

SCERS TOTAL FUND PERFORMANCE SUMMARY
Quarter Reporting Periods Ending December 31, 2021

SCERS ASSET CLASS	Quarter	Fiscal Year to-Date	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	4.0%	5.9%	17.0%	15.6%	12.3%	8.8%	Jun-86
Policy Index	3.6%	5.1%	14.4%	13.2%	10.4%	8.8%	
InvestorForce Public DB > \$1B	4.1%	4.5%	14.5%	14.8%	11.0%	8.5%	
SCERS TOTAL FUND Return w/o Overlay	4.2%	6.2%	17.5%	15.2%	12.2%	8.7%	Jun-86
Policy Index	3.6%	5.1%	14.4%	13.2%	10.4%	8.8%	
GROWTH ASSET CATEGORY	5.3%	7.0%	23.7%	21.4%	-	15.7%	Mar-17
Custom Benchmark	4.8%	6.0%	20.2%	18.6%	-	13.5%	
DIVERSIFYING ASSET CATEGORY	0.3%	0.3%	0.7%	5.5%	-	4.0%	Mar-17
Custom Benchmark	0.0%	0.2%	0.1%	5.0%	-	3.8%	
REAL RETURN ASSET CATEGORY	5.9%	11.6%	21.4%	9.4%	-	9.4%	Mar-17
Custom Benchmark	4.6%	9.9%	18.4%	6.8%	-	6.7%	
OPPORTUNITIES PORTFOLIO	1.3%	1.5%	18.5%	8.8%	7.0%	14.2%	Oct-07
Custom Benchmark	3.6%	5.1%	14.4%	13.2%	10.4%	8.6%	
DEDICATED CASH	0.0%	0.0%	0.1%	-	-	0.6%	Jun-19
Overnight LIBOR	0.0%	0.0%	0.1%	-	-	0.6%	

SCERS' portfolio delivered good results in the calendar fourth quarter (second quarter of the fiscal year), outperforming SCERS' Policy Index with balanced contributions across several parts of the portfolio. For the quarter, SCERS' portfolio returned +4.0%, outperforming the policy index benchmark return of +3.6% and slightly trailing the median public fund return of +4.1%. SCERS' portfolio delivered positive performance in every quarter during calendar 2021, ending the year up +17.0% and significantly outperforming the Policy Index (+14.4%) and median public fund return (+14.5%). SCERS' Real Return asset category was the top performing segment in the fourth quarter as Real Estate and Real Assets benefited from the strong economy and significant increases in inflation. Inflation in the U.S. reached levels not seen since the early 1980's, with the Consumer Price Index (CPI) up +7.0% in December over the prior year. For the full year, the Growth asset category led the portfolio, up +23.7%, with SCERS' Private Equity portfolio up nearly +60% and SCERS' U.S. Equity portfolio up over +25%. International equity markets lagged the strong performance of U.S., particularly within emerging markets, as China equity markets suffered from increased regulatory scrutiny and concerns over debt levels and default of large residential property developers.

COVID-19 continued to have a significant impact across the globe, as new variants of the disease developed causing significant health and economic impact during the year. From an economic standpoint, the various policy responses enacted to limit the spread of the virus, such as national lockdowns and travel restrictions, had significant ramifications including limitations on economic activity and supply chain disruptions that contributed to rising inflation. Despite the continued impact from COVID-19, overall economic growth was strong in 2021, with global GDP estimated to be up +5.5% for the year, rebounding from the decline of -3.3% in 2020. With the continued economic rebound, the expectation of reduced monetary policy support from central banks, and increasing inflation, interest rates rose steadily throughout the year. Rising interest rates created significant headwinds for fixed income portfolios, with SCERS' Diversifying asset category ending the year just slightly positive, as positive results from Diversifying Absolute Return strategies helped to offset negative returns from fixed income strategies.

Growth Asset Category

Results within the Growth asset category were positive during the quarter, returning +5.3%, and outperforming the Growth asset category benchmark return of +4.8%. The Growth asset category outperformed its benchmark during the quarter despite SCERS' Public Equity portfolio underperforming the MSCI ACWI index during the quarter. SCERS' Public Equity portfolio was up +5.1% in the quarter versus the MSCI ACWI index up +6.7%. The Public Equity portfolio's relative underperformance versus the MSCI ACWI was driven by a combination of poor active returns during the quarter and also a relative underweight allocation to the U.S. equity market, which significantly outperformed international equity markets during the quarter. SCERS' Public Equity portfolio was negatively impacted by the performance of growth oriented managers, particularly within the small cap segment, as small cap stocks significantly underperformed large cap stocks during the quarter, and growth stocks underperformed value stocks within the small cap universe.

SCERS' Private Equity portfolio, where performance is lagged one quarter, was the top performing segment of the Growth asset category for both the fourth quarter and year full year. SCERS' Private Equity portfolio was up +7.8% for the quarter and +58.4% for the year, significantly outperforming the benchmark returns of +5.1% and +48.3%, respectively. The private equity asset class benefited from increased company valuations, record setting levels of capital fundraising and transaction (M&A) activity. SCERS' Private Equity portfolio returns rank in the top quartile across all time periods over the past ten years. SCERS' Private Credit and Public Credit portfolios also delivered solid returns in the fourth quarter, up +2.9% and +1.5%, respectively, with both segments outperforming their benchmarks. Credit markets have delivered strong returns over the past year, as the economic recovery has limited the level of defaults across credit markets. SCERS' Growth Absolute Return portfolio detracted from returns in the quarter, declining -1.3% and underperforming the benchmark return of +0.6%. For the full year, Growth Absolute Return delivered good returns and outperforming its benchmark, benefiting from the strong return of public equity markets. The Growth Absolute Return asset class was eliminated when SCERS' Strategic Asset Allocation was updated. The asset class is being wound-down, with manager allocations within the asset class either being liquidated or re-allocated to other parts of SCERS' portfolio.

SCERS GROWTH Performance Summary for the periods ending 12/31/21	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	5.3%	7.0%	23.7%	15.7%	Mar-17
Custom Benchmark	4.8%	6.0%	20.2%	13.5%	
Public Equity	5.1%	4.1%	16.6%	11.0%	Jun-11
MSCI ACWI	6.7%	5.6%	18.5%	10.0%	
Private Equity (lagged 1 quarter)	7.8%	19.0%	58.4%	8.1%	Feb-08
Cambridge All PE	5.1%	18.1%	48.3%	12.9%	
Public Credit	1.5%	3.1%	13.4%	5.5%	Nov-13
Custom Benchmark	0.7%	1.7%	5.4%	4.9%	
Private Credit (lagged 1 quarter)	2.9%	4.8%	15.0%	7.8%	Mar-17
Credit Suisse Leveraged Loan + 2%	1.7%	3.5%	10.5%	6.6%	
Growth Absolute Return	-1.3%	2.9%	13.2%	5.6%	Aug-04
HFRI FoF Composite +1%	0.6%	1.6%	7.2%	6.4%	

Diversifying Asset Category

SCERS' Diversifying Asset Category was slightly positive during the quarter, up +0.3%, outperforming the flat return for the category benchmark. U.S. Treasury and Fixed Income markets were little changed during the quarter, which corresponded to rate moves with the U.S. 10-year Treasury ending the quarter within a few basis points of where it began. For the full year, fixed income market returns were slightly negative, with the Bloomberg Barclays U.S. Aggregate index down -1.5% and the U.S. Treasury index down -2.3%, as interest rates moved up during the year. The 10-year U.S Treasury rate ended the year at 1.51%, up 60 basis points from where it started 2021. SCERS' Core/Core Plus Fixed Income portfolio slightly outperformed the benchmark, declining just -0.7% for the year.

Global fixed income returns were negative for the fourth quarter and full year. Similar to U.S. fixed income markets, global fixed income suffered from rising inflation and expectations for less supportive monetary policy, which pushed yields higher and contributed to negative performance. Additionally, a stronger U.S. Dollar contributed to negative foreign market returns, particularly compared to emerging market currencies, when measured on a U.S. Dollar basis. SCERS' Global Fixed Income portfolio outperformed its benchmark, declining -0.4% and -4.8% for the quarter and year, versus the benchmark returns of -1.4% and -7.3%, respectively.

The Diversifying Absolute Return portfolio was up +0.8% in the quarter, slightly outperforming the benchmark return of +0.6%, with contributions from market neutral and systematic macro strategies. Equity long/short and discretionary macro strategies were a drag on performance during the quarter and year, as SCERS' managers in these areas struggled for direction against shifting interest rate expectations and pockets of volatility within equity markets, such as the pressure on short equity positions in the early part of the year. For the year, Diversifying Absolute Return was the strongest segment within the Diversifying asset category, despite underperforming its benchmark, returning +6.6% versus the benchmark return of +7.5%.

SCERS DIVERSIFYING Performance Summary for the periods ending 12/31/21	Quarter	Fiscal Year to-Date	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	0.3%	0.3%	0.7%	4.0%	Mar-17
Custom Benchmark	0.0%	0.2%	0.1%	3.8%	
Core/Core Plus Fixed Income	0.1%	0.4%	-0.7%	3.8%	Jun-11
Bloomberg Barclays US Aggregate TR	0.0%	0.1%	-1.5%	3.2%	
U.S. Treasury	0.1%	0.2%	-2.2%	4.0%	Feb-18
Bloomberg Barclays US Treasury TR	0.2%	0.3%	-2.3%	4.0%	
Global Fixed Income	-0.4%	-3.6%	-4.8%	2.9%	May-13
Custom Benchmark	-1.4%	-3.0%	-7.3%	1.2%	
Diversifying Absolute Return	0.8%	1.6%	6.6%	2.8%	Nov-11
HFRI FoF Conservative Index	0.6%	1.5%	7.5%	5.0%	

Real Return Asset Category

Real Return was the top performing asset category during the fourth quarter, up +5.9%, and outperformed the benchmark return of +4.6%. Performance was led by SCERS' Real Estate portfolio, which is a mix of Core Real Estate liquid commingled funds valued as of 12/31/21 and Non-Core Real Estate investments in closed end funds valued as of 9/30/21. SCERS' Real Estate portfolio was up +7.6% in the quarter, outperforming the benchmark return of +6.7%. Real estate returns benefited the strong economic recovery from the prior year, and rising inflation which helped push the price of real assets higher. For the one year period, SCERS' Real Estate portfolio was up +23.3%, outperforming the benchmark return of +19.5%.

SCERS' Real Assets also posted strong returns in the quarter, up +5.0% versus the benchmark return of +2.8%. Energy and commodity prices moved higher during the fourth quarter, in general, with an exception being the price of natural gas which declined during quarter. Despite the decline in Q4, natural gas prices still rose over 25% during the year, while oil prices increased over 50% during the year. Other areas of strength included agriculture and industrial metals, which increased over 25%, while precious metal prices declined slightly during the year. For the year, SCERS' Real Assets portfolio was up +24.8% versus the benchmark return of +18.4%.

SCERS' Liquid Real Return also benefited from the asset price appreciation across real assets. Additionally, the portfolio includes exposure to treasury inflation-protected securities (TIPS), which generated positive returns in the quarter from rising inflation. SCERS' Liquid Real Return portfolio was up +4.1% and 13.8% for the quarter and year-to-date, respectively, slightly outperforming its benchmark.

SCERS REAL RETURN Performance Summary	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
SCERS Real Return w/ SSgA Proxy	5.9%	11.6%	21.4%	9.4%	Mar-17
SCERS Real Return w/o SSgA Proxy	5.9%	11.6%	21.4%	10.0%	Mar-17
Custom Benchmark	4.6%	9.9%	18.4%	6.7%	Mar-17
SCERS Real Estate	7.6%	14.3%	23.3%	11.7%	Jun-11
Custom Benchmark	6.7%	12.9%	19.5%	9.7%	
Core Real Estate (as of 12/31/21)					
Commingled Funds	7.9%	15.3%	26.5%	6.7%	Sep-08
NFI-ODCE	8.0%	15.1%	22.2%	6.4%	Sep-08
Non-Core Real Estate (as of 9/30/21)					
Opportunistic	8.2%	13.7%	17.8%	17.4%	Feb-14
Value Add	3.3%	6.4%	8.2%	0.6%	Sep-08
NFI-ODCE net +1%	4.3%	8.8%	14.6%	9.3%	Feb-14
				7.7%	Sep-08
SCERS Real Assets (as of 9/30/21)	5.0%	13.3%	24.8%	5.7%	Jan-13
Custom Benchmark	2.8%	8.3%	18.4%	6.1%	
SCERS Liquid Real Return (as of 12/31/21)	4.1%	5.1%	13.8%	7.7%	Jun-19
SSgA Real Assets	3.8%	5.2%	13.7%	7.1%	

SCERS' policy index benchmark includes a blended weighted average of the individual asset class benchmarks, as defined within SCERS' Master IPS, and as shown below. No changes to the policy index benchmark were made during the quarter. SCERS is in the process of updating its benchmarks across asset categories and individual asset classes, to reflect the changes approved as part of the revised Strategic Asset Allocation. Changes to the benchmarks will be applied in calendar year 2022.

SCERS BENCHMARK SUMMARY As of December 31, 2021	
Asset Class	Policy Index Benchmark
Growth Asset Category	Blended Weighted Average of Asset Class Benchmarks
US Equities	Russell 3000
International Equities	MSCI ACWI ex.-U.S. IMI
Private Equity	Cambridge All PE
Public Credit	50% (BofA High Yield) + 50% (CS High Yield)
Private Credit	CS Leveraged Loan + 2%
Growth Absolute Return	HFRI FoF Composite Index +1%
Diversifying Asset Category	Blended Weighted Average of Asset Class Benchmarks
Core/Core Plus Fixed Income	Bloomberg Barclays U.S. Aggregate
U.S. Treasury	Bloomberg Barclays U.S. Treasury
Global Fixed Income	80% Citi WGBI + 20% JPMorgan GBI EM
Diversifying Absolute Return	HFRI FoF Conservative Index
Real Return Asset Category	Blended Weighted Average of Asset Class Benchmarks
Real Estate	65% (NFI-ODCE) + 35% (NFI-ODCE +1%)
Real Assets	45% (Cambridge Infrastructure) + 35% (Cambridge Energy) + 10% (NCREIF Agriculture) + 10% (NCREIF Timber)
Liquid Real Return	30% (Barclays U.S. TIPS) + 25% (S&P Global Infrastructure Index) + 15% (Global REITs) + 10% (S&P Global Natural Resources Index) + 10% (Bloomberg Commodity Index) + 10% (U.S. Dollar Floating Rate Notes)
Opportunities Portfolio	SCERS Total Fund
Dedicated Cash	Overnight LIBOR

ATTACHMENT

- Board Order
- Verus' Investment Performance Review for SCERS for the period ending December 31, 2021.

Prepared by:

/S/

Brian Miller
Senior Investment Officer

Reviewed by:

/S/

Steve Davis
Chief Investment Officer

/S/

Eric Stern
Chief Executive Officer



Retirement Board Order

Sacramento County Employees' Retirement System

**Before the Board of Retirement
February 16, 2022**

AGENDA ITEM:

Quarterly Investment Performance Report – Fourth Quarter 2021

THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to receive and file the Total Fund Investment Performance Report – Fourth Quarter 2021.

I HEREBY CERTIFY that the above order was passed and adopted on February 16, 2022 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES (Present but not voting):

Richard B. Fowler II
Board President

Eric Stern
Chief Executive Officer and
Board Secretary



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: DECEMBER 31, 2021

Investment Performance Review for

Sacramento County Employees' Retirement System

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

PITTSBURGH 412-784-6678

Investment Landscape **TAB I**

Total Fund **TAB II**

Policy Index and
Benchmark History **TAB III**



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

1ST QUARTER 2022
Investment Landscape

Recent Verus research

Visit: <https://www.verusinvestments.com/insights/>

Topics of interest

THE ROLE OF INCOME IN PORTFOLIOS

Many aspects of investing are fundamentally rooted in the idea that total investment return includes both investment income and investment price appreciation (growth). Nearly every asset class can be decomposed into these two characteristics—some assets being composed mostly of income and some assets being composed mostly of price appreciation. As interest rates have fallen around the world, the importance of income, and the role it plays in portfolios, has seen a dramatic increase. In this Topic of Interest, we revisit these two fundamental characteristics to provide investors with a lens with which to view decision-making in the current market environment.

INTEGRATING ACTIVE RETURN INTO ASSET ALLOCATION MODELING

Long-term asset class forecasts, or capital market assumptions, typically focus on the future performance of broad markets. However, most investors employ some combination of passive and active management in their portfolios. And active management is most often pursued with the expectation that returns will be different than that of the broad market (specifically, that “active return” will be achieved above and beyond the market return). If capital market assumptions are typically comprised of market forecasts, but investors tend to build portfolios with the expectation of market return plus active return, how might investors estimate the expected behavior of active management (active return) in their asset allocation work? In this Topic of Interest we look at this question from multiple angles.

Annual research

2022 CAPITAL MARKET ASSUMPTIONS

Some important developments occurred in the last year. During our 2022 Capital Market Assumptions webinar, we discussed:

- Market movements of 2021 and how these shifts have improved our long-term outlook,
- The impact of rising inflation and interest rates on asset class expectations,
- And our newly released forecasts for specific hedge fund styles, and forecasts for various strategies/approaches with the private credit universe.

Verus business update

2021

- We celebrated our 35th anniversary. Wurts Johnson & Company (founding name) was established in January 1986.
- Eight employees passed their CFA exams, including two who passed Level III, earning their charters. Verus now has a total of 32 CFA charterholders.
- Jeff MacLean, CEO, was awarded the 2021 Knowledge Broker Award by CIO Magazine in September.
- Verus expanded the ownership group to 30 employees. 95% of senior consultants are shareholders.
- We continued to grow our Pittsburgh footprint by adding three professionals for a total of five and moved to a new space on Liberty Avenue. Verus established our “east coast” office in Pittsburgh, PA in May 2020.
- Our national client footprint expanded to 23 states, with our recent additions of clients in Massachusetts, Illinois, and Texas.
- Our assets under advisement has reached over \$664 billion, as a result of strong markets and success in retaining several new clients. Our OCIO business saw continued growth as well, surpassing \$5 billion in assets.
- We completed a third-party verification process that supports our claim of GIPS* compliance and have implemented the verified GIPS and policies and procedure for our OCIO performance composites. We have 17 unique composites. Our E&F and Taft-Hartley composites now have >5-year track records.
- The IIDC grew to 24 consulting firms with over \$32 trillion in assets under advisement. Verus founded the Institutional Investing Diversity Cooperative in December 2020, leading a call to action in the consulting industry for disclosure of asset manager diversity data at the investment team level.

2022

- Managing Director | Senior Consultant, Margaret Jadallah plans to retire towards the end of the year.



Table of contents



VERUSINVESTMENTS.COM

SEATTLE 206.622.3700

PITTSBURGH 412.784.6678

LOS ANGELES 310.297.1777

SAN FRANCISCO 415.362.3484

Economic environment 7

Fixed income rates & credit 21

Equity 26

Other assets 35

Appendix 38

4th quarter summary

THE ECONOMIC CLIMATE

- Real GDP grew at a 4.9% rate year-over-year in the third quarter (+2.3% quarterly annualized rate). A slowdown in consumer spending contributed to a lower rate of growth. This was due to a combination of factors, including new COVID-19 restrictions, a delay in the reopening of businesses across the country, and general fear of virus spread which has led to less spending on services. **p. 9**
- The U.S. labor market improved further, as unemployment fell from 4.8% to 3.9%. The labor force participation rate has also improved, though very gradually, rising from 61.6% to 61.9%. **p. 14**

PORTFOLIO IMPACTS

- Credit spreads have reached extremely tight levels. High yield bonds traded at a credit spread of 283 bps at year-end. However, these spread levels may be justified by record-low bond default activity. Just 0.4% of U.S. high yield bonds defaulted in 2021, on a par-weighted basis. **p. 24**
- U.S. core CPI increased 5.5% year-over-year in December. Headline inflation, which includes all goods, reached 7.0%. Large price increases have occurred across many goods and services, though approximately half of the rise in inflation continues to be driven by energy prices and automobiles. **p. 13**

THE INVESTMENT CLIMATE

- In December it was announced that Senator Joe Manchin had communicated a hard “No” regarding his support for the Build Back Better bill. For months, Democrats have sought a solution to the disparate needs and spending interests of their party. **p. 12**
- Extremely fast spread of the Omicron variant worldwide does not seem to have had an outsized impact on the markets. While this new wave has in fact led to shutdowns in certain economies, much of the world has remained open, perhaps in acknowledgment that the health effects of Omicron are believed to be milder in nature. **p. 10**

ASSET ALLOCATION ISSUES

- Equity markets delivered strong returns in Q4, up +6.7% and ending the year up 18.5% (MSCI ACWI). U.S. equities delivered 11.0% during the quarter, while international equities delivered 2.7% and emerging market equities saw a slight loss of -1.3%, on an unhedged currency basis. **p. 27**
- Size and Value factor performance was negative once again during Q4. Large capitalization stocks significantly outperformed small capitalization stocks and Growth beat Value. Tighter monetary conditions and a pullback in some growth stocks has renewed talks of a possible Value rotation. **p. 29**

Risk assets continue to perform strongly, despite rapid global spread of the Omicron variant

What drove the market in Q4?

“World is put on high alert over the Omicron coronavirus variant”

NUMBER OF NEW DETECTED COVID-19 INFECTIONS WORLDWIDE (MILLIONS)

Jul	Aug	Sep	Oct	Nov	Dec
15.6	19.9	16.0	13.0	15.7	25.4

Article Source: CNN, as of November 28th, 2021

“‘Transitory’ is out for describing inflation at the Fed... what will take its place?”

HEADLINE CONSUMER PRICE INFLATION (YEAR-OVER-YEAR)

Jul	Aug	Sep	Oct	Nov	Dec
5.4%	5.3%	5.4%	6.2%	6.8%	7.0%

Article Source: MarketWatch, December 15th, 2021

“Unphased by Omicron, Fed policymakers show greater consensus for faster taper”

FEDERAL RESERVE BALANCE SHEET SIZE (TRILLIONS)

Jul	Aug	Sep	Oct	Nov	Dec
\$8.2T	\$8.3T	\$8.4T	\$8.6T	\$8.7T	\$8.8T

Article Source: Reuters, December 2nd, 2021

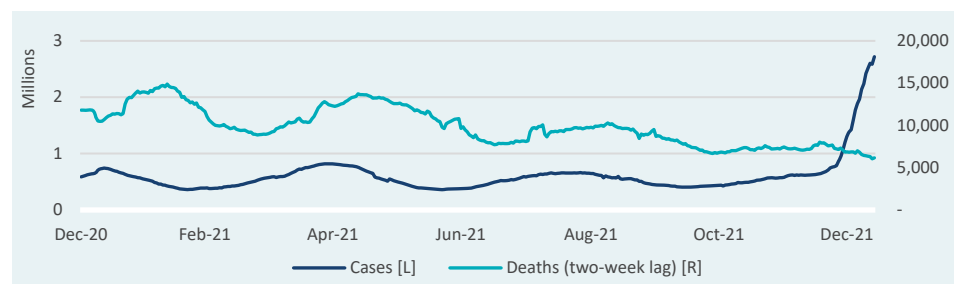
“Dow, S&P 500 end at all-time records as U.S. stocks extend winning streak amid strong company earnings”

S&P 500 INDEX – NUMBER OF CUMULATIVE YEAR-TO-DATE RECORD CLOSES

Jul	Aug	Sep	Oct	Nov	Dec
41	53	54	59	66	70

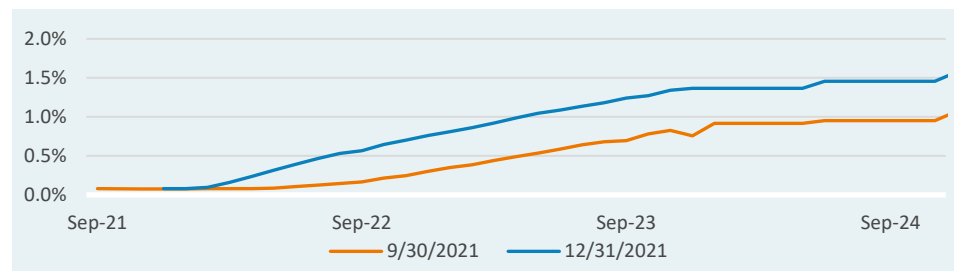
Article Source: October 26th, 2021

GLOBAL CASE GROWTH VS. LAGGED DEATHS (7-DAY TRAILING AVERAGE)



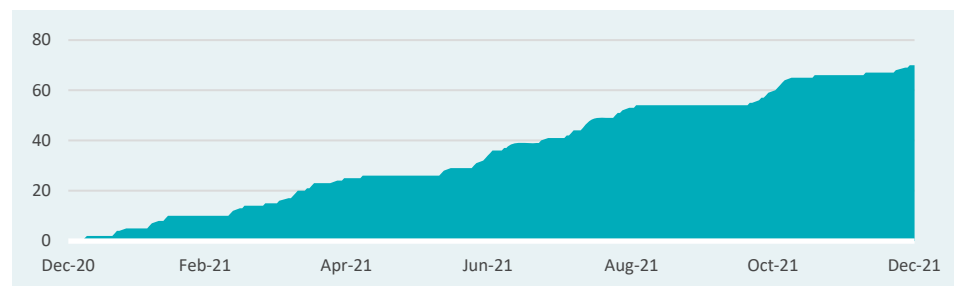
Source: Bloomberg, as of 12/31/21

IMPLIED EFFECTIVE FED FUNDS RATE



Source: Bloomberg, as of 12/31/21

S&P 500 INDEX – CUMULATIVE NUMBER OF RECORD CLOSES IN 2021



Source: Standard & Poor's, Bloomberg, as of 12/31/21

Economic environment

U.S. economics summary

- Real GDP grew at a 4.9% rate year-over-year in the third quarter (+2.3% quarterly annualized rate). A slowdown in consumer spending contributed to a lower pace of growth. This was due to a combination of factors, including new COVID-19 restrictions, a delay in the reopening of businesses, and general fear of virus spread which has led to less spending on services. As GDP growth is stated in *inflation-adjusted* terms, higher inflation has also contributed to slower economic growth.
- U.S. core CPI, which excludes food and energy prices, increased 5.5% year-over-year in December. Headline inflation, which includes all goods, reached 7.0%. Large price increases have occurred across many goods and services, though approximately half of the rise in inflation continues to be driven by energy prices and automobiles.
- The U.S. unemployment fell further, from 4.8% to 3.9% during Q4. The labor force participation rate has improved, though very gradually, rising from 61.6% to 61.9%.
- After months of political brinksmanship, it appears the Build Back Better plan has stalled, as Senator Joe Manchin had communicated a hard “No” on his support for the Build Back Better bill. Democrats continue to seek a solution to the disparate needs and spending interests of their party.
- U.S. home prices increased +19.1% over the past year ending October. However, price growth may be cooling off, as the inventory of homes has expanded materially and mortgage interest rates have begun to rise.
- Consumer sentiment was mixed during the quarter. Depressed survey levels suggest we are no longer in the euphoric spending environment of mid to late 2021.

	Most Recent	12 Months Prior
Real GDP (YoY)	4.9% 9/30/21	(2.9%) 9/30/20
Inflation (CPI YoY, Core)	5.5% 12/31/21	1.6% 12/31/20
Expected Inflation (5yr-5yr forward)	2.3% 12/31/21	2.0% 12/31/20
Fed Funds Target Range	0% – 0.25% 12/31/21	0% – 0.25% 12/31/20
10-Year Rate	1.51% 12/31/21	0.91% 12/31/20
U-3 Unemployment	3.9% 12/31/21	6.7% 12/31/20
U-6 Unemployment	7.3% 12/31/21	11.7% 12/31/20

GDP growth

Real GDP grew at a 4.9% rate year-over-year in the third quarter (+2.3% quarterly annualized rate). During the quarter, a slowdown in consumer spending resulted in a lower pace of growth. This was partly a factor of new COVID-19 restrictions and a delay in the reopening of businesses across the country. Fear of contracting the virus likely led to less spending on services. Government assistance to businesses and households also continued to fall, creating a drag on growth. On the other hand, a strong rebuilding of inventories by businesses had a large positive impact on economic growth.

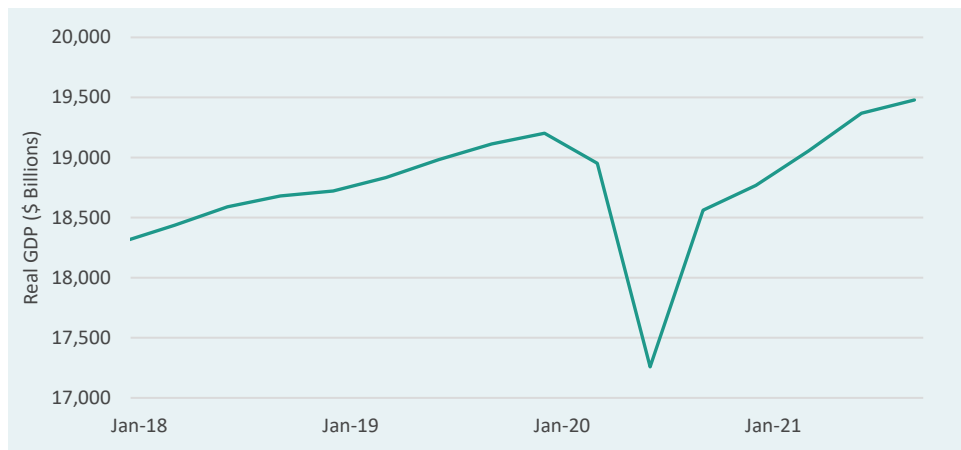
Although Q3 showed a weaker rate of growth, expectations more broadly are for further strong economic expansion—

materially above pre-pandemic rates. The Atlanta Fed GDPNow estimate, as of January 14th, suggests a GDP growth rate of 6.8% in the fourth quarter (seasonally-adjusted quarterly annualized rate).

U.S. GDP growth is traditionally quoted in *inflation-adjusted* terms. This means that higher inflation has contributed to slower GDP growth, as shown below. It will be important to watch the rate of inflation and the impact of higher inflation on GDP figures. Multiple past U.S. recessions were caused at least partially by rising inflation rather than solely by slowing growth (see 1970s, 1980s).

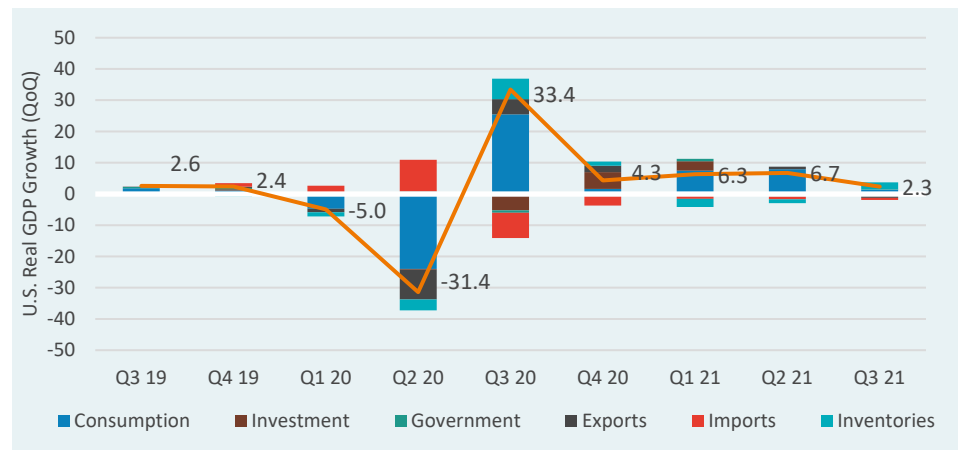
Although Q3 was relatively weak, economists expect continued above-average GDP growth

U.S. REAL GROSS DOMESTIC PRODUCT



Source: FRED, as of 9/30/21

U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 9/30/21

Omicron variant

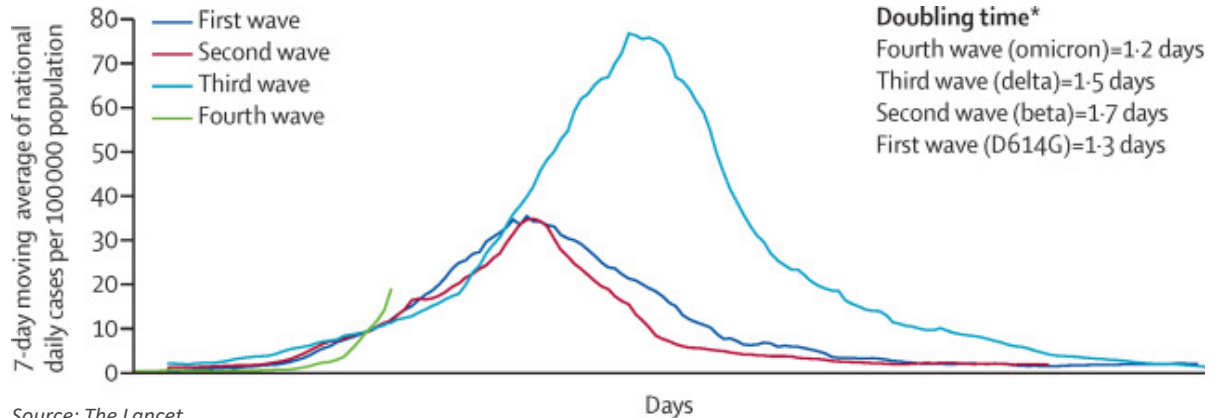
COVID-19 variant B.1.1.529 (Omicron) was discovered in Botswana on November 11th and has since spread exponentially around the globe, replacing the delta variant as the dominant global strain.

Based on available studies and data, the Omicron variant is much more infectious than prior variants, but its symptoms are less severe. In the Gauteng province within South Africa, the doubling time of cases proved to be faster than each of the previous three waves at 1.2 days

While case growth has accelerated more quickly than in previous waves in South Africa, hospitalizations and deaths have not paced the increase in cases, leaving some to predict that symptoms may be less severe.

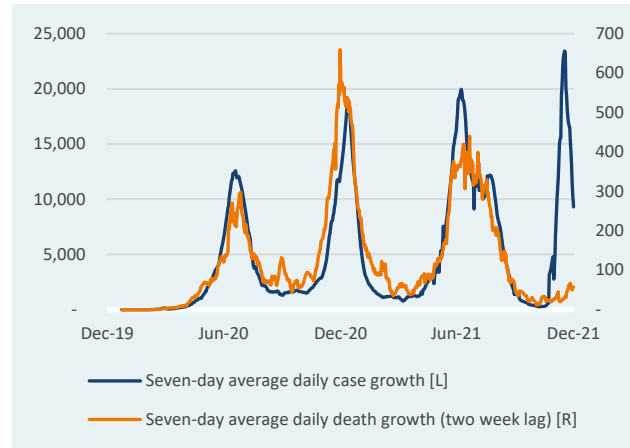
Some have argued that it is a good thing that a highly infectious but not severe strain is spreading around the world, because it will provide some level of neutralizing antibodies to the people it infects, shortening the path to herd immunity. A more pessimistic view would be that “letting it rip” would allow more time for the virus to mutate to a more deadly strain.

COVID WAVE CASE DOUBLING TIME – GAUTENG PROVINCE, SOUTH AFRICA



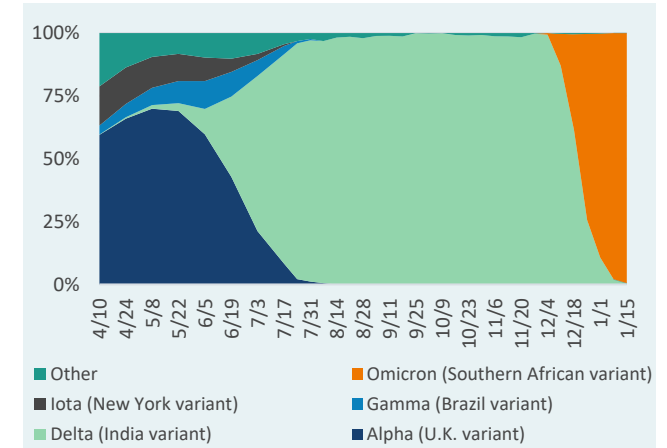
Source: The Lancet

SOUTH AFRICAN CASES AND DEATHS



Source: Bloomberg, as of 12/31/21

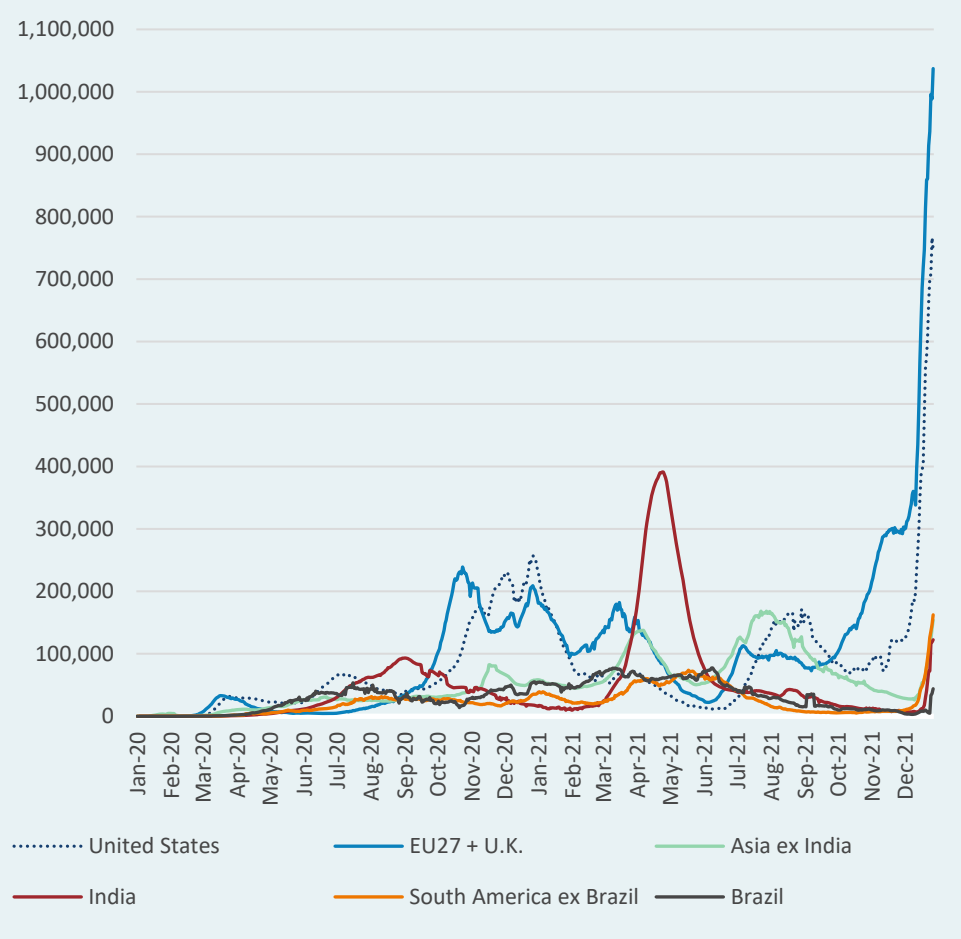
STRAIN DOMINANCE IN THE UNITED STATES



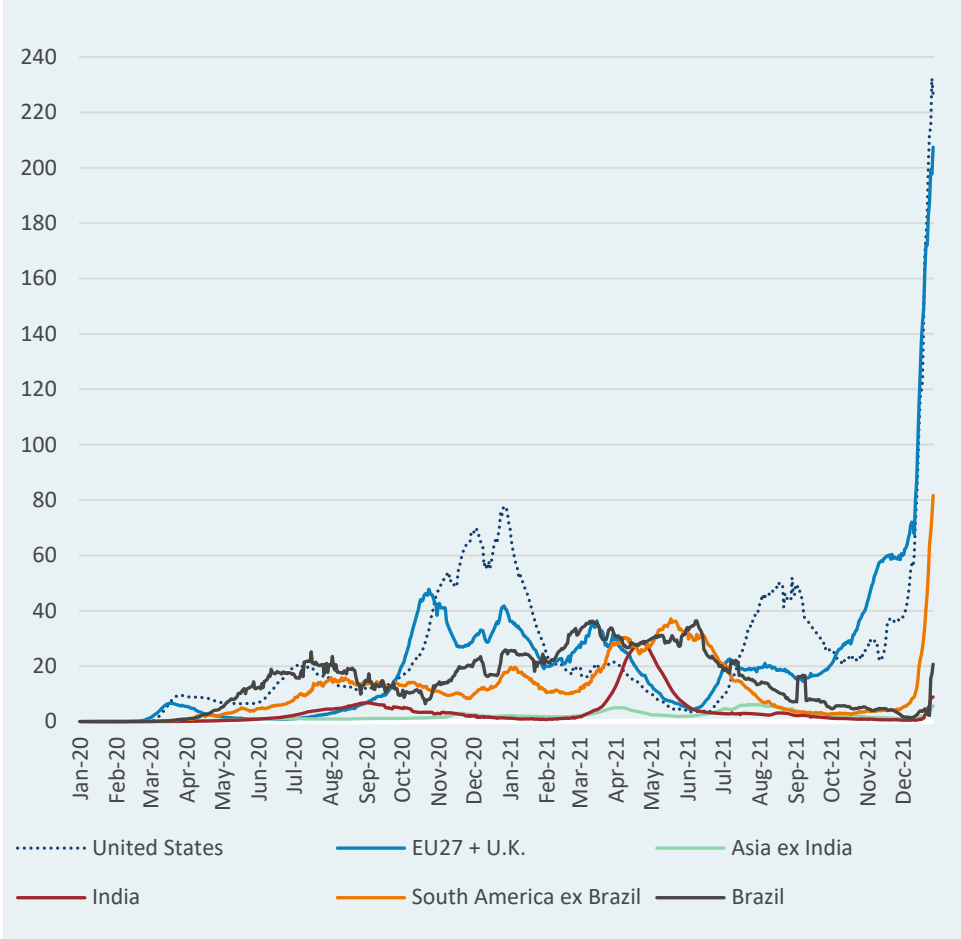
Source: CDC, as of 1/15/22

COVID-19 case growth monitors

DAILY AVERAGE CASE GROWTH (SEVEN-DAY TRAILING)



DAILY AVERAGE CASE GROWTH (SEVEN-DAY TRAILING) – PER 100,000



Source: Bloomberg, as of 1/11/22

“Build Back Better” update

After months of political brinksmanship, it appears the BBB plan has stalled

- For months, Democrats have sought a solution to the disparate needs and spending interests of their party. This ranged from the more aggressive spending demands of Bernie Sanders, who hoped for a total of nearly \$6 trillion in new spending, to Senator Joe Manchin who had expressed throughout the year a willingness to support a maximum of \$1.5 trillion in new spending. In December it was announced that Senator Joe Manchin communicated a hard “No” regarding his support for the bill.
- The party appears to have taken a calculated risk in continuing to push for spending in excess of the \$1.5 trillion limit that Joe Manchin had indicated, as well as refusing to negotiate on other items where disagreement existed, such as tax credits and climate change legislation. Despite DNC claims that the Build Back Better would not raise the national deficit, Manchin also expressed skepticism around sunset clauses and other assumptions within the bill that he believed hid the true magnitude of spending and its likely impact on the U.S. deficit.
- Some remain hopeful for a revival of negotiations and perhaps an agreement on many or most of the items within the bill. However, in January Senator Manchin indicated that he will not support the bill altogether—a reversal from the sentiments expressed during earlier negotiations.

Inflation

U.S. core CPI, which excludes food & energy prices, increased 5.5% year-over-year in December. Headline inflation, which includes all goods, reached 7.0%. Large price increases have occurred across many goods and services, though approximately half of the rise in inflation continues to be driven by energy prices and automobiles. Inflation has proven more “sticky”, which suggests that higher prices may be less transitory than previously believed.

The price of shelter continue to be a notable driver of U.S. inflation, as shelter costs have risen 4.1% over the past year. Although the rate of price growth in this area has been fairly modest, the cost of shelter makes up nearly one third of the overall CPI basket (32.4% as of November). As we have mentioned

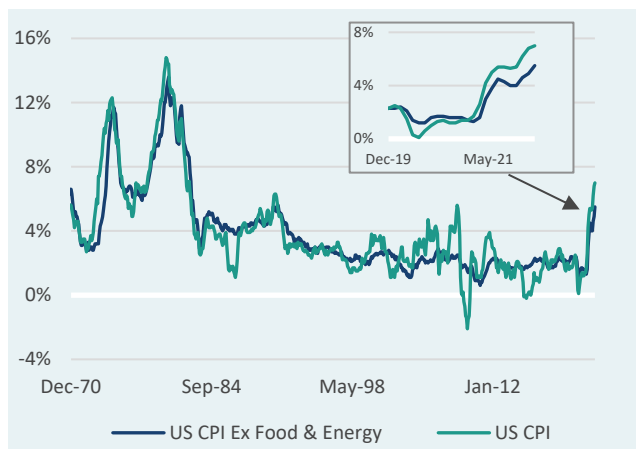
previously, the way in which housing costs are captured in official statistics is nuanced, and increases in home prices do not necessarily flow through directly to official inflation numbers. Instead, today’s higher shelter costs may take quarters or even years to show up in government statistics.

We maintain our view that inflation will most likely begin falling towards previous levels later in 2022, though this could be a slower process. The variables that will likely impact this outcome include: whether energy and automobile prices plateau, the speed at which supply chain problems are resolved, and the willingness of businesses to raise wages in line with rates of inflation (quickly rising wages could further pressure prices upward).

Inflation has proven more “sticky”

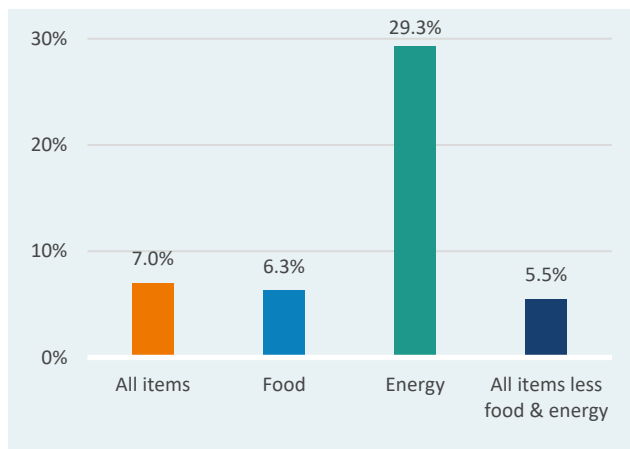
Higher prices may be less transitory than previously believed

U.S. CPI (YOY)



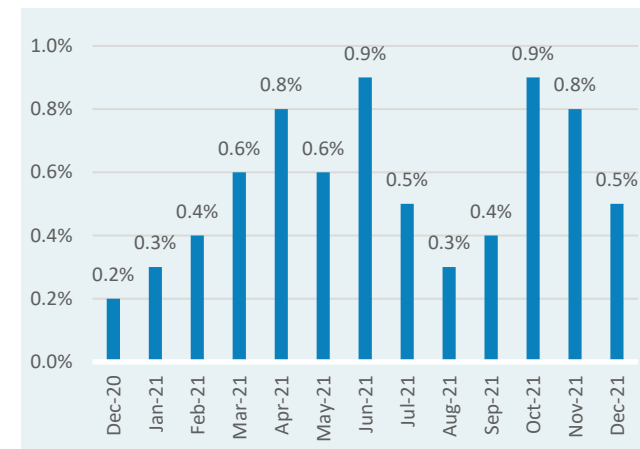
Source: BLS, as of 12/31/21

U.S. CPI (YOY)



Source: BLS, as of 12/31/21

MONTHLY PRICE MOVEMENT



Source: BLS, as of 12/31/21

Labor market

The U.S. unemployment rate fell further, from 4.8% to 3.9% during Q4. The labor force participation rate has improved, though very gradually, rising from 61.6% to 61.9%. The U.S. labor shortage has reached historic proportions. Job openings far exceed the supply of workers. As of November, 10.5 million job openings were posted, while only 6.8 million Americans were seeking work.

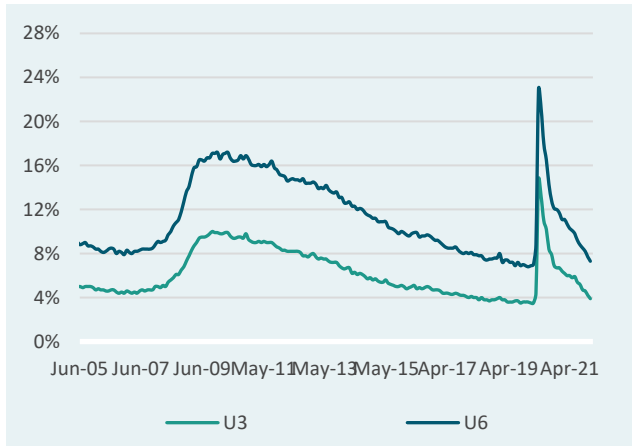
In 2021, using U.S. government employment and retirement data, we reached a conclusion that the sudden and historically large quantity of workers leaving the labor force was mostly caused by early retirements. At the time, multiple theories had

been proposed, such as COVID-19 fear (workers were not seeking employment due to a fear of human interaction) or that this was due to government aid and stimulus (workers flush with cash were finding it temporarily unnecessary to hold a job). Over recent quarters it does appear that our thesis has held. The U.S. labor force participation rate remains stuck, as two million abnormally early retirements imply that the available workforce is now permanently smaller. This reduction in workforce likely reduces the productive capacity of the U.S. economy and aggregate household income, though it may have an incremental lifting effect on the wages of existing workers.

A portion of the U.S. labor force remains neither employed nor seeking work

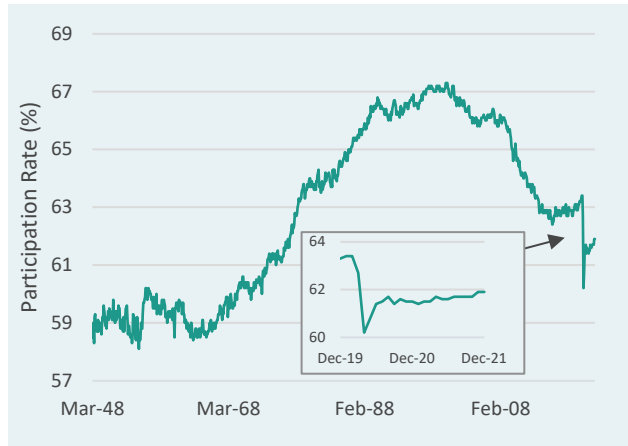
Much of this loss appears to be due to early retirements

U.S. UNEMPLOYMENT



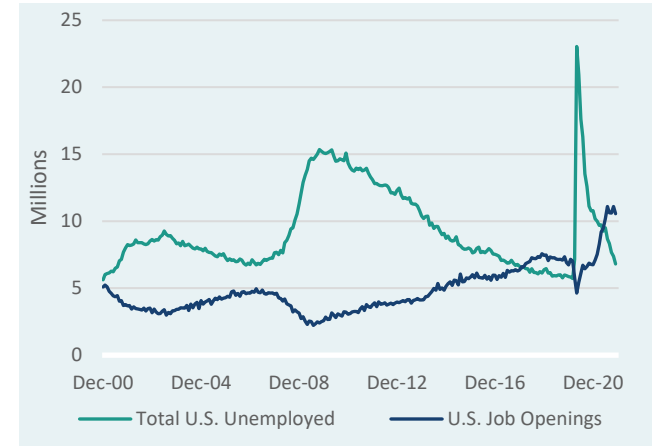
Source: FRED, as of 12/31/21

LABOR PARTICIPATION RATE



Source: FRED, as of 12/31/21

UNEMPLOYED VS # JOBS AVAILABLE



Source: FRED, as of 11/30/21

Labor costs & shortages

“We could see mid-single-digit inflation in retails, as **rising raw material pricing, labor and transportation costs are all impacting us and our suppliers**. We have no way to say how long this will last, but our industry has been disciplined about pricing for decades, and we expect that to continue.” -AutoZone (Dec. 7)



“Moving on to inflation, again, it's pretty much the same story that we told during each of the last two quarters. **There have been and are a variety of inflationary pressures that we and others are seeing from labor cost to freight cost, to higher demand, to container shortages and port delays, to increased demand on certain product categories**, much of what you see and read out there. Various shortages on everything from chips to oils and chemicals supplied by facilities hit by the Gulf storms a while back. Higher commodities prices.” -Costco (Dec. 9)



“To further impact our second-quarter results, I will highlight several key drivers. **The difficult labor market once again had the largest effect on our bottom line, representing an estimated \$470 million in additional year-over-year costs**. As I did last quarter, I'll separate the effect of the labor market into two components: **higher rates and network inefficiencies resulting from labor shortages**.” -FedEx (Dec. 16)



“To add to the challenge, **industry-wide shortages in the labor market are impacting every part of the supply chain, adding significant costs that are above and beyond inflation**. We're seeing record levels of **disruptions across our raw material suppliers, internal and external production facilities, our own distribution centers, our customers' warehouses and the logistics networks required to connect each of these elements of the supply chain**. These disruptions are resulting in service challenges and elevated costs across the industry.” -General Mills (Dec. 21)



“**Lost production days and unplanned downtimes** were primarily due to **labor shortages** across our manufacturing network, including **COVID-related absenteeism**.” -Lamb Weston (Jan. 6)



Source: FactSet, as of 1/13/22

The consumer

U.S. real retail sales remain strong, up 10.6% year-over-year. It is worth noting that this was the growth rate *after* adjusting for inflation. American households continue to spend at a rapid pace, though this could be set to slow down as government spending and other easy money policies are likely in the rearview mirror.

Auto sales volumes fell dramatically in the second half of 2021. Multiple variables are having an impact, as microchip shortages crimp new car production, many households already purchased a vehicle recently (assisted by stimulus checks), and very high auto prices have disincentivized purchases more generally.

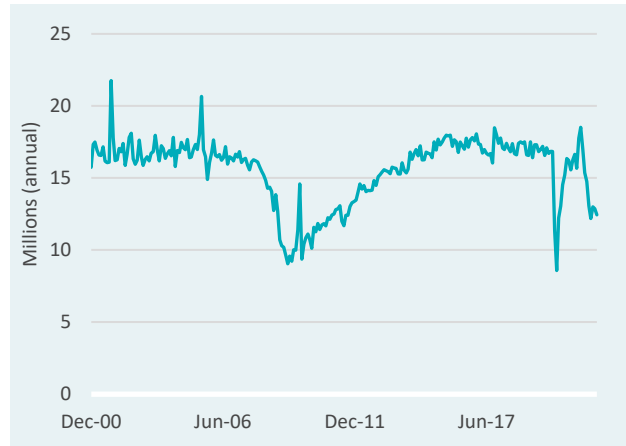
A rather surprising economic result of the pandemic has been the jump in household savings rates, paying down of debt, and broadly improved financial situation of domestic households. As we have discussed in recent quarters, the inability of Americans to take vacations during much of the past two years, as well as reduced spending on services such as dining out, meant greater saving and less spending. However, it is incredibly important to point out that economic metrics such as the ones discussed here inherently involve an *averaging* of all household situations. The recent recession has had particularly destructive effects on specific sectors of the economy, and many have yet to recover.

REAL RETAIL SALES GROWTH (MONTHLY)



Source: FRED, as of 11/30/21

AUTO SALES



Source: Federal Reserve, as of 12/31/21

U.S. HOUSEHOLD DEBT BURDEN



Source: FRED, as of 9/30/21 – household debt service payments as a percent of disposable personal income

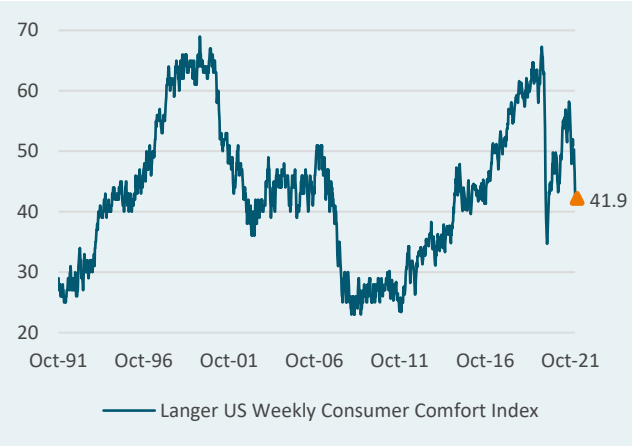
Sentiment

Consumer sentiment was mixed during the quarter. The University of Michigan survey indicated relatively depressed but stable sentiment. Announced increases to Social Security payments (+5.9% YoY) due to inflation and a rise in wages among younger workers lifted sentiment slightly. On the other hand, the Langer U.S. Weekly Consumer Comfort Index suggested a sharp falloff in sentiment. Rising inflation, the spreading Omicron variant, and the steepest one week drop in “buying conditions” in 36 years translated to much poorer sentiment to start 2022. Both surveys seem to communicate an end to the euphoric spending spree that occurred in mid to late 2021.

The NFIB Small Business Optimism index was rangebound during the quarter but remained near the long-term average level. As outlined by the survey, 59% of small businesses have increased prices, which was the highest reading since 1979. The December survey suggests that business conditions are not encouraging to small business owners, as new government mandates and tax increases have been discussed in the legislature. Furthermore, high inflation and supply chain issues continue to create challenges.

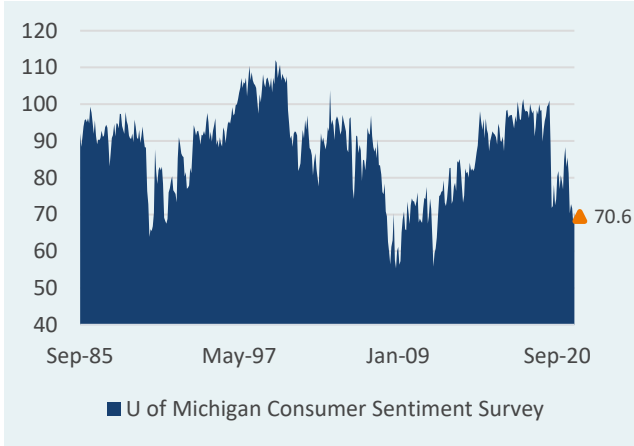
Sentiment remains depressed, as concerns exist around inflation, Omicron, and economic restrictions

CONSUMER COMFORT



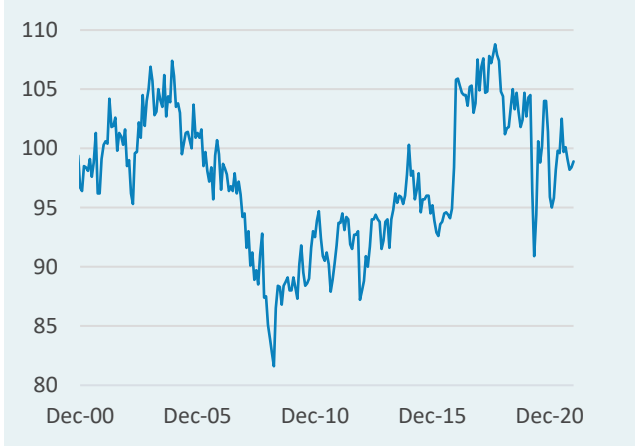
Source: Bloomberg, as of 1/9/22

CONSUMER SENTIMENT



Source: University of Michigan, as of 12/31/21

SMALL BUSINESS OPTIMISM



Source: NFIB, as of 12/31/21

Housing

U.S. home prices increased +19.1% over the past year, ending October. However, price growth may be cooling off, as the inventory of homes has expanded materially and mortgage interest rates have begun to rise. The dramatic surge in real estate values throughout the pandemic resulted in considerable wealth gains for those who owned homes, but has also created real financial issues for many who rent as housing costs have risen faster than incomes.

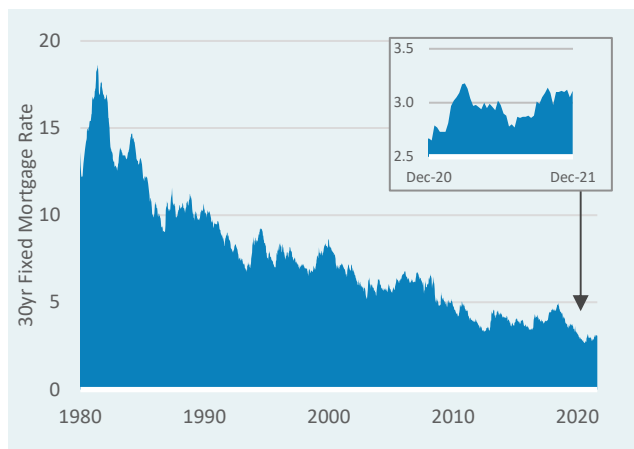
Much higher living costs may lead to further social unrest and political discussions on topics such as the relaxation of

zoning restrictions and rent control. The growing homeless crisis in many U.S. areas further compounds the need, both real and perceived, for bringing the costs of housing under control.

U.S. mortgage rates have risen off the all-time-low (2.65%) achieved earlier in 2021. During the first week of January, the 30-year average fixed rate mortgage reached 3.22%. Given high home prices, small increases in interest rates will have a larger impact on affordability. Higher borrowing costs would act as a headwind to further home price appreciation.

A dramatic jump in shelter costs may be adding pressure to household budgets

30YR FIXED MORTGAGE RATE (AVERAGE)



Source: U.S. Census Bureau, as of 12/31/21

SUPPLY OF HOMES



Source: FRED, as of 11/30/21

CASE-SHILLER HOME PRICE INDEX



Source: FRED, as of 10/31/21

International economics summary

— COVID-19 variant B.1.1.529 (Omicron) was discovered in Botswana on November 11th and has since spread exponentially around the globe, replacing the delta variant as the dominant global strain. Based on available studies and data, the Omicron variant is much more infectious than prior variants, but its symptoms are less severe. Many countries have taken a cautious approach and have reinstated social distancing controls.

— Several countries including China and New Zealand have implemented zero-COVID approaches with the goal of completely eradicating the virus within their borders. These policies may present upside risks for inflation looking ahead, as they are likely to result in more uncertainty and therefore potentially sustain or even worsen current supply chain problems.

— Prices paid by global producers of

goods and services have surged over the last year. Chinese producer price growth (+10.3% in December) hit its highest level in 26 years, and German producer prices (+19.2% in November) grew very quickly as supply chain disruptions squeezed prices for timber and raw metal materials.

— Eurozone GDP grew +3.7% year-over-year in Q3, lagging U.S. growth over the same period (+4.9%). Economic growth was more robust in Italy (+3.8%) and a bit weaker in Germany (+2.5%).

— China's real estate crisis seems to be spreading. In early December, Evergrande, one of the largest property developers in China, defaulted on its debt. An increasing number of Chinese property developers have been strained. Given that real estate development makes up nearly one third of China's economy, a crisis in this sector could have serious ramifications.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	4.9% 9/30/21	7.0% 12/31/21	3.9% 12/31/21
Eurozone	3.9% 9/30/21	5.0% 12/31/21	7.2% 11/30/21
Japan	1.2% 9/30/21	0.8% 12/31/21	2.7% 11/30/21
BRICS Nations	5.2% 9/30/21	3.3% 12/31/21	5.4% 6/30/21
Brazil	4.0% 9/30/21	10.1% 12/31/21	12.1% 10/31/21
Russia	4.3% 9/30/21	8.4% 12/31/21	4.3% 11/30/21
India	8.4% 9/30/21	5.6% 12/31/21	7.9% 12/31/21
China	4.0% 12/31/21	1.5% 12/31/21	5.1% 12/31/21

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

International economics

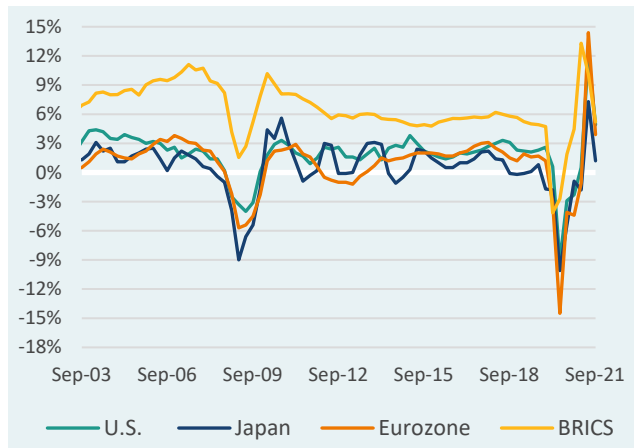
The rate of economic growth across most economies has moved back towards average levels, as the global recession and recovery fades from the rearview mirror. In October, the International Monetary Fund cut their 2021 advanced economy growth projections (from 5.6% to 5.2%), citing supply chain disruptions which have dampened the outlook for these economies. Worsening pandemic dynamics were flagged as a greater risk for emerging and developing economies, though 2021 growth expectations were revised up 0.1% to 6.4%.

Inflation moved higher in many areas, and the United States continues to cope with one of the highest rates of inflation among other major developed economies. Several countries

including China and New Zealand have implemented zero-COVID approaches with the goal of completely eradicating the virus within their borders. These policies may present upside risks for inflation looking ahead, as they are likely to result in more uncertainty and therefore potentially sustain or even worsen current supply chain problems. Inflation trends and the reaction of central banks to these trends will have important implications for markets.

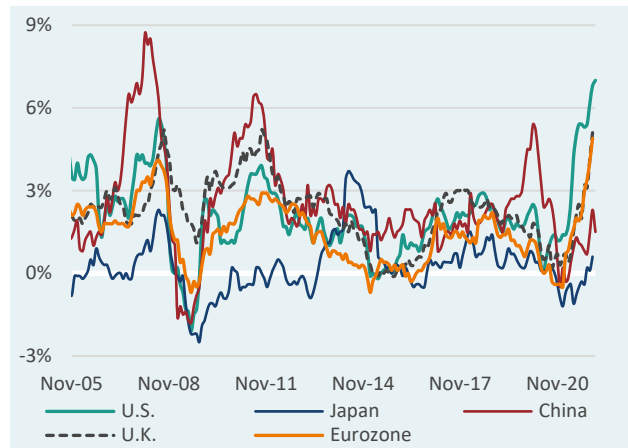
Unemployment has generally improved to pre-pandemic levels, as government restrictions are relaxed, people regain comfort in moving out and about, and economies trend back towards normalcy.

REAL GDP GROWTH (YOY)



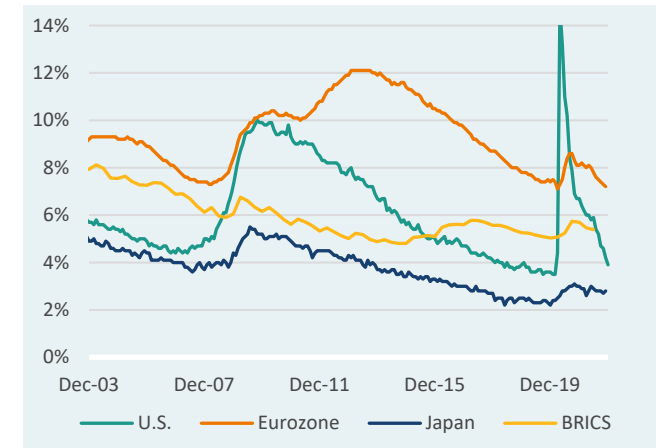
Source: Bloomberg, as of 9/30/21

INFLATION (CPI YOY)



Source: Bloomberg, as of 12/31/21 – or most recent release

UNEMPLOYMENT



Source: Bloomberg, as of 12/31/21 – or most recent release

Fixed income rates & credit

Fixed income environment

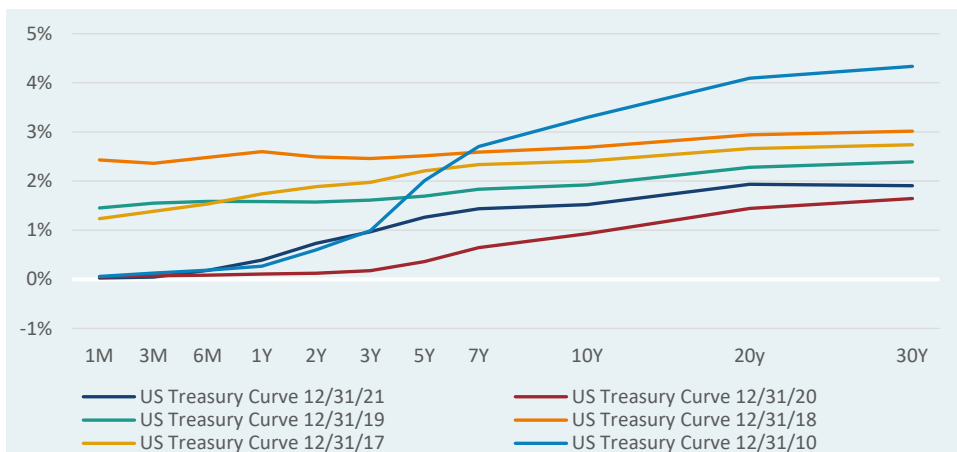
- The 10-year U.S. Treasury yield was relatively rangebound during the quarter, remaining at a yield of 1.5%. Thus far, U.S. interest rates have not noticeably reacted to an inflation rate of 7.0%. Market pricing seems to indicate that investors generally expect inflation to be transitory—perhaps falling towards normal levels by the end of this year.
- One of the largest stories over the quarter was the Fed’s pivot on inflation, the retirement of the word “transitory” to describe inflation, and a more aggressive policy path expected by investors. The conversation around the balance sheet shifted from concluding the taper in June to concluding in March, and perhaps selling assets as soon as June. The conversation around interest rates shifted from potentially hiking around June to the market fully pricing in a hike by March and maybe two by May. The Fed is now clearly more concerned with inflation relative to unemployment.
- Although credit spreads are tight, bond defaults have dropped to incredibly low levels. The one-year high-yield bond default rate reached 0.4% in December, one of the lowest rates on record.
- New issue activity across credit markets has been historically high. In the fourth quarter, \$285 billion of investment grade credit was issued. Over the full year, gross issuance totaled \$1.4 trillion, which was second only to the \$1.8 trillion issued in 2020.
- In early December, Evergrande, one of the largest property developers in China, defaulted on its debt. At the start of 2022, property developer Shimao also defaulted on its debt. These bonds had been classified as investment grade until recently. Credit spreads of Chinese debt have expanding enormously, from near 750 bps in June to 2,175 bps in November.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	0.0%	(1.5%)
Core Plus Fixed Income (Bloomberg U.S. Universal)	0.0%	(1.1%)
U.S. Treasuries (Bloomberg U.S. Treasury)	0.2%	(2.3%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.7%	5.3%
Bank Loans (S&P/LSTA Leveraged Loan)	0.7%	5.2%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(2.5%)	(8.7%)
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(0.4%)	(1.8%)
Mortgage-Backed Securities (Bloomberg MBS)	(0.4%)	(1.0%)

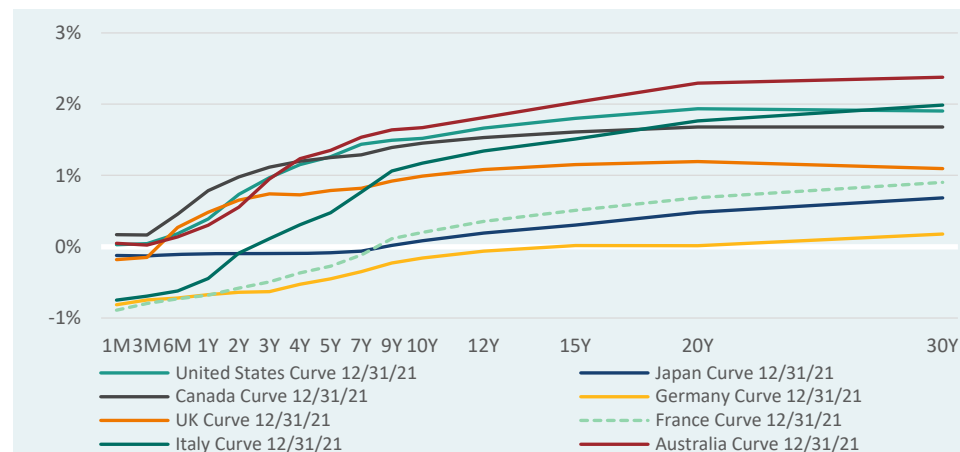
Source: Bloomberg, as of 12/31/21

Yield environment

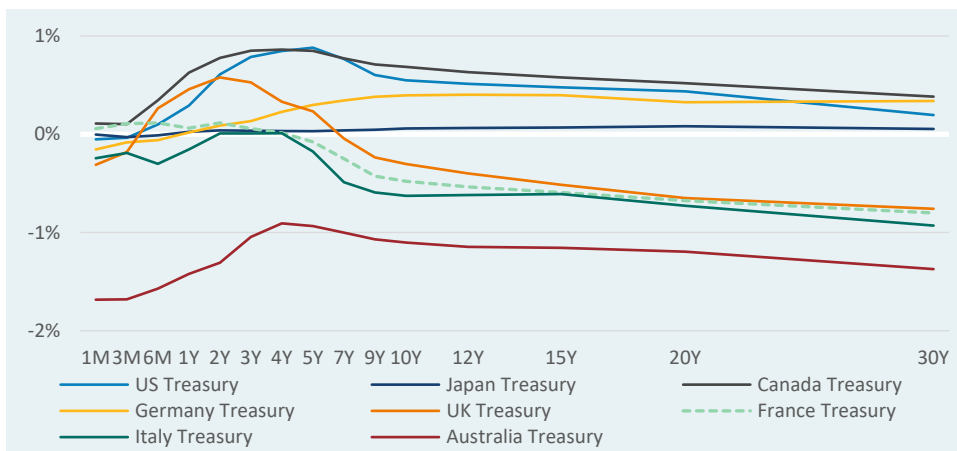
U.S. YIELD CURVE



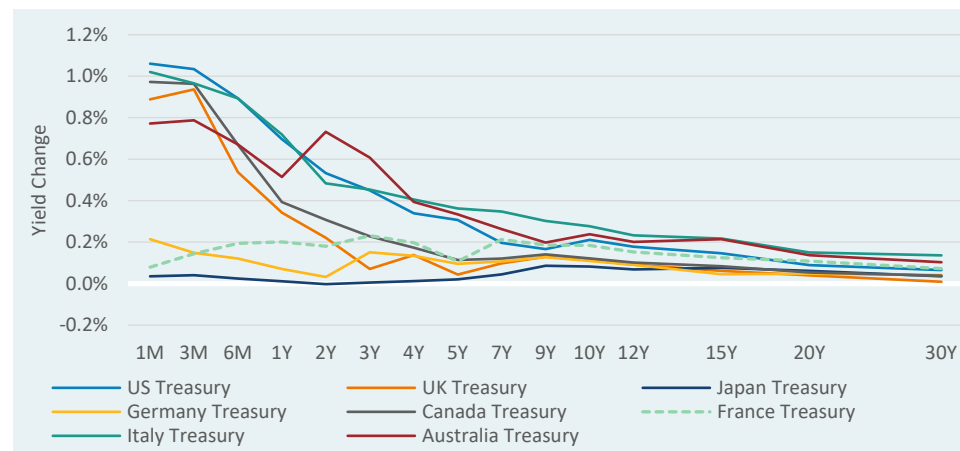
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/21

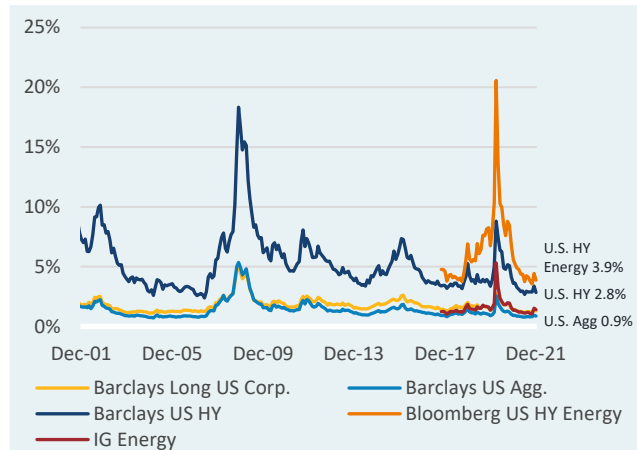
Credit environment

During the fourth quarter, high yield bonds returned 0.7%, matching the performance of loans and outperforming investment grade credit (+0.2%). Over the full year, leveraged loans returned 5.4%, exceeding high yield performance (+5.3%) as well as investment grade credit (-1.2%). Credit spreads tightened modestly over the course of the year with pockets of volatility. This was also the case during Q4 as the Omicron variant circulated across the globe, reducing the appetite for risk. Investment grade spreads widened 8 basis points to 92 bps, which was 4 bps tighter relative to the beginning of the year. High yield corporate spreads finished 2021 at 283 bps, 6 bps tighter for the quarter and 77 bps tighter to end the year.

The search for yield continues within credit markets as option-adjusted

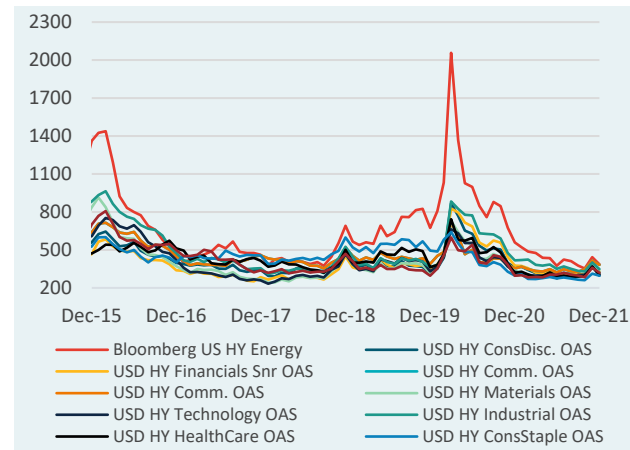
spreads continue to be at or near historic lows and short-term interest rates remain near zero. We have observed that numerous managers are positioning portfolios relatively more defensively with an eye toward capitalizing on potential future volatility, as well as placing greater focus on more niche segments within credit markets. Despite tight spreads, increased rate volatility, and surging inflation, a record amount of funds (\$583 billion) flowed into fixed income funds and ETFs in 2021, exceeding the previous record set in 2019 (\$459 billion). Demand was broad-based, driven by demographics, an abundance of cash on corporate balance sheets, and strong equity market returns which led to increased rebalancing activity. Furthermore, given continued low rates across developed markets, U.S. fixed income remains an attractive market for foreign investors to pick up yield.

SPREADS



Source: Barclays, Bloomberg, as of 12/31/21

HIGH YIELD SECTOR SPREADS (BPS)



Source: Bloomberg, as of 12/31/21

Market	Credit Spread (OAS)	
	12/31/21	12/31/20
Long U.S. Corp	1.3%	1.4%
U.S. Inv Grade Corp	0.9%	1.0%
U.S. High Yield	2.8%	3.6%
U.S. Bank Loans*	4.3%	4.6%

Source: Barclays, Credit Suisse, Bloomberg, as of 12/31/21

*Discount margin (4-year life)

Default & issuance

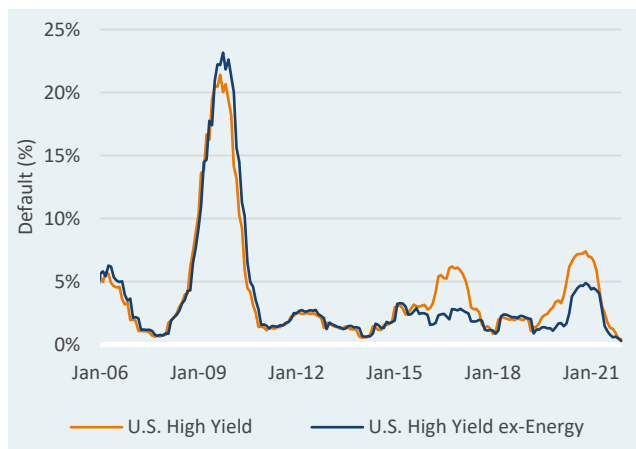
Contrasting the pandemic-driven surge of credit defaults in 2020, which resulted in the second highest annual dollar volume of defaulted bonds and loans on record, default activity in 2021 was very modest. Overall, 14 companies defaulted on loans and bonds during the year on debt totaling \$9.8 billion. The year-over-year improvement was largely fueled by robust economic growth, improving credit fundamentals, and greater access to capital markets, as record bond and loan refinancing activity totaling roughly \$1 trillion since 2020 has improved corporate liquidity.

The par-weighted U.S. high yield default rate ended the year at a historic low of 0.4%, down 82 bps for the quarter and down 656 bps for the year. The par-weighted loan default rate ended the year at 0.5%, down 23 bps for the quarter and 348 bps for the year. For context, the 25-year average annual

default rate of high yield was 3.1%, while the default rate for loans has averaged 3.0% since 1998.

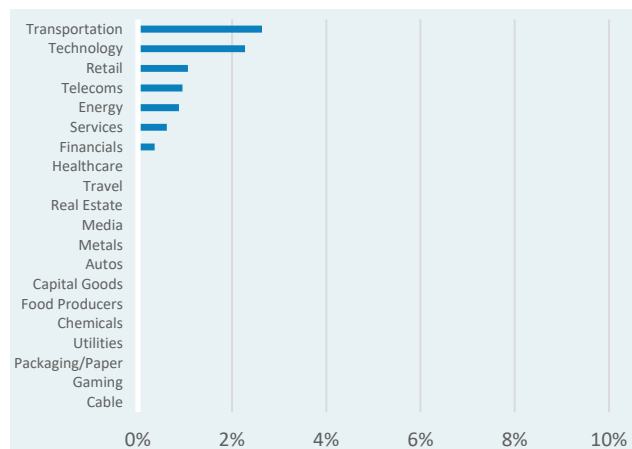
While new issue activity across credit markets fell broadly during the second half of the year, total credit issuance in 2021 was historically high. In the fourth quarter, \$285 billion of investment grade credit was issued. Over the full year, gross issuance totaled \$1.4 trillion, which was second only to the \$1.8 trillion issued in 2020. Similarly, the fourth quarter was the lightest quarter for new issue activity for both high yield bonds and loans with \$87.3 billion and \$114.4 billion, respectively. However, each asset class experienced record issuance over the year with \$557.1 billion in high yield bonds and \$534.4 billion in loans.

HY DEFAULT RATE (ROLLING 1-YEAR)



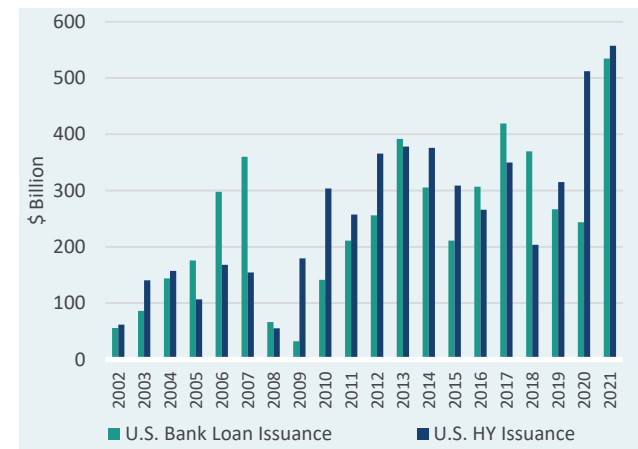
Source: BofA Merrill Lynch, as of 12/31/21

U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 12/31/21 – par weighted

U.S. ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, as of 12/31/21

Equity

Equity environment

- Equity markets delivered strong returns in Q4, up 6.7% and ending the year up 18.5% (MSCI ACWI). U.S. equities delivered 11.0% during the quarter, while international equities delivered 2.7% and emerging market equities saw a slight loss of -1.3%, on an unhedged currency basis.
- Size and Value factor performance was negative once again during Q4. Large capitalization stocks significantly outperformed small capitalization stocks (Russell 1000 +9.8%, Russell 2000 +2.1%) and Growth exceeded Value (Russell 1000 Growth +11.6%, Russell 1000 Value +7.8%). This theme held for full-year 2021.
- Extremely fast spread of the Omicron variant worldwide does not seem to have had an outsized impact on the markets. While this new wave has in fact led to shutdowns in certain countries,

much of the world has remained open, perhaps in acknowledgment that the health effects of Omicron are milder in nature.

- Labor costs and labor supply issues are front-of-mind in corporate boardrooms, and 60% of S&P 500 companies have reported negative impacts to Q4 earnings during quarterly calls so far, as reported by FactSet.
- Weakness in Chinese equities (MSCI China -6.1%) continued to drive the broader underperformance of emerging market equities. Chinese policymakers have signaled a shift in focus from containing excessive leverage in the property sector to promoting growth and stability ahead of next year's parliamentary meeting. Still, the risk of further crackdowns on targeted sectors of the economy remains in place.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	11.0%		28.7%	
U.S. Small Cap (Russell 2000)	2.1%		14.8%	
U.S. Equity (Russell 3000)	9.3%		25.7%	
U.S. Large Value (Russell 1000 Value)	7.8%		25.2%	
US Large Growth (Russell 1000 Growth)	11.6%		27.6%	
Global Equity (MSCI ACWI)	6.7%	7.1%	18.5%	20.9%
International Large (MSCI EAFE)	2.7%	4.2%	11.3%	19.4%
Eurozone (Euro Stoxx 50)	4.4%	6.9%	14.6%	24.4%
U.K. (FTSE 100)	5.2%	5.1%	17.3%	18.9%
Japan (NIKKEI 225)	(5.3%)	(2.0%)	(4.7%)	6.7%
Emerging Markets (MSCI Emerging Markets)	(1.3%)	(1.3%)	(2.5%)	(1.3%)

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 12/31/21

Domestic equity

U.S. equities were a top performer in Q4, delivering 11.0% (S&P 500). The S&P 500 Index achieved all-time closing highs on 70 days over the course of the year, which was nearly a record number in and of itself. Performance across sectors was broadly positive during Q4, though those with a greater “value” bias lagged the index (ex: Financials, Energy, Industrials). Per FactSet, the bottom-up price target for the S&P 500 Index by 2022 year-end is around 5300, which implies a price return of roughly 11% for the year.

While supply chain disruptions remain a key concern for chief financial officers in the United States and around the globe, the number one headwind for earnings in Q4 shifted to labor costs and shortages, based on earnings calls transcribed by FactSet. Workers have been quitting their jobs in great numbers

for a wide variety of reasons, pushing many employers to raise wages in order to retain employees, which could erode margins. Of companies that had reported Q4 earnings, 60% reported that rising labor costs had negatively impacted earnings. On a more optimistic note, those companies reported aggregate year-over-year earnings growth of around 28%, suggesting somewhat defensible margins and modest pricing power. Of companies mentioning labor issues, 85% discussed increasing prices or improving price realization on their earnings calls.

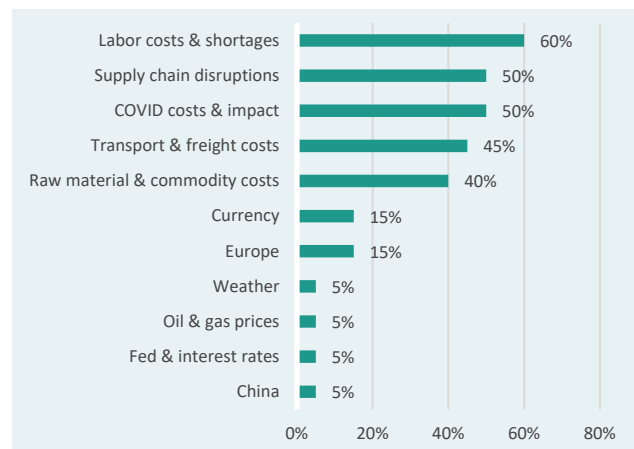
Net profit margins have fallen a percentage point from the record level of 13% achieved in Q2 2021, but remain historically high. If earnings growth in Q4 2021 meets expectations (21.4%), it will mark the fourth consecutive quarter of 20% YoY earnings growth.

S&P 500 INDEX



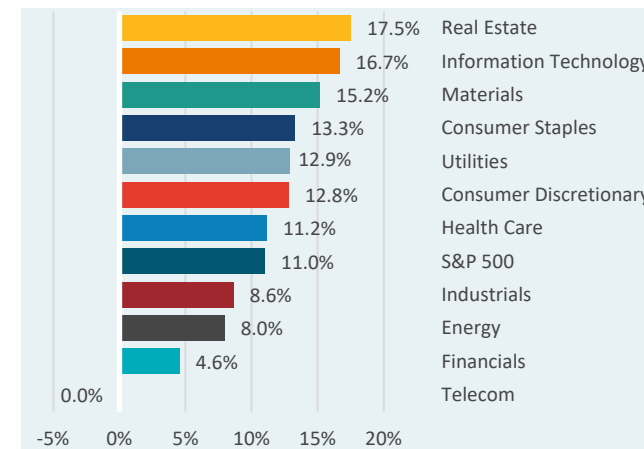
Source: Standard & Poor's, as of 12/31/21

S&P 500 COS. CITING NEGATIVE IMPACT – 4Q21



Source: FactSet, as of 1/13/22

Q4 SECTOR PERFORMANCE



Source: Standard & Poor's, as of 12/31/21

Domestic equity size & style

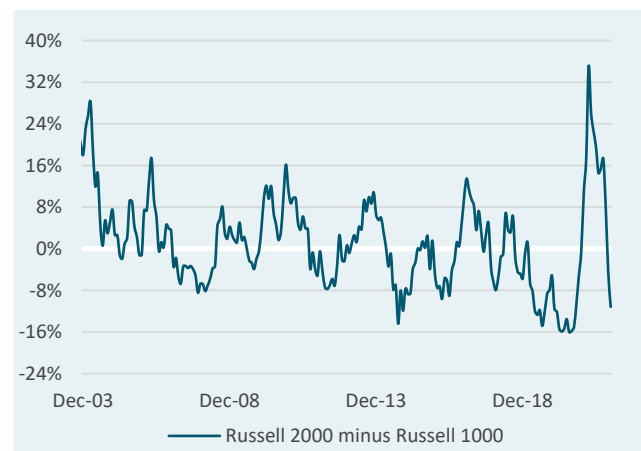
Size and Value factor performance was negative once again during Q4. Large capitalization stocks significantly outperformed small capitalization stocks (Russell 1000 +9.8%, Russell 2000 +2.1%) and Growth exceeded Value (Russell 1000 Growth +11.6%, Russell 1000 Value +7.8%). This theme held for full-year 2021.

Within MSCI's suite of long-only factor indices, Quality (+11.0%) was the top performer in Q4 which generally implies investor appetite for more defensive positioning. The strong performance of the Quality factor was skewed by Nvidia (+42.0%), Apple (+25.7%) and Microsoft (+19.5%).

Towards the end of the year, investor expectations for tighter Fed policy and interest rate hikes increased markedly. If the market is in fact undergoing a transition to tighter monetary conditions, this could have a notable impact on Value and Growth stock performance. The general cheapness of certain Value stocks and richness of certain Growth stocks may accentuate a value rotation, if and when this occurs. As always, we like to keep in mind that factor performance tends to be noisy and difficult to predict, which suggests that style investing should in most cases involve a longer-term focus.

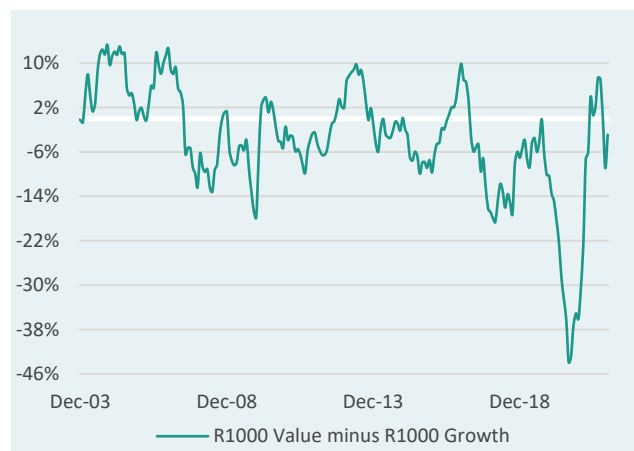
Size and Value underperformed during Q4 2021

SMALL CAP VS LARGE CAP (YOY)



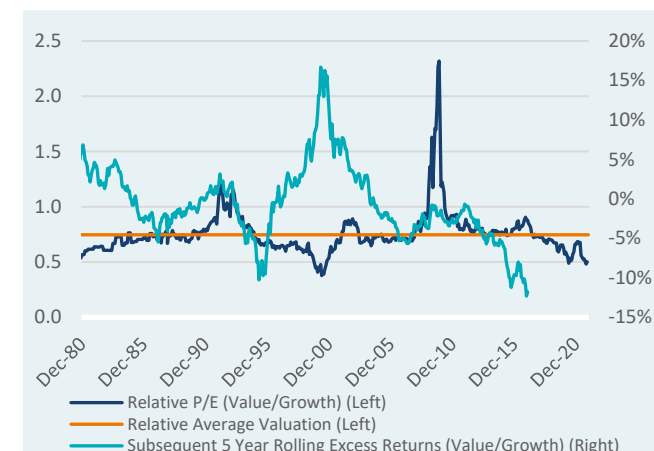
Source: FTSE, as of 12/31/21

VALUE VS GROWTH (YOY)



Source: FTSE, as of 12/31/21

VALUE VS. GROWTH RELATIVE VALUATIONS



Source: Standard & Poor's, as of 12/31/21

International developed equity

International developed equities delivered 2.7% during the quarter. U.S. equities were the top performer (S&P 500 +11.0%) while emerging market equities saw a slight loss (MSCI Emerging Markets -1.3%), on an unhedged currency basis. Currency movement during the quarter resulted in a loss of -1.5% (MSCI EAFE) relative to those investors with a currency hedging program.

Japanese equities (MSCI Japan -4.0%) underperformed most developed markets, reversing strong third quarter returns, though this was mostly caused by currency market movement (Yen -3.1%). The yen fell to its weakest level relative to the dollar since early 2017 in the fourth quarter as

the Bank of Japan's dovish policy increasingly diverged from peers, many of which have signaled the beginning of a normalization process from pandemic stimulus. Rising interest rate differentials, as well as speculation that the new strain of COVID-19 might not be as disruptive as had been feared, has likely contributed to investor flows out of yen positions.

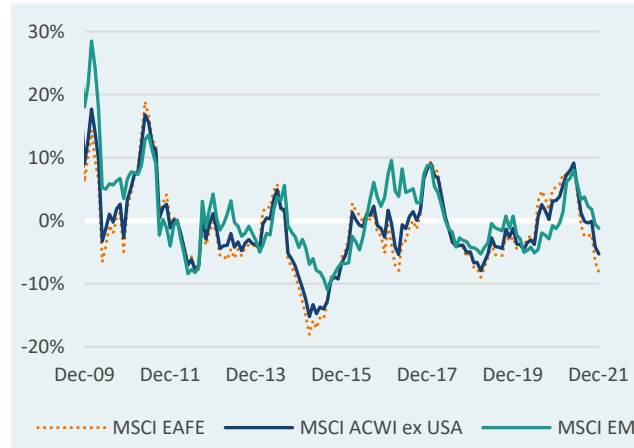
Swiss equities (MSCI Switzerland +12.8%) were the top performer in developed European markets, and unhedged U.S. investors benefitted from a 2.1% appreciation in the Swiss Franc relative to the U.S. dollar.

EFFECT OF CURRENCY (1-YEAR ROLLING)



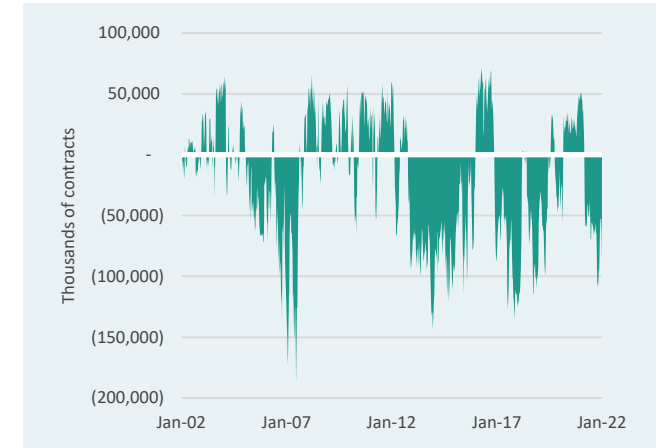
Source: MSCI, as of 12/31/21

INTERNATIONAL DEVELOPED EQUITIES



Source: MSCI, as of 12/31/21

YEN NET FUTURES POSITIONING



Source: CFTC, non-commercial positioning, as of 1/11/22

Emerging market equity

Emerging market equities saw a mild loss (MSCI EM -1.5%) on an unhedged currency basis, underperforming global markets again in the fourth quarter. Latin American and Asian emerging markets performed generally on par during the quarter (MSCI EM Latin America -2.7%, MSCI EM Asia -1.0%).

Weakness in Chinese equities (MSCI China -6.1%) continues to drive broader emerging market underperformance, as China delivered -21.7% return in 2021, while the broader complex was down -2.5% (MSCI China, MSCI Emerging Markets).

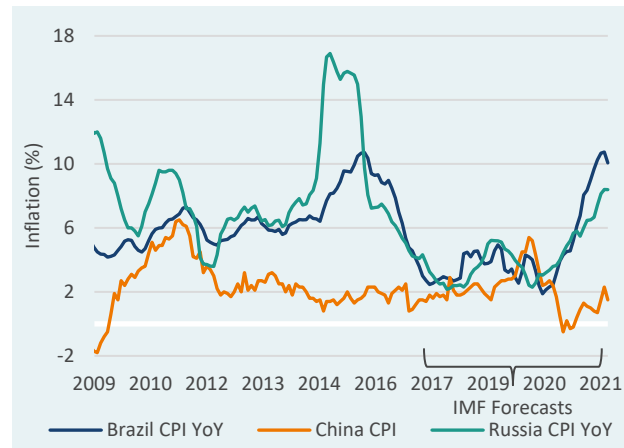
Inflation in Brazil has reached 10.7%, while Russia saw an 8.4% rise in prices and China sits near the longer-term average at 1.5%. Emerging market central banks have continued to raise interest rates. Brazil hiked their rate during the quarter from 6.25% to 9.25% in order to fight rising prices, while Russia hiked its rate from 6.75% to 8.50%. It is worth noting that many of these central banks have very recently implemented a domestic interest rate tightening cycle in order to battle price fluctuations and/or unwanted domestic currency movements. In other words, many emerging central banks deal with these types of issues more often than developed central bankers.

EMERGING MARKET EQUITY



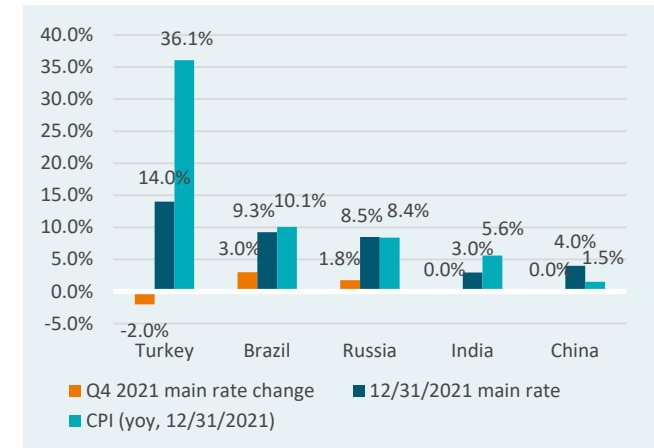
Source: MSCI, as of 12/31/21

INFLATION (YOY)



Source: Bloomberg, as of 12/31/21 or most recent data

CENTRAL BANK RATE CHANGES AND INFLATION



Source: Bloomberg, various, as of 12/31/21

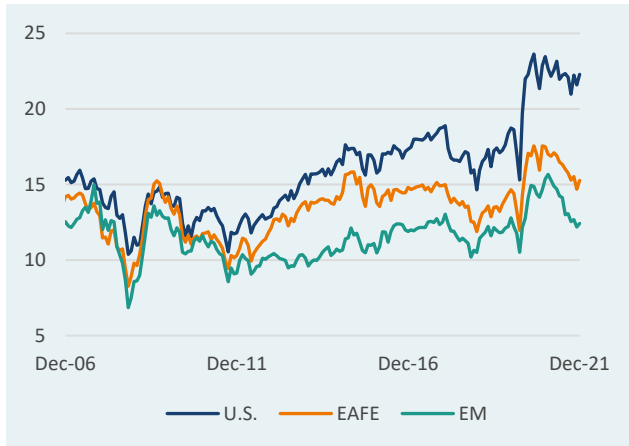
Equity valuations

Forward price/earnings equity multiples have been falling around the world, as earnings expectations rise faster than equity prices. U.S. equities remain the exception in this regard, as U.S. valuations have stayed elevated. The domestic equity market offers one half of the dividend yield of international developed equities (MSCI EAFE), with a forward P/E multiple that is 50% higher. The valuation difference between U.S. and the rest of the world is wider than ever before. This effect is partly due to the rising share of domestic technology stocks, as the technology sector tends to demand loftier valuations than most other sectors, but only partly so. The high prices of U.S. equities may imply more muted returns over the longer-term.

U.S. equity trailing P/E ratio was unmoved during the quarter, while international developed equity valuations fell (19.3 to 17.2) along with emerging market equity valuations (15.8 to 14.0). Relative valuation differences across global markets are apparent in the yield (carry) offered by each market. U.S. equities offer a 3.8% earnings yield, while international developed offer 5.8% and emerging market equities offer 7.1%. In simple terms, for the U.S. market to deliver future performance equivalent to other markets, domestic stocks will either need to deliver outsized profit growth or higher valuations.

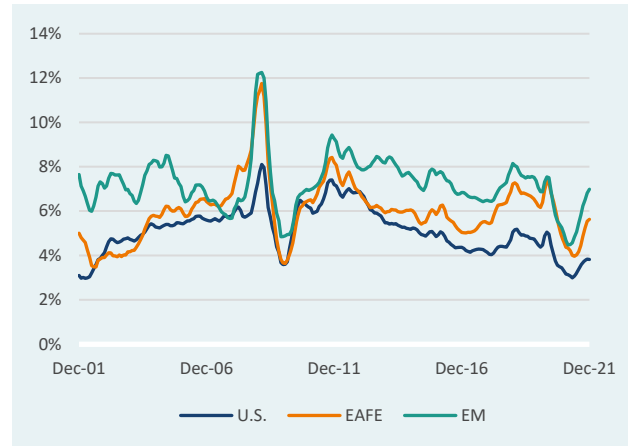
Most equity valuations have moved back towards normal levels, though U.S. prices remain exceptionally rich

FORWARD P/E RATIOS



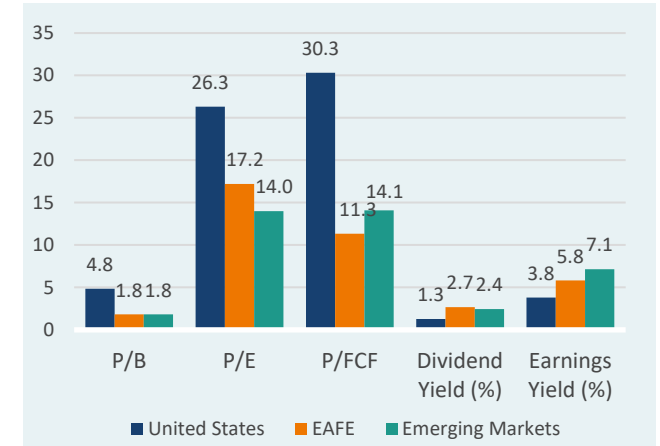
Source: MSCI, 12m forward P/E, as of 12/31/21

CURRENT EARNINGS YIELD (3-MONTH AVERAGE)



Source: Bloomberg, MSCI, as of 12/31/21

VALUATION METRICS (3-MONTH AVERAGE)



Source: Bloomberg, MSCI as of 12/31/21 - trailing P/E

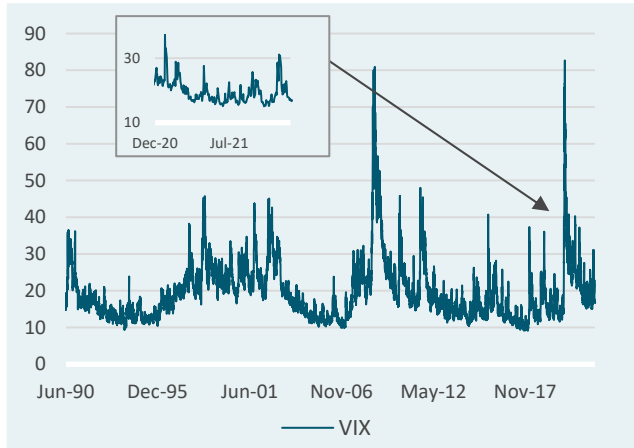
Equity volatility

The Cboe VIX Index stayed near average levels throughout the fourth quarter, with the exception of market choppiness at the end of November which briefly sent the VIX Index above 30. Realized volatility over the past year was muted. U.S. and emerging market equities exhibited 11% volatility during the calendar year, while international developed showed 9.8%. Historically, it has been uncommon for global markets to show similar levels of volatility, as developed markets tend to deliver lower volatility, and emerging markets higher volatility.

Market response to the Omicron variant was minimal, with a few larger market drops followed by quick recoveries. We

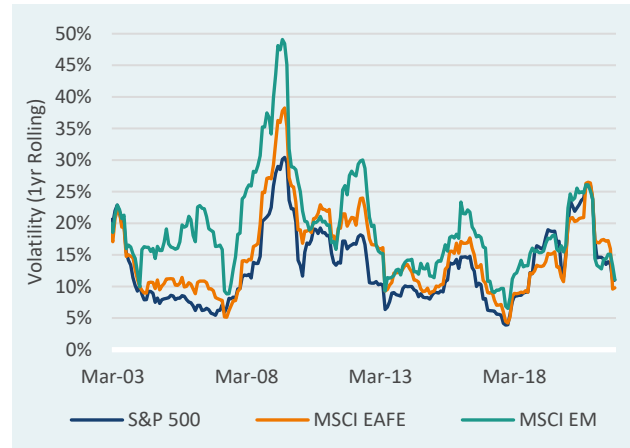
believe that investors have largely moved beyond COVID-19, and that markets have adjusted to the transition away from fiscal stimulus and many of the recent unique government spending programs. As we enter 2022, investors seem to be focused on Federal Reserve plans for tapering and interest rate hikes. It is very possible that this rate hike cycle will look similar to those of the past decade—bouts of volatility as markets either accept or push back against tightening financial conditions, “good news is bad news” as positive economic developments are seen as potentially encouraging tighter Fed policy, and “bad news is good news” as economic weakness is interpreted as an excuse for Federal Reserve easiness and accommodation.

U.S. IMPLIED VOLATILITY (VIX)



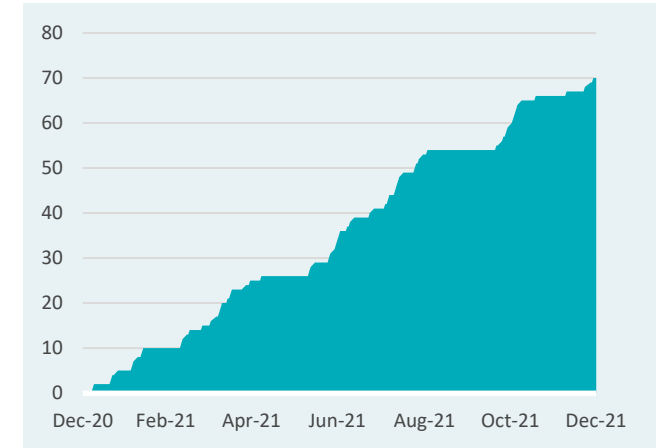
Source: Cboe, as of 12/31/21

REALIZED VOLATILITY



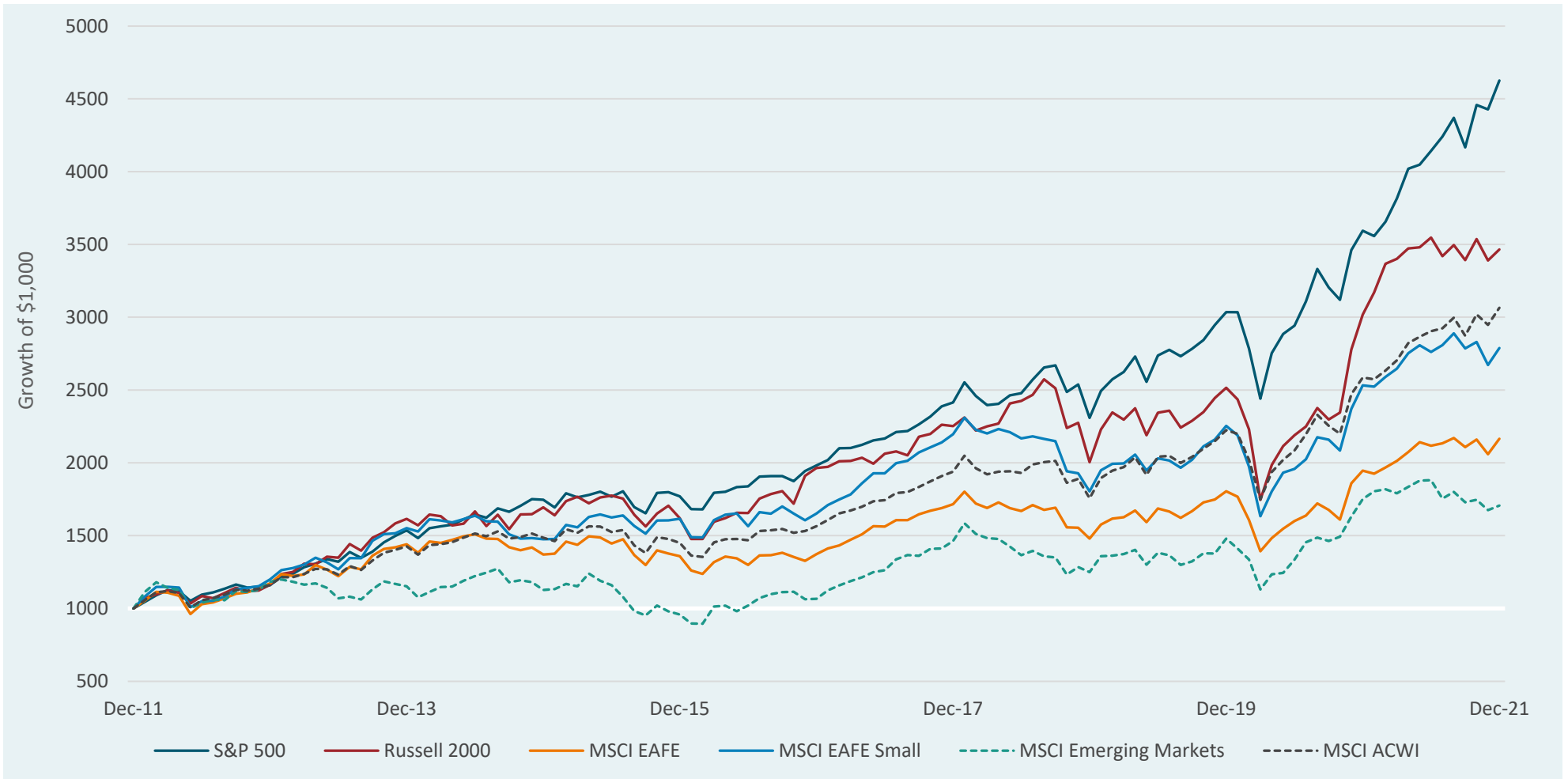
Source: Standard & Poor's, MSCI, as of 12/31/21

S&P 500 INDEX – CUMULATIVE NUMBER OF RECORD CLOSES IN 2021



Source: Standard & Poor's, Bloomberg, as of 12/31/21

Long-term equity performance



Source: Morningstar, as of 12/31/21

Other assets

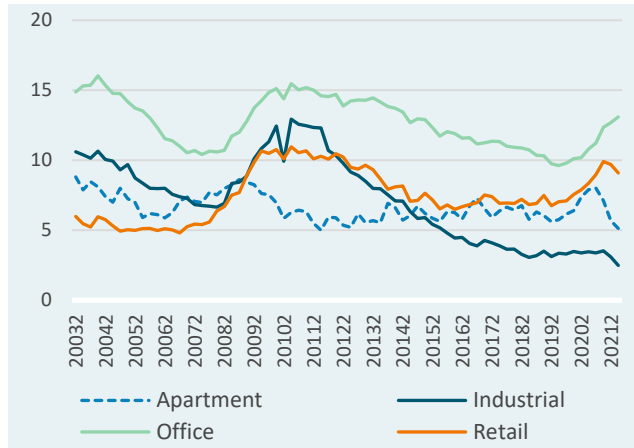
Private real estate fundamentals

Private real estate fundamentals have seen steady improvement in vacancy rates and net operating income (NOI) growth during 2021.

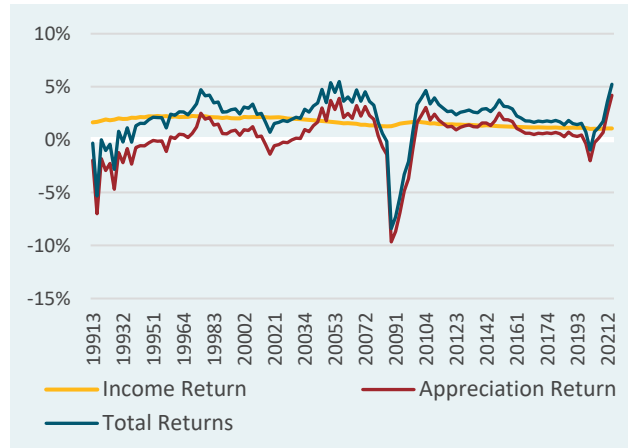
Performance has also been very strong. In Q3 2021, the NCREIF ODCE posted a 6.4% net return, the highest single quarter return in the history of the index, beating the previous high of 6.2% (Q4 1978). Early indications are Q4 2021 will be another strong quarter.

The office sector has been one exception where vacancy rates have continued to climb and NOI growth has been modest (although still positive).

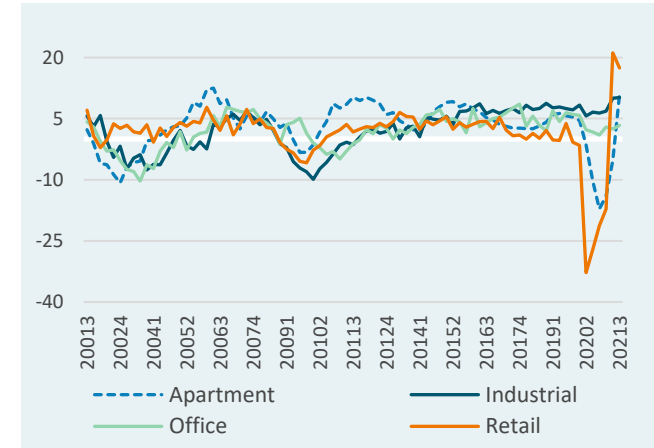
VACANCY BY PROPERTY TYPE



NCREIF PROPERTY INDEX QUARTERLY RETURNS



NOI GROWTH BY PROPERTY TYPE (4-QTR ROLLING)



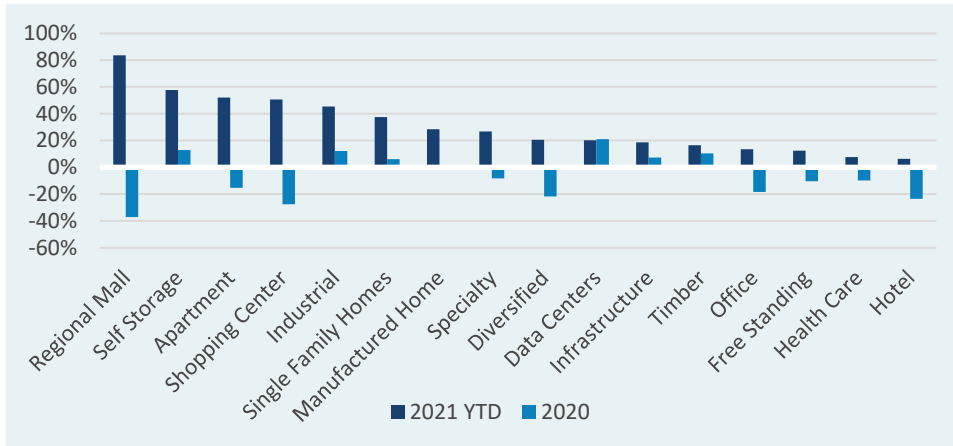
Source: NCREIF, as of 9/30/21

Strong rebound in REITs

REITs rebounded strongly in 2021 posting an overall return of +42.3% for the FTSE NAREIT Equity Index. Several of the strongest sectors of 2021 were those that struggled the most in 2020, such as Regional Malls, Shopping Centers, and Apartments. Sectors with pandemic-driven tailwinds such as Industrial and Data Centers continued to perform well in 2021.

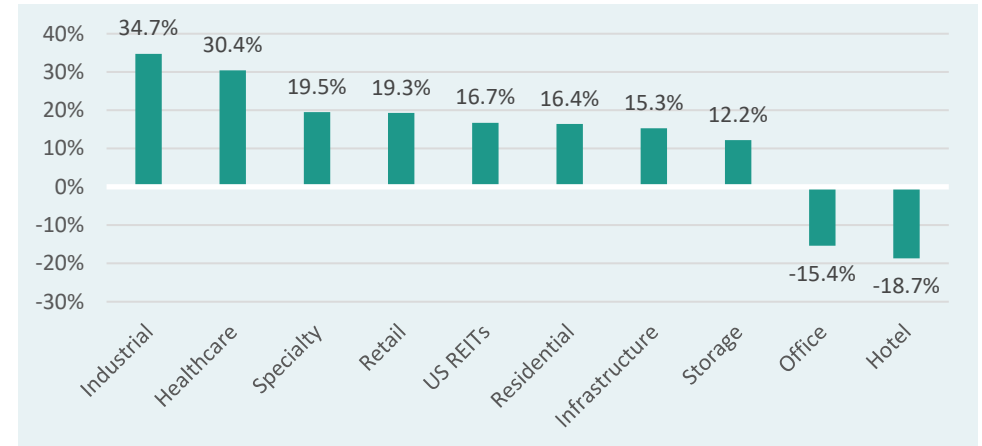
Valuations have become rich across a number of sectors, trading at substantial premiums to their net asset values (NAVs). The U.S. REIT market overall is currently trading at a 16% premium to NAV.

REIT PERFORMANCE BY SUB SECTOR (2021 VS 2020)



Source: Cohen & Steers, as of 11/30/21

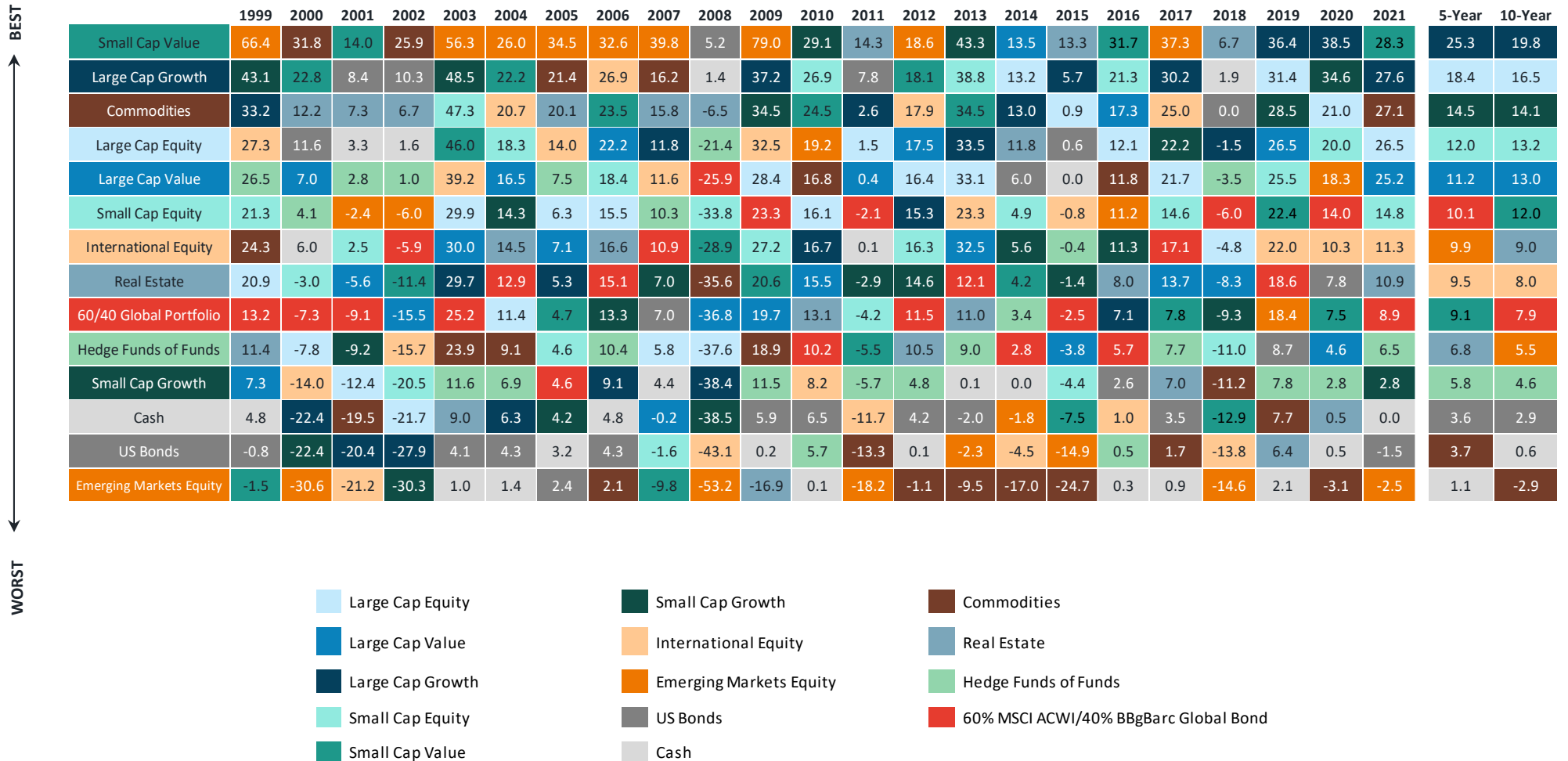
REIT PREMIUM/DISCOUNT TO NAV BY SUB SECTOR



Source: Heitman, as of 12/31/21

Appendix

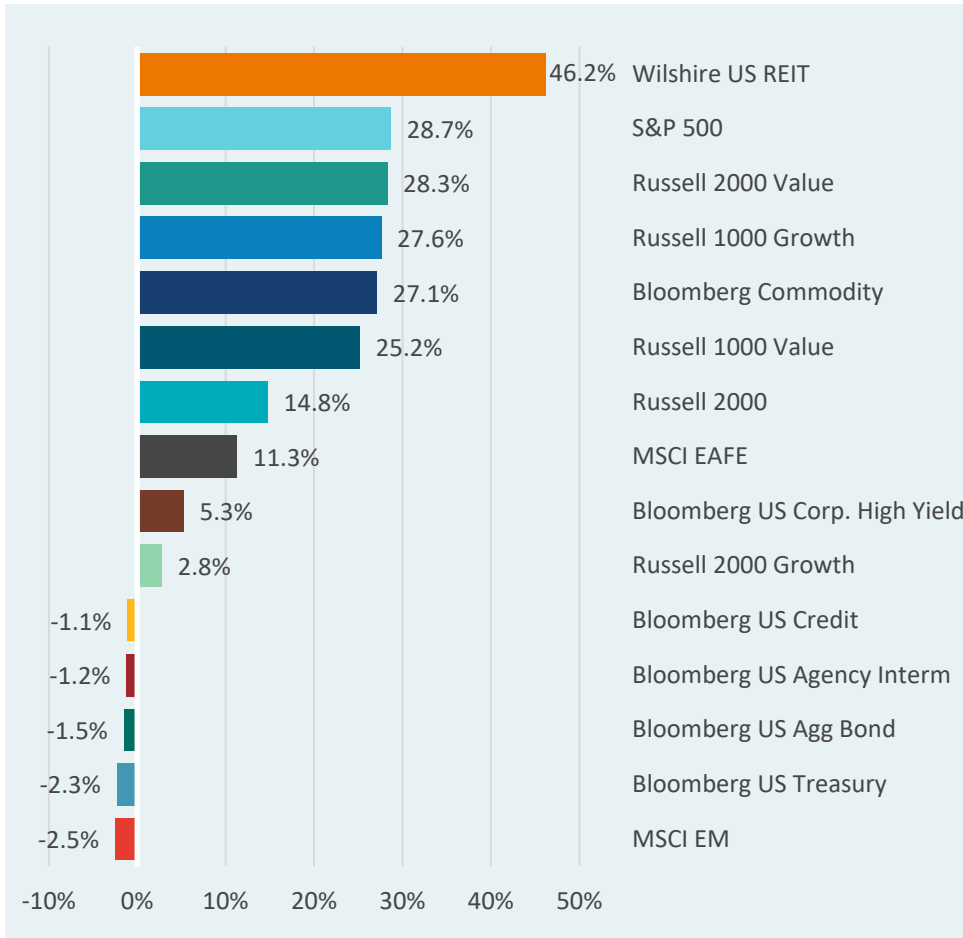
Periodic table of returns



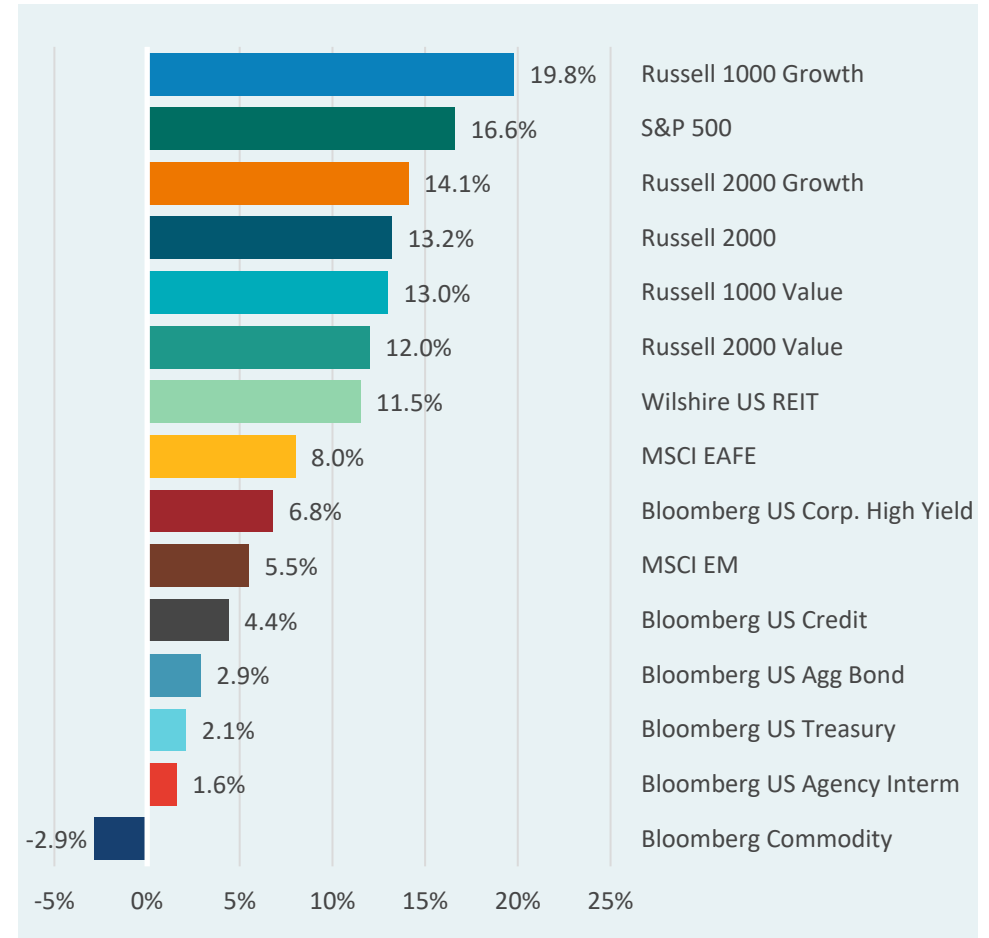
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 9/30/21.

Major asset class returns

ONE YEAR ENDING DECEMBER



TEN YEARS ENDING DECEMBER



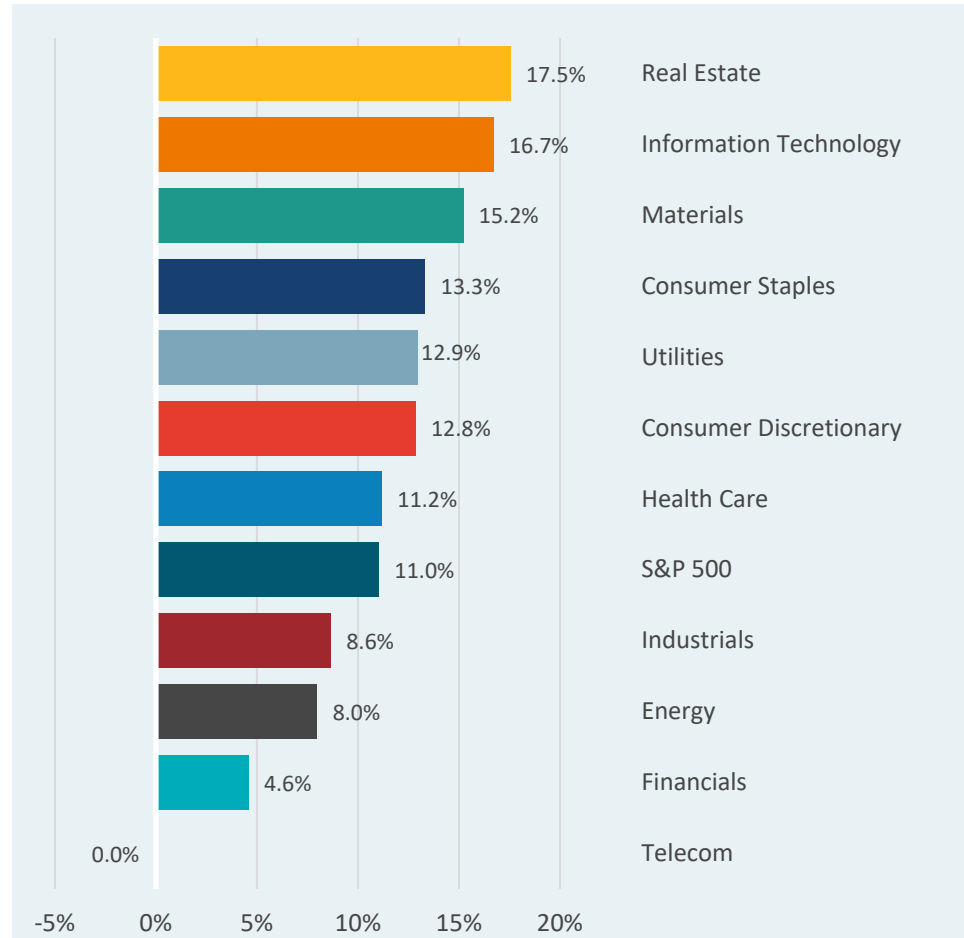
*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 12/31/21

Source: Morningstar, as of 12/31/21

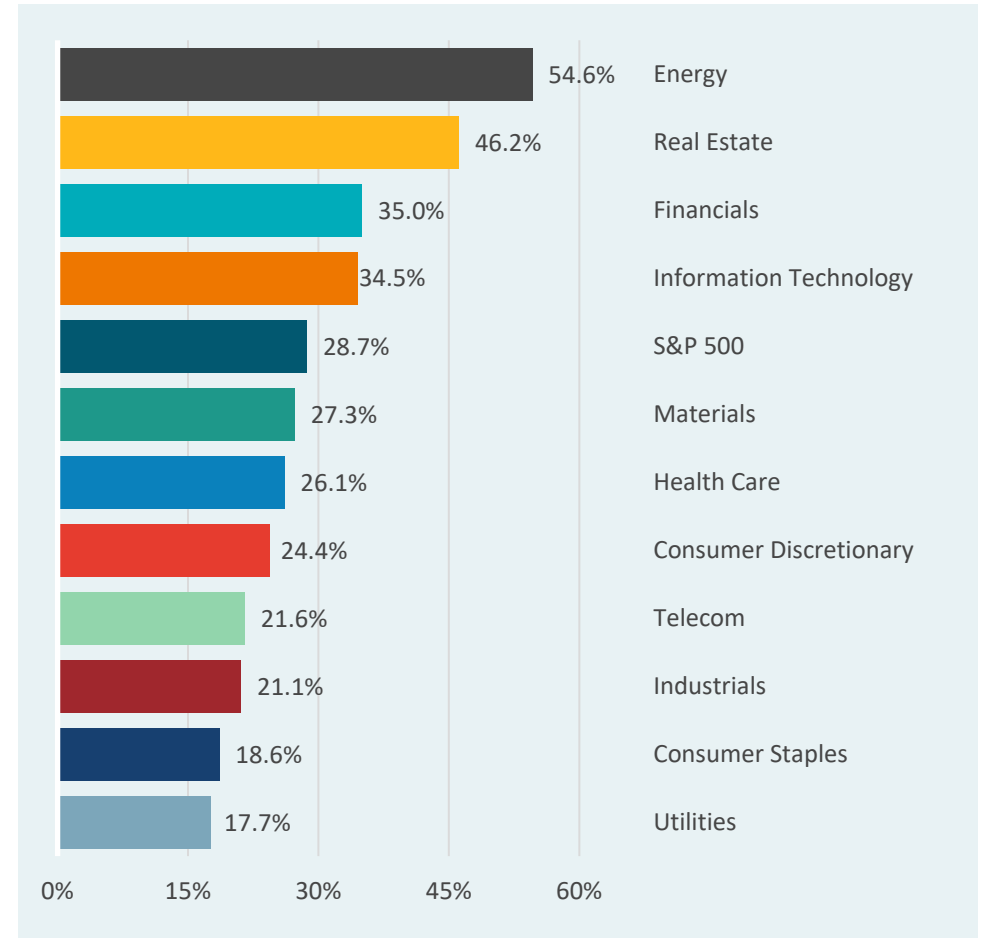
S&P 500 sector returns

Q4 2021



Source: Morningstar, as of 12/31/21

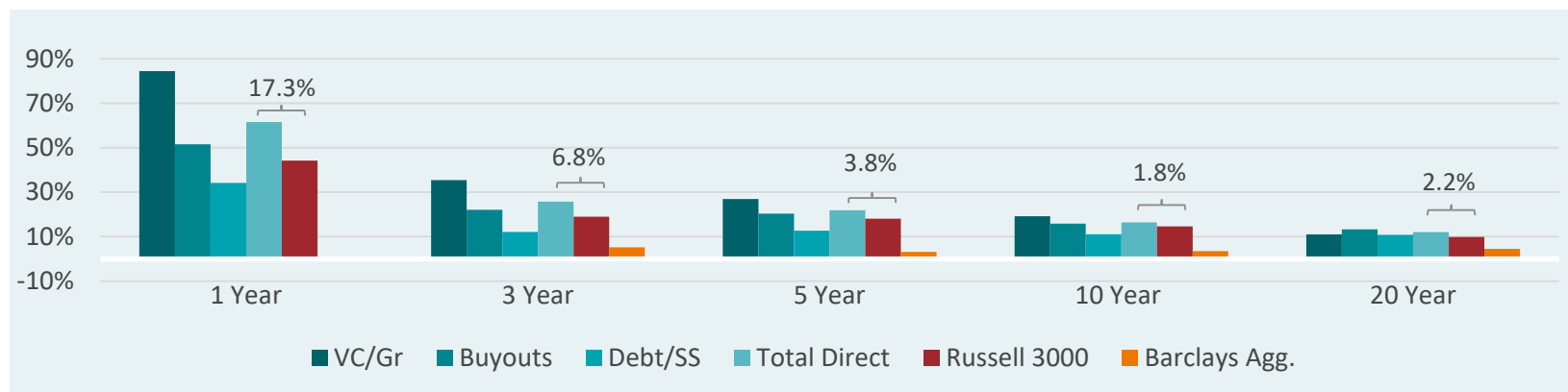
ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/21

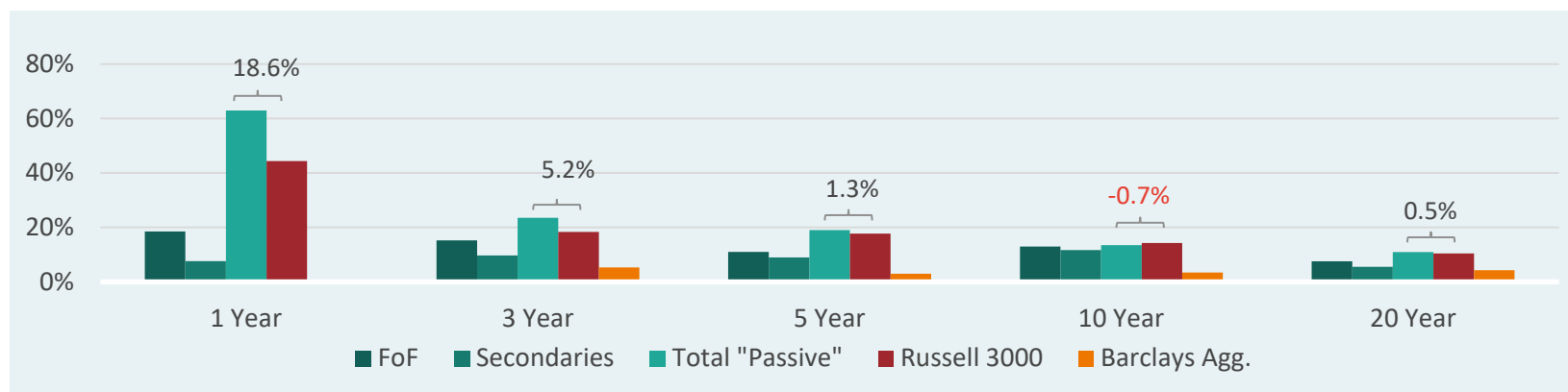
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments outperformed comparable public equities across all time periods.

“PASSIVE” STRATEGIES

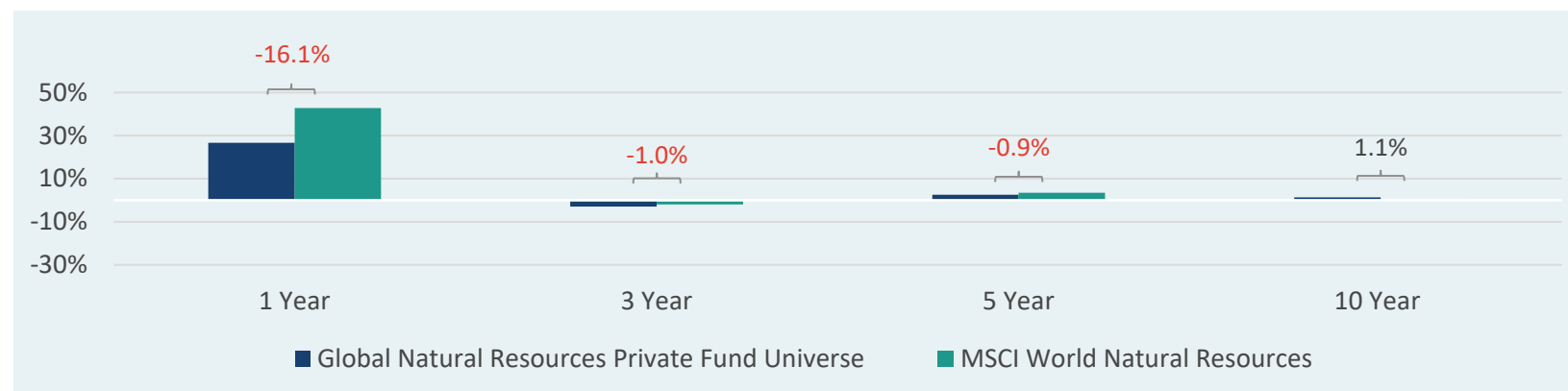


“Passive” strategies outperformed comparable public equities across all time periods, aside from the 10-year basis.

Sources: Refinitiv CJA PME: U.S. Private Equity Funds sub asset classes as of June 30, 2021. Public Market Equivalent returns resulted from “Total Passive” and Total Direct’s identical cash flows invested into and distributed from respective traditional asset comparable.

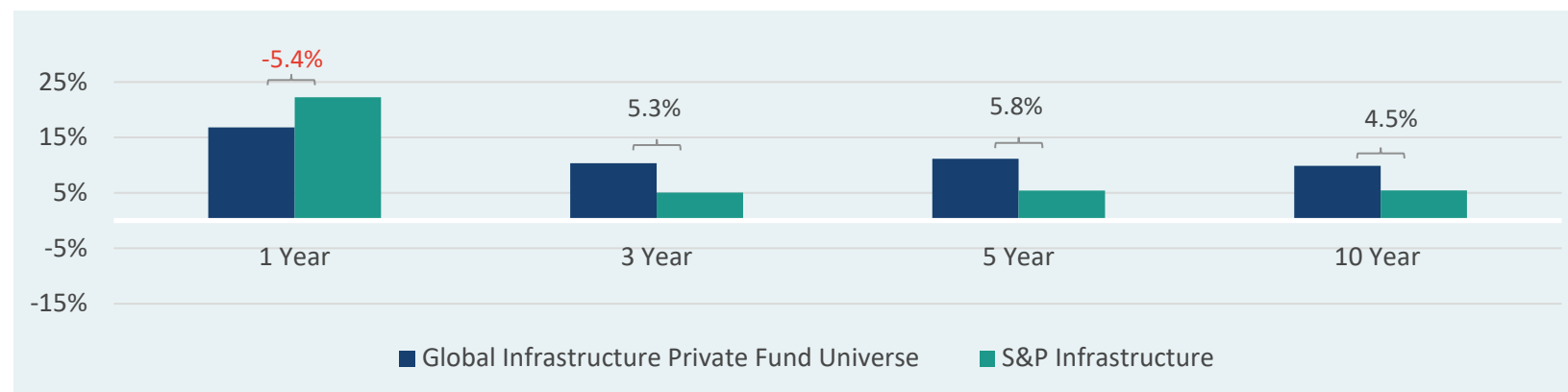
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds underperformed the MSCI World Natural Resources benchmark across all time periods, aside from the 10-year basis.

GLOBAL INFRASTRUCTURE FUNDS

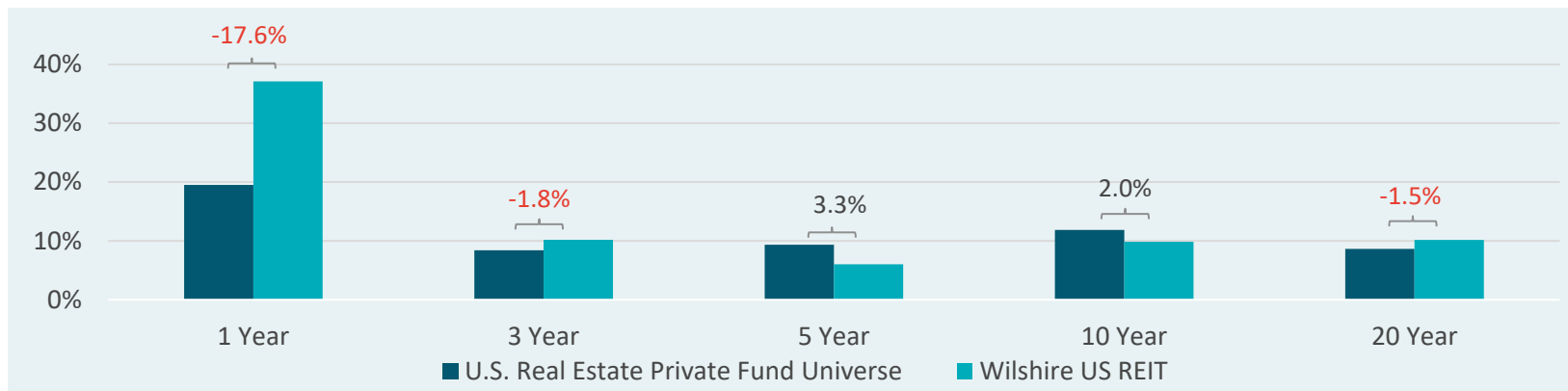


Infra. funds outperformed the S&P Infra. across all periods, aside from the 1-year basis.

Sources: Refinitiv CJA PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of June 30, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

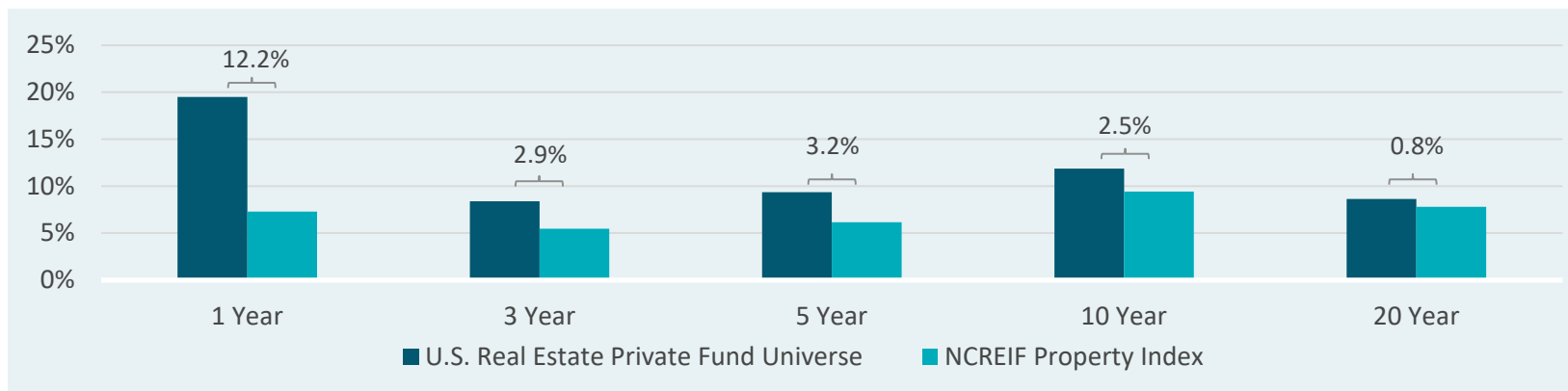
Private vs. liquid and core real estate performance

U.S. PRIVATE REAL ESTATE FUNDS VS. LIQUID UNIVERSE



U.S. Private R.E. funds underperformed the Wilshire U.S. REIT Index across all time periods, aside on a 5-year and 10-year basis.

U.S. PRIVATE REAL ESTATE FUNDS VS. CORE FUNDS



U.S. Private R.E. Funds outperformed the NCREIF Property Index across all time periods.

Sources: Refinitiv CJA PME: Global and U.S. Real Estate universes as of June 30, 2021. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	4.5	11.0	28.7	28.7	26.1	18.5	16.6
S&P 500 Equal Weighted	6.2	9.0	29.6	29.6	23.6	15.7	15.6
DJ Industrial Average	5.5	7.9	20.9	20.9	18.5	15.5	14.2
Russell Top 200	4.0	11.0	27.9	27.9	27.3	19.7	17.2
Russell 1000	4.1	9.8	26.5	26.5	26.2	18.4	16.5
Russell 2000	2.2	2.1	14.8	14.8	20.0	12.0	13.2
Russell 3000	3.9	9.3	25.7	25.7	25.8	18.0	16.3
Russell Mid Cap	4.1	6.4	22.6	22.6	23.3	15.1	14.9
Style Index							
Russell 1000 Growth	2.1	11.6	27.6	27.6	34.1	25.3	19.8
Russell 1000 Value	6.3	7.8	25.2	25.2	17.6	11.2	13.0
Russell 2000 Growth	0.4	0.0	2.8	2.8	21.2	14.5	14.1
Russell 2000 Value	4.1	4.4	28.3	28.3	18.0	9.1	12.0

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	4.0	6.7	18.5	18.5	20.4	14.4	11.9
MSCI ACWI ex US	4.1	1.8	7.8	7.8	13.2	9.6	7.3
MSCI EAFE	5.1	2.7	11.3	11.3	13.5	9.5	8.0
MSCI EM	1.9	(1.3)	(2.5)	(2.5)	10.9	9.9	5.5
MSCI EAFE Small Cap	4.4	0.1	10.1	10.1	15.6	11.0	10.8
Style Index							
MSCI EAFE Growth	4.3	4.1	11.3	11.3	19.0	13.6	10.1
MSCI EAFE Value	6.0	1.2	10.9	10.9	7.8	5.3	5.8
Regional Index							
MSCI UK	7.3	5.6	18.5	18.5	8.7	6.2	5.1
MSCI Japan	1.9	(4.0)	1.7	1.7	11.7	8.5	8.3
MSCI Euro	6.3	3.9	14.9	14.9	14.6	9.7	8.4
MSCI EM Asia	1.5	(1.0)	(5.1)	(5.1)	13.3	11.9	8.1
MSCI EM Latin American	5.9	(2.7)	(8.1)	(8.1)	(2.4)	1.5	(2.2)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	0.3	2.4	6.0	6.0	8.4	5.3	3.1
Bloomberg US Treasury Bills	0.0	0.0	0.0	0.0	1.0	1.2	0.7
Bloomberg US Agg Bond	(0.3)	0.0	(1.5)	(1.5)	4.8	3.6	2.9
Bloomberg US Universal	(0.1)	(0.0)	(1.1)	(1.1)	5.2	3.8	3.3
Duration							
Bloomberg US Treasury 1-3 Yr	(0.2)	(0.6)	(0.6)	(0.6)	2.0	1.6	1.1
Bloomberg US Treasury Long	(1.4)	3.1	(4.6)	(4.6)	8.8	6.5	4.5
Bloomberg US Treasury	(0.5)	0.2	(2.3)	(2.3)	4.1	3.1	2.1
Issuer							
Bloomberg US MBS	(0.1)	(0.4)	(1.0)	(1.0)	3.0	2.5	2.3
Bloomberg US Corp. High Yield	1.9	0.7	5.3	5.3	8.8	6.3	6.8
Bloomberg US Agency Interm	(0.2)	(0.7)	(1.2)	(1.2)	2.4	2.0	1.6
Bloomberg US Credit	(0.1)	0.2	(1.1)	(1.1)	7.2	5.1	4.4
OTHER							
Index							
Bloomberg Commodity	3.5	(1.6)	27.1	27.1	9.9	3.7	(2.9)
Wilshire US REIT	8.8	17.1	46.2	46.2	19.2	10.9	11.5
CS Leveraged Loans	0.6	0.7	5.4	5.4	5.4	4.3	4.8
S&P Global Infrastructure	6.6	4.6	11.9	11.9	10.2	7.8	7.7
Alerian MLP	3.7	0.9	40.9	40.9	1.0	(3.7)	(0.3)
Regional Index							
JPM EMBI Global Div	1.4	(0.4)	(1.8)	(1.8)	5.9	4.7	5.3
JPM GBI-EM Global Div	1.6	(2.5)	(8.7)	(8.7)	2.1	2.8	0.7
Hedge Funds							
HFRI Composite	1.3	0.6	10.3	10.3	10.9	7.1	5.8
HFRI FOF Composite	0.8	0.7	6.5	6.5	8.6	5.8	4.6
Currency (Spot)							
Euro	1.0	(1.9)	(7.1)	(7.1)	(0.2)	1.5	(1.3)
Pound Sterling	2.4	0.5	(0.9)	(0.9)	2.1	1.9	(1.4)
Yen	(1.4)	(3.1)	(10.3)	(10.3)	(1.6)	0.3	(4.0)

Source: Morningstar, HFRI, as of 12/31/21

Definitions

Bloomberg US Weekly Consumer Comfort Index - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.lanqerresearch.com)

University of Michigan Consumer Sentiment Index - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)

NFIB Small Business Outlook - Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (<http://www.nfib-sbet.org/about/>)

NAHB Housing Market Index – the housing market index is a weighted average of separate diffusion indices for three key single-family indices: market conditions for the sale of new homes at the present time, market conditions for the sale of new homes in the next six months, and the traffic of prospective buyers of new homes. The first two series are rated on a scale of Good, Fair, and Poor and the last is rated on a scale of High/Very High, Average, and Low/Very Low. A diffusion index is calculated for each series by applying the formula $(\text{Good-Poor} + 100)/2$ to the present and future sales series and $(\text{High/Very High-Low/Very Low} + 100)/2$ to the traffic series. Each resulting index is then seasonally adjusted and weighted to produce the HMI. Based on this calculation, the HMI can range between 0 and 100.

Notices & disclosures

Past performance is no guarantee of future results. This report or presentation is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and should not be relied upon by retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. The opinions and information expressed are current as of the date provided or cited only and are subject to change without notice. This information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. Verus Advisory Inc. expressly disclaim any and all implied warranties or originality, accuracy, completeness, non-infringement, merchantability and fitness for a particular purpose. This report or presentation cannot be used by the recipient for advertising or sales promotion purposes.

The material may include estimates, outlooks, projections and other “forward-looking statements.” Such statements can be identified by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “anticipates,” or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.

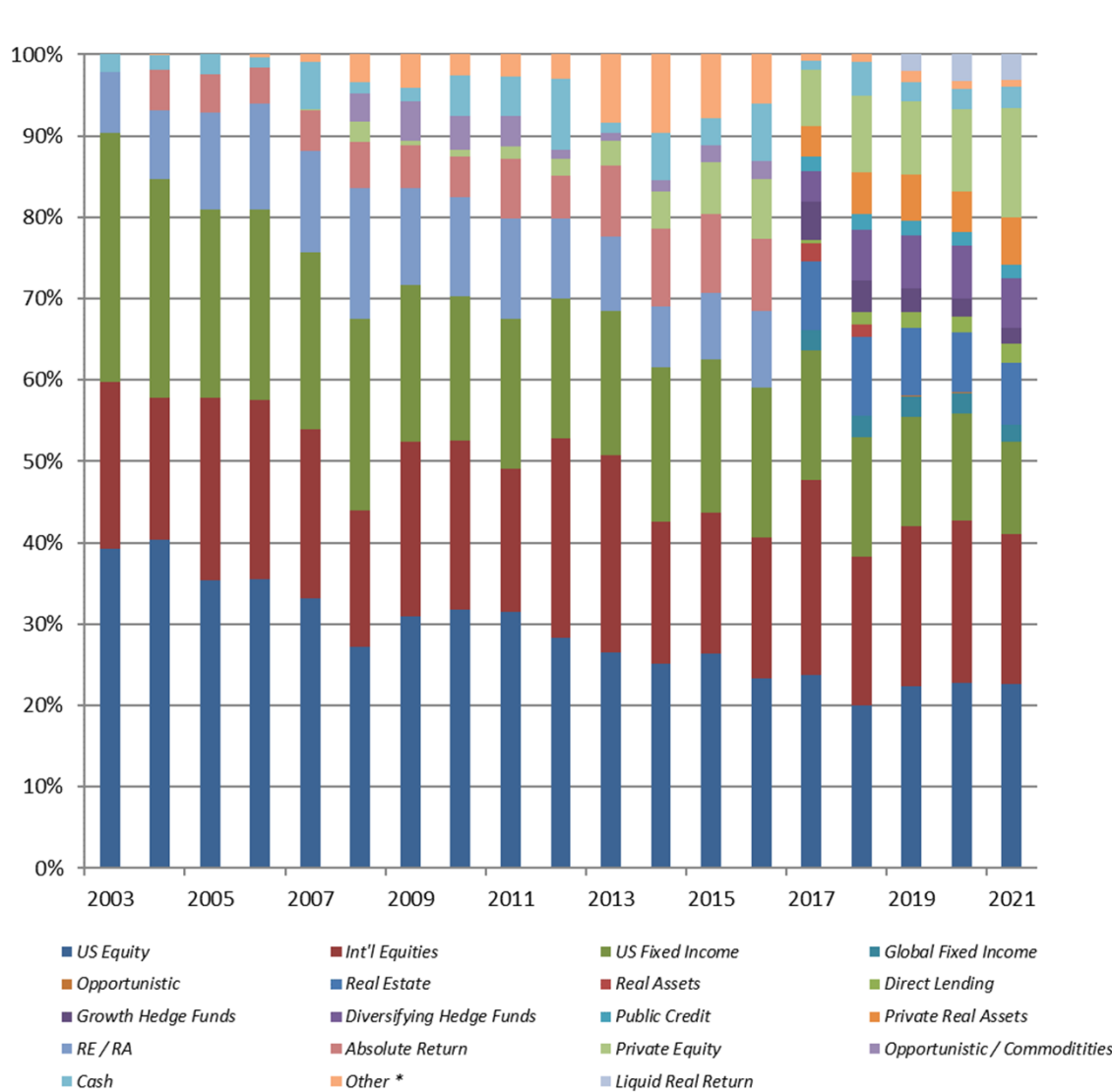
“VERUS ADVISORY™” and any associated designs are the respective trademarks of Verus Advisory, Inc. Additional information is available upon request.

Verus⁷⁷⁷ is a registered trademark of Verus Advisory, Inc.

Total Fund

Actual Yearly and Quarterly Asset Allocation

Period Ending: December 31, 2021



	2003	2004	2005	2006	2007	2008
US Equity	39.2	40.4	35.4	35.5	33.1	27.2
International Equity	20.6	17.5	22.3	22.0	20.9	16.8
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1
Absolute Return	-	4.9	4.8	4.4	5.1	5.6
Private Equity	-	-	-	-	0.1	2.5
Opportunistic / Commodities	-	-	-	-	-	3.5
Cash	2.1	1.8	2.4	1.2	5.8	1.4
Other *	-	0.1	-	0.4	0.9	3.4

	2009	2010	2011	2012	2013	2014
US Equity	30.9	31.7	31.4	28.4	26.5	25.2
International Equity	21.5	20.7	17.6	24.5	24.3	17.5
US Fixed Income	19.3	17.8	18.4	17.1	17.7	18.9
Real Estate / Real Assets	11.9	12.2	12.4	9.9	9.0	7.6
Absolute Return	5.3	4.9	7.3	5.2	8.8	9.4
Private Equity	0.5	0.9	1.6	2.2	3.0	4.6
Opportunistic / Commodities	4.8	4.1	3.7	1.1	1.0	1.4
Cash	1.7	5.0	4.9	8.8	1.2	5.9
Other *	4.1	2.6	2.7	2.9	8.4	9.6

	2015	2016	2017	2018	2019	2020	2021
US Equity	26.4	23.4	23.8	20.0	22.4	22.8	22.6
International Equity	17.3	17.2	23.9	18.3	19.6	19.9	18.4
US Fixed Income	18.7	18.5	16.0	14.6	13.6	13.2	11.4
Global Fixed Income	-	-	2.4	2.6	2.5	2.5	2.1
Public Credit	-	-	1.8	1.9	1.8	1.7	1.7
Real Estate / Real Assets	8.3	9.3	-	-	-	-	-
Real Estate	-	-	8.4	9.7	8.3	7.3	7.6
Real Assets	-	-	2.1	1.4	-	-	-
Private Real Assets	-	-	3.7	5.2	5.7	4.9	5.8
Liquid Real Return	-	-	-	-	2.0	3.3	3.2
Absolute Return	9.7	8.8	-	-	-	-	-
Growth Hedge Funds	-	-	4.6	3.9	3.0	2.3	2.0
Diversifying Hedge Funds	-	-	3.8	6.2	6.4	6.4	6.0
Private Equity	6.3	7.4	6.9	9.3	9.0	10.1	13.4
Direct Lending	-	-	0.5	1.5	2.0	1.9	2.3
Opportunistic / Commodities	2.1	2.2	-	-	-	-	-
Opportunistic	-	-	0.1	0.1	0.1	0.0	0.0
Cash	3.2	7.1	1.1	4.3	2.4	2.5	2.6
Other *	7.9	6.0	0.8	0.9	1.4	1.0	0.8

* Allocations without overlay.

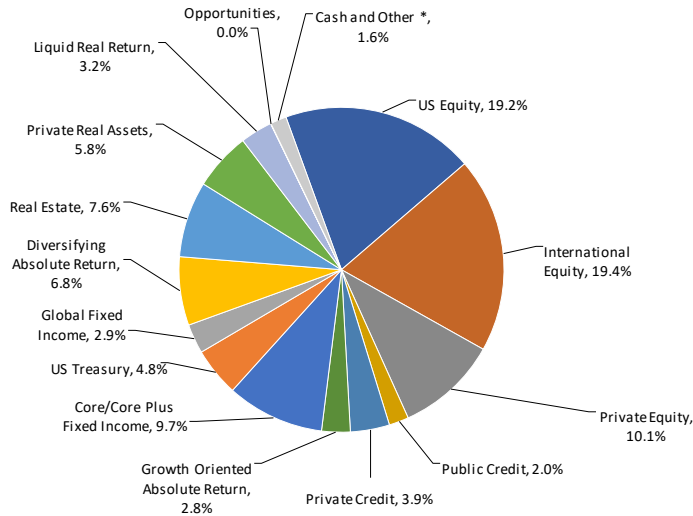
* Other includes SSgA Overlay and closing accounts. Prior to Q2 2017 SSgA Real Assets is also included

Total Fund

Asset Allocation Analysis

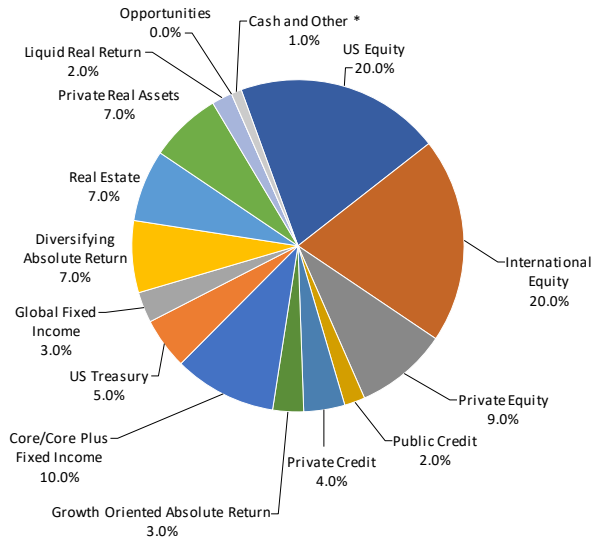
Period Ending: December 31, 2021

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	2,551,780,415	19.2%	22.6%
International Equity	2,576,473,770	19.4%	18.4%
Private Equity	1,345,450,451	10.1%	13.4%
Public Credit	260,077,028	2.0%	1.7%
Private Credit	514,501,431	3.9%	2.3%
Growth Oriented Absolute Return	376,576,386	2.8%	2.0%
Core/Core Plus Fixed Income	1,290,568,676	9.7%	7.8%
US Treasury	642,741,652	4.8%	3.6%
Global Fixed Income	387,878,363	2.9%	2.1%
Diversifying Absolute Return	904,459,858	6.8%	6.0%
Real Estate	1,001,589,614	7.6%	7.6%
Private Real Assets	766,650,754	5.8%	5.8%
Liquid Real Return	422,424,536	3.2%	3.2%
Opportunities	3,310,597	0.0%	0.0%
Cash and Other *	212,458,205	1.6%	3.4%
TOTAL	13,256,941,736	100.0%	100.0%

Target



ASSET ALLOCATION	ACTUAL	TARGET	DIFF
US Equity	19.2%	20.0%	-0.8%
International Equity	19.4%	20.0%	-0.6%
Private Equity	10.1%	9.0%	1.1%
Public Credit	2.0%	2.0%	0.0%
Private Credit	3.9%	4.0%	-0.1%
Growth Oriented Absolute Return	2.8%	3.0%	-0.2%
Core/Core Plus Fixed Income	9.7%	10.0%	-0.3%
US Treasury	4.8%	5.0%	-0.2%
Global Fixed Income	2.9%	3.0%	-0.1%
Diversifying Absolute Return	6.8%	7.0%	-0.2%
Real Estate	7.6%	7.0%	0.6%
Private Real Assets	5.8%	7.0%	-1.2%
Liquid Real Return	3.2%	2.0%	1.2%
Opportunities	0.0%	0.0%	0.0%
Cash and Other *	1.6%	1.0%	0.6%

* Other includes closing accounts (Heitman), Transition Account and SSgA Overlay of \$109.6 million.

- The Total Plan returned 3.9% net in the fourth quarter of 2021 and ranked in the third quartile among other public funds greater than \$1 billion. The Plan outperformed its policy index by 30 bps over this time period. Longer-term, the three-year return of 15.3% ranks in the top third of large public plan peer group which returned 13.2%. The five-year return of 12.1% ranks in the top quartile of the large public plan peer group.
- Fourth quarter results (net) were enhanced by the following factors:
 1. The Real Return category returned 5.9% for the quarter, led by real estate which returned 7.5% and real assets returning 5.0%. With inflation continuing to move higher, the positive results from your inflation protection portfolio reaffirmed the role it plays in SCERS' plan.
 2. Private equity was up 7.8% for the quarter which led performance among the growth asset category investments. On a relative basis, private equity ranked right outside the top decile among private equity peer groups.
 3. Walter Scott returned 5.4% for the fourth quarter, outperforming the benchmark by 110 bps and ranking in the top decile of its peer group. Performance benefited most from holdings in healthcare and consumer staples which were top performing sectors in the 4th quarter.
- Fourth quarter results (net) were hindered by the following factors:
 1. The Diversifying Asset category was up slightly in the fourth quarter (+0.3%), led by absolute return which was up 0.8%. However, on a relative basis Diversifying assets were a drag on portfolio returns as rising rates continue to present a headwind to fixed income portfolios.
 2. Eagle Capital struggled on a relative basis, returning 3.3% vs. 9.8% for the Russell 1000 index and ranking in the bottom decile of its peer group. Eagle was hurt by holdings in the financial sector which lagged the broader market and a lack of exposure to commodity-related stocks or to REITs, utilities and consumer staples which performed well during the 4th quarter.

Total Fund Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date*
Total Fund - Gross*	13,256,941,736	100.0	4.0	60	5.9	21	17.0	25	15.6	30	12.3	9	10.3	22	8.8	Jun-86
Total Fund - Net			3.9	64	5.8	24	16.7	33	15.3	32	12.1	16	10.1	36	8.6	
<i>Policy Index¹</i>			3.6	76	5.1	37	14.4	51	13.2	87	10.4	71	9.4	69	8.8	Jun-86
<i>InvMetrics Public DB > \$1B Gross Median</i>			4.1		4.5		14.5		14.8		11.0		9.7		8.5	Jun-86
Total Fund ex Overlay - Gross**	13,147,332,761	99.2	4.2	45	6.2	19	17.5	12	15.2	38	12.2	12	10.2	27	8.7	Jun-86
Total Fund ex Overlay - Net			4.2	46	6.1	20	17.3	17	14.9	49	11.9	24	10.0	40	8.5	
<i>Policy Index</i>			3.6	76	5.1	37	14.4	51	13.2	87	10.4	71	9.4	69	8.8	Jun-86
Growth Asset Category - Gross	8,022,567,970	60.5	5.3	--	7.0	--	23.7	--	21.4	--	--	--	--	--	15.7	Mar-17
Growth Asset Category - Net			5.2	--	6.9	--	23.3	--	21.1	--	--	--	--	--	15.4	
<i>Growth Custom¹</i>			4.8	--	6.0	--	20.2	--	18.6	--	14.1	--	--	--	13.5	Mar-17
Equities - Gross Public	5,443,439,873	41.1	5.1	--	4.1	--	16.6	--	20.9	--	15.2	--	12.9	--	11.0	Jun-11
Equities - Net			5.0	--	3.8	--	16.2	--	20.4	--	14.7	--	12.5	--	10.7	
<i>MSCI ACWI</i>			6.7	--	5.6	--	18.5	--	20.4	--	14.4	--	11.9	--	10.0	Jun-11
US Equity - Gross	2,999,661,873	22.6	8.2	76	8.7	60	25.3	66	26.0	16	18.1	17	16.3	20	11.0	Jun-86
US Equity - Net			8.1	78	8.5	63	25.0	69	25.7	29	17.8	30	16.0	39	10.8	
<i>Russell 3000¹</i>			9.3	40	9.2	41	25.7	60	25.8	23	18.0	25	16.3	19	11.1	Jun-86
<i>InvMetrics All DB US Eq Gross Median</i>			9.1		9.0		25.8		24.8		17.1		15.6		11.1	Jun-86
Large Cap - Gross	2,714,824,517	20.5	9.1	--	9.7	--	27.0	--	26.1	--	18.5	--	16.5	--	8.1	Mar-98
Large Cap - Net			9.1	--	9.5	--	26.7	--	25.8	--	18.3	--	16.3	--	7.9	
<i>Russell 1000</i>			9.8	--	10.0	--	26.5	--	26.2	--	18.4	--	16.5	--	8.6	Mar-98

*Total Fund and asset class composites are ranked against InvestorForce universes. Managers are ranked against eVest manager universes. Net Returns are ranked against gross universe. Ranking of 1 is a top ranking and ranking of 100 is a bottom rating.

**Total Fund ex Overlay returns from 2/1/2006-12/31/2010 were calculated using the overlay impact provided by SSgA.

+ Since inception date denotes last day of the month.

1. See Policy Index and Benchmark History

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Large Cap - Index - Gross	1,578,555,767	11.9	9.8	--	10.0	--	26.4	--	26.2	--	18.4	--	16.5	--	13.6	Sep-08
Large Cap - Index - Net			9.8	--	10.0	--	26.4	--	26.1	--	18.4	--	16.5	--	13.6	
<i>Russell 1000</i>			9.8	--	10.0	--	26.5	--	26.2	--	18.4	--	16.5	--	13.6	Sep-08
AB - Gross	1,578,555,767	11.9	9.8	73	10.0	71	26.4	85	26.2	39	18.4	65	16.5	69	11.0	Apr-89
AB - Net			9.8	73	10.0	71	26.4	85	26.1	43	18.4	66	16.5	69	11.0	
<i>Russell 1000¹</i>			9.8	70	10.0	69	26.5	81	26.2	32	18.4	56	16.5	57	--	Apr-89
<i>eV US Passive Large Cap Equity Gross Median</i>			11.0		11.6		28.6		26.1		18.5		16.5		11.1	Apr-89
Large Cap - Enhanced - Gross	369,732,093	2.8	10.1	--	10.3	--	28.2	--	25.0	--	--	--	--	--	17.3	Jul-18
Large Cap - Enhanced - Net			10.0	--	10.1	--	27.9	--	24.7	--	--	--	--	--	17.0	
<i>Russell 1000</i>			9.8	--	10.0	--	26.5	--	26.2	--	18.4	--	16.5	--	18.8	Jul-18
AQR US Enhanced Equity - Gross	369,732,093	2.8	10.1	60	10.3	52	28.2	58	25.0	60	--	--	--	--	17.3	Jul-18
AQR US Enhanced Equity - Net			10.0	60	10.1	55	27.9	58	24.7	62	--	--	--	--	17.0	
<i>Russell 1000</i>			9.8	66	10.0	56	26.5	70	26.2	36	18.4	37	16.5	53	18.8	Jul-18
<i>eV US Enh Equity Gross Median</i>			10.4		10.4		28.4		25.8		18.2		16.6		18.1	Jul-18
Large Cap (130/30) - Gross	385,730,325	2.9	11.6	--	11.4	--	26.1	--	26.6	--	18.5	--	17.5	--	14.2	Sep-08
Large Cap (130/30) - Net			11.5	--	11.1	--	25.5	--	25.9	--	17.9	--	16.8	--	13.6	
<i>Russell 1000</i>			9.8	--	10.0	--	26.5	--	26.2	--	18.4	--	16.5	--	13.6	Sep-08
JP Morgan 130/30 - Gross	201,112,617	1.5	12.4	28	13.2	50	30.4	58	29.7	4	20.3	8	18.4	12	14.6	Jul-08
JP Morgan 130/30 - Net			12.3	31	12.8	52	29.7	66	28.9	19	19.5	22	17.6	36	13.8	
<i>Russell 1000</i>			9.8	83	10.0	71	26.5	80	26.2	36	18.4	35	16.5	57	12.7	Jul-08
<i>eV Extended US Equity Gross Median</i>			11.5		13.1		30.8		23.7		16.3		17.0		13.2	Jul-08
DE Shaw Broad Mkt Core Alpha Ext - Gross	184,617,708	1.4	10.8	68	9.5	73	21.5	92	--	--	--	--	--	--	21.1	Jan-19
DE Shaw Broad Mkt Core Alpha Ext - Net			10.7	70	9.3	75	21.2	92	--	--	--	--	--	--	20.7	
<i>Russell 1000</i>			9.8	83	10.0	71	26.5	80	26.2	36	18.4	35	16.5	57	23.6	Jan-19
<i>eV Extended US Equity Gross Median</i>			11.5		13.1		30.8		23.7		16.3		17.0		21.1	Jan-19

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Large Cap Active - Gross	380,806,333	2.9	3.5	--	6.1	--	29.3	--	25.8	--	17.9	--	16.5	--	13.1	Sep-08
Large Cap Active - Net			3.3	--	5.7	--	28.3	--	24.9	--	17.0	--	15.7	--	12.4	
<i>Russell 1000¹</i>			9.8	--	10.0	--	26.5	--	26.0	--	15.8	--	15.3	--	12.0	Sep-08
Eagle Capital - Gross	380,786,068	2.9	3.5	99	6.1	94	29.3	36	25.9	41	18.8	34	--	--	16.6	Feb-12
Eagle Capital - Net			3.3	99	5.7	96	28.3	45	24.9	53	17.9	50	--	--	15.7	
<i>Russell 1000</i>			9.8	64	10.0	63	26.5	64	26.0	40	15.8	80	15.3	73	14.7	Feb-12
<i>eV US Large Cap Core Equity Gross Median</i>			10.5		10.8		27.9		25.0		17.9		16.2		15.4	Feb-12
Small Cap - Gross	284,837,356	2.1	0.0	--	0.3	--	11.3	--	25.3	--	16.5	--	15.1	--	12.6	Dec-90
Small Cap - Net			-0.1	--	-0.2	--	10.7	--	24.6	--	15.8	--	14.4	--	11.9	
<i>Russell 2000</i>			2.1	--	-2.3	--	14.8	--	20.0	--	12.0	--	13.2	--	11.1	Dec-90
Small Cap - Growth - Gross	160,886,656	1.2	-5.0	--	-2.3	--	6.8	--	34.1	--	25.8	--	18.4	--	15.4	Sep-08
Small Cap - Growth - Net			-5.1	--	-2.8	--	6.2	--	33.2	--	25.1	--	17.7	--	14.8	
<i>Russell 2000 Growth</i>			0.0	--	-5.6	--	2.8	--	21.2	--	14.5	--	14.1	--	12.2	Sep-08
Weatherbie - Gross	160,886,656	1.2	-5.0	90	-2.3	67	6.8	73	34.1	18	27.5	12	20.5	11	15.3	Dec-02
Weatherbie - Net			-5.1	91	-2.8	69	6.2	74	33.2	22	26.8	14	19.6	14	14.5	
<i>Russell 2000 Growth</i>			0.0	70	-5.6	82	2.8	84	21.2	89	14.5	92	14.1	92	11.8	Dec-02
<i>eV US Small Cap Growth Equity Gross Median</i>			2.6		0.5		11.5		28.2		20.4		17.3		14.3	Dec-02
Small Cap - Value - Gross	123,950,700	0.9	7.4	--	3.8	--	17.8	--	14.9	--	6.6	--	11.2	--	9.5	Sep-08
Small Cap - Value - Net			7.1	--	3.3	--	17.1	--	14.3	--	5.9	--	10.4	--	8.7	
<i>Russell 2000 Value</i>			4.4	--	1.2	--	28.3	--	18.0	--	9.1	--	12.0	--	9.5	Sep-08
Snyder Capital Management - Gross	123,950,700	0.9	7.4	39	3.8	70	--	--	--	--	--	--	--	--	15.3	Jan-21
Snyder Capital Management - Net			7.1	44	3.3	72	--	--	--	--	--	--	--	--	14.6	
<i>Russell 2000 Value</i>			4.4	85	1.2	83	28.3	61	18.0	76	9.1	74	12.0	82	21.9	Jan-21
<i>eV US Small Cap Value Equity Gross Median</i>			6.8		5.2		30.6		20.0		10.5		13.3		27.6	Jan-21

1. See Policy Index and Benchmark History.

Total Fund Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
International Equity - Gross	2,443,778,000	18.4	1.5	56	-1.1	54	7.4	72	15.2	40	11.9	22	8.9	35	6.9	Dec-87
International Equity - Net			1.4	61	-1.5	66	6.9	76	14.5	48	11.2	31	8.4	50	6.5	
<i>MSCI ACWI ex US¹</i>			1.9	38	-1.1	52	8.3	55	13.7	66	10.1	55	7.8	72	6.5	Dec-87
<i>InvMetrics All DB ex-US Eq Gross Median</i>			1.6		-1.0		8.6		14.3		10.3		8.4		7.2	Dec-87
International - Developed - Gross	1,987,325,679	15.0	2.2	31	1.9	20	11.4	32	15.8	45	12.1	37	9.6	45	5.5	Mar-98
International - Developed - Net			2.1	33	1.5	23	10.7	38	15.1	52	11.4	46	9.1	57	5.0	
<i>MSCI World ex US Gross</i>			3.2	14	2.6	16	13.2	13	14.6	59	10.2	58	8.4	65	5.4	Mar-98
<i>InvMetrics All DB Dev Mkt ex-US Eq Gross Median</i>			1.7		-0.5		8.5		15.3		11.1		9.4		5.6	Mar-98
Large Cap - Gross	1,728,781,409	13.0	2.8	56	2.2	53	11.9	61	15.4	45	12.0	33	9.2	49	6.1	Dec-04
Large Cap - Net			2.7	58	1.8	60	11.2	68	14.7	51	11.3	38	8.7	64	5.6	
<i>MSCI World ex US Gross</i>			3.2	45	2.6	43	13.2	47	14.6	52	10.2	53	8.4	71	6.0	Dec-04
<i>eV EAFE Large Cap Equity Gross Median</i>			3.0		2.3		12.8		14.8		10.5		9.1		6.7	Dec-04
Lazard - Gross	478,934,552	3.6	0.3	77	-1.4	76	7.2	78	13.1	80	10.6	67	--	--	9.4	Jun-12
Lazard - Net			0.2	78	-1.6	78	6.9	81	12.8	82	10.3	70	--	--	9.1	
<i>MSCI ACWI ex USA Gross</i>			1.9	54	-1.1	70	8.3	73	13.7	76	10.1	72	7.8	84	7.9	Jun-12
<i>eV All ACWI ex-US Equity Gross Median</i>			2.1		0.6		11.4		17.6		12.5		9.9		9.9	Jun-12
Walter Scott & Partners Limited - Gross	708,395,386	5.3	5.5	8	6.2	7	14.1	17	20.0	66	--	--	--	--	15.1	Mar-17
Walter Scott & Partners Limited - Net			5.4	8	5.4	14	13.1	28	18.8	68	--	--	--	--	14.1	
<i>MSCI World ex USA Growth GR USD</i>			4.3	32	4.1	34	11.9	35	19.5	67	13.8	77	10.1	82	12.7	Mar-17
<i>eV EAFE Large Cap Growth Gross Median</i>			3.2		2.3		11.5		21.7		15.5		11.5		14.4	Mar-17
LSV - Gross	541,451,470	4.1	1.6	44	0.5	53	14.3	29	12.0	33	8.2	28	8.5	19	5.2	Dec-04
LSV - Net			1.5	50	0.3	54	13.9	32	11.5	41	7.7	45	8.1	28	4.8	
<i>MSCI World ex US Value Gross</i>			2.0	34	1.1	41	14.0	31	9.4	92	6.4	90	6.5	90	4.7	Dec-04
<i>eV EAFE Large Cap Value Gross Median</i>			1.5		0.6		13.0		11.3		7.6		7.6		5.4	Dec-04

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Small Cap - Gross	258,544,271	2.0	-1.6	85	0.3	62	8.1	84	18.8	32	12.9	39	11.0	76	10.3	Sep-08
Small Cap - Net			-1.8	86	-0.1	71	7.3	85	17.9	38	12.0	48	10.1	91	9.4	
<i>MSCI World ex US Small Cap GD</i>			0.4	60	1.2	47	11.5	69	16.7	50	11.5	59	10.4	88	9.4	Sep-08
<i>eV EAFE Small Cap Equity Gross Median</i>			1.0		0.7		13.8		16.7		11.9		11.9		10.6	Sep-08
Mondrian Dev Small Cap - Gross	121,853,241	0.9	-2.6	95	-2.8	88	5.2	97	13.7	81	11.0	76	9.6	91	9.4	Aug-10
Mondrian Dev Small Cap - Net			-2.7	95	-3.1	91	4.5	97	13.0	87	10.3	83	8.9	95	8.7	
<i>MSCI World ex US Small Cap GD</i>			0.4	58	1.2	48	11.5	74	16.7	68	11.5	73	10.4	80	9.7	Aug-10
<i>eV ACWI ex-US Small Cap Equity Gross Median</i>			1.1		1.1		14.9		20.2		14.4		12.9		12.1	Aug-10
William Blair Dev Small Cap - Gross	136,691,030	1.0	-0.7	76	3.2	32	10.8	77	24.2	28	14.7	48	12.3	59	11.2	Sep-08
William Blair Dev Small Cap - Net			-1.0	86	2.8	34	9.9	78	23.1	33	13.7	56	11.3	69	10.2	
<i>MSCI World ex US Small Cap GD</i>			0.4	58	1.2	48	11.5	74	16.7	68	11.5	73	10.4	80	9.4	Sep-08
<i>eV ACWI ex-US Small Cap Equity Gross Median</i>			1.1		1.1		14.9		20.2		14.4		12.9		11.5	Sep-08
International - Emerging - Gross	456,448,033	3.4	-1.4	88	-12.5	99	-6.9	99	12.5	42	11.2	27	5.4	73	6.7	Jan-00
International - Emerging - Net			-1.5	89	-12.6	99	-7.2	99	12.2	46	10.8	30	5.2	76	6.3	
<i>MSCI Emerging Markets Gross</i>			-1.2	81	-9.1	79	-2.2	72	11.3	57	10.3	34	5.9	57	7.1	Jan-00
<i>InvMetrics All DB Emg Mkt Eq Gross Median</i>			-0.3		-7.2		1.7		11.7		9.7		6.1		--	Jan-00
Baillie Gifford Emg All Cap - Gross	252,836,708	1.9	-1.9	72	-14.0	94	-9.0	92	14.8	38	14.5	16	--	--	13.4	Mar-16
Baillie Gifford Emg All Cap - Net			-1.9	72	-14.0	94	-9.0	92	14.8	38	14.5	16	--	--	13.4	
<i>MSCI Emerging Markets Gross</i>			-1.2	62	-9.1	66	-2.2	69	11.3	69	10.3	64	5.9	75	9.9	Mar-16
<i>eV Emg Mkts Equity Gross Median</i>			-0.7		-7.2		1.2		13.1		11.1		7.2		10.8	Mar-16
Mondrian Emg All Cap - Gross	203,611,325	1.5	-0.7	51	-10.5	80	-4.2	78	9.8	84	8.0	91	--	--	7.4	Mar-16
Mondrian Emg All Cap - Net			-0.9	55	-10.8	82	-4.8	81	9.2	88	7.4	94	--	--	6.7	
<i>MSCI Emerging Markets Gross</i>			-1.2	62	-9.1	66	-2.2	69	11.3	69	10.3	64	5.9	75	9.9	Mar-16
<i>eV Emg Mkts Equity Gross Median</i>			-0.7		-7.2		1.2		13.1		11.1		7.2		10.8	Mar-16

Total Fund Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Private Equity - Gross** **	1,780,335,252	13.4	7.8	14	19.0	18	58.4	12	30.2	18	26.8	11	18.5	20	8.1	Feb-08
Private Equity - Net			7.8	14	19.0	18	58.4	12	30.2	18	26.8	11	18.8	19	8.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag¹</i>			5.1	35	18.1	23	48.3	27	22.0	40	19.7	35	19.5	11	12.9	Feb-08
<i>Russell 3000 +3% 1Q Lag</i>			1.0	61	9.1	57	34.9	48	19.0	61	19.9	35	19.6	7	13.4	Feb-08
<i>InvMetrics All DB Private Eq Net Median</i>			2.4		10.2		34.0		20.8		17.3		14.9		10.4	Feb-08
Abbott VI - Gross	39,841,832	0.3	3.9	--	18.9	--	54.7	--	25.6	--	22.9	--	17.2	--	8.9	Jul-08
Abbott VI - Net			3.9	--	18.9	--	54.7	--	25.6	--	22.9	--	17.2	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	13.7	Jul-08
Accel-KKR IV - Gross	15,953,176	0.1	1.4	--	63.1	--	88.9	--	45.0	--	58.1	--	--	--	20.5	Jun-13
Accel-KKR IV - Net			1.4	--	63.1	--	88.9	--	45.0	--	58.1	--	--	--	20.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.6	Jun-13
Accel-KKR V - Gross	26,991,817	0.2	9.5	--	19.1	--	78.0	--	38.5	--	--	--	--	--	27.2	Jan-17
Accel-KKR V - Net			9.5	--	19.1	--	78.0	--	38.5	--	--	--	--	--	27.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.4	Jan-17
Accel-KKR VI - Gross	6,901,154	0.1	2.6	--	-13.9	--	--	--	--	--	--	--	--	--	-52.2	Feb-21
Accel-KKR VI - Net			2.6	--	-13.9	--	--	--	--	--	--	--	--	--	-52.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	48.3	Feb-21
Accel-KKR Growth Partners II - Gross	11,933,067	0.1	16.2	--	43.5	--	173.2	--	60.5	--	40.9	--	--	--	21.2	Feb-15
Accel-KKR Growth Partners II - Net			16.2	--	43.5	--	173.2	--	60.5	--	40.9	--	--	--	21.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.3	Feb-15
Accel-KKR Growth Partners III - Gross	30,336,485	0.2	4.7	--	24.0	--	45.3	--	--	--	--	--	--	--	5.0	Jul-19
Accel-KKR Growth Partners III - Net			4.7	--	24.0	--	45.3	--	--	--	--	--	--	--	5.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	26.4	Jul-19

1. See Policy Index and Benchmark History.

** Private Equity Composite includes the historical returns of Summit Credit and Athyrum Opportunities up to 4/1/17.

++ Private Equity returns are one-quarter lag.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Atalaya Special Opp VI - Gross	5,941,882	0.0	-0.6	--	6.2	--	34.8	--	22.8	--	17.6	--	--	--	15.5	Apr-16
Atalaya Special Opp VI - Net			-0.6	--	6.2	--	34.8	--	22.8	--	17.6	--	--	--	15.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.3	Apr-16
Canvas Ventures III - Gross	6,850,463	0.1	-1.6	--	-6.0	--	-16.1	--	--	--	--	--	--	--	-15.0	Nov-20
Canvas Ventures III - Net			-1.6	--	-6.0	--	-16.1	--	--	--	--	--	--	--	-15.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	56.7	Nov-20
Cortec Group Fund VII - Gross	26,391,859	0.2	-1.4	--	26.6	--	60.4	--	--	--	--	--	--	--	35.2	Dec-19
Cortec Group Fund VII - Net			-1.4	--	26.6	--	60.4	--	--	--	--	--	--	--	35.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	30.0	Dec-19
CRV Select Fund I - Gross	19,249,129	0.1	12.6	--	11.7	--	--	--	--	--	--	--	--	--	11.7	May-21
CRV Select Fund I - Net			12.6	--	11.7	--	--	--	--	--	--	--	--	--	11.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	29.1	May-21
CRV XVIII LP - Gross	15,565,665	0.1	4.7	--	6.3	--	--	--	--	--	--	--	--	--	1.8	Feb-21
CRV XVIII LP - Net			4.7	--	6.3	--	--	--	--	--	--	--	--	--	1.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	48.3	Feb-21
Davidson Kempner LT Dist Opp IV - Gross	39,033,433	0.3	5.8	--	11.5	--	18.4	--	9.7	--	--	--	--	--	11.2	Mar-18
Davidson Kempner LT Dist Opp IV - Net			5.8	--	11.5	--	18.4	--	9.7	--	--	--	--	--	11.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.9	Mar-18
Davidson Kempner LT Dist Opp V - Gross	26,076,889	0.2	2.4	--	7.5	--	25.5	--	--	--	--	--	--	--	26.6	May-20
Davidson Kempner LT Dist Opp V - Net			2.4	--	7.5	--	25.5	--	--	--	--	--	--	--	26.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	35.5	May-20
Digital Colony Partners II - Gross	15,838,273	0.1	12.8	--	3.2	--	--	--	--	--	--	--	--	--	3.2	May-21
Digital Colony Partners II - Net			12.8	--	3.2	--	--	--	--	--	--	--	--	--	3.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	29.1	May-21
Dyal Capital Partners II - Gross	34,109,278	0.3	17.2	--	37.1	--	65.5	--	15.9	--	7.1	--	--	--	2.1	Dec-14
Dyal Capital Partners II - Net			17.2	--	37.1	--	65.5	--	15.9	--	7.1	--	--	--	2.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.7	Dec-14

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Dyal Capital Partners III - Gross	25,897,042	0.2	2.6	--	11.2	--	43.9	--	26.5	--	25.9	--	--	--	25.9	Dec-16
Dyal Capital Partners III - Net			2.6	--	11.2	--	43.9	--	26.5	--	25.9	--	--	--	25.9	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	19.7	Dec-16
Garrison Investment Group - Gross	8,090,693	0.1	-0.8	--	9.6	--	21.8	--	0.9	--	1.8	--	--	--	1.0	May-12
Garrison Investment Group - Net			-0.8	--	9.6	--	21.8	--	0.9	--	1.8	--	--	--	1.0	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.8	May-12
Gridiron Capital Fund IV - Gross	30,159,051	0.2	19.4	--	34.4	--	50.6	--	--	--	--	--	--	--	40.4	May-20
Gridiron Capital Fund IV - Net			19.4	--	34.4	--	50.6	--	--	--	--	--	--	--	40.4	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	35.5	May-20
Harbourvest VIII - Gross	9,176,500	0.1	4.5	--	13.6	--	48.7	--	20.2	--	19.5	--	16.3	--	12.3	Dec-07
Harbourvest VIII - Net			4.5	--	13.6	--	48.7	--	20.2	--	19.5	--	16.3	--	--	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	12.5	Dec-07
Harbourvest Intl VI - Gross	32,160,854	0.2	-4.2	--	4.0	--	40.9	--	20.5	--	19.7	--	14.2	--	-1.6	Mar-09
Harbourvest Intl VI - Net			-4.2	--	4.0	--	40.9	--	20.5	--	19.7	--	14.2	--	--	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.0	Mar-09
H.I.G. Bayside Loan III - Gross	4,425,324	0.0	3.9	--	12.3	--	24.5	--	2.0	--	6.4	--	--	--	5.3	Jan-13
H.I.G. Bayside Loan III - Net			3.9	--	12.3	--	24.5	--	2.0	--	6.4	--	--	--	5.3	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.4	Jan-13
H.I.G. Capital V - Gross	12,292,792	0.1	10.6	--	26.9	--	51.7	--	22.2	--	35.0	--	--	--	14.5	Jul-13
H.I.G. Capital V - Net			10.6	--	26.9	--	51.7	--	22.2	--	35.0	--	--	--	14.5	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.5	Jul-13
H.I.G. Europe Capital II - Gross*	10,754,496	0.1	5.7	--	11.8	--	49.4	--	19.2	--	14.5	--	--	--	--	Jan-14
H.I.G. Europe Capital II - Net			5.7	--	11.8	--	49.4	--	19.2	--	14.5	--	--	--	--	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.9	Jan-14
Khosla IV - Gross	26,465,167	0.2	32.2	--	26.8	--	166.9	--	54.8	--	42.1	--	29.4	--	27.0	Jul-11
Khosla IV - Net			32.2	--	26.8	--	166.9	--	54.8	--	42.1	--	29.4	--	27.0	
Thomson Reuters CJA All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.7	Jul-11

* Unable to calculate a since inception return due to system limitations when HIG Europe Capital II experienced 2 quarters of negative fund values in 2016.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Khosla V - Gross	51,986,535	0.4	26.8	--	40.9	--	197.6	--	51.1	--	36.9	--	--	--	24.8	Nov-14
Khosla V - Net			26.8	--	40.9	--	197.6	--	51.1	--	36.9	--	--	--	24.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.3	Nov-14
Khosla VI - Gross	41,310,513	0.3	13.8	--	21.0	--	50.4	--	11.2	--	--	--	--	--	8.3	Aug-18
Khosla VI - Net			13.8	--	21.0	--	50.4	--	11.2	--	--	--	--	--	8.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	22.8	Aug-18
Khosla VII - Gross	6,725,706	0.1	-2.4	--	5.6	--	--	--	--	--	--	--	--	--	-17.9	Jan-21
Khosla VII - Net			-2.4	--	5.6	--	--	--	--	--	--	--	--	--	-17.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	48.3	Jan-21
Linden Capital III - Gross	54,992,802	0.4	13.2	--	39.1	--	99.4	--	54.9	--	43.8	--	--	--	33.9	Jun-16
Linden Capital III - Net			13.2	--	39.1	--	99.4	--	54.9	--	43.8	--	--	--	33.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	19.4	Jun-16
Linden Capital Partners IV - Gross	36,229,297	0.3	6.9	--	16.7	--	26.5	--	12.1	--	--	--	--	--	12.1	Sep-18
Linden Capital Partners IV - Net			6.9	--	16.7	--	26.5	--	12.1	--	--	--	--	--	12.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	21.6	Sep-18
Marlin Equity IV - Gross	12,086,565	0.1	3.2	--	7.2	--	23.5	--	15.2	--	10.8	--	--	--	7.3	Nov-13
Marlin Equity IV - Net			3.2	--	7.2	--	23.5	--	15.2	--	10.8	--	--	--	7.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.7	Nov-13
Marlin Equity V - Gross	23,087,686	0.2	5.9	--	9.5	--	39.7	--	32.1	--	--	--	--	--	21.3	Feb-18
Marlin Equity V - Net			5.9	--	9.5	--	39.7	--	32.1	--	--	--	--	--	21.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	21.8	Feb-18
Marlin Heritage - Gross	8,916,466	0.1	4.3	--	8.7	--	28.1	--	33.1	--	36.6	--	--	--	25.2	Jul-14
Marlin Heritage - Net			4.3	--	8.7	--	28.1	--	33.1	--	36.6	--	--	--	25.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.7	Jul-14
Marlin Heritage II - Gross	11,734,510	0.1	6.1	--	11.3	--	30.6	--	16.3	--	--	--	--	--	6.6	Oct-17
Marlin Heritage II - Net			6.1	--	11.3	--	30.6	--	16.3	--	--	--	--	--	6.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.9	Oct-17

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Marlin Heritage Europe - Gross	33,048,100	0.2	22.5	--	38.5	--	70.2	--	44.8	--	--	--	--	--	29.3	Aug-17
Marlin Heritage Europe - Net			22.5	--	38.5	--	70.2	--	44.8	--	--	--	--	--	29.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.8	Aug-17
New Enterprise 14 - Gross	58,354,280	0.4	-10.1	--	0.4	--	104.3	--	33.8	--	28.6	--	--	--	20.4	May-12
New Enterprise 14 - Net			-10.1	--	0.4	--	104.3	--	33.8	--	28.6	--	--	--	20.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.8	May-12
New Enterprise 15 - Gross	72,769,500	0.5	-12.2	--	-4.5	--	48.0	--	25.8	--	26.7	--	--	--	20.3	Apr-15
New Enterprise 15 - Net			-12.2	--	-4.5	--	48.0	--	25.8	--	26.7	--	--	--	20.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.2	Apr-15
New Enterprise 16 - Gross	45,889,089	0.3	-0.9	--	1.0	--	33.6	--	19.9	--	--	--	--	--	14.0	May-17
New Enterprise 16 - Net			-0.9	--	1.0	--	33.6	--	19.9	--	--	--	--	--	14.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.5	May-17
New Enterprise 17 - Gross	22,016,492	0.2	0.1	--	7.8	--	55.5	--	--	--	--	--	--	--	25.9	Jul-19
New Enterprise 17 - Net			0.1	--	7.8	--	55.5	--	--	--	--	--	--	--	25.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	26.4	Jul-19
OrbiMed Private Investments VIII, LP - Gross	5,369,847	0.0	-1.9	--	3.4	--	-6.2	--	--	--	--	--	--	--	-6.2	Dec-20
OrbiMed Private Investments VIII, LP - Net			-1.9	--	3.4	--	-6.2	--	--	--	--	--	--	--	-6.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	48.3	Dec-20
Private Equity X - Gross	22,268,028	0.2	-0.2	--	-0.1	--	36.6	--	8.4	--	13.7	--	12.2	--	1.0	Jun-08
Private Equity X - Net			-0.2	--	-0.1	--	36.6	--	8.4	--	13.7	--	12.2	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	14.1	Jun-08
RCP Multi-Fund Feeder - Gross	57,421,134	0.4	7.4	--	15.4	--	32.7	--	8.1	--	--	--	--	--	7.8	Nov-18
RCP Multi-Fund Feeder - Net			7.4	--	15.4	--	32.7	--	8.1	--	--	--	--	--	7.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	22.9	Nov-18
RRJ Capital Master Fund II - Gross	12,454,947	0.1	25.5	--	16.6	--	56.5	--	15.5	--	15.4	--	--	--	14.4	May-13
RRJ Capital Master Fund II - Net			25.5	--	16.6	--	56.5	--	15.5	--	15.4	--	--	--	14.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.0	May-13

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
RRJ Capital Master Fund III - Gross	12,667,816	0.1	2.4	--	15.8	--	29.4	--	8.5	--	9.2	--	--	--	-4.6	Dec-15
RRJ Capital Master Fund III - Net			2.4	--	15.8	--	29.4	--	8.5	--	9.2	--	--	--	-4.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	19.4	Dec-15
Shamrock Capital II - Gross	5,682,515	0.0	5.2	--	8.7	--	2.6	--	--	--	--	--	--	--	-95.4	Jul-20
Shamrock Capital II - Net			5.2	--	8.7	--	2.6	--	--	--	--	--	--	--	-95.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	49.7	Jul-20
Shamrock Capital Growth Fund V - Gross	670,055	0.0	-32.8	--	--	--	--	--	--	--	--	--	--	--	-32.8	Jul-21
Shamrock Capital Growth Fund V - Net			-32.8	--	--	--	--	--	--	--	--	--	--	--	-32.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.1	Jul-21
Spectrum Equity VII - Gross	78,690,140	0.6	38.5	--	38.1	--	47.1	--	75.6	--	69.2	--	--	--	35.1	Dec-14
Spectrum Equity VII - Net			38.5	--	38.1	--	47.1	--	75.6	--	69.2	--	--	--	35.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.7	Dec-14
Spectrum Equity Fund VIII - Gross	33,299,608	0.3	24.2	--	25.9	--	248.6	--	44.7	--	--	--	--	--	-14.1	Jun-18
Spectrum Equity Fund VIII - Net			24.2	--	25.9	--	248.6	--	44.7	--	--	--	--	--	-14.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	21.6	Jun-18
Spectrum Equity Fund IX - Gross	9,296,530	0.1	-2.0	--	-5.0	--	-16.9	--	--	--	--	--	--	--	-16.1	Sep-20
Spectrum Equity Fund IX - Net			-2.0	--	-5.0	--	-16.9	--	--	--	--	--	--	--	-16.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	47.6	Sep-20
Strategic Value Spl Fund V - Gross	7,399,132	0.1	-2.7	--	--	--	--	--	--	--	--	--	--	--	-2.7	Aug-21
Strategic Value Spl Fund V - Net			-2.7	--	--	--	--	--	--	--	--	--	--	--	-2.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.1	Aug-21
Summit EUR Growth Equity II - Gross	39,563,098	0.3	13.5	--	49.6	--	54.0	--	39.0	--	--	--	--	--	81.6	Jan-18
Summit EUR Growth Equity II - Net			13.5	--	49.6	--	54.0	--	39.0	--	--	--	--	--	81.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	21.3	Jan-18
Summit EUR Growth Equity III - Gross	7,255,007	0.1	0.0	--	-3.1	--	--	--	--	--	--	--	--	--	-21.3	Jan-21
Summit EUR Growth Equity III - Net			0.0	--	-3.1	--	--	--	--	--	--	--	--	--	-21.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	48.3	Jan-21

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Summit Ventures III - Gross	3,150,631	0.0	-0.4	--	-2.9	--	5.4	--	14.2	--	15.1	--	--	--	12.9	Jun-12
Summit Ventures III - Net			-0.4	--	-2.9	--	5.4	--	14.2	--	15.1	--	--	--	12.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.6	Jun-12
Summit Ventures IV - Gross	41,294,478	0.3	3.2	--	16.4	--	102.1	--	48.5	--	44.7	--	--	--	43.0	May-16
Summit Ventures IV - Net			3.2	--	16.4	--	102.1	--	48.5	--	44.7	--	--	--	43.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.6	May-16
Summit Ventures V - Gross	5,114,915	0.0	1.8	--	-8.7	--	--	--	--	--	--	--	--	--	-8.7	May-21
Summit Ventures V - Net			1.8	--	-8.7	--	--	--	--	--	--	--	--	--	-8.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	29.1	May-21
Thoma Bravo XI - Gross	59,176,596	0.4	7.9	--	15.8	--	36.6	--	48.8	--	47.1	--	--	--	31.0	Jun-14
Thoma Bravo XI - Net			7.9	--	15.8	--	36.6	--	48.8	--	47.1	--	--	--	31.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.6	Jun-14
Thoma Bravo XII - Gross	51,211,328	0.4	3.9	--	10.4	--	23.7	--	22.9	--	17.1	--	--	--	11.8	May-16
Thoma Bravo XII - Net			3.9	--	10.4	--	23.7	--	22.9	--	17.1	--	--	--	11.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.6	May-16
Thoma Bravo XIII - Gross	64,655,729	0.5	5.6	--	10.9	--	25.0	--	--	--	--	--	--	--	41.3	Feb-19
Thoma Bravo XIII - Net			5.6	--	10.9	--	25.0	--	--	--	--	--	--	--	41.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	23.5	Feb-19
Threshold Ventures III - Gross	22,509,426	0.2	16.1	--	73.6	--	82.6	--	--	--	--	--	--	--	21.2	Oct-19
Threshold Ventures III - Net			16.1	--	73.6	--	82.6	--	--	--	--	--	--	--	21.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	27.7	Oct-19
TPG Opp Partners III - Gross	13,280,774	0.1	2.6	--	16.9	--	34.1	--	11.6	--	12.7	--	--	--	-6.8	Mar-14
TPG Opp Partners III - Net			2.6	--	16.9	--	34.1	--	11.6	--	12.7	--	--	--	-6.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.4	Mar-14
Trinity Ventures XI - Gross	60,419,218	0.5	6.8	--	29.0	--	66.7	--	23.3	--	23.7	--	--	--	11.4	Apr-13
Trinity Ventures XI - Net			6.8	--	29.0	--	66.7	--	23.3	--	23.7	--	--	--	11.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.0	Apr-13

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Trinity Ventures XII - Gross	83,451,637	0.6	9.1	--	37.0	--	148.7	--	63.0	--	45.2	--	--	--	35.1	Apr-16
Trinity Ventures XII - Net			9.1	--	37.0	--	148.7	--	63.0	--	45.2	--	--	--	35.1	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	20.3	Apr-16
TSG7 A LP - Gross*	29,067,481	0.2	51.9	--	74.2	--	119.6	--	41.5	--	27.3	--	--	--	--	Mar-16
TSG7 A LP - Net			51.9	--	74.2	--	119.6	--	41.5	--	27.3	--	--	--	--	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.9	Mar-16
TSG7 B LP - Gross	5,750,052	0.0	6.0	--	59.5	--	99.6	--	32.5	--	4.4	--	--	--	-0.2	Jan-16
TSG7 B LP - Net			6.0	--	59.5	--	99.6	--	32.5	--	4.4	--	--	--	-0.2	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.1	Jan-16
TSG8 LP - Gross**	21,978,191	0.2	-1.7	--	-1.7	--	24.2	--	--	--	--	--	--	--	--	Jan-19
TSG8 LP - Net			-1.7	--	-1.7	--	24.2	--	--	--	--	--	--	--	--	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	22.7	Jan-19
TSSP Opportunities Partners IV - Gross	29,223,605	0.2	0.0	--	3.6	--	27.8	--	--	--	--	--	--	--	14.3	Jan-19
TSSP Opportunities Partners IV - Net			0.0	--	3.6	--	27.8	--	--	--	--	--	--	--	14.3	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	22.7	Jan-19
Waterland V - Gross	3,584,943	0.0	-3.7	--	5.6	--	17.8	--	17.4	--	25.3	--	29.2	--	22.7	Aug-11
Waterland V - Net			-3.7	--	5.6	--	17.8	--	17.4	--	25.3	--	29.2	--	22.7	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.0	Aug-11
Waterland VI - Gross	23,887,237	0.2	17.7	--	23.5	--	45.8	--	31.9	--	29.9	--	--	--	9.3	Jul-15
Waterland VI - Net			17.7	--	23.5	--	45.8	--	31.9	--	29.9	--	--	--	9.3	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	16.9	Jul-15
Wayzata Opportunities III - Gross	4,061,395	0.0	-0.8	--	5.4	--	-8.3	--	-4.2	--	-3.0	--	--	--	-5.2	Feb-13
Wayzata Opportunities III - Net			-0.8	--	5.4	--	-8.3	--	-4.2	--	-3.0	--	--	--	-5.2	
<i>Thomson Reuters C A All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	18.5	Feb-13

* Unable to calculate a since inception return due to system limitations when TSG7 A LP experienced 1 quarter of negative fund value in 2016 .

** Unable to calculate a year to date, 1-year and since inception return due to system limitations when TSG8 LP experienced several months of negative fund value in 2019 and 2020.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Wynnchurch Capital Partners V - Gross	6,895,898	0.1	-2.6	--	10.4	--	49.8	--	--	--	--	--	--	--	-20.2	Apr-20
Wynnchurch Capital Partners V - Net			-2.6	--	10.4	--	49.8	--	--	--	--	--	--	--	-20.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	33.5	Apr-20
Public Credit - Gross	223,093,865	1.7	1.5	--	3.1	--	13.4	--	9.0	--	6.5	--	--	--	5.5	Nov-13
Public Credit - Net			1.5	--	3.1	--	13.4	--	9.0	--	6.5	--	--	--	5.5	
<i>Brigade Custom¹</i>			0.7	--	1.7	--	5.4	--	7.0	--	5.2	--	--	--	4.9	Nov-13
Brigade Capital - Gross	223,093,865	1.7	1.5	4	3.1	3	13.4	2	9.0	43	6.5	38	--	--	5.5	Nov-13
Brigade Capital - Net			1.5	4	3.1	3	13.4	2	9.0	43	6.5	38	--	--	5.5	
<i>Brigade Custom</i>			0.7	64	1.7	47	5.4	50	7.0	87	5.2	87	--	--	4.9	Nov-13
<i>eV US High Yield Fixed Inc Gross Median</i>			0.8		1.7		5.4		8.8		6.3		6.9		5.7	Nov-13
Private Credit - Gross⁺⁺	310,611,982	2.3	2.9	--	4.8	--	15.0	--	9.4	--	8.9	--	8.0	--	7.8	Oct-11
Private Credit - Net			2.9	--	4.8	--	15.0	--	9.4	--	8.9	--	8.0	--	7.8	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.6	Oct-11
Ares Capital Europe Fund V - Gross	13,145,827	0.1	8.9	--	--	--	--	--	--	--	--	--	--	--	8.9	Jul-21
Ares Capital Europe Fund V - Net			8.9	--	--	--	--	--	--	--	--	--	--	--	8.9	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	2.9	Jul-21
Athyrium Opp II - Gross	11,672,428	0.1	-0.3	--	-0.7	--	9.4	--	11.1	--	10.4	--	--	--	8.6	Jun-15
Athyrium Opp II - Net			-0.3	--	-0.7	--	9.4	--	11.1	--	10.4	--	--	--	8.6	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.3	Jun-15
Athyrium Opp III - Gross	14,385,180	0.1	-2.3	--	-1.1	--	4.1	--	7.5	--	--	--	--	--	2.9	May-17
Athyrium Opp III - Net			-2.3	--	-1.1	--	4.1	--	7.5	--	--	--	--	--	2.9	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.3	May-17
Benefit St Pr Sr Secure Opp - Gross	32,056,468	0.2	1.3	--	3.3	--	13.3	--	5.8	--	--	--	--	--	5.9	Jan-18
Benefit St Pr Sr Secure Opp - Net			1.3	--	3.3	--	13.3	--	5.8	--	--	--	--	--	5.9	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.4	Jan-18

1. See Policy Index and Benchmark History.

++ Private Credit returns are one-quarter lag.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Benefit St Pr Sr Secure Opp II - Gross	23,877,219	0.2	2.7	--	15.8	--	-1.8	--	--	--	--	--	--	--	7.9	Dec-19
Benefit St Pr Sr Secure Opp II - Net			2.7	--	15.8	--	-1.8	--	--	--	--	--	--	--	7.9	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.6	Dec-19
IFM US Infrastructure DB FD LP - Gross	8,861,532	0.1	2.8	--	7.0	--	--	--	--	--	--	--	--	--	7.0	Mar-21
IFM US Infrastructure DB FD LP - Net			2.8	--	7.0	--	--	--	--	--	--	--	--	--	7.0	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.1	Mar-21
MCP Private Capital IV - Gross	12,033,099	0.1	2.9	--	1.3	--	-4.9	--	--	--	--	--	--	--	-2.2	Apr-20
MCP Private Capital IV - Net			2.9	--	1.3	--	-4.9	--	--	--	--	--	--	--	-2.2	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.1	Apr-20
OrbiMed Royalty & Credit Opp III - Gross	11,338,248	0.1	0.4	--	-11.9	--	32.5	--	--	--	--	--	--	--	25.0	Sep-19
OrbiMed Royalty & Credit Opp III - Net			0.4	--	-11.9	--	32.5	--	--	--	--	--	--	--	25.0	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.5	Sep-19
Shamrock Capital Debt Fund I - Gross	2,030,718	0.0	-73.8	--	--	--	--	--	--	--	--	--	--	--	-73.8	Jul-21
Shamrock Capital Debt Fund I - Net			-73.8	--	--	--	--	--	--	--	--	--	--	--	-73.8	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	2.9	Jul-21
Silver Point Specialty Credit Fund II - Gross	27,619,877	0.2	2.0	--	4.7	--	12.2	--	--	--	--	--	--	--	21.0	Jul-20
Silver Point Specialty Credit Fund II - Net			2.0	--	4.7	--	12.2	--	--	--	--	--	--	--	21.0	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	15.0	Jul-20
Summit Credit - Gross	403,827	0.0	0.0	--	1.1	--	17.2	--	1.5	--	5.1	--	6.6	--	6.5	Oct-11
Summit Credit - Net			0.0	--	1.1	--	17.2	--	1.5	--	5.1	--	6.6	--	6.5	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.6	Oct-11
Summit Credit II - Gross	13,275,187	0.1	7.1	--	3.8	--	10.9	--	3.6	--	6.3	--	--	--	5.5	Nov-14
Summit Credit II - Net			7.1	--	3.8	--	10.9	--	3.6	--	6.3	--	--	--	5.5	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.1	Nov-14
Summit Credit III - Gross	33,813,549	0.3	5.7	--	10.3	--	28.0	--	17.1	--	--	--	--	--	16.1	Oct-18
Summit Credit III - Net			5.7	--	10.3	--	28.0	--	17.1	--	--	--	--	--	16.1	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.2	Oct-18

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Summit Credit IV - Gross	6,307,948	0.0	--	--	--	--	--	--	--	--	--	--	--	--	0.0	Nov-21
Summit Credit IV - Net			--	--	--	--	--	--	--	--	--	--	--	--	0.0	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	0.8	Nov-21
TCP Direct Lending VIII - Gross	99,790,875	0.8	3.3	--	6.4	--	14.9	--	9.7	--	--	--	--	--	8.1	Feb-18
TCP Direct Lending VIII - Net			3.3	--	6.4	--	14.9	--	9.7	--	--	--	--	--	8.1	
<i>Credit Suisse Leveraged Loan + 2% 1 Qtr Lag</i>			1.7	--	3.5	--	10.5	--	6.1	--	6.6	--	7.1	--	6.4	Feb-18
Growth Oriented Absolute Return - Gross** **	265,086,997	2.0	-1.3	--	2.9	--	13.2	--	12.4	--	8.2	--	7.3	--	5.6	Aug-04
Growth Oriented Absolute Return - Net			-1.3	--	2.9	--	13.2	--	12.4	--	8.2	--	7.3	--	5.6	
<i>HFRI FoF Composite Index + 1%</i>			0.6	--	1.6	--	7.2	--	9.5	--	6.6	--	5.8	--	6.4	Aug-04
Grosvenor SCARF Growth - Gross	61,539,425	0.5	0.0	59	-0.1	57	2.6	68	6.7	71	5.8	64	5.8	54	5.7	Nov-11
Grosvenor SCARF Growth - Net			0.0	59	-0.1	57	2.6	68	6.7	71	5.8	64	5.8	54	5.7	
<i>HFRI FoF Composite Index + 1%</i>			0.6	49	1.6	47	7.2	46	9.5	50	6.6	52	5.8	54	5.8	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			0.6		1.2		6.3		9.4		6.8		6.3		6.2	Nov-11
Lakewood - Gross	59,163,844	0.4	3.8	35	7.5	22	32.1	12	14.9	50	7.1	72	--	--	7.4	Jun-13
Lakewood - Net			3.8	35	7.5	22	32.1	12	14.9	50	7.1	72	--	--	7.4	
<i>HFRI FoF Composite Index + 1%</i>			0.6	57	1.6	47	7.2	58	9.5	73	6.6	77	5.8	80	6.0	Jun-13
<i>eV Alt Fundamental - Long/Short Equity Median</i>			1.6		0.9		9.6		14.9		10.9		9.0		8.4	Jun-13
Sculptor Domestic II - Gross	66,036,491	0.5	-2.0	83	-0.7	68	5.1	62	13.1	26	9.6	25	8.3	32	8.3	Dec-11
Sculptor Domestic II - Net			-2.0	83	-0.7	68	5.1	62	13.1	26	9.6	25	8.2	33	8.2	
<i>HFRI FoF Composite Index + 1%</i>			0.6	51	1.6	45	7.2	52	9.5	40	6.6	49	5.8	52	5.8	Dec-11
<i>eV Alt All Multi-Strategy Median</i>			0.7		1.1		7.5		7.8		6.5		6.0		6.0	Dec-11
Third Point Offshore Fund - Gross	78,347,237	0.6	-4.9	98	7.2	6	23.9	10	21.3	6	13.4	7	--	--	11.9	Apr-12
Third Point Offshore Fund - Net			-4.9	98	7.2	6	23.9	10	21.3	6	13.4	7	--	--	11.9	
<i>HFRI FoF Composite Index + 1%</i>			0.6	58	1.6	41	7.2	60	9.5	38	6.6	53	5.8	56	5.9	Apr-12
<i>eV Alt All Event Driven Median</i>			1.0		0.8		8.5		7.2		7.2		6.4		6.2	Apr-12

** Absolute Return managers are ranked in the eVest net of fee universe.

** Composite reflects net returns from Cliffwater up to March 2017.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Diversifying Asset Category - Gross	2,583,404,450	19.5	0.3	--	0.3	--	0.7	--	5.5	--	--	--	--	--	4.0	Mar-17
Diversifying Asset Category - Net			0.3	--	0.2	--	0.5	--	5.4	--	--	--	--	--	3.9	
<i>Diversifying Custom¹</i>			0.0	--	0.2	--	0.1	--	5.0	--	3.8	--	--	--	3.8	Mar-17
Core/Core Plus Fixed Income - Gross	1,027,565,896	7.8	0.1	--	0.4	--	-0.7	--	6.2	--	4.7	--	3.8	--	3.8	Jun-11
Core/Core Plus Fixed Income - Net			0.1	--	0.2	--	-0.8	--	6.0	--	4.5	--	3.6	--	3.7	
<i>Bloomberg US Aggregate TR</i>			0.0	--	0.1	--	-1.5	--	4.8	--	3.6	--	2.9	--	3.2	Jun-11
Prudential - Gross	514,080,691	3.9	0.3	6	0.5	5	-0.6	22	6.4	7	5.2	3	--	--	4.6	Jul-14
Prudential - Net			0.2	7	0.4	10	-0.8	32	6.2	12	5.0	4	--	--	4.5	
<i>Bloomberg US Aggregate TR</i>			0.0	38	0.1	46	-1.5	74	4.8	91	3.6	91	2.9	95	3.1	Jul-14
<i>eV US Core Fixed Inc Gross Median</i>			0.0		0.0		-1.2		5.5		4.1		3.5		3.6	Jul-14
TCW MetWest Fixed - Gross	513,485,205	3.9	0.0	35	0.2	25	-0.7	30	6.0	21	4.5	19	4.3	8	5.8	Dec-01
TCW MetWest Fixed - Net			0.0	43	0.1	45	-0.9	37	5.8	27	4.3	28	4.1	12	5.6	
<i>Bloomberg US Aggregate TR</i>			0.0	38	0.1	46	-1.5	74	4.8	91	3.6	91	2.9	95	4.3	Dec-01
<i>eV US Core Fixed Inc Gross Median</i>			0.0		0.0		-1.2		5.5		4.1		3.5		4.9	Dec-01
U.S. Treasury - Gross	479,858,907	3.6	0.1	--	0.2	--	-2.2	--	4.1	--	--	--	--	--	4.0	Feb-18
U.S. Treasury - Net			0.1	--	0.2	--	-2.2	--	4.1	--	--	--	--	--	4.0	
<i>Bloomberg US Treasury TR</i>			0.2	--	0.3	--	-2.3	--	4.1	--	3.1	--	2.1	--	4.0	Feb-18
Neuberger Berman - Gross ⁺	479,858,907	3.6	0.1	16	0.2	16	-2.2	74	4.1	48	3.4	23	3.0	2	6.2	Jun-88
Neuberger Berman - Net			0.1	17	0.2	17	-2.2	75	4.1	49	3.3	33	2.9	3	6.1	
<i>Bloomberg US Govt TR</i>			0.2	16	0.2	15	-2.3	75	4.1	49	3.1	56	2.1	72	5.6	Jun-88
<i>eV US Government Fixed Inc Gross Median</i>			-0.3		-0.2		-1.6		4.0		3.2		2.4		5.9	Jun-88

1. See Policy Index and Benchmark History.

+ Account converted to U.S. Treasury from Core Fixed Income in February 2018. Reflects linked historical returns up to February 2018.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Global Fixed Income - Gross	274,422,195	2.1	-0.4	--	-3.6	--	-4.8	--	5.4	--	4.8	--	--	--	2.9	May-13
Global Fixed Income - Net			-0.5	--	-3.8	--	-5.2	--	5.0	--	4.4	--	--	--	2.6	
<i>Brandywine Custom¹</i>			-1.4	--	-3.0	--	-7.3	--	2.7	--	3.0	--	--	--	1.2	May-13
Brandywine Global - Gross	274,422,195	2.1	-0.4	57	-3.6	89	-4.8	78	5.4	56	4.8	49	--	--	2.9	May-13
Brandywine Global - Net			-0.5	61	-3.8	90	-5.2	79	5.0	60	4.4	60	--	--	2.6	
<i>Brandywine Custom</i>			-1.4	86	-3.0	85	-7.3	93	2.7	92	3.0	87	--	--	1.2	May-13
<i>eV All Global Fixed Inc Gross Median</i>			-0.2		-0.4		-0.5		5.9		4.7		3.8		3.6	May-13
Diversifying Absolute Return - Gross ⁺⁺	801,557,453	6.0	0.8	--	1.6	--	6.6	--	5.3	--	2.8	--	2.9	--	2.8	Nov-11
Diversifying Absolute Return - Net			0.8	--	1.6	--	6.5	--	5.3	--	2.8	--	2.9	--	2.8	
<i>HFRI FoF Conservative Index</i>			0.6	--	1.5	--	7.5	--	6.7	--	4.9	--	5.0	--	5.0	Nov-11
Aristeia Partners LP - Gross	48,681,300	0.4	1.7	38	2.3	43	8.2	20	--	--	--	--	--	--	8.2	Dec-20
Aristeia Partners LP - Net			1.7	38	2.3	43	8.2	20	--	--	--	--	--	--	8.2	
<i>HFRI FoF Conservative Index</i>			0.6	57	1.5	52	7.5	22	6.7	48	4.9	59	5.0	48	7.5	Dec-20
<i>eV Alt Relative Value - Multi-Market Arbitrage Median</i>			1.2		1.6		2.1		6.3		5.7		4.8		2.1	Dec-20
BlackRock Event Driven Equity Fund - Gross	53,724,298	0.4	1.1	44	0.1	62	3.5	74	--	--	--	--	--	--	6.1	Feb-20
BlackRock Event Driven Equity Fund - Net			0.7	57	-0.6	70	1.9	82	--	--	--	--	--	--	4.5	
<i>HFRI FoF Conservative Index</i>			0.6	60	1.5	42	7.5	58	6.7	52	4.9	67	5.0	66	7.9	Feb-20
<i>eV Alt All Event Driven Median</i>			1.0		0.8		8.5		7.2		7.2		6.4		9.3	Feb-20
Davidson Kempner Instl Partners LP - Gross	58,708,732	0.4	0.2	59	0.0	63	7.1	53	--	--	--	--	--	--	6.5	Apr-19
Davidson Kempner Instl Partners LP - Net			0.2	59	0.0	63	7.1	53	--	--	--	--	--	--	6.5	
<i>HFRI FoF Conservative Index</i>			0.6	51	1.5	46	7.5	50	6.7	56	4.9	62	5.0	57	6.0	Apr-19
<i>eV Alt All Multi-Strategy Median</i>			0.7		1.1		7.5		7.8		6.5		6.0		7.3	Apr-19

1. See Policy Index and Benchmark History.

++ Absolute Return managers are ranked in the eVest net of fee universe.

** Composite reflects net returns from Cliffwater up to March 2017.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Eisler Capital Fund LP - Gross	42,707,773	0.3	-1.9	83	-5.1	88	--	--	--	--	--	--	--	--	-5.1	Jun-21
Eisler Capital Fund LP - Net			-1.9	83	-5.1	88	--	--	--	--	--	--	--	--	-5.1	
<i>HFRI FoF Conservative Index</i>			0.6	51	1.5	46	7.5	50	6.7	56	4.9	62	5.0	57	1.5	Jun-21
<i>eV Alt All Multi-Strategy Median</i>			0.7		1.1		7.5		7.8		6.5		6.0		1.1	Jun-21
Elliott Associates - Gross*	74,121,107	0.6	4.0	13	7.3	6	13.9	26	11.0	31	8.8	31	--	--	8.4	Apr-12
Elliott Associates - Net			4.0	13	7.3	6	13.9	26	11.0	31	8.8	31	--	--	8.4	
<i>HFRI FoF Conservative Index</i>			0.6	60	1.5	42	7.5	58	6.7	52	4.9	67	5.0	66	5.0	Apr-12
<i>eV Alt All Event Driven Median</i>			1.0		0.8		8.5		7.2		7.2		6.4		6.2	Apr-12
Graham Global Inv II - Gross	37,309,500	0.3	-1.3	57	-3.6	75	2.6	64	7.1	55	--	--	--	--	1.6	Feb-17
Graham Global Inv II - Net			-1.3	57	-3.6	75	2.6	64	7.1	55	--	--	--	--	1.6	
<i>HFRI FoF Conservative Index</i>			0.6	44	1.5	41	7.5	49	6.7	60	4.9	47	5.0	35	4.9	Feb-17
<i>eV Alt All Managed Futures Median</i>			-0.5		0.3		6.8		7.3		4.5		3.8		4.2	Feb-17
Grosvenor SCARF Diversifying - Gross	219,813,680	1.7	0.8	42	3.1	32	2.8	67	6.2	76	2.9	89	2.7	90	2.6	Nov-11
Grosvenor SCARF Diversifying - Net			0.8	42	3.1	32	2.8	67	6.2	76	2.9	89	2.7	90	2.6	
<i>HFRI FoF Conservative Index</i>			0.6	53	1.5	47	7.5	45	6.7	71	4.9	71	5.0	70	5.0	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			0.6		1.2		6.3		9.4		6.8		6.3		6.2	Nov-11
Grosvenor SCARF B Diversifying - Gross	220,528	0.0	-4.1	98	-6.5	93	-8.8	97	1.2	98	-0.7	99	--	--	0.4	Jan-13
Grosvenor SCARF B Diversifying - Net			-4.1	98	-6.5	93	-8.8	97	1.2	98	-0.7	99	--	--	0.4	
<i>HFRI FoF Conservative Index</i>			0.6	53	1.5	47	7.5	45	6.7	71	4.9	71	5.0	70	5.0	Jan-13
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			0.6		1.2		6.3		9.4		6.8		6.3		5.7	Jan-13
KLS Diversified Fund - Gross	161,818	0.0	-2.9	95	-3.7	94	-1.2	68	-2.8	95	--	--	--	--	-2.8	Dec-18
KLS Diversified Fund - Net			-2.9	95	-3.7	94	-1.2	68	-2.8	95	--	--	--	--	-2.8	
<i>HFRI FoF Conservative Index</i>			0.6	57	1.5	52	7.5	22	6.7	48	4.9	59	5.0	48	6.7	Dec-18
<i>eV Alt Relative Value - Multi-Market Arbitrage Median</i>			1.2		1.6		2.1		6.3		5.7		4.8		6.3	Dec-18

+ Preliminary quarterly returns as of 12/31/2021.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Laurion Capital - Gross	62,338,070	0.5	-3.9	94	-8.9	87	16.5	42	16.5	24	11.8	14	--	--	10.0	Mar-14
Laurion Capital - Net			-3.9	94	-8.9	87	16.5	42	16.5	24	11.8	14	--	--	10.0	
<i>HFRI FoF Conservative Index</i>			0.6	57	1.5	52	7.5	60	6.7	57	4.9	64	5.0	76	5.0	Mar-14
<i>eV Alt Relative Value - Equity Relative Value Median</i>			1.7		2.0		11.0		10.7		7.1		6.7		5.4	Mar-14
LMR Fund LTD - Gross	49,718,964	0.4	1.8	39	5.9	20	15.0	25	--	--	--	--	--	--	4.7	Oct-19
LMR Fund LTD - Net			1.8	39	5.9	20	15.0	25	--	--	--	--	--	--	4.7	
<i>HFRI FoF Conservative Index</i>			0.6	51	1.5	46	7.5	50	6.7	56	4.9	62	5.0	57	7.1	Oct-19
<i>eV Alt All Multi-Strategy Median</i>			0.7		1.1		7.5		7.8		6.5		6.0		7.7	Oct-19
MW Global Opportunities Fund - Gross	52,349,878	0.4	-2.8	76	1.1	50	-6.5	89	5.7	89	--	--	--	--	5.7	Dec-18
MW Global Opportunities Fund - Net			-2.8	76	1.1	50	-6.5	89	5.7	89	--	--	--	--	5.7	
<i>HFRI FoF Conservative Index</i>			0.6	58	1.5	48	7.5	58	6.7	84	4.9	85	5.0	86	6.7	Dec-18
<i>eV Alt Fundamental - Long/Short Equity Median</i>			1.6		0.9		9.6		14.9		10.9		9.0		14.9	Dec-18
PSquared Event Driven Opp Fund - Gross	52,608,803	0.4	1.9	26	3.4	21	3.3	74	--	--	--	--	--	--	3.8	Jul-20
PSquared Event Driven Opp Fund - Net			1.9	26	3.4	21	3.3	74	--	--	--	--	--	--	3.8	
<i>HFRI FoF Conservative Index</i>			0.6	60	1.5	42	7.5	58	6.7	52	4.9	67	5.0	66	10.4	Jul-20
<i>eV Alt All Event Driven Median</i>			1.0		0.8		8.5		7.2		7.2		6.4		13.1	Jul-20
Two Sigma Risk Premia Enhanced - Gross	49,093,002	0.4	9.3	7	10.7	8	22.3	11	--	--	--	--	--	--	3.9	Sep-19
Two Sigma Risk Premia Enhanced - Net			9.3	7	10.7	8	22.3	11	--	--	--	--	--	--	3.9	
<i>HFRI FoF Conservative Index</i>			0.6	51	1.5	46	7.5	50	6.7	56	4.9	62	5.0	57	6.9	Sep-19
<i>eV Alt All Multi-Strategy Median</i>			0.7		1.1		7.5		7.8		6.5		6.0		8.0	Sep-19

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Real Return (with SSgA RA Overlay Proxy) - Gross	2,190,664,904	16.5	5.9	--	11.6	--	21.4	--	9.4	--	--	--	--	--	9.4	Mar-17
Real Return (with SSgA RA Overlay Proxy) - Net			5.9	--	11.5	--	21.2	--	9.2	--	--	--	--	--	9.2	
<i>Real Return Custom¹</i>			4.6	--	9.9	--	18.4	--	6.8	--	6.6	--	--	--	6.7	Mar-17
Real Return Asset Category - Gross	2,190,664,904	16.5	5.9	--	11.6	--	21.4	--	9.3	--	--	--	--	--	10.0	Mar-17
Real Return Asset Category - Net			5.9	--	11.5	--	21.2	--	9.1	--	--	--	--	--	9.8	
<i>Real Return Custom</i>			4.6	--	9.9	--	18.4	--	6.8	--	6.6	--	--	--	6.7	Mar-17
Real Estate - Gross	1,001,589,614	7.6	7.6	47	14.3	44	23.3	12	11.6	3	11.0	3	11.6	4	11.7	Jun-11
Real Estate - Net			7.5	49	14.2	44	23.2	13	11.3	4	10.7	3	10.9	6	11.0	
<i>Real Estate Custom¹</i>			6.7	60	12.9	61	19.5	55	8.5	47	8.1	41	9.5	30	9.7	Jun-11
<i>InvMetrics All DB Real Estate Priv Net Median</i>			7.5		13.9		20.3		8.2		7.5		9.0		9.1	Jun-11
Core RE -Limited Partnership - Gross	734,990,361	5.5	7.9	--	15.3	--	26.5	--	12.8	--	11.9	--	11.9	--	6.7	Sep-08
Core RE -Limited Partnership - Net			7.9	--	15.2	--	26.3	--	12.5	--	11.6	--	11.4	--	6.2	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	6.4	Sep-08
Brookfield Premier RE Partners - Gross*	122,388,985	0.9	10.5	--	15.3	--	23.1	--	10.8	--	--	--	--	--	10.6	Sep-18
Brookfield Premier RE Partners - Net			10.5	--	15.3	--	23.1	--	10.8	--	--	--	--	--	10.6	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	9.0	Sep-18
Clarion Lion Properties - Gross	125,714,137	0.9	7.8	--	14.4	--	23.4	--	10.6	--	--	--	--	--	10.4	Sep-18
Clarion Lion Properties - Net			7.6	--	13.9	--	22.4	--	9.7	--	--	--	--	--	9.5	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	9.0	Sep-18
Metlife Core Property - Gross	81,572,637	0.6	8.4	--	16.5	--	27.6	--	11.8	--	10.3	--	--	--	11.8	Dec-13
Metlife Core Property - Net			8.3	--	16.3	--	27.0	--	11.3	--	9.8	--	--	--	11.3	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	10.0	Dec-13
Principal US Property - Gross	59,894,894	0.5	10.0	--	15.5	--	22.6	--	9.3	--	8.8	--	--	--	9.1	Oct-15
Principal US Property - Net			10.0	--	15.5	--	22.6	--	9.3	--	8.8	--	--	--	9.1	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	9.1	Oct-15

1. See Policy Index and Benchmark History.
* Preliminary quarterly returns as of 12/31/2021.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Prologis Targeted Euro Logistics - Gross*	77,365,906	0.6	7.6	--	12.5	--	24.9	--	18.1	--	18.5	--	--	--	15.4	Oct-15
Prologis Targeted Euro Logistics - Net			7.6	--	12.5	--	24.9	--	18.1	--	18.5	--	--	--	15.4	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	9.1	Oct-15
Prologis Targeted US Logistics - Gross*	123,252,015	0.9	14.9	--	28.0	--	51.1	--	24.8	--	22.1	--	--	--	20.5	Jul-15
Prologis Targeted US Logistics - Net			14.9	--	28.0	--	51.1	--	24.8	--	22.1	--	--	--	20.5	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	9.3	Jul-15
Townsend Real Estate - Gross*	144,801,788	1.1	0.0	--	7.8	--	17.9	--	9.0	--	9.3	--	--	--	9.5	Mar-16
Townsend Real Estate - Net			0.0	--	7.8	--	17.9	--	9.0	--	9.3	--	--	--	9.5	
<i>NFI-ODCE</i>			8.0	--	15.1	--	22.2	--	9.2	--	8.7	--	10.4	--	8.7	Mar-16
Non-Core RE -Opportunistic - Gross**	185,768,078	1.4	8.2	--	13.7	--	17.8	--	7.6	--	7.6	--	--	--	17.4	Feb-14
Non-Core RE -Opportunistic - Net			8.2	--	13.7	--	17.8	--	7.6	--	7.6	--	--	--	16.8	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	9.3	Feb-14
Carlyle China Realty - Gross	8,707,172	0.1	3.3	--	3.7	--	4.9	--	4.9	--	--	--	--	--	-0.9	Jun-17
Carlyle China Realty - Net			3.3	--	3.7	--	4.9	--	4.9	--	--	--	--	--	-0.9	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	7.1	Jun-17
Carlyle China Rome Logistics - Gross	38,686,846	0.3	3.6	--	3.9	--	5.3	--	2.8	--	--	--	--	--	-0.4	Jun-17
Carlyle China Rome Logistics - Net			3.6	--	3.9	--	5.3	--	2.8	--	--	--	--	--	-0.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	7.1	Jun-17
CIM Opportunity VIII - Gross	30,143,127	0.2	-0.2	--	-3.6	--	-8.8	--	-7.1	--	-1.9	--	--	--	0.4	Feb-15
CIM Opportunity VIII - Net			-0.2	--	-3.6	--	-8.8	--	-7.1	--	-1.9	--	--	--	-0.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	8.9	Feb-15
Kohlberg Kravis Roberts - Gross	2,005,215	0.0	10.8	--	30.2	--	21.7	--	-6.0	--	-13.7	--	--	--	3.8	Feb-14
Kohlberg Kravis Roberts - Net			10.8	--	30.2	--	21.7	--	-6.0	--	-13.7	--	--	--	3.6	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	9.3	Feb-14

* Preliminary quarterly returns as of 12/31/2021.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.

** Non-Core RE returns are one-quarter lag.

Total Fund Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Lasalle China Logistics Venture LP - Gross	2,470,237	0.0	-44.2	--	--	--	--	--	--	--	--	--	--	--	-44.2	Sep-21
Lasalle China Logistics Venture LP - Net			-44.2	--	--	--	--	--	--	--	--	--	--	--	-44.2	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	4.3	Sep-21
NREP Nordic Strat II - Gross	46,939,065	0.4	27.5	--	45.8	--	61.1	--	27.6	--	28.3	--	--	--	22.3	Jun-16
NREP Nordic Strat II - Net			27.5	--	45.8	--	61.1	--	27.6	--	28.3	--	--	--	22.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	7.3	Jun-16
NREP Nordic Strat III - Gross	34,198,202	0.3	1.1	--	8.6	--	19.4	--	3.6	--	--	--	--	--	5.8	Jul-18
NREP Nordic Strat III - Net			1.1	--	8.6	--	19.4	--	3.6	--	--	--	--	--	5.8	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	6.9	Jul-18
NREP Nordic Strat IV - Gross	9,767,829	0.1	7.7	--	15.3	--	119.0	--	--	--	--	--	--	--	20.7	Jul-20
NREP Nordic Strat IV - Net			7.7	--	15.3	--	119.0	--	--	--	--	--	--	--	20.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	7.9	Jul-20
Sculptor Real Estate Fund III - Gross	8,610,782	0.1	3.7	--	13.0	--	22.3	--	14.2	--	19.3	--	--	--	9.5	Sep-14
Sculptor Real Estate Fund III - Net			3.7	--	13.0	--	22.3	--	14.2	--	19.3	--	--	--	6.6	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	8.8	Sep-14
Sculptor Real Estate Fund IV - Gross	4,239,603	0.0	7.1	--	16.5	--	31.6	--	--	--	--	--	--	--	3.7	Jun-20
Sculptor Real Estate Fund IV - Net			7.1	--	16.5	--	31.6	--	--	--	--	--	--	--	3.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	--	--	7.5	Jun-20
Core RE -Value Added - Gross⁺ ⁺⁺	80,831,176	0.6	3.3	--	6.4	--	8.2	--	9.6	--	10.2	--	11.3	--	0.6	Sep-08
Non-Core RE -Value Added - Net			3.3	--	6.4	--	8.2	--	9.6	--	10.2	--	10.7	--	-0.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	7.7	Sep-08
Asana Partners Fund II - Gross [*]	21,707,575	0.2	15.5	--	25.8	--	45.9	--	--	--	--	--	--	--	--	Apr-19
Asana Partners Fund II - Net			15.5	--	25.8	--	45.9	--	--	--	--	--	--	--	--	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	6.6	Apr-19

* Unable to calculate a since inception return due to system limitations when Asana Partners Fund II experienced a quarter of negative fund value in 2019.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.

++ Non-Core RE returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
ECE Euro Prime Shopping II - Gross	34,765,778	0.3	-3.1	--	-2.3	--	-4.9	--	-0.4	--	5.1	--	--	--	9.0	Jul-15
ECE Euro Prime Shopping II - Net			-3.1	--	-2.3	--	-4.9	--	-0.4	--	5.1	--	--	--	8.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	8.4	Jul-15
European RE Debt II - Gross	2,519,391	0.0	3.3	--	10.4	--	-62.9	--	-26.0	--	-12.0	--	--	--	-7.4	Nov-13
European RE Debt II - Net			3.3	--	10.4	--	-62.9	--	-26.0	--	-12.0	--	--	--	-7.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	9.6	Nov-13
Hammes II - Gross	2,714,689	0.0	3.7	--	9.3	--	1,081.3	--	239.9	--	119.7	--	--	--	93.0	Jul-15
Hammes II - Net			3.7	--	9.3	--	1,081.3	--	239.9	--	119.7	--	--	--	90.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	8.4	Jul-15
Hammes III - Gross	19,123,743	0.1	2.4	--	4.7	--	40.9	--	-9.5	--	--	--	--	--	-9.0	Oct-18
Hammes III - Net			2.4	--	4.7	--	40.9	--	-9.5	--	--	--	--	--	-9.0	
<i>NFI-ODCE net +1% 1Q Lag</i>			4.3	--	8.8	--	14.6	--	7.1	--	7.2	--	10.1	--	6.8	Oct-18
Private Real Assets - Gross**	766,650,754	5.8	5.0	--	13.3	--	24.8	--	7.5	--	10.9	--	--	--	5.7	Jan-13
Private Real Assets - Net			5.0	--	13.3	--	24.8	--	7.5	--	10.9	--	--	--	5.7	
<i>Private Real Assets Custom¹</i>			2.8	--	8.3	--	18.4	--	4.4	--	6.1	--	--	--	6.1	Jan-13
<i>CPI-U Headline +5%</i>			3.6	--	5.8	--	12.0	--	8.5	--	7.9	--	7.0	--	7.1	Jan-13
ACM II - Gross	17,691,538	0.1	-1.7	--	-3.8	--	-9.0	--	-8.0	--	-7.1	--	--	--	-7.4	Sep-16
ACM II - Net			-1.7	--	-3.8	--	-9.0	--	-8.0	--	-7.1	--	--	--	-7.4	
<i>NCREIF Farmland 1 Qtr Lag</i>			1.5	--	3.0	--	5.5	--	4.9	--	5.5	--	10.2	--	5.5	Sep-16
ArcLight Energy VI - Gross	25,061,847	0.2	5.5	--	0.7	--	3.0	--	-9.6	--	0.5	--	--	--	0.8	Aug-15
ArcLight Energy VI - Net			5.5	--	0.7	--	3.0	--	-9.6	--	0.5	--	--	--	0.8	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	11.8	Aug-15

1. See Policy and Benchmark History .

** Private Real Assets returns are one-quarter lag.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Brookfield Infra III - Gross	34,355,853	0.3	4.1	--	8.8	--	15.3	--	11.7	--	9.5	--	--	--	11.6	May-16
Brookfield Infra III - Net			4.1	--	8.8	--	15.3	--	11.7	--	9.5	--	--	--	11.6	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	11.5	May-16
Brookfield Infra IV - Gross	26,942,122	0.2	3.3	--	6.5	--	14.4	--	--	--	--	--	--	--	8.3	Sep-19
Brookfield Infra IV - Net			3.3	--	6.5	--	14.4	--	--	--	--	--	--	--	8.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	9.8	Sep-19
Carlyle Power II - Gross	37,124,358	0.3	9.2	--	11.3	--	21.2	--	10.4	--	11.5	--	--	--	4.1	Oct-15
Carlyle Power II - Net			9.2	--	11.3	--	21.2	--	10.4	--	11.5	--	--	--	4.1	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	11.1	Oct-15
EnCap Energy IX - Gross	15,071,637	0.1	8.3	--	45.0	--	127.0	--	-5.1	--	3.4	--	--	--	-0.9	Jan-13
EnCap Energy IX - Net			8.3	--	45.0	--	127.0	--	-5.1	--	3.4	--	--	--	-0.9	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	0.8	Jan-13
EnCap Energy X - Gross	33,105,413	0.2	10.1	--	30.6	--	69.2	--	8.4	--	12.2	--	--	--	2.3	Apr-15
EnCap Energy X - Net			10.1	--	30.6	--	69.2	--	8.4	--	12.2	--	--	--	2.3	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	0.0	Apr-15
EnCap Flatrock Midstream III - Gross	13,502,896	0.1	5.0	--	9.7	--	17.3	--	2.4	--	8.3	--	--	--	5.8	Jul-14
EnCap Flatrock Midstream III - Net			5.0	--	9.7	--	17.3	--	2.4	--	8.3	--	--	--	5.8	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.3	Jul-14
EnCap Flatrock Midstream IV - Gross	5,981,432	0.0	3.8	--	5.4	--	11.0	--	8.9	--	--	--	--	--	1.4	Feb-18
EnCap Flatrock Midstream IV - Net			3.8	--	5.4	--	11.0	--	8.9	--	--	--	--	--	1.4	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.3	Feb-18
EQT Infrastructure Fund IV - Gross	30,988,709	0.2	3.9	--	9.7	--	21.9	--	--	--	--	--	--	--	-1.3	Jun-19
EQT Infrastructure Fund IV - Net			3.9	--	9.7	--	21.9	--	--	--	--	--	--	--	-1.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	9.8	Jun-19

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
First Reserve - Gross	15,063,965	0.1	0.9	--	-6.0	--	-9.4	--	0.6	--	14.4	--	--	--	-1.2	Dec-14
First Reserve - Net			0.9	--	-6.0	--	-9.4	--	0.6	--	14.4	--	--	--	-1.2	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.5	Dec-14
Harrison St Social Infra Fd - Gross	73,870,222	0.6	1.7	--	--	--	--	--	--	--	--	--	--	--	1.7	Jul-21
Harrison St Social Infra Fd - Net			1.7	--	--	--	--	--	--	--	--	--	--	--	1.7	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	6.1	Jul-21
IFM Global Infrastructure US LP - Gross	141,141,116	1.1	4.9	--	11.7	--	18.0	--	11.3	--	--	--	--	--	12.4	Apr-17
IFM Global Infrastructure US LP - Net			4.9	--	11.7	--	18.0	--	11.3	--	--	--	--	--	12.4	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	11.7	Apr-17
ISQ Global Infrastructure Fund II - Gross	45,259,096	0.3	5.2	--	8.2	--	19.2	--	14.5	--	--	--	--	--	13.7	Oct-18
ISQ Global Infrastructure Fund II - Net			5.2	--	8.2	--	19.2	--	14.5	--	--	--	--	--	13.7	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.0	Oct-18
ISQ Global Infrastructure Fund III - Gross	3,045,768	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	Dec-21
ISQ Global Infrastructure Fund III - Net			--	--	--	--	--	--	--	--	--	--	--	--	--	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	--	Dec-21
Meridiam Infra N America III - Gross	11,649,544	0.1	91.2	--	106.9	--	103.6	--	-39.5	--	--	--	--	--	-69.1	Sep-17
Meridiam Infra N America III - Net			91.2	--	106.9	--	103.6	--	-39.5	--	--	--	--	--	-69.1	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.4	Sep-17
Meridiam Sa Infra Euro IV - Gross	1,107,139	0.0	-67.7	--	--	--	--	--	--	--	--	--	--	--	-67.7	Jul-21
Meridiam Sa Infra Euro IV - Net			-67.7	--	--	--	--	--	--	--	--	--	--	--	-67.7	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	6.1	Jul-21

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
NGP Royalty Partners - Gross	15,817,194	0.1	15.8	--	22.3	--	50.5	--	--	--	--	--	--	--	23.2	Aug-20
NGP Royalty Partners - Net			15.8	--	22.3	--	50.5	--	--	--	--	--	--	--	23.2	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	27.6	Aug-20
Paine Schwartz Food Chain V - Gross	21,483,396	0.2	6.9	--	20.5	--	22.0	--	--	--	--	--	--	--	-1.8	Jan-20
Paine Schwartz Food Chain V - Net			6.9	--	20.5	--	22.0	--	--	--	--	--	--	--	-1.8	
<i>NCREIF Farmland 1 Qtr Lag</i>			1.5	--	3.0	--	5.5	--	4.9	--	5.5	--	10.2	--	4.9	Jan-20
Pantheon Ventures - Gross	57,682,875	0.4	5.9	--	9.4	--	22.1	--	7.5	--	9.0	--	--	--	17.3	Jul-14
Pantheon Ventures - Net			5.9	--	9.4	--	22.1	--	7.5	--	9.0	--	--	--	17.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	10.3	Jul-14
Quantum Energy VI - Gross	42,941,963	0.3	-0.1	--	33.9	--	59.5	--	16.0	--	22.7	--	--	--	22.2	Nov-14
Quantum Energy VI - Net			-0.1	--	33.9	--	59.5	--	16.0	--	22.7	--	--	--	22.2	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	-2.1	Nov-14
Quantum Energy VII - Gross	31,625,133	0.2	-7.6	--	29.4	--	81.4	--	15.0	--	--	--	--	--	8.4	Aug-17
Quantum Energy VII - Net			-7.6	--	29.4	--	81.4	--	15.0	--	--	--	--	--	8.4	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	0.9	Aug-17
Tailwater Energy Fund III - Gross	28,650,358	0.2	4.6	--	9.8	--	8.1	--	0.7	--	--	--	--	--	-2.2	Sep-18
Tailwater Energy Fund III - Net			4.6	--	9.8	--	8.1	--	0.7	--	--	--	--	--	-2.2	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	-1.7	Sep-18
Tailwater Energy IV - Gross	21,183,217	0.2	8.1	--	17.1	--	21.8	--	--	--	--	--	--	--	-10.6	Oct-19
Tailwater Energy IV - Net			8.1	--	17.1	--	21.8	--	--	--	--	--	--	--	-10.6	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			4.2	--	14.2	--	31.5	--	-2.6	--	2.7	--	2.1	--	0.1	Oct-19
Wastewater Opportunity - Gross	16,303,963	0.1	-0.5	--	1.4	--	19.7	--	4.5	--	-1.9	--	--	--	-15.3	Dec-15
Wastewater Opportunity - Net			-0.5	--	1.4	--	19.7	--	4.5	--	-1.9	--	--	--	-15.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			2.2	--	6.1	--	14.7	--	9.8	--	10.9	--	9.8	--	11.2	Dec-15

Total Fund
Performance Summary

Period Ending: December 31, 2021

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Liquid Real Return - Gross	422,424,536	3.2	4.1	--	5.1	--	13.8	--	--	--	--	--	--	--	7.7	Jun-19
Liquid Real Return - Net			4.0	--	5.0	--	13.5	--	--	--	--	--	--	--	7.3	
SSgA Real Asset ¹			3.8	--	5.2	--	13.7	--	9.5	--	5.8	--	3.7	--	7.1	Jun-19
Brookfield Liquid Real Return - Gross	117,283,180	0.9	5.0	--	4.8	--	13.6	--	--	--	--	--	--	--	8.7	Nov-19
Brookfield Liquid Real Return - Net			4.8	--	4.5	--	12.9	--	--	--	--	--	--	--	8.1	
Brookfield Real Return Custom ¹			4.5	--	4.6	--	10.9	--	--	--	--	--	--	--	7.3	Nov-19
SSgA Passive Real Return Proxy - Gross	305,141,356	2.3	3.8	--	5.2	--	13.9	--	9.8	--	6.0	--	3.9	--	2.6	Jan-08
SSgA Passive Real Return Proxy - Net			3.7	--	5.0	--	13.6	--	9.4	--	5.7	--	3.7	--	2.4	
SSgA Real Asset			3.8	--	5.2	--	13.7	--	9.5	--	5.8	--	3.7	--	--	Jan-08
Opportunities Asset Category - Gross ^{**++}	3,310,597	0.0	1.3	--	1.5	--	18.5	--	8.8	--	7.0	--	15.3	--	14.2	Oct-07
Opportunities Asset Category - Net			1.3	--	1.5	--	18.5	--	8.8	--	7.0	--	15.3	--	14.2	
Policy Index			3.6	--	5.1	--	14.4	--	13.2	--	10.4	--	9.4	--	8.6	Oct-07
Atalaya Special Opportunities V - Gross	3,310,597	0.0	1.3	--	1.5	--	18.5	--	8.8	--	6.6	--	--	--	6.4	Jul-13
Atalaya Special Opportunities V - Net			1.3	--	1.5	--	18.5	--	8.8	--	6.6	--	--	--	6.4	
Thomson Reuters C A All PE 1 Qtr Lag			5.1	--	18.1	--	48.3	--	22.0	--	19.7	--	19.5	--	17.5	Jul-13
Cash - Gross	347,376,449	2.6	0.1	--	0.3	--	0.7	--	1.6	--	1.8	--	1.3	--	3.0	Jun-92
Cash - Net			0.1	--	0.3	--	0.7	--	1.6	--	1.8	--	1.3	--	--	
91 Day T-Bills			0.0	--	0.0	--	0.0	--	0.8	--	1.1	--	0.6	--	2.3	Jun-92
Cash Account - Gross	250,990,090	1.9	0.1	--	0.4	--	1.0	--	1.9	--	2.0	--	1.4	--	3.1	Jun-92
Cash Account - Net			0.1	--	0.4	--	1.0	--	1.9	--	2.0	--	1.4	--	--	
91 Day T-Bills			0.0	--	0.0	--	0.0	--	0.8	--	1.1	--	0.6	--	2.3	Jun-92
Dedicated Cash Allocation - Gross	96,386,360	0.7	0.0	--	0.0	--	0.1	--	--	--	--	--	--	--	0.6	Jun-19
Dedicated Cash Allocation - Net			0.0	--	0.0	--	0.1	--	--	--	--	--	--	--	0.6	
ICE LIBOR Spot/Next Overnight USD			0.0	--	0.0	--	0.1	--	0.9	--	1.1	--	0.6	--	0.6	Jun-19

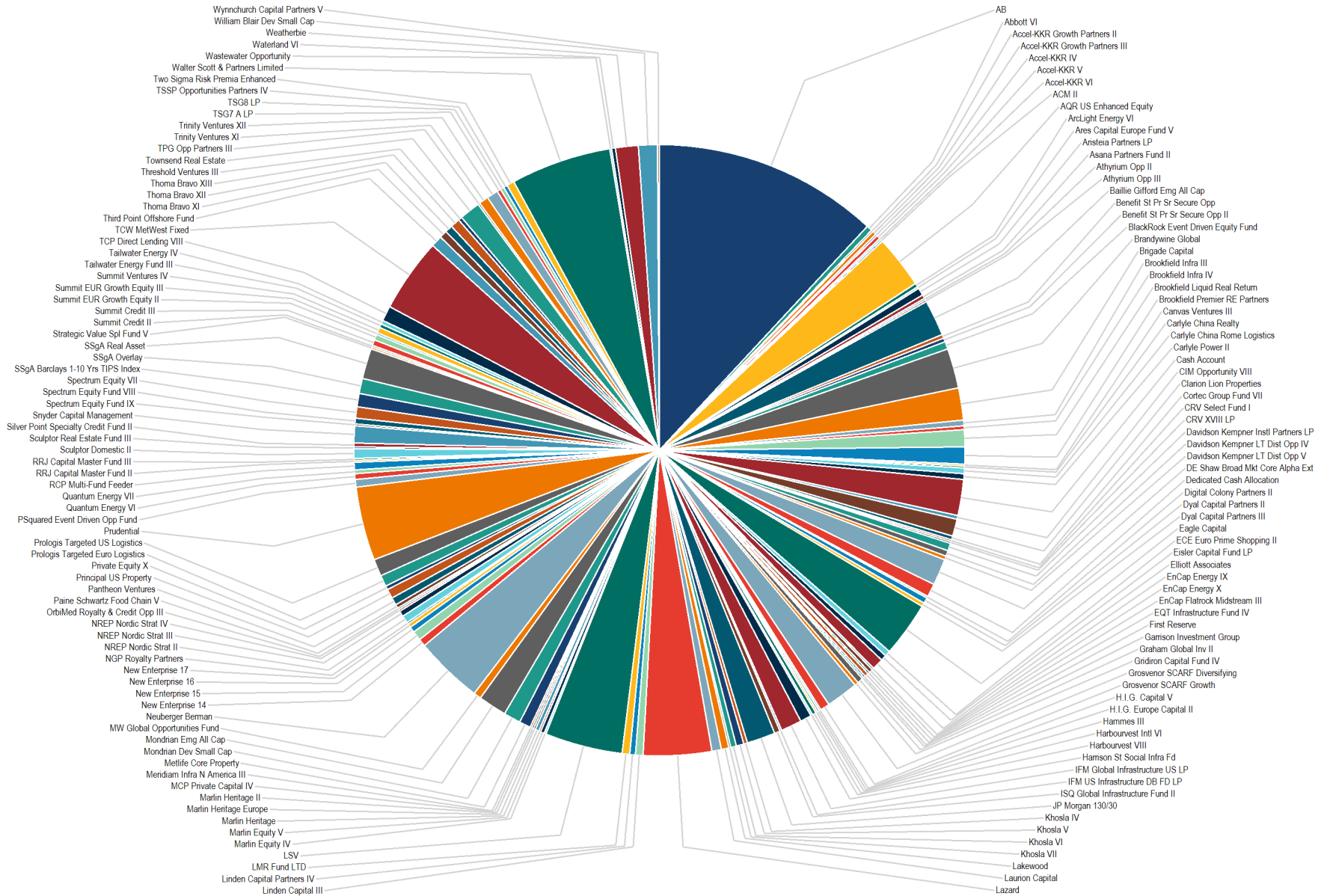
1. See Policy and Benchmark History .

** Composite reflects net returns from Cliffwater up to March 2017.

++ Oportunities Asset returns are one-quarter lag.

Total Fund Manager Allocation Analysis

Period Ending: December 31, 2021



Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
AB	\$1,578,555,767	11.9%
AQR US Enhanced Equity	\$369,732,093	2.8%
JP Morgan 130/30	\$201,112,617	1.5%
DE Shaw Broad Mkt Core Alpha Ext	\$184,617,708	1.4%
Eagle Capital	\$380,786,068	2.9%
Huber Capital	\$20,264	0.0%
Weatherbie	\$160,886,656	1.2%
Snyder Capital Management	\$123,950,700	0.9%
Lazard	\$478,934,552	3.6%
Walter Scott & Partners Limited	\$708,395,386	5.3%
LSV	\$541,451,470	4.1%
Mondrian Dev Small Cap	\$121,853,241	0.9%
William Blair Dev Small Cap	\$136,691,030	1.0%
Baillie Gifford Emg All Cap	\$252,836,708	1.9%
Mondrian Emg All Cap	\$203,611,325	1.5%
CBRE Clarion	\$4,287	0.0%
Abbott VI	\$39,841,832	0.3%
Accel-KKR IV	\$15,953,176	0.1%
Accel-KKR V	\$26,991,817	0.2%
Accel-KKR VI	\$6,901,154	0.1%
Accel-KKR Growth Partners II	\$11,933,067	0.1%
Accel-KKR Growth Partners III	\$30,336,485	0.2%
Atalaya Special Opp VI	\$5,941,882	0.0%
Canvas Ventures III	\$6,850,463	0.1%
Cortec Group Fund VII	\$26,391,859	0.2%
CRV Select Fund I	\$19,249,129	0.1%
CRV XVIII LP	\$15,565,665	0.1%
Davidson Kempner LT Dist Opp IV	\$39,033,433	0.3%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
Davidson Kempner LT Dist Opp V	\$26,076,889	0.2%
Digital Colony Partners II	\$15,838,273	0.1%
Dyal Capital Partners II	\$34,109,278	0.3%
Dyal Capital Partners III	\$25,897,042	0.2%
Garrison Investment Group	\$8,090,693	0.1%
Gridiron Capital Fund IV	\$30,159,051	0.2%
Harbourvest VIII	\$9,176,500	0.1%
Harbourvest Intl VI	\$32,160,854	0.2%
H.I.G. Bayside Loan III	\$4,425,324	0.0%
H.I.G. Capital V	\$12,292,792	0.1%
H.I.G. Europe Capital II	\$10,754,496	0.1%
Khosla IV	\$26,465,167	0.2%
Khosla V	\$51,986,535	0.4%
Khosla VI	\$41,310,513	0.3%
Khosla VII	\$6,725,706	0.1%
Linden Capital III	\$54,992,802	0.4%
Linden Capital Partners IV	\$36,229,297	0.3%
Marlin Equity IV	\$12,086,565	0.1%
Marlin Equity V	\$23,087,686	0.2%
Marlin Heritage	\$8,916,466	0.1%
Marlin Heritage II	\$11,734,510	0.1%
Marlin Heritage Europe	\$33,048,100	0.2%
New Enterprise 14	\$58,354,280	0.4%
New Enterprise 15	\$72,769,500	0.5%
New Enterprise 16	\$45,889,089	0.3%
New Enterprise 17	\$22,016,492	0.2%
OrbiMed Private Investments VIII, LP	\$5,369,847	0.0%
Private Equity X	\$22,268,028	0.2%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
RCP Multi-Fund Feeder	\$57,421,134	0.4%
RRJ Capital Master Fund II	\$12,454,947	0.1%
RRJ Capital Master Fund III	\$12,667,816	0.1%
Shamrock Capital II	\$5,682,515	0.0%
Shamrock Capital Growth Fund V	\$670,055	0.0%
Spectrum Equity VII	\$78,690,140	0.6%
Spectrum Equity Fund VIII	\$33,299,608	0.3%
Spectrum Equity Fund IX	\$9,296,530	0.1%
Strategic Value Spl Fund V	\$7,399,132	0.1%
Summit EUR Growth Equity II	\$39,563,098	0.3%
Summit EUR Growth Equity III	\$7,255,007	0.1%
Summit Ventures III	\$3,150,631	0.0%
Summit Ventures IV	\$41,294,478	0.3%
Summit Ventures V	\$5,114,915	0.0%
Thoma Bravo XI	\$59,176,596	0.4%
Thoma Bravo XII	\$51,211,328	0.4%
Thoma Bravo XIII	\$64,655,729	0.5%
Threshold Ventures III	\$22,509,426	0.2%
TPG Opp Partners III	\$13,280,774	0.1%
Trinity Ventures XI	\$60,419,218	0.5%
Trinity Ventures XII	\$83,451,637	0.6%
TSG7 A LP	\$29,067,481	0.2%
TSG7 B LP	\$5,750,052	0.0%
TSG8 LP	\$21,978,191	0.2%
TSSP Opportunities Partners IV	\$29,223,605	0.2%
Waterland V	\$3,584,943	0.0%
Waterland VI	\$23,887,237	0.2%
Wayzata Opportunities III	\$4,061,395	0.0%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
Wynnchurch Capital Partners V	\$6,895,898	0.1%
Brigade Capital	\$223,093,865	1.7%
Ares Capital Europe Fund V	\$13,145,827	0.1%
Athyrium Opp II	\$11,672,428	0.1%
Athyrium Opp III	\$14,385,180	0.1%
Benefit St Pr Sr Secure Opp	\$32,056,468	0.2%
Benefit St Pr Sr Secure Opp II	\$23,877,219	0.2%
IFM US Infrastructure DB FD LP	\$8,861,532	0.1%
MCP Private Capital IV	\$12,033,099	0.1%
OrbiMed Royalty & Credit Opp III	\$11,338,248	0.1%
Shamrock Capital Debt Fund I	\$2,030,718	0.0%
Silver Point Specialty Credit Fund II	\$27,619,877	0.2%
Summit Credit	\$403,827	0.0%
Summit Credit II	\$13,275,187	0.1%
Summit Credit III	\$33,813,549	0.3%
Summit Credit IV	\$6,307,948	0.0%
TCP Direct Lending VIII	\$99,790,875	0.8%
Grosvenor SCARF Growth	\$61,539,425	0.5%
Lakewood	\$59,163,844	0.4%
Sculptor Domestic II	\$66,036,491	0.5%
Third Point Offshore Fund	\$78,347,237	0.6%
Prudential	\$514,080,691	3.9%
TCW MetWest Fixed	\$513,485,205	3.9%
Neuberger Berman	\$479,858,907	3.6%
Brandywine Global	\$274,422,195	2.1%
Aristeia Partners LP	\$48,681,300	0.4%
BlackRock Event Driven Equity Fund	\$53,724,298	0.4%
Davidson Kempner Instl Partners LP	\$58,708,732	0.4%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
Eisler Capital Fund LP	\$42,707,773	0.3%
Elliott Associates	\$74,121,107	0.6%
Graham Global Inv II	\$37,309,500	0.3%
Grosvenor SCARF Diversifying	\$219,813,680	1.7%
Grosvenor SCARF B Diversifying	\$220,528	0.0%
KLS Diversified Fund	\$161,818	0.0%
Laurion Capital	\$62,338,070	0.5%
LMR Fund LTD	\$49,718,964	0.4%
MW Global Opportunities Fund	\$52,349,878	0.4%
PSquared Event Driven Opp Fund	\$52,608,803	0.4%
Two Sigma Risk Premia Enhanced	\$49,093,002	0.4%
Brookfield Premier RE Partners	\$122,388,985	0.9%
Clarion Lion Properties	\$125,714,137	0.9%
Metlife Core Property	\$81,572,637	0.6%
Principal US Property	\$59,894,894	0.5%
Prologis Targeted Euro Logistics	\$77,365,906	0.6%
Prologis Targeted US Logistics	\$123,252,015	0.9%
Townsend Real Estate	\$144,801,788	1.1%
Carlyle China Realty	\$8,707,172	0.1%
Carlyle China Rome Logistics	\$38,686,846	0.3%
CIM Opportunity VIII	\$30,143,127	0.2%
Kohlberg Kravis Roberts	\$2,005,215	0.0%
Lasalle China Logistics Venture LP	\$2,470,237	0.0%
NREP Nordic Strat II	\$46,939,065	0.4%
NREP Nordic Strat III	\$34,198,202	0.3%
NREP Nordic Strat IV	\$9,767,829	0.1%
Sculptor Real Estate Fund III	\$8,610,782	0.1%
Sculptor Real Estate Fund IV	\$4,239,603	0.0%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
Asana Partners Fund II	\$21,707,575	0.2%
ECE Euro Prime Shopping II	\$34,765,778	0.3%
European RE Debt II	\$2,519,391	0.0%
Hammes II	\$2,714,689	0.0%
Hammes III	\$19,123,743	0.1%
ACM II	\$17,691,538	0.1%
ArcLight Energy VI	\$25,061,847	0.2%
Brookfield Infra III	\$34,355,853	0.3%
Brookfield Infra IV	\$26,942,122	0.2%
Carlyle Power II	\$37,124,358	0.3%
EnCap Energy IX	\$15,071,637	0.1%
EnCap Energy X	\$33,105,413	0.2%
EnCap Flatrock Midstream III	\$13,502,896	0.1%
EnCap Flatrock Midstream IV	\$5,981,432	0.0%
EQT Infrastructure Fund IV	\$30,988,709	0.2%
First Reserve	\$15,063,965	0.1%
Harrison St Social Infra Fd	\$73,870,222	0.6%
IFM Global Infrastructure US LP	\$141,141,116	1.1%
ISQ Global Infrastructure Fund II	\$45,259,096	0.3%
ISQ Global Infrastructure Fund III	\$3,045,768	0.0%
Meridiam Infra N America III	\$11,649,544	0.1%
Meridiam Sa Infra Euro IV	\$1,107,139	0.0%
NGP Royalty Partners	\$15,817,194	0.1%
Paine Schwartz Food Chain V	\$21,483,396	0.2%
Pantheon Ventures	\$57,682,875	0.4%
Quantum Energy VI	\$42,941,963	0.3%
Quantum Energy VII	\$31,625,133	0.2%
Tailwater Energy Fund III	\$28,650,358	0.2%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2021

	Current	%
Tailwater Energy IV	\$21,183,217	0.2%
Wastewater Opportunity	\$16,303,963	0.1%
Brookfield Liquid Real Return	\$117,283,180	0.9%
SSgA Barclays 1-10 Yrs TIPS Index	\$91,602,074	0.7%
SSgA Real Asset	\$213,539,282	1.6%
Atalaya Special Opportunities V	\$3,310,597	0.0%
Cash Account	\$250,990,090	1.9%
Dedicated Cash Allocation	\$96,386,360	0.7%
Transition Account	\$0	0.0%
Heitman Adv JMB V	\$8,390	0.0%
SSgA Overlay	\$109,608,975	0.8%
Total	\$13,256,941,736	100.0%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	15.6%	30	8.4%	25	1.8	13	0.7	5	3.5%	96
Policy Index	13.2%	87	7.8%	13	1.6	28	--	--	0.0%	1
Total Fund ex Overlay	15.2%	38	8.4%	25	1.7	18	0.6	23	3.5%	97
Policy Index	13.2%	87	7.8%	13	1.6	28	--	--	0.0%	1

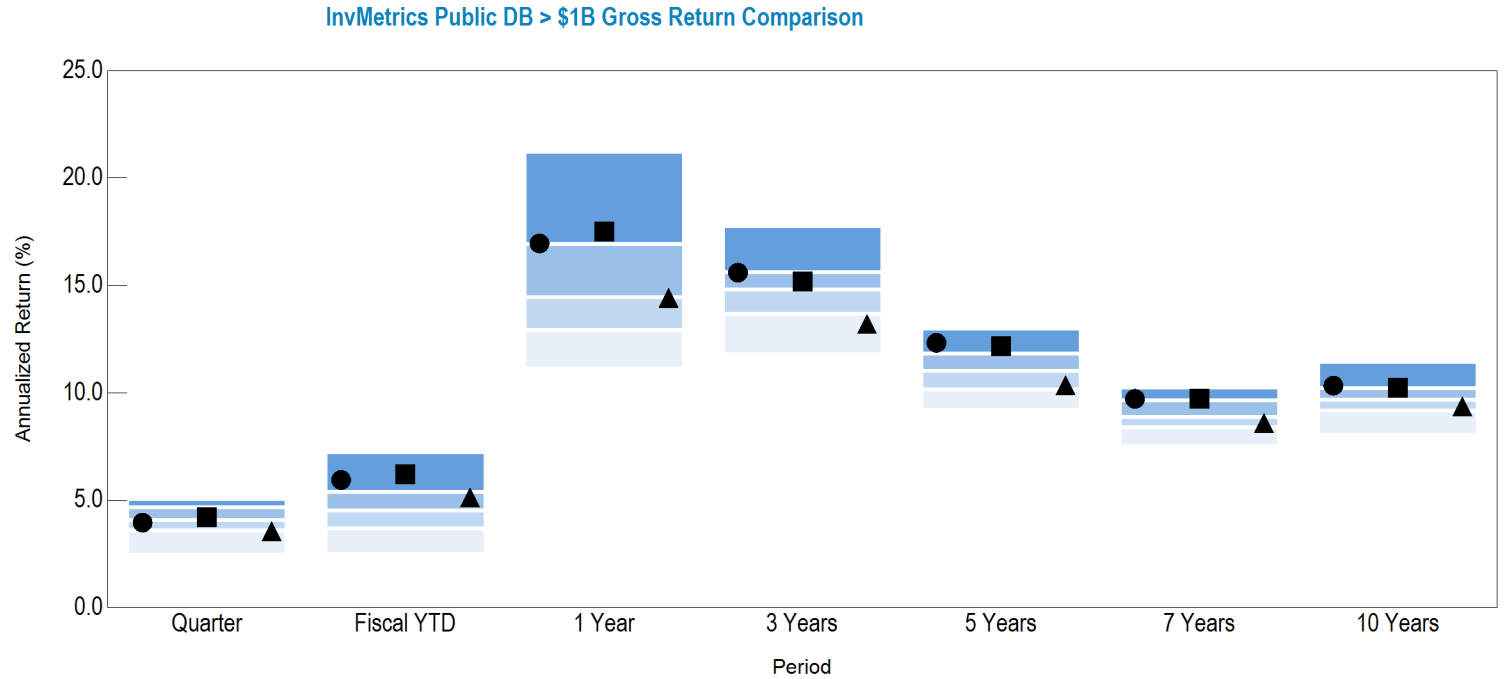
Statistics Summary

5 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	12.3%	9	7.4%	26	1.5	11	0.7	17	2.9%	96
Policy Index	10.4%	71	6.7%	12	1.4	27	--	--	0.0%	1
Total Fund ex Overlay	12.2%	12	7.3%	21	1.5	11	0.6	26	2.9%	97
Policy Index	10.4%	71	6.7%	12	1.4	27	--	--	0.0%	1

Total Fund
Peer Universe Comparison

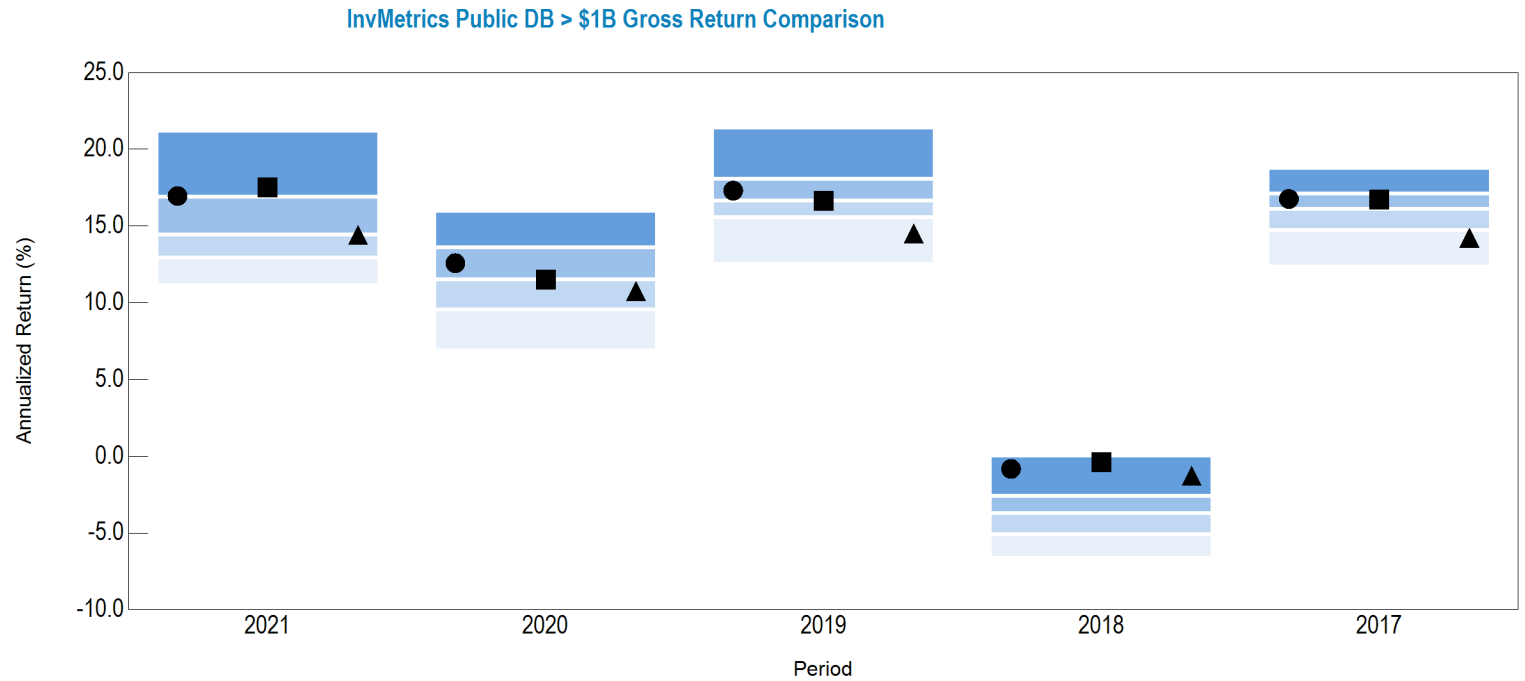
Period Ending: December 31, 2021



	Quarter		Fiscal YTD		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	5.0		7.2		21.2		17.7		13.0		10.2		11.4	
25th Percentile	4.7		5.4		16.9		15.6		11.8		9.7		10.2	
Median	4.1		4.5		14.5		14.8		11.0		8.9		9.7	
75th Percentile	3.6		3.7		12.9		13.7		10.2		8.4		9.2	
95th Percentile	2.5		2.5		11.2		11.8		9.2		7.5		8.0	
# of Portfolios	50		49		49		49		49		49		47	
● Total Fund	4.0	(60)	5.9	(21)	17.0	(25)	15.6	(30)	12.3	(9)	9.7	(21)	10.3	(22)
■ Total Fund ex Overlay	4.2	(45)	6.2	(19)	17.5	(12)	15.2	(38)	12.2	(12)	9.7	(21)	10.2	(27)
▲ Policy Index	3.6	(76)	5.1	(37)	14.4	(51)	13.2	(87)	10.4	(71)	8.6	(70)	9.4	(69)

Total Fund
Peer Universe Comparison (Calendar Years)

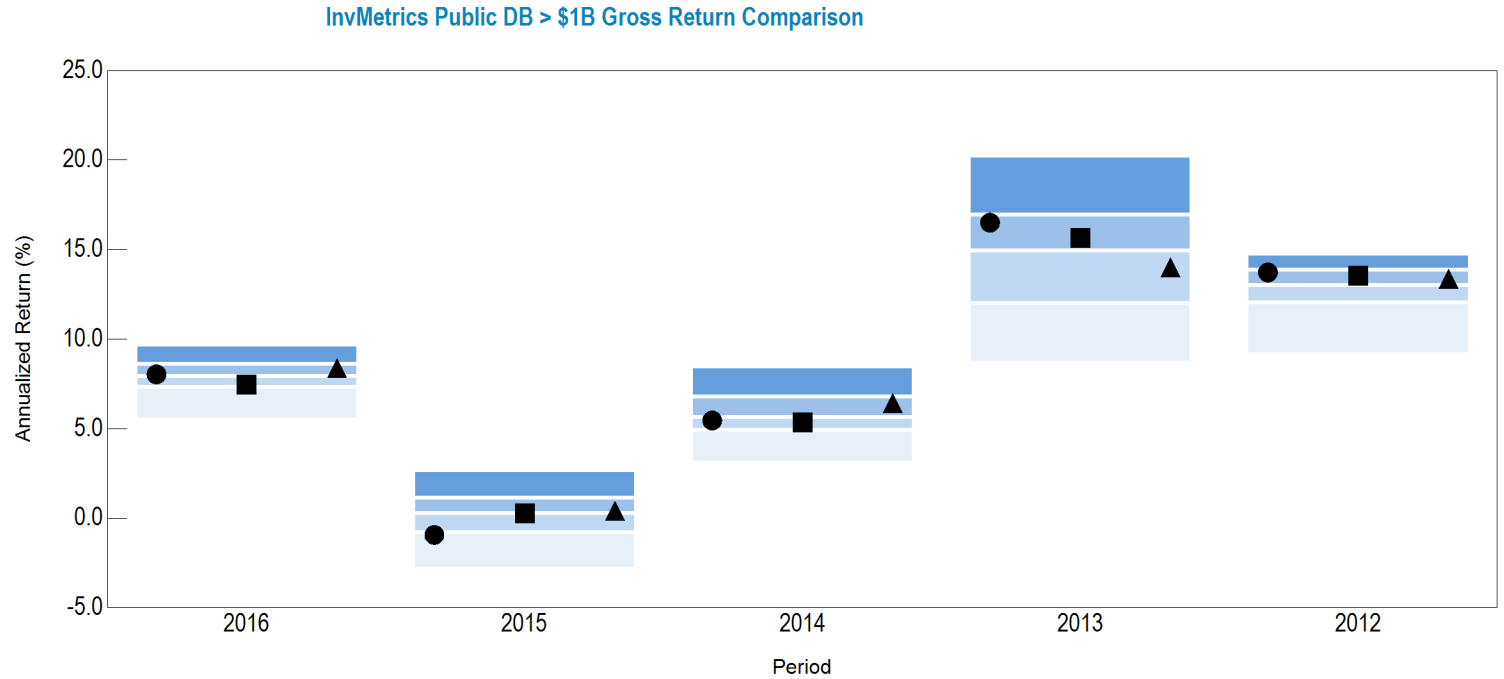
Period Ending: December 31, 2021



	2021		2020		2019		2018		2017	
Return (Rank)										
5th Percentile	11.2		6.9		12.5		-6.6		12.4	
25th Percentile	12.9		9.6		15.6		-5.1		14.8	
Median	14.5		11.5		16.7		-3.7		16.2	
75th Percentile	16.9		13.6		18.1		-2.6		17.2	
95th Percentile	21.2		16.0		21.4		0.0		18.8	
# of Portfolios	49		94		81		71		98	
● Total Fund	17.0	(25)	12.6	(36)	17.3	(40)	-0.8	(7)	16.8	(38)
■ Total Fund ex Overlay	17.5	(12)	11.5	(51)	16.6	(52)	-0.4	(6)	16.7	(39)
▲ Policy Index	14.4	(51)	10.8	(61)	14.5	(88)	-1.3	(10)	14.2	(82)

Total Fund
Peer Universe Comparison (Calendar Years)

Period Ending: December 31, 2021



	2016		2015		2014		2013		2012	
Return (Rank)	9.7	(46)	2.7	(83)	8.5	(61)	20.2	(31)	14.7	(36)
5th Percentile	9.7		2.7		8.5		20.2		14.7	
25th Percentile	8.6		1.1		6.8		17.0		13.9	
Median	8.0		0.3		5.7		15.0		13.0	
75th Percentile	7.4		-0.7		4.9		12.0		12.1	
95th Percentile	5.5		-2.8		3.1		8.7		9.2	
# of Portfolios	92		98		79		67		74	
● Total Fund	8.0	(46)	-0.9	(83)	5.5	(61)	16.5	(31)	13.7	(36)
■ Total Fund ex Overlay	7.5	(73)	0.3	(51)	5.3	(65)	15.6	(43)	13.6	(41)
▲ Policy Index	8.4	(34)	0.4	(46)	6.4	(34)	14.0	(64)	13.4	(42)

Policy Index and Benchmark History

Period Ending: December 31, 2021

Total Plan Policy Index	As of:									
	7/1/19	7/1/17	4/1/17	1/1/14	1/1/12	1/1/08	2/1/06	9/1/04	1/1/00	7/1/86
91-day UST Bill +5% (AR)			10.0%	10.0%	10.0%	5.0%	5.0%	5.0%		
Bloomberg Aggregate	10.0%	10.0%	10.0%	15.0%	20.0%	20.0%	25.0%	25.0%	30.0%	
Bloomberg US Treasury	5.0%	5.0%	5.0%							
ICE BofA ML High Yield II	1.0%	1.0%	1.0%	1.0%						
Bloomberg Commodity		2.0%	2.0%			5.0%				
Cambridge Associates Private Energy 1 Qtr Lag	2.5%	2.5%								
Cambridge Associates Private Infrastructure 1 Qtr Lag	3.2%	3.2%								
FTSE BIG										23.0%
FTSE WGBI ex US Unhedged	2.4%	2.4%	2.4%	2.4%						
CPI-U +5% (PRA)			7.0%	15.0%	15.0%					
Credit Suisse Leveraged Loans	1.0%	1.0%	1.0%	1.0%						
Credit Suisse Leveraged Loans +2% 1 Qtr Lag	4.0%	4.0%	4.0%							
JPM GBI EM Diversified	0.6%	0.6%	0.6%	0.6%						
HFRI FoF Composite Index + 1%	3.0%	3.0%								
HFRI FoF Conservative Index	7.0%	7.0%								
MSCI ACWI ex US	20.0%	20.0%	20.0%	22.5%	22.5%	20.0%				
MSCI EAFE							15.0%	15.0%	15.0%	15.0%
MSCI Emerging Markets							5.0%	5.0%	5.0%	
NAREIT						3.0%	3.0%			
NFI-ODCE	4.6%	4.6%								
NFI-ODCE net +1% 1Q Lag	2.5%	2.5%								
NCREIF			7.0%			12.0%	12.0%	15.0%	10.0%	15.0%
NCREIF Farmland 1 Qtr Lag	0.7%	0.7%								
NCREIF Timberland Index Lagged	0.7%	0.7%								
Russell 1000							30.0%	30.0%	35.0%	
Russell 1000 +3% 1QL (PE)				10.0%	10.0%					
Russell 2000							5.0%	5.0%	5.0%	
Russell 3000	20.0%	21.0%	21.0%	22.5%	22.5%	30.0%				47.0%
S&P 500 +2% 1QL (PE)						5.0%				
Thomson Reuters CJA All PE 1 Qtr Lag	9.0%	9.0%	9.0%							
Bloomberg Roll Select Commodity Total Return	0.2%									
Bloomberg Barclays U.S. Floating Rate Note < 5 Yr	0.2%									
S&P Global LargeMidCap Commodity and Resources	0.2%									
S&P Global Infrastructure Index - Net of Tax on Dividend	0.5%									
Bloomberg Barclays U.S. Government Inflation-Linked 1-10 Yrs	0.6%									
FTSE EPRA Nareit Developed Liquid Index	0.3%									
ICE LIBOR Spot/Next Overnight USD	1.0%									
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: December 31, 2021

Growth Benchmark	As of:		
	7/1/19	7/1/17	4/1/17
91 Day T-Bill +5%			5.08%
ICE BofA ML High Yield II	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loans	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	6.90%	6.78%	6.78%
HFRI FoF Composite Index + 1%	5.17%	5.08%	
MSCI ACWI ex US	34.48%	33.90%	33.90%
Russell 3000	34.48%	35.59%	35.59%
Thomson Reuters C A All PE 1 Qtr Lag	15.52%	15.25%	15.25%
	100.0%	100.0%	100.0%

US Equity Benchmark	As of:			
	1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000		85.71%	87.5%	
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%			100.0%
	100.0%	100.0%	100.0%	100.0%

Large Cap Active Benchmark	As of:	
	2/1/19	9/1/08
Russell 1000 Value		100.0%
Russell 1000	100.0%	
	100.0%	100.0%

International Equity Benchmark	As of:		
	1/1/08	1/1/00	7/1/86
MSCI ACWI ex US	100.0%		
MSCI EAFE		75.0%	100.0%
MSCI Emerging Markets		25.0%	
	100.0%	100.0%	100.0%

Private Equity Benchmark	As of:		
	4/1/17	1/1/12	1/1/08
Russell 1000 +3% 1QL		100.0%	
S&P 500 +2% 1QL			100.0%
Thomson Reuters C A All PE 1 Qtr Lag	100.0%		
	100.0%	100.0%	100.0%

Public Credit Benchmark	As of:
	4/1/17
ICE BofA ML High Yield II	50.0%
Credit Suisse Leveraged Loans	50.0%
	100.0%

Private Credit Benchmark	As of:
	4/1/17
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	100.0%
	100.0%

Growth Oriented Absolute Return Benchmark	As of:	
	7/1/17	4/1/17
91-day UST Bill +5%		100.0%
HFRI FoF Composite Index + 1%	100.0%	
	100.0%	100.0%

Diversifying Benchmark	As of:	
	7/1/17	4/1/17
91 Day T-Bill +5%		28.0%
Bloomberg US Aggregate	40.0%	40.0%
Bloomberg US Treasury	20.0%	20.0%
FTSE WGBI ex US Unhedged	9.6%	9.6%
HFRI FoF Conservative Index	28.0%	
JPM GBI EM Diversified	2.4%	2.4%
	100.0%	100.0%

Global Fixed Income Benchmark	As of:
	6/1/13
FTSE WGBI ex US Unhedged	80.0%
JPM GBI EM Diversified	20.0%
	100.0%

Diversifying Absolute Return Benchmark	As of:	
	7/1/17	4/1/17
91-day UST Bill +5%		100.0%
HFRI FoF Conservative Index	100.0%	
	100.0%	100.0%

Real Return Benchmark	As of:	
	4/1/19	4/1/17
Real Estate Benchmark	43.75%	43.75%
Private Real Assets Benchmark	43.75%	43.75%
Bloomberg Commodity		12.50%
Liquid Real Return Custom Benchmark	12.50%	
	100.0%	100.0%

Real Estate Benchmark	As of:	
	7/1/17	7/1/2011
NCREIF		100.0%
NFI-ODCE	65.0%	
NFI-ODCE net +1% 1Q Lag	35.0%	
	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: December 31, 2021

RE-Value Added Benchmark	As of:	
	7/1/16	10/1/08
NCREIF +2% 1Q Lag		100.0%
NFI-ODCE net +1% 1Q Lag	100.0%	
	100.0%	100.0%

Private Real Assets Benchmark	As of:	
	7/1/17	4/1/17
CPI-U Headline +5%		100.0%
Cambridge Associates Private Energy 1 Qtr Lag	35.0%	
Cambridge Associates Private Infrastructure 1 Qtr Lag	45.0%	
NCREIF Farmland 1 Qtr Lag	10.0%	
NCREIF Timberland Index Lagged	10.0%	
	100.0%	100.0%

Liquid Real Return Custom Benchmark	As of:
	7/1/19
Bloomberg Roll Select Commodity Total Return	10.0%
Bloomberg Barclays U.S. Floating Rate Note < 5 Yr	10.0%
S&P Global LargeMidCap Commodity and Resources	10.0%
S&P Global Infrastructure Index - Net of Tax on Dividend	25.0%
Bloomberg Barclays U.S. Government Inflation-Linked 1-10 Yrs	30.0%
FTSE EPRA Nareit Developed Liquid Index	15.0%
	100.0%

AllianceBernstein Benchmark	As of:		
	1/1/01	1/1/98	5/1/89
Russell 1000	100.0%		
Russell 3000		100.0%	
Wilshire 2500			100.0%
	100.0%	100.0%	100.0%

Eagle Capital Benchmark	As of:	
	2/1/19	9/1/08
Russell 1000 Value		100.0%
Russell 1000	100.0%	
	100.0%	100.0%

Brandywine Benchmark	As of:
	6/1/13
FTSE WGBI ex US Unhedged	80.0%
JPM GBI EM Diversified	20.0%
	100.0%

Brigade Benchmark	As of:
	12/1/13
ICE BofA ML High Yield II	50.0%
Credit Suisse Leveraged Loans	50.0%
	100.0%

Brookfield Real Return Custom	As of:
	12/1/2019
FTSE Global Core Infrastructure 50/50 Index	30.0%
FTSE EPRA Nareit Developed Index	20.0%
ICE BofA 7% Constrained REIT Preferred Securities Index	10.0%
ICE BofA USD Real Asset High Yield Custom Index	16.0%
ICE BofA USD Real Asset Corporate Custom Index	24.0%
	100.0%

SSgA Real Asset Benchmark	As of:		
	3/2/2018	10/1/15	2/1/08
Bloomberg US Govt Inflation-Linked 1-10 Yrs		10.0%	
Bloomberg US TIPS		10.0%	20.0%
Bloomberg 1-10 Yr US TIPS	30.0%		
Bloomberg Roll Select Commodity TR	10.0%	20.0%	
Bloomberg USD Floating Rate Note <5yr	10.0%		
DJ US Select REIT			30.0%
FTSE EPRA/NAREIT Developed Liquid	15.0%	10.0%	
MSCI World Natural Resources		20.0%	25.0%
S&P Global Large Mid Cap Commodity Resources	10.0%		
S&P Global Infrastructure	25.0%	20.0%	
S&P GS Commodities			25.0%
S&P MLP		10.0%	
	100.0%	100.0%	100.0%

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$.

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.