lech, Mr. Mike Sandal, Ms. Cindy Ternes

As consistent with prior years, RIO's Supervisor of Audit Services, Sara Sauter, was requested to administer the Executive Director/CIO Survey on behalf of the SIB and/or the Executive Review Committee.

The first meeting of the Executive Review Committee was held on February 10^{th}, noting the ERC re-elected Ms. Yvonne Smith to serve as Chair. The ERC also advanced plans to move forward with the annual SIB self-assessment survey which was launched on Monday, February 15^{th}.

Board Acceptance Requested

To: **State Investment Board**

From: Dave Hunter

Date: February 19, 2021

RE: **Securities Litigation Committee (SLC) Update**

On February 4, 2021, the SLC approved the engagement of Robbins Geller Rudman & Dowd LLP to Opt-In into international group securities litigation to recover up to an estimated $315,000 in net loss recoveries from Daimler AG allegedly violating German securities trading laws.

RIO is in the process of requesting a Special Assistant Attorney General (SAAG) appointment by our AG office in order to advance this international opt-in securities litigation forward.

- Financial Recovery Technologies (FRT), our securities litigation monitoring firm, made RIO aware of a developing international securities litigation case against Daimler AG (Daimler).
- Daimler, a German multinational automotive corporation, has been sued for allegedly violating the German Securities Trading Act (WpHG) by failing to disclose the use of "illegal defeat devices" – software installed in its vehicles to temporarily lower nitrous oxide levels emitted during emission tests.
- Based on our SIB approved SLC Charter, the Committee is authorized to "make decisions on the level of participation the SIB will take in … opt-in or group litigation" cases and "approve the selection of special assistant attorneys" under the guidance and approval of the AG office (SLC Charter on next page).
- The SLC discussed the merits of the case with Michael Lange and Craig D'Allessio of FRT to confirm: 1) estimated damages are approximately $1.8 million; 2) the legal jurisdiction is Germany; and 3) the SIB approved litigation threshold for Germany is $5 million (Exhibit A).
- The attached FRT "Global Opt-In Litigation – Organizer Comparison" Monitoring Alert states the "Jurisdiction Risk" for this Daimler AG case in Germany is deemed to be "Moderate Risk" for "Costs", "Discovery" and "Anonymity" (Exhibit B).
- FRT believes there is "little downside risk to pursuing securities litigation in this case and there is a good chance of obtaining a 25% estimated recovery" which translates into "an approximate ($1.8 million x 25%) $450,000 gross loss recovery or an estimated $315,000 net loss recovery" after up to a 30% contingent fee arrangement which will <u>not require the approval of the ND Emergency Commission</u>.

CHARTER OF THE
SECURITIES LITIGATION COMMITTEE OF THE
NORTH DAKOTA STATE INVESTMENT BOARD

PURPOSE

The Securities Litigation Committee (the Committee) is a standing committee of the North Dakota State Investment Board (SIB) created to assist in fulfilling its fiduciary oversight responsibilities of monitoring the investment of assets entrusted to it by the various statutory and contracted funds, and to serve as a communications link for the SIB, RIO's management and staff, third party securities litigation firms, and others.

The Committee will determine when an active role should be pursued in regards to securities litigation affecting securities within the SIB's portfolios.

AUTHORITY

The Committee is authorized to:

- draft policy (to be formally approved by SIB) regarding dollar and/or risk thresholds for determining when to opt-out of class actions and/or seek direct litigation or lead plaintiff status;
- based on SIB approved policy, make decisions on the level of participation the SIB will take in direct litigation, opt-in or group litigation, anti-trust and other class actions; and
- approve the selection of special assistant attorneys in cases of direct litigation.

Exhibit A
Non-US Opt-In and Group Litigation Jurisdictional Thresholds

Jurisdictional Description	Threshold
Passive/very low risk jurisdictions, simple registration or claim filing (no participation in litigation required, strong anonymity, very low costs) including, but potentially not limited to: Australia, Israel, Netherlands (including Dutch Foundations), regulatory funds (e.g. Compensation Schemes in UK)	**$20,000 (FRT proposal to lower to zero)**
Low risk jurisdictions (no discovery, low cost) including, but potentially not limited to: Japan	**$1 million**
Moderate risk jurisdictions (moderate cost, funded/insured to protect from cost shifting, some restricted discovery, not fully public) including but potentially not limited to: Germany, Austria, Belgium, Switzerland, Denmark, Spain, Finland, France, Hong Kong, Indonesia, Ireland, Italy, Korea, Luxembourg, Malaysia, Norway, New Zealand, Portugal, Sweden, and Thailand	**$5 million**
High risk jurisdictions (potential in-person discovery, no anonymity, uncapped fees) including, but potentially not limited to: Taiwan, United Kingdom, Singapore, Brazil	**$10 million**

Jurisdictional Thresholds are developed in consultation with legal counsel including other designated agents which are experts in global securities litigation matters.

FRT FINANCIAL RECOVERY TECHNOLOGIES

GLOBAL OPT-IN LITIGATION: ORGANIZER COMPARISON December 2020

Daimler AG

Daimler AG, a German multinational automotive corporation, has been sued in for allegedly violating the German Securities Trading Act (WpHG) by failing to disclose the use of "illegal defeat devices" - software installed in its vehicles to temporarily lower nitrous oxide levels emitted during emissions tests.

The current stage of litigation

In December 2018, the Lower Regional Court of Stuttgart accepted a motion for model case proceedings (called a KapMug). This was the first formal step towards collective redress for investors. When the KapMug has been accepted with a model plaintiff chosen, it will trigger a six-month period of time for other investors to register their claims with the court and prevent them from expiring. While registering claims preserves them, investors must still 'perfect' claims by filing suit before the KapMug proceedings progress beyond the model case proceedings to the final stage of the process: the adjudication of individual claims.

The Organizers

Currently, three organizers are planning opt-in group litigation in Germany.

- AdvoFin Prozessfinanzierung AG (AdvoFin), with Rotter Rechtsanwalte as local counsel;
- Robbins Geller Rudman & Dowd (Robbins Geller), with Nieding + Barth as local counsel; and
- Deminor Recovery Services (Deminor), with Arnold & Porter as local counsel[1]

Their proposed terms of representation

The table below details the planned recovery efforts for three organizers: Rotter, Robbins Geller and Deminor[2]. In selecting the one that best fits your needs, please note several key differences in their strategies and proposed terms of representation.

<u>Relevant time periods</u>: Each organizer has a different claim period. You should consider how the differing time periods impact your estimated losses and which best matches your trading history.

<u>Securities covered</u>: All three efforts encompass Daimler common stock.

<u>Eligible losses</u>: Your estimated losses will likely vary significantly by organizer. All are using an inflationary (event study) method, but as noted in the table there are differences in their models (constant versus variable inflation) and in their Claim Periods. They have also chosen different disclosure dates and end their claim periods at different time. Some are considering recessionary damages, a less conservative method. Depending on your trading history, this will likely produce different estimates.

1 Deminor considers its case analysis proprietary and restricted to clients but offered the following statement: "At this stage, given the ongoing investigations and factual uncertainty, we believe that a registration of claim is a recommended and prudent path that safeguards investors' interests and future options on the case. Once further information emerges, it will still be possible to file suit against Daimler and to join the German model case ("KapMug") as a full participant to pursue compensation for damages suffered. Indeed, on the basis of a thorough factual investigation and legal advice from German counsel on the options available as of today to investors under German law, Deminor recommends that investors register in a first stage their claims with the KapMug proceeding in Stuttgart, once the model plaintiff has been appointed by the court (likely during Q4 2020/Q1 2021). This will have the effect of tolling the statute of limitations, while preserving the possibility to issue proceedings at a later stage when further evidence against Daimler emerges, and some of the key outstanding questions are resolved. We have determined the class period, which stretches from 10 July 2012 to 11 October 2019 (both dates included). If new information comes to light, the class period might be broadened or shortened.

2 Deminor restricts its funding terms to clients but provided the following: "We work on an "all-in" contingency fee basis (i.e. costs included). The percentage of the success fee varies, depending in which step a success is reached (registration of the claims vs issuance of proceedings seeking damages). Investors are invited to sign up for the case by 30 November 2020 (soft deadline). In order to join our group, we will need (i) the contract of services duly executed, (ii) a statement issued by your bank confirming the trades throughout the relevant period and (iii) a power of attorney to the German counsel."

Proposed success fees and expense reimbursement: All organizers are proposing representation on a no-win, no-fee basis, advancing all case costs, and will insure you against the risk of adverse (loser pays) cost shifting. All are proposing a success fee from your recovery, if any. The fees for Rotter are 25% - the fee for Robbins Geller is 30%. Deminor's fee is in the same range. However, differences among fee percentages become minimal when costs are factored in. Robbins Geller offers an 'all in' fee that includes case expenses. Rotter gets case cost reimbursement in addition to their percentage fees. In short, when costs are factored in the funder fee rates are essentially similar, so the percentage difference should not weigh heavily in your participation decision.

Protection against adverse costs: Under German law, the amount of adverse cost exposure is modest in amount and fixed at the start of the case based on claim value. For foreign claimants, German courts typically require claimants post bonds or other security. All organizers will give any required security and will be insuring clients against adverse costs with their own assets and not with ATE insurance. Only Robbins Geller is expressly covering the legal cost related to any US federal court proceedings under 28 USC Section 1782.

Registration documents: Please be sure to carefully read the funding documents for the organizer you select to fully understand the role it will play in the recovery efforts, particularly those provisions concerning their ability to discontinue funding the matter and the decision-making around possible settlement. Both Deminor and Robbins Geller consider their registration agreement proprietary and confidential. Therefore, if you want to register with either of them we will first need to send them your trade data for loss estimates and then, if they consider your losses sufficiently large, you will need to have a call with them first so they can ascertain your interest in joining before they will share with you their registration agreements, case analyses, and other offering terms.

Organizer(s) Comparison Matrix

The following firms are contemplating actions against Daimler and soliciting shareholder interest.

	Advofin/Rotter	Robbins Geller/Nieding + Barth	Deminor/Arnold & Porter
Local German Counsel	Rotter Rechtsanwalte	Nieding + Barth	Arnold & Porter
Funder(s)	AdvoFin Prozessfinanzierung AG (AdvoFin)	Robbins Geller	Deminor
Relevant Period	September 26, 2015 – June 11, 2018	January 1, 2011 – December 31, 2018	July 10, 2012 – October 11, 2019
Damages Methodology	Inflationary model (event study) - details not available. "We currently calculate a loss between EUR 6 and EUR 15 per share." Recission damages may also be available.	Inflationary model	Inflationary model
Percentage Success Fee	25%	25-30%	30%
Applied to Gross or Net Recovery	Net: The organizer success fee is applied after reimbursement of all case costs paid by AdvoFin.	N/A	N/A
Protection against Adverse Costs	Funder indemnification - no ATE insurance. Funder will post required bond or deposits for foreign plaintiffs.	Funder indemnification – no ATE insurance. This Organizer is covering the legal cost related to any US federal court proceedings under 28 USC Section 1782.	Funder indemnification - no ATE insurance.
Choice of Law/Forum for Dispute Resolution	Funding agreement does not specify choice of law - venue for dispute resolution is the Vienna courts.	N/A	N/A
Registration Requirements	Funding Letter Agreement Power of Attorney (POA)	In order to register with this Organizer, you will need to first authorize FRT to send your data so they can confirm your losses are significant and they would like to discuss representing you. You will then need to have a call with them to confirm your intention to join before they will send you their case analyses and registration agreements which will include a funding agreement and power of attorney for local counsel.	In order to register with this Organizer, you will need to first authorize FRT to send your data so they can confirm your losses are significant and they would like to discuss representing you. You will then need to have a call with them to confirm your intention to join before they will send you their case analyses and registration agreements which will include a funding agreement and power of attorney for local counsel.

Organizer Profiles

THE ADVOFIN/ ROTTER GROUP

Founded in 1998, ***Rotter Rechtsanwaelte*** is based in Munich and Bremen. With four lawyers, it is among the most experienced plaintiff securities litigation firms in Germany. Since 2006, Rotter has been counsel in dozens of matters against German companies, including the proceedings against VW. It has been selected and appointed under the Investor Model Proceedings Act by German Higher Regional Courts as counsel for model plaintiffs in six damage actions based on incorrect market information.

Funded by high-net-worth institutional investors, Austria based ***AdvoFin Prozessfinanzierung AG*** started in 2001 and is now a significant funder of collective procedures. Rotter and AdvoFin have been working together for more than seven years.

THE ROBBINS GELLER/NIEDING + BARTH GROUP

Robbins Geller Rudman & Dowd LLP ("Robbins Geller" or the "Firm") specializes in complex litigation emphasizing securities, corporate mergers and acquisitions, shareholder derivative, whistleblower, antitrust, consumer and insurance class actions. The Firm's unparalleled experience and capabilities in these fields are based on the talents of its attorneys, who have successfully prosecuted thousands of class action lawsuits.

The Firm is widely recognized as a leading law firm worldwide. Judges have described Robbins Geller as one of the most formidable securities law firms in the United States. With 200 lawyers in 9 offices nationwide, the Firm has the resources, experience and tenacity to achieve superior results, including some of the largest recoveries in history: $17+ billion (US Volkswagen Consumer class action) and $7.2 billion (US Enron securities class action).

Nieding + Barth Rechtsanwaltsaktiengesellschaft is one of the leading law firms in banking and capital markets law in Germany. They have been committed to institutional and private investors since 1994 - on a national and international level. In this regard, over 50 decisions by the Federal Court of Justice (BGH) on investor protection have already been brought about. The total damage represented by private and institutional investors now adds up to around 20 billion euros.

They are also active in the DSW (German Association for Protection of Securities), the largest association for investor protection in Germany, and in the German Investor Protection Association (DASB), which is the first point of contact for investors who have been victims of dubious financial advisors in the so-called "gray capital market".

THE DEMINOR/ARNOLD & PORTER GROUP

Deminor Recovery Services ("Deminor") has been a pioneer and market leader in international asset recoveries for private and institutional investors since 1990. It's clients benefit from Deminor's 25+ years of experience in the fields of investor protection, shareholder activism, corporate governance and investment recovery. Deminor is organized as a fully independent private partnership.

Arnold & Porter are a client-driven and industry-focused worldwide litigation firm. Their lawyers practice in more than 40 practice areas across the litigation, regulatory and transactional spectrum to help clients with complex needs stay ahead of the global market, anticipate opportunities and address issues that impact the very value of their businesses. Their global reach, experience and deep knowledge allow them to work across geographic, cultural, technological and ideological borders, to offer clients forward-looking, results-oriented solutions that resolve their US, international and cross-border legal needs.

RIO Legislative Update
February 23, 2021 9:00am

Bill No.	Description	Sponsor/Introducer
HB 1022	**RIO Budget**	**Appropriations Committee**

https://www.legis.nd.gov/assembly/67-2021/documents/21-0281-02000.pdf

HB 1022 contains the 2021-23 budget authority for RIO to administer the SIB investment program and TFFR retirement program which are special funds. RIO's 2021-23 budget request is $6.49 million including a $311,154 increase in the Governor's Budget primarily for 2% annual salary increases and higher benefit costs, $73,123 to join the Governor's IT Unification plan and $52,000 to reinstate our Contingency line plus $309,225 in additional amendments primarily to add one FTE for a Public Information Officer (½ SIB and ½ TFFR) and $73,000 to more properly fund our Contingency line (to $125,000). RIO will also request an amendment to HB 1022 to rollover the remaining balance of the $9 million one-time funding for the TFFR Pension Administration System (PAS) project into the 2021-23 biennium. House Appropriations– Gov. Ops (GO) effectively approved RIO's Amended Budget Request excluding $73,000 to more properly fund our Contingency line to $125,000. RIO's Amended Budget includes a base payroll change, House salary and health insurance increase, funding for desktop support and Office 365, 1 FTE for a PIO ($236,225) and transfer of 2 FTE to ITD for IT unification (RIO IT professionals will remain onsite). **On 2/16, House Appropriations unanimously gave a Do Pass recommendation to the RIO Budget bill. However, that recommendation was on an amended version from that recommended by the Government Operations Committee. House Appropriations Gov't. Ops. Chair Vigesaa highlighted the results of a recent study supporting RIO's PIO request to enhance strategic communication given increasing public interest in SIB investments which more than tripled from $5 billion in 2010 to over $18 billion in 2020. One committee representative stated he could not support this request and made a motion to remove the PIO FTE and related funding noting that other agency budgets are being cut. The committee voted 11-10 to amend RIO's Budget to eliminate the FTE for a PIO ($236,525). They also voted on a nearly unanimous voice vote to remove the request to implement the Governor's NDIT Unification plan (moving two IT FTE from RIO budget to NDIT budget and associated salary amounts from salary line to operating line), indicating they would be removing similar requests from other agency budgets. On 2/22, the House re-referred HB 1022 back to House Appropriations. On 2/23, House Appropriations voted unanimously to also remove "desktop support" funding from HB 1022.**

Status: House Appropriations Do Pass 21-0-0 on 2/23 (without PIO, IT Unification and desktop support)

HB 1037	**Legacy Earnings Fund & Transfers**	**Legislative Management/Legacy Earnings Committee**

https://www.legis.nd.gov/assembly/67-2021/documents/21-0111-02000.pdf

HB 1037 gives the SIB authority over the investment of a newly created "Legacy Earnings Fund" and requires all legacy fund earnings, which are constitutionally required to be transferred to the general fund at the end of each biennium, be immediately transferred into the new Legacy Earnings Fund. This bill would go into effect for legacy fund earnings generated and transferred during the 2021-23 biennium. **The bill then**

spells out the amount available for appropriation out of this new fund as six percent (6%) of the five-year average value of legacy fund assets as determined by SIB. Any amounts in the new legacy earnings fund in excess of this 6% amount are to be retained in the fund as a reserve balance for future use only if the amounts transferred from the legacy fund are insufficient to cover the calculated 6% of average value amount. Beginning with the 2023-25 biennium, the legislature will be able to appropriate out of the new legacy earnings fund an amount equal to the six percent amount calculated above or the balance of the fund, whichever is less. **For the 2021-23 biennium and going forward, all constitutionally mandated legacy fund earnings which are transferred to the general fund will be immediately transferred to the new legacy earnings fund. All interest and earnings derived from this fund will also be kept in this fund. Therefore, for the 2021-23 biennium, there will be a reduction in available general fund revenues in an amount equal to the legacy fund earnings in the biennium. RIO will also note the Legacy Earnings Fund could be set-up as a sub-account within Legacy Fund, if desired.**

Status: Committee Hearing (House Appropriations) 2/2/21

HB 1038 Legacy Fund Earnings Committee Legislative Management

https://www.legis.nd.gov/assembly/67-2021/documents/21-0178-01000.pdf

HB 1038 creates the legacy fund earnings committee to study the potential uses of legacy fund earnings, including the use of earnings to provide tax relief, provide for reinvestment of legacy fund earnings, fund research and technological advancements, promote economic growth and diversification, and promote workforce development and career and technical education. **The committee may consider public input on the use of legacy fund earnings and review the operation of other funds, such as Norway's sovereign wealth fund. Legislative management shall report its findings and recommendations, together with any legislation required to implement those recommendations, to the sixty-eighth legislative assembly.**

Status: Passed House / Senate Finance & Tax Committee Do-Pass 7-0-0 on 2/22

HB 1041 PERS Program

https://www.legis.nd.gov/assembly/67-2021/documents/21-0091-01000.pdf

A BILL for an Act to amend and reenact subsection 2 of section 54-52-06, section 54-52.1-06,and subsection 2 of section 54-52.6-09 of the North Dakota Century Code, relating to public employees retirement system penalties for late payments or failures to follow required processes; and to provide a penalty.

Status: Passed House and Sent to Senate 1/12; referred to Senate GVA Committee 2/3

HB 1114 Teacher Support Program Rep. Heinert and Owens, Senator Schaible

https://www.legis.nd.gov/assembly/67-2021/documents/21-0255-02000.pdf

A BILL for an Act to amend and reenact sections 15.1-18.2-05 and 15.1-18.2-06 of the North Dakota Century Code, relating to the expansion of the teacher support program to provide mentoring to all first- and second-year teachers in the state; and to provide an appropriation.
Status: House Educ. Do Pass 12-1-1 on 1/14; House Do Not Pass 23-71-0 on 2/22

HB 1140 Contingency Fee Arrangements Rep Klemin, Devlin, Roers Jones, Sen. Dwyer, Larson, Lee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0612-01000.pdf

A BILL for an Act to amend and reenact section 54-12-08.1 of the North Dakota Century Code, relating to contingent fee arrangements. This may be impactful to securities litigation agreements. Secretary of State Jaeger did an excellent job presenting this bill and highlighting its interesting history.

Status: Passed House Referred to Senate Judiciary Committee 2/15/21

HB 1174 TFFR Program Rep. Kempenich and Kreidt, Senator Klein

https://www.legis.nd.gov/assembly/67-2021/documents/21-0677-01000.pdf

HB 1174 enacts the requirements of the Secure Act of 1999 which changed federal law relating to "required minimum distributions" (RMD's) in retirement plans. RMD's are minimum amounts that a retirement plan account owner must withdraw annually starting when the member reaches a certain age. The Secure Act changed that age. This bill was reviewed by plan actuaries who found no impact to the actuarial position of the fund, or material impact to liabilities or costs.

Status: Passed House 1/22/21; Senate GVA Committee Work 2/16

HB 1188 Certs for Special Education Teacher Rep. Schreiber-Beck, D. Johnson, Sen. Oban

https://www.legis.nd.gov/assembly/67-2021/documents/21-0670-02000.pdf

A BILL for an Act to create and enact a new section to chapter 15.1-32 of the North Dakota Century Code, relating to services provided by special education technicians; and to amend and reenact section 15.1-02-16 of the North Dakota Century Code, relating to a certificate of completion for special education technicians.

Status: Passed House as amended 2/8/21; Senate Education Committee Work 2/15

HB 1209 PERS Program Rep. M. Ruby, Dockter, O'Brien, Schauer, Sen. Anderson, Dever

https://www.legis.nd.gov/assembly/67-2021/documents/21-0566-02000.pdf

A BILL for an Act to amend and reenact section 54-52-02.9, 54-52-06, 54-52-06.5, and 54-52.6-09 of the North Dakota Century Code, relating to public employees retirement system employer and temporary employee contribution rates; and to provide an effective date.

Status: Committee Hearing 1/21/21; House GVA Amendment Adopted 11-1-2 on 2/17

HB 1211 Veterans' Funds Rep. Magrum, Hoverson, Kasper, B. Koppelman, Louser, Schauer, Vetter
Sen. Meyer, Vedaa

https://www.legis.nd.gov/assembly/67-2021/documents/21-0690-02000.pdf

A BILL for an Act to amend and reenact sections 37-14-03 and 37-14-14 of the North Dakota Century Code, relating to the veterans' aid fund and veterans' postwar trust fund; and to declare an emergency.

Status: **House Do Pass 91-0-0 on 2/8/21 emergency clause declared - Senate GVA Comm. Work 2/16**

HB 1231 SIB Program Rep. Satrom, K. Koppelman, Ostlie, Paulson, D. Ruby, Schauer, Vetter
Sen. Conley

https://www.legis.nd.gov/assembly/67-2021/documents/21-0127-02000.pdf

A BILL for an Act to amend and reenact section NDCC 21-10-05, relating to duty of the investment director to consider investing locally. This may have implications for both the PERS and TFFR plans. **During the 2021-22 interim, the legislative management shall consider studying the benefits of investing legacy fund moneys locally before investing any moneys outside the state. The legislative management shall report its findings and recommendations, together with any legislation required to implement the recommendations to the sixty-eighth legislative assembly.**

Status: **House amended to legislative study Do Pass 9-3-2 2/8/21; Senate VGA Comm Work 2/18**

HB 1260 Wage Moratorium Rep. Becker, Kasper, B. Koppelman, Rohr, Steiner
Sen. Anderson, Heitkamp

https://www.legis.nd.gov/assembly/67-2021/documents/21-0598-07000.pdf

A BILL for an Act to create and enact a new section to chapter 54-06 of the North Dakota Century Code, relating to a wage and salary moratorium on state or local officials and employees if certain temporary restrictions on businesses are imposed.

Status: **Reported back, Do Not Pass as amended, 10-3-1 on 2/10/21**

HB 1275 Legacy Earnings & Transfers Reps. Boschee, P. Anderson, Buffalo, Dobervich, Ista, Mitskog
Senators Heckaman, Hogan, Mathern, Oban

https://www.legis.nd.gov/assembly/67-2021/documents/21-0668-02000.pdf

HB 1275 is similar to HB 1037 and gives the SIB authority over the investment of a new "Legacy Earnings Fund" and a new "Human Services and Public Health Stabilization Fund", but also provides a distribution waterfall for the continuing appropriation of funds from the Legacy Earnings Fund including the "Arts and Culture Endowment Fund" and "Human Services and Public Health Stabilization Fund" among others.

HB1275 states the amount available for appropriation out of this new fund as seven percent (7%) of the five-year average value of legacy fund assets as determined by SIB (versus 6% for HB 1037). Any amounts in the new legacy earnings fund in excess of this 7% amount are to be retained in the fund as a reserve balance for future use only if the amounts transferred from the legacy fund are insufficient to cover the calculated 7% of average value amount. Beginning with the 2023-25 biennium, the legislature will be able to appropriate out of the new legacy earnings fund an amount equal to the six percent amount calculated above or the balance of the fund, whichever is less. **For the 2021-23 biennium and going forward, Section 7 of the bill will require all of the constitutionally mandated legacy fund earning which are transferred to the general fund to be immediately transferred to the new legacy earnings fund. <u>All interest and earnings derived from this fund will be kept in this fund</u>. Therefore, for the 2021-23 biennium, there will be a reduction in available general fund revenues in an amount equal to the legacy fund earnings in the biennium. RIO will also note the Legacy Earnings Fund could be reported as a sub-account within the Legacy Fund, if desired, to reduce administrative costs.**

Status: Committee Hearing (House Appropriations) 2/1/21

HB 1342 PERS Retirement Rep. Lefor, Dockter, Nathe, O'Brien
Sen. Anderson, Dever, Wardner

https://www.legis.nd.gov/assembly/67-2021/documents/21-0202-05000.pdf

A BILL for an Act to amend and reenact subsection 1 of section 54-52-02.9, subsection 2 of section 54-52-05, subsection 1 of section 54-52-06, subsection 6 of section 54-52.6-02, subsection 1 of section 54-52.6-09, and subsection 2 of section 54-52.6-09 of the North Dakota Century Code, relating to increased employer and employee contributions under the public employees retirement system defined benefit and defined contribution plans; to provide an appropriation; and to provide a statement of legislative intent.

Status: Status: House Gov. & Veterans' Affairs Comm "Do Not Pass" on 2/12/21

HB 1380 SIB/Legacy Fund Rep. Lefor, Bosch, Dockter, Headland, Howe, Nathe, Porter, M. Ruby, Steiner
Sen. Patten, Sorvaag, Wardner

https://www.legis.nd.gov/assembly/67-2021/documents/21-0218-05000.pdf

A BILL for an Act to create and enact a new section to chapter 6-09, a new section to chapter 6-09.4, a new section to chapter 15-20.1, a new section to chapter 21-10, a new section to chapter 50-06, two new sections to chapter 54-44, and a new section to chapter 54-59 of the NDCC, relating to an economic diversification research fund, **a legacy sinking and interest fund**, a career and technical education support fund, **a legacy earnings fund,** a behavioral health support fund, **a legacy infrastructure project fund**, a state building maintenance and project fund, and an information technology cybersecurity fund; **to amend and reenact subsection 1 of section 21-10-06 and section 21-10-12 of the North Dakota Century Code, relating to funds invested by the state investment board and legacy fund definitions; to provide for a transfer; and to provide a report. For the 2021-23 biennium and going forward, Section 6 of the bill will require all of the constitutionally mandated legacy fund earning which are transferred to the general fund to be immediately transferred to the new legacy earnings fund. <u>All interest and earnings derived from this fund will be kept in this fund</u>. Therefore, for the 2021-23 biennium, there will be a reduction in available general fund revenues in an amount equal to the legacy fund earnings in the biennium. RIO will also note the Legacy Earnings Fund could be reported as a sub-account within the Legacy Fund, if desired.**

Status: House Appropriations Committee Hearing 2/2/21

HB 1425 SIB/Legacy Fund Rep. Nathe, D. Anderson, Bosch, Headland, Howe, Lefor, Mock, Porter Sen. Meyer, Bell, Wardner

https://www.legis.nd.gov/assembly/67-2021/documents/21-0415-10000.pdf

A BILL for an Act to create and enact section 6-09-49.1 and a new section to NDCC 21-10, relating to the legacy infrastructure revolving loan fund and SIB; to amend and reenact sections 21-10-02 and 21-10-11 of NDCC, relating to the SIB and Legacy Advisory Board; and to provide a continuing appropriation.
HB 1425 Section 2 amends NDCC 21-07 to add "Prudent investor rule - Exception" for Legacy Fund.
HB 1425 Section 3.5 amends NDCC 21-10-02 Board Powers by stating the SIB shall give preference to investment firms and institutions with a presence in the state (without reference to their qualifications).
HB 1425 Section 4 amends NDCC 21-10-11 Advisory Board by stating target Legacy Fund in-state investment allocations at 10% of fixed income and 10% of equity.

RIO will review Advisory Board presentations with regards to in-state investment target percentages for other U.S. public funds, highlight due diligence best practices being used by SIB, RIO and Callan including "competitive rate of return" targets for existing BND in-state investment program, and request SIB approval of Advisory Board recommended investment policy statement changes.

Legacy Investment Policy Statement *"The Legacy Fund was created, in part, due to the recognition that state revenue from the oil and gas industry will be derived over a finite timeframe. The Legacy Fund defers the recognition of 30% of this revenue for the benefit of future generations. The primary mission of the Legacy Fund is to preserve the real, inflation-adjusted purchasing power of monies deposited into the Fund.*"

RIO understands HB 1425 may be applied to "new money", although this understanding is not stated in the current bill "in order to allow the Advisory Board and SIB implementation flexibility".

Status: **House Finance & Taxation Do Pass 14-0-0 on 2/9; Re-referred to Appropriations 2/11; House Appropriations Do Pass 15-5-1; Engrossed HB 1425 placed on calendar on 2/22**

HB 1446 SIB/Legacy Fund Rep. Magrum, Ertelt, Kading, B. Koppelman, Simons, Toman Sen. Clemens, Heitkamp.

https://www.legis.nd.gov/assembly/67-2021/documents/21-0069-04000.pdf

A BILL for an Act to create and enact a **new section to chapter 21-10 and a new section to chapter 57-02 of the North Dakota Century Code, relating to the transfer of legacy fund earnings to a property tax relief fund and a property tax credit for property used as a primary residence**; to provide a continuing appropriation; to provide for a transfer; to provide an exemption; to provide an effective date; and to declare an emergency.

Status: **House Finance & Tax Do Not Pass 9-3-2 on 2/9; House Do Not Pass 24-69-0-1 on 2/16**

HB 1475 SIB/Legacy Fund Rep. Satrom, Haggert, Kempenich, Keifert, Mitskog, Ostlie Sen. Conley, Wanzek

https://www.legis.nd.gov/assembly/67-2021/documents/21-0693-03000.pdf

A BILL for an Act to create and enact a new section to chapter 4.1-01 and a **new section to chapter 21-10 of the North Dakota Century Code, relating to an agriculture innovation fund and a transfer of legacy fund earnings; and to provide a continuing appropriation.**

Status: **House Finance & Tax Do Pass as amended 13-0-01 on 2/9/21; Re-referred to Appropriations**

SB 2033 NEW Fund Legislative Management

https://www.legis.nd.gov/assembly/67-2021/documents/21-0187-03000.pdf

A BILL for an Act to create and enact a new chapter to title 15 of the North Dakota Century Code, relating to creation of a **new university system capital building fund**; to provide an appropriation; to provide for a transfer; **State Board of Higher Ed may provide for fund to be invested by SIB**; and declare an emergency.

Status: Amended and Passed by Senate, 1/25

SB 2040 PERS Retirement Senate Appropriation Comm Senators Mathern, Heckaman, Oban Representatives Boschee, Dobervich, Mitskog

https://www.legis.nd.gov/assembly/67-2021/documents/21-0421-02000.pdf

Relating to bonded debt repayments; to amend and reenact sections 6-09.4-06, 6-09.4-10, and 15.1-36-08 of the North Dakota Century Code, relating to borrowing and lending authority of the public finance authority, reserve funds associated with bonds, and the school construction assistance revolving loan fund; to provide an appropriation; and to provide a bond issue limit.

Status: **Senate Appropriations Do Not Pass 12-2-0 on 2/17; Senate Failed 7-40 on 2/18**

SB 2042 PERS Retirement Gov. & Veterans' Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0089-01000.pdf

A BILL for an Act to amend and reenact subsection 1 of section 54-52-02.9, subsection 1 of section 54-52-06, subsection 6 of section 54-52.6-02, and subsection 2 of section 54-52.6-09 of the North Dakota Century Code, relating to increased employer and employee contributions under the public employees retirement system defined benefit and defined contribution plans; and to provide a penalty.

Status: **Senate GVA Do Not Pass 7-0-0 on 2/18; Senate Failed 1-46 on 2/19**

SB 2043 Highway Patrolmen's Retirement Fund Gov. & Veteran's Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0090-01000.pdf

A BILL for an Act to amend and reenact section 39-03.1-10 of the North Dakota Century Code, relating to contributions to the highway patrolmen's retirement system by the state.

Status: **Senate Passed 47-0 on 2/19**

SB 2044 PERS Retirement Gov. & Veteran's Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0092-01000.pdf

A BILL for an Act to amend and reenact section 39-03.1-10, subsection 2 of section 39-03.1-11.2, subsection 8 of section 54-52-17, subsection 10 of section 54-52-26, subsection 2 of section 54-52-28, subsection 2 of section 54-52.1-03.2, subsection 1 of section 54-52.1-03.3, and subsection 2 of section 54-52.6-21 of the North Dakota Century Code, relating to public employees retirement system unpaid benefit payments, missing member confidentiality requirements, compliance with Internal Revenue Code distribution requirements, insurance programs for which retiree health insurance credit moneys may be used, and clarification of eligibility for retiree health insurance credit payments.

Status: **Senate Passed 47-0 on 1/18**

SB 2045 PERS Retirement Gov. & Veteran's Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0094-01000.pdf

A BILL for an Act to create and enact a new section to chapter 54-52.2 of the North Dakota Century Code, relating to payment of administrative expenses for the public employees retirement system deferred compensation plan; and to provide a continuing appropriation.

Status: **Passed Senate 46-1 on 1/18**

SB 2046 PERS Retirement Gov. & Veteran's Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0095-02000.pdf

A BILL for an Act to amend and reenact subsection 1 of section 54-52-02.9, subsection 2 of section 54-52-05, subsection 1 of section 54-52-06, subsection 6 of section 54-52.6-02, and section 54-52.6-09 of the North Dakota Century Code, relating to increased employer and employee contributions under the public employees retirement system defined benefit and defined contribution plans; and to provide a penalty.

Status: **Senate Passed 47-0 on 1/19**

SB 2069 Applications for Public Employment Gov. & Veteran's Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-8037-02000.pdf

SB 2069 expands the confidentiality of applications for public employment to include finalists.

Status: Senate Passed as amended 40-7 on 1/26

SB 2291 Social Investing Prohibition Senator Bell

https://www.legis.nd.gov/assembly/67-2021/documents/21-0717-03000.pdf

A BILL for an Act to create and enact a new section to chapter 21-10, a new section to chapter 54-44, and a new section to chapter 54-60 of the North Dakota Century Code, relating to social investments made by the state investment board and the boycott of energy or commodities companies; to provide for a department of commerce study of the implications of complete divestment of companies that boycott energy or commodities; and to provide for reports to legislative management. RIO engaged with legislators to highlight SIB's existing policies with regards to social investing including maximizing risk adjusted returns.

Status: Senate passed as amended, 42-4 on 2/17

PERS Health Care Related Bills

HB 1029 PERS Health Care Legislative Management

https://www.legis.nd.gov/assembly/67-2021/documents/21-0170-01000.pdf

A BILL for an Act to amend and reenact section 54-52.1-04.2 of the North Dakota Century Code, relating to public employee uniform group insurance for health benefits; to provide for application; and to declare an emergency.

Status: House passed 90-0 on 1/12; Senate GVA Committee Do Pass 7-0-0 on 2/22

HB 1042 PERS Health Care Gov. & Veterans Affairs Committee

https://www.legis.nd.gov/assembly/67-2021/documents/21-0093-01000.pdf

A BILL for an Act to amend and reenact subsection 3 of section 54-52.1-04.16, relating to the public employees retirement system's uniform group insurance program part D contracts with pharmacy benefit managers.

Status: House passed as amended, 90-0 on 1/19; Senate GVA Committee on 2/3

HB 1147 PERS Health Care Rep. Brandenburg, Dobervich, Mitskog Sen. Erbele, Oban, K. Roers

https://www.legis.nd.gov/assembly/67-2021/documents/21-0447-02000.pdf

A BILL for an Act to create and enact section 54-52.1-04.19 of the North Dakota Century Code, relating to public employee fertility health benefits; to amend and reenact section 26.1-36.6-03 of the North Dakota Century Code, relating to self-insurance health plans; to provide for a report; to provide for application; to provide an expiration date; and to declare an emergency.

Status: House Industry, Bus. & Labor Do Not Pass 8-6 on 2/9; House Approp. Do Not Pass 17-3-1 on 2/19

HB 1155 PERS Health Care Rep. Keiser, Sen. Oban

https://www.legis.nd.gov/assembly/67-2021/documents/21-0135-03000.pdf

A Bill for an Act to amend and reenact section 54-52.1-02 of the North Dakota Century Code, relating to the public employees retirement system uniform group insurance program benefits; and to provide for application.

Status: House Industry, Bus. & Labor Do Pass 11-2-1 on 1/18; House Approp. Do Not Pass 18-2-1 on 2/18

HB 1233 PERS Health Care Rep. Kasper, Jones, Keiser, Lefor, Louser, Meier, Rohr, Schauer, Steiner

https://www.legis.nd.gov/assembly/67-2021/documents/21-0147-02000.pdf

A BILL for an Act to provide for the public employees retirement system to contract for an audit of pharmacy benefit managers providing contract services for the state uniform group health insurance program; and to provide for a legislative management report.

Status: House GVA Do Pass 13-1-0 on 2/22; Re-referred to House Appropriations 13-1-0 on 2/22

HB 1245 PERS Health Care Rep. Kasper, Dockter, Keiser, B. Koppelman, Lefor, Louser, Meier, Pollert, D. Ruby, Steiner Sen. Hogue

https://www.legis.nd.gov/assembly/67-2021/documents/21-0148-04000.pdf

A BILL for an Act to amend and reenact sections 54-52.1-04, 54-52.1-04.1, 54-52.1-04.2, 54-52.1-04.7, 54-52.1-04.8, and 54-52.1-05 of the North Dakota Century Code, relating to public employee uniform group insurance plans; to provide for application; and to declare an emergency.

Status: House Gov. & Veterans' Affairs Comm. 2/11/21; Do Pass 12-2-0 on 2/16; place on House calendar

Failed Bills

HB 1202 Land Board Investments Reps. Kempenich, Brandenburg, Delzer, M. Ruby, Schatz, Tveit Senators Klein, Patten
https://www.legis.nd.gov/assembly/67-2021/documents/21-0252-01000.pdf
HB 1202 amends NDCC 21-10-06 and NDCC 15-01-02 relating to funds managed by the SIB and board of university and school lands. "Investment authority over the permanent funds derived from the sale of any of the lands" including the "Common schools trust fund and other investments under the control of the board of university and school lands" are transferred to the SIB under HB 1202.
Status: Failed 2/3/21; 27-66

HB 1138 Free Speech Rep. Kading, Becker, Lefor, D. Ruby, Schatz, and Schauer, Sen. Heitkamp, O. Larsen, Myrdal
https://www.legis.nd.gov/assembly/67-2021/documents/21-0454-01000.pdf
To provide for a civil action against state/political subdivision for state constitutional free speech violation.
Status: Failed to Pass House 2/10/21; 28-66

HB 1250 PERS Health Care Rep. M. Nelson, Adams Sen. Mathern
https://www.legis.nd.gov/assembly/67-2021/documents/21-0068-01000.pdf
A BILL for an Act to create and enact a new section to chapter 54-52.1 of the North Dakota Century Code, relating to public employee health insurance drug benefit coverage; to amend and reenact section 26.1-36.6-03 of the North Dakota Century Code, relating to self-insurance health plans; to require a report; to provide for application; to provide an expiration date; and to declare an emergency.
Status: Failed 1/19/21

HB 1274 Legacy Fund Fiscal Impact Reps. Kempenich, B. Anderson, Longmuir, Pollert, Shatz Senators Erbele, Klein, Wardner
https://www.legis.nd.gov/assembly/67-2021/documents/21-0248-01000.pdf
HB 1274 creates and enacts a new section to NDCC 21-10 relating to fiscal impact statements for any measure or policy affecting the legacy fund. The legacy and budget stabilization fund advisory board shall review any legislative measure, initiated or referred measure, or asset allocation and investment policy affecting the legacy fund. **If the advisory board determines the measure or policy will have a fiscal impact on the fund, the board shall request the state retirement and investment office to arrange for the preparation and submission of a fiscal impact statement to the advisory board before the measure or policy is acted upon.** The fiscal impact statement must be prepared by an independent consultant paid by the state retirement and investment office. The fiscal impact statement must include the estimated fiscal impact of the measure or policy for the next biennium and for the next ten biennia. The Senate is
Status: Failed 1/22/21; 24-67

SB 2320 Legacy Fund Sen. Klein, Wardner, Rep. Kempenich, Kreidt, Pollert
https://www.legis.nd.gov/assembly/67-2021/documents/21-1004-01000.pdf
A BILL for an Act to create and enact a new section to chapter 21-10 of the North Dakota Century Code, relating to fiscal impact statements for a measure or policy affecting the legacy fund.
Status: Failed 2/5/21; 0-45

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE

QUARTERLY MONITORING REPORT
Executive Limitations / Staff Relations

Quarter Ended December 31, 2020

The Executive Limitation "Staff Relations" deals with the treatment of staff at RIO. The executive director "shall not cause or allow any condition or any communication which is unfair, undignified, or disrespectful." This Executive Limitation lists six specific limitations that range from personnel policies to exit interviews. All the limitations are intended to protect staff from unfair, undignified, or disrespectful treatment by management.

There were no exceptions to this Executive Limitation during the past quarter.

The Executive Director/CIO held at least three full office meetings and three manager meetings during the fourth calendar quarter of 2020 in order to promote an open and collaborative work environment while enhancing team member communication, awareness and engagement. RIO also participated in two Senior Leadership Change Management "Sponsor Briefing/Training" in the fourth quarter of 2020 in addition to numerous other smaller meetings with administration, audit, fiscal, IT, investment and retirement benefit services team members and one-on-one meetings.

I sincerely thank all of our RIO team members who have done an outstanding job of handling an increased workload since last July when we elected to restructure agency operations to become more technologically efficient particularly while transitioning to a remote work enabled office environment in early-2020 and in anticipation of our long awaited TFFR pension administration system modernization project.

BUDGETING / FINANCIAL CONDITION

AS OF DECEMBER 31, 2020

			EXPENDITURES			
	2019-2021 BUDGET	ADJUSTED APPROPRIATION	BIENNIUM TO DATE ACTUAL	BUDGET AVAILABLE	% BUDGET AVAILABLE	% OF BIENNIUM REMAINING
SALARIES AND BENEFITS	$ 4,978,230.00	$ 4,978,230.00	$ 3,576,139.52	$ 1,402,090.48	28.16%	25.00%
OPERATING EXPENDITURES	3,538,934.00 *	3,538,934.00	508,780.42	3,030,153.58	85.62%	25.00%
CAPITAL ASSETS	6,300,000.00	6,300,000.00	0.00	6,300,000.00	100.00%	25.00%
CONTINGENCY	52,000.00	52,000.00	0.00	52,000.00	100.00%	25.00%
TOTAL	$ 14,869,164.00	$ 14,869,164.00	$ 4,084,919.94	10,784,244.06	72.53%	25.00%

* In addition to the Capital Assets line, the operating expenditure budget includes $2,650,000 for the TFFR Pension Administration System Project.

EXPENDITURE REPORT

QUARTER ENDED DECEMBER 31, 2020

	INVESTMENT	RETIREMENT	QUARTERLY TOTALS	FISCAL YEAR TO - DATE	BIENNIUM TO - DATE
CONTINUING APPROPRIATIONS					
INVESTMENT EXPENDITURES*	$ 23,528,695	$ 0	$ 23,528,695	$ 23,528,695	$ 88,960,660
MEMBER CLAIMS					
1. ANNUITY PAYMENTS	0	59,010,795	59,010,795	117,604,624	341,966,154
2. REFUND PAYMENTS	0	1,718,861	1,718,861	3,499,444	9,989,148
TOTAL MEMBER CLAIMS	0	60,729,656	60,729,656	121,104,068	351,955,302
OTHER CONTINUING APPROPRIATIONS	165,545	2,425	167,969	214,632	1,435,826
TOTAL CONTINUING APPROPRIATIONS	23,694,239	60,732,081	84,426,320	144,847,395	440,449,461
BUDGETED EXPENDITURES					
1. SALARIES & BENEFITS					
SALARIES	249,924	211,315	461,239	921,842	2,630,083
OVERTIME/TEMPORARY	0	0	0	0	55
TERMINATION SALARY & BENEFITS	0	0	0	0	0
FRINGE BENEFITS	81,772	85,281	167,053	331,796	946,001
TOTAL SALARY & BENEFITS	331,696	296,596	628,293	1,253,638	3,576,140
2. OPERATING EXPENDITURES					
DATA PROCESSING	4,355	17,610	21,966	37,753	122,114
TELECOMMUNICATIONS - ISD	1,372	1,740	3,111	4,836	16,600
TRAVEL	345	449	794	794	29,527
IT - SOFTWARE/SUPPLIES	14	20	34	34	330
POSTAGE SERVICES	568	9,225	9,794	11,415	44,322
IT - CONTRACTUAL SERVICES	208	293	501	730	4,697
BUILDING/LAND RENT & LEASES	9,059	13,032	22,091	51,546	141,471
DUES & PROF. DEVELOPMENT	1,163	1,257	2,420	3,440	18,891
OPERATING FEES & SERVICES	236	554	790	1,150	26,189
REPAIR SERVICE	0	0	0	0	2,165
PROFESSIONAL SERVICES	1,076	54,397	55,473	59,470	74,073
INSURANCE	0	0	0	894	1,812
OFFICE SUPPLIES	57	62	119	247	1,717
PRINTING	66	2,025	2,090	2,794	16,769
PROFESSIONAL SUPPLIES & MATERIALS	0	0	0	30	1,472
MISCELLANEOUS SUPPLIES	30	35	66	107	1,163
IT EQUIPMENT UNDER $5000	100	140	240	212	1,931
OTHER EQUIP. UNDER $5000	0	0	0	0	0
OFFICE EQUIP. & FURNITURE UNDER $5000	0	0	0	0	3,540
TOTAL OPERATING EXPENDITURES	18,650	100,839	119,489	175,451	508,780
3. CAPITAL ASSETS	0	0	0	0	0
4. CONTINGENCY	0	0	0	0	0
TOTAL BUDGETED EXPENDITURES	350,346	397,435	747,781	1,429,089	4,084,920
TOTAL EXPENDITURES	$ 23,879,041	$ 61,127,092	$ 85,174,101	$ 146,276,485	$ 414,530,698

* Beginning with the quarter ended September 30, 2020, investment expenses will be reported on a quarter lag until the end of the fiscal year. Since investment fees are generally based on the investment value as of the end of the quarter, very few investment fee amounts for the quarter will be available when this monitoring report is issued. This will result in the fees for the September quarter being reported on the December monitoring report, December fees on the March report and March and June fees on the final June report. Additionally, all investment expenses will be shown in the investment column until final year-end allocations are reconciled for TFFR.

INVESTMENT EXPENDITURE DETAIL

FEES PAID DURING THE QUARTER ENDED DECEMBER 31, 2020

	Pension Investment Pool	Insurance Investment Pool	Legacy Fund	Health Credit Fund Job Service ND Pension Fund	Tobacco Prevention and Control Fund	Totals
Investment Manager Fees	$ 11,983,063	$ 1,801,654	$ 9,282,530	$ 268,406	$ 236	$ 23,335,890
Investment Consultant Fees	80,590	32,205	80,010	0	0	192,805
Total Investment Expenses	$ 12,063,653	$ 1,833,859	$ 9,362,540	$ 268,406	$ 236	$ 23,528,695

Quarterly Report on Ends
Q2:FY21

Investment Program

Manager Research and Monitoring Highlights

Over the quarter Staff spent a significant amount of time researching effective, efficient and prudent approaches to increasing the Legacy Fund's in-state investment program. Staff has reached out to both peers and investment managers such as Grosvenor, Barings and Hamilton Lane to move forward on this endeavor. Over the quarter, Staff also focused on evaluating and optimizing the Diversified Real Assets allocation. Staff has reached out to existing and potential candidate managers including Grosvenor and EQT in an effort to optimize this piece of the portfolio. Staff also conducted due diligence on candidate managers that employ quantitative strategies in international equities. Lastly, Staff continues its portfolio monitoring endeavors. One notable example is: in response to President Trump's Executive Order 13959, "Addressing the Threat from Securities Investments that Finance Communist Chinese Military Companies", Staff reached out to the SIB's managers to determine the amount of exposure and the potential impact this order would have on the SIB portfolios.

Portfolio Changes & Investment Consultant

At the October 23rd board meeting, the Board approved Staff's recommendation to engage Callan to move forward with a comprehensive research project to advance an in-state investment program.

Other

Staff continues to conduct preliminary due diligence on prospect managers/products for future consideration.

Staff continues to monitor each client's asset allocation monthly and makes rebalancing decisions based on rebalancing policy and cash flow requirements.

Staff attended meetings with many SIB client boards, sub-committees and/or legislative committees or representatives including TFFR, PERS, Legacy and Budget Stabilization Advisory Fund.

LSV and Epoch remain on the Watch List.

NDRIO Investment Due Diligence
Quarterly Monitoring Report
Oct-01-2020 to Dec-31-2020

Date	Firm	Reason For Call	Key Takeaways	Location	RIO Attendees
10/1/2020	**Wells Fargo**	Portfolio Review	*Portfolio managed to outperform on an excess return basis through the year*	Video Call	David Hunter,Darren Schulz,Matt Posch
10/2/2020	**Axiom**	Team Update	*PM Chris Lively will be transfering PM responsibilities early next year*	Conference Call	David Hunter,Darren Schulz,Matt Posch,Eric Chin
10/7/2020	**TPG**	Public Equities Intro	*Leverages firm's private equity teams to get industry insight and ideas*	Video Call	Eric Chin,Matt Posch
10/8/2020	**Entrust Global**	Prospect Update	*Interesting Prospect*	Conference Call	Eric Chin
10/9/2020	**Epoch**	Quick Update/New product intro	*Evaluate New Product*	Conference Call	Eric Chin
10/14/2020	**LA Capital**	Strategy Overview	*Uses factor models to forecast alpha*	Video Call	Eric Chin,Matt Posch
10/15/2020	**NTAM**	Portfolio Overview	*Portfolio is tilted towards value, value has underperformed up to this point.*	Video Call	David Hunter,Darren Schulz,Eric Chin,Matt Posch
10/16/2020	**GCM**	Pacing Analysis Chat	*GCM is working with ND to build an infrastructure pacing model*	Video Call	Eric Chin
10/16/2020	**DFA**	Confirm Manager Exposures	*N/A*	Conference Call	Eric Chin
10/20/2020	**William Blair**	WB proposed a sub allocation for the international leaders strategy	*Strategy is a more concentrated version of the current strategy and would offer a fee discount*	Conference Call	Darren Schulz,David Hunter,Eric Chin,Matt Posch
10/26/2020	**Axiom**	Team Update & Commentary	*Went over the team transition*	Video Call	David Hunter,Darren Schulz,Eric Chin,Matt Posch
10/28/2020	**Wellington**	Small Cap Team Update	*Lead PM Simon Thomas is retiring. Daniel Maguire will take over as lead PM.*	Video Call	Darren Schulz,Eric Chin,Matt Posch
10/29/2020	**Callan**	Equity Portfolio	*Roadmap for potential future equity portfolio changes*	Video Call	David Hunter,Darren Schulz,Eric Chin,Matt Posch
10/29/2020	**PGIM**	Portfolio Overview	*Portfolios have outperformed. CMBS a driver of performance.*	Conference Call	Darren Schulz,Eric Chin,Matt Posch
10/30/2020	**Arcmont**	Arcmont Direct Lending Update	*Interesting Prospect*	Conference Call	Eric Chin
11/2/2020	**MSCI**	Index Overviews	*Met regarding how portfolios are using MSCI indexes for benchmarking*	Video Call	
11/2/2020	**LA Capital**	Portfolio Overview	*Enhanced strategy has outperformed. Growth has struggled to outperform recently due to index concentration of megacaps*	Video Call	David Hunter,Darren Schulz,Eric Chin,Matt Posch
11/4/2020	**Western Asset Management**	Portfolio Review	*Performance driven by IG Credit & duration. CMBS has been detractor of performance*	Conference Call	David Hunter,Darren Schulz,Eric Chin,Matt Posch
11/5/2020	**PIMCO**	PIMCO Update	*PIMCO has a number of products that may fit the SIB portfolios*	Conference Call	Eric Chin
11/10/2020	**MSCI**	Index Overview	*Strategies are using MSCI indexes for benchmarking. Went over MSCI ACWI IMI and how some plans are using is it as policy index*	Video Call	Darren Schulz,Eric Chin,Matt Posch
11/13/2020	**WFAM**	WFAM product update	*May have candidate for international equity search*	Conference Call	Eric Chin
11/18/2020	**GCM Grosvenor**	LPAC and pacing model chat		Conference Call	Eric Chin
11/19/2020	**GCM Grosvenor**	Annual CIS I & CIS II LPAC	*Portfolio companies little to no impact from COVID*	Video Call	Darren Schulz,Eric Chin,Matt Posch
11/20/2020	**Contrarian**	Prospect Update	*Potential Prospect*	Conference Call	Eric Chin
11/25/2020	**Russell**	Indices Chat		Conference Call	Eric Chin
12/9/2020	**Invesco**	Real Estate Catch-up	*Market update and introducted Western Build-to-Core Program*	Video Call	Eric Chin,Darren Schulz,Matt Posch
12/14/2020	**WorldQuant**	Strategy Overview	*Researches quantitatively come up with alpha signals, PMs combine alpha signals into portfolios.*	Conference Call	Eric Chin,Matt Posch
12/16/2020	**PIMCO**	Portfolio Review	*BRAVO & DISCO review*	Video Call	Darren Schulz,David Hunter,Eric Chin,Matt Posch
12/16/2020	**GCM**	Pacing Model Chat	*Model Tweaks*	Conference Call	Eric Chin

NORTH
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MEMORANDUM

TO: State Investment Board
FROM: Jan Murtha, Deputy Executive Director – Chief Retirement Officer
DATE: February 18, 2021
RE: PAS Project Update

The following summarizes the efforts of RIO agency staff to complete Phase 1 of the PAS project from January 2021 through the current date:

- Staff and Segal finished business interviews related to the Communication, Cyber Risk and Current Business Process Assessments.

- Staff and Segal completed workshops to discuss and agree upon a Future Business Process model on which to base RFP development.

- NDIT, RIO staff, and Segal meet weekly to discuss project status.

- The Communications Assessment was presented to the TFFR Board at its January 2021 meeting. The assessment provided a strong business case for the addition of a Public Information Officer (PIO) position for the agency. This position would be used to support strategic communication efforts for both the TFFR and SIB programs. The consultant issued a weighted average score of 39%, measuring our communication against the criteria proven to result in effective benefit communication. RIO requested a PIO position as a budget amendment; and this request was approved by the House Appropriations Government Operations subcommittee. Unfortunately, by a loss of one vote, the PIO position was removed from RIO's budget by the full House Appropriations Committee.

- The Cyber-Security and Business Model Assessments will be presented to the TFFR Board at the March Board meeting.

- RIO expects to sign off on all Phase 1 deliverables and begin Phase 2 of the PAS project (vendor RFP development) in March, 2021.

BOARD INFORMATION ONLY. No board action requested.

BOARD LEADERSHIP

INNOVATIVE APPROACHES TO GOVERNANCE

NUMBER 171, SEPT.-OCT.R 2020

www.wileyonlinelibrary.com/journal/bl

Finding Freedom in Discipline

By Jannice Moore

Jannice Moore is president of The Governance Coach, a Calgary, Alberta, Canada–based firm that specializes in Policy Governance® consultation and coaching. In this article, Moore discusses how a disciplined commitment to following Policy Governance® principles can free up a board to explore new possibilities and improve its performance.

Boards sometimes decide against implementing Policy Governance® because they say it is "too hard." What they really mean is that they don't wish to exercise discipline. Many boards tend to shy away from discipline. Perhaps it's because the word evokes mental images of punishment—when our parents or teachers disciplined us, we did not always appreciate it (at least not at the time)! However, there are several positive meanings to the word. The *Merriam-Webster Dictionary* includes these: "a field of study"; "training that corrects, molds or perfects the mental faculties or moral character"; "orderly or prescribed conduct or pattern of behavior"; "self-control"; "a rule or system of rules governing conduct or activity."[1] The definition of discipline as a verb (such as to exercise discipline) includes "to train or develop by instruction and exercise, especially in self-control." Finally, self-discipline is defined as "correction or regulation of oneself for the sake of improvement."

Boards have a moral and fiduciary responsibility to govern responsibly on behalf of an organization's owners. Therefore, they should be constantly seeking to improve their ability to govern by having an orderly approach to their work, by training and developing their governance capabilities, and by correcting and regulating themselves for the sake of improvement—in other words, exercising self-discipline as a board.

The exercise of self-discipline, rather than being a set of "rules" under which boards chafe, is actually the path to freedom!

Merriam-Webster includes in the definitions for freedom these concepts: "ease, facility," "boldness of conception or execution," and "unrestricted use." Rather than thinking of discipline as restraining, let's consider it as a key to freedom, the key to allowing boards to boldly conceptualize what could be in the future.

Examples of Discipline as the Path to Freedom

Joel Weldon tells the inspiring story of a young man whose goal was to qualify for the Olympic trials in the marathon. Here's what he said about the discipline of running 26,000 miles

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ALSO IN THIS ISSUE

CALENDAR OF EVENTS

November 12–14

ARNOVA 2020 Annual Conference—Virtual Event

The Association for Research on Nonprofit Organizations and Voluntary Action will hold its 2020 Annual Conference Nov. 12–14 online in lieu of its originally planned venue in Indianapolis.

According to organizers, this conference aims to create a public conversation on, as well as opportunities for presenting research about pressing issues and vital opportunities facing the voluntary or nonprofit sector. It is both a showcase for the best and most current research, as well as a seedbed from which new research is born. This three-day event includes two plenary sessions, over 180 panel and/or paper presentation sessions, a poster session, and numerous opportunities for networking/idea sharing.

The theme for this year's conference is "From Climate Change to Social Justice: How Citizens are Re-Shaping Nonprofits and Philanthropy in an Age of Disruption and Transition."

Conference tracks will include:

- Accountability, Effectiveness, Evaluation, and Program Outcomes.
- Boards and Governance.
- Civil Society, Community, and Grassroots Associations.
- Collaboration: In, Between, and Among Sectors.

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Discipline

(continued from front page)

to train for a 26-mile marathon: "What does the word 'discipline' mean? It means freedom! It's not putting yourself in a box; it's putting yourself on top of the box, giving yourself a structure that can support you. The box is not a trap, a confinement, or a prison cell. It's a platform, a solid step that affords you a higher vantage point from which to view your possibilities."[2]

There are countless examples of discipline as the key to freedom. American swimmer Michael Phelps, who won eight gold medals at the 2008 Beijing Olympics, has been quoted as saying, "Swimming is normal for me. I'm relaxed. I'm comfortable, and I know my surroundings. It's my home."[3] But that freedom did not come without discipline. Starting in his preteens, he swam 50 miles a week; his intensive Olympic training included over 70 grueling workouts in a three-week period.

At the 2010 Winter Olympics in Vancouver, Canadian figure skater Joannie Rochette applied great self-discipline, carrying on with her performance only two days after the death of her mother. The discipline of her training gave her the freedom to keep her goal of achieving a medal in the forefront, even in the face of personal tragedy, and win the bronze medal.

Consider Web 2.0 where users are able to interact and collaborate with each other in a virtual community. This freedom of collaboration is made possible by the "nearly religious application of open standards.... The open standard is the control that enables the relinquishing of control.... Freedom without discipline becomes the freedom not to reach our goal."[4]

Itzhak Perlman, widely considered to be one of the preeminent violin virtuosi of the 20th century—winner of five Grammy Awards, and honored with medals by both Presidents Reagan and Clinton—achieved the freedom of making his violin sing through the exercise of discipline. His daily routine includes rising at 5:15 a.m., and practicing for nine hours every single day of the year, except concert days, when, in addition to performing, he practices for 4½ hours.[5]

The violin itself is an example of freedom through discipline. "If a violin string is lying on a table loose and detached from any violin, some might suppose it 'free' because it is unconstrained. But what, one should ask oneself, is it 'free' to do or be? Certainly it cannot vibrate with beautiful music in such a condition of limpness. Yet if you fasten one end of it to the tailpiece of the violin and the other to a peg in the scroll, then tighten it to its allotted pitch, you have rendered it free to play. And you might say that spiritually the string has been liberated by being tied tightly at both ends. For this is one of the great paradoxes of the world to be seen and tested on every side: the principle of emancipation by discipline."[6]

Entrepreneurs know the freedom of "being one's own boss" is obtained only through the exercise of discipline. As a business owner, I am free to take a day off in the middle of the week or to go on an extended vacation. But I have achieved that freedom to be self-directed by applying the discipline of committing to self-imposed deadlines (like getting this article written on time!), keeping the commitments I make to clients, setting aside time to develop new products, and continuing to hone my skills. This framework of discipline is what makes my freedom possible.

There are simple every day examples as well—practicing the discipline of charging your cell phone results in the freedom of knowing it will not run out during an important call. The discipline of keeping the larder stocked results in the freedom to cook creatively.

So it is with boards. Applying the discipline of using a systematic approach to the important work of governing is, paradoxically, the path to freedom—the freedom to think more creatively, to envision a future that is better than the past or present, to set a direction that will ensure your organization makes a difference in the world.

Steps to Freedom

Peter Clemens,[7] has outlined a number of steps to achieving the freedom that comes from exercising self-discipline as an individual. Those same steps can be applied in the group-setting of a board.

- *Step One: Self-knowledge*

  "Discipline means behaving according to what you have decided is best, regardless of how you feel in the moment" [emphasis added]. Board self-knowledge involves deciding what behavior will best reflect the goals and values of the board as a whole. Writing these values down in policies ensures that everyone on the board knows what they are and agrees to commit to them.
- *Step Two: Conscious Awareness*

  To exercise self-discipline you must be consciously aware of what you are doing or not doing. Having set a standard for yourselves as a board, regularly reflecting on your behavior and comparing it to that standard will create this conscious awareness. A good way to do this is to assign a board member the task of being the "monitor" at each meeting. The monitor can act as a mirror, reflecting back to the board's conscious awareness what it is doing—and whether that is consistent with what it said it would do—and what it is not doing (that it said it would do).
- *Step Three: Commitment to Self-Discipline*

  Although writing down the goals and values in policies is necessary, it is not sufficient. There needs to be an internal commitment to follow through. We all know organizations that have policies, but don't follow them. Self-discipline means living the policies, not just having them. To make certain the board in fact does what it says it would, and in the way it said it would, a tracking system is helpful. Regular, deliberate self-evaluation that compares the board's actual behavior to the standard set in its policies is a way of keeping track.
- *Step 4: Courage*

  Practicing self-discipline as

an individual is difficult. It's also difficult as a board. In the board setting, you are dealing with the moods and passions not of just one person, but of each person in the group. It takes a courageous board to commit to self-discipline, but the rewards are worth it.

- *Step 5: Internal Coaching*

  In talking about personal self-discipline, Clemens recommends "internal coaching" or self-talk to "remind you of your goals, call up courage, reinforce your commitment and keep you conscious of the task at hand."[8] That's good advice for a board as well. External coaching can also help a board to keep their goals in the forefront, reinforce its commitment, and bring to its conscious attention whether its behavior is consistent with its commitment.

Policy Governance® as a Disciplined System Leading to Freedom

The Policy Governance® model developed by Dr. John Carver[9] is a system for governing boards that results in the freedom to explore new possibilities for the future your organization can help to create. The system takes some time to learn and requires a commitment to self-discipline on the part of the board. As in the previous examples of discipline, the rewards are worth it.

A Few Cautions

Discipline itself is not the goal

Although discipline is very important, boards should remember discipline itself is not the goal. Elevating discipline so it becomes an end rather than the means is stifling. The purpose of exercising self-discipline as a board is to enable you to achieve your central purpose—ensuring that your organization achieves what it should, and in doing so, that it does not use unethical or imprudent means. As Stephen Covey has succinctly said, "The main thing is to keep the main thing the main thing."[10] The discipline should always serve the purpose of the board's role as agent for the owners.

Discipline requires practice

"Discipline is the ability to do the right thing at the right time for the right reason."[11] Dr. William DeVries, the famous heart surgeon, said the reason you practice is so you will do things automatically the same way every time. When the chips are down, when you are in the middle of a crisis, having practiced the exercise of discipline will stand you in good stead. "Freedom comes not from the absence of restraint, but from the presence of discipline ... when we find ourselves in the middle of a crisis it is too late."[11]

Avoid being a dilettante

Al Payson[12] describes musicians who want the freedom, but skim lightly over the discipline as dilettantes. They plunge in with great gusto, but very little technique, mistakenly believing that what they lack in proficiency will be made-up for by their great talent. He calls this a "crude display of incompetence."[12] It pains me to say that many boards resemble the dilettante when it comes to policy governance. They dabble. They even develop policies, but the policies are only followed when it "suits" the board. This lack of discipline in applying the principles of the model will not result in the freedom it promises. This is unfortunate because many of these boards are made up of gifted people who, working together to apply a system, could lead their organizations to greatness. However, they are not prepared to make that commitment.

Avoid being a pedant

Payson describes another type of musician as a "pedant:" he who gives a precise, technically perfect performance—but it is wooden; it lacks "soul."[12] Many boards tend to get stuck in the discipline, mired in the mechanics, not moving on to the freedom it enables. They do Policy Governance® instead of using Policy Governance® to help them govern effectively. Yes, it's important to apply the discipline, but not for its own sake. Practice so that the processes become automatic. Then concentrate on the purpose of your organization. Applying the disciplines of Policy Governance® can free your time from the mundane, day-to-day operational focus and move you into that "on top of the box" space where you can exercise the freedom to dream, to create, to truly lead.

Don't be a stylist

Payson[12] describes one more musical type to be avoided—the individual that wants to use music primarily as a vehicle to project his own ego. He has to "express himself" rather than give an honest presentation of the music. Instead of focusing on what the composer intended, he wants to leave his own mark. This detracts from the music itself. "Stylist" boards say, "We are unique. We can't use all of the Policy Governance® principles because we want to do things our way. They miss two important points. (1) Their primary task is not to express their will, but to find out what the "composer"—their owners—intended. They are agents of the owners, and as such are acting on behalf of the owners. (2) There are a small number of principles that must be followed in order for the Policy Governance® system to operate as intended. There are a large number of areas in which boards can indeed do things their way, consistent with the culture of their organization. However, the discipline of maintaining the basic principles must be there first.

The Freedom Pay-Off

British mathematician and philosopher Alfred North Whitehead (1861–1947) described the educational process like this: "It consists of going from freedom through discipline to freedom again."[13] That is an apt description of the board that decides to learn to use Policy Governance® well. It goes from the freedom of "doing anything we want, any way we want" through the discipline of learning to use a system, and use it well, so that it is then free, but this time, free to lead its organization to greater accomplishment on behalf of those for whom it governs. Applying the discipline of using the Policy Governance® system results in a significant pay-off.

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A Board Member's Work in Dismantling Systemic Racism

by Cindy Elsbernd

Cindy Elsbernd is a governance and leadership coach for Emendable Consulting, LLC. She served two 4-year terms on the Des Moines Public Schools Board of Directors in Des Moines, Iowa, where she was a board officer for six of those eight years. She is a member of the Council for Great City Schools' "Team Rogue," a group of school board members and superintendents whose collective research and experience resulted in the development of the Student Outcomes Focused Governance© (SOFG) framework. She is a provisionally certified SOFG Coach and a graduate of Govern for Impact's Policy Governance© Proficiency Program. In this article, she discusses the examination of "white privilege" as the work of boards—white board members in particular—in dismantling systems that perpetuate oppression, suppression, and exclusion; and in developing policy and procedure that create organizational climate and culture for unconditional inclusion. She will be offering workshops for exploring white privilege later this fall and may be reached at c.elsbernd@emendableconsulting.com.

A few months have now passed since we watched in horror as a Minnesota man cried for his mother and gasped his last three words, "I can't breathe" and America's civil rights movement stretched across oceans. It's further proof (as if we needed it) that we still find ourselves unredressed with the centuries-old issue of systemic racism and its pervasiveness. Yet I find seemingly little specific to board leadership and organizational guidance in addressing this: a culture we've created and perpetuate through our own leadership-absent acknowledgment.

Personal reflection has made me aware of the harm I played a part in as a school board member—not intentionally, of course, but that's the point. It leaves me to wonder how it would be if more of us—especially those of us who are white—were willing to see our place in its creation and perpetuation. I wonder if we've become blinded because our white norming, often expressed implicitly, has gotten the better of us. Or maybe we're afraid of what real change looks like for us. And on my worst days, I wonder if we really care if this is who we are.

So like many others, I set out to be a white person who does better. I delved into the lists of suggested media, adding to the other reading I was already catching up on during the pandemic. Alexander,[1] Kendi,[2] McIntosh,[3] and others would join Carver and Carver,[4] Collins,[5] Covey,[6] Kegan and Lehey,[7] Zaffron and Logan,[8] and the Arbinger Institute,[9] melding in my brain until it didn't take a far stretch of the imagination to think concepts typically presented for personal and organizational growth and improvement could be applied to the effort of organizational leaders—boards in particular—in dismantling the systemic oppression upon which our structures are built.

I'm compelled to proceed in good faith that we—or at least enough of—do care and that this is not who we want to be. I as a white female leader can say this is not who I want to be. And here I am, nearly 50 years old, and just coming in recent years to this realization of the air I've been breathing and how I'm complicit in taking it from others. I can mourn (and have) the decades of awareness and acknowledgment lost and the cost to others, but others cannot afford my continued paralysis: That's a selfishness I know my privilege allows. Therefore, I am committing to creating space for others to join and take part in learning, introspection, and self-examination to recognize white privilege and begin using that work to help create the change needed to ensure systems where equity can be realized. I'll note that though I believe this work to be universally applicable, I envision that were it to occur in school system governance and leadership, we may see the intent of Houston and Marshall in Brown v Board of Education achieved in full.

How Do We Get There?

First, it doesn't have to be alone, but I'll offer an overview of what some of the high-level mile markers might look like.

Take your first step from wherever it is you are standing: Each journey is personal. I'm making no claims of expertise in anything other than my own, which is ongoing, and if I'm being honest, every step isn't forward. I even wrestle now as I write and rewrite this article wanting to get it "right" and prove I'm that good person I like to believe I am, but reminding myself I need to strive to be what psychologist Dolly Chugh calls "goodish"—acting toward a higher standard requiring growth rather than the often stifling guidance of an inner assumption that I've already arrived.[10]

In the spirit of growth, we start with learning and unlearning to build our own awareness, to acknowledge where we fit, and then look for places to take action for change in ourselves and the institutions we lead and govern. With that media mind-meld I mentioned earlier, there's a handful of my own learnings and unlearnings that could be helpful in providing various jumping-off places.

Understand What Systemic Racism Is

I realize that I've been long limited by my own idea of what racism is, believing that what I do as an individual in how I treat people is enough: All is well in my world so long as I'm emulating a healthy dose of "Iowa nice." It's not. Systemic racism is a centuries-old social construct fueled by a human-born virus that is hungry not only for power, but for power at the expense—oppression—of others.

"The fortunate man is seldom satisfied with the fact of being fortunate, beyond this he needs to know that he has a right to his good fortune. He wants to be convinced he deserves it and above all that he deserves it in comparison with others. Good fortune thus wants to be legitimate fortune." Max Weber, German Sociologist, 1915 (as cited by Biewen[11])

This has been demonstrated over the course of centuries and institutionalized through policies and practices that would legitimize not only individual fortune, but also provide for a caste of cascading deservedness where whiteness regardless of economic status would always be more convincing. So it's not individual bigotry—although of course that can thrive within—rather constructed systems that omit or oppress others. These systems norm whiteness, often profess law and order, and by their very nature give favor to white (often) men.

Good advice is not to take offense. It's likely correct that you or I didn't build these systems and that neither of us always win within them, but generally they assure that others will rarely if ever win. That's what defines privilege and the need to recognize it is a thing.

Learn About History—and Probably Not the History They Taught Us in School

This goes hand-in-hand with understanding systemic racism and its creation and perpetuation. History—real history and not just the white-centric version typical of American K–12 education—is eye-opening. Again, the purpose of this learning isn't blame and shame. It is, however, vital to understand its aftermath isn't going to fix itself on its own, and that those targeted are, by its nature, held virtually powerless to do so. It will call to question if you're good with choosing to remain silent after seeing for yourself the inequity and the injustice, and where you fit in with that in the here-and-now (which is what's next).

Assess Yourself

It's incredibly important to figure out personal place in the privilege biosphere. I believe we individually and collectively (in the multiple collectives we inhabit) have the responsibility to do so. In his book, "Man's Search for Meaning," Holocaust survivor Viktor Frankl states, "Freedom is only part of the story and half the truth.... That is why I recommend that the Statue of Liberty on the East Coast be supplanted by a Statue of Responsibility on the West Coast."[12] A quick (and insufficient) synopsis of Frankl's book is that the ability to live your best life—to find meaning—is incumbent on your actions and how much personal responsibility you bring to the decisions you make. This is what helped Frankl to survive the Holocaust.

The sharing of his story is an amazing gift; yet I see how our Black and Brown brothers and sisters are further indentured to a response pattern for survival as decision-makers creating life-meaning within structures not meant for them, where the extension of liberties lives in infancy if ever made fully whole. I see opportunity and need to shoulder significant responsibility to make it whole and assure that our own creations of life's meaning aren't reliant on subjugation of others. Doing so allows those others to exhaust less of their responsibility in creating a best self in an environment where power is purposefully imbalanced far out of their favor and their "best" is often still called to question. Starting with self-examination and assessment may allow the embodiment of the notion of that nonexistent "statue of responsibility" in the quest to ensure liberties are no longer disparately dispersed.

Brace Yourself to Learn You Are Complicit

Get uncomfortable. Sit in it. Sit with it. See your responsibility. Repeat.

We are creatures of habit and our systems in their current state make it easy to regress into complacency or carelessness. What we tolerate is a choice and often based on a decision, whether conscious or not,

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WHEN WE SAY...

Board Leadership's mission is "to discover, explain and discuss innovative approaches to board governance with the goal of helping organizations achieve effective, meaningful and successful leadership to fulfill their missions."

Board Leadership aims to fulfill this mission by engaging its readers in a lively and illuminating inquiry into how board governance can be made more effective. This inquiry is based on three key assumptions:

- Boards exist to lead organizations, not merely monitor them.
- Effective board governance is not about either systems, structures, processes, theories, practices, culture, or behaviors—it is about all of them.
- Significant improvements are likely to come only through challenging the status quo and trying out new ideas in theory and in practice.

Uniquely among regular publications on board governance, *Board Leadership* primarily focuses on the job of board leadership as a whole, rather than on individual elements of practice within the overall job.

Over time, *Board Leadership* will provide a repository of different approaches to governance created through its regular "One Way to Govern" feature.

Here's what a few of the key terms we use mean to us:

- **Innovative:** Creating significant positive change
- **Approaches:** Principles, theories, ideas, methodologies and practices.
- **Board governance:** The job of governing whole organizations. ❑

Racism

(continued from page 5)

that whatever benefits our tolerance achieves—comfort, conflict avoidance, personal financial or positional gain, etc.—in that moment is more important. That's what makes this heart and mind work. That's what makes this not enough to be not racist or explicitly bigoted or prejudiced. I believe as leaders we must work from the inside–out with an understanding and examination of our own white (and other) privilege. We need to ask ourselves about the hidden commitments we hold that prevent us as individuals from applying and preserving antiracist (and anti- any "ist") practice and policy. It's a narrowly focused and necessary step needed to create space for policy and practice that embodies equity and justice as a core of how we govern and do business.

Also, know that deeper examination reaches into "identity politics" and may also shine a light on other "isms" that remain pervasive, and, given the myriad intersectionality of a person's identities, often cannot be neatly unwoven to isolate racism only. As another heads-up, membership in a target population is not an automatic exemption from perpetuating those offending systems whether by act or omission (like how I need to examine my own usefulness to the maintenance of patriarchy).

And so this is work that continually relies on play, replay, and restoration to improve. It's sure to involve getting knocked on your hind side sometimes too: probably deservedly for those of us who've been asleep so long and also finding "ally-ship" unnatural given former conditioning—that's okay so long as you don't stay down for long.

Mobilize

We can't become immobile with guilt, shame, or whatever comes of the heart and mind work this is. Again, not being racist is not enough: Systems must be dismantled. My hope is that you make this your work, your board's work, your organization's work, and that you'll be in it for the long haul.

In Jim Collins' "Good to Great,"[5] a chapter is dedicated to the explanation of what he refers to as the flywheel and the doom loop. In a nutshell, he points out that observed from the outside, transformations often look like dramatic, revolutionary events, but on the inside, it feels different as steps are intentional to gain flywheel-like momentum. There are foundational steps that cannot be skipped without risk of casting change efforts to the doom loop. The chapter poignantly begins with the quote by composer Igor Stravinsky, "Revolution means turning the wheel."[5] So, turn the wheel. Do so with urgency, yet don't be fooled that it won't take time to make sustainable transformation.

Buy-in from your colleagues must be fostered. From there, investigation into the myriad functions of governance will be warranted: from the examination and identification of organizational ends or goals and the prioritization of resources to achieve them to the limitations on executive authority and the resulting organizational policy and strategy that may either promote or preclude equity. It may very well require sharing leadership and seeking the ownership/stakeholder voice that may not be represented on your board (but don't forget that having board members of color does not abdicate the board of its responsibility to ensure linkage to a broader representation of any ownership segment).

N E W S

by Amy Dodds

California introduces bill to increase board diversity

In the wake of the worldwide protests following the death of George Floyd, many companies publicly supported racial diversity and better representation. However, supporting a cause does not always lead to long-term systemic change. That is why on June 29, 2020, the California State Legislature introduced proposed legislation that would compel publicly owned companies headquartered in the state to increase diversity on their boards or face fines.

Introduced by assemblymembers Chris Holden and Cristina Garcia, with Eloise Gomez Reyes as principal co-author, Assembly Bill 979 would require public companies to have at least one director from an underrepresented community by the end of 2021. By 2022, corporate boards with more than four members must include two members from underrepresented communities, whereas corporations with more than nine members must have a minimum of three minority directors. Bill AB 979 defines underrepresented communities as African American, Hispanic, or American Indian.

"Corporations have money, power, and influence," said assemblymember Chris Holden. "If we are going to address racial injustice and inequity in our society, it's imperative that corporate boards reflect the diversity of our state."

The legislation is similar to Senate Bill 826, which requires gender diversity on boards and was adopted in 2018. If the bill is signed into law, publicly held companies that are noncompliant could face fines between $100,000 to $300,000.

"By ensuring diversity on their boards, we know the corporations are more likely to both create opportunities for people of color and give them the support to thrive within that corporation," said Assembly member Cristina Garcia. But the benefits aren't just for the individual, the lawmakers argue—corporations themselves will also benefit. "Corporations with ethnically diverse boards have shown to outperform those that lack diversity," stated Holden. ❑

An invitation

In closing, I offer an invitation and assurance that you are not alone in this work, and you don't have to navigate it in isolation. Learning and exploration in community can make all the difference. Doing so with an effective board and leadership consultant who can lead that exploration and provide coaching through the resulting collective work to "turn the wheel" can instigate lasting change.

In working with school boards, we'll start workshops with reflection using the analogy of coaches playing back game tapes whether they've won or lost: "What was a time when—whether you realized it or not then, but that you begin to notice now as you play back the video of your leadership—what was a time when your adult behaviors, your choices, may have made it harder for your school system to achieve its vision?" We'll continue diving into such reflections in safe space over the course of the workshop, leading to development of policy amid a new personal and collective mindset established through this process. Now imagine how robust and impactful the process could be if preceded by the antiracism work we've been exploring here. Think about the potential for the resulting policy and the possibilities it creates for organizational beneficiaries as well as those working within the system: for unconditional inclusiveness, for equity, for everyone to breathe free. I'm imagining it and I'm here for it. Will you join me? ❑

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Calendar

(continued from page 1)

- Networks and Methodology.
- Management, Leadership, and Strategy.
- Philanthropy, Fundraising, and Giving.
- Public Policy, Law, Regulation, and Advocacy.

For more information, visit https://bit.ly/3d6oW2h.

November 12–14

Governance Institute November Leadership Conference

Fairmont Scottsdale Princess, 7575 East Princess Drive, Scottsdale, Arizona 85255, USA

According to organizers, the Governance Institute Leadership Conference offers current information, interactive sessions, expert speakers, and the opportunity to meet others with a similar commitment to improving governance and achieving optimal board performance. Key features of the event will include:

- Educational sessions aimed at helping attendees stay abreast of current topics in healthcare and board governance with the opportunity to earn continuing education credits.
- Engaging and relevant presentations that will foster learning opportunities and team building for boards, healthcare executives, and medical staff leadership.
- Networking opportunities that will bring together organizations facing similar challenges.

The conference will feature keynote speaker Michael Dowling, president and CEO of Northwell Health, as well as sessions led by:

- Todd Sagin, national medical director of Sagin Healthcare Consulting LLC.
- Lawrence R. McEvoy II, president and CEO of Epidemic Leadership.

For more information, visit https://bit.ly/2Vk8O7x.

December 14–16

International Corporate Governance Network Annual Conference and General Meeting

Fairmont Royal York Hotel, Street West, Toronto, Ontario, M5J 1E3, Canada

This conference, to be hosted by the Ontario Teachers' Pension Plan in partnership with the Royal Bank of Canada, celebrates the ICGN's 25th year. From humble beginnings in 1995 with 49 founding members, the ICGN now represents over 800 members in 50 countries and counting.

Accordingly, the group said, this year's annual conference is both a cause for celebration and reflection as the ICGN and its members take stock of what they have learned and achieved over the past 25 years, but also look to the future with regard to priorities for reform. As the governance and investor stewardship landscape continues to evolve, leading expert speakers will provide attendees with key insights into best practice and highlight future priorities for companies, investors and stakeholders.

For more information, visit https://bit.ly/2A5oVyc. ❑

Discipline

(continued from page 3)

Going back to our musical illustration, the artist has practiced the discipline so well that the listeners are not even aware of the technique for its own sake. They simply hear the flow of the music and can grasp its meaning. The board that disciplines itself learns to use the techniques of Policy Governance® so that it can push through to the freedom to lead exceptionally.

Policy Governance® can put your board "on top of the box," or if desired, you can choose to remove the box altogether. The Chair of a client's board some years ago[14] expressed this freedom vividly: "Thinking outside the box has been used so much in the business community and in our society that it has become a cliché. The problem is that even when you're outside the box, the box still exists, imposing its limitations to a certain extent or at least providing points of reference. Policy Governance has taken us so far outside the box that the box no longer exists. It encourages the mind to explore options that have no bounds, allowing one to consider all possibilities. As new members of the board caught the vision, they found themselves empowered to expand their thinking, to explore possibilities that they had never thought possible. At the same time, Policy Governance gave us a structure and form that kept us focused on our responsibilities to our owners and our Ends. It was an amazing combination that took us beyond anything that we had thought possible and the results were exceptional." ❑

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FOOD FOR THOUGHT

"I have three precious things which I hold fast and prize. The first is gentleness; the second is frugality; the third is humility, which keeps me from putting myself before others. Be gentle and you can be bold; be frugal and you can be liberal; avoid putting yourself before others and you can become a leader among men."

Lao Tzu

BOARD LEADERSHIP
INNOVATIVE APPROACHES TO GOVERNANCE

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Mitigating Risk and Volatility – A Conversation about Boards and Guiding Businesses through COVID-19

By Pat Ackerman

Pat Ackerman is chair of Milwaukee Women inc., and senior vice president of investor relations, corporate responsibility and sustainability, and treasurer at A.O. Smith Corporation. In this article, Pat presents insights and observations from a recent panel discussion focused on corporate board efforts to navigate the chaos and uncertainty businesses face due to the COVID-19 pandemic and resulting economic crisis.

In November 2019, EY's Center for Board Matters released a report identifying key priorities for boards of directors in 2020. Even then, concerns about growth and stability in uncertain times and evolving enterprise risk management were key priorities. Others included accelerating the talent agenda and activating culture as a strategic asset, embracing ESG as a business imperative, and redefining and better communicating long-term value.

While COVID-19 has drastically changed how we conduct business today and will have a continued impact well into the future, all of these priorities remain relevant. To address these priorities and the new world of business today, corporate boards of directors across the country are reflecting on how to best manage the risk and volatility associated with the uncertainty in which we live.

Recently, Milwaukee Women inc, an organization of professional women determined to change the face and quality of leadership in the Wisconsin business community by increasing the number of female corporate directors, hosted a frank conversation with EY's Center for Board Matters and two business leaders and current board directors about the challenges their boards are facing, how they are managing through them and planning for the future, and lessons learned over the past six months.

Following are key insights from the conversation between Cigdem Oktem, regional leader of EY's Center for Board Matters, who served as moderator, along with:

- **Michelle Kumbier** – former chief operating officer of Harley-

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ALSO IN THIS ISSUE

CALENDAR OF EVENTS

December 1-3

Conference Board Leadership Excellence Course and Executive Coaching

Virtual Course

According to organizers, hard skills such as planning, finance, and analysis that were paramount in years past are now just a fraction of the many skills executives must now possess. In today's global economy, soft skills like good communication, creativity, collaboration, and the ability to motivate are requisite to leadership.

The Conference Board Leadership Excellence Course aims to empower attendees with a multitude of new skills along with a contemporary perspective on leadership. This three-day course will offer a journey of self-discovery to uncover what kind of leader you want to be.

Attendees will come away with:

- A clear understanding of their personal leadership philosophy.
- Strategies for building high-performance teams.
- Steps to align and accomplish organizational goals.
- Ways to build influence with boards, shareholders, stakeholders, and colleagues.
- Processes for setting priorities and creating clear action plans.
- Techniques to inspire and

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Risk

(continued from front page)

Davidson. She currently serves on the board of Abbott Labs.

- **Mara Swan** – retired EVP of global strategy and talent at ManpowerGroup and former chief people officer at Molson Coors. She currently sits on the board of BrightView Landscapes, GOJO Industries and Uline.

Oktem: What is top of mind for directors right now, given all the challenges boards and businesses are facing?

Kumbier: There are so many different challenges hitting corporations and broader society right now, and every one of those topics is being discussed in the boardroom in one way or another. Zooming out and looking more broadly, it really is about trying to manage the uncertainty and the volatility that is coming at every company. Those that manage that uncertainty and volatility the best is going to be the most successful on the other side.

On the Abbott board, we have been successful by looking at all of the challenges the company is facing from both a cultural and strategic standpoint. On the cultural side, we leaned-in even further to maximize the company's agility and innovative mindset. We used Abbott's inherent culture to protect, preserve and grow the business. Then from a strategic standpoint, the diversification of the business, with four distinct business units that already existed, enabled the business to manage the volatility in each of the business units and as things rapidly changed in the marketplace, shift its focus to new opportunities in specific business units with unprecedented speed and agility. An example of that is when Abbott's Medical Device business was severely impacted by the significant reduction in elective procedures early in the COVID pandemic, the company was able to, with speed, agility and know how, quickly ramp up COVID testing in an unprecedented way in their Diagnostics unit.

As a result, Abbott not only was able to significantly offset the decline in medical devices, they now have a whole new revenue stream to build on as they serve society with critical COVID medical diagnostics.

Swan: For me, the conversation has shifted from dealing with the immediate impact of COVID to how are we going to allocate capital for future growth, whether it be in facilities, machinery, inventory or people. One of the boards I'm on recently started asking when do we start adding salespeople? We do not want them too soon, but we need folks trained and ready to take advantage of growth opportunities.

And, beyond financial allocation, which is a regular topic of discussion in non-crisis times, the other big switch in the conversation has been around human capital. I have never seen the emphasis that we are seeing right now in human capital. Boards are very concerned about people working remotely 24/7, how they are dealing with stress, and ultimately, how it will affect the company's ability to grow and be a good employer.

To that end, we also have had more discussions about culture than ever before, and beyond conversations, a willingness to execute. Businesses are thinking about their social obligations, given what is going on in the world, and more importantly, caring and paying attention to the opinions of employees, not just management.

Oktem: How are managements' expectations of boards, and vice versa, boards' expectations of management, shifting as some of these conversations are happening?

Swan: There has been a shift in the format of dialogue. Rather than management presenting to the board and sharing their point of view, we are seeing broader, more generative discussions between the two. There are so many unknowns, and management and the board need to have an open conversation, rather than a presentation. From my experience, this is a big change for management, and for some, it has been a difficult shift. They are used to feeling the need to have all of the answers for the board, but we are in uncertain times.

Kumbier: Excellent point. I believe management teams are leveraging the wisdom of the board more than ever. Directors come from different backgrounds and are seasoned, and that guidance is what the board is there for. The other expectation is that we are not just trying to survive this period of time. We really expect the management team to thrive coming out of it. How do you take the current situation, and through the ability to be innovative and to think differently about the business, grow and beat your competition?

Oktem: I want to dive a little bit deeper into the strategy and risk considerations, and in particular, scenario planning. This is a common foundational element of both growth and revenue strategy, as well as managing risk. How are your boards looking at scenario planning?

Swan: We spent a day recently on scenario planning on one of my boards. We went through five different scenarios, as well as the associated socio-economic, global and behavioral factors. It resulted in a really generative discussion and a questioning of underlying assumptions around scenarios.

One of my priorities for this meeting was asking questions: What are your assumptions underlying your analysis? Where are your data sources, emphasis on the plural? What do you think could go wrong? What are you missing? What is your level of confidence? If you had to pick a different scenario versus the one settled on, why would you and what would you do about it?

After asking these questions, we found we had to go back and redo a lot. There are so many unknowns, but there is also so much money and opportunity on the line, so it's critical to get these decisions right.

Kumbier: We have had success developing a range of possible outcomes for the business in the short term based on the volatility of the market and how the management team sees the market unfolding. Understanding the underlying assumptions of your scenarios are also critical to success. I have found that key assumptions not identified and discussed or a bad assumption can lead to not achieving the outcome we expected.

As an example, a salesperson is typically, inherently, optimistic. Whereas an operations person, like myself, typically sees what could go wrong. An optimistic scenario for me, is probably somebody else's pessimistic scenario. It is important to dive deep and really understand where everyone is coming from.

Plus, management teams have tremendous pressure to be right, and to come in and prove that they understand the situation and its outcome. It is uncomfortable to say, "Well, I really don't know," but COVID-19 has changed that. Boards and management have become much more comfortable managing uncertainty. As long as you can track the assumptions throughout planning and revisit them continuously, that will be critical for mitigating risk.

Oktem: There has always been a delicate balance for boards between the executive management role and the oversight role. How do you manage that balance?

Kumbier: The management team needs to leverage the wisdom of the board and maintain clarity that the board is not running the business, but guiding decisions. We are continuing with current governance processes but adding to that discussions about the current risks and mitigations for COVID and how to be innovative and think differently about the business given the situation today.

Swan: During COVID, a lot of boards were meeting once a week and wanting detailed insight into the numbers. The situation was so new. So, some boards did cross over the line into management. But, from what I've seen, we're now back to equilibrium.

This is the time, however, when strong boards get stronger and weak boards get weaker. And the same thing with management teams. When you have a weak management team or board, you have weak governance and there can be crossing over of responsibilities.

Oktem: There is robust research showing when companies accelerate out of a downturn, it creates a real advantage. That can be tough for an executive team to wrap their head around. Where can the board play a role in helping to create and catalyze some of those conversations?

Kumbier: Oftentimes a crisis is the best opportunity to drive creativity, innovation and new avenues for growth.

To do that well, capital allocation is critical. Continuing to evaluate and ask what the priorities of the business are and then investing appropriately in your strategy as you manage the real demands of the crisis. One approach is to have a crisis management team dealing with the day-to-day issues, while the rest of the team remains focused on the strategy. Even if a company is going through a crisis, there still needs to be a north star and employees need to understand what is the same and what may have changed. The board can help to make sure that the north star remains visible and continues to be communicated to the organization and all stakeholders.

Oktem: As individuals are positioning themselves to be on boards, what do you think is different right now and what should individuals be thinking about compared to even six or eight months ago?

Swan: Throughout all of this, we have had to communicate with executives in ways not typical of a board member-executive relationship. For instance, some CEOs wanted to keep doing business as usual – traveling on planes and more. I reminded them that those simple things could be perceived as a bad example of leadership.

Beyond that, many leaders simply need an ear. I have spent time on the phone with executives who simply needed to decompress, so that they could go back and be the leaders they are. So, new board members should offer a sense of maturity and the ability to listen.

Kumbier: Having a broader, 360-degree view of the business is also critical. We know all the different challenges that are hitting the board room and that the management teams are trying to balance. We just talked about many of them. Being multi-dimensional and being able to provide your perspective and your advice to management teams is invaluable.

I would also add that from a female perspective, we bring empathy to situations and are often a bit more balanced in our approach. When companies are thinking through a lot of these cultural and social conversations – ESG, how the company is leading in society and their standing in the broader world – women, in particular, can bring those traits and a strong value to that conversation.

To read EY's full report highlighting key priorities for boards in 2020, visit https://www.ey.com/en_us/board-matters/eight-priorities-for-boards-in-2020 *or read the following article for further insights* — https://milwaukeewomeninc.org/board-agenda-2020-eight-priorities-for-boards-as-they-tackle-the-covid-19-crisis/. ❑

FOOD FOR THOUGHT

"A leader…is like a shepherd. He stays behind the flock, letting the most nimble go out ahead, whereupon the others follow, not realizing that all along they are being directed from behind."

Nelson Mandela

Board Effectiveness Begins with Director Selection

by Steve Mader and Shawn Oglesbee

Steve Mader and Shawn Oglesbee are partners in the Board Services practice at executive search firm ON Partners. In this article, they discuss some of the challenges and nuances of recruiting new board members.

While boards continue to invest more time in the effectiveness of the body, a positive development to be sure, often one of the best investments they can make is paying more thoughtful attention to the selection process for new appointments. The average director serves more than a decade, and boards have a natural resistance to identifying and addressing personal under-performance. In a peer group with shared responsibilities, working around pockets of mediocrity can seem more efficient than trying to confront it.

The ultimate answer is more sure-footedness in recruiting and selection, but that can be tricky. A board is a collection of established leaders based on tangible experience and apparent achievement. But we know leadership success derives not from one thing or one collection of qualities, it is situational. Personal contribution within organization achievement can be hard to unwrap. But it is important for understanding an individual as a potential board appointment.

While we sometimes associate leader success with effective use of hierarchy and authority, peer group leadership, which is so vital in a board setting, depends more on active listening, collaboration, and the personal authenticity to influence. The goal of every board appointment is to add enriching perspectives while strengthening the group's operating culture for peer group leadership. That is what facilitates the richness of perspectives from good board composition. One of the best investments a board can make is in strengthening the ability to define and select the qualities that matter most in a new director appointment, and to recognize the hazards that can imperil that choice. The payback will be measured in years of higher board performance.

Key Attributes

Boards will generally drive their considerations for a new appointment from the view of composition, that is, what skills and experiences will best enrich total perspectives. That is good direction but it turns out to be the easier part of the work towards a great selection. Here are five key attributes that a board selection committee can focus on for a barometer of future contribution, translating those skills and experiences effectively into tangible value to the board's business.

Achievement: A director comes with a history of achievement that lends personal confidence as well as valuable credibility in the eyes of others. Personal achievement for leaders shares context with organization accomplishment. The two can be different, both can be valuable to the board, and it can be a challenge to separate them. Strive to understand those contexts in order to best understand a potential colleague's contribution power. A candidate's own perspectives on this should show insight; past successes and failures are teaching moments for the leaders who know how to use them.

Expectations: Setting expectations at the onset of discussions is a key learning moment. A board appointment carries the long-term promise for mutual satisfaction with the work at hand. Clarifying that promise up front depends heavily on a concrete communication exchange that shapes the business opportunity and reveals how a candidate thinks about it. This is no time for assumptions; it is the time for exploring the value propositions of both parties in real terms.

Integrity: For all good leaders, working principles don't bow to consequences. A board depends on every director's commitment to working principles and code of conduct. That provides the board's confidence to explore challenges using every perspective without losing compass. Individual integrity also extends to the collective board since "integrity" also means "undivided," and the role of the board is to ultimately align as one voice.

Authenticity: Collaboration breaks down without trust, and so does personal leadership, especially at a peer-to-peer level. Consistent clarity of genuine purpose breeds trust and is a powerful leadership tool. It has a special place within a collaborative peer group, saving time, raising active listening, and increasing the focus on the subjects at hand.

Humility: An effective board is an assembly of career high achievers striving continually to do more and better as individuals and as a group. The members are comfortable in their own skins and are able to welcome constructive disagreement without making it a competition. They will share their own past mistakes and vulnerabilities to advance a perspective. They are not there to prove anything; they are there to advance success. Put simply, the work is not about them.

Common Hazards

Understanding the social, psychological and behavioral aspects of accomplished people is not easy, but on the other hand, taking them for granted can be dangerous. Driving for the best information is no different for director candidates than for operating executives, and the human resource sciences have provided many tools. But for directors, it can seem tedious and overkill. It isn't, generally speaking. However, common sense and situational sensitivity apply, there is not one template. What is important is that a selection committee appraises their specific situation with an awareness of what matters, and makes conscious choices about what they want to know and how to get to it to their own level of satisfaction. Following are some of the most common hazards that are easily lulled into and often work out fine – but can sometimes carry real penalties:

Prevalence of assumptions: High-level courtships involving successful careers can take too much for granted, especially when it is a role of service and advisement. This can cut discovery short and emphasize initial "chemistry" and obvious experience while not paying attention to other details that can define the quality of mutual satisfaction in the match. It introduces a totally unnecessary vulnerability of decision process for both parties and their expectations. And sub-optimum matches consummated are frequently accepted ongoing for many reasons, creating an opportunity cost.

Over-weighting achievement: Association with high achievement is clearly relevant and attractive but it shouldn't be intoxicating. Evaluating achievement on its personal dimensions can be complicated, and a part of the job of good selection process is to limit halo effects among the multiple considerations that matter for high-capacity functioning. One of the finest directors serving Fortune 500's for two decades was a former CEO whose company failed on his watch after more than 100 years of success. That failure didn't define him.

Narrow knowledge focus: Boards sometimes feel vulnerable to lacking a specific area of experience that has become exposed due to an external force, or perhaps a management issue. If the timing of a director search parallels this attention, there is a natural response to make it a solution. But while new directors should bring depth to targeted areas of knowledge, they are appointed to provide years of broad-based advising across the enterprise. Consultants can solve targeted issues and management solves management challenges. Directors have a broad mission and must be broad in perspectives.

Essential adjustments unaddressed: A good director match may in some ways be a departure from norms and expectations for the board, the candidate, or both. Those departures take many forms, and the challenge is that they may not be recognized at the time that it matters. It means that the appointment will have distinctions from past experiences that could have important consequences. A board with a history of appointing experienced directors may need to make deep revisions in onboarding for a first-time director. A new director as an active executive may have a future high potential for non-negotiable calendar conflicts or for becoming competitively conflicted. In some cases a full recognition of these issues could alter an appointment. In many cases a solution could be engineered successfully. But failure to recognize them can create setbacks that last.

Diligence Rewarded

With the accelerating trend for boards to put energy into their own unit effectiveness, they have three main pillars of value to think about: the composition of the board, the proficiency of the individual board members, and their team effectiveness. For a new appointment it has been common and obviously relevant to focus on the composition pillar, to add the skills and experiences that build dimension in the board's perspective. But in order for that choice to really pay off, a director has to be chosen for the ability to be a positive force in the other two pillars, which means being an effective peer leader. For the best boards it will become a lasting ingredient to improved performance. ❑

WHEN WE SAY…

Board Leadership's mission is "to discover, explain and discuss innovative approaches to board governance with the goal of helping organizations achieve effective, meaningful and successful leadership to fulfill their missions."

Board Leadership aims to fulfill this mission by engaging its readers in a lively and illuminating inquiry into how board governance can be made more effective. This inquiry is based on three key assumptions:

- Boards exist to lead organizations, not merely monitor them.
- Effective board governance is not about either systems, structures, processes, theories, practices, culture, or behaviors—it is about all of them.
- Significant improvements are likely to come only through challenging the status quo and trying out new ideas in theory and in practice.

Uniquely among regular publications on board governance, *Board Leadership* primarily focuses on the job of board leadership as a whole, rather than on individual elements of practice within the overall job.

Over time, *Board Leadership* will provide a repository of different approaches to governance created through its regular "One Way to Govern" feature.

Here's what a few of the key terms we use mean to us:

- **Innovative:** Creating significant positive change
- **Approaches:** Principles, theories, ideas, methodologies and practices.
- **Board governance:** The job of governing whole organizations. ❑

How Boards & Board Members Can Leverage Social Media to Promote their Organization's Mission

by Kristin Dyak

Kristin Dyak is digital marketing director at The Cyphers Agency, an integrated marketing and PR firm based outside of Washington, D.C. In this article, she discusses how board members can not only ensure their organization is effectively promoting its mission on social media, but also to do so themselves.

Over the roughly 150 years that boards have existed, the functions and responsibilities required of their members have grown in both number and diversity. And though they certainly vary from corporation to corporation and nonprofit to nonprofit, all share the essential need to establish, update, and implement their organization's mission.

Although perhaps not top of mind, one of the best ways to do this is by efficiently and effectively leveraging the power of social media—both as an organization as a whole and as individual board members. As a current member of two boards, those of the Chesapeake Chapter of the Public Relations Society of America (PRSA) and Broadway Crew, a promotional staffing resource for Broadway-related brands and events, I've helped implement social media initiatives and seen firsthand how powerful a board's focus on this area can be.

With that in mind, here are my top recommendations for boards and board members seeking to amplify their message through social media.

How Boards Can Ensure their Organization Is Using Social Media to Advance their Mission

Before you can determine where you're going, you must establish a starting point.

To this end, it's essential to take the time to carry out a deep-dive audit of your current social media accounts. This includes taking stock of post frequency, content categories and subject balance, engagement rate, and internal participation. These metrics will create a baseline for your growth moving forward and will also assist in dictating your social media strategy per platform.

This done, you should then turn to your content and prioritize two things: developing and consistently posting the type of content that advances your organization's mission and, equally important, tailoring it to each platform and audience. For example, your audience on LinkedIn and Twitter may primarily consist of industry professionals, meaning that standard content categories for the network are mission-focused industry news, event promotions, and content from attendees. Your Instagram and Facebook followers, on the other hand, are likely consumers of or general fans of your brand/mission, for whom posts that feature company culture and new product announcements are better suited. Overall, your content should appeal to your organization's fans in addition to employees, industry thought leaders, and board members alike.

But reaching your audience doesn't necessarily mean creating a one-way bulletin board of information, as engagement can expand beyond simply liking, commenting, and sharing a post. For example, at PRSA we created a contest on its Facebook page in which chapter members who engaged with the post were entered into a drawing for a chance to receive a free registration to a virtual industry summit. This type of promotion not only encourages interaction with the content, but also shows that the organization values involvement in industry events.

It's also important to remember that your social media channels are not simply megaphones for promoting your content. If done properly, you can utilize social media listening to increase engagement within your online communities; there are several listening tools available that aggregate content based on search terms and relative hashtags. This can also be done manually by searching terms and hashtags, but I recommend using a tool that encompasses the whole conversation and alerts you to real-time trends. It's valuable to participate in these discussions from your organization's accounts not only to express your stance on certain topics that you and your constituents care about, but also because liking someone's comment may result in a retweet coming your way given that engagement is give-and-take.

In a more narrow scope, it's worthwhile to follow, monitor, and engage with content posted by your stakeholders, employees, and industry partners. An efficient way to do this on Twitter is to create lists for each category. Scan the list during your regularly scheduled monitoring to sift through your main news feed and interact with a specified group of accounts. On the other social media platforms, I recommend either saving links to notable accounts in a document or as bookmarks in your web browser. That way they're accessible and easy to click through when browsing for engaging content. Encouraging your stakeholders, employees, and industry partners to tag you in their content, when appropriate, can also be a very helpful way to ensure that you receive a notification and are able to engage right away. This level of engagement tightens the digital community by showcasing a unified front with a parallel message.

How Board Members Can Promote Mission Themselves

Board members can serve as an extension of an organization's or brand's presence and mission themselves, acting as top-level ambassadors by establishing and maintaining a thought leadership role that's prevalent on all channels. Given this, it's valuable to periodically conduct a self-assessment of your digital activity just as you do with that of your organization.

For starters, the lowest-hanging fruit is likely adding your involvement to your LinkedIn profile. This is a great way to display your connection with the organization because it may not be your place of employment and can be incorporated under "Experience," "Volunteer Experience," or "Accomplishments," depending on which category best suits how the board role fits into your professional profile.

As for content, it's important to "go beyond the like" and give the content posted by the organization whose board you're on more than a mere mouse-click. This means sharing it with a comment about its importance, sharing additional content related to the cause, and tagging the organization, and the like—essentially, using your personal content to promote your organization's mission in any way you can. This not only broadens the content's reach, but creates content for your page and showcases the pride you take in your involvement. Your network of followers will see that you've interacted with the post, which will generate more impressions, and ultimately, an increase in engagement, continuing the web effect of exposure. For example, although I do not work in the Broadway industry, I follow and share content from not just Broadway Crew itself, but also high-level industry media outlets and popular shows. This has a two-pronged result: It increases engagement for like-minded content that's related to Broadway Crew and connects the dots of my involvement with the organization.

When engaging, it's key to portray a clear tone and stance on topics relating to your mission and be mindful of the sources you're sharing and citing so that your content aligns well with both your intention and that of the organization. And, similar to the organization's content strategy, it's also important to tailor your posts to each platform. If you're sharing a photo of board members at Happy Hour, for example, Facebook or Instagram would be an appropriate medium, whereas an initiative announcement would perform best on Twitter and LinkedIn.

There's clearly a lot to consider when it comes to the ever-changing world of social media, but the importance of a digital presence is something that boards—and board members—both big and small can't ignore. It's always valuable to remind yourself that you joined the board because you believed in what the organization does, and putting a renewed focus on in its social media presence—whether on an internal level or by working with professionals with expertise in the digital world—will likely be well worth the investment. ❑

N E W S

Upcoming book explores new approach to working with boards

A new book from leadership coach and organizational development consultant Ken Schuetz offers insight into a new approach for nonprofit executives and boards to work together on governance and oversight.

In *Aligned Influence: Beyond-Governance (A Better Way Forward for Boards, Executives, and Their Organizations)*, Schuetz seeks to equip board members and executives with a clear way forward in their roles together by helping them understand why and how to improve.

Within every organization is an "ecosystem" of influencers. In organizations with boards of directors and executives, that ecosystem is even more complex, Schuetz says, and it is even more important to understand it for the benefit of everyone, including donors.

According to Schuetz, governance models to date have not provided sufficient understanding of this ecosystem of influence, leaving this as an ongoing problem in organizations. In this book, Schuetz presents the Aligned Influence model, which offers a unique perspective to this central problem and a solution that addresses organizational alignment as a necessary prerequisite to effectiveness.

The book is scheduled for release on Amazon on March 30. For more information, visit https://amzn.to/3mLOTdN.

Board members: reach out to your CEO during dark times

One of the easiest and most effective things board members can do – especially those in leadership positions – is pick up the phone and touch bases with the organization's executive director, according to nonprofit consultant Joan Garry.

As Garry explains on her website, nonprofit CEOs are facing unprecedented challenges due to the pandemic, social unrest and general instability and chaos currently rocking the United States. And, they are expected to navigate them without any guidance from their forebears, who admittedly faced many challenges, but not so many all at once, that made even simple things like holding board meetings a strenuous logistical undertaking.

Board members can do a variety of things to help out – Garry goes into many of them on her website – but one of the easiest things for board members to do is get on their phone and let the CEO know they have their support at a time when many nonprofit execs are questioning their leadership abilities.

For more information, visit https://www.joangarry.com. ❑

Calendar of Events

(continued from page 1)

develop committed, energized employees.

For more information, visit https://bit.ly/3jwyQxC.

DECEMBER 14-16

International Corporate Governance Network Annual Conference and General Meeting

Fairmont Royal York Hotel, Street West, Toronto, Ontario, M5J 1E3, Canada

This conference, to be hosted by the Ontario Teachers' Pension Plan in partnership with the Royal Bank of Canada, celebrates the ICGN's 25th year. From humble beginnings in 1995, with 49 founding members, the ICGN now represents over 800 members in 50 countries and counting.

Accordingly, the group said, this year's annual conference is both a cause for celebration and reflection as the ICGN and its members take stock of what they have learned and achieved over the past 25 years, but also look to the future with regard to priorities for reform. As the governance and investor stewardship landscape continues to evolve, leading expert speakers will provide attendees with key insights into best practice and highlight future priorities for companies, investors and stakeholders.

For more information, visit https://bit.ly/2A5oVyc.

JANUARY 17-20, 2021

Governance Institute January Leadership Conference

The Ritz-Carlton, 280 Vanderbilt Beach Road, Naples, FL 34108 USA

The Governance Institute Leadership Conference offers current information, interactive sessions, expert speakers, and the opportunity to meet others with a similar commitment to improving governance and achieving optimal board performance.

The January conference will feature keynote speaker Robert M. Wachter, M.D., Professor and Chair of the Department of Medicine at the University of California San Francisco.

For more information, visit https://bit.ly/3dZJiwv.

JANUARY 26-28, 2021

The Society for Corporate Governance Essentials Conference

Loews Portofino Bay Hotel, 5601 Universal Blvd., Orlando, FL 32819 USA

According to organizers, this conference is designed as both basic training for new corporate secretaries and as a refresher course for those with more experience.

The three-day program is taught by seasoned corporate secretaries and governance professionals who have mastered the tools needed to manage the multifaceted responsibilities of corporate governance.

Attendees include corporate secretaries, assistant secretaries, general counsel, other corporate counsel, paralegals, compliance or ethics professionals, and industry-related service providers, such as auditing firms and legal experts, among others. Agenda items vary from year to year but typically include sessions focused on the following topics, among others:

- Fundamentals of corporate governance.
- Internal source of (and limits on) governance authority.
- Fundamentals of ESG.
- Minutes.
- Board and committee meeting best practices.
- Corporate entity management.
- Board responsibilities, structure and committees.
- Cybersecurity.

For more information, visit https://www.societycorpgov.org. ☐

BOARD LEADERSHIP
INNOVATIVE APPROACHES TO GOVERNANCE

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