

How Hedge Funds Can Improve Portfolio Diversification

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- In 2022, many investors were disappointed to find that their hedge funds declined at the same time as the traditional 60/40 portfolio.
- Over the past several years, investors piled into sectors like Equity Hedge and Event Driven, which fared poorly in 2022, and historically have been highly correlated with equities.
- However, many hedge funds delivered positive and even double-digit returns in 2022. Investors have a wide choice of funds that are likely to provide good diversification going forward.
- Our analysis shows that many hedge fund sectors benefit from volatility and higher interest rates, including Equity Market Neutral, Discretionary Macro, Fixed Income Relative Value, and CTAs. We believe they are likely to be good diversifiers for traditional portfolios in today's environment.

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Judging a book by its cover has a bad rap for a good reason—it’s an unreliable guide to what’s inside. There’s a similar issue with the “hedge fund” label—it tells you nothing about the strategy the manager is pursuing. In a sustained bull market like the one that ended after 2021, when most hedge funds appreciated along with other risky assets, that isn’t necessarily a problem.

Of course, 2022 was a much different environment. An “alternative” diversifier would have been very beneficial, given that the traditionally diversified 60% stock/40% bond portfolio¹ experienced its worst drawdown since the Great Depression, losing 15.9%.

In conversations with investors and other market observers, we found that many expected their hedge funds to provide diversification for their traditional market portfolio. Hedge funds overall certainly

held up better than the broad equity market in 2022, with the HFRI Fund Weighted Composite Index losing -4.2%, compared with a drop of 17.7% for the MSCI World Index Gross (USD).

But for investors looking for a positive bounce from this part of their portfolio—especially those who expected their hedge funds to have no correlation to stocks—the results were disappointing. That’s especially true for those invested in the large segment of the fund universe that did substantially worse than the HFRI Fund Weighted Composite.

However, many funds delivered positive and even double-digit returns in 2022. This paper examines how investors can structure their hedge fund portfolios to increase the odds that performance will be in line with expectations, especially if the goal is to add diversification to stock and bond portfolio allocations.

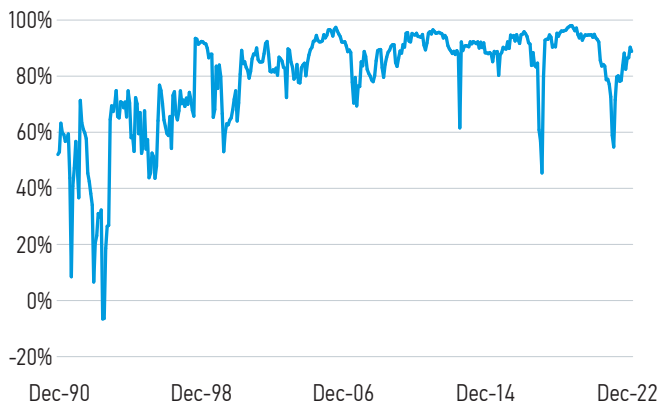
Increasing correlations

Hedge funds are generally understood to be vehicles that seek alpha in an unconstrained fashion, using techniques such as leverage and short selling to boost returns, emphasizing a goal of positive absolute returns through most market environments. In fact, hedge funds are not really an asset class, but a legal structure that encompasses a wide range of strategies across every underlying asset type or investment product set.

Display 1A shows that over the past three decades, the correlation between the broad hedge fund index and the MSCI World Index has been steadily increasing. *Display 1B* shows that as a result, during the five worst equity drawdowns since 1990, the broad hedge fund index also lost money in four of those periods.

DISPLAY 1A
Hedge funds overall have become more correlated with stocks

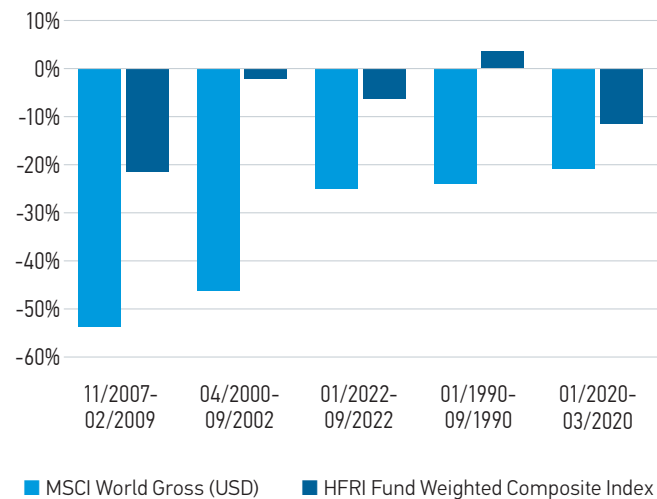
Rolling 12-month correlation HFRI Hedge Fund Index to MSCI World



Sources: MSCI, Hedge Fund Research, Morgan Stanley Investment Management as of 12/31/22.

DISPLAY 1B
Hedge funds had losses during 4 of the 5 biggest equity drawdowns

HFRI Fund Weighted Composite Index performance



Sources: MSCI, Hedge Fund Research, Morgan Stanley Investment Management as of 12/31/22.

¹ Reflects a portfolio with allocations of 60% to MSCI World Index Gross (USD), which lost 17.7% in 2022, and 40% to the Bloomberg U.S. Aggregate Bond Index, which lost 13.0%.

Display 2 helps explain the results in *Displays 1A* and *1B*. During the recent sustained bull market, many investors in hedge funds and fund of funds gravitated to strategies that have performed well in pro-cyclical regimes. The assets of two hedge fund sectors with highest-beta strategies—Equity Hedge and Event Driven—increased by \$656 billion over the three years leading into 2022, more than three times the increase for Relative Value and Macro strategies.

Like the unhelpful broad “hedge fund” label, Equity Hedge and Event Driven can give the impression that they should be uncorrelated with equity and bond markets. Indeed, they do employ hedging and invest in alternative markets and assets not typically found in a 60/40 portfolio.

Nonetheless, Equity Hedge and Event Driven are exposed to the same risk premia found in a 60/40 portfolio, as illustrated by their performance in 2022—Equity Hedge fell by 10.4% and Event Driven fell by 5.0%.² A closer examination of their strategies shows why this should not be surprising.

For example, long-biased equity funds typically hedge only a portion of their long position. In the Event Driven space, credit funds often take positions in illiquid debt, including emerging markets, which had an awful year in 2022.

Decades of high correlation

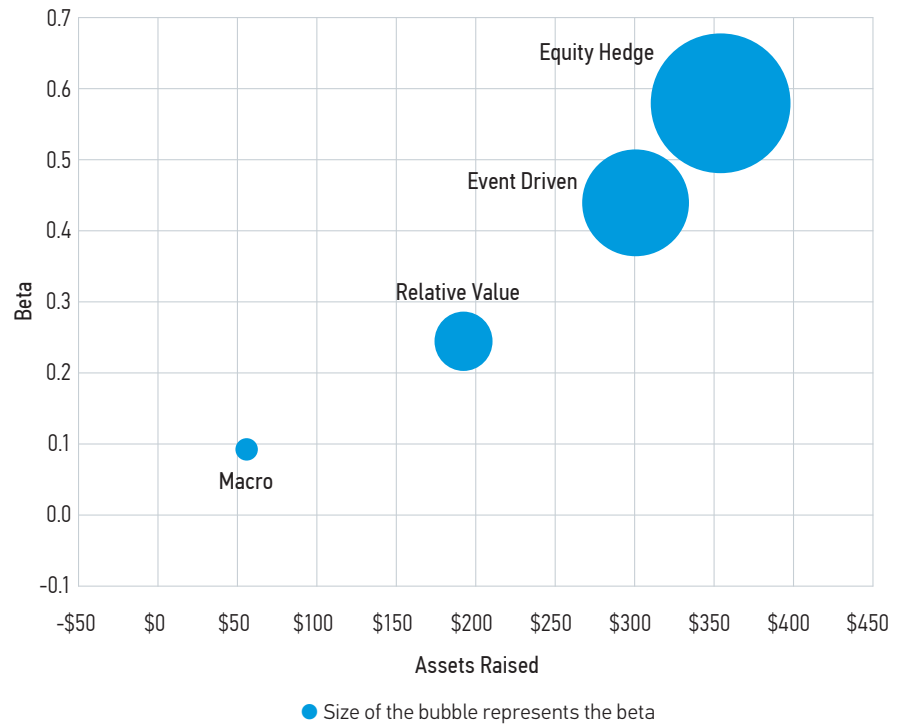
Display 3 shows that 2022 was no fluke. Equity Hedge and Event Driven have been highly correlated with equities for the past two decades, and left investors exposed to market pullbacks in 2018, 2020, and 2022, reducing the diversification power of their alternative portfolio.

Relative Value is only modestly lower in correlation, while Macro has achieved a materially low correlation.

DISPLAY 2

Investors have piled into 2 high-beta hedge fund sectors

Strategy Growth (\$ Billions) 2019-2021 by Beta to MSCI World

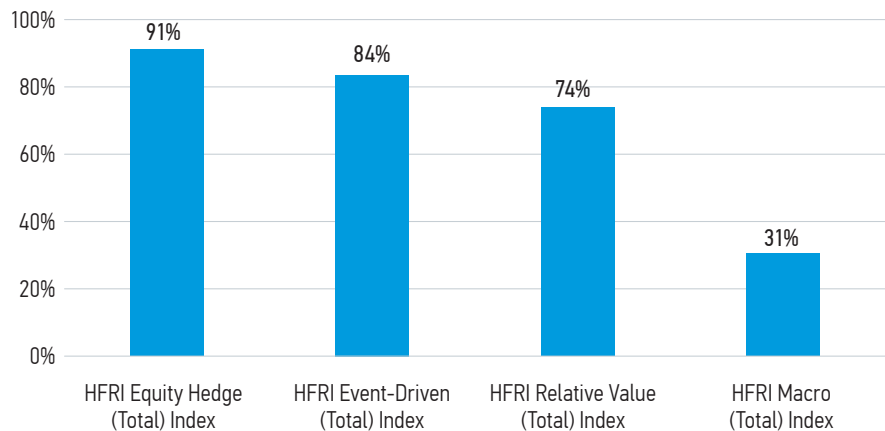


Sources: MSCI, Hedge Fund Research, Morgan Stanley Investment Management as of 12/31/22.

DISPLAY 3

Only Macro has consistently exhibited low correlation with stocks

Correlation to MSCI World 1/2003 to 12/2022



Sources: MSCI, Hedge Fund Research, Morgan Stanley Investment Management as of 12/31/22.

² As measured by the HFRI Equity Hedge (Total) Index and the HFRI Event-Driven (Total) Index.

Good records in bear markets

Fortunately, a number of hedge fund strategies have historically provided strong diversification to equities. The Macro sector was particularly successful in 2022, with a total return on the HFRI Macro (Total) Index of 9.0%. A number of the Macro sub-sectors produced double-digit returns, including systematic diversified, systematic directional, currency, and commodities.

In fact, Macro and Fixed Income Relative Value sectors have had consistently strong relative performance during bear markets, as seen in *Display 4*. It also highlights that the Equity Hedge and Event Driven strategies have underperformed the hedge fund average consistently during those down periods.

But even within the Equity Hedge category, there are strategies that perform well in bear markets, such as Equity Market Neutral. As the name implies, the strategy is focused purely on security selection and removes all market exposure. This strategy requires a high degree of skill and sophistication given the portfolio gets no “free” boost from rising equity markets. While Equity Market Neutral is only 2% of total exposure with the HFRI universe, it is the prevalent strategy in popular hedge fund platforms, such as Millennium and Citadel.

Next, we offer our view on the strategies we believe likely to diversify a 60/40 portfolio and potentially deliver stronger alpha than they have in the past decade.

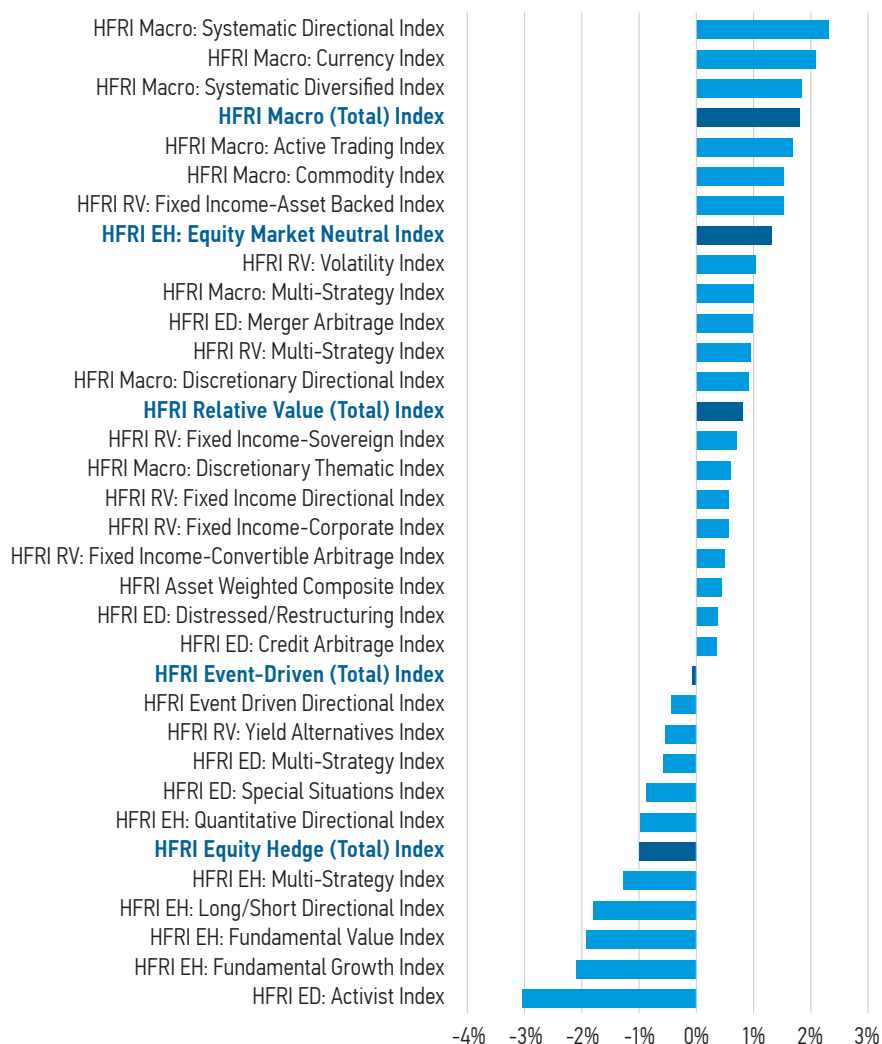
Volatility as a tailwind

Prior to 2022, the ultra-low interest rates and quantitative easing by the U.S. Federal Reserve and other central banks helped drive investors into risky assets, which was a tailwind for all stocks. That helped reduce dispersion among individual equities, tightening the range between best- and worst-performing issues, and depriving fund managers of alpha opportunities.

DISPLAY 4

Macro and Relative value have led hedge funds in bear markets

Excess performance over broad HFRI Hedge Fund Index in Bear Markets



Sources: Hedge Fund Research, Morgan Stanley Investment Management as of 12/31/22.

Now, however, with price moves that are more frequent and extended, a much broader range of opportunities opens up for a variety of hedge fund sectors. For example, in Equity Market Neutral, sharper price movements can push long and short positions farther in their trading ranges, potentially boosting profits.

Short rebate inflates

Rising interest rates provide yet another direct benefit to highly hedged strategies. To see how, consider a short-selling transaction by a typical long/short equity

fund. When the fund sells borrowed shares, the cash proceeds from the sale generate interest, which belongs to the lender of the stock. However, the fund is typically entitled to a portion of that interest, known as the short rebate.

With the effective federal funds rate at 0% in nine of the last 13 years, the short rebate had zero benefit for equity long/short funds. But with federal funds exceeding 4% at the start 2023, the short rebate is expected to be significantly additive to long/short equity returns.

CTAs profiting from cash

Commodity Trading Advisors (CTAs) comprise another hedge fund category set to benefit from rising rates. The futures positions typically employed by these funds only require a relatively small margin payment as a percentage of the value of those contracts, which leads to high levels of unencumbered portfolio cash.

The shift from zero percent interest rates to a new inflation-fighting policy regime has boosted the return on cash and added hundreds of basis points to potential return of CTA strategies. Likewise, many Discretionary Macro and Fixed Income Relative Value strategies that carry 40%-60% unencumbered cash or greater stand to benefit from this tailwind for gross returns.

Relative value in Treasuries

Fixed-Income Relative Value strategies are also flourishing with the increase in interest rate volatility, as can be seen in

the U.S. Treasury market. Despite being the largest and most liquid market in the world, discontinuities in pricing can occur along the yield curve that make particular issues over- or undervalued.

The Treasury curve can be discontinuous for a variety of reasons. For example, a big pension fund may be swapping into or out of a particular issue, or another issue may be deliverable for an expiring futures contract, creating a spike in demand. The degree of over- or undervaluation can be estimated relative to the interest-rate swap curve. These are highly popular private contracts in which investors agree to swap fixed for floating payments for a set time, for a number of reasons, such as hedging floating-rate liabilities.

Additionally, the Fed's balance sheet reduction through quantitative tightening forces the market to absorb greater volumes of Treasury issues. Historically, shrinking Fed balance sheets have corresponded with increased inefficiencies along the curve. In today's market,

the impact of this factor as a driver of volatility is even greater because of lower Treasury market liquidity, thanks largely to reduced participation by primary dealers.

The bottom line is that Relative Value hedge funds can find a growing number of opportunities as providers of liquidity, and in general, take advantage of inefficient Treasury pricing as it appears along the curve.

Drivers of hedge fund engines

In 2022, many investors were disappointed to find that their hedge funds were strongly correlated with equities at the same time traditional 60/40 allocation failed to provide downside protection. However, we have shown that many hedge funds offered successful diversification in a difficult year, and many are likely to be effective diversifiers going forward. Knowing what drives a hedge fund's engine is key to predicting its direction when the stock market heads south.

DEFINITIONS

HFR1 500 Fund Weighted Composite Index: global, equal-weighted index of the largest hedge funds that report to the HFR Database which are open to new investments and offer quarterly liquidity or better. The index constituents are classified into Equity Hedge, Event Driven, Macro or Relative Value strategies.

HFR1 Equity Hedge (Total) Index: Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.

HFR1 Event-Driven (Total) Index: Investment Managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

HFR1 Macro (Total) Index: Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

HFR1 Relative Value (Total) Index: Investment Managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

MSCI World Index: a free float adjusted market capitalization weighted index that is designed to measure the global equity market performance of developed markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

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