Callan

December 31, 2021

North Dakota State Investment Board Legacy Fund

Investment Measurement Service Quarterly Review

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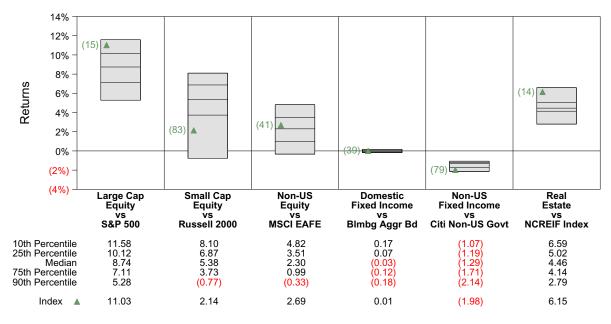


Market Overview Active Management vs Index Returns

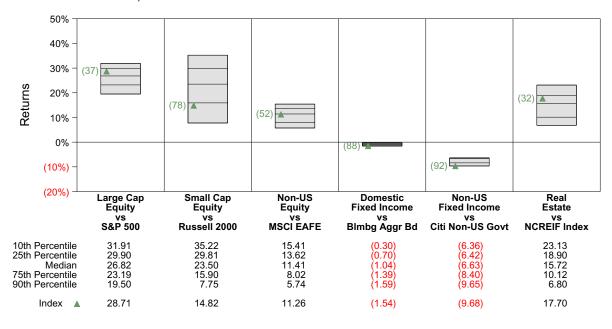
Market Overview

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

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



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









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

ECONOMY

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?

Another Year of Gains but New Threats Rise

INSTITUTIONAL INVESTORS

In 2021 all institutional investor types had strong PAGE 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.

S&P 500 Up Again: **Global Stocks Falter**

EQUITY

The S&P 500 posted a strong 11.0% gain in PAGE 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.

Agg Is Flat as Real **Yields Stay Negative**

FIXED INCOME

The Bloomberg 8 Aggregate was flat in PAGE 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.

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

REAL ESTATE/REAL ASSETS

The NCREIF 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%.

Big Bounce Back in 2021 After 2020 Drop

PRIVATE EQUITY

Private equity fared exceedingly PAGE 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%.

Strong Demand Due to Focus on Yield

PRIVATE CREDIT

Private credit remains attractive to institutional PAGE investors due to its yield and income-generating characteristics. Private credit has, on average, generated net IRRs of 8% to 10% for most trailing periods ended 4Q20. Fundraising significantly rebounded in the first half of 2021.

Ending the Year on a Positive Note

HEDGE FUNDS/MACs

Hedge funds ended higher, despite inflation PAGE 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.

Index Falls in 3Q21, First Time Since 1Q20

DEFINED CONTRIBUTION

The Callan DC Index™ declined 0.4% in 3Q21. PAGE 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

U.S. Equity Russell 3000



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

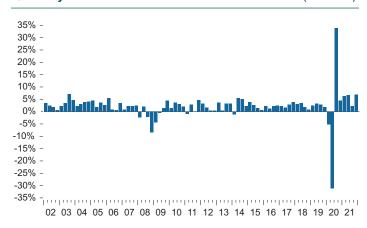
The fourth quarter of 2021 closed out another remarkable year following the wild ride through the pandemic and the recovery, a cycle that began in earnest in February 2020. U.S. GDP notched an incredibly strong 6.9% quarterly gain (4Q over 4Q), which translates to annual growth of 5.7% over 2020. We 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

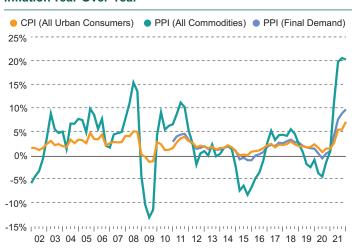
Quarterly Real GDP Growth

(20 Years)



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 quarters, 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

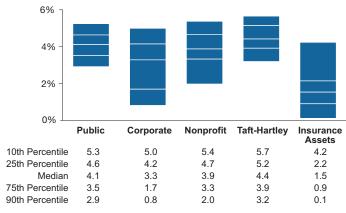
Most Investors Saw Double-Digit Gains in 2021

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



Source: Callan

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

Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
4.1	13.7	14.8	10.9	9.6	7.5
3.3	9.5	14.1	10.2	9.0	7.3
3.9	14.0	15.1	11.0	9.5	7.4
4.4	15.0	14.8	11.0	10.0	7.2
1.5	5.1	8.4	6.1	5.3	5.6
4.0	13.4	14.7	10.8	9.5	7.4
3.8	14.4	15.0	11.1	9.9	7.7
4.0	12.9	14.7	10.9	9.5	7.3
4.2	13.3	14.4	10.3	9.2	7.0
6.6	15.9	15.9	17.5	11.1	7.7
	4.1 3.3 3.9 4.4 1.5 4.0 3.8 4.0	4.1 13.7 3.3 9.5 3.9 14.0 4.4 15.0 1.5 5.1 4.0 13.4 3.8 14.4 4.0 12.9 4.2 13.3	4.1 13.7 14.8 3.3 9.5 14.1 3.9 14.0 15.1 4.4 15.0 14.8 1.5 5.1 8.4 4.0 13.4 14.7 3.8 14.4 15.0 4.0 12.9 14.7 4.2 13.3 14.4	4.1 13.7 14.8 10.9 3.3 9.5 14.1 10.2 3.9 14.0 15.1 11.0 4.4 15.0 14.8 11.0 1.5 5.1 8.4 6.1 4.0 13.4 14.7 10.8 3.8 14.4 15.0 11.1 4.0 12.9 14.7 10.9 4.2 13.3 14.4 10.3	4.1 13.7 14.8 10.9 9.6 3.3 9.5 14.1 10.2 9.0 3.9 14.0 15.1 11.0 9.5 4.4 15.0 14.8 11.0 10.0 1.5 5.1 8.4 6.1 5.3 4.0 13.4 14.7 10.8 9.5 3.8 14.4 15.0 11.1 9.9 4.0 12.9 14.7 10.9 9.5 4.2 13.3 14.4 10.3 9.2

^{*}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.

- 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.

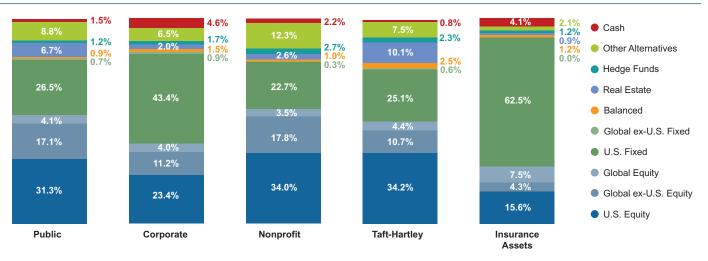
Defined Contribution Plans

- 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

Equity

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.

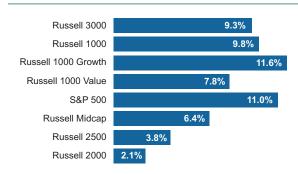
...but may be hiding underlying weakness

 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%.

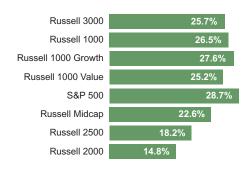
Market capitalization, style driving divergence in returns

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

U.S. Equity: Quarterly Returns



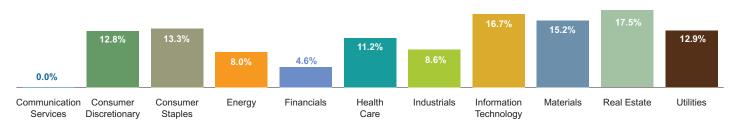
U.S. Equity: One-Year Returns



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.

Quarterly Performance of Industry Sectors



Source: S&P Dow Jones Indices

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.

Global ex-U.S. Equity: Quarterly Returns

(U.S. Dollar)



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

(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.

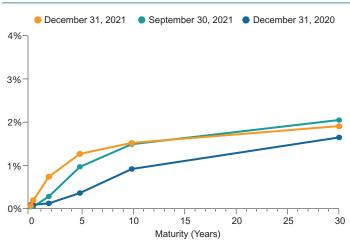
Inflation is being felt, indicated by several measures

- 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

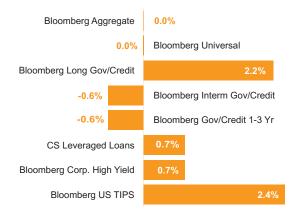
- Fed announced a doubling of the pace of tapering and an upward revision to the anticipated path of rate hikes.
- FOMC participants now expect three rate hikes in 2022 to bring the targeted range to 0.75%-1.0% by year-end.

U.S. Treasury Yield Curves



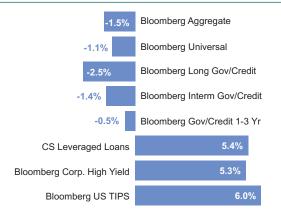
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg and Credit Suisse

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

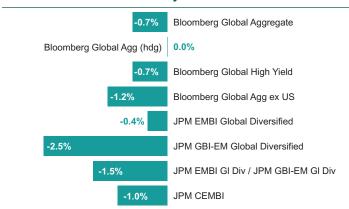
- The U.K. has led the way with interest rate hikes as the BOE expects inflation to peak in April 2022.
- Europe and Japan continue to have below-target inflation and are expected to maintain relatively accommodating monetary policy.
- EM central banks, having moved early to battle inflation, may be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

Change in 10-Year Global Government Bond Yields



Source: Bloomberg

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.

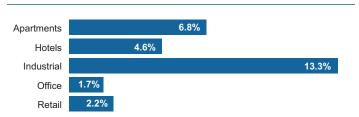
Compression in vacancy rates

- 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



Source: NCREIF

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

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

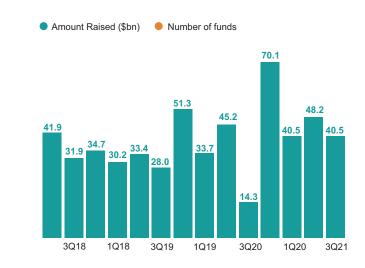
Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the Capital Markets Review and other Callan publications.

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: Pregin

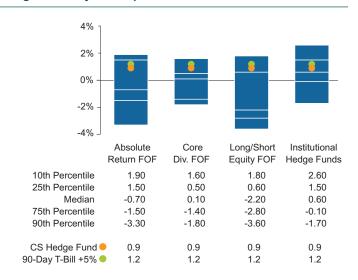
Hedge Funds Ended the Year on a Positive Note

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 guarter 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

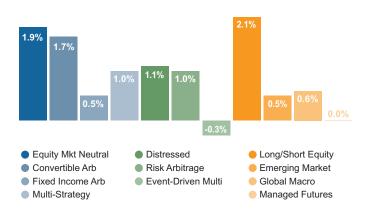
Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	0.6	9.3	6.4	5.4	6.1	7.0
Callan Fund-of-Funds Peer Group	-0.6	5.2	8.9	5.9	5.7	4.8
Callan Absolute Return FOF Style	-0.7	5.6	7.1	4.8	4.7	3.9
Callan Core Diversified FOF Style	0.1	6.2	8.5	5.7	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.

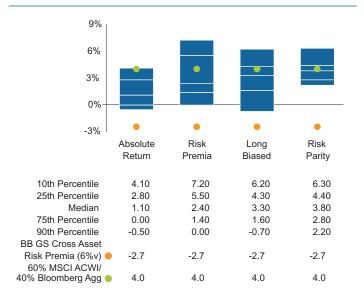
Representing hedge funds reporting performance without implementation costs, the HFRI Fund Weighted Composite

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 non-directional strategies of long and short asset class exposures, the Callan Absolute Return MAC gained 1.1%.

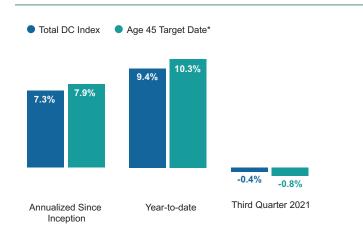
Index Declines Slightly in 3Q21, First Time Since 1Q20

DEFINED CONTRIBUTION | Patrick Wisdom

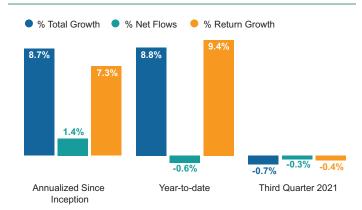
- The Callan DC Index™ fell 0.4% in 3Q21, the first decline since the pandemic-induced 15.0% 1Q20 plunge.
- The Age 45 Target Date Fund (analogous to the 2040 vintage) had a slightly lower return (-0.8%), attributable to its higher allocation to equity, which underperformed fixed income during the guarter.
- 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.

Investment Performance



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

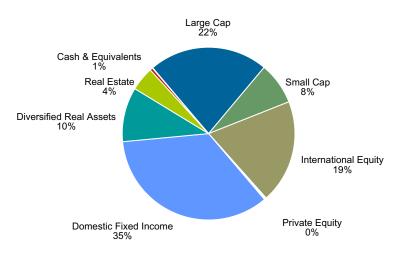
Note: DC Index inception date is January 2006.

- * 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.

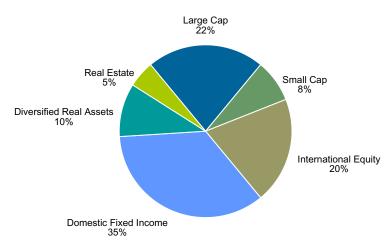
Actual vs Target Asset Allocation As of December 31, 2021

The first chart below shows the Fund's asset allocation as of December 31, 2021. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



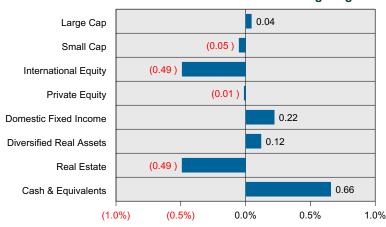
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	1,953,503	22.3%	22.0%	0.3%	30,184
Small Cap	692,765	7.9%	8.0%	(0.1%)	(6,624)
International Equity	1,697,366	19.4%	20.0%	(0.6%)	(51,105)
Private Equity .	33,327	0.4%	0.0%	0.4%	`33,327
Domestic Fixed Income	3,034,661	34.7%	35.0%	(0.3%)	(25,164)
Diversified Real Assets	891,311	10.2%	10.0%	0.2%	`17,075
Real Estate	391,454	4.5%	5.0%	(0.5%)	(45,663)
Cash & Equivalents	47,970	0.5%	0.0%	0.5%	`47,970′
Total	8.742.356	100.0%	100.0%		· · · · · · · · · · · · · · · · · · ·

^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.



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.

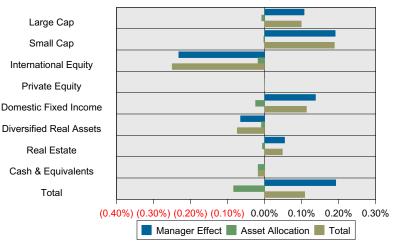




Actual vs Target Returns

10.29 4.55 3.14 0.40 0.01 2.55 3.20 7.52 0.01 0.01 3 69 10% 0% 2% 4% 6% 8% 12% 14% Actual Target

Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2021

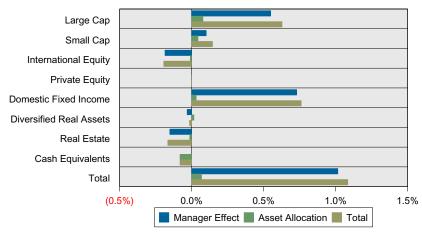
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22% 8%	22% 8%	10.29% 4.55%	9.78%	0.11% 0.19%	(0.01%)	0.10% 0.19%
Small Cap International Equity	19%	20%	1.94%	2.14% 3.14%	(0.23%)	(0.02%)	(0.25%)
Private Equity Domestic Fixed Incom	0% ne 35%	0% 35%	2.25% 0.40%	2.25% 0.01%	0.00% 0.14%	(0.00%)	0.00% 0.11%
Diversified Real Asset	s 10%	10%	2.55%	3.20%	(0.07%)	(0.01%)	(0.07%)
Real Estate Cash & Equivalents	5% 1%	5% 0%	7.52% 0.01%	6.15% 0.01%	0.05% 0.00%	(0.01%) (0.02%)	0.05% (0.02%)
Total			3.69% =	3.59%	+ 0.19% +	(0.08%)	0.11%

^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.

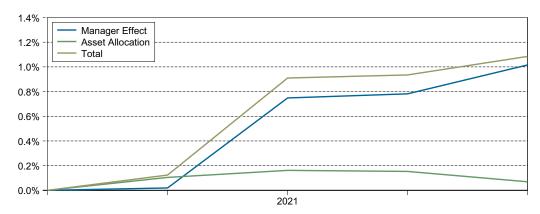


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

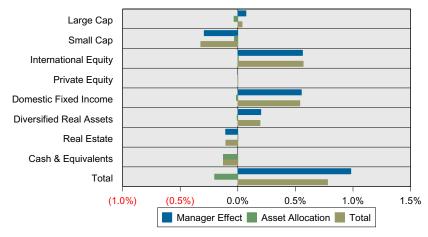
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	29.25%	26.46%	0.55%	0.08%	0.63%
Small Cap	8%	8%	16.70%	14.82%	0.10%	0.04%	0.15%
International Equity	20%	20%	11.59%	12.62%	(0.18%)	(0.01%)	(0.19%)
Private Equity ' '	0%	0%	10.46%	10.46%	0.00%	`0.00%	`0.00%
Domestic Fixed Incom		35%	0.41%	(1.54%)	0.73%	0.03%	0.76%
Diversified Real Asset	s 10%	10%	8.62%	8.72%	(0.03%)	0.02%	(0.01%)
Real Estate	4%	5%	14.29%	17.70%	(0.15%)	(0.01%)	(0.16%)
Cash Equivalents	1%	0%	0.03%	0.03%	0.00%	(0.08%)	(0.08%)
Total			11.54% =	= 10.45% -	+ 1.02% +	0.07%	1.08%

^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.

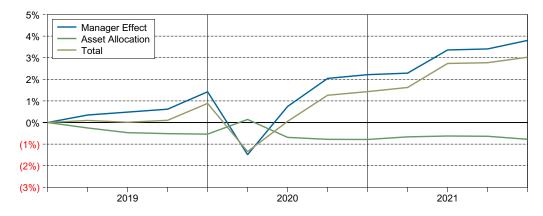


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

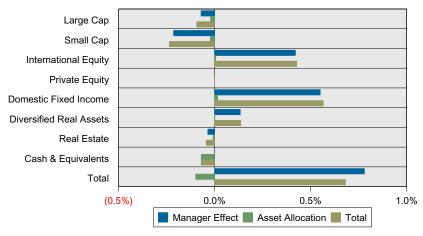
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	26.47%	26.21%	0.07%	(0.03%)	0.04%
Small Cap International Equity	8% 20%	8% 20%	16.68% 16.85%	20.02% 14.07%	(<mark>0.29%)</mark> 0.56%	(<mark>0.03%)</mark> 0.01%	(<mark>0.32%)</mark> 0.57%
Private Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Incom		35%	6.51%	4.79%	0.55%	(0.01%)	0.54%
Diversified Real Asset		10%	9.79%	7.71%	0.20%	(0.01%)	0.19%
Real Estate Cash & Equivalents	5% 1%	5% 0%	6.12% 0.85%	8.37% 0.85%	(<mark>0.11%)</mark> 0.00%	0.00% (0.13%)	(0.10%) _(0.13%)
Total			14.07% =	: 13.29%	+ 0.98% +	(0.20%)	0.78%

^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.

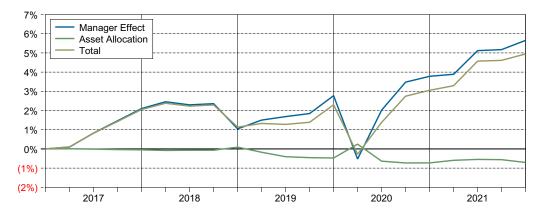


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

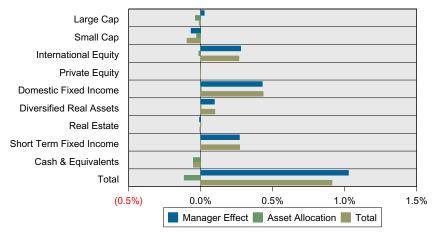
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	22%	22%	18.03%	18.43%	(0.07%)	(0.02%)	(0.09%)
Small Cap	8%	8%	9.60%	12.02%	(0.21%)	(0.02%)	(0.24%)
International Equity	20%	20%	11.66%	9.63%	`0.42%´	0.01%	0.43%
Private Equity ' ´	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Income		35%	5.25%	3.57%	0.55%	0.02%	0.57%
Diversified Real Assets		10%	7.13%	5.71%	0.13%	0.00%	0.14%
Real Estate	5%	5%	6.85%	7.75%	(0.04%)	(0.01%)	(0.04%)
Cash & Equivalents	1%	0%	1.01%	1.01%	0.00%	(0.07%)	(0.07%)
Total			10.10% =	9.42%	+ 0.78% +	(0.10%)	0.68%

^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.

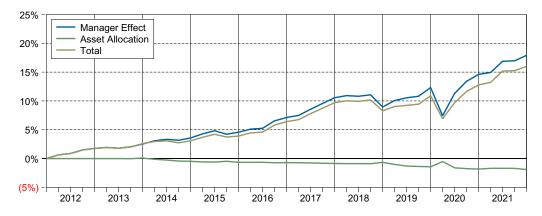


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	17%	17%	-	-	0.03%	(0.04%)	(0.01%)
Small Cap	6%	6%	-	-	(0.07%)	(0.03%)	(0.09%)
International Equity	16%	16%	-	-	`0.28%	(0.01%)	`0.27%´
Private Equity ' '	0%	0%	-	-	0.00%	0.00%	0.00%
Domestic Fixed Incon		27%	-	-	0.43%	0.01%	0.43%
Diversified Real Asse	ts 7%	7%	-	-	0.10%	0.00%	0.10%
Real Estate	4%	4%	-	-	(0.01%)	0.00%	(0.01%)
Short Term Fixed Inco	ome22%	22%	-	-	0.27%	0.00%	`0.27%′
Cash & Equivalents	1%	0%	0.57%	0.57%	0.00%	(0.05%)	(0.05%)
Total			6.88% =	5.97%	+ 1.03% +	(0.11%)	0.91%

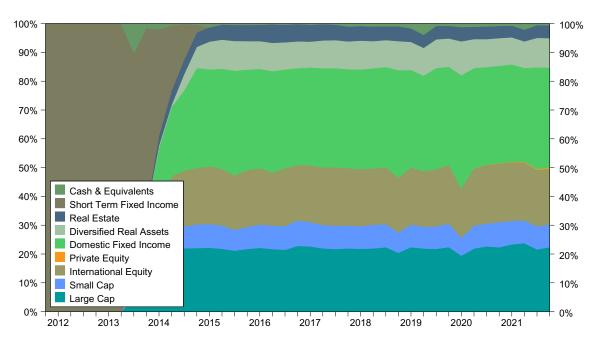
^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.



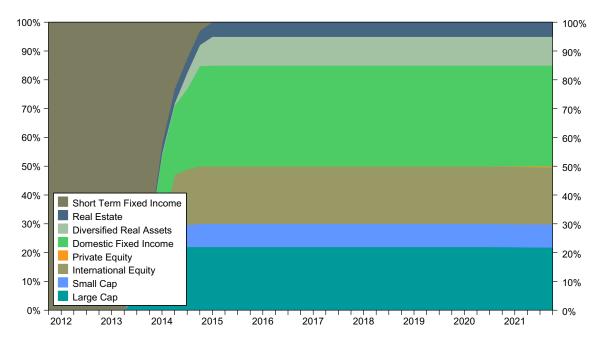
Actual vs Target Historical Asset Allocation

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

Actual Historical Asset Allocation



Target Historical Asset Allocation

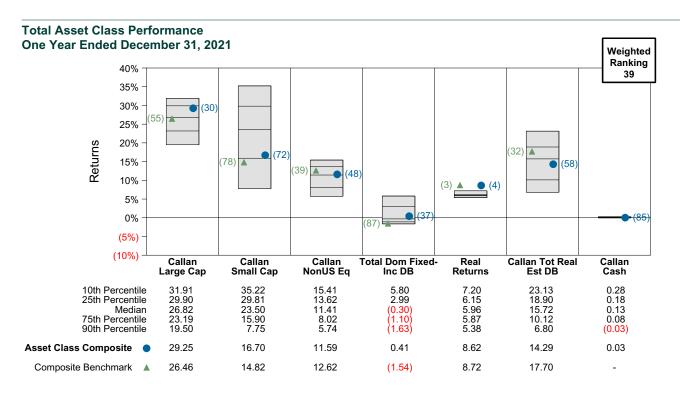


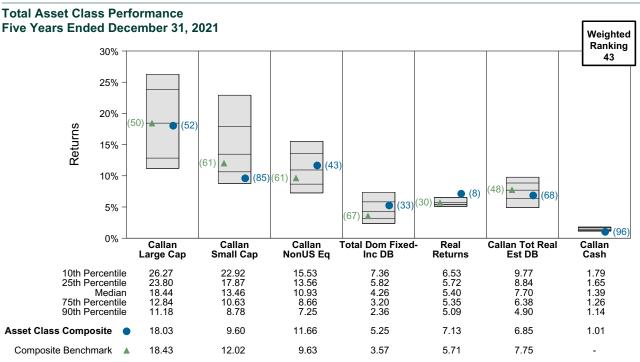
^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.



Asset Class Rankings

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





^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.



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 31, 2021			September 30, 2021				
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight		
Global Equity	\$4,376,960,246	50.07%	\$29,070,718	\$247,199,094	\$4,100,690,434	49.52%		
Domestic Equity	\$2,646,267,549	30.27%	\$(21,836,729)	\$213,902,231	\$2,454,202,048	29.63%		
Large Cap	\$1,953,502,684	22.35%	\$(20,766,178)	\$183,682,386	\$1,790,586,476	21.62%		
L.A. Capital Enhanced	402,650,191	4.61%	(113,452)	39,309,773	363,453,870	4.39%		
L.A. Capital Large Cap Growth	606,659,312	6.94%	(20,289,639)	71,781,222	555,167,729	6.70%		
Parametric Large Cap	395,136,762	4.52%	0	38,155,663	356,981,099	4.31%		
LSV Large Cap Value	549,056,419	6.28%	(363,087)	34,435,728	514,983,778	6.22%		
Small Cap	\$692,764,865	7.92%	\$(1,070,551)	\$30,219,844	\$663,615,572	8.01%		
Atlanta Capital	242,485,687	2.77%	(324,821)	24,670,875	218,139,632	2.63%		
Riverbridge Small Cap Growth	224,845,184	2.57%	(432,069)	(11,856,473)	237,133,726	2.86%		
Sycamore Small Cap Value	225,433,994	2.58%	(313,661)	17,405,442	208,342,213	2.52%		
International Equity	\$1,697,365,914	19.42%	\$43,789,836	\$32,718,730	\$1,620,857,348	19.57%		
DFA Intl SmallCap Value	170,119,771	1.95%	10,000,000	3,007,829	157,111,942	1.90%		
LSV Intl Value	578,438,488	6.62%	(554,098)	8.099.652	570,892,935	6.89%		
Vanguard Intl Explorer Fund	173,230,176	1.98%	10,000,000	590.198	162,639,978	1.96%		
William Blair	775,577,478	8.87%	24,343,934	21,021,051	730,212,493	8.82%		
	400 000 =00	0.000/	AT 44T 044	A== 0.40.4	****	0.040/		
Private Equity	\$33,326,783	0.38%	\$7,117,611	\$578,134	\$25,631,038	0.31%		
50 South Capital	2,863,424	0.03%	1,080,000	(170,696)	1,954,120	0.02%		
Sixth Street TAO	30,463,359	0.35%	6,037,611	748,830	23,676,918	0.29%		
Domestic Fixed Income	\$3,034,660,719	34.71%	\$97,674,163	\$11,801,155	\$2,925,185,401	35.32%		
Ares ND Credit Strategies Fd	102,980,463	1.18%	4,024,590	2,274,657	96,681,216	1.17%		
BND CDs	44,535,111	0.51%	(1,646,340)	290,768	45,890,683	0.55%		
Cerberus ND Private Credit Fd	130,180,915	1.49%	12,600,000	2,598,411	114,982,504	1.39%		
Declaration Total Return	230,159,281	2.63%	(151,025)	(653,250)	230,963,556	2.79%		
PIMCO Bravo II	6,095,834	0.07%	(345,587)	259,759	6,181,662	0.07%		
PIMCO DISCO II	55,030,898	0.63%	Ó	434,996	54,595,902	0.66%		
Prudential	902,805,054	10.33%	28,549,346	3,814,929	870,440,779	10.51%		
SSgA US Govt Credit Bd Idx	425,142,218	4.86%	19,985,015	701,504	404,455,698	4.88%		
Wells Capital	237,991,600	2.72%	7,890,353	1,196,841	228,904,407	2.76%		
Western Asset Management	899,739,345	10.29%	26,767,810	882,541	872,088,994	10.53%		
Global Real Assets	\$1,282,765,371	14.67%	\$22,056,084	\$48,981,175	\$1,211,728,112	14.63%		
Real Estate	\$391,454,460	4.48%	\$(474,759)	\$27,404,708	\$364,524,511	4.40%		
Invesco Core Real Estate	199,412,904	2.28%	(162,348)	14,028,570	185,546,682	2.24%		
JP Morgan RE Inc & Growth	192,041,556	2.20%	(312,411)	13,376,139	178,977,829	2.16%		
Diversified	\$891,310,911	10.20%	\$22,530,843	\$21,576,467	\$847,203,602	10.23%		
Western Asset TIPS	514,050,057	5.88%	(14,140,051)	12,853,009	515,337,098	6.22%		
ISQ Global Infrastructure II	67,800,964	0.78%	(14,140,001)	2,407,779	65,393,185	0.79%		
ISQ Global Infrastructure III	7,069,336	0.08%	7,069,336	2,407,773	-	0.7370		
JP Morgan Infrastructure	105,323,010	1.20%	(3,038,835)	308,712	108,053,133	1.30%		
Grosvenor Cust. Infrastructure	57,668,583	0.66%	(3,636,311)	869,792	60,435,102	0.73%		
Grosvenor Cust. Infrastructure	10,500,000	0.00%	10,500,000	009,792	00,400,102	0.7370		
Macquarie Infrastructure Fund IV	75,323,879	0.12%	(41,704)	2,169,213	73,196,370	0.88%		
Macquarie Infrastructure Fund V	53,575,082	0.61%	25,818,407	2,169,213	24,788,713	0.30%		
Cook	£47.060.000	0.559/	¢2 067 528	¢2 540	¢42.000.040	0.530/		
Cash	\$47,969,866	0.55%	\$3,967,538	\$3,519	\$43,998,810	0.53%		
Northern Trust Cash Account	28,589,186	0.33%	2,321,198	217	26,267,772	0.32%		
Bank of ND	19,380,680	0.22%	1,646,340	3,302	17,731,038	0.21%		
Total Fund	\$8,742,356,202	100.0%	\$152,768,502	\$307,984,943	\$8,281,602,757	100.0%		



Investment Manager Returns

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

	Loot	Loot	Last 3	Last 5	Last 10
	Last Quarter	Last Year	Years	Years	Years
Global Equity Gross Net Weighted Benchmark	5.99%	20.07%	21.05%	-	-
	5.92%	19.68%	20.73%	-	-
	5.85%	18.99%	20.36%	-	-
Domestic Equity Gross Net Weighted Benchmark	8.74%	25.91%	23.86%	15.76%	-
	8.66%	25.48%	23.56%	15.52%	-
	7.69%	23.36%	24.67%	-	-
Large Cap Gross Net Russell 1000 Index	10.29% 10.25% 9.78%	29.25% 28.93% 26.45%	26.47% 26.24% 26.21%	18.03% 17.82% 18.43%	- - 16.54%
L.A. Capital Enhanced - Gross	10.82%	29.09%	26.84%	18.09%	-
L.A. Capital Enhanced - Net	10.78%	28.93%	26.69%	17.94%	-
Russell 1000 Index	9.78%	26.45%	26.21%	18.43%	16.54%
L.A. Capital LargeCap Growth - Gross	13.02%	31.52%	34.33%	24.22%	-
L.A. Capital LargeCap Growth - Net	12.97%	31.26%	34.07%	23.97%	-
Russell 1000 Growth Index	11.64%	27.60%	34.08%	25.32%	19.79%
Parametric Clifton Large Cap - Gross	10.69%	28.43%	26.46%	18.48%	-
Parametric Clifton Large Cap - Net	10.69%	27.84%	26.34%	18.43%	-
S&P 500 Index	11.03%	28.71%	26.07%	18.47%	16.55%
LSV Large Cap Value - Gross	6.69%	28.56%	17.30%	10.88%	-
LSV Large Cap Value - Net	6.62%	28.21%	16.98%	10.57%	-
Russell 1000 Value Index	7.77%	25.16%	17.64%	11.16%	12.97%
Small Cap Gross Net Russell 2000 Index	4.55% 4.39% 2.14%	16.70% 16.01% 14.82%	16.68% 16.20% 20.02%	9.60% 9.27% 12.02%	- - 13.23%
Atlanta Capital - Gross	11.31%	20.30%	-	-	-
Atlanta Capital - Net	11.16%	19.61%	-	-	-
S&P 600 Small Cap Index	5.64%	26.82%	20.11%	12.42%	14.50%
Riverbridge Small Cap Growth - Gross	(5.02%)	4.59%	-	-	-
Riverbridge Small Cap Growth - Net	(5.18%)	3.91%	-	-	-
Russell 2000 Growth Index	0.01%	2.83%	21.17%	14.53%	14.14%
Sycamore Small Cap Value - Gross Sycamore Small Cap Value - Net Russell 2000 Value Index	8.35% 8.20% 4.36%	26.40% 25.69% 28.27%	- 17.99%	- 9.07%	- 12.03%
International Equity Gross Net Benchmark(1)	1.94%	11.59%	16.85%	11.66%	-
	1.86%	11.29%	16.51%	11.33%	-
	3.14%	12.62%	14.07%	9.63%	8.10%
DFA Intl Small Cap Value	1.96%	15.89%	12.23%	6.77%	-
World ex US SC Va	0.72%	13.27%	12.59%	8.30%	8.85%
LSV Intl Value - Gross	1.42%	12.36%	9.69%	6.62%	-
LSV Intl Value - Net	1.32%	11.93%	9.27%	6.22%	-
MSCI EAFE Index	2.69%	11.26%	13.54%	9.55%	8.03%
Vanguard Intl Explorer Fund	0.08%	9.55%	15.40%	10.42%	-
BMI, EPAC, <\$2 B	(1.67%)	8.50%	13.66%	9.37%	9.52%
William Blair - Gross	2.75%	10.77%	23.91%	17.24%	-
William Blair - Net	2.66%	10.38%	23.47%	16.81%	-
MSCI ACWI ex US IMI	1.64%	8.53%	13.62%	9.83%	7.57%
Private Equity Net	2.25%	10.46%	-	-	-
50 South Capital - Net	(8.74%)	-	-	-	-
Sixth Street TAO - Net	3.08%	13.50%	-	-	-
Benchmark(2)	0.77%	5.24%	-	-	-

⁽¹⁾ MSCI EAFE through 6/30/2016 and MSCI World ex-US thereafter. (2) 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 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 Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Fixed Income					
Gross	0.40%	0.41%	6.51%	5.25%	-
Net	0.37%	0.31%	6.39%	5.13%	-
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Ares ND Credit Strategies Fd - Net	2.35%	12.08%	7.85%	-	-
Cerberus ND Private Credit Fd - Net	2.18%	11.08%	9.48%	-	-
S&P/LSTA Leveraged Loan B	0.85%	5.22%	5.98%	4.59%	5.02%
BND CDs - Net	0.65%	2.72%	2.90%	2.91%	-
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 Bravo II - Net(1)	4.20%	33.16%	3.51%	5.55%	-
PIMCO DiSCO II - Net (1)	0.80%	6.33%	6.08%	7.81%	-
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Prudential - Gross	0.43%	(1.08%)	6.61%	5.35%	-
Prudential - Net	0.38%	(1.27%)	6.38%	5.13%	-
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Wells Capital - Gross	0.51%	1.51%	10.17%	7.09%	-
Wells Capital - Net	0.47%	1.32%	9.97%	6.90%	-
Blmbg Credit Baa	0.33%	(0.40%)	8.27%	5.77%	5.08%
Western Asset - Gross	0.10%	(1.19%)	5.88%	4.66%	_
Western Asset - Net	0.08%	(1.29%)	5.76%	4.54%	-
Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
SSgA US Govt Credit Bd Idx - Gross	0.16%	(1.71%)	5.60%	4.06%	-
SSgA US Govt Credit Bd Idx - Net	0.16%	(1.72%)	5.58%	4.04%	-
Blmbg Govt/Credit Bd	0.18%	(1.75%)	5.50%	3.99%	3.13%

⁽¹⁾ Prior to 7/1/2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning 7/1/2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.



Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 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 10
	Quarter	Year	Years	Years	Years
Global Real Assets					
Gross	4.04%	10.32%	8.59%	_	_
Net	3.98%	10.04%	8.29%	_	_
Weighted Benchmark	4.17%	11.65%	7.94%	_	_
Weighted Benchmark	4.17 /0	11.05 /0	7.9470	-	_
Real Estate					
Gross	7.52%	14.29%	6.12%	6.85%	-
Net	7.40%	13.79%	5.62%	6.33%	-
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%	
Invesco Core Real Estate - Gross	7.47%	15.90%	6.68%	6.96%	-
					- 0.220/
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%
JP Morgan RE Inc & Growth - Gross	7.47%	12.31%	5.21%	6.39%	_
JP Morgan RE Inc & Growth - Net	7.33%	11.69%	4.58%	5.70%	-
NCREIF Total Index	6.15%	17.70%	8.37%	7.75%	9.32%
Diversified					
Gross	2.55%	8.62%	9.79%	7.13%	_
Net	2.50%	8.43%	9.57%	6.91%	_
	3.20%	8.72%	7.70%	5.71%	-
Weighted Benchmark	3.20%	0.7270	7.70%	5.7 1 76	-
Western Asset TIPS - Gross	2.50%	5.90%	9.10%	5.96%	-
Western Asset TIPS - Net	2.47%	5.79%	8.98%	5.84%	-
Benchmark(3)	2.52%	6.00%	8.74%	6.19%	3.72%
JP Morgan Infrastructure - Gross	0.29%	8.51%	7.77%	8.31%	-
JP Morgan Infrastructure - Net	0.13%	7.68%	6.99%	7.56%	-
Grosvenor Cust. Infrastructure - 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%)	-	_	_
ISQ Global Infrastructure II - Net	3.68%	18.83%	18.09%	_	_
Benchmark(2)	4.14%	13.37%	5.82%	-	-
Cash & Equivalents - Not	0.040/	0.020/	0.950/	1 010/	0 E70/
Cash & Equivalents - Net	0.01%	0.03% 0.01%	0.85%	1.01%	0.57%
NT Cash Account - Net	0.00%		-	-	-
Bank of ND - Net	0.02%	0.08%	-	-	-
90 Day Treasury Bills	0.01%	0.05%	0.99%	1.14%	0.63%
Гotal Fund					
Gross	3.69%	11.54%	14.07%	10.10%	6.88%
Net	3.64%	11.28%	13.84%	9.87%	6.68%
Target*	3.59%	10.45%	13.29%	9.42%	5.97%

⁽³⁾ Blmbg Global Inflation-Linked through 10/31/2018 and Blmbg US Govt Inflation Linked Bond Index thereafter.



^{*} Current Quarter Target = 35.0% Blmbg Aggregate, 21.8% Russell 1000 Index, 19.8% MSCI World ex US, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index, 5.0% NCREIF Total Index and 0.4% NDLEG-Private Equity.

⁽¹⁾ CPI-W through 6/30/2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

^{(2) 50%} CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

Domestic Equity Period Ended December 31, 2021

Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 8.74% return for the quarter placing it in the 36 percentile of the Total Domestic Equity Database group for the quarter and in the 50 percentile for the last year.
- Domestic Equity's portfolio outperformed the Domestic Equity Target by 1.04% for the quarter and outperformed the Domestic Equity Target for the year by 2.55%.

Quarterly Asset Growth

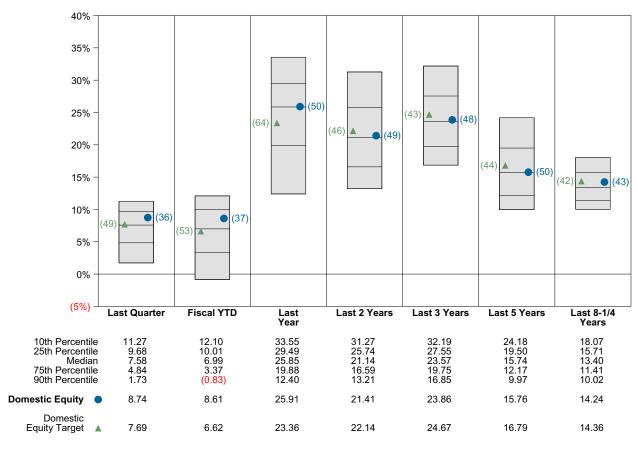
 Beginning Market Value
 \$2,454,202,048

 Net New Investment
 \$-21,836,729

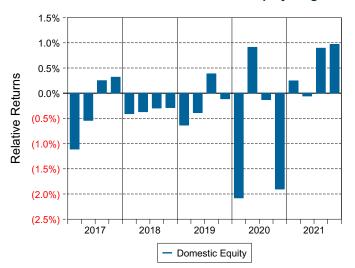
 Investment Gains/(Losses)
 \$213,902,231

Ending Market Value \$2,646,267,549

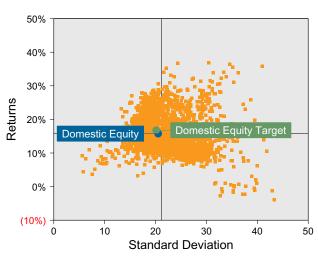
Performance vs Total Domestic Equity Database (Gross)



Relative Return vs Domestic Equity Target



Total Domestic Equity Database (Gross) Annualized Five Year Risk vs Return





Parametric Large Cap 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.

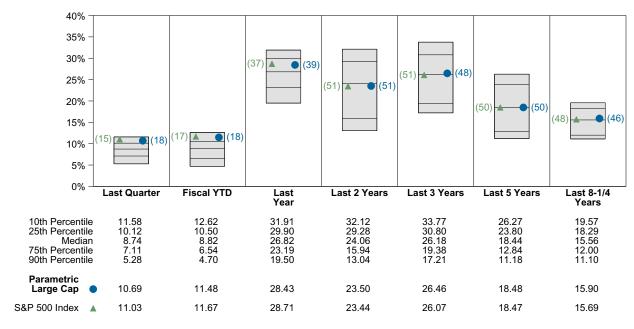
Quarterly Summary and Highlights

- Parametric Large Cap's portfolio posted a 10.69% return for the quarter placing it in the 18 percentile of the Callan Large Capitalization group for the quarter and in the 39 percentile for the last year.
- Parametric Large Cap's portfolio underperformed the S&P 500 Index by 0.34% for the quarter and underperformed the S&P 500 Index for the year by 0.27%.

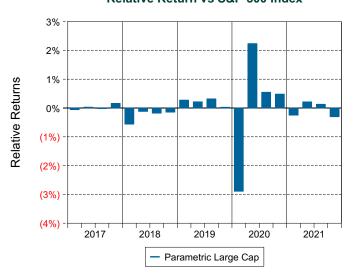
Quarterly Asset Growth

Beginning Market Value	\$356,981,099
Net New Investment	\$0
Investment Gains/(Losses)	\$38,155,663
Ending Market Value	\$395,136,762

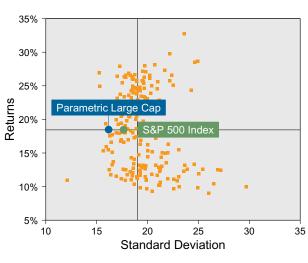
Performance vs Callan Large Capitalization (Gross)



Relative Return vs S&P 500 Index



Callan Large Capitalization (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.

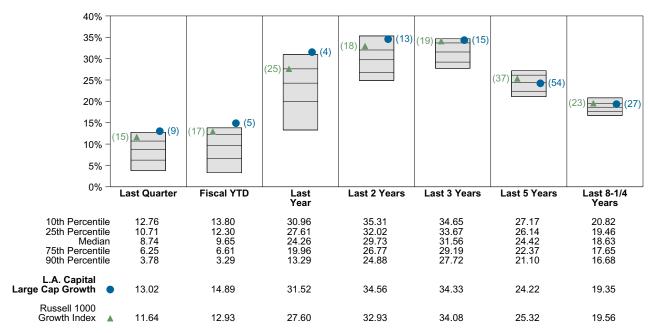
Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 13.02% return for the quarter placing it in the 9 percentile of the Callan Large Cap Growth group for the quarter and in the 4 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 1.38% for the quarter and outperformed the Russell 1000 Growth Index for the year by 3.93%.

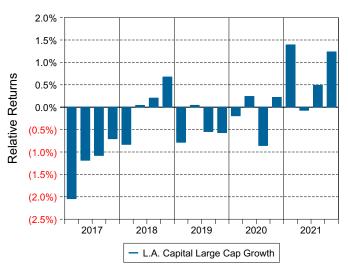
Quarterly Asset Growth

Beginning Market Value	\$555,167,729
Net New Investment	\$-20,289,639
Investment Gains/(Losses)	\$71,781,222
Ending Market Value	\$606,659,312

Performance vs Callan Large Cap Growth (Gross)



Relative Return vs Russell 1000 Growth Index



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





L.A. Capital Enhanced Period Ended December 31, 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.

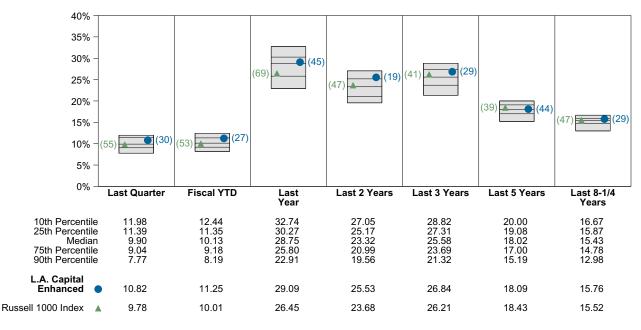
Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 10.82% return for the quarter placing it in the 30 percentile of the Callan Large Cap Core group for the quarter and in the 45 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 1.04% for the quarter and outperformed the Russell 1000 Index for the year by 2.63%.

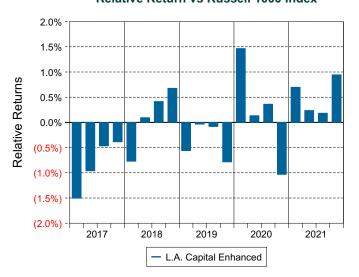
Quarterly Asset Growth

Beginning Market Value	\$363,453,870
Net New Investment	\$-113,452
Investment Gains/(Losses)	\$39,309,773
Ending Market Value	\$402,650,191

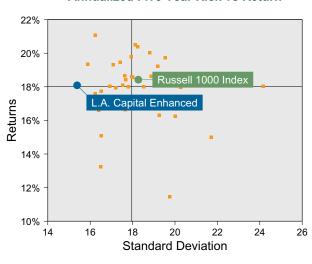
Performance vs Callan Large Cap Core (Gross)



Relative Return vs Russell 1000 Index



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





LSV Asset Management Period Ended December 31, 2021

Investment Philosophy

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

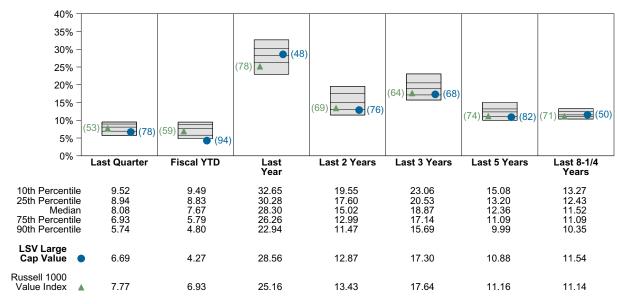
Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 6.69% return for the quarter placing it in the 78 percentile of the Callan Large Cap Value group for the quarter and in the 48 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 1.08% for the quarter and outperformed the Russell 1000 Value Index for the year by 3.40%.

Quarterly Asset Growth

Beginning Market Value	\$514,983,778
Net New Investment	\$-363,087
Investment Gains/(Losses)	\$34,435,728
Ending Market Value	\$549.056.419

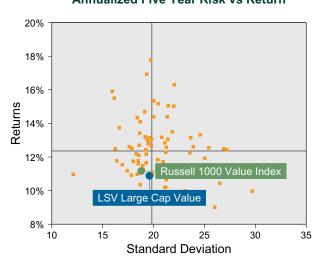
Performance vs Callan Large Cap Value (Gross)



Relative Return vs Russell 1000 Value Index



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





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.

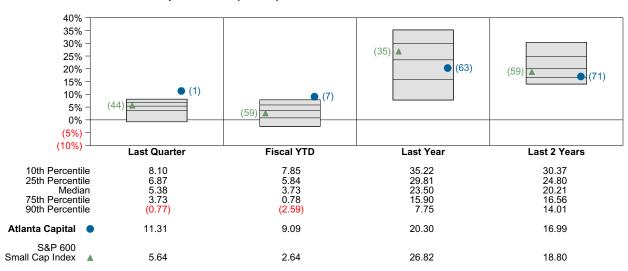
Quarterly Summary and Highlights

- Atlanta Capital's portfolio posted a 11.31% 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 5.67% for the quarter and underperformed the S&P 600 Small Cap Index for the year by 6.52%.

Quarterly Asset Growth

Beginning Market Value	\$218,139,632
Net New Investment	\$-324,821
Investment Gains/(Losses)	\$24,670,875
Ending Market Value	\$242,485,687

Performance vs Callan Small Capitalization (Gross)



Relative Return vs S&P 600 Small Cap Index



Cumulative Returns vs S&P 600 Small Cap Index





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.

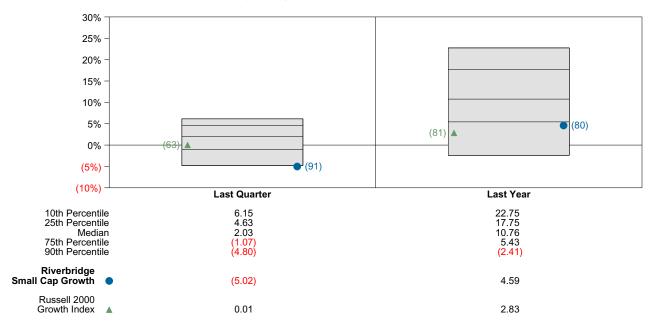
Quarterly Summary and Highlights

- Riverbridge Small Cap Growth's portfolio posted a (5.02)% return for the quarter placing it in the 91 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 5.03% for the quarter and outperformed the Russell 2000 Growth Index for the year by 1.76%.

Quarterly Asset Growth

Beginning Market Value	\$237,133,726
Net New Investment	\$-432,069
Investment Gains/(Losses)	\$-11,856,473
Ending Market Value	\$224 845 184

Performance vs Callan Small Cap Growth (Gross)



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.

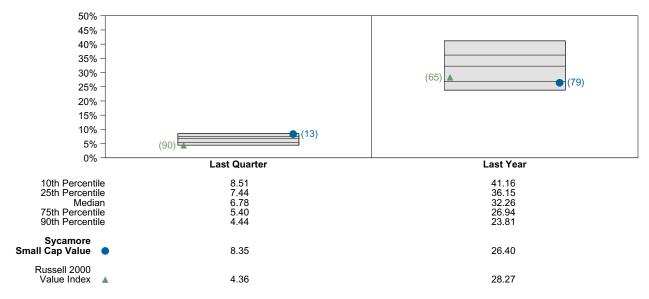
Quarterly Summary and Highlights

- Sycamore Small Cap Value's portfolio posted a 8.35% return for the quarter placing it in the 13 percentile of the Callan Small Cap Value group for the quarter and in the 79 percentile for the last year.
- Sycamore Small Cap Value's portfolio outperformed the Russell 2000 Value Index by 4.00% for the quarter and underperformed the Russell 2000 Value Index for the year by 1.87%.

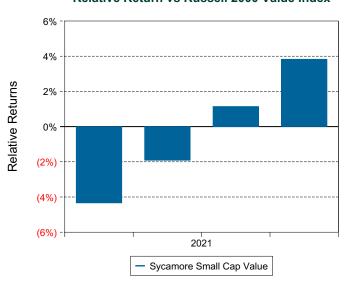
Quarterly Asset Growth

Beginning Market Value	\$208,342,213
Net New Investment	\$-313,661
Investment Gains/(Losses)	\$17,405,442
Ending Market Value	\$225,433,994

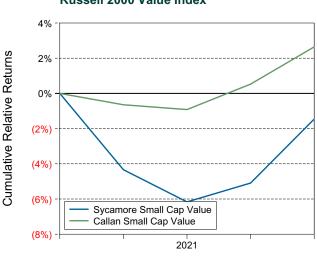
Performance vs Callan Small Cap Value (Gross)



Relative Return vs Russell 2000 Value Index



Cumulative Returns vs Russell 2000 Value Index





International Equity Period Ended December 31, 2021

Quarterly Summary and Highlights

- International Equity's portfolio posted a 1.94% return for the quarter placing it in the 56 percentile of the Callan Non-US Equity group for the quarter and in the 48 percentile for the last year.
- International Equity's portfolio underperformed the International Equity Target by 1.21% for the quarter and underperformed the International Equity Target for the year by 1.03%.

Quarterly Asset Growth

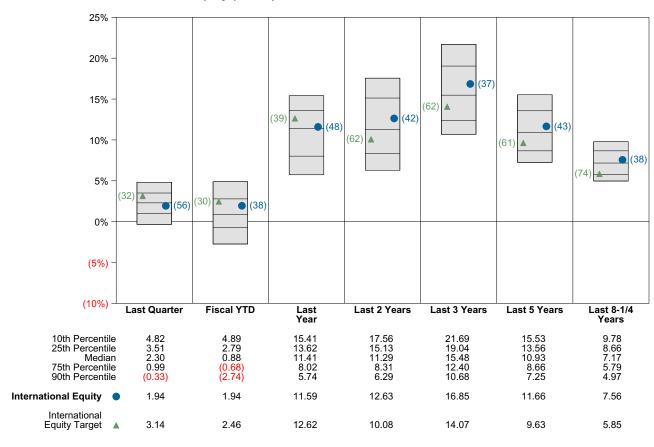
 Beginning Market Value
 \$1,620,857,348

 Net New Investment
 \$43,789,836

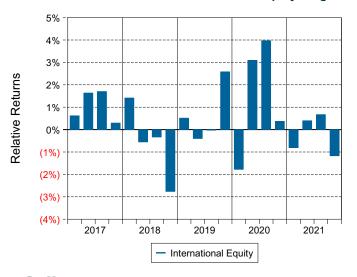
 Investment Gains/(Losses)
 \$32,718,730

Ending Market Value \$1,697,365,914

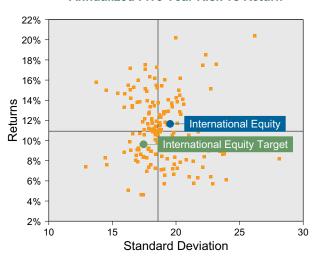
Performance vs Callan Non-US Equity (Gross)



Relative Return vs International Equity Target



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





DFA Intl Small Cap Value Period Ended December 31, 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.

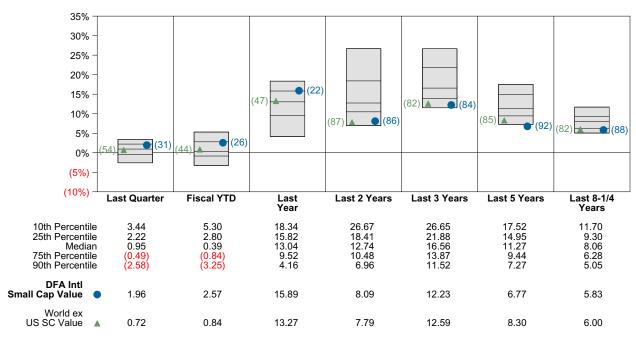
Quarterly Summary and Highlights

- 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%.

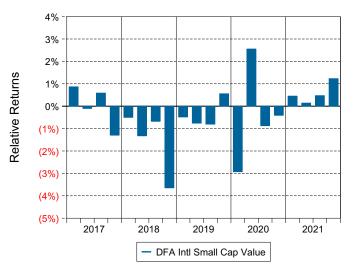
Quarterly Asset Growth

Beginning Market Value	\$157,111,942
Net New Investment	\$10,000,000
Investment Gains/(Losses)	\$3,007,829
Ending Market Value	\$170,119,771

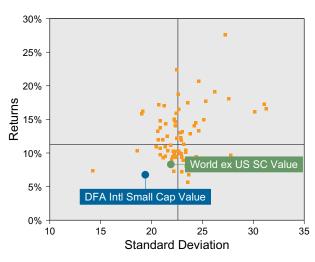
Performance vs Callan International Small Cap Mut Funds (Net)



Relative Return vs World ex US SC Value



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





LSV Intl Value Period Ended December 31, 2021

Investment Philosophy

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

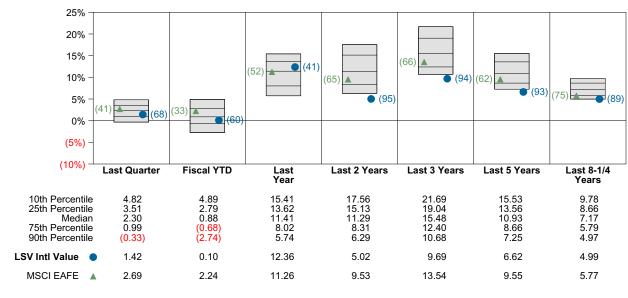
Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a 1.42% return for the quarter placing it in the 68 percentile of the Callan Non-US Equity group for the quarter and in the 41 percentile for the last year.
- LSV Intl Value's portfolio underperformed the MSCI EAFE by 1.27% for the quarter and outperformed the MSCI EAFE for the year by 1.10%.

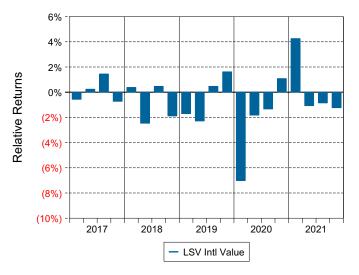
Quarterly Asset Growth

Beginning Market Value	\$570,892,935
Net New Investment	\$-554,098
Investment Gains/(Losses)	\$8,099,652
Ending Market Value	\$578,438,488

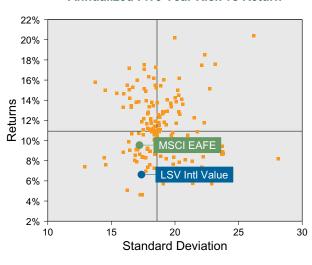
Performance vs Callan Non-US Equity (Gross)



Relative Return vs MSCI EAFE



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





Vanguard Intl Explorer Fund Period Ended December 31, 2021

Investment Philosophy

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

Quarterly Summary and Highlights

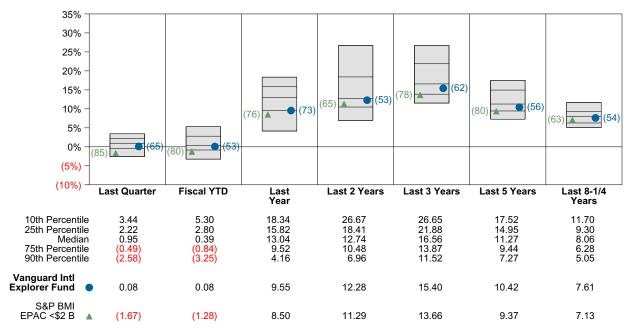
- Vanguard Intl Explorer Fund's portfolio posted a 0.08% return for the quarter placing it in the 65 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 73 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <\$2 B by 1.76% for the quarter and outperformed the S&P BMI EPAC <\$2 B for the year by 1.05%.

Quarterly Asset Growth

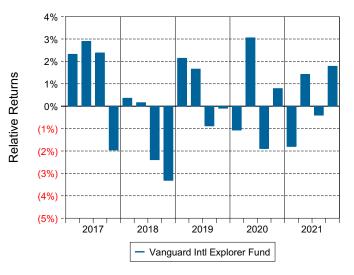
Beginning Market Value	\$162,639,978
Net New Investment	\$10,000,000
Investment Gains/(Losses)	\$590,198

Ending Market Value \$173,230,176

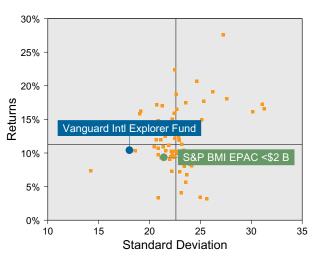
Performance vs Callan International Small Cap Mut Funds (Net)



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



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





William Blair Period Ended December 31, 2021

Investment Philosophy

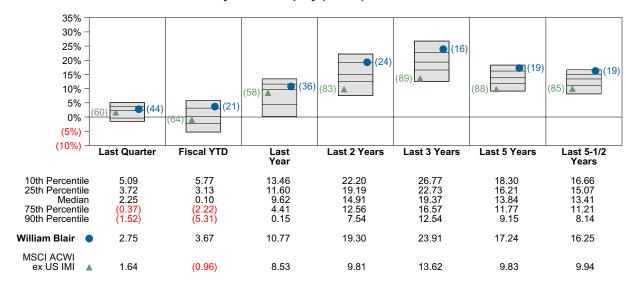
One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates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

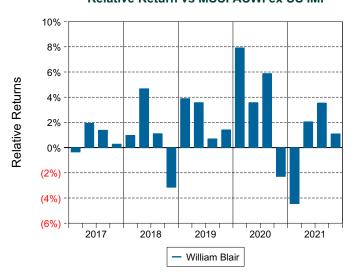
- William Blair's portfolio posted a 2.75% return for the quarter placing it in the 44 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 36 percentile for the last year.
- William Blair's portfolio outperformed the MSCI ACWI ex US IMI by 1.11% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 2.25%.

Beginning Market Value	\$730,212,493
Net New Investment	\$24,343,934
Investment Gains/(Losses)	\$21,021,051
Ending Market Value	\$775,577,478

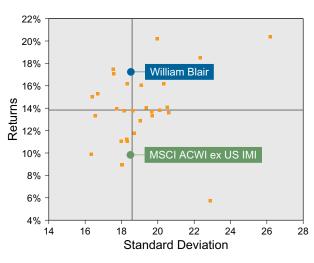
Performance vs Callan Non-US All Country Growth Equity (Gross)



Relative Return vs MSCI ACWI ex US IMI



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





Sixth Street TAO Period Ended December 31, 2021

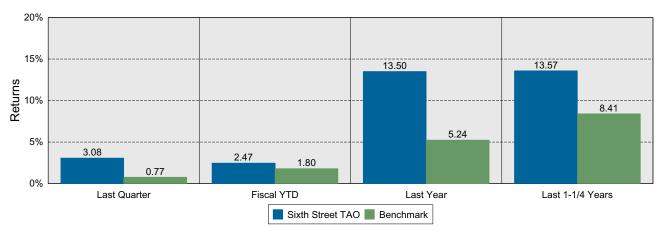
Investment Philosophy

Sixth Street Partners' TAO strategy is an opportunistics, theme-driven multi-strategy credit mandate that seeks to leverage the firm's entire credit platform by investing in theme-driven liquid and less liquid investments across a broad array of credit-oriented opportunities. The strategy invests in opportunities sourced across the firm that feature attractive risk/reward profiles but do not fit the investment mandates of SSP's Special Situations, Direct Lending and Fundamental Strategies platforms, thereby carrying the moniker "Adjacent Opportunities". These opportunities can be an outgrowth of certain conditions: non-control positions with attractive risk-reward profiles; higher return, low money multiples due to short duration situations; and longer duration opportunities with low macroeconomic correlations. The Benchmark is comprised of 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.

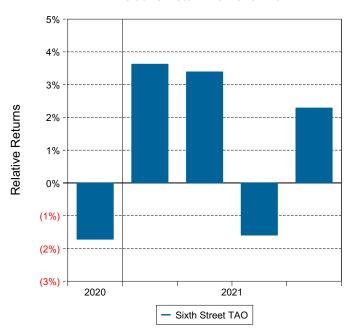
Quarterly Summary and Highlights

 Sixth Street TAO's portfolio outperformed the Benchmark by 2.31% for the quarter and outperformed the Benchmark for the year by 8.26%.

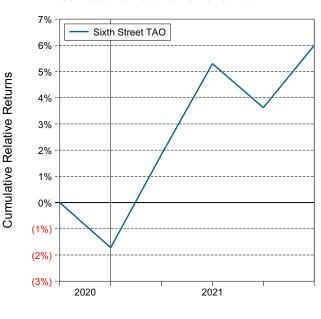
Quarterly Asset Growth		
Beginning Market Value	\$23,676,918	
Net New Investment	\$6,037,611	
Investment Gains/(Losses)	\$748,830	
Ending Market Value	\$30,463,359	



Relative Return vs Benchmark



Cumulative Returns vs Benchmark





Domestic Fixed Income Period Ended December 31, 2021

Quarterly Summary and Highlights

- Domestic Fixed Income's portfolio posted a 0.40% return for the quarter placing it in the 33 percentile of the Total Domestic Fixed-Inc Database group for the quarter and in the 37 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Income Target by 0.38% for the quarter and outperformed the Domestic Fixed Income Target for the year by 1.96%.

Quarterly Asset Growth

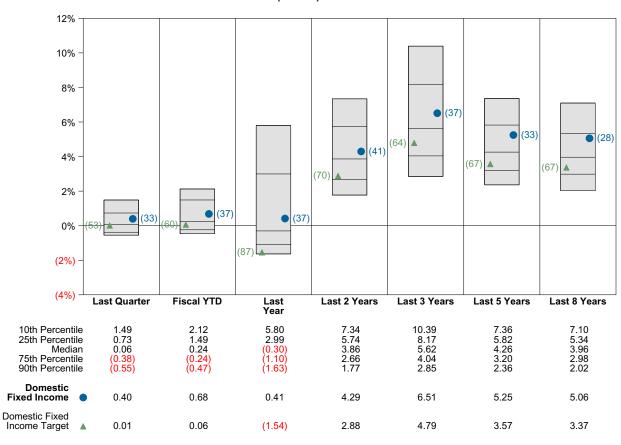
 Beginning Market Value
 \$2,925,185,401

 Net New Investment
 \$97,674,163

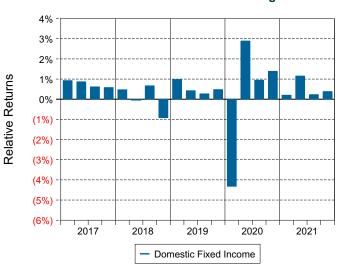
 Investment Gains/(Losses)
 \$11,801,155

Ending Market Value \$3,034,660,719

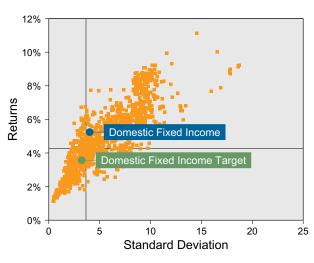
Performance vs Total Domestic Fixed-Inc Database (Gross)



Relative Returns vs Domestic Fixed Income Target



Total Domestic Fixed-Inc Database (Gross) Annualized Five Year Risk vs Return





Ares ND Credit Strategies Fd Period Ended December 31, 2021

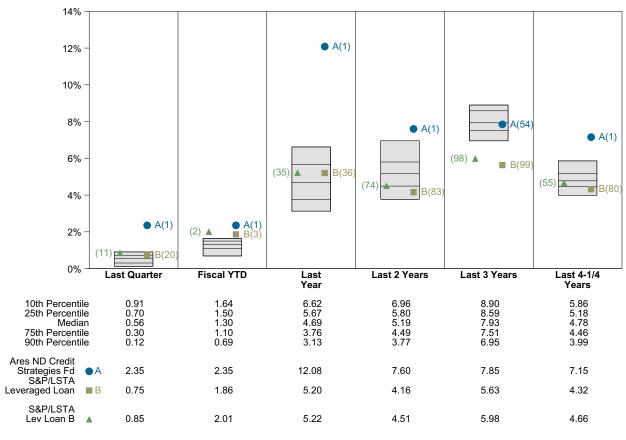
Quarterly Summary and Highlights

- Ares ND Credit Strategies Fd's portfolio posted a 2.35% 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 1.50% for the quarter and outperformed the S&P/LSTA Lev Loan B for the year by 6.87%.

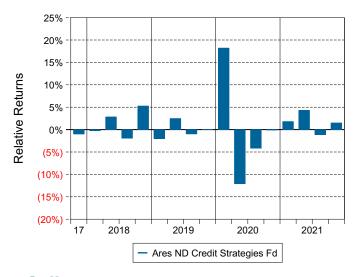
Quarterly Asset Growth

Beginning Market Value	\$96,681,216
Net New Investment	\$4,024,590
Investment Gains/(Losses)	\$2,274,657
Ending Market Value	\$102,980,463

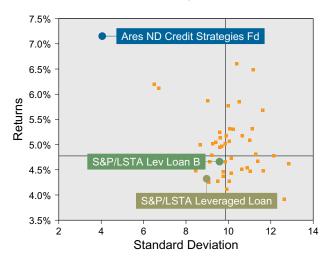
Performance vs Callan High Yield Mutual Funds (Net)



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.

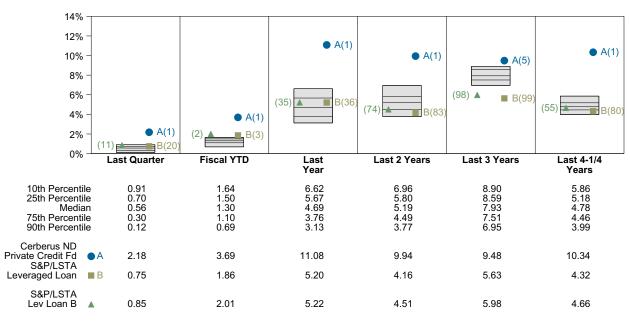
Quarterly Summary and Highlights

- Cerberus ND Private Credit Fd's portfolio posted a 2.18% 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 1.33% for the quarter and outperformed the S&P/LSTA Lev Loan B for the year by 5.87%.

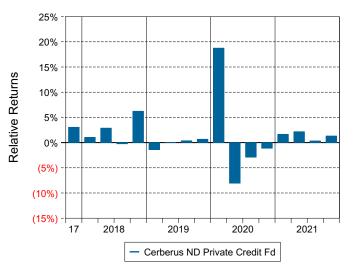
Quarterly Asset Growth

Beginning Market Value	\$114,982,504
Net New Investment	\$12,600,000
Investment Gains/(Losses)	\$2,598,411
Ending Market Value	\$130.180.915

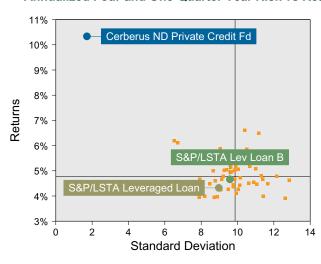
Performance vs Callan High Yield Mutual Funds (Net)



Relative Return vs S&P/LSTA Lev Loan B



Callan High Yield Mutual Funds (Net) Annualized Four and One-Quarter 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.

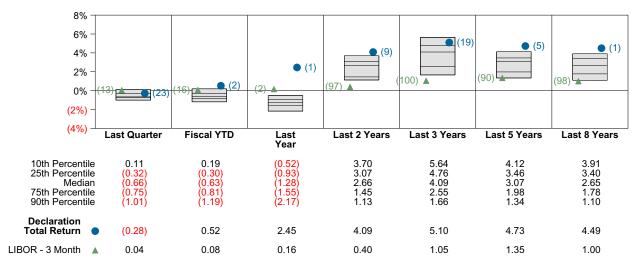
Quarterly Summary and Highlights

- 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 2.29%.

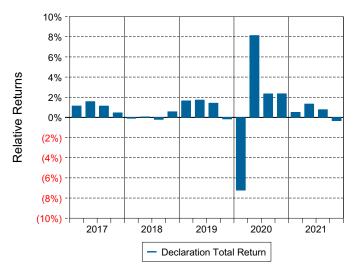
Quarterly Asset Growth

Beginning Market Value	\$230,963,556
Net New Investment	\$-151,025
Investment Gains/(Losses)	\$-653,250
Ending Market Value	\$230,159,281

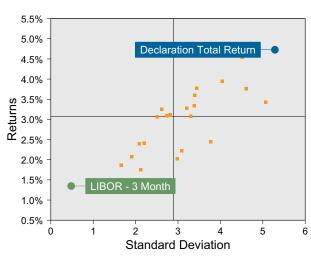
Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



Relative Return vs LIBOR - 3 Month



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





PIMCO Bravo II Period Ended December 31, 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. **Prior to July 1**, 2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.

Quarterly Summary and Highlights

- PIMCO Bravo II's portfolio posted a 4.20% 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 Bravo II's portfolio outperformed the Blmbg Aggregate by 4.19% for the quarter and outperformed the Blmbg Aggregate for the year by 34.70%.

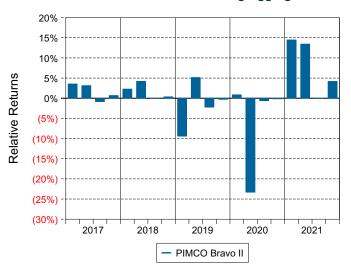
Quarterly	/ Asset	Growth

Beginning Market Value	\$6,181,662
Net New Investment	\$-345,587
Investment Gains/(Losses)	\$259,759
Ending Market Value	\$6,095,834

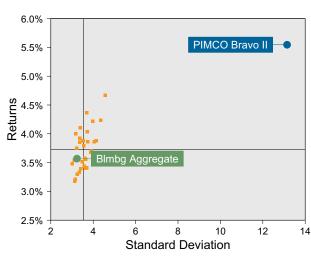
Performance vs Callan Core Bond Mutual Funds (Net)



Relative Return vs Blmbg Aggregate



Callan Core Bond Mutual 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. **Prior to July 1**, **2019**, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.

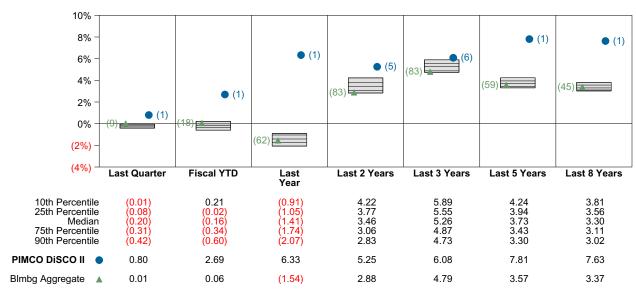
Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 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%.

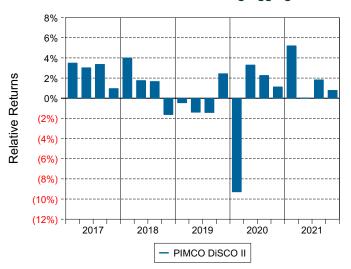
Quarterly Asset Growth

Beginning Market Value	\$54,595,902
Net New Investment	\$0
Investment Gains/(Losses)	\$434,996
Ending Market Value	\$55,030,898

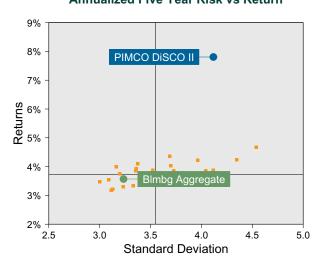
Performance vs Callan Core Bond Mutual Funds (Net)



Relative Return vs Blmbg Aggregate



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





Prudential

Period Ended December 31, 2021

Investment Philosophy

PGIM Fixed Income is the primary public fixed income asset management business of Prudential Investment Management, Inc. (PIM). PIM is the largest investment advisor within Prudential Financial, Inc. (Prudential Financial). PIM was registered as an investment advisor with the US Securities and Exchange Commission (SEC) in December of 1984. The Core Plus strategy is an actively managed strategy that seeks +150 bps over the Bloomberg Barclays U.S. Aggregate Bond Index. Portfolio duration is kept within +/- 0.5 years of benchmark. The lead portfolio managers are Mike Collins, Rich Piccirillo and Greg Peters. As of Q2 2017, the strategy had \$24.6 billion in mutual fund assets.

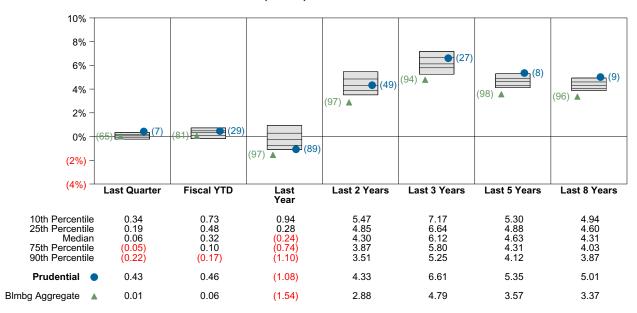
Quarterly Summary and Highlights

- Prudential's portfolio posted a 0.43% return for the quarter placing it in the 7 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 89 percentile for the last year.
- Prudential's portfolio outperformed the Blmbg Aggregate by 0.42% for the quarter and outperformed the Blmbg Aggregate for the year by 0.47%.

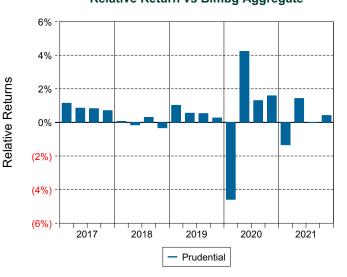
Quarterly Asset Growth

Beginning Market Value	\$870,440,779
Net New Investment	\$28,549,346
Investment Gains/(Losses)	\$3,814,929
Ending Market Value	\$902.805.054

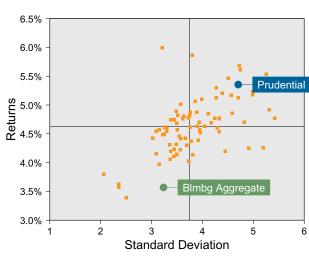
Performance vs Callan Core Plus Fixed Income (Gross)



Relative Return vs Blmbg Aggregate



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





SSgA US Govt Credit Bd Idx Period Ended December 31, 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. Government/Credit Bond Index over the long term.

Quarterly Summary and Highlights

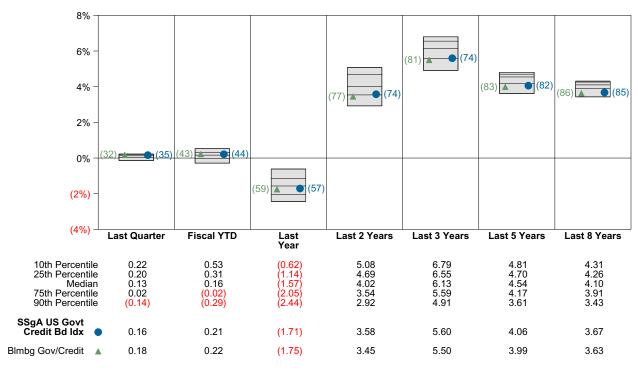
- SSgA US Govt Credit Bd Idx's portfolio posted a 0.16% return for the quarter placing it in the 35 percentile of the Callan Government/Credit group for the quarter and in the 57 percentile for the last year.
- SSgA US Govt Credit Bd Idx's portfolio underperformed the Blmbg Gov/Credit by 0.02% for the quarter and outperformed the Blmbg Gov/Credit for the year by 0.04%.

Quarterly Asset Growth

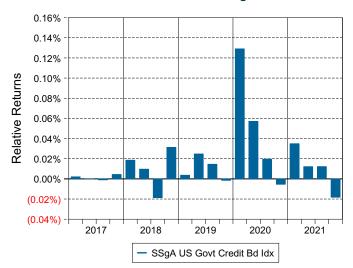
Beginning Market Value	\$404,455,698
Net New Investment	\$19,985,015
Investment Gains/(Losses)	\$701,504

Ending Market Value \$425,142,218

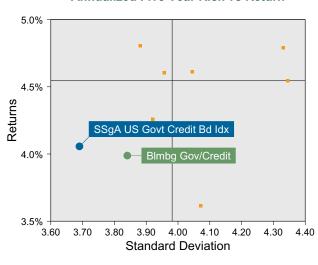
Performance vs Callan Government/Credit (Gross)



Relative Return vs Blmbg Gov/Credit



Callan Government/Credit (Gross) Annualized Five Year Risk vs Return





Wells Capital Period Ended December 31, 2021

Investment Philosophy

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

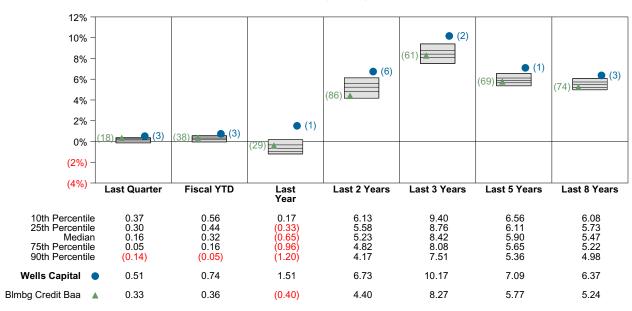
Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 0.51% return for the quarter placing it in the 3 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 1 percentile for the last year.
- Wells Capital's portfolio outperformed the Blmbg Credit Baa by 0.18% for the quarter and outperformed the Blmbg Credit Baa for the year by 1.91%.

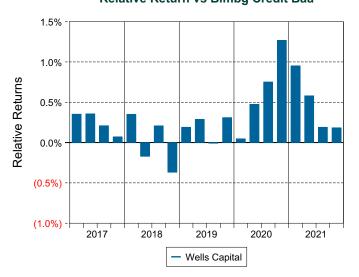
Quarterly Asset Growth

Beginning Market Value	\$228,904,407
Net New Investment	\$7,890,353
Investment Gains/(Losses)	\$1,196,841
Ending Market Value	\$237.991.600

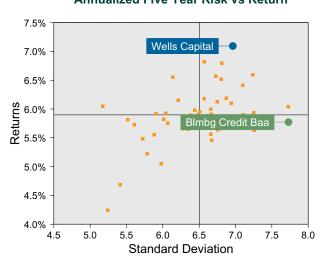
Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



Relative Return vs Blmbg Credit Baa



Callan Investment Grade Credit Fixed Inc (Gross) Annualized Five Year Risk vs Return





Western Asset Management Company Period Ended December 31, 2021

Investment Philosophy

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

Quarterly Summary and Highlights

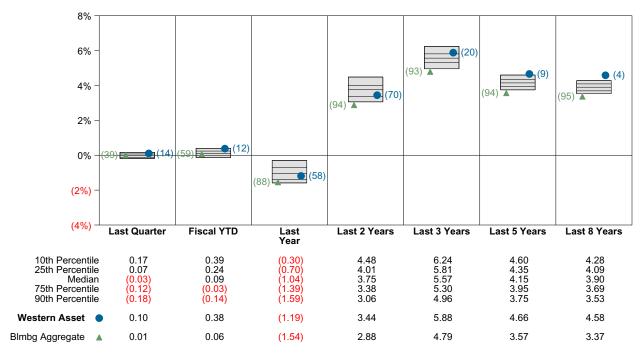
- Western Asset's portfolio posted a 0.10% return for the quarter placing it in the 14 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 58 percentile for the last year.
- Western Asset's portfolio outperformed the Blmbg Aggregate by 0.09% for the quarter and outperformed the Blmbg Aggregate for the year by 0.35%.

Quarterly Asset Growth

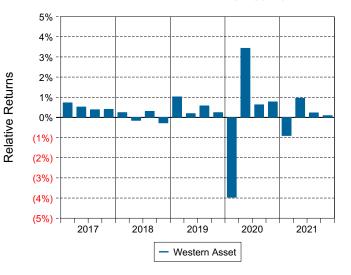
Beginning Market Value	\$872,088,994
Net New Investment	\$26,767,810
Investment Gains/(Losses)	\$882,541

Ending Market Value \$899,739,345

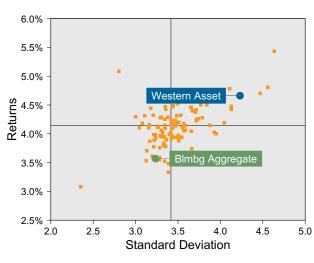
Performance vs Callan Core Bond Fixed Income (Gross)



Relative Return vs Blmbg Aggregate



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





Invesco Core Real Estate Period Ended December 31, 2021

Investment Philosophy

IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

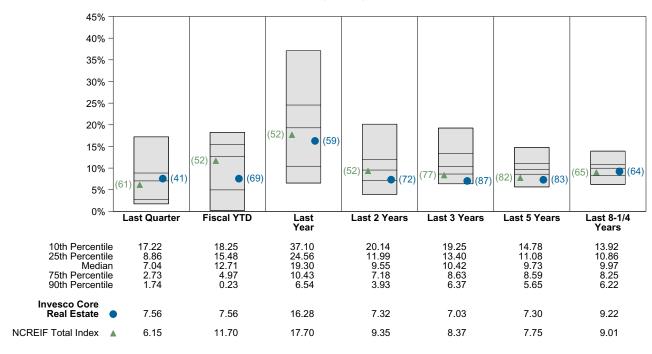
Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 7.56% return for the quarter placing it in the 41 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 59 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF Total Index by 1.41% for the quarter and underperformed the NCREIF Total Index for the year by 1.42%.

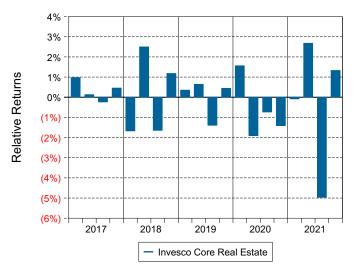
Quarterly Asset Growth

Beginning Market Value	\$185,546,682
Net New Investment	\$-162,348
Investment Gains/(Losses)	\$14,028,570
Ending Market Value	\$199,412,904

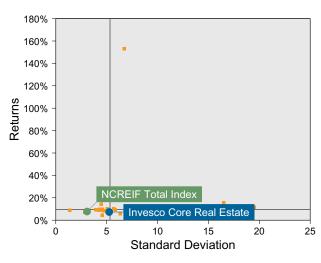
Performance vs Callan Total Domestic Real Estate DB (Gross)



Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return





JP Morgan RE Inc & Growth Period Ended December 31, 2021

Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

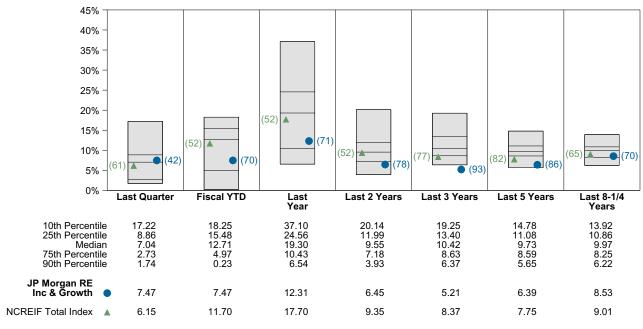
Quarterly Summary and Highlights

- JP Morgan RE Inc & Growth's portfolio posted a 7.47% return for the quarter placing it in the 42 percentile of the Callan Total Domestic Real Estate DB group for the quarter and in the 71 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio outperformed the NCREIF Total Index by 1.33% for the quarter and underperformed the NCREIF Total Index for the year by 5.39%.

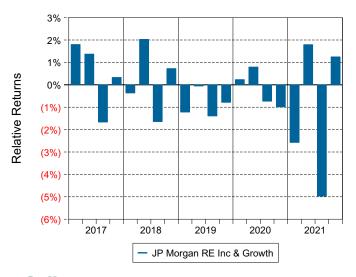
Quarterly Asset Growth

Beginning Market Value	\$178,977,829
Net New Investment	\$-312,411
Investment Gains/(Losses)	\$13,376,139
Ending Market Value	\$192,041,556

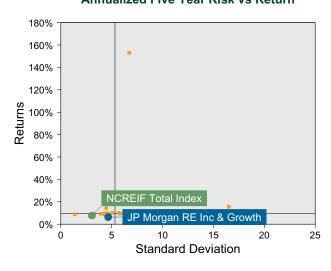
Performance vs Callan Total Domestic Real Estate DB (Gross)



Relative Return vs NCREIF Total Index



Callan Total Domestic Real Estate DB (Gross) Annualized Five Year Risk vs Return





Western Asset TIPS Period Ended December 31, 2021

Investment Philosophy

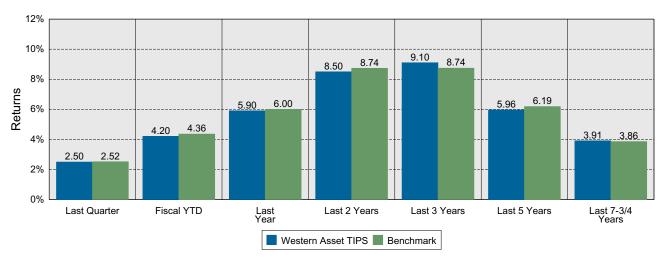
The Western Asset US TIPS Full Discretion strategy is an inflation-protected strategy that aims to maximize total return and add value through duration and curve positioning, sector allocation, and security selection, while approximating benchmark risk. The strategy invests in a diversified portfolio using higher-yielding inflation-protected instruments with a bias toward Treasury Inflation-Protected Securities (TIPS). Opportunistic investments include high-yield, emerging markets, non-dollar securities, commodities and bank loans that may also be employed using derivatives. Benchmark: Bloomberg US TIPS through 12/31/2009; Bloomberg Global Inflation-Linked through 10/31/2018; Bloomberg US Govt Inflation Linked Bond Index thereafter.

Quarterly Summary and Highlights

 Western Asset TIPS's portfolio underperformed the Benchmark by 0.02% for the quarter and underperformed the Benchmark for the year by 0.10%.

Quarterly	Asset	Growt	h

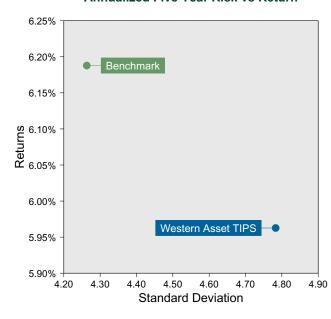
Beginning Market Value	\$515,337,098
Net New Investment	\$-14,140,051
Investment Gains/(Losses)	\$12,853,009
Ending Market Value	\$514,050,057



Relative Return vs Benchmark

1.0% 0.5% 0.0% (1.0%) (1.5%) (2.0%) 2017 2018 2019 2020 2021 — Western Asset TIPS

Annualized Five Year Risk vs Return





ISQ Global Infrastructure II Period Ended December 31, 2021

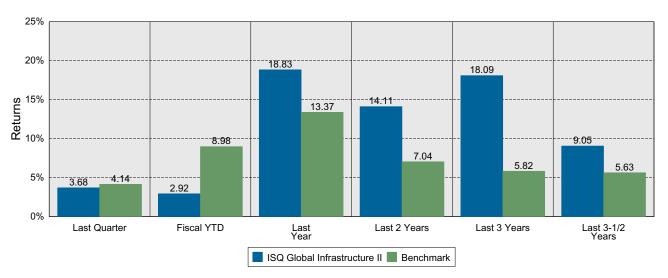
Investment Philosophy

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%.

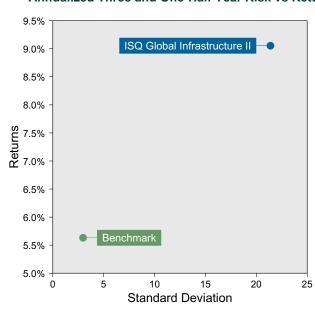
Quarterly Asset Growth	
Beginning Market Value	\$65,393,185
Net New Investment	\$0
Investment Gains/(Losses)	\$2,407,779
Ending Market Value	\$67,800,964



Relative Return vs Benchmark



Annualized Three and One-Half Year Risk vs Return





JP Morgan Infrastructure 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 guarter and 50% NFI-ODCE Equal Weight Net thereafter.

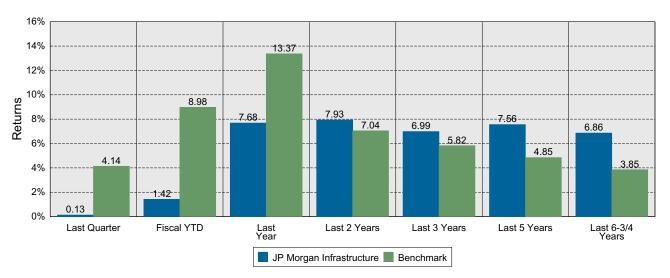
Ending Market Value

Quarterly Summary and Highlights

• JP Morgan Infrastructure'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	\$108,053,133
Net New Investment	\$-2,870,555
Investment Gains/(Losses)	\$140,432

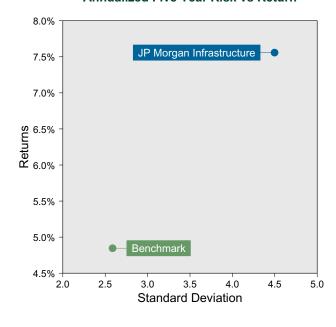
\$105,323,010



Relative Return vs Benchmark



Annualized Five Year Risk vs Return





Grosvenor Cust. Infrastructure Period Ended December 31, 2021

Investment Philosophy

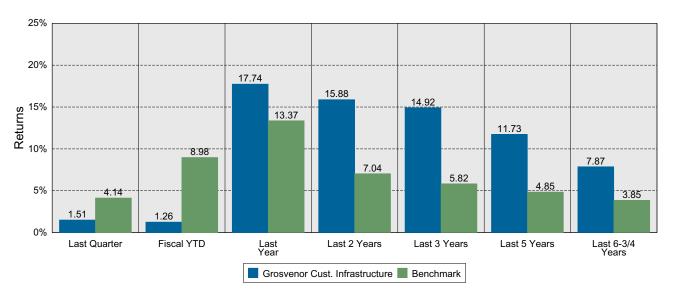
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified 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 2.63% for the quarter and outperformed the Benchmark for the year by 4.37%.

Quarterly Asset Growth

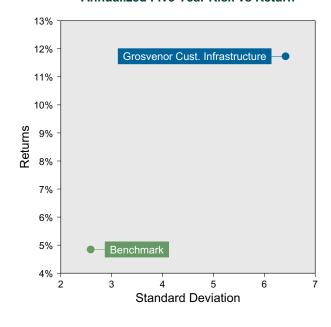
Beginning Market Value	\$60,435,102
Net New Investment	\$-3,636,311
Investment Gains/(Losses)	\$869,792
Ending Market Value	\$57,668,583



Relative Return vs Benchmark

10% 8% 6% Relative Returns 4% 2% 0% (2%) (4%) (6%) (8%)2017 2018 2019 2020 2021 Grosvenor Cust. Infrastructure

Annualized Five Year Risk vs Return





Macquarie Infrastructure Fund IV Period Ended December 31, 2021

Investment Philosophy

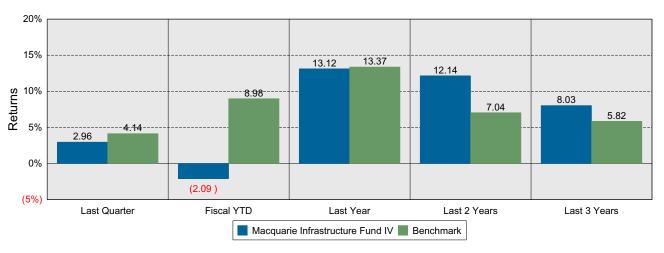
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience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

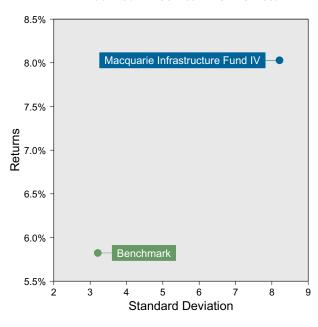
Quarterly Asset Growth

Beginning Market Value	\$73,196,370
Net New Investment	\$-41,704
Investment Gains/(Losses)	\$2,169,213
Ending Market Value	\$75,323,879



Relative Return vs Benchmark

Annualized Three Year Risk vs Return





Macquarie Infrastructure Fund V Period Ended December 31, 2021

Investment Philosophy

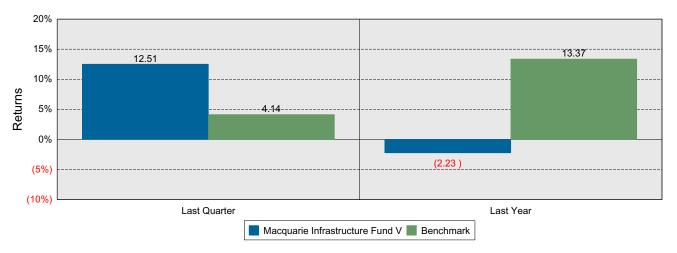
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience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

 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%.

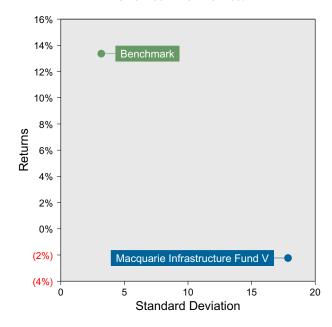
Quarterly	Asset	Growth
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Beginning Market Value	\$24,788,713
Net New Investment	\$25,818,407
Investment Gains/(Losses)	\$2,967,962
Ending Market Value	\$53,575,082



Relative Return vs Benchmark

One Year Risk vs Return







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.

2021 ESG Survey | 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.

<u>Understanding Return Forecasts for Public DB Plans</u> | 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

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

<u>Active vs. Passive Charts, 3Q21</u> | 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

<u>Capital Markets Review, 3Q21</u> | 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

Unique pieces of research the Institute generates each year

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: callan.com/events/mar-dc-college/



"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer







Callan

Quarterly List as of December 31, 2021

List of Callan's Investment Manager Clients

Confidential - For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name
abrdn (Aberdeen Standard Investments)
Acadian Asset Management LLC
Adams Street Partners, LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
Allspring Global Investments (formerly Wells Fargo Asset Mgmt)
American Century Investments
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC
Aviva Investors
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC

Manager Name
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners
ClearBridge Investments, LLC

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

