BANK OF AMERICA

CHIEF INVESTMENT OFFICE

# Alternative Investments Spotlight

## Lights, Camera, Action!
## Time To Turn The Spotlight On Alternatives

Q1 2023

**All data, projections and opinions are as of the date of this report, unless indicated otherwise and subject to change.**

### KEY TAKEAWAYS

- Uncertainty has increased in the wake of bank-related pressures that proliferated in March, likely pulling forward the much-anticipated recession, which is still expected to be mild overall.
- With a more cautious posture in the near term, defensive Alternative Investments (AI) strategies for qualified investors are expected to outperform.
- However, given the long-term nature of many AI strategies within Private Markets, elevated volatility may create opportunities for current- and coming-year vintages, particularly in Equity-related strategies such as Private Equity and Venture Capital.
- Macro Hedge Funds had a difficult March with reversals in interest rates. Our expectation is that the strategy will continue to work well as it has since 2020, unless we return to an environment like the decade post-Global Financial Crisis (GFC) of 2008/2009 which was characterized by low rates/low inflation/ low volatility.
- The near-term outlook for Private Real Estate has declined with continued cost-of-capital pressures and now potentially tighter lending standards by banks. For the longer term, Private Real Estate continues to warrant a strategic allocation given the diversification benefits and income features.
- Notwithstanding current uncertainty, we continue to suggest that qualified investors build up to a target strategic allocation to Alternatives Investments based on risk appetite and time horizons. For Private Markets strategies in particular, history has shown it is critical to maintain consistent commitment programs—including through downturns—to help improve vintage-year diversification and to capitalize on emerging opportunities.

### CIO STRATEGY VIEWS

| Strategy | CIO View | | | | |
|---|---|---|---|---|---|
| | Underweight | | Neutral | Overweight | |
| **Hedge Funds** | | | | | |
| Equity Hedge | | | | ● | |
| Event Driven | | | ● | | |
| Relative Value | | | ● | | |
| Macro | | | | ● | |
| **Private Equity** | | | | | |
| Buyout | | | ● | | |
| Venture Capital / Growth Equity | | | | ● | |
| Special Situations | | | ● | | |
| Private Credit | | | ● | | |
| Opportunistic Real Estate | | | ● | | |
| **Private Real Estate** | | | | | |
| Core/Core Plus | | | ● | ◀ | |
| Infrastructure | | | ● | | |
| **Tanigible Assets** | | | | | |
| Commodities | | | ● | | |

CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio. Because economic and market conditions change, recommended allocations may vary in the future. All asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. **Alternative investments such as derivatives, hedge funds, private equity funds and funds of funds can result in higher return potential, but also higher loss potential. Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors.**

Source: Global Wealth & Investment Management Investment Strategy Committee as of April 19, 2023.

### RECENT TRENDS ACROSS AI STRATEGIES

Investors began the year hoping for a reprieve from the tumult of 2022, and though equity and bond markets largely ended Q1 2023 in positive territory, the banking crisis sparked by the collapse of Silicon Valley Bank (SVB) in March injected uncertainty into the economic outlook. In that context, AI strategies will continue to face challenges and opportunities.

From a performance perspective, we believe AI strategies proved their mettle in 2022. For the full year, Hedge Funds returned -4.1%, and Core Private Real Estate returned


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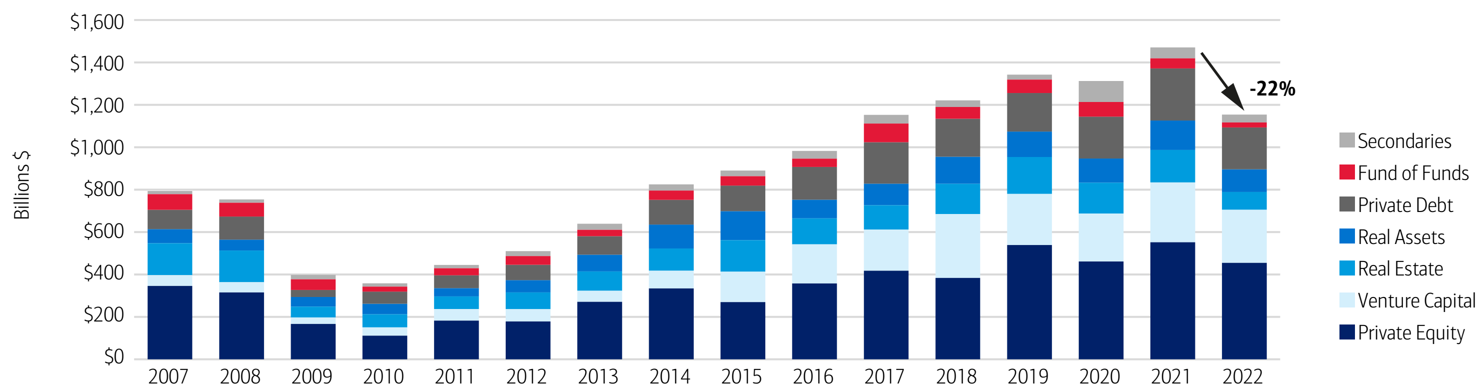
|---|---|---|

**Please see last page for important disclosure information.** 5645553 4/2022

7.5% compared to -18.4% for global equities and -13% for fixed income in 2022.[1] With final performance numbers only through Q3, Private Equity returned -6.8% year-to-date (YTD) in 2022, and preliminary benchmark reporting is currently showing roughly flat to slightly positive performance in Q4.[2]

Fundraising, on the other hand, reflected hesitance on behalf of institutional investors. Asset-raising levels declined across Private Markets and Hedge Funds in 2022 and are expected to remain tepid until sentiment improves. Total private markets fundraising fell 22% in 2022 from the prior year (Exhibit 1), while Hedge Funds saw net outflows of approximately 1% of assets under management, according to HFR, Inc.

**Exhibit 1: Total Private Markets Fundraising.**




Source: PitchBook Data, Inc. As of December 31, 2022.

Deal activity followed a similar pattern to fundraising in 2022. Transaction volumes across asset classes and AI strategies fell sharply year-over-year. Although uncertainty will likely need to decline before the spigots reopen, there is a growing expectation that pent-up deal demand is building across asset classes and could at some point surge.

Core Private Real Estate has increasingly been in the spotlight with the recent pressures on regional banks given their sizable role in commercial real estate lending. We elaborate on this dynamic below, as well as in the March 2023 *CIO Alternative Insights: Focusing in on Commercial Real Estate*. We have downgraded our outlook in April for the strategy to neutral reflecting the heightened refinancing risks, while balancing still positive fundamentals in certain sectors along with the "inflationary hedge" characteristics of the asset class. The longer the higher cost-of-capital environment persists, or if the economic slowdown is more severe than expected, the outlook could deteriorate further.

## PRIVATE EQUITY

### Buyout

We maintain a neutral outlook for the strategy. Like public Equities, Private Equity (PE) Buyout has been facing headwinds from higher interest rates, but we see reasons for resilience throughout this year and next.

The higher-cost-of-capital environment has presented challenges for the cash flows of portfolio companies as well as for the financing of new investments. At the portfolio company level, floating rate debt has begun to erode interest coverage ratios, and the risk is for even further deterioration. As illustrated by PitchBook Data, Inc., at 5% cost-of-

**Private Equity Performance**

| Performance | Q3 2022 | YTD 2022 through Q3 | Q4 2022* |
|---|---|---|---|
| Buyout | -1.9% | -6.8% | 4.2% |
| Venture Capital | -2.7% | -14.2% | -6.1% |
| Special Situations | 0.2% | 1.6% | 3.0% |
| Private Credit | -0.1% | 0.4% | 4.2% |
| Opportunistic/ Value Add Real Estate | -1.3% | 2.7% | -0.6% |

*Performance is preliminary and is subject to revision as data is reported. Source: Cambridge Associates as of December 2022. **Past performance is no guarantee of future results. Please refer to index definitions at the end of this report.**

[1] Based on the HFRI Fund-Weighted Composite Index, the National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End Diversified Core Equity (NFI-ODCE), MSCI All-Country World Index (ACWI) and Bloomberg US Aggregate Bond as of March 2023.

[2] Based on the Cambridge US Private Equity Index as of March 2023.

debt, a hypothetical company with a leverage ratio of 6x would have around 3.3x interest coverage ratio. At 11.5% cost-of-debt, interest coverage would fall to around 1.5x. Similarly, the financing calculus for PE acquisitions has shifted. To keep interest expense in check, generic buyout financing of 70% debt and 30% equity would have to shift closer to 50%/50%, which we began to observe in late 2022 and early this year.

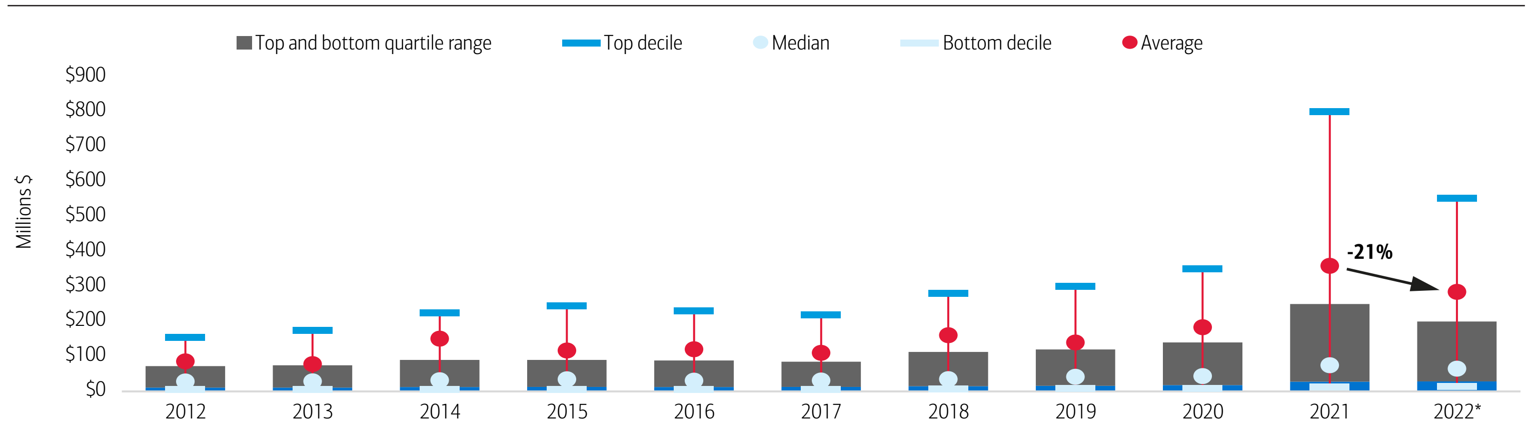
Yet, with a range of levers to pull in different environments, Buyout strategies continue to find opportunity. Several large PE transactions in Q1 exemplified this dynamic. For example, in March, Qualtrics agreed to be acquired by a PE sponsor, a Canadian pension plan, and co-investors for approximately $12.5 billion. The take-private deal was financed with approximately $1 billion of debt against $11.5 billion of equity, highlighting the willingness of PE managers to invest greater proportions of equity for perceived high-quality investments, even amid an environment of uncertainty. We expect PE Buyout managers to capitalize on the shifting opportunity set by cycling through the strategy's toolkit—including pursuing different transaction types, shifting sector focus, utilizing a range of public and private debt financing sources, bringing in co-investment capital, and more.

### Venture Capital

Venture Capital (VC) has been undergoing a sizable revaluation process since last year for dollars "in the ground"—i.e., valuations of VC-backed companies have been declining for several quarters given the macro headwinds of higher inflation and interest rates. Exhibit 2 shows that late-stage, pre-money valuations declined last year from 2021's highs, with the average falling 21% and the median falling 13%. The expectation is for this trend to continue in the near term.

And yet, while current VC investments will likely continue to work through this phase of reset, "fresh capital" may be looking at an attractive opportunity set. According to analysis from PitchBook Data, Inc., returns[3] from VC funds that invested during periods of below-trend pre-money valuations have historically been higher than from those that invested during above-trend periods. Given that relationship, VC vintages from this year and next could ultimately see stronger performance relative to the last few vintages.

**Exhibit 2: Late-Stage VC Valuations Declined in 2022.**




*Estimate. Source: PitchBook. Q4 2022 US VC Valuations Report. As of December 31, 2022. Chart depicts late-stage VC pre-money valuations annually.

### Special Situations

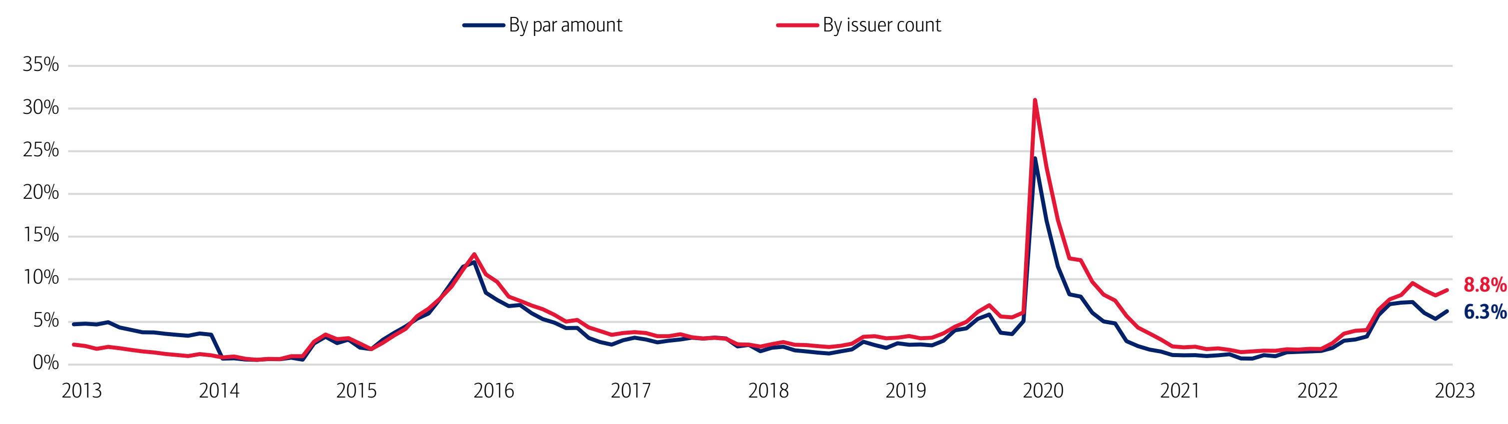
Given the evolving macroenvironment, Special Situations is quickly becoming an area of potential opportunity. The first half of last year saw a historic dearth of stressed and distressed situations due to the long tail of fiscal and monetary stimulus enacted in 2020 and extending forward into early 2022. As the overall regime has shifted to a hawkish

[3] measured using Total Value to Paid In (TVPI) capital.

posture, rising rates have begun to pressure lower-credit-quality capital structures through lower interest coverage ratios or greater difficulties refinancing debt maturities.

The regional banking issues that unfolded in March have raised expectations for the strategy. A proxy for distressed across the leveraged loan universe (Exhibit 3, distressed loans traded below 80 cents on the dollar) has risen over the last several quarters to 8.8%. Market participants' expectations had been for average levels of defaults across leveraged loans and high yield bonds; however, tighter lending standards stemming from bank risk aversion could push default rates into even higher territory.

**Exhibit 3: Morningstar/Loan Syndications and Trading Association (LSTA) Leveraged Loan Index Distressed Ratio.**




Source: PitchBook Data, Inc. March 2023 Global Markets Snapshot. "Distressed" loans are priced below 80 to par.

### Private Credit

The outlook for the strategy remains neutral though leaning positive. The potential deterioration of interest coverage ratios is the primary vector of concern for this largely floating-rate asset class. As noted in the PE Buyout section, interest coverage ratios have a degree of sensitivity to rising interest rates depending on Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) growth and the amount of leverage. Potentially mitigating the risk of increased defaults is the fact that debt maturities have been pushed back, as companies and PE sponsors took advantage of the low-rate environment with significant refinancing activity in 2020-2021.

Meanwhile, as interest rates have risen, investors have been compensated in the form of higher yields. As of year-end 2022, yields across the direct lending space had risen to 10.3%.[4] Private Credit has also emerged in the last year as the "go-to" source of debt financing for companies and sponsors as high yield bond markets shut down and banks pulled back from the loan space. With a potential turn in the cycle, Private Credit may be susceptible to credit deterioration; however, the strategy has historically weathered downturns relatively well, including during the GFC.

### Opportunistic/Value Add Real Estate

We maintain a neutral outlook for the strategy given that we are still early in the cycle. However, as conditions deteriorate for core private real estate (see downgraded outlook in the Private Real Estate Core section), the expectation is for Opportunistic/Value Add Real Estate (RE), including distressed, to ultimately emerge with a robust opportunity set. Cost inflation in 2022 had pressured new construction, however, if inflation for construction materials eases to a lower terminal level, then the fundamental undersupply in sectors such as housing would likely spur investment. We also see the possibility of continued opportunism by larger general partners (GPs) in public-to-private transactions given discounted valuations.

[4] Measured by the Cliffwater Direct Lending Index.

## PRIVATE REAL ESTATE

### Core/Core Plus

We have downgraded our outlook for the strategy to neutral given the macroenvironment. Performance in 2022 was solid at 7.5%, though the quarterly trend showed steep declines, with Q4 2022 (-5.0%) registering the worst quarterly return since the GFC. Importantly, different property sectors and geographies are facing their own unique dynamics, suggesting that differentiation is warranted. The recent issues spreading through the banking system, however, may have tipped the balance for the strategy overall between favorable fundamentals and financing pressures in favor of the latter.

Sectors such as Industrial and Rental Housing are still seeing rental income growth but are contending with the higher cost of capital environment. Others, such as Office, face both fundamental and financing/valuation challenges. The potential for tightening lending standards by banks as commercial real estate (CRE) mortgages mature this year and next is a significant risk—banks are estimated to hold approximately $1.4 trillion of CRE loans, $270 billion of which comes due in 2023, according to the Mortgage Bankers Association. Bolstering the strategy in the face of higher rates for the last one or two quarters was the fact that the market was largely gridlocked. If banks were to begin selling down CRE exposure, that could catalyze price declines.

The valuation gap between core private real estate cap rates and the implied cap rates of publicly traded Real Estate Investment Trusts (REIT) continues to draw attention. Given that gap, investors are focused on the degree to which private real estate valuations will have to decline to reflect the higher-rate environment. For the longer term, Private CRE continues to make sense as a strategic allocation given the diversification benefits and income features. Opportunistic and distressed real estate strategies will likely emerge as areas of opportunity as the asset class works through this reset.

### Infrastructure

Infrastructure remains well positioned in the current inflationary environment. Infrastructure investments often generate inflation-linked earnings and have contractual cost inflation pass-throughs, thereby mitigating the deterioration of real income. Key thematic sectors within the space include digital Infrastructure and Energy transition. Bolstering the Energy transition theme over the next several years is the Inflation Reduction Act of 2022, which earmarked nearly $390 billion for energy security and climate change-related investments. Higher interest rates present financing challenges for infrastructure deals, similar to all asset classes. In addition, the strategic importance of infrastructure assets heightens the risk of government or regulatory intervention; we favor managers with a dedicated focus on this aspect of the asset class.

## CIO STRATEGY VIEWS

| Strategy | CIO View | | | | |
|---|---|---|---|---|---|
| | Underweight | | Neutral | | Overweight |
| Private Real Estate | | | | | |
| Core/Core Plus | • | • | ● (current) | ◀ (previous) | • |

### Private Real Estate Performance

| Performance | Q4 2022 | 2022 |
|---|---|---|
| Private Real Estate (Core) | -5.0% | 7.5% |

Source: NCFREIF using the NPI- Open End Diversified Core Equity (ODCE) Index as of December 2022. **Past performance is no guarantee of future results. Please refer to index definitions at the end of this report.**

## HEDGE FUNDS

### Equity Hedge

We maintain a slight overweight for the strategy. Equity Hedge managers in aggregate trailed Equity Indexes in Q1 2023 in terms of performance, a dynamic which was expected given the market rally. This followed outperformance by Equity Hedge managers in 2022.

We continue to favor strategies and managers with low-to-moderate net exposures given the expectation for equity market volatility in the near term. Careful management of risk factor exposures will also be critical in this environment. Higher levels of stock dispersion (see dispersion and volatility side bar on next page) would create a favorable backdrop for stock pickers to generate alpha on both long and short positions. Therefore, a hedged yet flexible investing approach by Equity Hedge managers presents an opportunity to potentially outperform broader equity markets while uncertainty remains elevated.

### Hedge Fund Performance

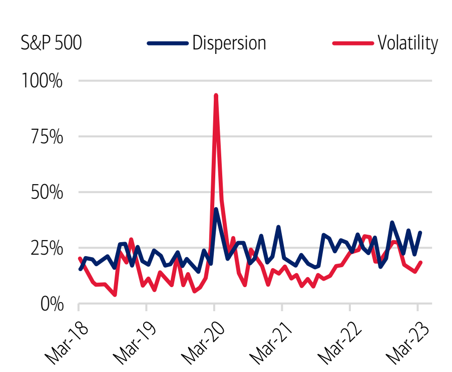
| Performance | Q1 2023 | 2022 |
|---|---|---|
| HFRI Fund Weighted Composite Index | 1.2% | -4.1% |
| HFRI Equity Hedge (Total) Index | 3.4% | -10.1% |
| HFRI Event Driven (Total) Index | 1.4% | -4.8% |
| HFRI Relative Value (Total) Index | 1.4% | -0.7% |
| HFRI Macro (Total) Index | -3.0% | 9.0% |

Source: Hedge Fund Research Inc. eVestment. As of March 31, 2023. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. **Past performance is no guarantee of future results. Please refer to index definitions at the end of this report.**

## Event Driven

The opportunity set for distressed situations (similar to within the Special Situations strategy) is rapidly improving. There is a recognition among managers, however, that capital deployment should be selective in the early stages of a distressed cycle. Given the macroenvironment, Event Driven managers have generally been favoring credit investments over Equities. In addition, we expect corporate activity, including mergers and acquisitions to ultimately increase as we move into the recovery phase of the cycle, which would present greater opportunity for Event Driven managers.

### S&P 500 Dispersion and Volatility



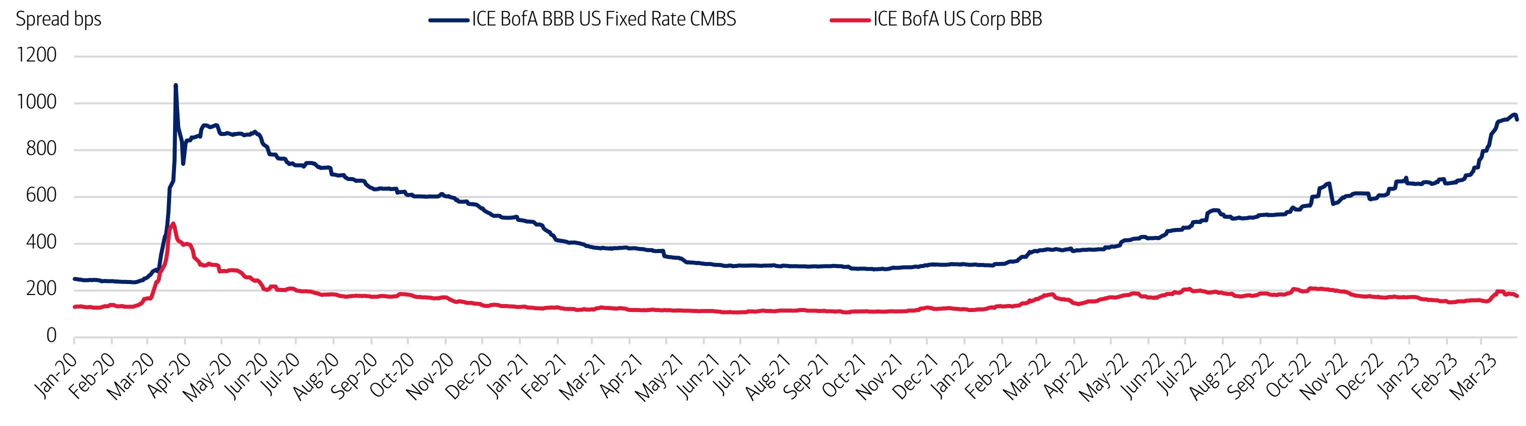

Source: S&P 500 Indexes as of March 2023. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. **Past performance is no guarantee of future results. Please refer to index definitions at the end of this report.**

## Relative Value

The strategy maintains a neutral outlook, with a cautious optimism from managers. As previously noted, yields and spreads across most debt asset classes are greater compared to the lows in 2021, implying greater potential return opportunity. And yet spreads overall are not pricing in recession risks. High-yield bond and leveraged loans spreads, just as examples, ended March at 499 basis points (bps) and 610 bps, respectively.[5] For high-yield bonds that is just below the 20-year average, and, for leveraged loans, that is slightly above the 11-year average.

Thus, the environment is presenting pockets of opportunity more so than wholesale opportunities. All-in yields are attractive, as mentioned, and certain sectors are seeing more stress and therefore attracting more attention. For instance, commercial mortgage-backed securities (CMBS) are garnering attention given spread widening (Exhibit 4). Anecdotally, hedge fund managers are cautious on BBB-rated debt due to weak fundamentals in certain sectors but have found attractive relative value higher up in the cap stack.

### Exhibit 4: BBB CMBS versus BBB U.S. Corporate Spreads.



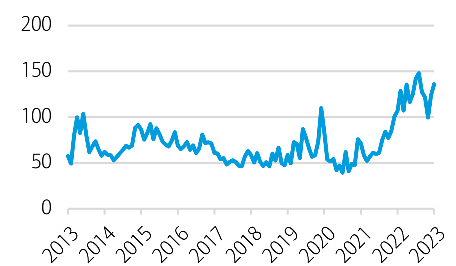

Source: Bloomberg, as of March 31, 2023. Indexes measuring the Option Adjusted Spreads (OAS). Please refer to index definitions at the end of this report.

## Global Macro

We maintain a slight overweight for the strategy. Since the pandemic in 2020, both Discretionary Macro and Systematic Managed Futures have benefited from the volatility across rates, Foreign Exchange and commodities that has characterized the new macro regime. The expectation is for a favorable environment to persist throughout the rest of this year.

Market reversals, however, may create near-term performance volatility, as was the case in March. Both sub-strategies were affected, though Systematic Managed Futures saw greater losses as short Fixed Income positioning was negatively affected by the dramatic decline in U.S. Treasury yields. As a result of the trend reversal and spike in volatility, this positioning was derisked in Systematic Managed Futures strategies.

### The MOVE Index




Source: Bloomberg as of March 2023. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. **Please refer to index definitions at the end of this report.**

[5] J.P. Morgan US High Yield Index and J.P. Morgan Leveraged Loan Index as of March 2023.

## Glossary of Terms

**Alpha** is used in finance as a measure of performance, indicating when a strategy, trader, or portfolio manager has managed to beat the market return over some period.

**Correlation** is any statistical relationship, whether causal or not, between two random variables or bivariate data.

**Denominator Effect** occurs when the value of one portion of portfolio decreases drastically and pulls down the overall value of the portfolio.

**Valuations** is the process of determining the present value of an asset.

**Beta** is a way of measuring a stock's volatility compared with the overall market's volatility.

**Net asset value (NAV)** is the net value of an investment fund's assets less its liabilities, divided by the number of shares outstanding.

**Unicorns** means a company with a greater than $1 billion valuation.

**Down rounds** means financing rounds in which the new implied valuation has declined from the previous round of financing.

**Froth(iness)** refers to a market condition where an asset's price begins to increase beyond its intrinsic value.

## Asset Class Proxies and Index Definitions

**The indices defined below are unmanaged, include the reinvestment of dividends when applicable, do not reflect the impact of transaction fees, management fees, or incentive compensation, and are not available for investment. They are included here for illustrative purposes.**

**S&P 500** widely regarded as the best single gauge of the U.S. equities market, includes a representative sample of 500 leading companies in leading industries of the U.S. economy.

**HFRI Macro (Total) Index/HFRI Fund-Weighted Composite Index** is a global, equal-weighted index of hedge funds with minimum assets under management of USD $500MM which report to the HFR Database and are open to new investments.

**National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index—Open End Diversified Core Equity Index** is an index of investment returns reporting on both a historical and current basis the results of 36 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s.

**MSCI All Country World Index (ACWI)** is a stock index designed to track broad global equity-market performance.

**Bloomberg US Aggregate Bond Index** is a market capitalization-weighted bond market index representing intermediate term investment grade bonds traded in the United States.

**Cambridge US Private Equity Index** contains the historical performance records of 960+ private investment fund managers and 1,891 institutional quality funds raised.

**Morningstar/Loan Syndications and Trading Association Leveraged Loan Index** is designed to deliver comprehensive, precise coverage of the US leveraged loan market.

**Cliffwater Direct Lending Index** seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements.

**The MOVE Index** measures U.S. interest rate volatility.

**Buyout/Cambridge Associates LLC US Private Equity Index®** is a horizon calculation based on data compiled from 1,468 US private equity funds (buyout, growth equity, private equity energy and subordinated capital funds), including fully liquidated partnerships, formed between 1986 and 2017. Pooled horizon return, net of fees, expenses, and carried interest.

**Event Driven/HFRI Event Driven (Total) Index** is a global, equal-weighted index of single-manager funds that report to the HFR Database.

**Equity Hedge/Global/HFRI Equity Hedge (Total) Index** is a global, equal-weighted index of hedge funds with minimum assets under management of USD $500MM which report to the HFR Database and are open to new investments.

**J.P. Morgan US High Yield Index** is designed to mirror the investable universe of the U.S. dollar domestic high yield corporate debt market.

**J.P. Morgan Leveraged Loan Index** is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weightings, spreads and interest payments.

**Real Estate/REITs/FTSE NAREIT All Equity REITS Total Return Index** tracks the performance of all Equity REITs not designated as Timber REITs or Infrastructure REITs. NAREIT Index a market capitalization-weighted index that includes all tax-qualified real estate investment trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange or the NASDAQ National Market.

**U.S. Venture Capital/Cambridge Associates U.S. Venture Capital/Growth Index** is a horizon calculation based on data compiled from 1,807 US venture capital funds (1,161) early stage, 210 late & expansion stage, and 436 multi-stage funds), including fully liquidated partnerships, formed between 1981 and 2018.

**Private Credit/Cambridge Associates Private Credit Index** is a horizon calculation based on data compiled from 461 credit opportunities (i.e. general credit opps and distressed), subordinated capital (i.e. mezzand capital appreciation opps) , and senior debt (i.e. direct lending) funds, including fully liquidated partnerships, formed between 1986 and 2018.

**Private Equity/Special Situations/Cambridge Associates U.S. Private Equity Index** is index is based on return data compiled for private equity funds (including buyout, growth equity and mezzanine funds) that represent the majority of institutional capital raised by private equity partnerships formed since 1986.

**HFRI Relative Value (Total) Index** is investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

The hedge fund and comparative indices shown are provided for illustrative purposes only. Hedge fund indices do not represent benchmarks or proxies for the return of any particular investable hedge fund product. The hedge fund universe from which the components of the indices are selected is based on funds which have continued to report results for a minimum period of time. This prerequisite for fund selection interjects a significant element of "survivor bias" into the reported levels of the indices, as generally only successful funds will continue to report for the required period, so that the funds from which the statistical analysis or the performance of the indices to date is derived necessarily tend to have been successful. There can, however, be no assurance that such funds will continue to be successful in the future. The Comparative Indices shown are provided solely as an indication of the performance of various capital markets and/or alternative investment strategies in general. Investors should not consider any Comparative Index to be a performance benchmark for the Fund (or any Underlying Fund), nor should Investors conclude that the Fund will or will not be correlated with a Comparative Index. The Underlying Fund may invest in financial instruments and strategies not included or represented in the Comparative Indices, and the performance and tax consequences of an investment in the securities, bonds or hedge funds represented by an index and an investment in the Fund may be, and in many cases are likely to be, materially different. Indices are unmanaged and although they reflect the reinvestment of dividends, they do not reflect the deduction of fees or expenses which would reduce returns. Investors cannot invest directly in indices. Merrill assumes no responsibility for any of the foregoing performance information, which has been provided by the index sponsor. Neither Merrill nor the index sponsor can verify the validity or accuracy of the self-reported returns of the managers used to calculate the index returns. Merrill does not guarantee the accuracy of the index returns and does not recommend any investment or other decision based on the results presented.

Investors should bear in mind that the global financial markets are subject to periods of extraordinary disruption and distress. During the financial crisis of 2008-2009, many private investment funds incurred significant or even total losses, suspended redemptions or otherwise severely restricted investor liquidity, including increasing the notice period required for redemptions, instituting gates on the percentage of fund interests that could be redeemed in any given period and creating side-pockets and special purpose vehicles to hold illiquid securities as they are liquidated. Other funds may take similar steps in the future to prevent forced liquidation of their portfolios into a distressed market. In addition, investment funds implementing alternative investment strategies are subject to the risk of ruin and may become illiquid under a variety of circumstances, irrespective of general market conditions.

## Important Disclosures

**Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.**

**Alternative investments are speculative and involve a high degree of risk.**

Alternative investments are intended for qualified investors only. Alternative Investments such as derivatives, hedge funds, private equity funds, and funds of funds can result in higher return potential but also higher loss potential. Changes in economic conditions or other circumstances may adversely affect your investments. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk.

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All recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets. Investments have varying degrees of risk.

Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments and yields and share price fluctuations due to changes in interest rates. Bonds are subject to interest rate, inflation and credit risks. Investments in high-yield bonds (sometimes referred to as "junk bonds") offer the potential for high current income and attractive total return, but involves certain risks. Changes in economic conditions or other circumstances may adversely affect a junk bond issuer's ability to make principal and interest payments. Treasury bills are less volatile than longer term fixed income securities and are guaranteed as to timely payment of principal and interest by the U.S. government. For investments in Agency Mortgage-backed Securities (AMBS) and Mortgage-backed Securities (MBS), generally, when interest rates decline, prepayments accelerate beyond the initial pricing assumptions, which could cause the average life and expected maturity of the securities to shorten. Conversely, when interest rates rise, prepayments slow down beyond the initial pricing assumptions, and could cause the average life and expected maturity of the securities to extend, and the market value to decline. Most senior/leveraged loans are made to corporations with below investment-grade credit ratings and are subject to significant credit, valuation and liquidity risk. The value of the collateral securing a loan may not be sufficient to cover the amount owed, may be found invalid or may be used to pay other outstanding obligations of the borrower under applicable law. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid. Investments in foreign securities (including ADRs) involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates, and risk related to renting properties, such as rental defaults. There are special risks associated with an investment in commodities, including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors.

Nonfinancial assets, such as closely-held businesses, real estate, fine art, oil, gas and mineral properties, and timber, farm and ranch land, are complex in nature and involve risks including total loss of value. Special risk considerations include natural events (for example, earthquakes or fires), complex tax considerations, and lack of liquidity. Nonfinancial assets are not in the best interest of all investors. Always consult with your independent attorney, tax advisor, investment manager, and insurance agent for final recommendations and before changing or implementing any financial, tax, or estate planning strategy.

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