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December 31, 2021 North Dakota State Investment Board Pension Funds

Investment Measurement Service Quarterly Review

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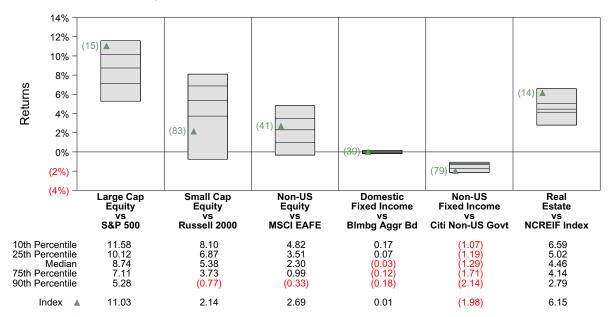
Executive Summary

Market Overview Active Management vs Index Returns

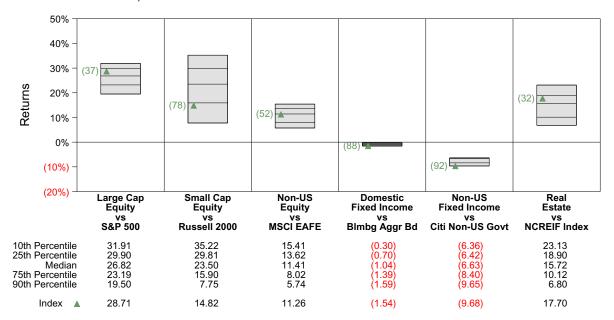
Market Overview

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, 2021



Range of Separate Account Manager Returns by Asset Class One Year Ended December 31, 2021



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Capital Markets Review

What's Next for the Recovery in the U.S.?

ECONOMY

PAGE The fourth quarter of 2021 closed out another remarkable year following the wild ride through

the pandemic and the recovery. U.S. GDP notched an incredibly strong 6.9% quarterly gain (4Q over 4Q), which translates to annual growth of 5.7% over 2020. So what's next?

Agg Is Flat as Real Yields Stay Negative

FIXED INCOME

8 PAGE Aggregate was flat in 4Q21, and real yields remain solidly in negative territory. Global returns were muted for unhedged U.S. investors in both 4Q and 2021. Emerging market debt indices underperformed most other fixed income sectors in 2021.

Strong Demand Due to Focus on Yield

PRIVATE CREDIT

Another Year of Gains but New Threats Rise

INSTITUTIONAL INVESTORS

A G E In 2021 all institutional investor types had strong gains but lagged a benchmark composed of 60% S&P 500/40% Bloomberg US Aggregate Index. For many, the question they face now is what to do in a low-yield environment with growing concerns over inflation.

ODCE's Best Quarter; U.S. REITs Top Stocks

REAL ESTATE/REAL ASSETS

10 P A G E The NCREIF ODCE Index had its best performance ever in 4Q21, up 7.7%. Net operating income fell for Office as Omicron delayed office returns. Global REITs rose 10.4% compared to 7.8% for MSCI World; U.S. REITs rose 16.3%, beating the S&P 500 Index, which rose 11.0%.

Ending the Year on a Positive Note

HEDGE FUNDS/MACs

13 PAGE Hedge funds ended higher, despite inflation and Omicron concerns growing in 4Q21; the HFRI Fund Weighted Composite Index gained 0.4%. Event-driven strategies finished on a strong note. Equity hedge finished in positive territory; macro strategies ended slightly lower.

S&P 500 Up Again; Global Stocks Falter

EQUITY

6 PAGE The S&P 500 posted a strong 11.0% gain in 4Q21; large cap growth was the top performer, small cap growth the worst. Globally, emerging markets struggled relative to developed markets due to the economic slowdown and regulatory crackdown in China.

Big Bounce Back in 2021 After 2020 Drop

PRIVATE EQUITY

Private equity fared exceedingly well in 2021, after 2020's big dip. Company investment and exit activity is up across the board, and IPO markets had another gangbuster year. On average, yearover-year transaction activity rose by 30% and dollar volumes by 70%.

Index Falls in 3Q21, First Time Since 1Q20

DEFINED CONTRIBUTION

15 PAGE The Callan DC Index[™] declined 0.4% in 3Q21. The Age 45 Target Date Fund had a slightly lower return (-0.8%), attributable to its higher allocation to equity, which underperformed fixed income. Balances also fell, by 0.7%. Target date funds received the largest net inflows.

Broad Market Quarterly Returns



Global ex-U.S. Equity MSCI ACWI ex USA



U.S. Fixed Income Bloomberg Agg



Global ex-U.S. Fixed Income Bloomberg Global Agg ex US



Sources: Bloomberg, FTSE Russell, MSCI

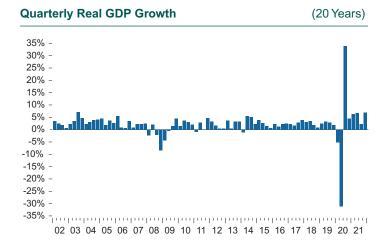
What's Next for the Post-Pandemic Economy?

ECONOMY | Jay Kloepfer

The fourth quarter of 2021 closed out another remarkable year following the wild ride through the pandemic and the recovery, a cycle that began in earnest in February 2020. U.S. GDP notched an incredibly strong 6.9% quarterly gain (4Q over 4Q), which translates to annual growth of 5.7% over 2020. We have not seen such growth since the Ronald Reagan administration, following the consecutive recessions of 1980 and 1982 induced in part to wring double-digit inflation out of the economy.

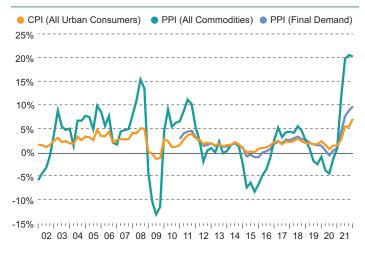
A short detour into monetary policy history is relevant here. The advent of current monetary policy began during the Reagan administration under Fed Chair Paul Volcker, although he was appointed by Jimmy Carter. Alan Greenspan took on the mantel of "monetarist" from Volcker and enshrined the discipline into Fed policy. That monetarist bent was then modified seriously by Ben Bernanke to address the Global Financial Crisis, where a zero interest rate policy was employed both in the U.S. and by most central banks around the world to rescue the global economy from collapse. Zero rates were combined with massive monetary intervention through the purchase of bonds to keep rates low and infuse liquidity into the system. Emboldened by what we learned in the GFC and the innovation in monetary intervention tools we developed, we applied zero rates with substantial monetary intervention to rescue the global economy again at the onset of the pandemic. After two years and a complete recovery to pre-pandemic GDP levels, the question now is what is next for the post-pandemic economy.

At the risk of *not* sounding an alarm, we believe supply chains will untangle, labor markets will slowly equilibrate, and supply and demand will line up the economy's production function and the consumer's normalizing demand for goods, services, food, and shelter. The Fed has begun tapering its asset purchases intended to supply liquidity to capital markets, and it is strongly signaling that interest rates will rise, with three hikes in the Fed Funds rate in 2022 articulated in the last FOMC meeting in January (the market is discounting four hikes). As policy is



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

withdrawn, the global economy will move to stand on its own two feet, complete with the cycles of growth and recession fully expected in a market system. Top of mind for many is inflation, which hit a peak of 7% in 4Q21. There is now an entire generation of market participants who have never experienced sustained inflation, which was last seen in the early 1980s.

After starting 2021 in the shadow of renewed lockdowns in 4Q20 following then-record spikes in pandemic infections and

hospitalizations, the global economy and the U.S. in particular began a spurt of optimistic growth in the spring, and many measures of economic growth took off: consumption, business spending, production, travel, home-buying (which had started surging in 2020), and the opening of retail trade, dining, hospitality, and recreation. U.S. GDP surged in the second and fourth guarters, and the increase of 5.7% for 2021 compares to the 3.6% decline in 2020. Much has been made of the supply chain issues that have restricted output and the supply of goods, the fundamental mismatch between job seekers and available jobs, and the impact of both on potential growth and inflation. We believe the remaining supply chain issues will be ironed out over the course of 2022, increasing the supply of goods and relieving the pressure on prices. We also believe that the labor market will adjust, but that the process may be slower than that for goods and services, and that higher wages may be a feature of the U.S. economy for at least another year and perhaps in to 2023. The job segments most disrupted by the pandemic-retail, wholesale trade, transportation services, hospitality, education, state and local government-are those facing the most obstacles to rehiring at prevailing wages.

A couple of key metrics point toward a slowdown from the manic growth of 2021. First, within GDP, the building of inventory accounted for 4.9% of the 6.9% growth for 4Q21. Inventories built now boost current GDP, but suggest downward pressure on prices of those inventoried goods and slower growth from future production. Second, one of the key forward-looking indicators is the Purchasing Managers' Index (PMI), which surveys planned activity by market participants—new orders, output, input prices, employment—and covers both goods and services. The PMI for new orders around the globe went flat

The Long-Term View

		Periods Ended 12/31/21			
Index	4Q21	1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	9.3	25.7	18.0	16.3	9.8
S&P 500	11.0	28.7	18.5	16.6	9.8
Russell 2000	2.1	14.8	12.0	13.2	9.0
Global ex-U.S. Equity					
MSCI EAFE	2.7	11.3	9.5	8.0	5.2
MSCI ACWI ex USA	1.8	7.8	9.6	7.3	
MSCI Emerging Markets	-1.3	-2.5	9.9	5.5	
MSCI ACWI ex USA Small Cap	0.6	12.9	11.2	9.5	6.9
Fixed Income					
Bloomberg Agg	0.0	-1.5	3.6	2.9	4.9
90-Day T-Bill	0.0	0.0	1.1	0.6	2.1
Bloomberg Long G/C	2.2	-2.5	7.4	5.7	7.3
Bloomberg GI Agg ex US	-1.2	-7.0	3.1	0.8	3.4
Real Estate					
NCREIF Property	6.1	17.7	7.8	9.3	9.4
FTSE Nareit Equity	16.3	43.2	10.8	11.4	9.9
Alternatives					
CS Hedge Fund	0.9	8.2	5.5	4.9	6.7
Cambridge PE*	4.8	49.5	21.2	17.2	15.7
Bloomberg Commodity	-1.6	27.1	3.7	-2.9	1.1
Gold Spot Price	4.1	-3.5	9.7	1.6	6.6
Inflation – CPI-U	1.6	7.0	2.9	2.1	2.3

*Data for most recent period lags by a quarter. Data as of 9/30/21. Sources: Bloomberg, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

in August 2021 and stayed flat through December, as first the Delta then the Omicron variants spooked consumers and businesses. Third, at the start of 2022, the PMI for new orders has fallen sharply, driven by weakness emerging in the order data in China and the U.S., two of the biggest global economies.

Recent Quarterly Economic Indicators

	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
Employment Cost–Total Compensation Growth	4.0%	3.7%	2.9%	2.6%	2.5%	2.4%	2.7%	2.8%
Nonfarm Business–Productivity Growth	6.6%	-5.0%	2.4%	4.3%	-3.4%	4.6%	11.2%	-0.8%
GDP Growth	6.9%	2.3%	6.7%	6.3%	4.5%	33.8%	-31.2%	-5.1%
Manufacturing Capacity Utilization	77.0%	76.1%	75.4%	74.5%	74.0%	71.9%	64.3%	74.4%
Consumer Sentiment Index (1966=100)	69.9	74.8	85.6	80.2	79.8	75.6	74.0	96.4

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

Most Investors Saw Double-Digit Gains in 2021

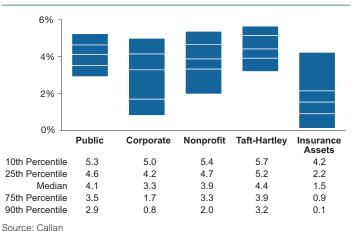
INSTITUTIONAL INVESTORS

- In 2021 all institutional investor types had strong gains but lagged a benchmark composed of 60% S&P 500/40% Bloomberg US Aggregate.
- Taft Hartley plans (+15.0%) topped the list while corporate defined benefit (DB) plans (+9.5%) had the lowest returns.
- Almost all investor types have seen double-digit returns for four of the last five calendar years, with single-digit losses in 2018 being the exception.
- Their returns more closely track the 60%/40% benchmark over longer time periods, with results over the last 20 years roughly comparable.
- Strategic conversations among investors remain focused on where to go from here. Many just enjoyed the best annual returns, calendar or fiscal year, in a generation, but their elation is tempered by sobering capital markets assumptions.
- Inflation is one major topic of conversation.
- But for all the concern about inflation, few investors have taken action to address it in portfolios.
- Another, related topic is what to do with fixed income:
 - How low can the fixed income allocation go?
 - · Should portfolios have bonds at all?
 - Should investors migrate out of an anchor to the Aggregate?
- Fixed income structures focus on the role of the asset

class—to diversify equity, to serve as a flight to quality, to act as a source of liquidity, to provide interest rate exposure balanced against the desire for return in a very low-yield environment. Investors are evaluating how they can avoid undue risk.

- Some investors have looked at creative reconstruction of "core" fixed income, away from lower-returning segments of the Aggregate anchor position:
 - Private credit
 - Securitized debt
 - High yield

Quarterly Returns, Callan Database Groups



Callan Database Median and Index Returns* for Periods Ended 12/31/21

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	4.1	13.7	14.8	10.9	9.6	7.5
Corporate Database	3.3	9.5	14.1	10.2	9.0	7.3
Nonprofit Database	3.9	14.0	15.1	11.0	9.5	7.4
Taft-Hartley Database	4.4	15.0	14.8	11.0	10.0	7.2
Insurance Assets Database	1.5	5.1	8.4	6.1	5.3	5.6
All Institutional Investors	4.0	13.4	14.7	10.8	9.5	7.4
Large (>\$1 billion)	3.8	14.4	15.0	11.1	9.9	7.7
Medium (\$100mm - \$1bn)	4.0	12.9	14.7	10.9	9.5	7.3
Small (<\$100 million)	4.2	13.3	14.4	10.3	9.2	7.0
60% S&P 500/40% Bloomberg Agg	6.6	15.9	15.9	17.5	11.1	7.7

*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, insurance assets, 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.

INSTITUTIONAL INVESTORS (Continued)

- Bank loans
- Private placements
- Global fixed income
- TIPS
- Risk-seeking in fixed income is not for all; some investors want to dial down the amount of risk their managers are taking, specifically credit.
- There is growing concern among investors about a market drawdown, given high valuations relative to historical averages.
- Hedge funds and other absolute return strategies may gain a new appreciation when compared to low fixed income expectations as a way to diversify growth risk with less of a return penalty.
- Real assets are under review with the growing concerns over inflation.
 - Will the inflation of the future come from the same sources as the global energy complex evolves?
 - · Are investors hedging inflation or outperforming it?
- Investors are questioning the inclusion of past real assets stalwarts:natural resources, energy, MLPs, and commodities.

Corporate DB Plans

- Many are conducting asset/liability (A/L) studies.
- Lower return expectations stress their EROA assumptions, but the American Rescue Plan Act (ARPA) provides a shot

in the arm to them: lower liabilities, higher funded status, and lower required contributions.

Public DB Plans

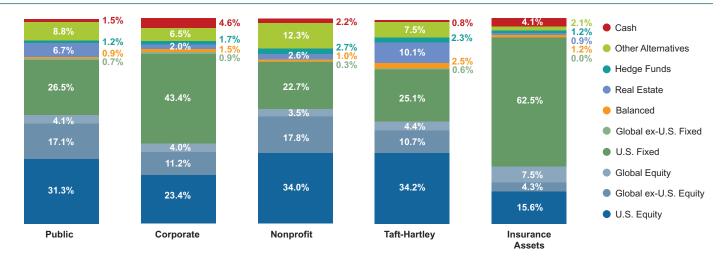
- These investors are also in the midst of numerous A/L studies.
- Low projected returns mean downward pressure on EROA assumptions. Weaker returns may derail the expressed desire to bring in risk, spurring further demand for alternatives exposures and leading to discussions of total fund leverage.

Defined Contribution Plans

- DC glidepaths are being reassessed due to lower shortterm capital markets assumptions, with some glidepath managers risking up. The long-term equilibrium did not change, but it is coming from a lower starting point.
- Sponsors are starting to discuss retirement income as their plans mature.

Nonprofits

- Subdued expectations for capital markets returns are challenging both their risk tolerance and the sustainability of established spending rates.
- They are dissatisfied with private real assets, hedge funds, and fixed income; portfolio reconstruction is on the table.



Average Asset Allocation, Callan Database Groups

Note: charts may not sum to 100% due to rounding. Other alternatives include but is not limited to: diversified multi-asset, private credit, private equity, and real assets. Source: Callan

U.S. Equities

Returns grind higher despite mounting concerns

- S&P 500 posted a strong 11.0% gain in 4Q21; large cap growth (Russell 1000 Growth) was the top performer, which contrasted with the worst-performing asset class, small cap growth (Russell 2000 Growth: 0.0%).
- The new Omicron variant, continued supply chain disruptions, and renewed fears of persistent inflation pushed investors into the perceived safety of the largest stocks.
- S&P 500 sector results were mixed, with Real Estate (+17.5%) posting the top returns alongside Technology (+16.7%) and Materials (+15.2%); Communication Services (0.0%) and Financials (+4.6%) lagged broad returns.
- In 2021, small value outperformed small growth by over 2,500 bps (Russell 2000 Value: 28.3% vs. Russell 2000 Growth: 2.8%), a stark reversal from 2020 and a pattern consistent with periods of robust GDP growth.

Index concentration driving positive returns...

- The 10 largest stocks in the S&P 500 comprised 30.5% of the index but accounted for 65% of the 2021 return.
- During 4Q21, top 10 weights accounted for ~40% of return.

...but may be hiding underlying weakness

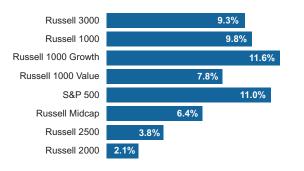
Quarterly Performance of Industry Sectors

 Nearly 10% of Russell 3000 stocks fell by 35% or more in 2021, which is unusual for a year when market returns were in excess of 25%.

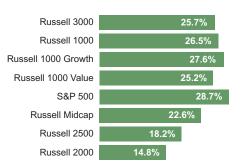
Market capitalization, style driving divergence in returns

 Mega-cap growth (Russell Top 200 Growth) was the strongest performer in both 4Q21 and 2021.

U.S. Equity: Quarterly Returns

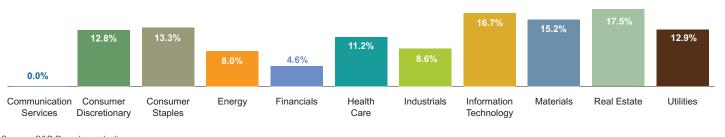


U.S. Equity: One-Year Returns



Sources: FTSE Russell and S&P Dow Jones Indices

- Growth style returns highly correlated with market capitalization in both 4Q21 and 2021 (higher market capitalization = high return).
- Within micro-, small-, and smid-cap growth, Health Care (especially biotech/pharma) was biggest detractor to returns.
- Value returns correlated with market capitalization in 4Q21; for 2021, value returns did not experience much divergence.



Source: S&P Dow Jones Indices

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EQUITY (Continued)

Global Equity

Omicron takes center stage

- A recovery-driven market shifted back to COVID favorites, boosting Information Technology stocks.
- Small cap underperformed large amid global growth concerns.
- Emerging markets struggled relative to developed markets as China experienced significant pressure from an economic slowdown and its regulatory crackdown.

Stalled recovery

- As the new variant took hold, Energy and Communication Services lagged on fear of restrained growth.
- Japan suffered from both supply chain issues and economic constraints from COVID-19.
- Growth and momentum factors outperformed in developed markets but not in emerging markets.

U.S. dollar vs. other currencies

 The U.S. dollar rose against other major currencies as tapering accelerated alongside the expectation for 2022 rate hikes, which notably detracted from global ex-U.S. results.

Growth vs. value

 Inflationary pressures and the ultimate rebound from COVID-19 supported value's leadership for the full year, despite the shift to growth in 4Q21.

Regulation has spooked Chinese market

- Although regulation is not new in China, the duration, scope, and intensity of the current regime are unprecedented.
- Regulations have been centered on antitrust, financial markets, data/national security, and social welfare to enhance the sustainability of its economy.
- Regulatory uncertainty should subside as China focuses on implementation.

Inflation is expected to normalize in a few years

- Forecasted year-over-year core CPI is expected to reach its peak between 1Q22 and 2Q22.
- Inflationary environment by and large has shifted central banks to contractionary policy.





0.7%

Global ex-U.S. Equity: One-Year Returns

MSCI Frontier Markets

(U.S. Dollar)



Source: MSCI

Rise in inflation expectations tends to stoke value

- Correlation between cyclical sectors and inflation/interest rate expectations generally has been positive.
- Growth relative to value is more vulnerable as interest rates normalize.
- Global recovery from COVID and deficit in Energy should support value.

Fixed Income

U.S. Fixed Income

Treasury yields again unchanged

- 10-year at 1.52% at 9/30 and 12/31, up slightly from 1.45% on 6/30.
- TIPS outperformed nominal Treasuries and 10-year breakeven spreads widened to 2.56%.
- Real yields remain solidly in negative territory.

Bloomberg Aggregate was flat, literally

- Spread sectors (Agencies, ABS, CMBS, MBS, and Credit) all underperformed UST by a modest amount (but positive YTD).
- Yield curve flattened; curve positioning had a meaningful impact on returns in 4Q.

High yield and leveraged performed relatively well

- Spreads remain near historic tights.
- High yield issuers' default rate declined to a record low in December (J.P. Morgan).
- New issuance hit a record for the second year in a row as issuers looked to finance at relatively low rates.

Munis outperformed Treasuries

 Lower-quality bonds continued their trend of outperformance as investors sought yield.

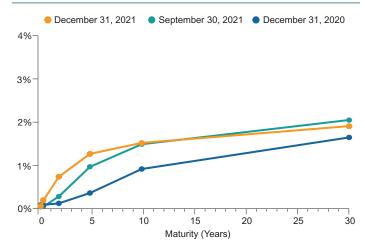
Inflation is being felt, indicated by several measures

- Annual CPI jumped to 7.0% in December—its eighth consecutive reading above 5% and the largest 12-month increase since the period ending June 1982.
- Increases for shelter and for used cars/trucks were the largest contributors to the seasonally adjusted all-items increase.
- Even service inflation, which had declined initially, has since recovered and is on an upward trend.

Fed has turned more hawkish than expected

- Fed announced a doubling of the pace of tapering and an upward revision to the anticipated path of rate hikes.
- FOMC participants now expect three rate hikes in 2022 to bring the targeted range to 0.75%-1.0% by year-end.

U.S. Treasury Yield Curves



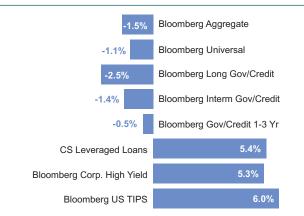


U.S. Fixed Income: Quarterly Returns

Bloomberg Aggregate	0.0%
0.0%	Bloomberg Universal
Bloomberg Long Gov/Credit	2.2%
-0.6%	Bloomberg Interm Gov/Credit
-0.6%	Bloomberg Gov/Credit 1-3 Yr
CS Leveraged Loans	0.7%
Bloomberg Corp. High Yield	0.7%
Bloomberg US TIPS	2.4%

Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg and Credit Suisse

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FIXED INCOME (Continued)

Spreads have returned to tights

- Fundamentals remain strong and default expectations low.
- Revenue, profits, and free cash flow at or near cycle highs.
- Gross and net leverage trending lower while interest coverage trends higher.

Global Fixed Income

Flat on a hedged basis

- Returns were muted and U.S. dollar strength eroded returns for unhedged U.S. investors in both 4Q and 2021.
- Yen was a notable underperformer in developed markets, falling 10% for the year.

Emerging market debt posted negative returns

- Emerging market debt indices underperformed most other fixed income sectors in 2021.
- Currencies fared the worst vs. the U.S. dollar; the Turkish lira sank 44% on spiking inflation.

Global outlook may shift lower with regional variance

 Moderating and differentiated outlook for various regions reflects certain DM and EM economies shifting to tightening balanced by others managing legacy issues.

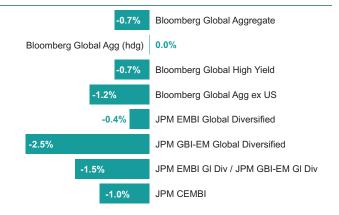
Central bank policy is mixed

- The U.K. has led the way with interest rate hikes as the BOE expects inflation to peak in April 2022.
- Europe and Japan continue to have below-target inflation and are expected to maintain relatively accommodating monetary policy.
- EM central banks, having moved early to battle inflation, may be moving to a more late-cycle posture.

Change in 10-Year Global Government Bond Yields

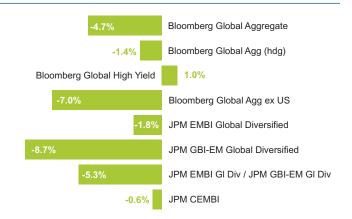


Global Fixed Income: Quarterly Returns



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns



Sources: Bloomberg and JPMorgan Chase

Best Gain Ever for ODCE; U.S. REITs Top Stocks

REAL ESTATE/REAL ASSETS | Munir Iman

Strongest gains for ODCE ever

- The NCREIF Open End Diversified Core Equity (ODCE) Index posted its best return ever in 4Q21 (7.7%); Industrial was the best performer.
- Income returns were positive across sectors.
- Appraisers are pricing in a recovery due to strong fundamentals in Industrial and Multifamily.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.
- Niche sectors such as self-storage and life sciences continued to be accretive.

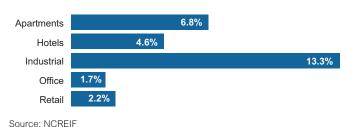
Compression in vacancy rates

- Vacancy rates kept compressing in Industrial and Multifamily as demand continued.
- Net operating income turned negative for Office as the Omicron variant delayed many return-to-work plans.
- 4Q21 rent collections were stable across all sectors.
- Demand outpaced supply as new construction of preleased Industrial and Multifamily occurred.

Global REITs and U.S. REITs outperform

- Global REITs outperformed in 4Q21, increasing 10.4% compared to 7.8% for global equities (MSCI World).
- U.S. REITs rose 16.3% in 4Q21, beating the S&P 500 Index, which gained 11.0%.
- Global REITs were trading below NAV, except for those in Australia, Japan, the United States, and Canada.
- Property sectors were mixed as out-of-favor sectors such as Office, Hotels, and Retail traded below NAV.
- 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.

Sector Quarterly Returns by Property Type



Callan Database Median and Index Returns* for Periods Ended 12/31/21

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	4.5	18.5	18.5	7.9	7.8	9.4	5.8
NFI-ODCE (value wt net)	7.7	21.1	21.1	8.2	7.7	9.4	5.8
NCREIF Property	6.1	17.7	17.7	8.4	7.8	9.3	7.2
NCREIF Farmland	3.8	7.8	7.8	5.2	5.7	9.7	10.6
NCREIF Timberland	4.6	9.2	9.2	3.7	3.6	5.3	5.1
Public Real Estate							
Global Real Estate Style	10.5	28.5	28.5	16.1	11.0	11.0	5.5
FTSE EPRA Nareit Developed	10.2	26.1	26.1	11.8	7.8	8.6	3.5
Global ex-U.S. Real Estate Style	3.2	10.8	10.8	10.8	9.7	10.1	3.9
FTSE EPRA Nareit Dev ex US	2.0	8.1	8.1	6.7	6.4	7.2	1.9
U.S. REIT Style	15.9	42.8	42.8	20.9	12.4	12.4	7.9
EPRA Nareit Equity REITs	16.3	43.2	43.2	18.4	10.8	11.4	6.9

*Returns less than one year are not annualized.

Sources: Callan, FTSE Russell, NCREIF

10 Callan Institute

A Big Bounce Back in 2021

PRIVATE EQUITY | Gary Robertson

Private equity has adapted well to the COVID environment with tremendous growth last year. On average, year-over-year transaction activity increased by 30% and dollar volumes by 70%.

Fundraising ► Based on preliminary data, in 2021 private equity partnerships holding final closes raised \$815 billion across 2,368 partnerships (unless otherwise noted, all data is from PitchBook and 4Q numbers are very preliminary). The dollar amount is only 5% away from 2020's total, while the number of partnerships trails by 22%; both will exceed 2020 when final tallies are concluded. 4Q21 had final closes totaling \$162 billion, up 5% from 3Q. The number of funds totaled 479, down 6%.

Buyouts ► New buyout investments for 2021 totaled 12,410, up 32% from 2020. Dollar volume increased 52% to \$797 billion. 4Q saw 3,022 new investments, a 1% decrease from 3Q, and dollar volume fell 20% to \$204 billion.

VC Investments ► The year produced 45,665 rounds of new investment in venture capital (VC) companies, up 13% from 2020. Announced volume of \$710 billion was up a stunning 99%. 4Q saw 10,196 new rounds, an 11% decline from 3Q, and dollar volume rose 11% to \$204 billion.

Exits ► Last year also saw 3,001 buyout-backed private M&A exits, up 31% from 2020, with proceeds of \$692 billion, up 66%. 4Q had 755 private exits, down 3% from 3Q, with proceeds of \$188 billion, down 11%. The year's 427 buyout-backed IPOs rose 150% from 2020, with proceeds of \$132 billion, up 76%. 4Q IPOs numbered 112, unchanged from 3Q, but proceeds of \$27 billion declined 16%.

Venture-backed M&A exits for the year totaled 3,080, up 40% from 2020. Announced dollar volume of \$218 billion was up 63%. The final quarter had 739 exits, down 10% from 3Q, and value of \$48 billion, down 24%. The year's 636 venture-backed IPOs rose 49% from 2020, with proceeds of \$201 billion, up 179%. There were 162 in 4Q, a 16% jump from 3Q, and the \$39 billion of proceeds rose 18%.

Funds Closed 1/1/21 to 12/31/21

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,536	230,022	28%
Growth Equity	176	103,648	13%
Buyouts	463	354,739	44%
Mezzanine Debt	20	14,163	2%
Distressed	32	48,573	6%
Energy	5	2,129	0%
Secondary and Other	99	52,651	6%
Fund-of-Funds	37	8,691	1%
Totals	2,368	814,616	100%

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

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/21*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	7.2	76.0	36.3	27.5	20.6	15.6	11.5	23.8
Growth Equity	4.4	52.3	29.0	24.3	18.1	15.6	14.7	16.4
All Buyouts	4.4	42.8	21.8	20.2	16.1	12.6	14.2	13.7
Mezzanine	3.0	22.2	11.8	12.4	12.2	11.0	10.5	10.4
Credit Opportunities	2.1	21.7	7.0	8.8	9.9	9.0	9.9	9.9
Control Distressed	7.2	42.6	16.6	14.3	13.5	10.8	11.7	11.9
All Private Equity	5.1	49.8	24.8	21.4	16.7	13.3	13.2	14.8
S&P 500	0.6	30.0	16.0	16.9	16.6	10.4	9.5	9.7
Russell 3000	-0.1	31.9	16.0	16.9	16.6	10.4	9.8	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

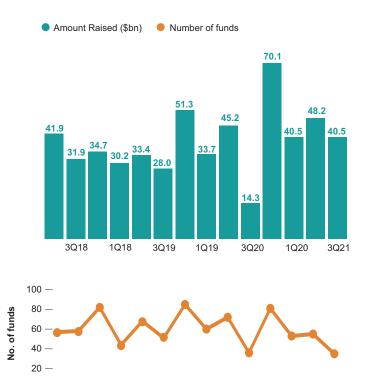
Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the Capital Markets Review and other Callan publications.

Strong Demand Due to Focus on Yield/Income

PRIVATE CREDIT | Catherine Beard

- The yield and income-generating characteristics of private credit remain attractive in a low-rate environment.
- In addition, many direct lending assets employ a floating rate, which can add protection against rising rates.
- Direct lending pricing is back to pre-COVID levels; portfolios were resilient during the COVID dislocation due to liquidity injected into the U.S. economy.
- That liquidity has also limited U.S. corporate stress and has muted the corporate distressed opportunity set.
- Opportunities within private credit include those that offer diversification through differentiated collateral and/or low correlation to public markets, including specialty finance, asset-backed lending, and niche areas (life science lending and intellectual property).
- Private credit performance varies across sub-asset class and underlying return drivers. On average, the asset class has generated net IRRs of 8% to 10% for trailing periods ended Dec. 31, 2020. Higher-risk strategies performed better than lower-risk strategies.
- Private credit fundraising tapered off in 3Q20 due to COVIDrelated disruption; it significantly rebounded in 4Q20 and the first half of 2021.
- There was strong fundraising activity in 2021 for senior debt and mezzanine capital, with a ramp-up in specialty finance, asset-backed lending, and venture debt.
- There has also been continued strong PC fundraising activity from large credit shops as well as new offerings from traditional fixed income managers.
- Consolidation is ramping up, with large traditional firms acquiring alternative credit managers, such as T. Rowe Price buying Oak Hill Advisors.

Private Credit Fundraising (\$bn)



Source: Preqin

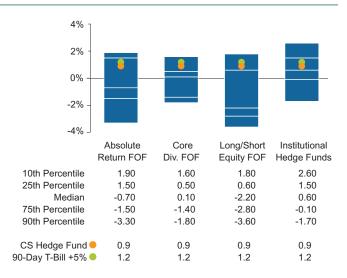
Hedge Funds Ended the Year on a Positive Note

HEDGE FUNDS/MACs | Joe McGuane

The fourth quarter saw a resurgence of COVID as the highly transmissible Omicron variant produced another wave of infections around the world, disrupting the positive momentum markets had experienced up to that point. Supply chain constraints continued, as service sectors were impacted by the new variant, and rising input prices persisted throughout the quarter. Further exacerbating markets were the hawkish comments made by Fed Chair Powell, opening the door to more aggressive tapering and rate increases next year. The confluence of a spike in COVID and the Fed now worried about curbing high inflation called into question the strength of economic growth moving forward. Investors grew concerned as they reassessed the probability of tighter monetary policy.

Despite increased market volatility during the final two months of the year, the S&P 500 (+11%) ended the quarter positive, with investors showing no sign of distress. This

Hedge Fund Style Group Returns



Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/21

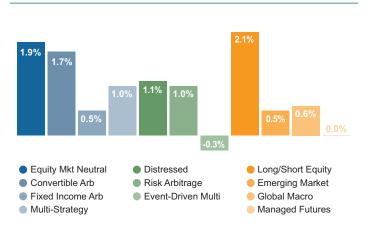
Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	0.6	9.3	6.4	5.4	6.1	7.0
Callan Fund-of-Funds Peer Group	-0.6	5.2	8.9	5.9	5.7	4.8
Callan Absolute Return FOF Style	-0.7	5.6	7.1	4.8	4.7	3.9
Callan Core Diversified FOF Style	0.1	6.2	8.5	5.7	5.5	4.4
Callan Long/Short Equity FOF Style	-2.2	3.3	12.6	8.3	7.1	5.5
BB GS Cross Asset Risk Premia 6% Vol Idx	-2.7	-0.5	1.4	1.9	3.7	5.2
Credit Suisse Hedge Fund	0.9	8.2	8.0	5.5	4.9	4.3
CS Convertible Arbitrage	1.7	6.3	8.2	5.4	4.6	4.3
CS Distressed	1.1	12.5	5.8	4.6	5.3	4.2
CS Emerging Markets	0.5	5.2	10.2	7.1	6.0	4.8
CS Equity Market Neutral	1.9	6.2	3.1	2.5	1.8	-1.2
CS Event-Driven Multi	-0.3	13.9	10.7	6.4	5.2	4.6
CS Fixed Income Arb	0.5	5.2	5.0	4.5	4.6	3.8
CS Global Macro	0.6	9.6	8.8	5.6	4.4	5.8
CS Long/Short Equity	2.1	8.4	9.4	7.2	6.7	5.1
CS Managed Futures	0.0	8.2	6.3	3.0	1.8	2.8
CS Multi-Strategy	1.0	7.0	6.6	5.1	6.2	5.2
CS Risk Arbitrage	1.0	5.3	8.6	6.3	4.4	4.3
HFRI Asset Wtd Composite	1.3	7.5	5.7	4.6	4.6	
90-Day T-Bill + 5%	1.2	5.1	6.0	6.1	5.6	5.9

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

equity market surge was aided by strength in U.S. mega caps, while risker equities underperformed in December, particularly within areas of technology such as software, fintech, and electric vehicles, all of which cooled off dramatically. U.S. small cap equities underperformed large cap due to worries around future growth. The Bloomberg High Yield Index ended the quarter higher (+0.7%), as the U.S. yield curve flattened throughout the quarter, driven by concerns for future growth amid expected tightening policies from central banks.

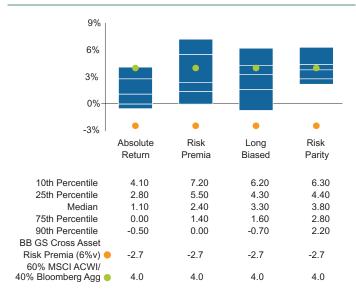
Representing hedge funds reporting performance without implementation costs, the HFRI Fund Weighted Composite

Credit Suisse Hedge Fund Strategy Returns



Source: Credit Suisse

MAC Style Group Returns



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

Index gained 0.4% in 4Q. Within the HFRI indices, the bestperforming strategy was Event Driven (+1.5%), as an abundance of corporate activity created alpha opportunities. Equity hedge ended higher (+0.8%), when value positioning paid off. Macro strategies had a difficult quarter (-0.5%), after interest rate volatility went against some manager positions.

Across the Callan Hedge FOF Database, the median Absolute Return FOF lost 0.7%. With exposures to non-directional and directional styles, the Core Diversified FOF rose 0.7%. Long/Short Equity FOF was negative at 2.2%, after a difficult December where growth equities sold off aggressively. Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group added 0.6%.

Since the Global Financial Crisis, liquid alternatives to hedge funds have become popular for their attractive risk-adjusted returns uncorrelated with stock and bond investments but offered at a lower cost. Much of that interest is focused on rules-based, long-short strategies that isolate risk premia such as value, momentum, and carry. These alternative risk premia are often embedded in hedge funds as well as other actively managed investment products.

In 4Q, the Bloomberg GSAM Risk Premia Index decreased 2.7% based upon a 6% volatility target. Within the underlying styles of the index, Equity Low Risk L/S (+5.9%) and Equity Trend (+1.6%) ended the quarter in positive territory as growth sold off relative to value in December. Equity Momentum (-4.8%) and FX Carry (-3.0%) had a difficult quarter as market volatility was elevated throughout the final month of the year.

The median managers of the Callan Multi-Asset Class (MAC) Style Groups generated gains gross of fees. The Callan Risk Premia MAC rose 2.4% based on its exposures to uncorrelated style premia targeting 5% to 15% portfolio volatility. The Callan Risk Parity MAC, which typically targets an equal risk-weighted allocation to the major asset classes with leverage, was up 3.8%. As the most conservative MAC style focused on nondirectional strategies of long and short asset class exposures, the Callan Absolute Return MAC gained 1.1%.

Index Declines Slightly in 3Q21, First Time Since 1Q20

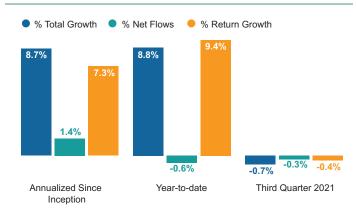
DEFINED CONTRIBUTION | Patrick Wisdom

- The Callan DC Index[™] fell 0.4% in 3Q21, the first decline since the pandemic-induced 15.0% 1Q20 plunge.
- The Age 45 Target Date Fund (analogous to the 2040 vintage) had a slightly lower return (-0.8%), attributable to its higher allocation to equity, which underperformed fixed income during the quarter.
- Balances within the DC Index declined by 0.7%. Investment returns (-0.4%) and net flows (-0.3%) both contributed to the lower aggregate balances.
- For the third straight quarter, target date funds received the largest net inflows, at 75.6% for the quarter.
- In a reversal from 2Q21, investors transferred assets into money market funds (13.1%). U.S. fixed income (-2.4%) had net outflows, albeit to a much smaller degree than the previous quarter (-17.7%).
- U.S. equity saw material net outflows, as U.S. large cap (-54.2%) and U.S. small/mid cap (-21.8%) drained assets.
 Global ex-U.S. equity (-1.0%) had smaller net outflows.
- Real return/TIPS also had larger-than-typical net inflows (4.8%), perhaps an indication that more participants are looking to hedge potential inflation.
- Turnover (i.e., net transfer activity levels within DC plans) decreased in 3Q to 0.19% from 2Q's measure of 0.37%.
- The Index's overall allocation to equity (72.23%) increased by 3 basis points.
- In a reversal from the previous quarter, U.S. small/mid cap (8.3%) had the largest percentage decrease in allocation.
- Company stock (2.5%) had the largest percentage increase in allocation.
- For plans with more than \$1 billion in assets, the average asset-weighted investment management fee decreased by 1 basis point. Plans with assets between \$500 million and \$1 billion also saw a fee decrease of 1 basis point, while the fee for plans with assets less than \$500 million had the largest decrease of 3 basis points.

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.

Total DC Index Age 45 Target Date* 7.3% 7.9% 9.4% 10.3% -0.4% -0.4% -0.8% Annualized Since Inception Year-to-date Third Quarter 2021

Growth Sources



Net Cash Flow Analysis (3Q21)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	75.56%
Money Market	13.14%
U.S. Small/Mid Cap	-21.76%
U.S. Large Cap	-54.20%
Total Turnover**	0.19%

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

Note: DC Index inception date is January 2006.

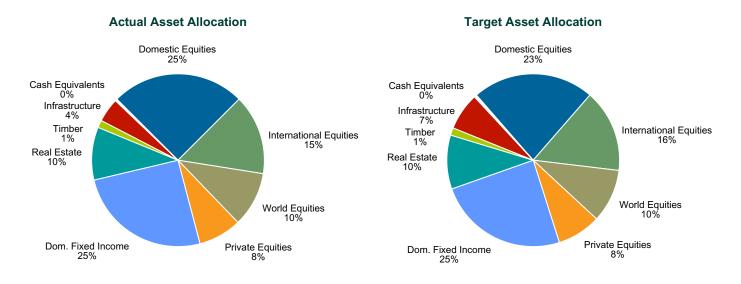
- * The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

Investment Performance

NDSIB - Consolidated Pension Trust

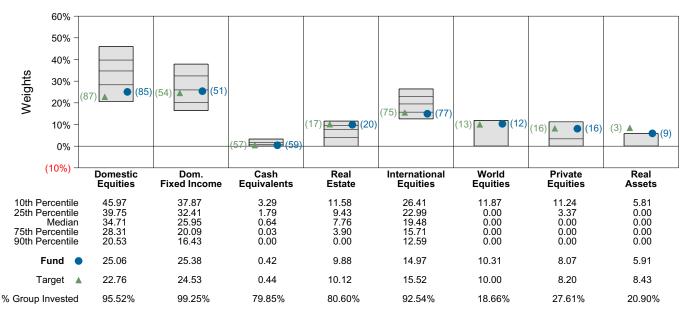
Actual vs Target Asset Allocation As of December 31, 2021

The top left chart shows the Fund's asset allocation as of December 31, 2021. 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.

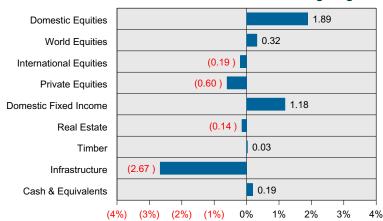


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	1,972,924	25.1%	22.8%	2.3%	180,420
International Equities	1,178,930	15.0%	15.5%	(0.5%)	(42,898)
World Equities	812,111	10.3%	10.0%	0.3%	24,680
Private Equities	635,525	8.1%	8.2%	(0.1%)	(10,259)
Dom. Fixed Income	1,998,573	25.4%	24.5%	0.9%	67,371
Real Estate	778,100	9.9%	10.1%	(0.2%)	(18,978)
Timber	113,973	1.4%	1.4%	0.0%	0
Infrastructure	351,113	4.5%	7.0%	(2.5%)	(198,807)
Cash Equivalents	33,062	0.4%	0.4%	(0.0%)	(1,529)
Total	7,874,310	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database

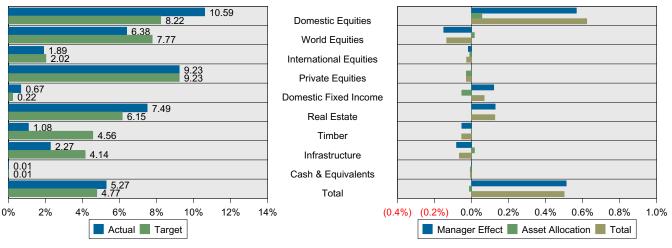


The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation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



Asset Class Under or Overweighting

Actual vs Target Returns



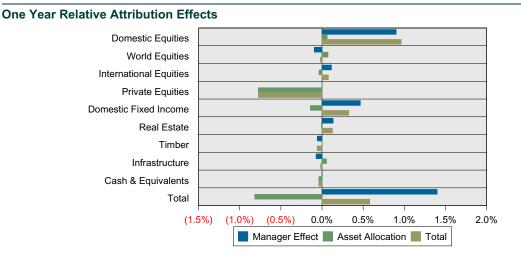
Relative Attribution Effects for Quarter ended December 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	23%	10.59%	8.22%	0.57%	0.06%	0.62%
World Equities	10%	10%	6.38%	7.77%	(0.15%)	0.02%	(0.14%)
International Equities	15%	16%	1.89%	2.02%	(0.02%)	(0.01%)	(0.03%)
Private Equities	8%	8%	9.23%	9.23%	`0.00%´	(0.03%)	(0.03%)
Domestic Fixed Incom	e 26%	25%	0.67%	0.22%	0.12%	(0.05%)	0.07%
Real Estate	10%	10%	7.49%	6.15%	0.13%	(0.00%)	0.13%
Timber	1%	1%	1.08%	4.56%	(0.05%)	(0.00%)	(0.05%)
Infrastructure	4%	7%	2.27%	4.14%	(0.08%)	0.02%	(0.07%)
Cash & Equivalents	1%	0%	0.01%	0.01%	(0.00%)	(0.01%)	(0.01%)
Total			5.27% =	4.77%	+ 0.51% +	(0.01%)	0.50%

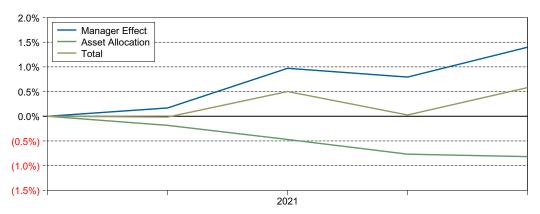
* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.5% CPI All Urban Cons lagged 3 months, 3.5% NCREIF NFI-ODCE Eq Wt Net, 1.4% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

Relative Attribution by Asset Class

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



Cumulative Relative Attribution Effects

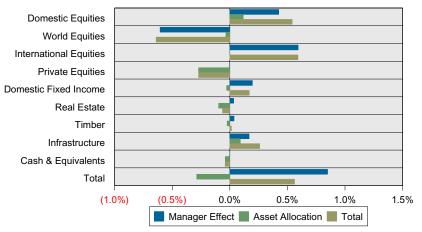


One Year Relative Attribution Effects

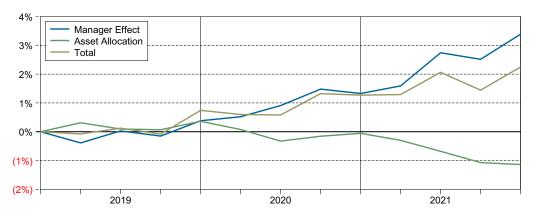
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	23%	28.00%	24.15%	0.90%	0.06%	0.96%
World Equities	12%	10%	20.57%	21.82%	(0.09%)	0.07%	(0.02%)
International Equities	16%	16%	9.40%	8.73%	0.12%	(0.04%)	0.08%
Private Equities	6%	8%	57.24%	57.24%	0.00%	(0.77%)	(0.77%)
Domestic Fixed Incom	e 25%	25%	2.12%	0.49%	0.47%	(0.14%)	0.32%
Real Estate	10%	10%	19.15%	17.70%	0.14%	(0.01%)	0.13%
Timber	2%	2%	5.66%	9.17%	(0.06%)	(0.00%)	(0.06%)
Infrastructure	4%	7%	11.51%	13.37%	(0.07%)	0.05%	(0.02%)
Cash & Equivalents	1%	0%	0.06%	0.05%	0.00%	(0.04%)	(0.04%)
Total			16.72% =	= 16.14%	+ 1.40% +	(0.82%)	0.58%

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





Cumulative Relative Attribution Effects

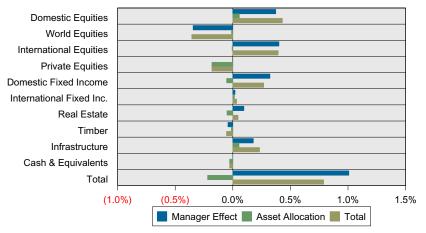


Three Year Annualized Relative Attribution Effects

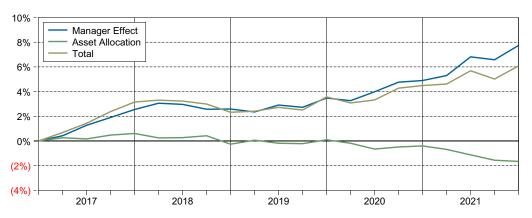
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	27.00%	24.93%	0.43%	0.12%	0.54%
World Equities	14%	14%	17.36%	21.70%	(0.61%)	(0.03%)	(0.64%)
International Equities	15%	15%	17.30%	13.35%	0.59%	(0.00%)	0.59%
Private Equities	5%	7%	23.62%	23.62%	0.00%	(0.27%)	(0.27%)
Domestic Fixed Incom	e 24%	24%	6.77%	6.08%	0.20%	(0.03%)	`0.17%´
Real Estate	11%	10%	8.68%	8.37%	0.03%	(0.10%)	(0.06%)
Timber	2%	2%	4.90%	3.69%	0.04%	(0.02%)	`0.01%´
Infrastructure	5%	6%	8.83%	5.82%	0.17%	`0.09%´	0.26%
Cash & Equivalents	1%	0%	0.92%	0.99%	(0.00%)	(0.04%)	(0.04%)
Total			15.73% =	= 15.17%	+ 0.85% +	(0.29%)	0.56%

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

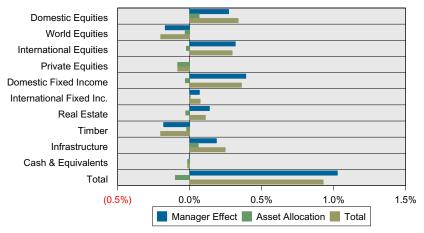


Five Year Annualized Relative Attribution Effects

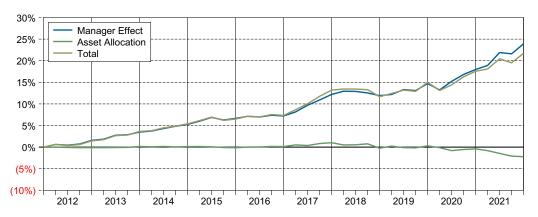
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	18.78%	17.03%	0.37%	0.06%	0.43%
World Equities	15%	15%	12.55%	15.03%	(0.34%)	(0.01%)	(0.36%)
International Equities	16%	15%	12.29%	9.69%	0.40%	(0.01%)	0.39%
Private Equities	4%	7%	16.43%	16.43%	0.00%	(0.18%)	(0.18%)
Domestic Fixed Income	23%	22%	5.80%	4.39%	0.32%	(0.05%)	0.27%
International Fixed Inc.	1%	1%	-	-	0.02%	0.01%	0.03%
Real Estate	11%	10%	8.65%	7.75%	0.10%	(0.05%)	0.05%
Timber	2%	2%	1.97%	3.58%	(0.04%)	(0.01%)	(0.05%)
Infrastructure	5%	6%	8.49%	4.85%	0.18%	0.05%	0.23%
Cash & Equivalents	1%	0%	1.15%	1.14%	(0.00%)	(0.03%)	(0.03%)
Total			11.83% =	11.04% +	+ 1.01% +	(0.22%)	0.79%

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

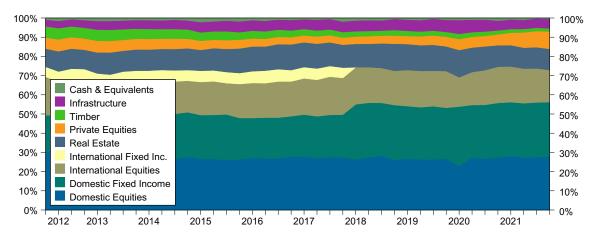


Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	17.12%	15.86%	0.27%	0.07%	0.34%
World Equities	15%	14%	11.28%	12.70%	(0.17%)	(0.03%)	(0.20%)
International Equities	15%	15%	9.66%	7.57%	0.32%	(0.02%)	0.30%
Private Equities	4%	6%	8.98%	8.98%	0.00%	(0.08%)	(0.08%)
Domestic Fixed Income	21%	20%	5.94%	4.02%	0.39%	(0.03%)	0.36%
International Fixed Inc.	3%	3%	-	-	0.07%	0.00%	0.07%
Real Estate	10%	10%	10.73%	9.32%	0.14%	(0.03%)	0.11%
Timber	3%	3%	1.08%	5.30%	(0.18%)	(0.02%)	(0.20%)
Infrastructure	4%	5%	7.30%	2.99%	0.19%	0.06%	0.25%
Cash & Equivalents	1%	1%	0.65%	0.63%	0.00%	(0.01%)	(0.01%)
Total			10.37% =	9.44% ·	+ 1.03% +	(0.10%)	0.93%

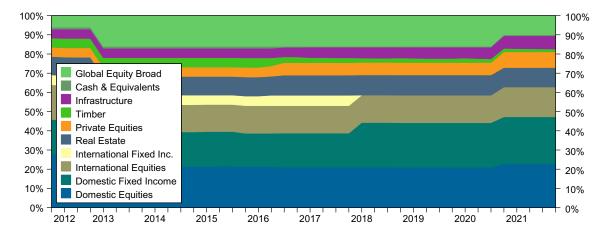
Actual vs Target Historical Asset Allocation

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.

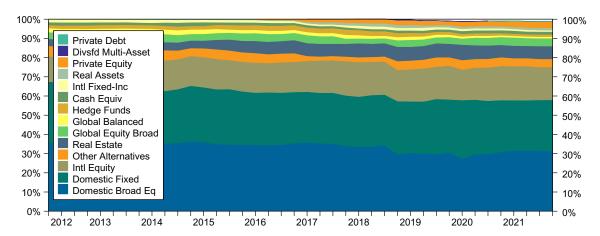


Actual Historical Asset Allocation

Target Historical Asset Allocation





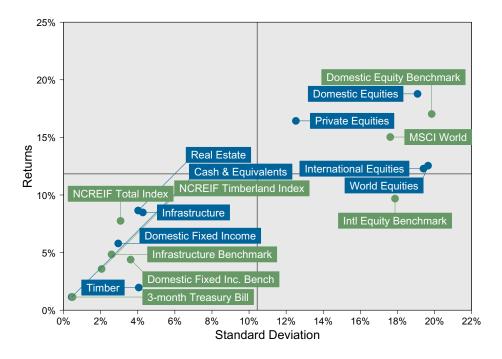




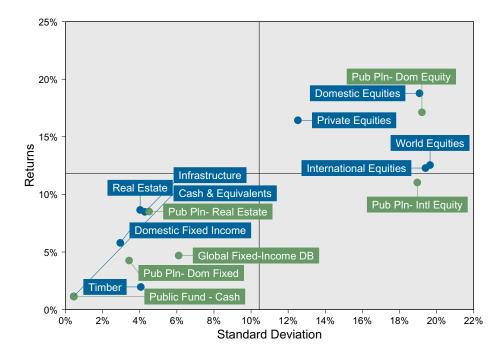
Asset Class Risk and Return

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



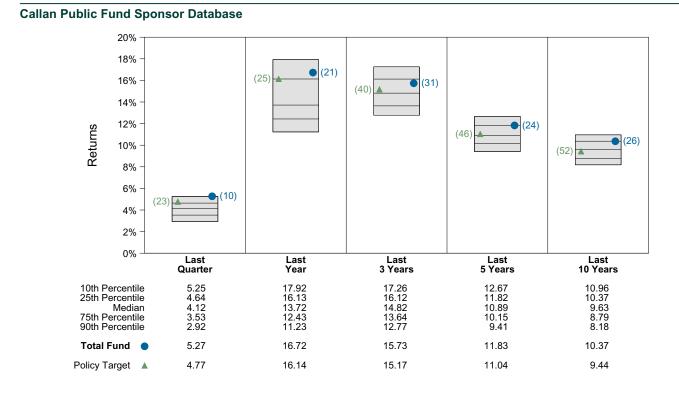
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



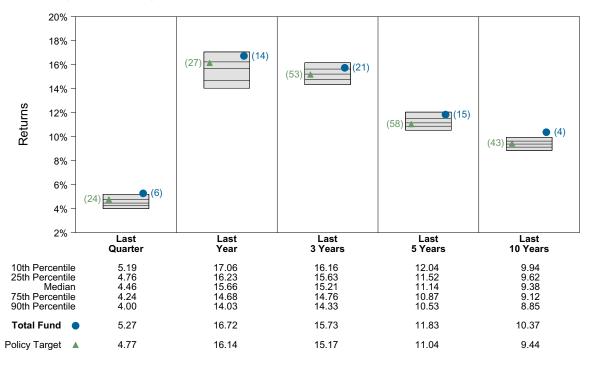
Callan

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, 2021. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



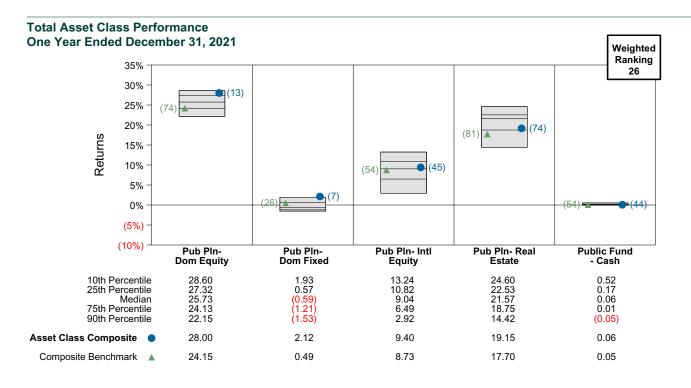
Asset Allocation Adjusted Ranking

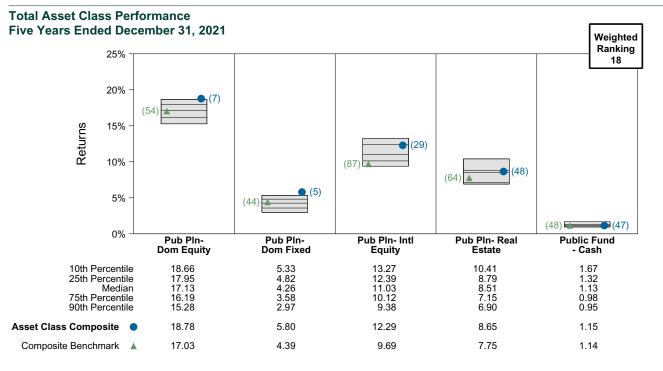




Asset Class Rankings

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







Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2021, with the distribution as of September 30, 2021. 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.

	December 31, 2021			September 30, 2021		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	\$4,599,489,593	58.41%	\$(142,337,008)	\$318,842,470	\$4,422,984,131	58.85%
Public Equities	\$3,963,964,692	50.34%	\$(160,962,610)	\$265,825,477	\$3,859,101,825	51.35%
World Equities	\$812,111,173	10.31%	\$(86,232,338)	\$50,320,564	\$848,022,946	11.28%
EPOCH Investment Partners	356,338,094	4.53%	(59,617,115)	28,656,979	387,298,230	5.15%
LSV Asset Management	455,773,078	5.79%	(26,615,223)	21,663,585	460,724,716	6.13%
Domestic Equities	\$1,972,923,725	25.06%	\$(50,992,353)	\$193,020,712	\$1,830,895,366	24.36%
Large Cap	\$1,593,783,419	20.24%	\$(40,390,214)	\$175,154,794	\$1,459,018,839	19.41%
L.A. Capital	633,252,633	8.04%	(40,312,054)	77,534,364	596,030,323	7.93%
LACM Enhanced Index	323,828,361	4.11%	(78,160)	31,767,130	292,139,391	3.89%
Northern Trust AM Enh S&P 500	310,859,768	3.95%	Ó	34,191,720	276,668,048	3.68%
Parametric Enh S&P 500	325,842,656	4.14%	0	31,661,580	294,181,076	3.91%
Small Cap	\$379,140,306	4.81%	\$(10,602,139)	\$17,865,918	\$371,876,527	4.95%
Atlanta Capital	129,765,296	1.65%	(174,456)	13,100,134	116,839,619	1.55%
Riverbridge Small Cap Growth	116,963,965	1.49%	(2,729,066)	(6,000,538)	125,693,569	1.67%
Sycamore Small Cap Value	132,411,045	1.68%	(7,698,616)	10,766,322	129,343,339	1.72%
International Equities	\$1,178,929,794	14.97%	\$(23,737,919)	\$22,484,201	\$1,180,183,512	15.70%
Developed	\$915,926,168	11.63%	\$(18,995,390)	\$24,533,895	\$910,387,662	12.11%
DFA Int'l Small Cap	92,977,632	1.18%	0	1,786,760	91,190,872	1.21%
Northern Trust AM World Ex US	443,868,404	5.64%	(33,713)	15,320,329	428,581,787	5.70%
Wellington Management Co.	101,817,791	1.29%	(212,878)	(930,776)	102,961,445	1.37%
William Blair	277,262,342	3.52%	(18,748,799)	8,357,583	287,653,558	3.83%
Emerging Markets	\$263,003,626	3.34%	\$(4,742,530)	\$(2,049,694)	\$269,795,850	3.59%
Axiom	193,781,211	2.46%	(242,530)	(2,800,897)	196,824,638	2.62%
DFA	69,222,415	0.88%	(4,500,000)	751,203	72,971,212	0.97%

Asset Distribution Across Investment Managers

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2021, with the distribution as of September 30, 2021. 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.

	December 31, 2021				September 3	otember 30, 2021	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Private Equities	\$635,524,901	8.07%	\$18,625,602	\$53,016,993	\$563,882,306	7.50%	
Adams St Direct Co-Invest Fund	13,150	0.00%	(154,282)	(966)	168,398	0.00%	
Adams St Direct Fund 2010	920,786	0.01%	(35,857)	59,290	897,353	0.01%	
Adams St 1998 Partnership	13,200	0.00%	Ó	163	13,037	0.00%	
Adams St 1999 Partnership	130,672	0.00%	0	13	130,659	0.00%	
Adams St 2000 Partnership	296,540	0.00%	0	(8,080)	304,620	0.00%	
Adams St 2001 Partnership	612,586	0.01%	0	(159,485)	772,071	0.01%	
Adams St 2002 Partnership	134,200	0.00%	0	(2,155)	136,355	0.00%	
Adams St 2003 Partnership	105,340	0.00%	0	(35,619)	140,959	0.00%	
Adams St 2010 Partnership	6,800,158	0.09%	(695,081)	724,149	6,771,090	0.09%	
Adams St 2008 Fund	6,374,793	0.08%	(706,030)	19,914	7,060,909	0.09%	
Adams St 2000 Non-US	193,711	0.00%	Ó	(25,703)	219,414	0.00%	
Adams St 2001 Non-US	94,563	0.00%	0	(3,517)	98,080	0.00%	
Adams St 2002 Non-US	91,072	0.00%	0	11,842	79,230	0.00%	
Adams St 2003 Non-US	147,585	0.00%	0	(8,198)	155,783	0.00%	
Adams St 2004 Non-US	244,564	0.00%	0	(20,059)	264,623	0.00%	
Adams St 2010 Non-US	2,990,802	0.04%	(347,755)	47,458	3,291,099	0.04%	
Adams St 2010 Non-US Emg	1,950,397	0.02%	(422,730)	157,712	2,215,415	0.03%	
Adams St 2015 Global Fund	48,226,677	0.61%	(3,979,103)	4,226,088	47,979,692	0.64%	
Adams St 2016 Global Fund	38,691,832	0.49%	(1,073,300)	3,859,709	35,905,423	0.48%	
Adams St 2017 Global Fund	77,603,521	0.99%	(1,844,070)	8,618,390	70,829,201	0.94%	
Adams St 2018 Global Fund	57,916,418	0.74%	462,738	6,375,205	51,078,475	0.68%	
Adams St 2019 Global Fund	39,697,312	0.50%	2,873,254	4,541,290	32,282,768	0.43%	
Adams St 2020 Global Fund	19,078,838	0.24%	5,148,000	1,516,586	12,414,252	0.17%	
Adams St 2021 Global Fund	3,000,000	0.04%	3,000,000	0	-	-	
BlackRock	209,701,464	2.66%	1,133,639	22,014,204	186,553,621	2.48%	
Blackrock PEP 2020	29,501,665	0.37%	6,196,364	2,120,888	21,184,413	0.28%	
Sixth Street TAO	45,697,267	0.58%	9,056,774	1,123,274	35,517,219	0.47%	
Remaining Misc. Funds*	45,295,788	0.58%	13,041	(2,135,400)	47,418,147	0.63%	

Asset Distribution Across Investment Managers

* 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, 2021, with the distribution as of September 30, 2021. 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.

	December 31, 2021				September 30, 2021		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Global Fixed Income	\$1,998,573,310	25.38%	\$80,143,577	\$13,184,079	\$1,905,245,654	25.35%	
Domestic Fixed Income	\$1,998,573,310	25.38%	\$80,143,577	\$13,184,079	\$1,905,245,654	25.35%	
Investment Grade	\$1,484,336,343	18.85%	\$62,201,661	\$6,307,921	\$1,415,826,761	18.84%	
Declaration Total Return	157,812,714	2.00%	(103,553)	(447,912)	158,364,179	2.11%	
PIMCO DISCO II	101,534,514	1.29%	Ó	802,588	100,731,926	1.34%	
PIMCO Core Plus Constrained	513,076,455	6.52%	25,851,972	211,235	487,013,248	6.48%	
Prudential Core	517,381,326	6.57%	25,860,060	(29,274)	491,550,540	6.54%	
SSgA Long US Treas Index	194,531,335	2.47%	10,593,183	5,771,285	178,166,868	2.37%	
Below Investment Grade	\$514,236,966	6.53%	\$17,941,915	\$6,876,158	\$489,418,893	6.51%	
Ares ND Credit Strategies Fd	146,784,444	1.86%	3,475,410	3,410,158	139,898,876	1.86%	
Cerberus ND Private Credit Fd	162,158,253	2.06%	15,400,000	3,175,835	143,582,418	1.91%	
Goldman Sachs 2006 Offshore	48,231	0.00%	0	1,230	47,001	0.00%	
Goldman Sachs Offshore V	128,336	0.00%	0	1,186	127,150	0.00%	
Loomis Sayles	192,654,446	2.45%	(226,922)	(243,343)	193,124,711	2.57%	
PIMCO Bravo II Fund	12,463,256	0.16%	(706,573)	531,092	12,638,737	0.17%	
Global Real Assets	\$1,243,185,715	15.79%	\$7,557,519	\$63,443,873	\$1,172,184,323	15.60%	
Real Estate	\$778,099,555	9.88%	\$(12,735,857)	\$55,033,985	\$735,801,428	9.79%	
Invesco Core Real Estate	377,246,272	4.79%	(307,126)	26,538,805	351,014,594	4.67%	
Invesco Fund III	230,975	0.00%	0	(1,301)	232,276	0.00%	
Invesco Asia RE Fund III	19,353,888	0.25%	0	69.591	19,284,297	0.26%	
Invesco Value Added Fd IV	10,350,356	0.13%	(10,989,890)	646,545	20,693,701	0.28%	
Invesco Value Added Fd V	62,987,109	0.80%	(1,438,841)	5,209,702	59,216,248	0.79%	
JP Morgan	307,280,889	3.90%	0	22,556,449	284,724,440	3.79%	
JP Morgan Greater European Opp Fd	650,066	0.01%	0	14,194	635,872	0.01%	
Other Real Assets	\$465,086,160	5.91%	\$20,293,376	\$8,409,889	\$436,382,896	5.81%	
Infrastructure	\$351,113,231	4.46%	\$24,105,376	\$7,177,702	\$319,830,154	4.26%	
ISQ Global Infrastructure II	58,760,832	0.75%	0	2,086,741	56,674,091	0.75%	
ISQ Global Infrastructure III	4,712,891	0.06%	4,712,891	0	-	-	
The Rohatyn Group	16,016,346	0.20%	105,917	221,480	15,688,949	0.21%	
JP Morgan IIF	128,192,936	1.63%	(3,698,690)	375,746	131,515,880	1.75%	
Grosvenor Cust. Infrastructure	11,365,378	0.14%	(736,346)	287,193	11,814,531	0.16%	
Grosvenor Cust. Infrastructure II	23,067,433	0.29%	(1,454,524)	347,916	24,174,041	0.32%	
Grosvenor Cust. Infrastructure III	8,000,000	0.10%	8,000,000	0	-	-	
Macquarie Infrastructure Fund IV	65,280,695	0.83%	(36,143)	1,879,984	63,436,854	0.84%	
Macquarie Infrastructure Fund V	35,716,721	0.45%	17,212,271	1,978,642	16,525,808	0.22%	
Timber	\$113,972,929	1.45%	\$(3,812,000)	\$1,232,187	\$116,552,742	1.55%	
TIR Teredo	27,185,857	0.35%	(1,000,000)	508,644	27,677,213	0.37%	
TIR Springbank	86,787,072	1.10%	(2,812,000)	723,543	88,875,529	1.18%	
Cash	\$33,061,757	0.42%	\$18,228,360	\$4,717	\$14,828,679	0.20%	
Northern Trust Cash Account	22,464,049	0.29%	18,228,360	2,848	4,232,841	0.06%	
Bank of ND	10,597,708	0.13%	0	1,870	10,595,838	0.14%	
Total Fund	\$7,874,310,375	100.0%	\$(36,407,553)	\$395,475,140	\$7,515,242,787	100.0%	

Asset Distribution Across Investment Managers

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. 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.

r	Returns for Periods Ended December 31, 2021				
	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Equities	7.0.10/	04.000/	04.000/	15 100/	10.10%
Gross Net	7.31% 7.25%	24.06% 23.73%	21.92% 21.64%	15.42% 15.16%	13.12% 12.80%
Weighted Benchmark	6.61%	23.88%	21.64%	15.02%	12.50%
Wolghou Bohonman	0.0170	20.0070	21.0170	10.02 /0	12.01 /0
Public Equities					
Gross Net	7.01% 6.94%	20.44% 20.09%	21.36% 21.06%	-	-
Weighted Benchmark	6.12%	18.57%	20.54%	-	-
Wolghod Bohonman	0.1270	10.01 /0	20.0170		
Vorld Equities					
Gross Net	6.38% 6.29%	20.57% 20.12%	17.36% 16.94%	12.55% 12.15%	11.28% 10.73%
MSCI World	7.77%	21.82%	21.70%	15.03%	12.70%
EPOCH Investment - Gross(1)	8.25%	18.28%	18.93%	15.11%	12.36%
EPOCH Investment - Net	8.07%	17.46%	18.18%	14.38%	11.64%
MSCI World	7.77%	21.82%	21.70%	15.03%	12.70%
LSV Asset Management - Gross(2)	4.88%	22.39%	15.94%	10.46%	-
LSV Asset Management - Net	4.86%	22.26%	15.82%	10.33%	-
Benchmark(4)	6.10%	18.22%	20.38%	14.64%	-
Domestic Equities					
Gross	10.59%	28.00%	27.00%	18.78%	17.12%
Net	10.54%	27.68%	26.76%	18.57%	16.88%
Weighted Benchmark	8.22%	24.15%	24.93%	17.03%	15.86%
arge Cap					
Gross	12.08%	30.82%	29.32%	20.51%	18.07%
Net	12.05%	30.60%	29.18%	20.39%	17.91%
Large Cap Benchmark(3)	9.78%	26.45%	26.21%	18.43%	16.54%
LA Conital Cross	13.13%	31.80%	34.57%	24.57%	20.07%
L.A. Capital - Gross L.A. Capital - Net	13.08%	31.56%	34.31%	24.37%	19.83%
Russell 1000 Growth Index	11.64%	27.60%	34.08%	25.32%	19.79%
LACM Enhanced Index - Goss	10.87%	29.04%	26.68%	18.15%	16.94%
LACM Enhanced Index - Net Russell 1000 Index	10.85% 9.78%	28.91% 26.45%	26.55% 26.21%	18.02% 18.43%	16.81% 16.54%
	5.10%	20.40%	20.2170	10.43%	10.54%
Northern Tr AM Enh S&P500 - Gross	12.36%	33.05%	23.05%	16.41%	15.64%
Northern Tr AM Enh S&P500 - Net	12.36%	33.05%	23.05%	16.41%	15.46%
S&P 500 Index	11.03%	28.71%	26.07%	18.47%	16.55%
Parametric Enh S&P500 - Gross	10.76%	28.33%	26.95%	18.48%	16.72%
Parametric Enh S&P500 - Net	10.76%	27.90%	26.90%	18.45%	16.66%
S&P 500 Index	11.03%	28.71%	26.07%	18.47%	16.55%
mall Can					
Small Cap Gross	4.81%	16.97%	18.60%	12.70%	13.58%
Net	4.65%	16.29%	18.02%	12.21%	13.09%
Russell 2000 Index	2.14%	14.82%	20.02%	12.02%	13.23%
Atlanta Capital - Gross	11 010/	20 100/	10 020/	14 07%	
Atlanta Capital - Gross Atlanta Capital - Net	11.21% 11.06%	20.10% 19.40%	19.83% 19.07%	14.97% 14.21%	-
S&P 600 Small Cap Index	5.64%	26.82%	20.11%	12.42%	- 14.50%
·					
Riverbridge Small Cap Growth - Gross	(4.98%)	4.61%	-	-	-
Riverbridge Small Cap Growth - Net Russell 2000 Growth Index	(<mark>5.15%)</mark> 0.01%	3.94%	- 21.17%	- 14.53%	- 14.14%
	0.01%	2.83%	∠1.1770	14.00%	14.14%
Sycamore Small Cap Value - Gross	8.54%	26.65%	-	-	-
Sycamore Small Cap Value - Net	8.38%	25.98%	-	-	-
Russell 2000 Value Index	4.36%	28.27%	17.99%	9.07%	12.03%

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



The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Retu	rns for Period	s Ended Decem	ber 31, 2021		
	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
International Equities					
Gross	1.89%	9.40%	17.30%	12.29%	9.66%
Net	1.83%	9.05%	16.99%	12.04%	9.37%
Weighted Benchmark	2.02%	8.73%	13.35%	9.69%	7.57%
Developed					
Gross	2.69%	12.10%	17.74%	12.16%	10.16%
Net	2.64%	11.87%	17.50%	11.92%	9.88%
Benchmark(1)	3.14%	12.62%	14.07%	9.63%	8.10%
DFA Int'l Small Cap Value - Net	1.96%	15.89%	12.23%	6.77%	9.13%
World ex US SC Value	0.72%	13.27%	12.59%	8.30%	8.85%
Northern Tr AM World ex US - Gross	3.57%	12.94%	14.46%	10.03%	-
Northern Tr AM World ex US - Net	3.57%	12.91%	14.42%	10.00%	-
MSCI World ex US	3.14%	12.62%	14.07%	9.63%	7.84%
Wellington Management - Gross	(0.91%)	8.48%	16.92%	11.38%	12.19%
Wellington Management - Net	(1.11%)	7.62%	15.95%	10.46%	11.26%
BMI, EPAC, <\$2 B	(1.67%)	8.50%	13.66%	9.37%	9.52%
William Blair - Gross	2.78%	10.84%	23.94%	17.26%	-
William Blair - Net	2.70%	10.48%	23.52%	16.85%	-
MSCI ACWI ex US IMI	1.64%	8.53%	13.62%	9.83%	7.57%
Emerging Markets					
Gross	(0.81%)	0.93%	15.95%	12.64%	7.55%
Net	(0.90%)	0.22%	15.46%	12.35%	7.23%
Emerging Mkts - Net	(1.31%)	(2.54%)	10.94%	9.88%	5.49%
Axiom - Gross(2)	(1.42%)	(3.37%)	16.54%	13.27%	-
Axiom - Net	(1.55%)	(4.29%)	15.87%	12.88%	-
Emerging Mkts - Net	(1.31%)	(2.54%)	10.94%	9.88%	5.49%
DFA - Net	0.98%	14.58%	14.42%	10.81%	7.90%
Emerging Mkts - Net	(1.31%)	(2.54%)	10.94%	9.88%	5.49%

(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.

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
vate Equities*					
Net	9.23%	57.24%	23.62%	16.43%	8.96%
Adams St Direct Co-Invest Fund	(0.57%)	(13.01%)	(32.67%)	(28.56%)	(9.58%)
Adams St Direct Fund 2010	6.88%	37.50%	13.16%	17.29%	14.96%
Adams St 1998 Partnership	1.25%	(1.34%)	(0.28%)	1.24%	2.73%
Adams St 1999 Partnership	0.01%	0.73%	(0.27%)	0.90%	2.31%
Adams St 2000 Partnership	(2.65%)	(4.44%)	(5.05%)	1.33%	0.84%
Adams St 2001 Partnership	(20.66%)	0.04%	1.56%	3.68%	5.09%
Adams St 2002 Partnership	(1.58%)	(2.00%)	(4.77%)	(1.83%)	3.08%
Adams St 2003 Partnership	(25.27%)	(26.56%)	(13.94%)	(3.97%)	3.11%
Adams St 2010 Partnership	11.36%	79.39%	40.94%	29.78%	21.36%
Adams St 2008 Fund	0.31%	36.02%	21.54%	20.23%	15.35%
Adams St 2000 Non-US	(11.71%)	(13.66%)	(5.75%)	0.90%	(0.97%)
Adams St 2001 Non-US	(3.59%)	(0.19%)	5.51%	6.11%	9.32%
Adams St 2002 Non-US	14.95%	5.59%	(0.61%)	0.62%	2.80%
Adams St 2003 Non-US	(5.26%)	(8.73%)	(10.04%)	(2.78%)	5.71%
Adams St 2004 Non-US	(7.58%)	31.93%	10.92%	9.31%	7.20%
Adams St 2010 Non-US	1.53%	43.96%	26.40%	24.10%	16.28%
Adams St 2010 Non-US Emg	8.29%	55.70%	24.08%	20.11%	11.49%
Adams St 2015 Global Fund	8.85%	78.44%	33.94%	29.57%	-
Adams St 2016 Global Fund	10.78%	72.68%	28.74%	29.95%	-
Adams St 2017 Global Fund	12.20%	75.78%	30.07%	-	-
Adams St 2018 Global Fund	11.92%	77.90%	34.52%	-	-
Adams St 2019 Global Fund	13.62%	142.33%	-	-	-
Adams St 2020 Global Fund	10.57%	392.02%	-	-	-
BlackRock	11.79%	57.57%	24.55%	-	-
Blackrock PEP 2020	9.81%	-	-	-	-
Sixth Street TAO	3.08%	13.50%	-	-	-
Remaining Misc. Funds**	(4.49%)	3.28%	2.22%	1.40%	(1.00%)

* 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.

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
lobal Fixed Income					
Gross	0.67%	2.12%	6.77%	6.12%	5.53%
Net	0.64%	1.99%	6.62%	5.95%	5.33%
Weighted Benchmark	0.22%	0.49%	6.08%	4.87%	3.71%
omestic Fixed Income					
Gross	0.67%	2.12%	6.77%	5.80%	5.94%
Net	0.64%	1.99%	6.62%	5.64%	5.75%
Weighted Benchmark	0.22%	0.49%	6.08%	4.39%	4.02%
nvestment Grade					
Gross	0.43%	(0.30%)	6.26%	5.17%	5.02%
Net	0.41%	(0.42%)	6.14%	5.06%	4.90%
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Declaration Total Return - Net	(0.28%)	2.45%	5.10%	4.73%	-
Libor-3 Month	0.04%	0.16%	1.05%	1.35%	0.88%
PIMCO Core Plus Cons Gross(1)	0.04%	(0.61%)	5.96%	5.09%	-
PIMCO Core Plus Cons Net	0.01%	(0.85%)	5.78%	4.88%	-
Blended Benchmark(2)	0.01%	(1.54%)	4.79%	3.66%	-
PIMCO DiSCO II - Net	0.80%	6.33%	6.12%	7.83%	11.40%
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Prudential Core - Gross	(0.00%)	(1.19%)	5.75%	-	-
Prudential Core - Net	(0.03%)	(1.29%)	5.60%	-	-
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
SSgA Long US Treas Idx - Gross	3.08%	(4.61%)	8.90%	6.59%	-
SSgA Long US Treas Idx - Net	3.07%	(4.63%)	8.89%	6.56%	-
Blmbg Long Treas	3.08%	(4.65%)	8.82%	6.54%	4.51%
elow Investment Grade					
Gross	1.37%	9.14%	8.16%	7.38%	8.35%
Net	1.32%	8.94%	7.93%	7.11%	7.99%
Blmbg HY Corp 2% Issue	0.69%	5.26%	8.81%	6.28%	6.82%
Ares ND Credit Strategies Fd - Net	2.44%	12.18%	7.88%	-	-
Cerberus ND Private Credit Fd - Net	2.13%	10.84%	9.33%	-	-
S&P/LSTA Leveraged Loan B	0.85%	5.22%	5.98%	4.59%	5.02%
Goldman Sachs 2006 Offshore - Net	2.62%	7.01%	6.27%	14.40%	14.68%
Goldman Sachs Offshore V - Net	0.93%	11.77%	26.44%	21.56%	16.33%
PIMCO Bravo II Fund - Net	4.20%	33.16%	3.51%	5.55%	-
Blmbg HY Corp 2% Issue	0.69%	5.26%	8.81%	6.28%	6.82%
Loomis Sayles - Gross	(0.12%)	4.22%	8.41%	6.46%	7.64%
Loomis Sayles - Net	(0.24%)	3.74%	7.88%	5.94%	7.12%
Blmbg HY Corp 2% Issue	0.69%	5.26%	8.81%	6.28%	6.82%

(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.



The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. 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.

r	Returns for Periods Ended December 31, 2021						
			Last	Last	Last		
	Last	Last	3	5	10		
	Quarter	Year	Years	Years	Years		
Global Real Assets							
Gross	5.42%	15.64%	8.38%	7.74%	7.94%		
Net	5.32%	15.17%	7.91%	7.30%	7.44%		
Weighted Benchmark	5.26%	15.34%	7.02%	6.35%	6.90%		
Real Estate							
Gross	7.49%	19.15%	8.68%	8.65%	10.73%		
Net	7.36%	18.56%	8.09%	8.12%	10.07%		
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%		
Invesco Core Real Estate - Gross	7.56%	16.28%	7.03%	7.30%	9.52%		
Invesco Core Real Estate - Net	7.47%	15.90%	6.68%	6.96%	9.15%		
Invesco Asia RE Fund III - Net	0.36%	5.07%	14.50%	26.48%	-		
Invesco Value Added Fd IV - Net	3.12%	13.75%	10.04%	9.95%	-		
Invesco Value Added Fd V - Net	8.80%	31.80%		-			
JP Morgan - Gross	7.92%	22.17%	9.53%	9.07%	11.15%		
JP Morgan - Net	7.69%	21.07%	8.42%	8.08%	10.11%		
JPM Greater European Opp Fd - Net	2.23%	(2.68%)	(3.09%)	(13.41%)	(10.00%		
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%		
Other Real Assets							
Gross	1.96%	9.85%	7.71%	-	-		
Net	1.91%	9.59%	7.41%	-	-		
Weighted Benchmark	4.21%	12.58%	5.36%	-	-		
nfrastructure							
Gross	2.27%	11.51%	8.83%	8.49%	7.30%		
Net	2.20%	11.14%	8.42%	8.03%	6.75%		
ISQ Global Infrastructure II - Net	3.68%	18.83%	18.09%	-	-		
The Rohatyn Group - Net	1.41%	0.13%	(7.32%)	(3.64%)	(0.45%		
JP Morgan IIF - Gross	0.29%	8.51%	7.99%	8.45%	7.14%		
JP Morgan IIF - Net	0.13%	7.68%	7.21%	7.70%	6.28%		
Grosvenor Cust. Infrastructure - Net	2.54%	13.31%	7.97%	7.86%	9.13%		
Grosvenor Cust. Infrastructure II - Net	1.51%	17.74%	14.92%	11.73%	-		
Benchmark(1)	4.14%	13.37%	5.82%	4.85%	2.99%		
Macquarie Infrastructure Fd IV - Net	2.96%	13.12%	8.03%	-	-		
Macquarie Infrastructure Fd V - Net	12.51%	(2.23%)	-	-	-		
Benchmark(2)	4.14%	13.37%	5.82%	-	-		
imber							
Net	1.08%	5.66%	4.90%	1.97%	1.08%		
TIR Teredo - Net	1.88%	7.77%	5.28%	0.91%	3.84%		
TIR Springbank - Net	0.83%	5.10%	4.84%	2.32%	(0.30%		
NCREIF Timberland Index	4.56%	9.17%	3.69%	3.58%	5.30%		
ash & Cash Equivalents - Net	0.01%	0.06%	0.92%	1.15%	0.65%		
Cash Account - Net	0.01%	0.05%	0.91%	1.14%	0.65%		
Bank of ND - Net	0.02%	0.08%	0.94%	1.14%	-		
3-month Treasury Bill	0.01%	0.05%	0.99%	1.14%	0.63%		
Total Fund							
Gross	5.27%	16.72%	15.73%	11.83%	10.37%		
Net	5.21%	16.43%	15.45%	11.56%	10.01%		
Target*	4.77%	16.14%	15.17%	11.04%	9.44%		

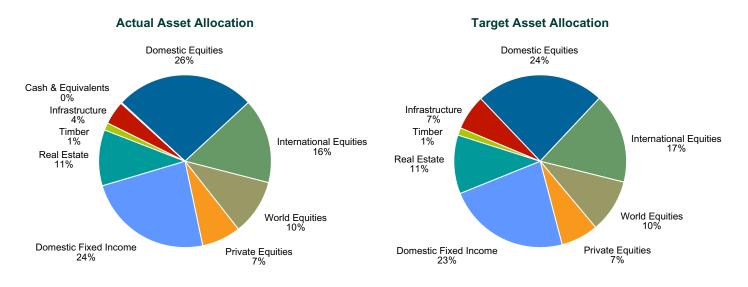
* Current Quarter Target = 18.2% Russell 1000 Index, 17.1% Blmbg Aggregate, 11.6% MSCI World ex US, 10.1% NCREIF Total Index, 10.0% MSCI World, 8.2% NDSIB PEN - Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.6% Russell 2000 Index, 3.9% MSCI EM, 3.5% CPI All Urban Cons lagged 3 months, 3.5% NCREIF NFI-ODCE Eq Wt Net, 1.4% 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.



NDSIB - Public Employees Retirement System

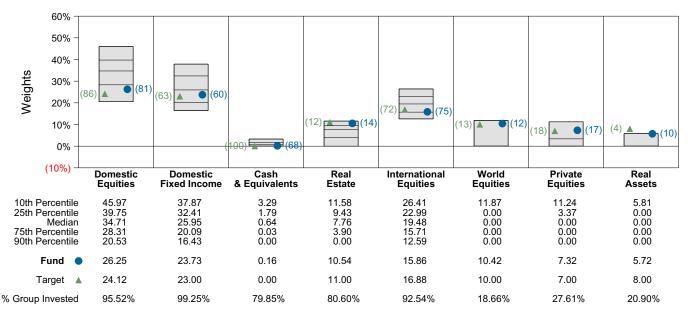
Actual vs Target Asset Allocation As of December 31, 2021

The top left chart shows the Fund's asset allocation as of December 31, 2021. 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.

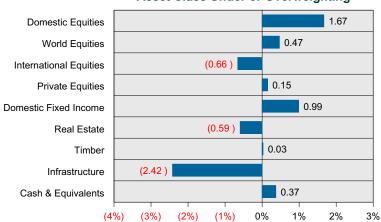


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	1,107,640	26.3%	24.1%	2.1%	90,023
International Equities	669,141	15.9%	16.9%	(1.0%)	(43,186)
World Equities	439,742	10.4%	10.0%	0.4%	17,802
Private Equities	308,846	7.3%	7.0%	0.3%	13,488
Domestic Fixed Income	1,001,353	23.7%	23.0%	0.7%	30,892
Real Estate	444,563	10.5%	11.0%	(0.5%)	(19,571)
Timber	57,635	1.4%	1.4%	0.0%	0
Infrastructure	183,610	4.4%	6.6%	(2.3%)	(96,308)
Cash & Equivalents	6,866	0.2%	0.0%	0.2%	6,866
Total	4,219,396	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database

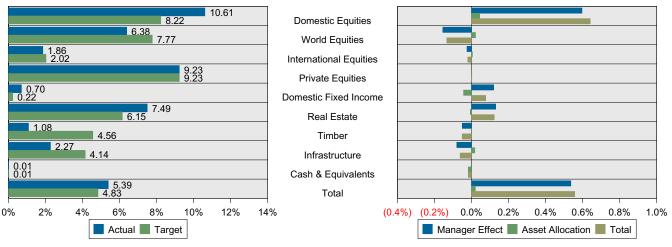


The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation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



Asset Class Under or Overweighting

Actual vs Target Returns



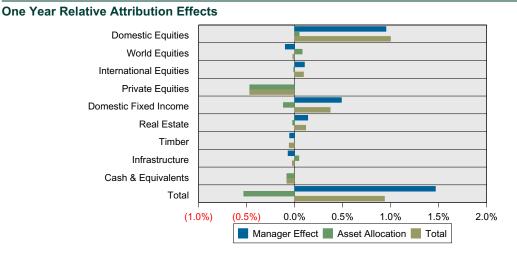
Relative Attribution Effects for Quarter ended December 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	26%	24%	10.61%	8.22%	0.60%	0.04%	0.64%
World Equities	10%	10%	6.38%	7.77%	(0.15%)	0.02%	(0.13%)
International Equities	16%	17%	1.86%	2.02%	(0.02%)	0.00%	(0.02%)
Private Equities	7%	7%	9.23%	9.23%	0.00%	0.00%	`0.00%
Domestic Fixed Incom	e 24%	23%	0.70%	0.22%	0.12%	(0.04%)	0.08%
Real Estate	10%	11%	7.49%	6.15%	0.13%	(0.01%)	0.12%
Timber	1%	1%	1.08%	4.56%	(0.05%)	(0.00%)	(0.05%)
Infrastructure	4%	7%	2.27%	4.14%	(0.08%)	0.02%	(0.06%)
Cash & Equivalents	0%	0%	0.01%	0.01%	0.00%	(0.02%)	(0.02%)
[
Total			5.39% =	4.83%	+ 0.54% +	0.02%	0.56%

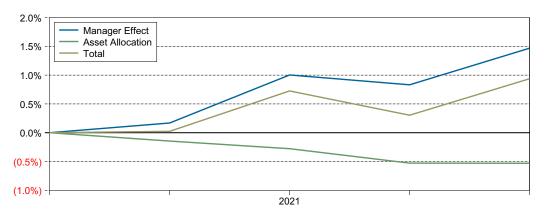
* Current Quarter Target = 19.3% Russell 1000 Index, 16.0% Blmbg Aggregate, 12.7% MSCI World ex US, 11.0% NCREIF Total Index, 10.0% MSCI World, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% NDSIB PERS - Private Equity, 4.8% Russell 2000 Index, 4.2% MSCI EM, 3.3% NCREIF NFI-ODCE Eq Wt Net, 3.3% CPI All Urban Cons lagged 3 months and 1.4% NCREIF Timberland Index.

Relative Attribution by Asset Class

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



Cumulative Relative Attribution Effects



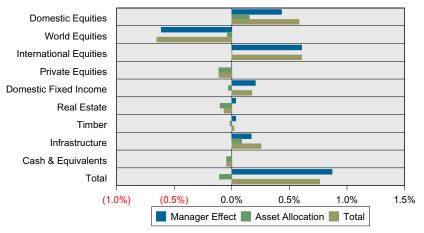
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	24%	28.03%	24.15%	0.95%	0.05%	1.00%
World Equities	12%	10%	20.57%	21.82%	(0.10%)	0.08%	(0.02%)
International Equities	17%	17%	9.30%	8.74%	0.10%	(0.01%)	0.09%
Private Equities	6%	7%	57.24%	57.24%	0.00%	(0.47%)	(0.47%)
Domestic Fixed Incom		23%	2.33%	0.50%	0.49%	(0.12%)	0.37%
Real Estate	10%	11%	19.15%	17.70%	0.14%	(0.02%)	0.12%
Timber	2%	1%	5.66%	9.17%	(0.05%)	(0.00%)	(0.06%)
Infrastructure	4%	7%	11.51%	13.37%	(0.07%)	0.05%	(0.02%)
Cash & Equivalents	1%	0%	0.06%	0.06%	0.00%	(0.08%)	(0.08%)
Total			17.00% =	= 16.06%	+ 1.47% +	(0.53%)	0.94%

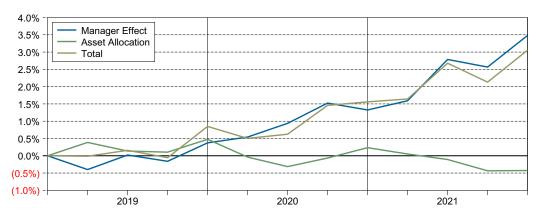


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

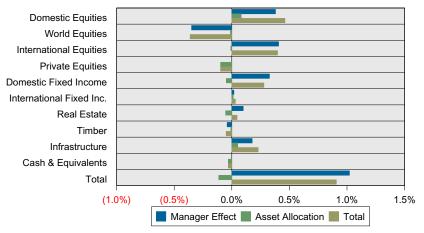


Three Year Annualized Relative Attribution Effects

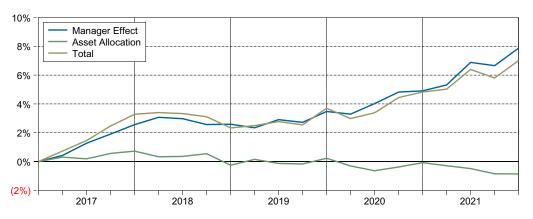
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	27.00%	24.94%	0.43%	0.15%	0.58%
World Equities	14%	14%	17.36%	21.70%	(0.61%)	(0.04%)	(0.65%)
International Equities	16%	15%	17.33%	13.38%	0.61%	0.00%	0.61%
Private Equities	5%	7%	23.63%	23.63%	0.00%	(0.11%)	(0.11%)
Domestic Fixed Incom	e 23%	23%	6.85%	6.09%	0.20%	(0.03%)	0.17%
Real Estate	11%	11%	8.68%	8.37%	0.03%	(0.10%)	(0.07%)
Timber	2%	2%	4.90%	3.69%	0.04%	(0.01%)	0.02%
Infrastructure	5%	6%	8.84%	5.82%	0.17%	0.09%	0.25%
Cash & Equivalents	0%	0%	0.94%	0.94%	0.00%	(0.05%)	(0.05%)
Total			15.88% =	= 15.12%	+ 0.87% +	(0.11%)	0.76%

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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

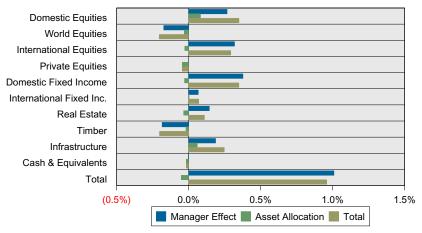


Five Year Annualized Relative Attribution Effects

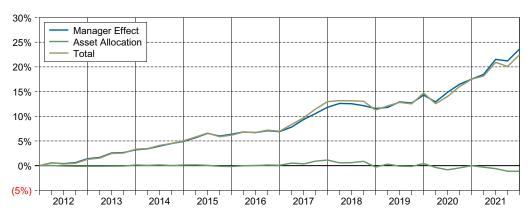
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
	U	0					
Domestic Equities	23%	21%	18.78%	17.04%	0.38%	0.08%	0.46%
World Equities	15%	15%	12.55%	15.03%	(0.35%)	(0.01%)	(0.36%)
International Equities	16%	15%	12.34%	9.74%	0.41%	(0.01%)	0.40%
Private Equities	4%	7%	16.44%	16.44%	0.00%	(0.10%)	(0.10%)
Domestic Fixed Income	22%	22%	5.86%	4.42%	0.33%	(0.05%)	0.28%
International Fixed Inc.	1%	1%	-	-	0.02%	0.01%	0.03%
Real Estate	11%	11%	8.65%	7.75%	0.10%	(0.05%)	0.05%
Timber	2%	2%	1.97%	3.58%	(0.04%)	(0.01%)	(0.05%)
Infrastructure	5%	6%	8.49%	4.85%	0.18%	0.05%	0.23%
Cash & Equivalents	1%	0%	1.17%	1.17%	0.00%	(0.03%)	(0.03%)
Total			11.94% =	11.03% +	+ 1.02% +	(0.11%)	0.91%

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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects

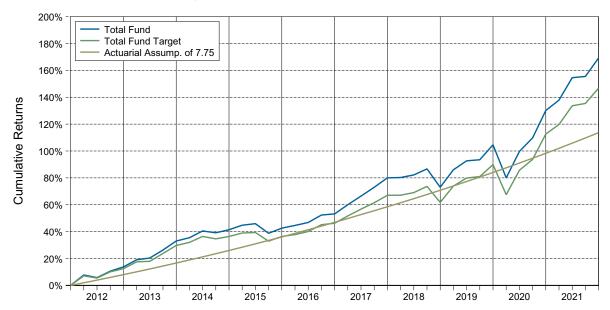


Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	17.09%	15.87%	0.27%	0.08%	0.35%
World Equities	15%	14%	11.28%	12.70%	(0.17%)	(0.03%)	(0.20%)
International Equities	16%	15%	9.60%	7.54%	0.32%	(0.03%)	0.29%
Private Equities	4%	6%	8.96%	8.96%	0.00%	(0.04%)	(0.04%)
Domestic Fixed Income	20%	19%	6.00%	4.07%	0.38%	(0.03%)	0.35%
International Fixed Inc.	3%	3%	-	-	0.07%	0.00%	0.07%
Real Estate	11%	11%	10.75%	9.32%	0.14%	(0.03%)	0.11%
Timber	3%	3%	1.08%	5.30%	(0.18%)	(0.02%)	(0.20%)
Infrastructure	4%	5%	7.31%	2.99%	0.19%	0.06%	0.25%
Cash & Equivalents	1%	0%	0.66%	0.65%	0.00%	(0.02%)	(0.02%)
Total			10.41% =	9.45% +	+ 1.01% +	(0.05%)	0.96%

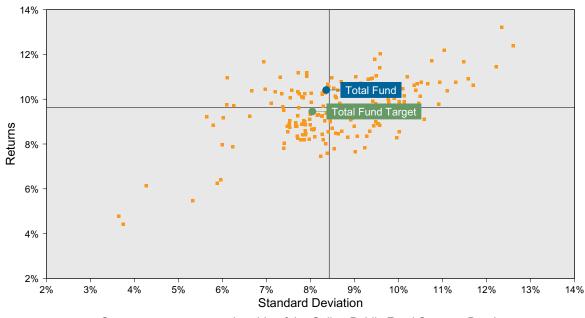
Cumulative Performance Relative to Target

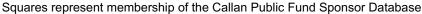
The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund 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

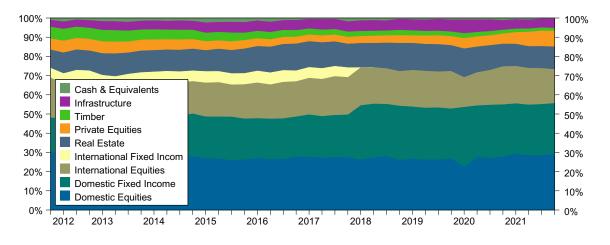






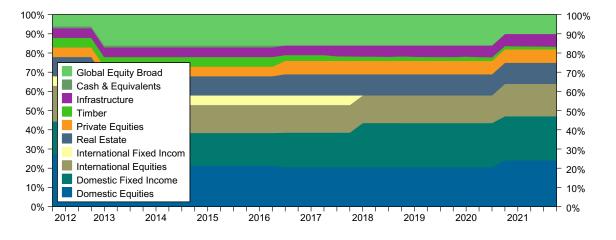
Actual vs Target Historical Asset Allocation

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.

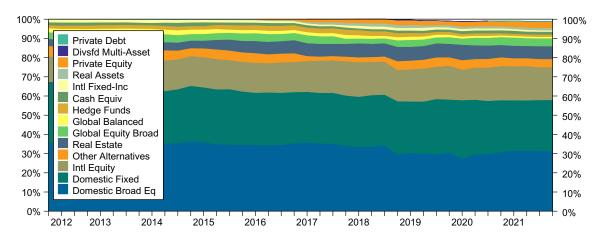


Actual Historical Asset Allocation

Target Historical Asset Allocation





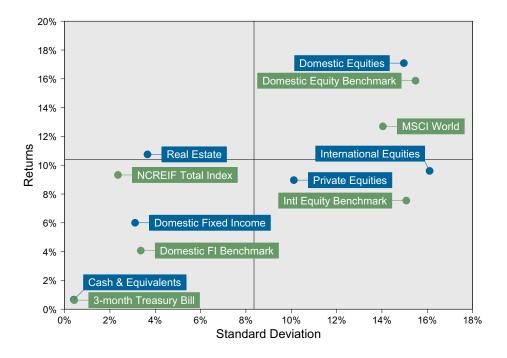




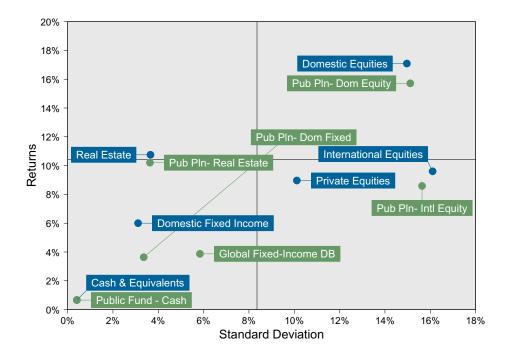
Asset Class Risk and Return

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

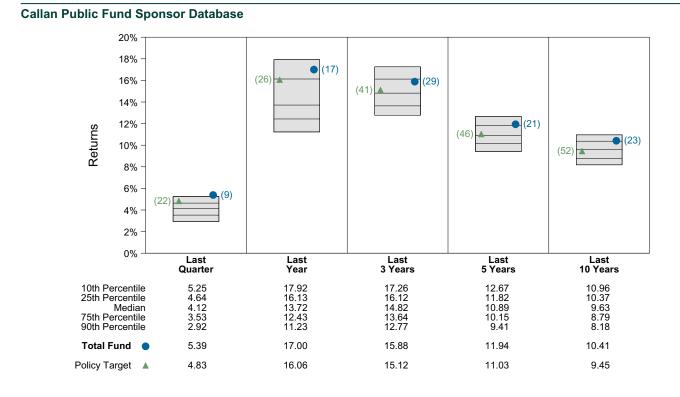


Ten Year Annualized Risk vs Return Asset Classes vs Asset Class Median

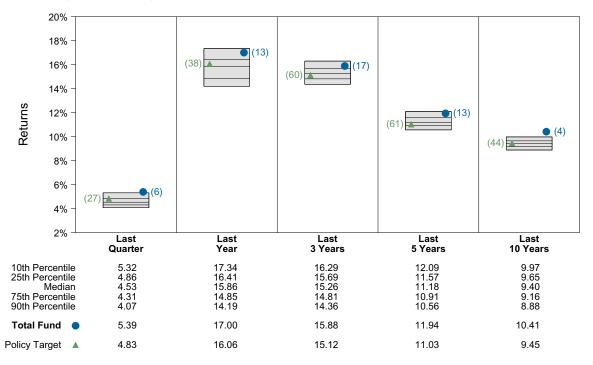


Total Fund Ranking

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, 2021. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



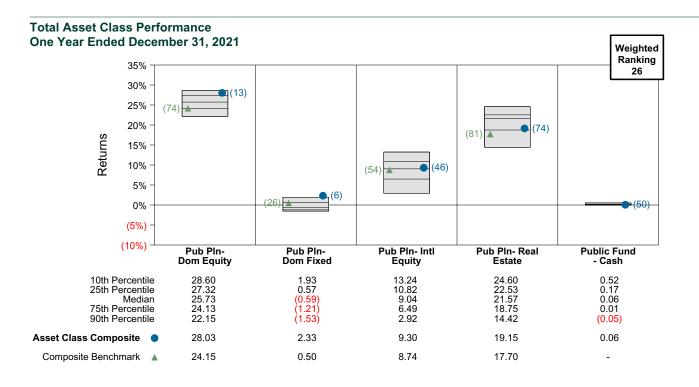
Asset Allocation Adjusted Ranking





Asset Class Rankings

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



Total Asset Class Performance Ten Years Ended December 31, 2021 Weighted Ranking 20% 10 18% (4) 16% 14% Returns 12% (20) 10% (21)(6 8% (86) • (2) 6% 4% (31 2% (48) 0% Pub Pin- Inti Pub Pin-Pub Pln-Pub Pin- Real Public Fund Dom Equity Dom Fixed Equity Estate - Cash 10th Percentile 2.51 1.01 16.58 5.00 9.88 11 05 25th Percentile 16.31 15.71 15.12 9.50 4.33 10.70 3.64 8.59 10.20 0.66 Median 75th Percentile 8.07 8.61 0.62 90th Percentile 2.46 0.50 14.48 7.67 7.03 Asset Class Composite 17.09 6.00 9.60 10.75 0.66 15.87 4.07 7.54 9.32 Composite Benchmark _



Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2021, with the distribution as of September 30, 2021. 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 3 ²	1, 2021			September 3	0, 2021
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	\$2,525,369,108	59.85%	\$(79,750,720)	\$174,521,950	\$2,430,597,879	60.46%
Public Equities	\$2,216,523,051	52.53%	\$(75,128,567)	\$147,777,369	\$2,143,874,248	53.33%
World Equities	\$439,741,864	10.42%	\$(43,629,010)	\$27,235,307	\$456,135,567	11.35%
Domestic Equities	\$1,107,639,971	26.25%	\$(20,301,691)	\$107,946,931	\$1,019,994,731	25.37%
Large Cap	895,570,520	21.23%	(16,980,132)	97,973,798	814,576,854	20.26%
Small Cap	212,069,451	5.03%	(3,321,559)	9,973,133	205,417,877	5.11%
International Equities	\$669,141,216	15.86%	\$(11,197,866)	\$12,595,131	\$667,743,951	16.61%
Developed	514,315,367	12.19%	(8,354,729)	13,804,655	508,865,441	12.66%
Emerging Markets	154,825,849	3.67%	(2,843,137)	(1,209,524)	158,878,510	3.95%
Private Equities	\$308,846,058	7.32%	\$(4,622,153)	\$26,744,581	\$286,723,630	7.13%
Global Fixed Income	\$1,001,353,109	23.73%	\$44,182,117	\$6,848,747	\$950,322,245	23.64%
Domestic Fixed Income	\$1,001,353,109	23.73%	\$44,182,117	\$6,848,747	\$950,322,245	23.64%
Investment Grade	727,089,305	17.23%	34,041,054	3,071,901	689,976,351	17.16%
Below Investment Grade	274,263,804	6.50%	10,141,064	3,776,847	260,345,894	6.48%
Global Real Assets	\$685,807,426	16.25%	\$16,476,437	\$34,926,159	\$634,404,831	15.78%
Real Estate	\$444,562,728	10.54%	\$5,497,772	\$30,561,134	\$408,503,821	10.16%
Other Real Assets	\$241,244,698	5.72%	\$10,978,664	\$4,365,025	\$225,901,009	5.62%
Infrastructure	183,609,667	4.35%	12,906,357	3,741,919	166,961,391	4.15%
Timber	57,635,032	1.37%	(1,927,692)	623,105	58,939,619	1.47%
Cash	\$6,866,373	0.16%	\$2,001,376	\$1,610	\$4,863,387	0.12%
Total Fund	\$4,219,396,016	100.0%	\$(17,090,791)	\$216,298,466	\$4,020,188,341	100.0%

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

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
ilobal Equities					
Gross	7.26%	23.66%	21.84%	15.37%	13.05%
Net	7.20%	23.35%	21.57%	15.12%	12.75%
Weighted Benchmark	6.48%	22.86%	21.24%	14.86%	12.40%
ublic Equities					
Gross	6.98%	20.34%	21.35%	-	-
Net	6.91%	20.00%	21.05%	-	-
Weighted Benchmark	6.07%	18.46%	20.49%	-	-
Vorld Equities					
Gross	6.38%	20.57%	17.36%	12.55%	11.28%
Net	6.28%	20.12%	16.95%	12.15%	10.69%
MSCI World	7.77%	21.82%	21.70%	15.03%	12.70%
omestic Equities					
Gross	10.61%	28.03%	27.00%	18.78%	17.09%
Net	10.55%	27.77%	26.78%	18.58%	16.88%
Weighted Benchmark	8.22%	24.15%	24.94%	17.04%	15.87%
arge Cap					
Gross	12.07%	30.83%	29.35%	20.54%	18.07%
Net	12.07 %	30.62%	29.33%	20.34%	17.91%
Benchmark(1)	9.78%	26.45%	29.21%	18.43%	16.54%
mall Cap Equity			10.000	10	
Gross	4.80%	16.96%	18.63%	12.72%	13.54%
Net	4.63%	16.27%	18.05%	12.22%	13.15%
Russell 2000 Index	2.14%	14.82%	20.02%	12.02%	13.23%
nternational Equities					
Gross	1.86%	9.30%	17.33%	12.34%	9.60%
Net	1.79%	8.94%	17.02%	12.09%	9.34%
Weighted Benchmark	2.02%	8.74%	13.38%	9.74%	7.54%
eveloped					
Gross	2.69%	12.11%	17.76%	12.17%	10.13%
Net	2.63%	11.88%	17.52%	11.93%	9.87%
Benchmark(2)	3.14%	12.62%	14.07%	9.63%	8.10%
merging Markets					
Gross	(0.81%)	0.92%	15.98%	12.66%	7.51%
Net	(0.90%)	0.21%	15.48%	12.37%	7.24%
Benchmark(3)	(1.31%)	(2.54%)	10.94%	9.88%	5.49%
rivate Equities					
Net	9.23%	57.24%	23.63%	16.44%	8.94%

(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.



The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	-	э Years	Years
	Quarter	rear	Years	rears	rears
lobal Fixed Income	0.70%	0.000/	0.050/	C 400/	5.56%
Gross	0.70%	2.33%	6.85%	6.18%	
Net	0.67%	2.19%	6.70%	6.01%	5.35%
Weighted Benchmark	0.22%	0.50%	6.09%	4.84%	3.71%
omestic Fixed Income					
Gross	0.70%	2.33%	6.85%	5.86%	6.00%
Net	0.67%	2.19%	6.70%	5.71%	5.81%
Weighted Benchmark	0.22%	0.50%	6.09%	4.42%	4.07%
Weighted Denominant	0.22 /0	0.0070	0.0070	1.1270	1.07 /0
v. Grade Fixed Income					
Gross	0.41%	(0.31%)	6.25%	5.16%	5.02%
Net	0.39%	(0.43%)	6.13%	5.06%	4.90%
Blmbg Aggregate Index	0.01%	(1.54%)	4.79%	3.57%	2.90%
elow Inv. Grade Fixed Income					
Gross	1.42%	9.25%	8.16%	7.40%	8.35%
Net	1.37%	9.06%	7.94%	7.14%	7.99%
Blmbg HY Corp 2% Issue	0.69%	5.26%	8.81%	6.28%	6.82%
Billibg HY Corp 2% Issue	0.09%	5.20%	0.01%	0.20%	0.02%
lobal Real Assets					
Gross	5.52%	15.81%	8.42%	7.79%	7.99%
Net	5.41%	15.34%	7.93%	7.35%	7.55%
Weighted Benchmark	5.33%	15.52%	7.10%	6.41%	6.94%
eal Estate					
Gross	7.49%	19.15%	8.68%	8.65%	10.75%
	7.36%	18.56%	8.09%		10.21%
Net				8.12%	
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%
ther Real Assets					
Gross	1.96%	9.89%	7.74%	-	-
Net	1.91%	9.62%	7.45%	-	-
Weighted Benchmark	4.21%	12.58%	5.37%	-	-
nfrastructure	0.07%	44 5400	0.049/	0.400/	
Gross	2.27%	11.51%	8.84%	8.49%	7.31%
Net	2.20%	11.14%	8.42%	8.04%	6.75%
Benchmark(1)	4.14%	13.37%	5.82%	4.85%	2.99%
imber					
Net	1.08%	5.66%	4.90%	1.97%	1.08%
NCREIF Timberland Index	4.56%	9.17%	3.69%	3.58%	5.30%
	4.5070	5.1770	0.0070	0.0070	0.00 /0
ash & Equivalents - Net	0.01%	0.06%	0.94%	1.17%	0.66%
3-month Treasury Bill	0.01%	0.05%	0.99%	1.14%	0.63%
otal Fund					
Gross	5.39%	17.00%	15.88%	11.94%	10.41%
Net	5.33%	16.70%	15.60%	11.67%	10.41%
	4.83%	16.06%	15.12%	11.03%	9.45%
Target*	4.03%	10.00%	10.12%	11.03%	9.43%

* 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, 3.3% NCREIF NFI-ODCE Eq Wt Net, 3.3% CPI All Urban Cons lagged 3 months and 1.4% NCREIF Timberland Index.

(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

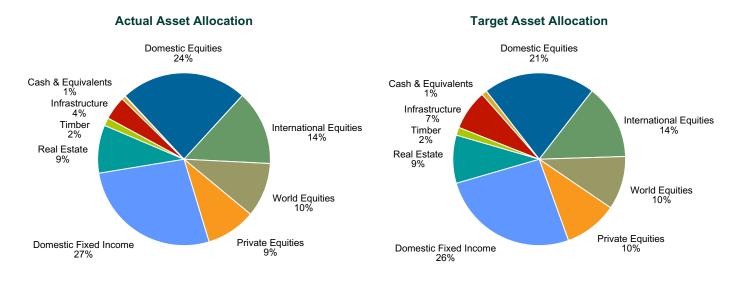
PLEASE REFER TO PAGES 32-36 FOR INVESTMENT MANAGER LEVEL RETURNS.



NDSIB - Teachers Fund For Retirement

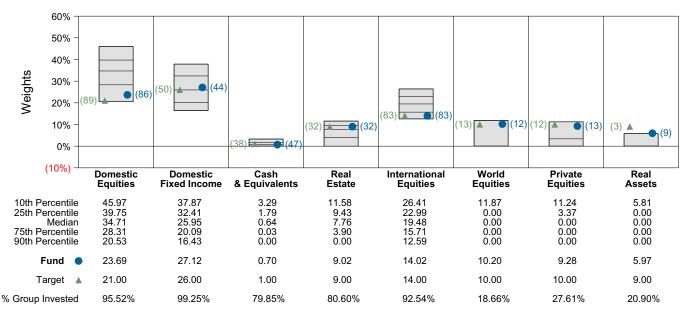
Actual vs Target Asset Allocation As of December 31, 2021

The top left chart shows the Fund's asset allocation as of December 31, 2021. 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.

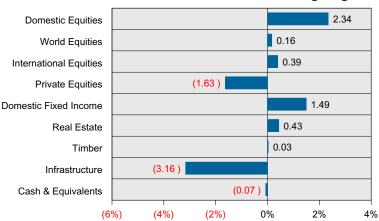


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	799,606	23.7%	21.0%	2.7%	90,827
International Equities	473,174	14.0%	14.0%	0.0%	654
World Equities	344,324	10.2%	10.0%	0.2%	6,810
Private Equities	313,231	9.3%	10.0%	(0.7%)	(24,283)
Domestic Fixed Income	915,204	27.1%	26.0%	1.1%	37,667
Real Estate	304,346	9.0%	9.0%	0.0%	583
Timber	51,447	1.5%	1.5%	0.0%	0
Infrastructure	150,087	4.4%	7.5%	(3.0%)	(102,229)
Cash & Equivalents	23,722	0.7%	1.0%	(0.3%)	(10,029)
Total	3,375,141	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database

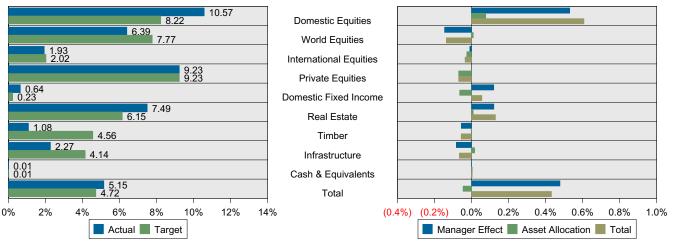


The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation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



Asset Class Under or Overweighting

Actual vs Target Returns



Relative Attribution Effects for Quarter ended December 31, 2021

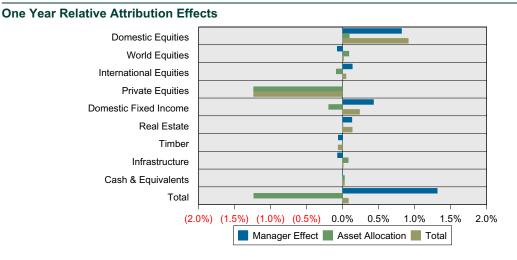
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	10.57%	8.22%	0.53%	0.08%	0.61%
World Equities	10%	10%	6.39%	7.77%	(0.15%)	0.01%	(0.14%)
International Equities	14%	14%	1.93%	2.02%	(0.01%)	(0.03%)	(0.04%)
Private Equities	8%	10%	9.23%	9.23%	`0.00%´	(0.07%)	(0.07%)
Domestic Fixed Incom	e 27%	26%	0.64%	0.23%	0.12%	(0.06%)	0.06%
Real Estate	9%	9%	7.49%	6.15%	0.12%	0.01%	0.13%
Timber	2%	2%	1.08%	4.56%	(0.06%)	(0.00%)	(0.06%)
Infrastructure	4%	7%	2.27%	4.14%	(0.08%)	`0.02%´	(0.07%)
Cash & Equivalents	1%	1%	0.01%	0.01%	(0.00%)	0.00%	<u>`0.00%</u>
Total			5.15% =	4.72%	+ 0.48% +	(0.05%)	0.43%

* 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, 3.7% NCREIF NFI-ODCE Eq Wt Net, 3.7% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.5% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

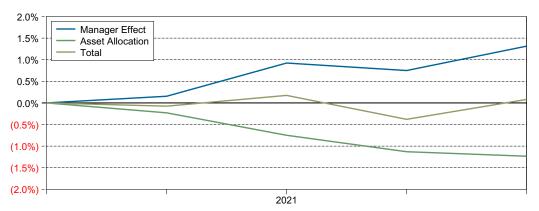


Relative Attribution by Asset Class

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



Cumulative Relative Attribution Effects



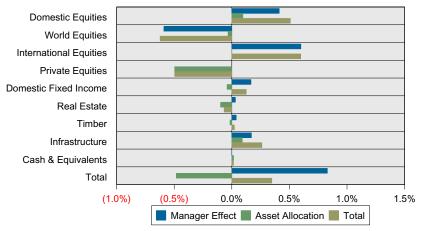
One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	27.86%	24.15%	0.82%	0.09%	0.91%
World Equities	12%	10%	20.60%	21.82%	(0.07%)	0.09%	0.01%
International Equities	15%	14%	9.58%	8.74%	0.14%	(0.09%)	0.05%
Private Equities	7%	10%	57.26%	57.26%	0.00%	(1.24%)	(1.24%)
Domestic Fixed Incom	e 27%	26%	1.93%	0.52%	0.43%	(0.19%)	0.24%
Real Estate	9%	9%	19.15%	17.70%	0.13%	0.00%	0.13%
Timber	2%	2%	5.66%	9.17%	(0.06%)	(0.00%)	(0.06%)
Infrastructure	4%	7%	11.51%	13.37%	(0.07%)	0.08%	`0.01%´
Cash & Equivalents	1%	1%	0.06%	0.05%	`0.00%´	0.03%	0.03%
Total			16.50% =	= 16.42%	+ 1.31% +	(1.23%)	0.08%

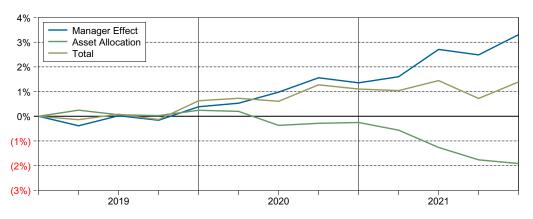


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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





Cumulative Relative Attribution Effects

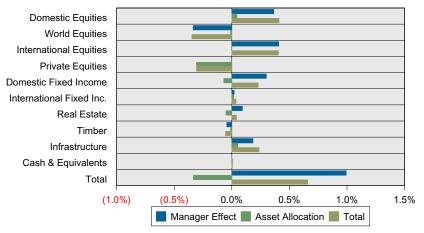


Three Year Annualized Relative Attribution Effects

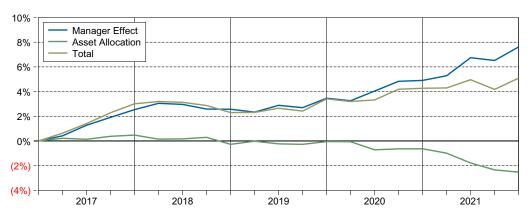
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	27.03%	24.97%	0.41%	0.10%	0.51%
World Equities	14%	14%	17.37%	21.70%	(0.59%)	(0.03%)	(0.62%)
International Equities	15%	14%	17.30%	13.30%	0.60%	(0.00%)	0.60%
Private Equities	5%	7%	23.63%	23.63%	0.00%	(0.50%)	(0.50%)
Domestic Fixed Incom	e 25%	24%	6.64%	6.10%	0.17%	(0.04%)	`0.13%´
Real Estate	10%	10%	8.68%	8.37%	0.03%	(0.10%)	(0.07%)
Timber	2%	2%	4.90%	3.69%	0.04%	(0.02%)	0.02%
Infrastructure	5%	6%	8.84%	5.82%	0.17%	0.09%	0.26%
Cash & Equivalents	1%	1%	0.94%	0.99%	(0.00%)	0.02%	0.01%
Total			15.66% =	= 15.31%	+ 0.83% +	(0.48%)	0.35%

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



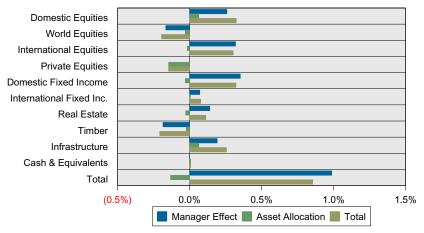
Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	21%	18.82%	17.08%	0.37%	0.04%	0.41%
World Equities	15%	15%	12.55%	15.03%	(0.34%)	(0.01%)	(0.35%)
International Equities	15%	14%	12.24%	9.60%	0.41%	(0.00%)	0.40%
Private Equities	5%	7%	16.44%	16.44%	0.00%	(0.31%)	(0.31%)
Domestic Fixed Income	23%	22%	5.69%	4.37%	0.30%	(0.07%)	0.23%
International Fixed Inc.	1%	1%	-	-	0.02%	0.02%	0.04%
Real Estate	10%	10%	8.65%	7.75%	0.09%	(0.05%)	0.04%
Timber	2%	2%	1.97%	3.58%	(0.04%)	(0.01%)	(0.06%)
Infrastructure	5%	6%	8.49%	4.85%	0.18%	0.05%	0.24%
Cash & Equivalents	1%	1%	1.17%	1.14%	0.00%	0.01%	0.01%
Total			11.78% =	11.12% +	+ 0.99% +	(0.33%)	0.66%

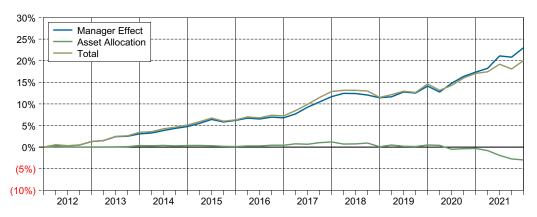


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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



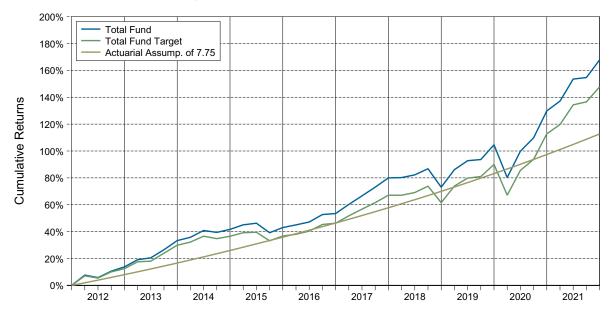
Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	17.10%	15.88%	0.26%	0.06%	0.32%
World Equities	15%	14%	11.28%	12.70%	(0.16%)	(0.03%)	(0.20%)
International Equities	16%	15%	9.67%	7.60%	0.32%	(0.02%)	0.30%
Private Equities	5%	6%	8.97%	8.97%	0.00%	(0.15%)	(0.15%)
Domestic Fixed Income	20%	20%	5.82%	4.01%	0.35%	(0.03%)	0.32%
International Fixed Inc.	3%	3%	-	-	0.07%	0.01%	0.08%
Real Estate	10%	10%	10.75%	9.32%	0.14%	(0.03%)	0.11%
Timber	3%	4%	1.08%	5.30%	(0.19%)	(0.02%)	(0.21%)
Infrastructure	4%	5%	7.31%	2.99%	0.19%	0.06%	0.26%
Cash & Equivalents	1%	1%	0.66%	0.63%	0.00%	0.01%	0.01%
Total			10.35% =	9.50% +	+ 0.99% +	(0.13%)	0.86%



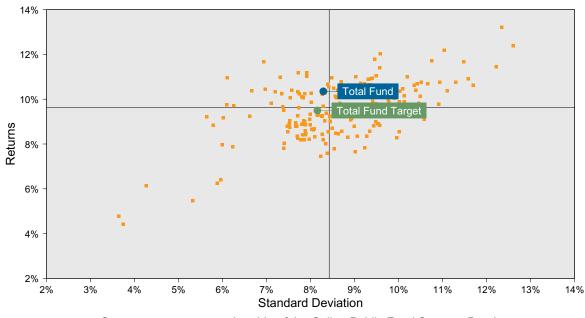
Cumulative Performance Relative to Target

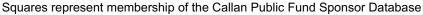
The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund 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

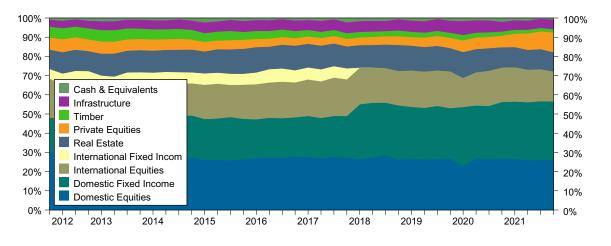
Ten Year Annualized Risk vs Return





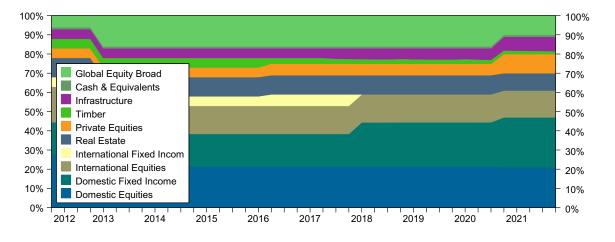
Actual vs Target Historical Asset Allocation

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.

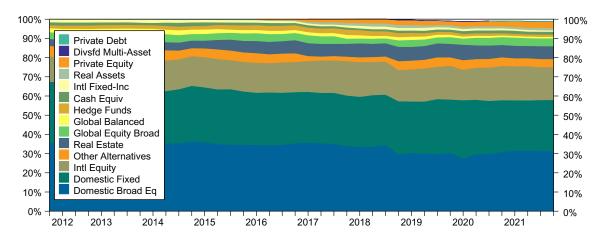


Actual Historical Asset Allocation

Target Historical Asset Allocation





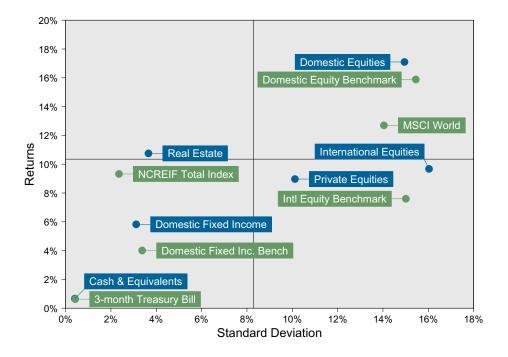




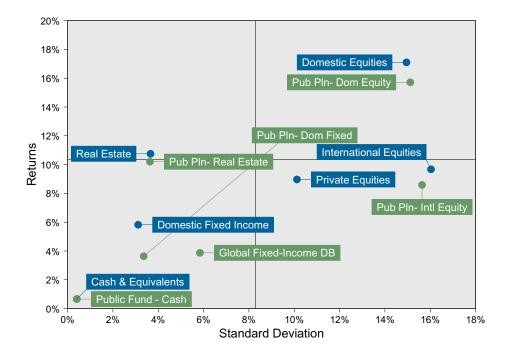
Asset Class Risk and Return

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

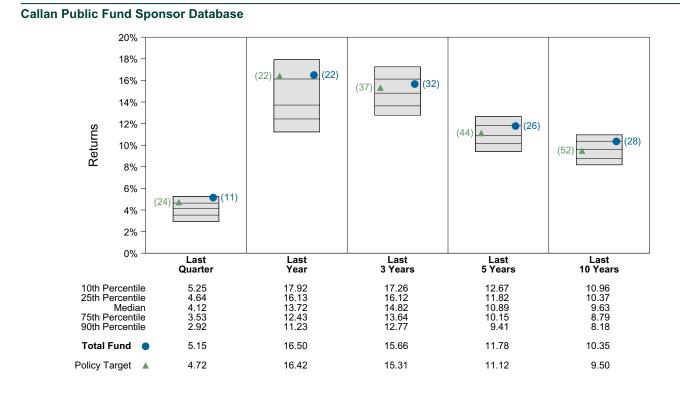


Ten Year Annualized Risk vs Return Asset Classes vs Asset Class Median

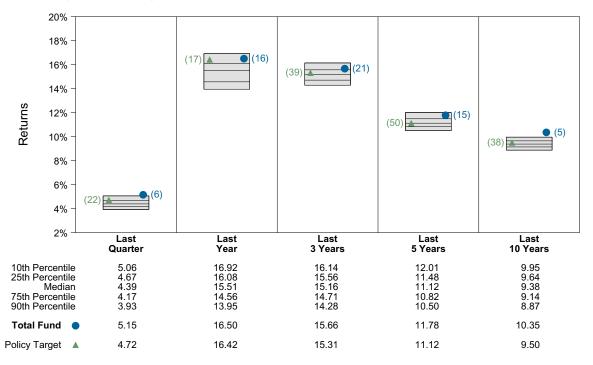


Total Fund Ranking

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, 2021. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.



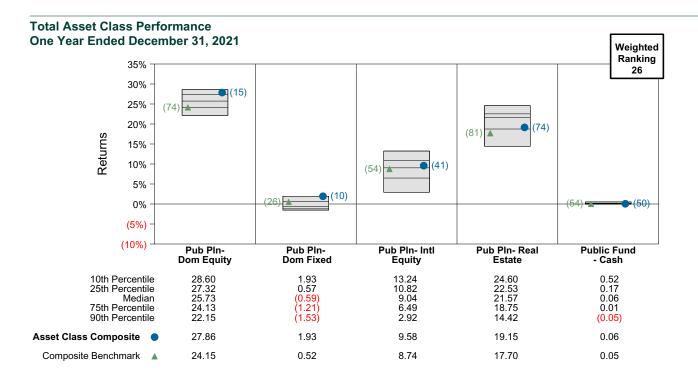
Asset Allocation Adjusted Ranking



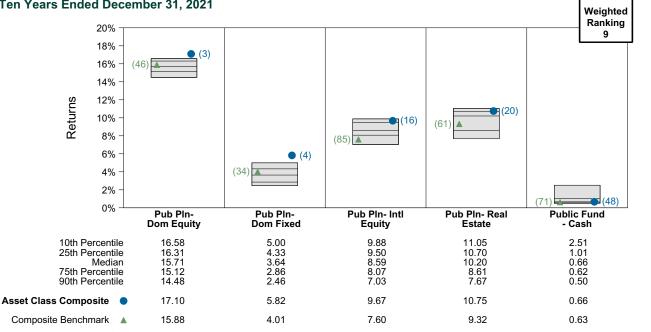


Asset Class Rankings

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









Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2021, with the distribution as of September 30, 2021. 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 3 ⁻	1, 2021			September 3	0, 2021
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equities	\$1,930,334,978	57.19%	\$(57,197,873)	\$134,010,069	\$1,853,522,783	57.48%
Public Equities	\$1,617,103,946	47.91%	\$(81,267,347)	\$108,921,320	\$1,589,449,974	49.29%
World Equities	\$344,324,024	10.20%	\$(42,034,954)	\$21,310,570	\$365,048,409	11.32%
Domestic Equities	\$799,606,325	23.69%	\$(26,158,789)	\$78,405,585	\$747,359,529	23.18%
Large Cap	645,750,304	19.13%	(18,920,834)	71,141,723	593,529,415	18.41%
Small Cap	153,856,021	4.56%	(7,237,955)	7,263,862	153,830,114	4.77%
International Equities	\$473,173,597	14.02%	\$(13,073,604)	\$9,205,165	\$477,042,036	14.79%
Developed	374,615,952	11.10%	(10,782,139)	9,983,526	375,414,565	11.64%
Emerging Markets	98,557,645	2.92%	(2,291,465)	(778,361)	101,627,471	3.15%
Private Equities	\$313,231,031	9.28%	\$24,069,474	\$25,088,749	\$264,072,809	8.19%
Global Fixed Income	\$915,203,508	27.12%	\$34,950,761	\$5,783,271	\$874,469,476	27.12%
Domestic Fixed Income	\$915,203,508	27.12%	\$34,950,761	\$5,783,271	\$874,469,476	27.12%
Investment Grade	694,742,314	20.58%	27,449,438	2,957,068	664,335,807	20.60%
Below Investment Grade	220,461,194	6.53%	7,501,323	2,826,203	210,133,668	6.52%
Global Real Assets	\$505,879,889	14.99%	\$(7,703,437)	\$25,947,403	\$487,635,924	15.12%
Real Estate	\$304,345,884	9.02%	\$(16,587,633)	\$22,334,569	\$298,598,948	9.26%
Other Real Assets	\$201,534,005	5.97%	\$8,884,196	\$3,612,834	\$189,036,975	5.86%
Infrastructure	150,087,325	4.45%	10,604,909	3,056,632	136,425,784	4.23%
Timber	51,446,680	1.52%	(1,720,713)	556,202	52,611,192	1.63%
Cash	\$23,722,133	0.70%	\$14,883,066	\$2,976	\$8,836,092	0.27%
Total Fund	\$3,375,140,508	100.0%	\$(15,067,484)	\$165,743,718	\$3,224,464,273	100.0%

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

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Blobal Equities					
Gross	7.37%	24.54%	22.09%	15.53%	13.14%
Net	7.31%	24.22%	21.82%	15.28%	12.84%
Weighted Benchmark	6.78%	25.34%	22.25%	15.35%	12.68%
Public Equities					
Gross	7.03%	20.51%	21.45%	-	-
Net	6.96%	20.16%	21.14%	-	-
Weighted Benchmark	6.17%	18.69%	20.58%	-	-
Vorld Equities					
Gross	6.39%	20.60%	17.37%	12.55%	11.28%
Net	6.30%	20.15%	16.96%	12.16%	10.70%
MSCI World	7.77%	21.82%	21.70%	15.03%	12.70%
omestic Equities					
Gross	10.57%	27.86%	27.03%	18.82%	17.10%
Net	10.51%	27.57%	26.80%	18.61%	16.89%
Weighted Benchmark	8.22%	24.15%	24.97%	17.08%	15.88%
arge Cap					
Gross	12.06%	30.75%	29.33%	20.53%	18.06%
Net	12.03%	30.54%	29.20%	20.40%	17.89%
Benchmark(1)	9.78%	26.45%	26.21%	18.43%	16.54%
small Cap					
Gross	4.81%	16.98%	18.63%	12.72%	13.54%
Net	4.65%	16.29%	18.05%	12.22%	13.15%
Russell 2000 Index	2.14%	14.82%	20.02%	12.02%	13.23%
	,0	1.1102,70	2010270		10.2070
nternational Equities Gross	1.93%	9.58%	17.30%	12.24%	9.67%
Net Weighted Banchmark	1.87% 2.02%	9.23% 8.74%	17.00% 13.30%	11.99% 9.60%	9.41% 7.60%
Weighted Benchmark	2.02%	8.74%	13.30%	9.60%	7.60%
Developed					
Gross	2.68%	12.10%	17.74%	12.16%	10.13%
Net	2.62%	11.87%	17.50%	11.92%	9.87%
Benchmark(2)	3.14%	12.62%	14.07%	9.63%	8.10%
merging Markets					
Gross	(0.83%)	0.91%	15.97%	12.65%	7.50%
Net	(0.92%)	0.20%	15.48%	12.36%	7.23%
Benchmark(3)	(1.31%)	(2.54%)	10.94%	9.88%	5.49%
rivate Equities					
Net	9.23%	57.26%	23.63%	16.44%	8.95%

(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.



The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

			Last	Last	Last
	1 4	1 4			
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
lobal Fixed Income					
Gross	0.64%	1.93%	6.64%	6.05%	5.40%
Net	0.61%	1.79%	6.50%	5.88%	5.24%
Weighted Benchmark	0.23%	0.52%	6.10%	4.89%	3.67%
omestic Fixed Income					
Gross	0.64%	1.93%	6.64%	5.69%	5.82%
Net	0.61%	1.79%	6.50%	5.54%	5.70%
	0.23%	0.52%	6.10%	4.37%	4.01%
Weighted Benchmark	0.23%	0.52%	6.10%	4.37%	4.01%
v. Grade Fixed Income					
Gross	0.42%	(0.31%)	6.25%	5.16%	5.02%
Net	0.40%	(0.43%)	6.14%	5.06%	4.90%
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
elow Inv. Grade Fixed Income					
Gross	1.31%	9.00%	8.18%	7.38%	8.34%
Net	1.26%	8.79%	7.94%	7.11%	7.98%
	0.69%	5.26%	8.81%	6.28%	6.82%
Blmbg HY Corp 2% Issue	0.09%	0.20%	0.0170	0.20%	0.02%
lobal Real Assets					
Gross	5.33%	15.47%	8.34%	7.68%	7.92%
Net	5.23%	15.01%	7.87%	7.24%	7.49%
Weighted Benchmark	5.18%	15.12%	6.93%	6.28%	6.87%
eal Estate					
Gross	7.49%	19.15%	8.68%	8.65%	10.75%
Net	7.36%	18.56%	8.09%	8.12%	10.21%
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%
					,-
ther Real Assets					
Gross	1.94%	9.79%	7.67%	-	-
Net	1.89%	9.52%	7.38%	-	-
Weighted Benchmark	4.21%	12.58%	5.35%	-	-
nfrastructure					
Gross	2.27%	11.51%	8.84%	8.49%	7.31%
Net	2.20%	11.14%	8.42%	8.04%	6.75%
Benchmark(1)	4.14%	13.37%	5.82%	4.85%	2.99%
	ידו.ד/0	10.07 /0	0.02 /0	7.0070	2.3370
imber	4.000/	E 000/	4 0001	4 070/	1.000
Net	1.08%	5.66%	4.90%	1.97%	1.08%
NCREIF Timberland Index	4.56%	9.17%	3.69%	3.58%	5.30%
ash & Equivalents - Net	0.01%	0.06%	0.94%	1.17%	0.66%
3-month Treasury Bill	0.01%	0.05%	0.99%	1.14%	0.63%
otal Fund					
Gross	5.15%	16.50%	15.66%	11.78%	10.35%
Net	5.10%	16.21%	15.39%	11.51%	10.05%
	4.72%	16.42%	15.31%	11.12%	9.50%
Target*	4.1270	10.42%	10.01%	11.1270	9.00%

* 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, 3.7% NCREIF NFI-ODCE Eq Wt Net, 3.7% CPI All Urban Cons lagged 3 months, 3.5% MSCI EM, 1.5% 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.



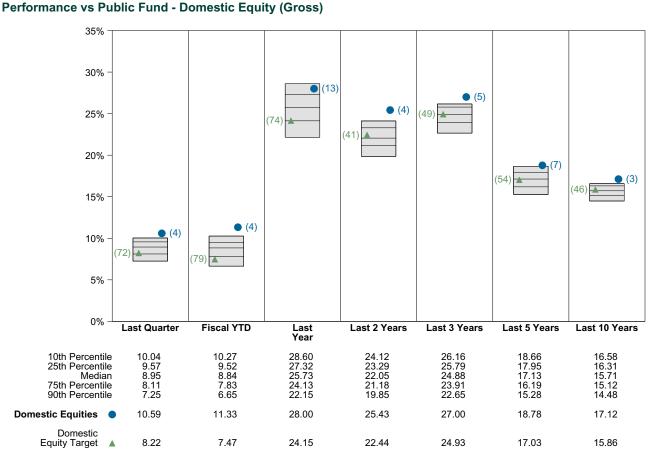
Domestic Equities Period Ended December 31, 2021

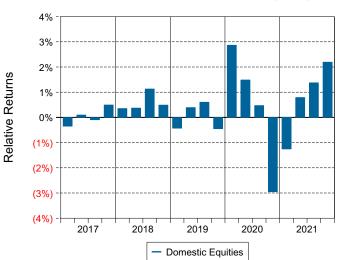
Quarterly Summary and Highlights

- Domestic Equities's portfolio posted a 10.59% return for the quarter placing it in the 4 percentile of the Public Fund -Domestic Equity group for the quarter and in the 13 percentile for the last year.
- Domestic Equities's portfolio outperformed the Domestic Equity Target by 2.37% for the quarter and outperformed the Domestic Equity Target for the year by 3.85%.

Quarterly Asset Growth

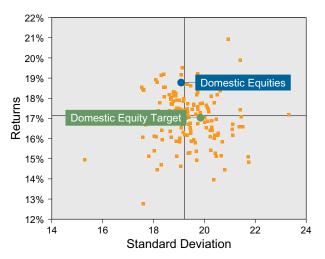
Beginning Market Value	\$1,830,895,366
Net New Investment	\$-50,992,353
Investment Gains/(Losses)	\$193,020,712
Ending Market Value	\$1,972,923,725





Relative Return vs Domestic Equity Target

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



L.A. Capital Period Ended December 31, 2021

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.

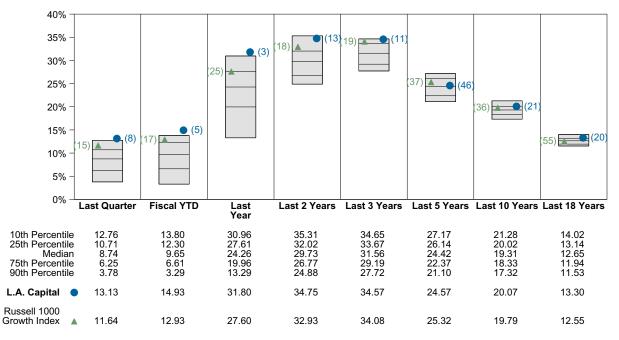
Quarterly Summary and Highlights

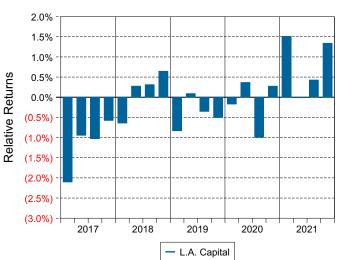
- L.A. Capital's portfolio posted a 13.13% return for the quarter placing it in the 8 percentile of the Callan Large Cap Growth group for the quarter and in the 3 percentile for the last year.
- L.A. Capital's portfolio outperformed the Russell 1000 Growth Index by 1.50% for the quarter and outperformed the Russell 1000 Growth Index for the year by 4.21%.

Quarterly Asset Growth

Beginning Market Value	\$596,030,323
Net New Investment	\$-40,312,054
Investment Gains/(Losses)	\$77,534,364
Ending Market Value	\$633,252,633

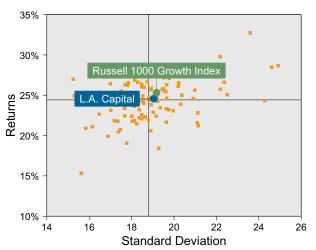






Relative Return vs Russell 1000 Growth Index

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



L.A. Capital Management Enhanced Index Period Ended December 31, 2021

Investment Philosophy

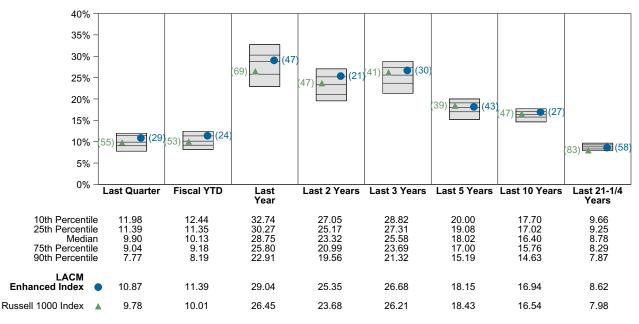
The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in 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.

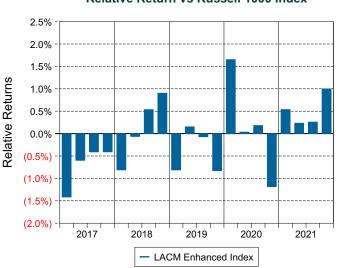
Quarterly Summary and Highlights

- LACM Enhanced Index's portfolio posted a 10.87% return for the quarter placing it in the 29 percentile of the Callan Large Cap Core group for the quarter and in the 47 percentile for the last year.
- LACM Enhanced Index's portfolio outperformed the Russell 1000 Index by 1.10% for the quarter and outperformed the Russell 1000 Index for the year by 2.58%.



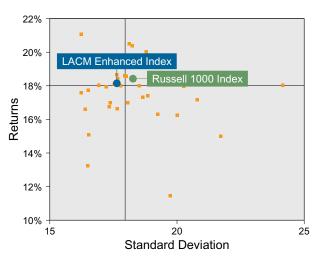






Relative Return vs Russell 1000 Index

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



Northern Trust AM Enh S&P500 Period Ended December 31, 2021

Investment Philosophy

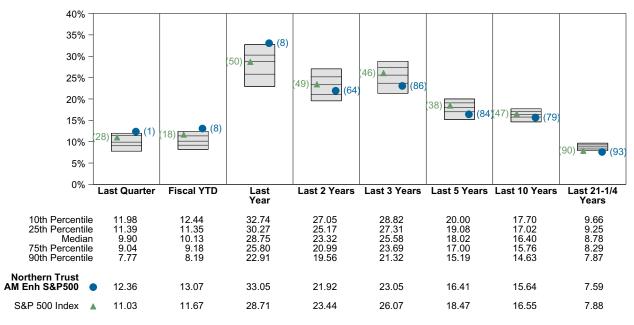
Northern Trust AM Enhanced S&P 500 employs a quantitative investment approach, focusing on the stock selection process as the principal source of value added. The account invests primarily in a broadly diversified portfolio of equity securities that include securities convertible into equity securities (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.

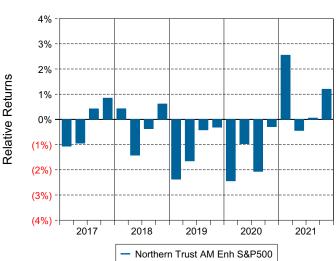
Quarterly Summary and Highlights

- Northern Trust AM Enh S&P500's portfolio posted a 12.36% return for the quarter placing it in the 1 percentile of the Callan Large Cap Core group for the quarter and in the 8 percentile for the last year.
- Northern Trust AM Enh S&P500's portfolio outperformed the S&P 500 Index by 1.33% for the quarter and outperformed the S&P 500 Index for the year by 4.35%.



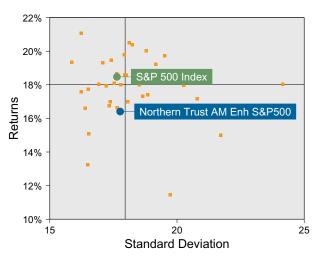






Relative Return vs S&P 500 Index

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



Parametric Enh S&P 500 Period Ended December 31, 2021

Investment Philosophy

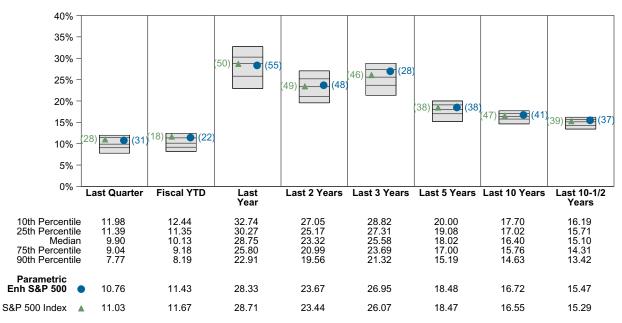
Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. 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.

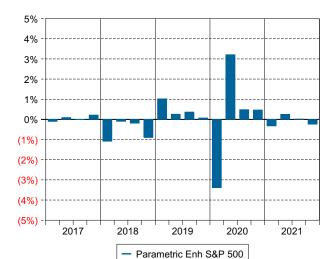
Quarterly Summary and Highlights

- Parametric Enh S&P 500's portfolio posted a 10.76% return for the quarter placing it in the 31 percentile of the Callan Large Cap Core group for the quarter and in the 55 percentile for the last year.
- Parametric Enh S&P 500's portfolio underperformed the S&P 500 Index by 0.26% for the quarter and underperformed the S&P 500 Index for the year by 0.38%.

Quarterly Asset Growth	
Beginning Market Value	\$294,181,076
Net New Investment	\$0
Investment Gains/(Losses)	\$31,661,580
Ending Market Value	\$325,842,656

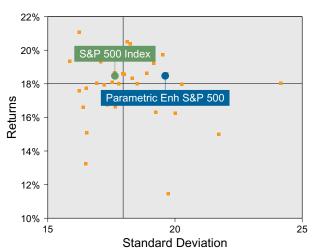






Relative Return vs S&P 500 Index

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



Callan

Relative Returns

Atlanta Capital Period Ended December 31, 2021

Investment Philosophy

Atlanta Capital Managements approach with its small cap product is to focus on high quality companies with an overall portfolio risk exposure tied to the Russell 2000 Index. Key characteristics of this portfolio include: (1)stocks rated B+ or better by S&P, (2) equally weighting 75 stocks, (3) sector concentrations similar to that of the benchmark. A group of ten analysts is in charge of screening the Russell 2000 to identify companies they believe have strong price appreciation potential and good business fundamentals. These analysts present the ideas to the portfolio management team, led by Chip Reed, who makes the final decisions on the inclusion of stocks. In general, stocks are sold from the portfolio if the B+ or better financial rating is no longer met, there is an adverse change in the fundamental business, or because of regular portfolio maintenance to ensure broad diversification.

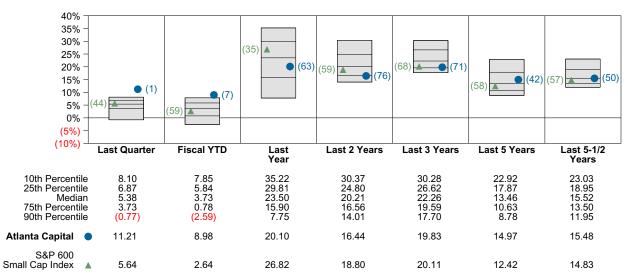
Quarterly Summary and Highlights

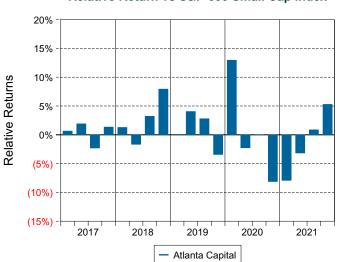
- Atlanta Capital's portfolio posted a 11.21% return for the quarter placing it in the 1 percentile of the Callan Small Capitalization group for the quarter and in the 63 percentile for the last year.
- Atlanta Capital's portfolio outperformed the S&P 600 Small Cap Index by 5.57% for the quarter and underperformed the S&P 600 Small Cap Index for the year by 6.72%.

Quarterly Asset Growth

Beginning Market Value	\$116,839,619
Net New Investment	\$-174,456
Investment Gains/(Losses)	\$13,100,134
Ending Market Value	\$129,765,296

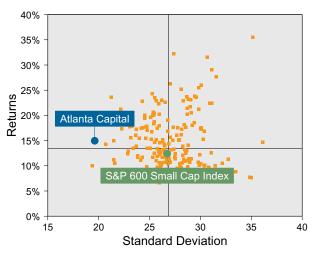






Relative Return vs S&P 600 Small Cap Index

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



Riverbridge Small Cap Growth Period Ended December 31, 2021

Investment Philosophy

Riverbridge believes earnings power determines the value of a franchise. They focus on companies that are building earnings power and intrinsic value of the company over long periods of time. They also look for high-quality growth companies that demonstrate the ability to sustain strong secular earnings growth, regardless of overall economic conditions.

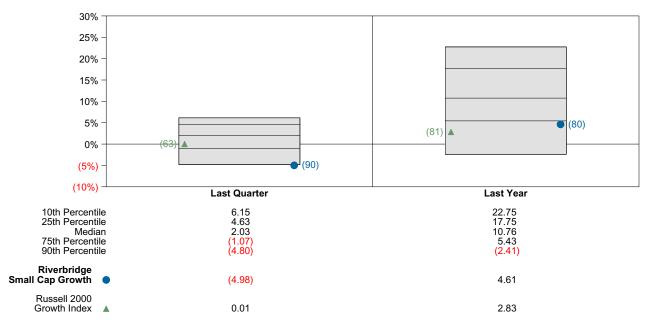
Quarterly Summary and Highlights

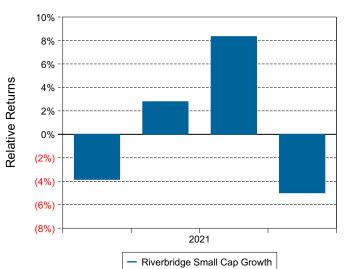
- Riverbridge Small Cap Growth's portfolio posted a (4.98)% return for the quarter placing it in the 90 percentile of the Callan Small Cap Growth group for the quarter and in the 80 percentile for the last year.
- Riverbridge Small Cap Growth's portfolio underperformed the Russell 2000 Growth Index by 4.99% for the quarter and outperformed the Russell 2000 Growth Index for the year by 1.78%.

Quarterly Asset Growth

Beginning Market Value	\$125,693,569
Net New Investment	\$-2,729,066
Investment Gains/(Losses)	\$-6,000,538
Ending Market Value	\$116,963,965

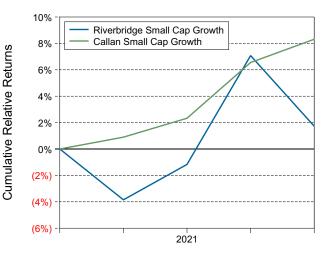






Relative Return vs Russell 2000 Growth Index

Cumulative Returns vs Russell 2000 Growth Index



Sycamore Small Cap Value Period Ended December 31, 2021

Investment Philosophy

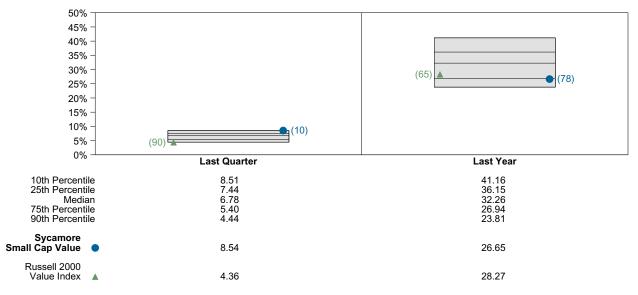
The Victory Small Cap Value Equity investment approach focuses on companies with market capitalizations between \$100 million and \$2 billion that are believed offer above-average total return potential with limited risk. The Small Cap Value Equity investment process seeks to identify high quality, low expectation small cap companies that appear poised for continued or improved earnings. Portfolios typically hold 100-125 stocks with average annual portfolio turnover of 40%. The team will begin to sell when a company's market capitalization exceeds \$4 billion, however they focus on the weighted average market capitalization of the total portfolio and thus may retain exposure to some mid cap companies.

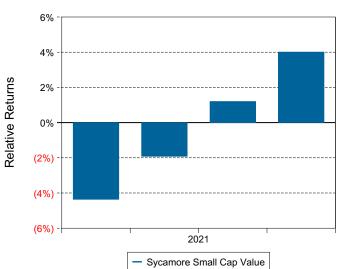
Quarterly Summary and Highlights

- Sycamore Small Cap Value's portfolio posted a 8.54% return for the quarter placing it in the 10 percentile of the Callan Small Cap Value group for the quarter and in the 78 percentile for the last year.
- Sycamore Small Cap Value's portfolio outperformed the Russell 2000 Value Index by 4.18% for the quarter and underperformed the Russell 2000 Value Index for the year by 1.62%.

Quarterly Asset Growth		
Beginning Market Value	\$129,343,339	
Net New Investment	\$-7,698,616	
Investment Gains/(Losses)	\$10,766,322	
Ending Market Value	\$132,411,045	

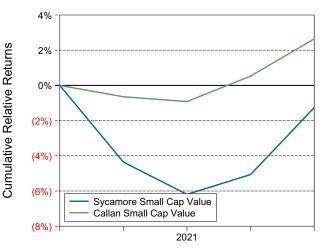
Performance vs Callan Small Cap Value (Gross)





Relative Return vs Russell 2000 Value Index

Cumulative Returns vs Russell 2000 Value Index



International Equities

International Equities Period Ended December 31, 2021

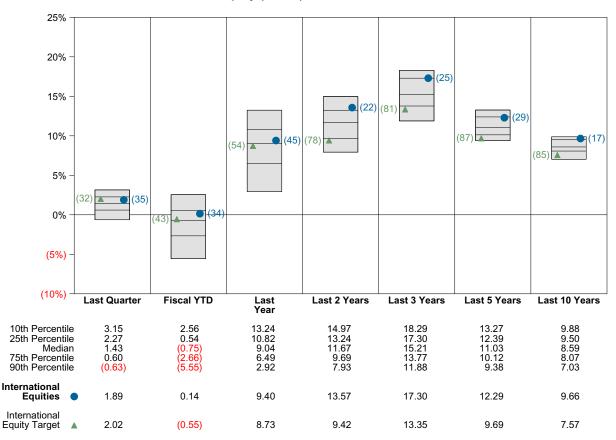
Quarterly Summary and Highlights

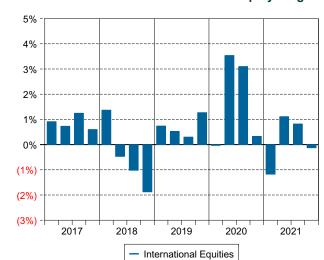
- International Equities's portfolio posted a 1.89% return for the quarter placing it in the 35 percentile of the Public Fund -International Equity group for the quarter and in the 45 percentile for the last year.
- International Equities's portfolio underperformed the International Equity Target by 0.13% for the quarter and outperformed the International Equity Target for the year by 0.67%.

Performance vs Public Fund - International Equity (Gross)

Quarterly Asset Growth

Beginning Market Value	\$1,180,183,512
Net New Investment	\$-23,737,919
Investment Gains/(Losses)	\$22,484,201
Ending Market Value	\$1,178,929,794





Relative Return vs International Equity Target

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



Callan

Relative Returns

DFA International Small Cap Value Fund Period Ended December 31, 2021

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.

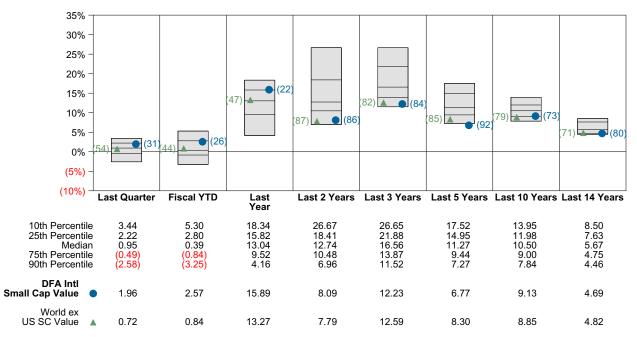
Quarterly Summary and Highlights

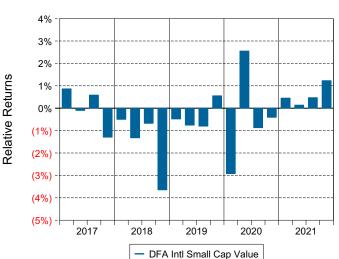
- DFA Intl Small Cap Value's portfolio posted a 1.96% return for the quarter placing it in the 31 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 22 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 1.24% for the quarter and outperformed the World ex US SC Value for the year by 2.63%.

Quarterly Asset Growth

Beginning Market Value	\$91,190,872
Net New Investment	\$0
Investment Gains/(Losses)	\$1,786,760
Ending Market Value	\$92,977,632

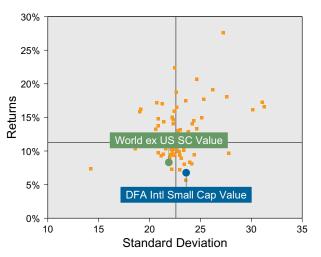






Relative Return vs World ex US SC Value

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



Northern Tr AM Wrld ex US Period Ended December 31, 2021

Investment Philosophy

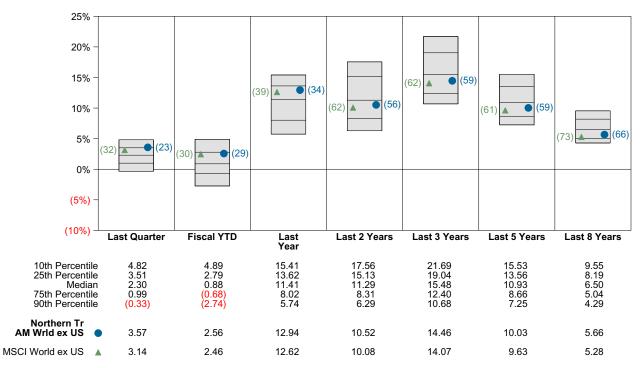
The Fund's objective is to provide investment results that approximate the overall performance of the MSCI World ex-US Equity Index.

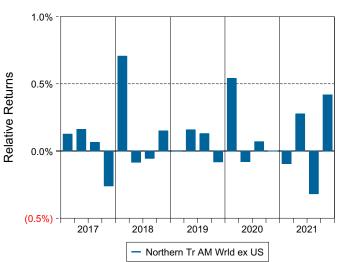
Quarterly Summary and Highlights

- Northern Tr AM Wrld ex US's portfolio posted a 3.57% return for the quarter placing it in the 23 percentile of the Callan Non-US Equity group for the quarter and in the 34 percentile for the last year.
- Northern Tr AM Wrld ex US's portfolio outperformed the MSCI World ex US by 0.43% for the quarter and outperformed the MSCI World ex US for the year by 0.32%.

Quarterly Asset Growth		
Beginning Market Value	\$428,581,787	
Net New Investment	\$-33,713	
Investment Gains/(Losses)	\$15,320,329	
Ending Market Value	\$443,868,404	

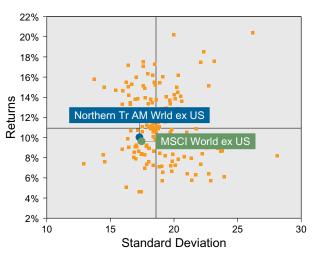
Performance vs Callan Non-US Equity (Gross)





Relative Return vs MSCI World ex US

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



Wellington Management Period Ended December 31, 2021

Investment Philosophy

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

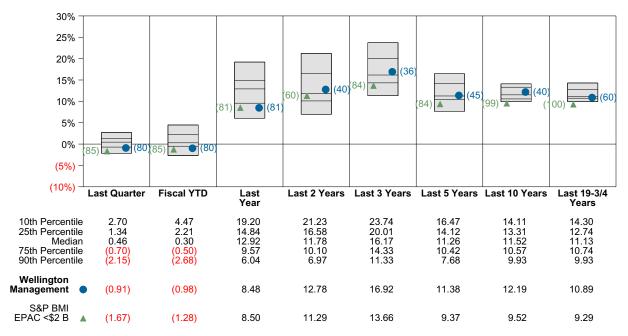
Quarterly Summary and Highlights

- Wellington Management's portfolio posted a (0.91)% return for the quarter placing it in the 80 percentile of the Callan International Small Cap group for the quarter and in the 81 percentile for the last year.
- Wellington Management's portfolio outperformed the S&P BMI EPAC <\$2 B by 0.77% for the quarter and underperformed the S&P BMI EPAC <\$2 B for the year by 0.02%.

Quarterly Asset Growth

Beginning Market Value	\$102,961,445
Net New Investment	\$-212,878
Investment Gains/(Losses)	\$-930,776
Ending Market Value	\$101,817,791







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





William Blair Period Ended December 31, 2021

Investment Philosophy

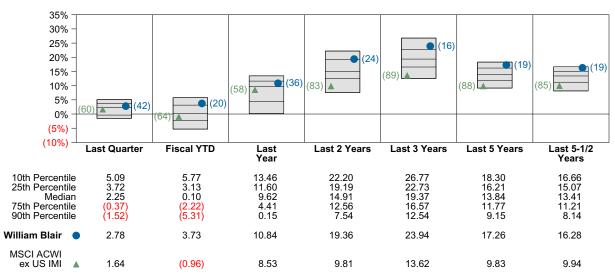
One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates 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.

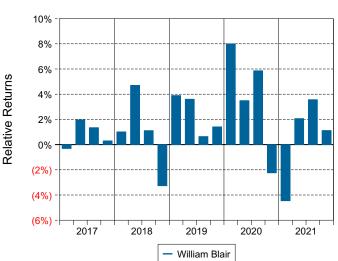
Quarterly Summary and Highlights

- William Blair's portfolio posted a 2.78% return for the quarter placing it in the 42 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 36 percentile for the last year.
- William Blair's portfolio outperformed the MSCI ACWI ex US IMI by 1.14% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 2.31%.

Beginning Market Value	\$287,653,558
Net New Investment	\$-18,748,799
Investment Gains/(Losses)	\$8,357,583
Ending Market Value	\$277,262,342

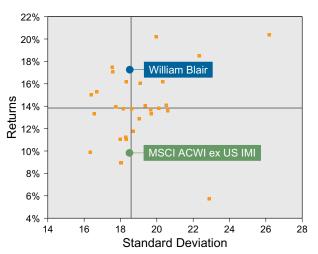






Relative Return vs MSCI ACWI ex US IMI

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



Axiom Emerging Markets Period Ended December 31, 2021

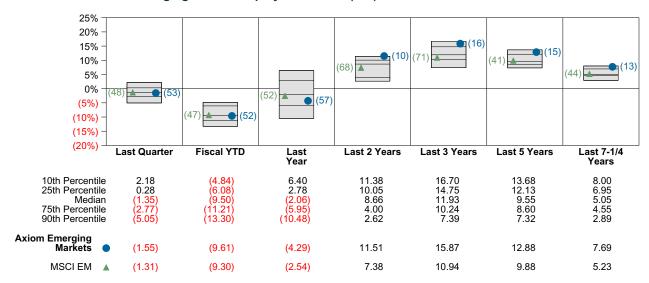
Investment Philosophy

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

Quarterly Summary and Highlights

- Axiom Emerging Markets's portfolio posted a (1.55)% return for the quarter placing it in the 53 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 57 percentile for the last year.
- Axiom Emerging Markets's portfolio underperformed the MSCI EM by 0.23% for the quarter and underperformed the MSCI EM for the year by 1.75%.

Quarterly Asset Growth		
Beginning Market Value	\$196,824,638	
Net New Investment	\$0	
Investment Gains/(Losses)	\$-3,043,427	
Ending Market Value	\$193,781,211	

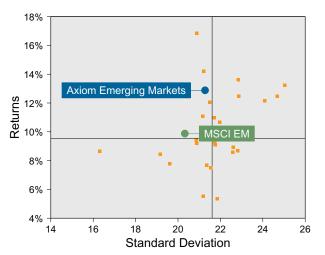


Performance vs Callan Emerging Markets Equity Mut Funds (Net)



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, 2021

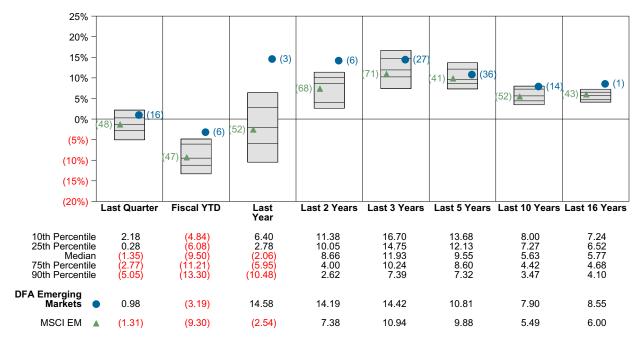
Investment Philosophy

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 0.98% return for the quarter placing it in the 16 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 3 percentile for the last year.
- DFA Emerging Markets's portfolio outperformed the MSCI EM by 2.30% for the quarter and outperformed the MSCI EM for the year by 17.12%.

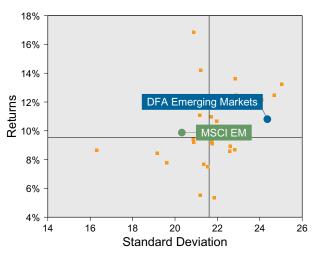
Quarterly Asset Growth			
Beginning Market Value	\$72,971,212		
Net New Investment	\$-4,500,000		
Investment Gains/(Losses)	\$751,203		
Ending Market Value	\$69,222,415		



Performance vs Callan Emerging Markets Equity Mut Funds (Net)







World Equities

EPOCH Investment Period Ended December 31, 2021

Investment Philosophy

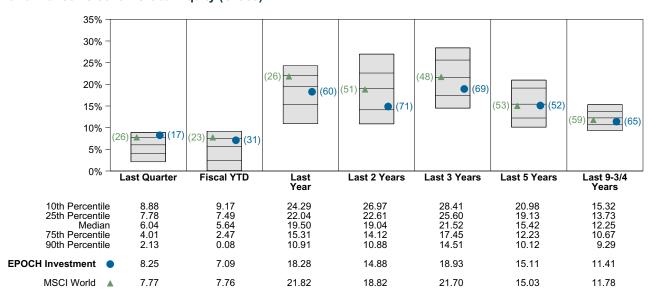
Epoch seeks to produce superior risk adjusted returns by building portfolios of businesses with outstanding risk/reward profiles without running a high degree of capital risk. They analyze businesses in the same manner private investors would in looking to purchase the entire company. The strategy only 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

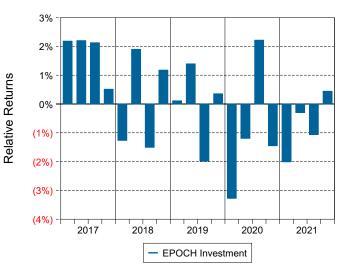
- EPOCH Investment's portfolio posted a 8.25% return for the quarter placing it in the 17 percentile of the Callan Global Equity group for the quarter and in the 60 percentile for the last year.
- EPOCH Investment's portfolio outperformed the MSCI World by 0.48% for the quarter and underperformed the MSCI World for the year by 3.54%.

Quarterly	Asset Growth
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Beginning Market Value	\$387,298,230
Net New Investment	\$-59,617,115
Investment Gains/(Losses)	\$28,656,979
Ending Market Value	\$356,338,094

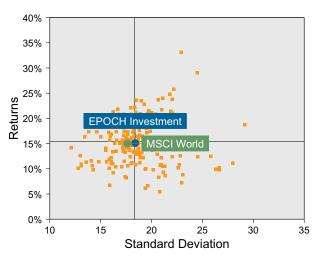






Relative Return vs MSCI World

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



LSV Asset Management Period Ended December 31, 2021

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 4.88% return for the quarter placing it in the 65 percentile of the Callan Global Equity group for the quarter and in the 24 percentile for the last year.
- LSV Asset Management's portfolio underperformed the Benchmark by 1.22% for the quarter and outperformed the Benchmark for the year by 4.17%.

Quarterly Asset Growth

Beginning Market Value	\$460,724,716
Net New Investment	\$-26,615,223
Investment Gains/(Losses)	\$21,663,585
Ending Market Value	\$455,773,078

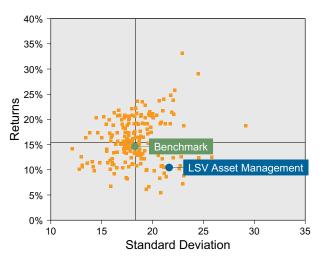






Relative Return vs Benchmark

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



Private Equities

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. 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, 2021					
	Last	Last	Last 3	Last 5	Last 21
	Quarter	Year	Years	Years	Years
Private Equity	9.23%	57.24%	23.62%	16.43%	5.30%
Adams St Direct Co-Invest Fund	(0.57%)	(13.01%)	(32.67%)	(28.56%)	-
Adams St Direct Fd 2010	6.88%	37.50%	13.16%	17.29%	-
Adams St 1998 Partnership	1.25%	(1.34%)	(0.28%)	1.24%	1.59%
Adams St 1999 Partnership	0.01%	0.73%	(0.27%)	0.90%	2.30%
Adams St 2000 Partnership	(2.65%)	(4.44%)	(5.05%)	1.33%	2.72%
Adams St 2001 Partnership	(20.66%)	0.04%	1.56%	3.68%	3.75%
Adams St 2002 Partnership	(1.58%)	(2.00%)	(4.77%)	(1.83%)	-
Adams St 2003 Partnership	(25.27%)	(26.56%)	(13.94%)	(3.97%)	-
Adams St 2010 Partnership	11.36%	79.39%	40.94%	29.78%	-
Adams St 2008 Fund	0.31%	36.02%	21.54%	20.23%	-
Adams St 2000 Non-US	(11.71%)	(13.66%)	(5.75%)	0.90%	2.25%
Adams St 2001 Non-US	(3.59%)	(0.19%)	5.51%	6.11%	-
Adams St 2002 Non-US	14.95%	5.59%	(0.61%)	0.62%	-
Adams St 2003 Non-US	(5.26%)	(8.73%)	(10.04%)	(2.78%)	-
Adams St 2004 Non-US	(7.58%)	31.93%	10.92%	9.31%	-
Adams St 2010 Non-US	1.53%	43.96%	26.40%	24.10%	-
Adams St 2010 NonUS Emg	8.29%	55.70%	24.08%	20.11%	-
Adams St 2015 Global Fund	8.85%	78.44%	33.94%	29.57%	-
Adams St 2016 Global Fund	10.78%	72.68%	28.74%	29.95%	-
Adams St 2017 Global Fund	12.20%	75.78%	30.07%	-	-
Adams St 2018 Global Fund	11.92%	77.90%	34.52%	-	-
Adams St 2019 Global Fund	13.62%	142.33%	-	-	-
Adams St 2020 Global Fund	10.57%	392.02%	-	-	-
BlackRock	11.79%	57.57%	24.55%	_	-
Blackrock PEP 2020	9.81%	-	-	-	-
Sixth Street TAO	3.08%	13.50%	-	-	-
Remaining Misc. Funds*	(4.49%)	3.28%	2.22%	1.40%	-
Russell 1000 Index	9.78%	26.45%	26.21%	18.43%	8.57%
Russell 2000 Index	2.14%	14.82%	20.02%	12.02%	9.02%

* 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

Domestic Fixed Income Period Ended December 31, 2021

Quarterly Summary and Highlights

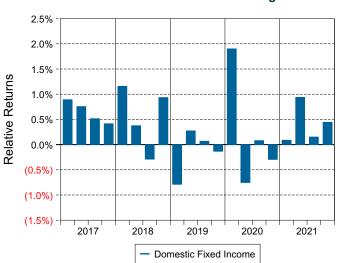
- Domestic Fixed Income's portfolio posted a 0.67% return for the quarter placing it in the 8 percentile of the Public Fund Domestic Fixed group for the quarter and in the 7 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Income Target by 0.45% for the quarter and outperformed the Domestic Fixed Income Target for the year by 1.64%.

Performance vs Public Fund - Domestic Fixed (Gross)

Quarterly Asset Growth

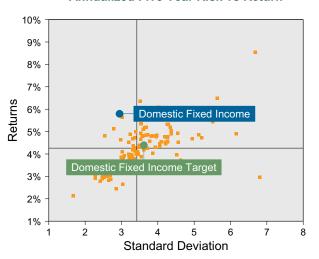
Beginning Market Value	\$1,905,245,654
Net New Investment	\$80,143,577
Investment Gains/(Losses)	\$13,184,079
Ending Market Value	\$1,998,573,310





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, 2021

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.

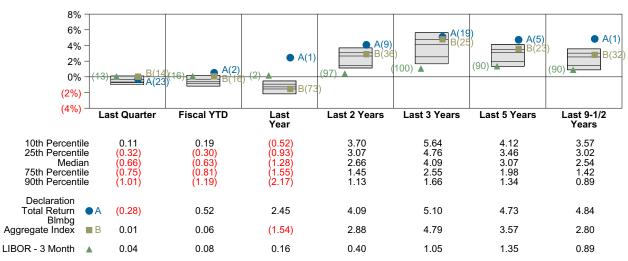
Quarterly Summary and Highlights

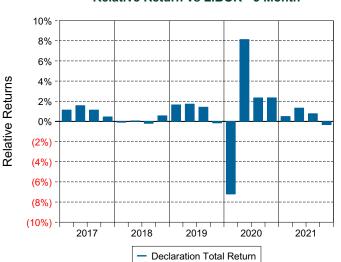
- Declaration Total Return's portfolio posted a (0.28)% return for the quarter placing it in the 23 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio underperformed the LIBOR 3 Month by 0.33% for the quarter and outperformed the LIBOR 3 Month for the year by 2.28%.

Quarterly Asset Growth		
Beginning Market Value	\$158,364,179	
Net New Investment	\$-103,553	

Net New Investment	\$-103,553
Investment Gains/(Losses)	\$-447,912
Ending Market Value	\$157,812,714

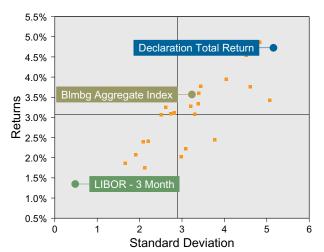






Relative Return vs LIBOR - 3 Month

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



PIMCO DiSCO II Period Ended December 31, 2021

Investment Philosophy

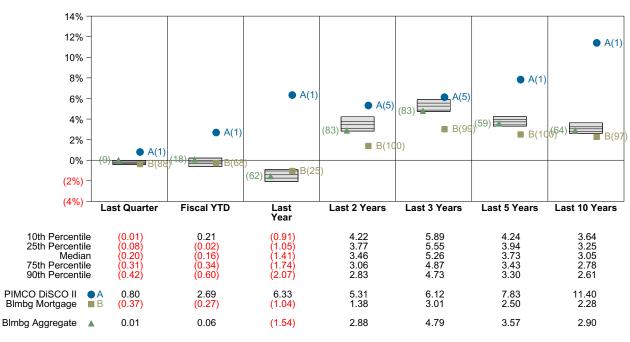
The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive 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.

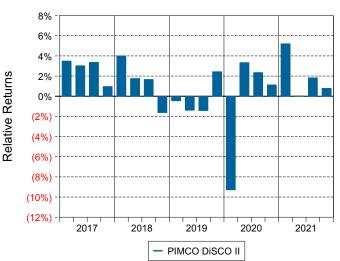
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 0.80% return for the quarter placing it in the 1 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO DiSCO II's portfolio outperformed the Blmbg Aggregate by 0.79% for the quarter and outperformed the Blmbg Aggregate for the year by 7.87%.

Quarterly Asset Growth			
Beginning Market Value	\$100,731,926		
Net New Investment	\$0		
Investment Gains/(Losses)	\$802,588		
Ending Market Value	\$101,534,514		

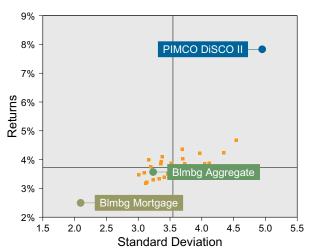






Relative Return vs Blmbg Aggregate

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



PIMCO Core Plus Constrained Period Ended December 31, 2021

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.

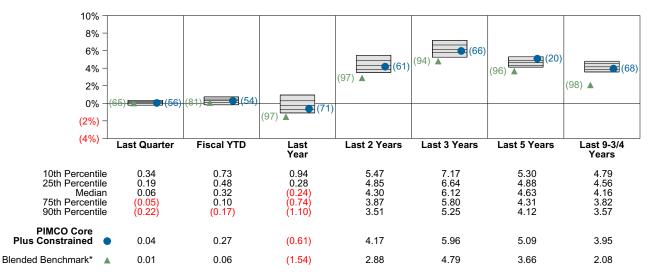
Quarterly Summary and Highlights

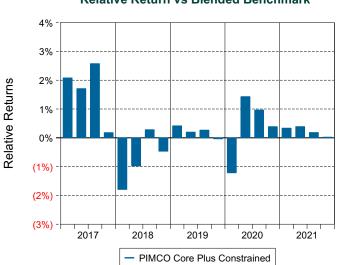
- PIMCO Core Plus Constrained's portfolio posted a 0.04% return for the quarter placing it in the 56 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 71 percentile for the last year.
- PIMCO Core Plus Constrained's portfolio outperformed the Blended Benchmark* by 0.03% for the quarter and outperformed the Blended Benchmark* for the year by 0.93%.

Quarterly Asset Growth ginning Market Value \$487,013,248

beginning market value	J407,013,240
Net New Investment	\$25,851,972
Investment Gains/(Losses)	\$211,235
Ending Market Value	\$513,076,455

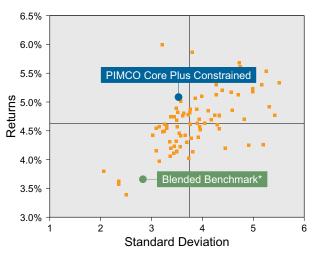






Relative Return vs Blended Benchmark*

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



Prudential Core Period Ended December 31, 2021

Investment Philosophy

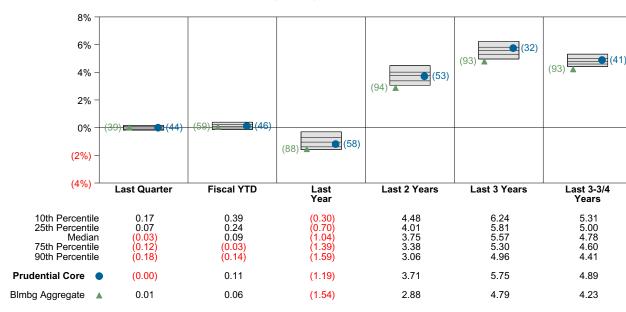
The PGIM Fixed Income Core Fixed Income strategy seeks to provide +60 bps over the Bloomberg Barclays Aggregate Index over a market cycle. The strategy tends to generate its excess return from fairly equal increments of both sector allocation and subsector/security allocation. Duration and yield curve 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 (0.00)% return for the quarter placing it in the 44 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 58 percentile for the last year.
- Prudential Core's portfolio underperformed the Blmbg • Aggregate by 0.02% for the quarter and outperformed the Blmbg Aggregate for the year by 0.35%.

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

Beginning Market Value	\$491,550,540
Net New Investment	\$25,860,060
Investment Gains/(Losses)	\$-29,274
Ending Market Value	\$517,381,326

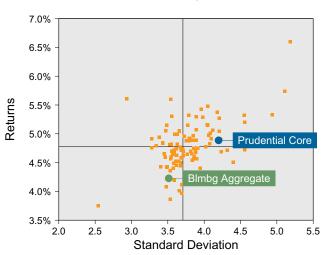


Performance vs Callan Core Bond Fixed Income (Gross)



Relative Return vs Blmbg Aggregate

Callan Core Bond Fixed Income (Gross) Annualized Three and Three-Quarter Year Risk vs Return



SSgA Long US Treas Index Period Ended December 31, 2021

Investment Philosophy

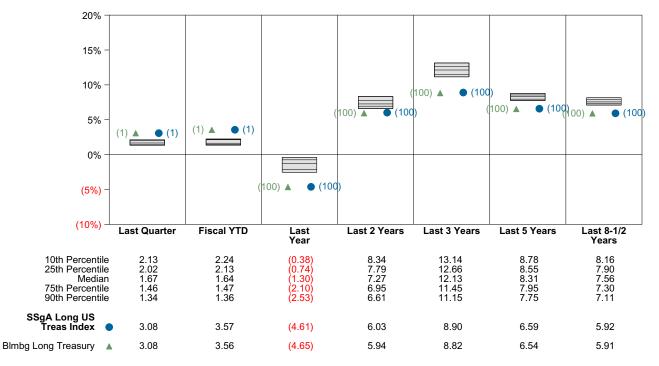
The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Bloomberg Capital U.S. Long Treasury Bond Index over the long term.

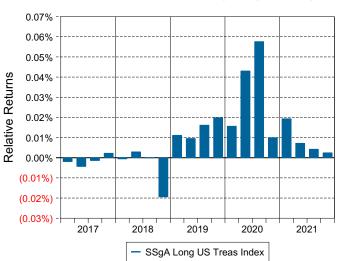
Quarterly Summary and Highlights

- SSgA Long US Treas Index's portfolio posted a 3.08% return for the quarter placing it in the 1 percentile of the Callan Extended Maturity Fixed Income group for the quarter and in the 100 percentile for the last year.
- SSgA Long US Treas Index's portfolio outperformed the Blmbg Long Treasury by 0.00% for the quarter and outperformed the Blmbg Long Treasury for the year by 0.03%.

Quarterly Asset Growth	
Beginning Market Value	\$178,166,868
Net New Investment	\$10,593,183
Investment Gains/(Losses)	\$5,771,285
Ending Market Value	\$194,531,335

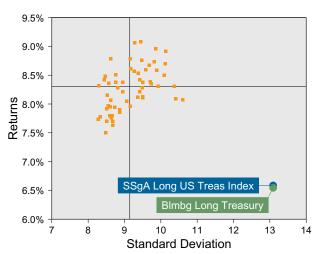
Performance vs Callan Extended Maturity Fixed Income (Gross)





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, 2021

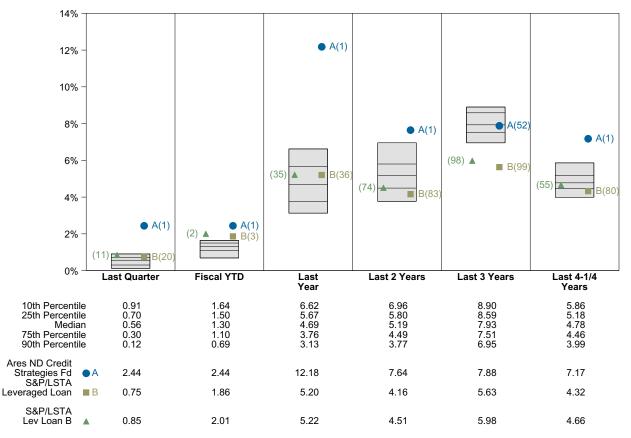
Quarterly Summary and Highlights

- Ares ND Credit Strategies Fd's portfolio posted a 2.44% 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.
- Ares ND Credit Strategies Fd's portfolio outperformed the S&P/LSTA Lev Loan B by 1.59% for the quarter and outperformed the S&P/LSTA Lev Loan B for the year by 6.96%.

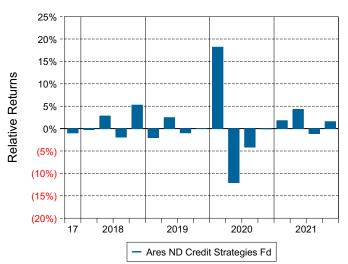
Performance vs Callan High Yield Mutual Funds (Net)

Quarterly Asset Growth

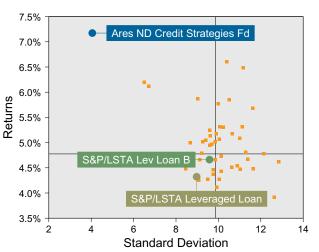
Beginning Market Value	\$139,898,876
Net New Investment	\$3,475,410
Investment Gains/(Losses)	\$3,410,158
Ending Market Value	\$146,784,444



Relative Return vs S&P/LSTA Lev Loan B



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



Cerberus ND Private Credit Fd Period Ended December 31, 2021

Investment Philosophy

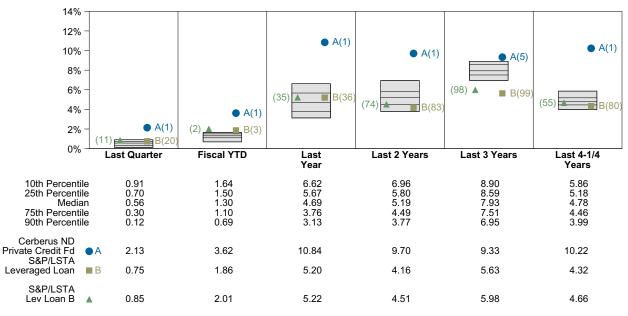
The investment objective of the LLC is to achieve superior risk-adjusted rates of return primarily through origination of, and investment in, secured debt assets consistent with the Loan Opportunities Strategy of the Cerberus Business Finance lending platform ("CBF", "Cerberus Business Finance" or the "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.

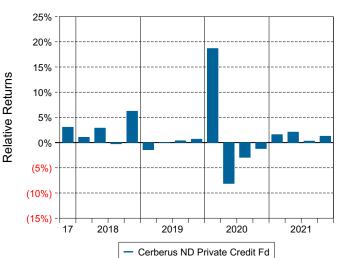
Quarterly Summary and Highlights

- Cerberus ND Private Credit Fd's portfolio posted a 2.13% 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.
- Cerberus ND Private Credit Fd's portfolio outperformed the S&P/LSTA Lev Loan B by 1.28% for the quarter and outperformed the S&P/LSTA Lev Loan B for the year by 5.62%.

Performance vs Callan High Yield Mutual Funds (Net)

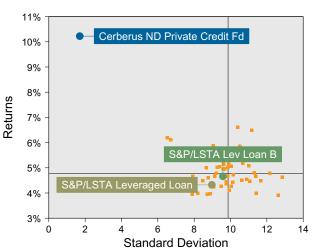
Quarterly Asset Growth		
Beginning Market Value	\$143,582,418	
Net New Investment	\$15,400,000	
Investment Gains/(Losses)	\$3,175,835	
Ending Market Value	\$162,158,253	





Relative Return vs S&P/LSTA Lev Loan B

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



Goldman Sachs 2006 Offshore Period Ended December 31, 2021

Investment Philosophy

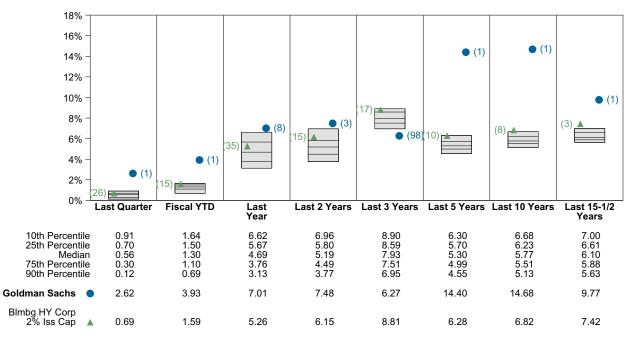
GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings,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

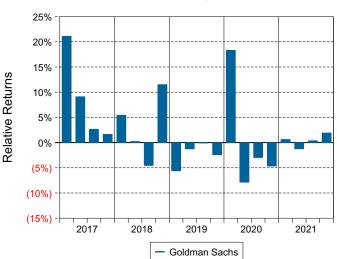
Quarterly Summary and Highlights

- Goldman Sachs's portfolio posted a 2.62% return for the quarter placing it in the 1 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 8 percentile for the last year.
- Goldman Sachs's portfolio outperformed the Blmbg HY Corp 2% Iss Cap by 1.93% for the quarter and outperformed the Blmbg HY Corp 2% Iss Cap for the year by 1.75%.

Quarterly Asset Growth		
Beginning Market Value	\$47,001	
Net New Investment	\$0	
Investment Gains/(Losses)	\$1,230	
Ending Market Value	\$48,231	

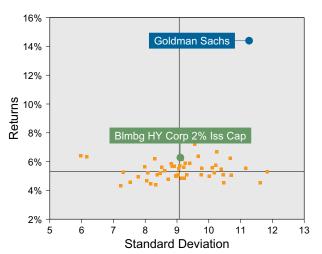






Relative Return vs Blmbg HY Corp 2% lss Cap

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



Goldman Sachs Offshore Fund V Period Ended December 31, 2021

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.

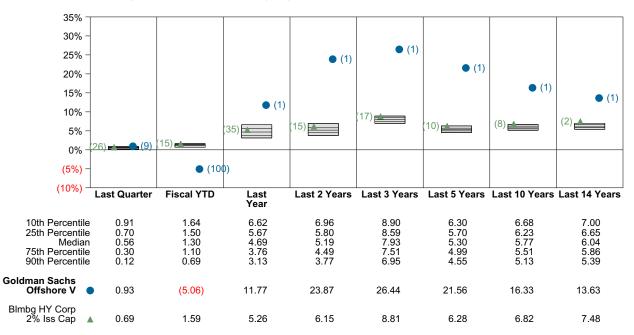
Quarterly Summary and Highlights

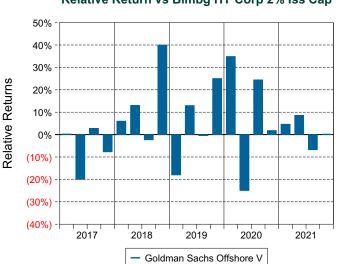
- Goldman Sachs Offshore V's portfolio posted a 0.93% return for the quarter placing it in the 9 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 1 percentile for the last year.
- Goldman Sachs Offshore V's portfolio outperformed the Blmbg HY Corp 2% Iss Cap by 0.24% for the quarter and outperformed the Blmbg HY Corp 2% Iss Cap for the year by 6.51%.

Quarterly Asset Growth Beginning Market Value \$127,150

Net New Investment	\$0
Investment Gains/(Losses)	\$1,186
Ending Market Value	\$128,336

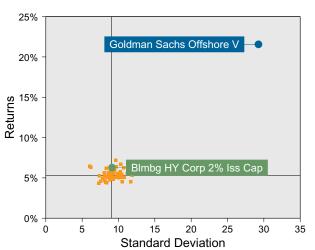






Relative Return vs Blmbg HY Corp 2% lss Cap

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



Loomis Sayles Period Ended December 31, 2021

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.

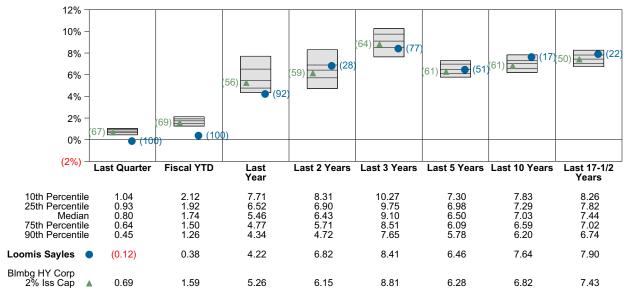
Quarterly Summary and Highlights

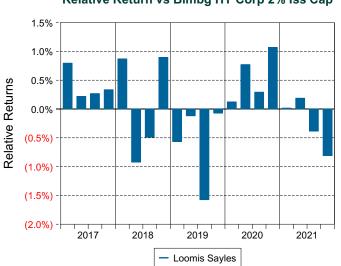
- Loomis Sayles's portfolio posted a (0.12)% return for the quarter placing it in the 100 percentile of the Callan High Yield Fixed Income group for the quarter and in the 92 percentile for the last year.
- Loomis Sayles's portfolio underperformed the Blmbg HY Corp 2% lss Cap by 0.81% for the quarter and underperformed the Blmbg HY Corp 2% lss Cap for the year by 1.04%.

Performance vs Callan High Yield Fixed Income (Gross)

Quarterly Asset Growth		
Beginning Market Value	\$193,124,711	
Net New Investment	\$-226,922	
Investment Gains/(Losses)	\$-243,343	

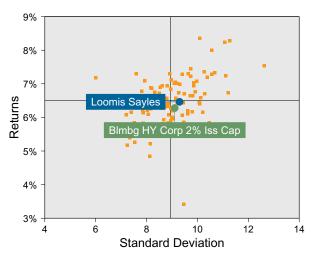
Investment Gains/(Losses)\$-243,343Ending Market Value\$192,654,446





Relative Return vs Blmbg HY Corp 2% lss Cap

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



PIMCO Bravo II Fund Period Ended December 31, 2021

Investment Philosophy

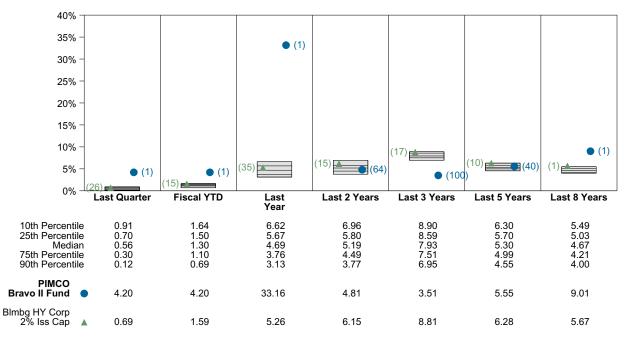
The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility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

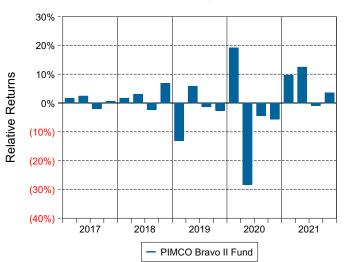
Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 4.20% 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.
- PIMCO Bravo II Fund's portfolio outperformed the Blmbg HY Corp 2% Iss Cap by 3.51% for the quarter and outperformed the Blmbg HY Corp 2% Iss Cap for the year by 27.90%.

Quarterly Asset Growth		
Beginning Market Value	\$12,638,737	
Net New Investment	\$-706,573	
Investment Gains/(Losses)	\$531,092	
Ending Market Value	\$12,463,256	

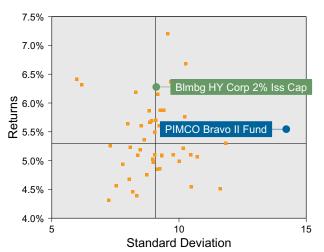






Relative Return vs Blmbg HY Corp 2% lss Cap

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



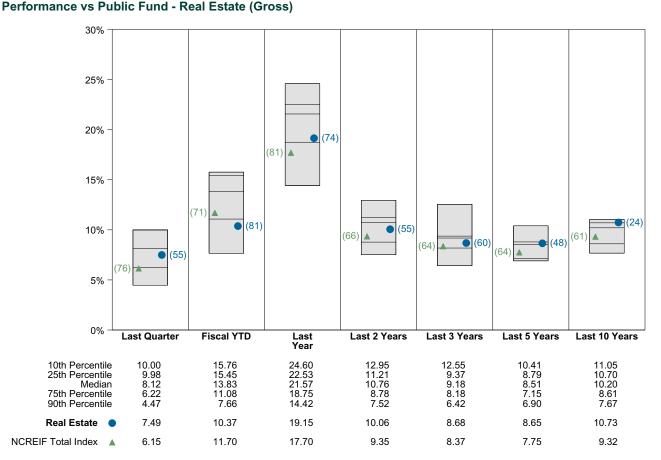
Real Estate Period Ended December 31, 2021

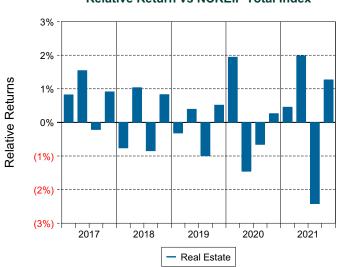
Quarterly Summary and Highlights

- Real Estate's portfolio posted a 7.49% return for the quarter placing it in the 55 percentile of the Public Fund - Real Estate group for the quarter and in the 74 percentile for the last year.
- Real Estate's portfolio outperformed the NCREIF Total Index by 1.34% for the quarter and outperformed the NCREIF Total Index for the year by 1.45%.

Quarterly Asset Growth

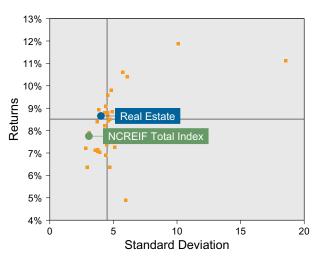
Beginning Market Value	\$735,801,428
Net New Investment	\$-12,735,857
Investment Gains/(Losses)	\$55,033,985
Ending Market Value	\$778,099,555





Relative Return vs NCREIF Total Index

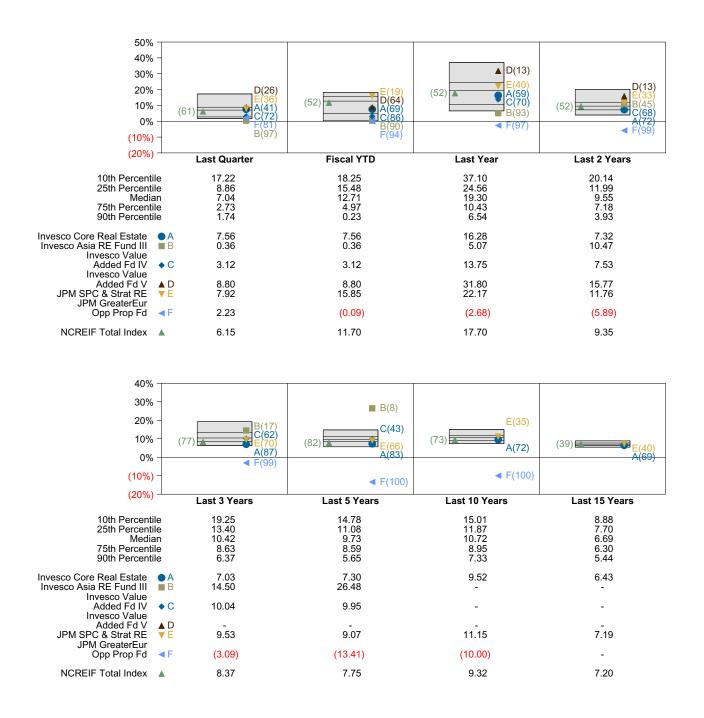
Public Fund - Real Estate (Gross) Annualized Five Year Risk vs Return



North Dakota State Investment Board Pension Funds Performance vs Callan Total Domestic Real Estate DB Periods Ended December 31, 2021

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.



Timber

TIR Teredo Period Ended December 31, 2021

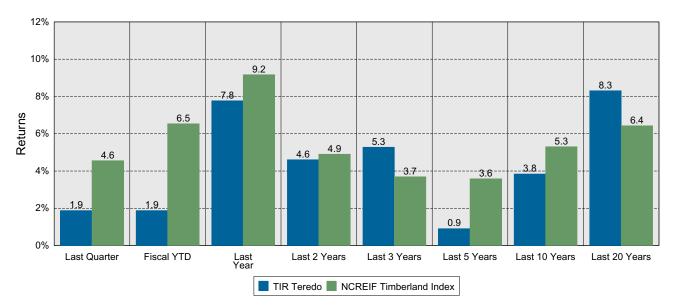
Investment Philosophy

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

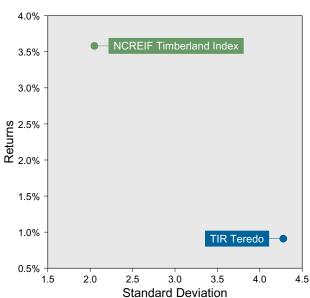
Quarterly Summary and Highlights

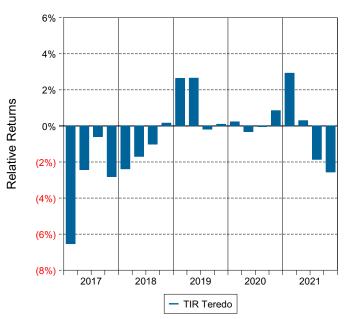
 TIR Teredo's portfolio underperformed the NCREIF Timberland Index by 2.68% for the quarter and underperformed the NCREIF Timberland Index for the year by 1.40%.

Quarterly Asset Growth		
Beginning Market Value	\$27,677,213	
Net New Investment	\$-1,000,000	
Investment Gains/(Losses)	\$508,644	
Ending Market Value	\$27,185,857	



Relative Return vs NCREIF Timberland Index





Annualized Five Year Risk vs Return

TIR Springbank Period Ended December 31, 2021

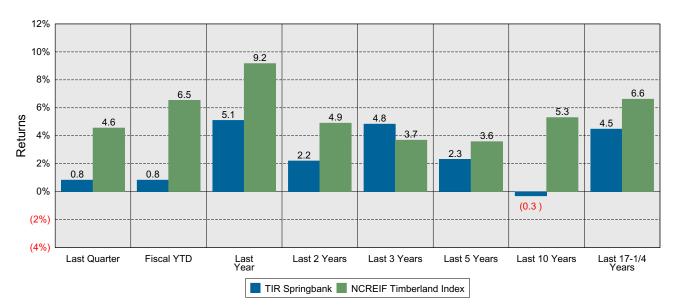
Investment Philosophy

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.

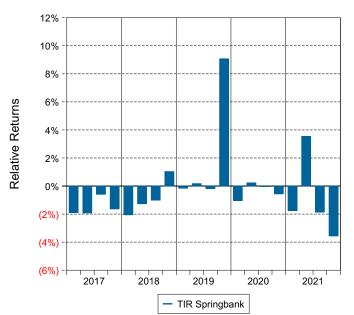
Quarterly Summary and Highlights

 TIR Springbank's portfolio underperformed the NCREIF Timberland Index by 3.73% for the quarter and underperformed the NCREIF Timberland Index for the year by 4.06%.

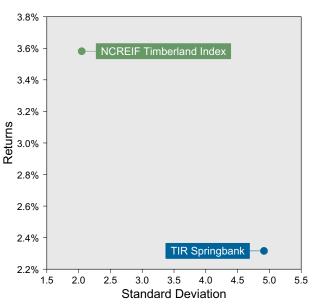
Quarterly Asset Growth	
Beginning Market Value	\$88,875,529
Net New Investment	\$-2,812,000
Investment Gains/(Losses)	\$723,543
Ending Market Value	\$86,787,072



Relative Return vs NCREIF Timberland Index



Annualized Five Year Risk vs Return



Infrastructure

ISQ Global Infrastructure II Period Ended December 31, 2021

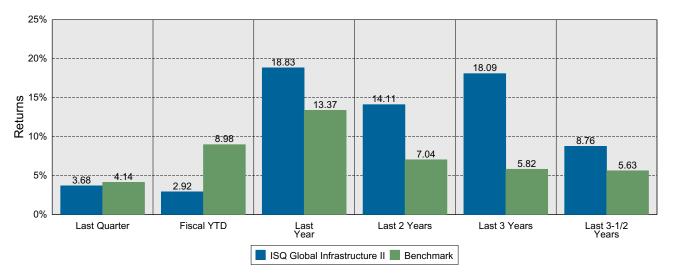
Investment Philosophy

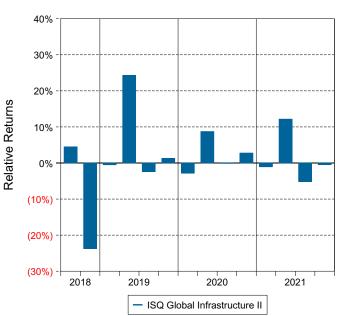
The ISQ Global Infrastructure Fund II seeks to achieve long-term capital appreciation as well as current income through equity and equity related investments in infrastructure and infrastructure related assets located globally, with a focus on North America, Europe, and selected growth economies in Asia 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 underperformed the Benchmark by 0.46% for the quarter and outperformed the Benchmark for the year by 5.46%.

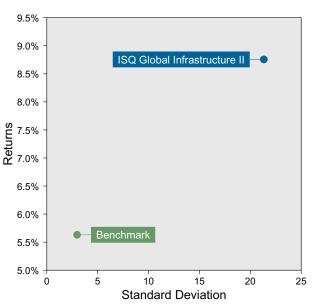
Quarterly Asset Growth		
Beginning Market Value	\$56,674,091	
Net New Investment	\$0	
Investment Gains/(Losses)	\$2,086,741	
Ending Market Value	\$58,760,832	





Relative Return vs Benchmark

Annualized Three and One-Half Year Risk vs Return



The Rohatyn Group Period Ended December 31, 2021

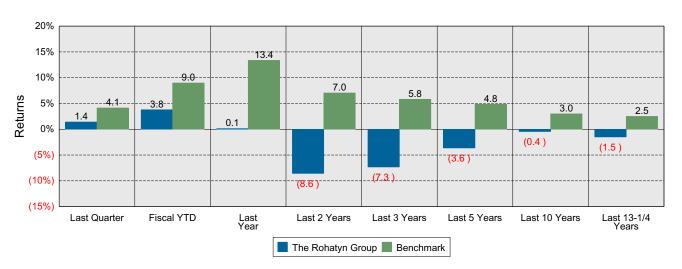
Investment Philosophy

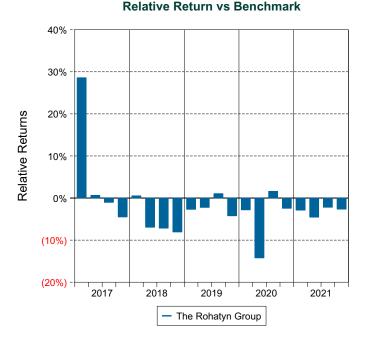
The Rohatyn Group's Asian Infrastructure & Related Resources Opportunity (AIRRO) Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional 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 2.72% for the quarter and underperformed the Benchmark for the year by 13.24%.

Quarterly Asset Growth		
Beginning Market Value	\$15,688,949	
Net New Investment	\$105,917	
Investment Gains/(Losses)	estment Gains/(Losses) \$221,480	
Ending Market Value	\$16,016,346	





Annualized Five Year Risk vs Return



JPM Infrastructure Fund Period Ended December 31, 2021

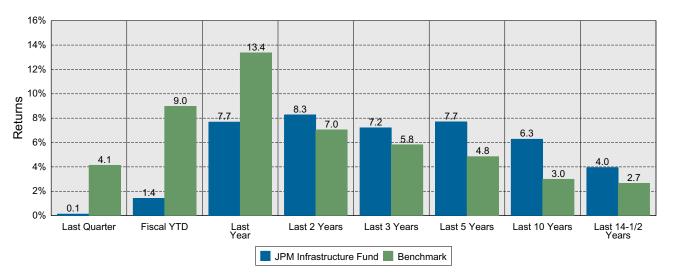
Investment Philosophy

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.

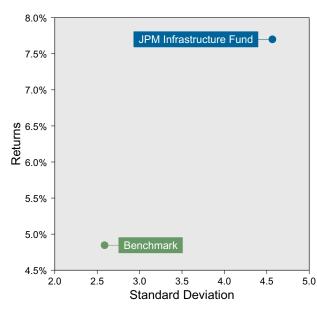
Quarterly Summary and Highlights

• JPM Infrastructure Fund's portfolio underperformed the Benchmark by 4.01% for the quarter and underperformed the Benchmark for the year by 5.68%.

Quarterly Asset Growth		
Beginning Market Value	\$131,515,880	
Net New Investment	\$-3,493,869	
Investment Gains/(Losses)	\$170,925	
Ending Market Value	\$128,192,936	







Annualized Five Year Risk vs Return

Callan

8%

6%

4%

2%

0%

(2%)

(4%)

(6%)

2017

2018

2019

JPM Infrastructure Fund

2020

2021

Relative Returns

Grosvenor Cust. Infrastructure Period Ended December 31, 2021

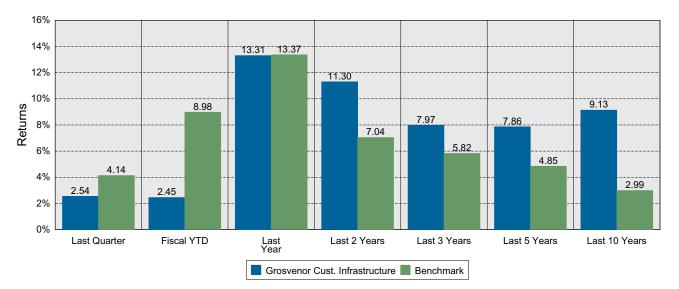
Investment Philosophy

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.

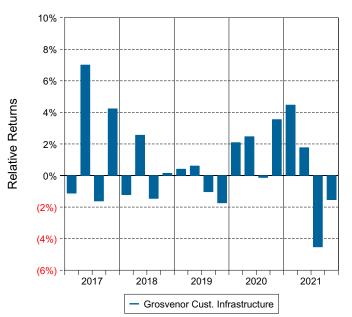
Quarterly Summary and Highlights

• Grosvenor Cust. Infrastructure's portfolio underperformed the Benchmark by 1.60% for the quarter and underperformed the Benchmark for the year by 0.06%.

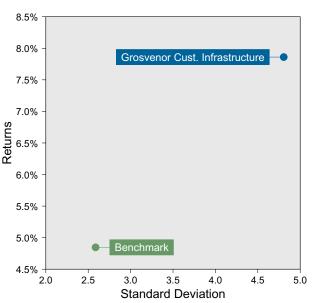
Quarterly Asset Growth		
Beginning Market Value	\$11,814,531	
Net New Investment	\$-736,346	
Investment Gains/(Losses)	\$287,193	
Ending Market Value	\$11,365,378	



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Grosvenor Cust. Infrastructure II Period Ended December 31, 2021

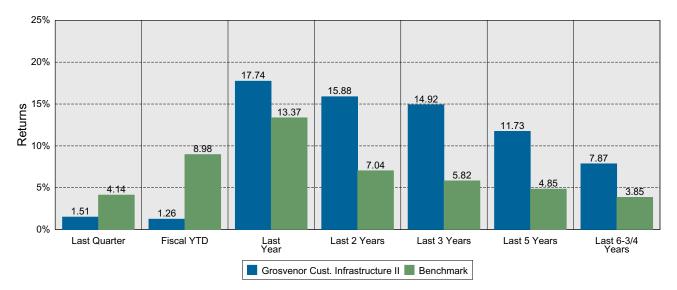
Investment Philosophy

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.

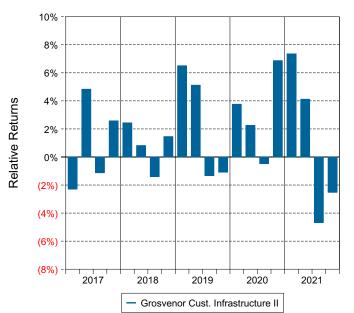
Quarterly Summary and Highlights • Grosvenor Cust. Infrastructure II's portfolio underperformed the Benchmark by 2.63% for the quarter and outperformed

the Benchmark for the year by 4.37%.

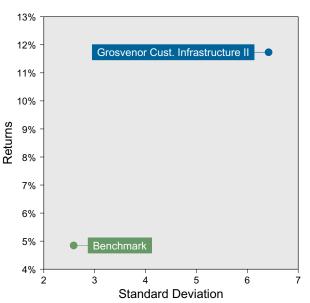
Quarterly Asset Growth		
Beginning Market Value	\$24,174,041	
Net New Investment	\$-1,454,524	
Investment Gains/(Losses)	\$347,916	
Ending Market Value	\$23,067,433	



Relative Return vs Benchmark



Annualized Five Year Risk vs Return



Macquarie Infrastructure Fund IV Period Ended December 31, 2021

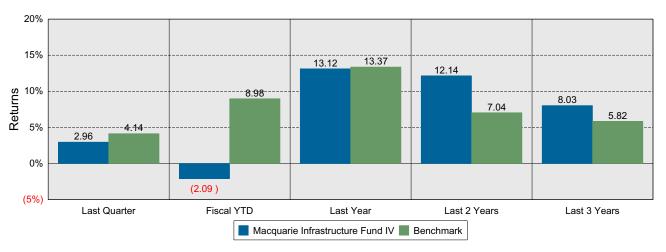
Investment Philosophy

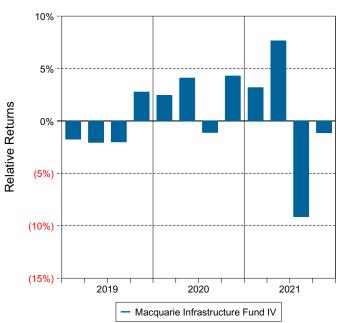
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience 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 underperformed the Benchmark by 1.17% for the quarter and underperformed the Benchmark for the year by 0.25%.

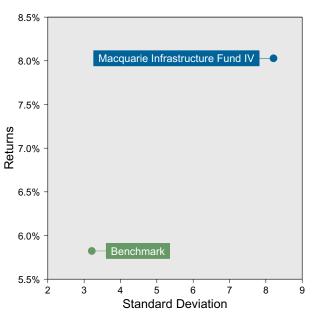
Quarterly Asset Growth		
Beginning Market Value	\$63,436,854	
Net New Investment	\$-36,143	
Investment Gains/(Losses)	\$1,879,984	
Ending Market Value	\$65,280,695	





Relative Return vs Benchmark

Annualized Three Year Risk vs Return

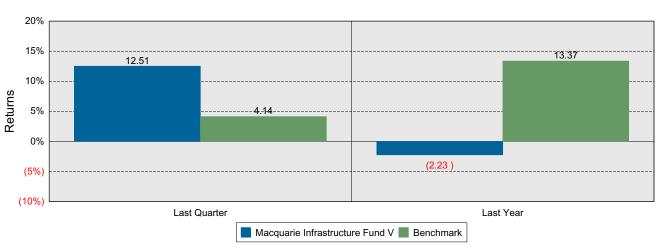


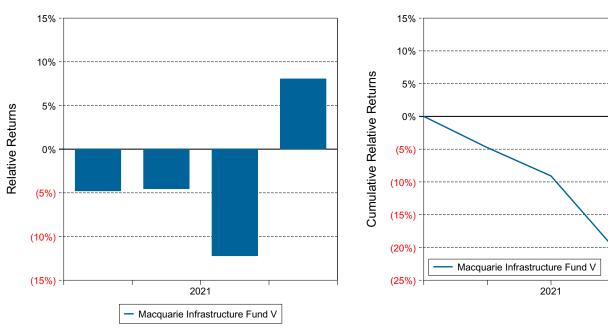
Macquarie Infrastructure Fund V Period Ended December 31, 2021

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 Quarterly Asset Growth • Macquarie Infrastructure Fund V's portfolio outperformed the Benchmark by 8.38% for the quarter and underperformed the Benchmark for the year by 15.60%. Beginning Market Value \$16,525,808 Net New Investment \$17,212,271 Investment Gains/(Losses) \$1,978,642 Ending Market Value \$35,716,721





Relative Return vs Benchmark

Cumulative Returns vs Benchmark

Callan Research/Education



Education

4th Quarter 2021

Quarterly Highlights

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

2021 Investment Management Fee Study | The purpose of this study, the ninth we have done, is to provide a detailed analysis on institutional investment management fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

2021 Nuclear Decommissioning Funding Study | This study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

2021 Private Equity Fees and Terms Study | This study is intended to help institutional investors better evaluate private equity funds, serving as an industry benchmark when comparing a partnership's terms to its peers.

2021 Cost of Doing Business Survey | In this survey, Callan compares the costs of administering and operating funds across all types of tax-exempt and tax-qualified organizations in the U.S. We identify practices to help institutional investors manage expenses.

<u>A Guide to Reinsurance for Institutional Investors</u> | Reinsurance investments are a potential option for institutional investors looking to diversify both equity and rate risks while also offering attractive risk-adjusted returns. Sean Lee examines how insurance-linked securities can be incorporated into institutional investors' portfolios.

<u>2021 ESG Survey</u> | Callan's ninth annual survey assessing the status of environmental, social, and governance (ESG) investing in the U.S. institutional investment market.

Blog Highlights

Rising Rates! Why the Heck Do We Own Bonds? | Investment grade bonds spin off yield and participate in rising rate markets through principal reinvestment, and their return distribution

provides downside protection that counter-balances growth-oriented portfolio investments. Despite frustratingly low expected returns, IG bonds can still contribute meaningfully to the long-term investment goals of most institutional investors.

Understanding Return Forecasts for Public DB Plans | It is important for decision makers to understand that actuaries and investment consultants offer assumptions on expected return that are inherently different: Actuarial discount rates assume a static return over time with no variability, whereas investment consultants estimate a median and a range of expected returns based on expected risk.

Quarterly Periodicals

Private Equity Trends, 3Q21 | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q21 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 3Q21 | 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, 3Q21 | 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, 3Q21 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 3Q21 | A summary of market activity for real assets and private real estate during the quarter

Events

A complete list of all upcoming events can be found on our website: callan.com/events-education.

Please mark your calendar and look forward to upcoming invitations:

2022 DC Survey Results Webinar

February 23, 2022 - 9:30 am (PT)

National Conference April 25-27, 2022, in San Francisco

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 March 1-3, 2022 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. Our virtual session is held over three days with virtual modules of 2.5-3 hours, while the in-person session lasts one-and-a-half days. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person 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 registration can be found at: callan.com/events/ccintro-march/

Introductory Workshop for DC Plan Fiduciaries March 23, 2022 – San Francisco

This one-day workshop centers on the fundamentals of administering a defined contribution (DC) plan. Designed primarily for ERISA fiduciaries and supporting staff members, attendees will gain a better understanding of the key responsibilities of an ERISA fiduciary and best practices for executing those responsibilities. Additionally, we will cover the basics of capital markets theory and DC investment menu design principles; investment manager evaluation, selection, and monitoring; best practices for evaluating fees; the regulatory and legal landscape; and industry trends. This workshop is complimentary and open to institutional investor clients.

Additional information including dates and registration can be found at: <u>callan.com/events/mar-dc-college/</u>



"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

Disclosures

Callan

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.

lanager Name	Manager Name
n (Aberdeen Standard Investments)	Baron Capital Management, Inc.
ian Asset Management LLC	Barrow, Hanley, Mewhinney & Strauss, LLC
ns Street Partners, LLC	BlackRock
N USA Investment Management Inc.	BMO Global Asset Management
ceBernstein	BNP Paribas Asset Management
Z	BNY Mellon Asset Management
ring Global Investments (formerly Wells Fargo Asset Mgmt)	Boston Partners
can Century Investments	Brandes Investment Partners, L.P.
Capital Management	Brandywine Global Investment Management, LLC
lanagement LLC	Brookfield Asset Management
nvestments, LLC	Brown Brothers Harriman & Company
tle Capital Management, LLC	Cambiar Investors, LLC
ta Capital Management Co., LLC	Capital Group
Investors	Carillon Tower Advisers
Investment Managers	CastleArk Management, LLC
e Gifford International, LLC	Causeway Capital Management LLC
Advisors	Chartwell Investment Partners
gs LLC	ClearBridge Investments, LLC

Manager Name

manager Name
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments North America
Credit Suisse Asset Management, LLC
Crescent Capital Group LP
D.E. Shaw Investment Management, LLC
DePrince, Race & Zollo, Inc.
Dimensional Fund Advisors L.P.
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
GAM (USA) Inc.
GCM Grosvenor
GlobeFlex Capital, L.P.
GoldenTree Asset Management, LP
Goldman Sachs
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
Income Research + Management Inc.
Insight Investment
Intech Investment Management LLC
Intercontinental Real Estate Corporation
Invesco
J.P. Morgan
Janus
Jennison Associates LLC

Jobs Peak Advisors

Manager Name J O Hambro Capital Management Limited KeyCorp Lazard Asset Management LGIM America (formerly Legal & General Inv. Mgmt. America) Lincoln National Corporation Longview Partners Loomis, Sayles & Company, L.P. Lord Abbett & Company LSV Asset Management MacKay Shields LLC Macquarie Investment Management (MIM) Manning & Napier Advisors, LLC Manulife Investment Management McKinley Capital Management, LLC Mellon MetLife Investment Management MFS Investment Management MidFirst Bank Mondrian Investment Partners Limited Montag & Caldwell, LLC Morgan Stanley Investment Management MUFG Union Bank, N.A. Natixis Investment Managers Neuberger Berman Newton Investment Management 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 Partners Group (USA) Inc. Pathway Capital Management Peregrine Capital Management, LLC PFM Asset Management LLC PGIM Fixed Income PGIM Quantitative Solutions LLC PineBridge Investments Polen Capital Management, LLC

Principal Global Investors

Manager Name

Putnam Investments, LLC **RBC Global Asset Management Regions Financial Corporation Richard Bernstein Advisors LLC Riverbridge Partners LLC** Robeco Institutional Asset Management, US Inc. Rothschild & Co. Asset Management US S&P Dow Jones Indices Schroder Investment Management North America Inc. Securian Asset Management, Inc. SLC Management Smith Graham & Co. Investment Advisors, L.P. State Street Global Advisors Stone Harbor Investment Partners L.P. Strategic Global Advisors, LLC 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 VanEck Versus Capital Group Victory Capital Management Inc. Virtus Investment Partners, Inc. Vontobel Asset Management Voya Waterton Associates LLC WCM Investment Management WEDGE Capital Management Wellington Management Company, LLP Western Asset Management Company LLC Westfield Capital Management Company, LP William Blair & Company LLC