Where's the Hedge in Hedge Funds?

By Nathan Barnard

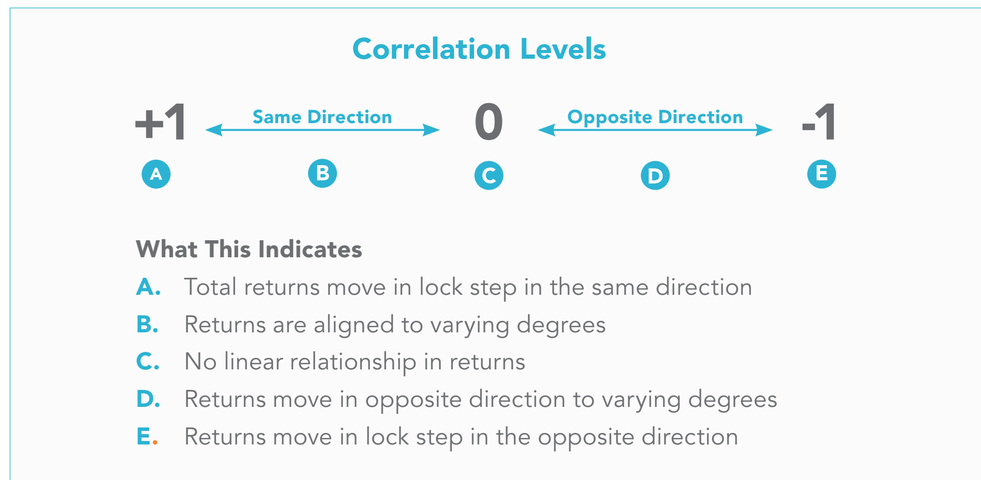
NATHAN BARNARD, CFA®
Nathan is an Investment Research Analyst in LNWM's Investment Strategy & Research group. He specializes in alternative investments and has more than a decade of experience sourcing and analyzing investment strategies across all major asset classes.

In 1952, Harry Markowitz published his seminal paper, Portfolio Selection, proving mathematically what had been understood for centuries: the benefits of diversification. As the merchant Antonio says in Shakespeare's The Merchant of Venice:

> *My ventures are not in one bottom trusted, Nor to one place; nor is my whole estate Upon the fortune of this present year: Therefore my merchandise makes me not sad.*

Unfortunately, Antonio was not nearly as diversified as he thought he was.

At LNWM, we try as much as possible to create truly diversified portfolios by including a wide variety of investments, including hedge funds. How do we gauge diversification? A major consideration is correlation, which is the extent to which two assets' returns are aligned. The diagram below shows general levels of correlation. Markowitz proved mathematically that assets with correlation less than +1 enhance portfolio diversification.



We view hedge funds as a unique tool in constructing more diversified portfolios to achieve better risk-adjusted returns over a full market cycle. It's worth noting that we don't think of hedge funds as a "hedge" to traditional asset classes. A hedge is analogous to insurance – it reduces risk in a portfolio in exchange for a premium. For example, to hedge a portfolio of stocks, you could buy put options, which are designed to gain in value when stocks fall below a specific level. By definition, a hedge has a correlation that is negative.

Correlation in Returns between Large US Equities and Other Asset Classes (1990 - Nov. 2018)

	Asset Class	Correlation Levels		
		Overall Correlation to US Large-Cap Equity	**Up Market Correlation** to US Large-Cap Equity	**Down Market Correlation** to US Large-Cap Equity
Traditional Asset Classes	US Large-Cap Equity	1.00	1.00	1.00
	US Small-Cap Equity	0.84	0.61	0.74
	International Developed Equity	0.75	0.52	0.70
	International Emerging Equity	0.78	0.55	0.71
	US Bonds	0.10	0.11	0.04
	High Yield	0.62	0.33	0.60
	REITs	0.56	0.28	0.53
	Cash	0.00	0.10	-0.02
Hedge Fund Strategies	**Equity Hedge**	0.76	0.51	0.66
	Equity Hedge - Market Neutral	0.29	0.20	0.18
	Equity Hedge - Sector - Tech/Healthcare**	0.63	0.37	0.50
	Equity Hedge - Sector - Energy+	0.50	0.33	0.33
	Event Driven	0.72	0.35	0.69
	Event Driven - Credit Arbitrage*	0.66	0.42	0.65
	Event Driven - Distressed Securities	0.54	0.11	0.58
	Event Driven - Merger Arbitrage	0.53	0.20	0.48
	Macro	0.33	0.17	0.16
	Macro - Discretionary*	0.67	0.55	0.38
	Macro - Systematic	0.38	0.30	-0.08
	Relative Value	0.53	0.22	0.53
	Relative Value - Asset-Backed^	0.18	-0.08	0.29
	Relative Value - Convertible Arbitrage	0.49	0.38	0.44
	Relative Value - Volatility*	0.37	0.00	0.43

*Historical returns as of 1/1/2008. **Historical returns as of 1/1/1991. ^Historical returns as of 1/1/1993. +Historical returns as of 1/1/1995.

Source: HFRI, Morningstar.

By contrast, the strategies used by hedge funds have varying levels of **positive** correlation to the stock market (between 0 and +1). Please see the table above. It shows correlation in returns relative to US large-cap stocks for traditional assets (different types of stocks, bonds, etc.) and also for various types of hedge fund strategies since 1990. In addition, the last two columns show correlations during periods when US stocks were up and when stocks were down. As you can see, hedge funds have had different levels of positive correlation with the US stock market, so they add another layer of diversification than bonds, which historically have had the lowest correlation to stocks outside of cash.

Levels of Equity Market Exposure

While hedge fund strategies vary widely, they can be grouped into four major types: Equity Hedge,

Event Driven, Macro and Relative Value (see box on right). Within these categories there are further sub-strategies, a few of which are listed in the table on the previous page. Not surprisingly, the strategies with higher net exposure to equities tend to have higher correlation to equity markets.

As the table on the previous page shows, Equity Hedge strategies have had the highest correlation to large Us stocks, at 0.76. This provides some diversification, but maybe not much more than foreign stocks in developed markets (International Developed Equity), which had a correlation of 0.75.

However, take a look at the sub-strategy Equity Market Neutral, which had a correlation of just 0.29. Much of the difference is due to portfolio construction: Equity Market Neutral funds aim to have zero exposure to the stock market by balancing their long positions (purchases of stock outright) with their short positions (selling stocks short). Many other funds in this category, however, do have substantial exposure to the stock market, usually net long.

Within Event Driven, the sub-strategy Merger Arbitrage matches long with short positions in the stocks of companies taking part in mergers and acquisitions, thus reducing the correlation to equity markets. By contrast, Credit Arbitrage strategies usually have net long positions in US corporate debt, which has a moderately high correlation with US equities.

The Macro and Relative Value strategies tend to be less heavily invested in equities, reflected in their lower correlation levels. Macro invests across equities, fixed income, currencies and commodities both long and short, while Relative Value strategies aim to profit from deviations in the relationships between securities.

If hedge funds aren't an overt hedge, do they at least perform well when equities do poorly? As it turns out, hedge fund correlation to equities tends to increase during poor stock market performance, which is the opposite of what a true "hedge" should do. Looking at the last two columns of the table from page 2, we can see that hedge fund correlations to equities tend to be higher when equities go down than when equities go up.

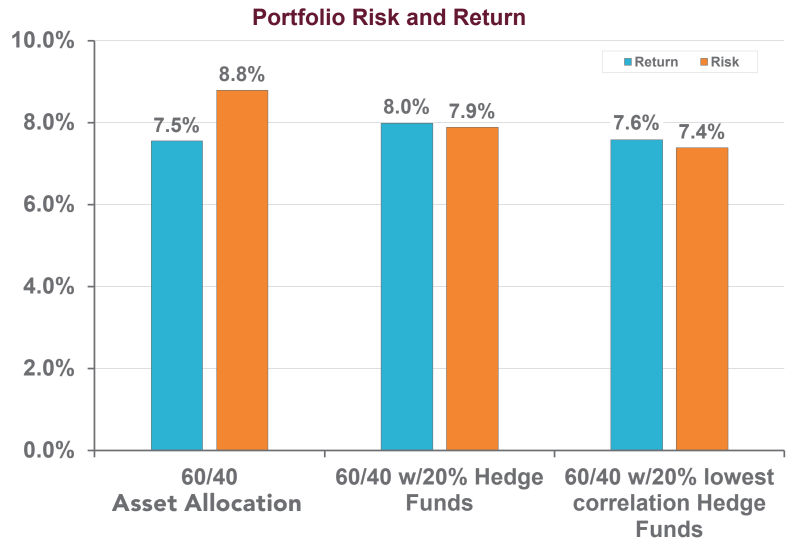
4 MAJOR HEDGE FUND STRATEGIES

- **Equity Hedge** – The oldest and most common strategy. Managers in this category generally buy stocks (go long) and/or sell stocks short. There are wide differences among funds as to levels of net market exposure, investment process (fundamental or quantitative), amount of leverage, holding period and areas of expertise.
- **Event Driven** – On the radar are companies that are, or likely to be, involved in a merger, buyout, restructuring, bankruptcy, tender offer, debt exchange or any other type of corporate transaction. A common approach is Merger Arbitrage, in which the fund attempts to capture the spread in pricing before and after a merger.
- **Macro** – Complex strategies that attempt to profit from changes in global macroeconomic conditions. Investments can be in equities, fixed income, currencies, or commodities and include both long and short exposures, as well as options, futures, forwards and other forms of derivatives. Decision-making can be strictly quantitative (known as "systematic"), it can be "discretionary" or a mix of both.
- **Relative Value** – Although all types of markets can be involved, the underlying goal is the same: to profit from price discrepancies in securities that are related somehow – convertible bonds and stock issued by the same company; shares of two companies in the same sector; two bonds issued by the same company but with different maturity dates and/or coupons.

LNWM's Approach to Hedge Funds

Over longer periods of time, adding hedge funds to a portfolio can lower risk without sacrificing return. The chart at right shows results for adding a 20% position in hedge funds equally (across all four major strategies) for the time period Jan. 1990 to Nov. 2018 (keeping stock/bond proportions the same).

During this time period, the addition of hedge funds would have lowered overall risk and increased return. More interesting: with perfect hindsight, we could have chosen the lowest-correlation hedge fund sub-strategies. The results for this hypothetical portfolio are shown in the far right of the chart: roughly the same return as a 60/40 portfolio but with significantly less risk.



*Basic 60/40 portfolio consist of 60% Equities and 40% Fixed Income. Please see Disclaimer at the end for specifics on types of equities, fixed income and hedge fund indexes used to create these hypothetical portfolios. Risk is measured by the standard deviation of return.

Source of Data: HFR Inc., Morningstar.

Granted, the above results are historical, and what we care about is returns and correlations in the future. During the past decade, overall hedge fund returns have declined and correlations with equities have increased as more money has flowed into hedge funds and many managers in this space are pursuing similar strategies. However, overall, hedge funds continue to offer different sources of return than a traditional portfolio of stocks and bonds, based on the additional strategies they have at their disposal and how well those are executed.

Bottom Line: We view portfolio construction as a balancing act between risk and return, with the level of correlation among investments as the fulcrum. The varying levels of correlation provided by hedge funds allow us to increase portfolio diversification, giving us a better chance to attain the twin goals of (1) lowering overall risk (2) without sacrificing long-term return.what a true "hedge" should do. Looking at the last two columns of the table from page 2, we can see that hedge fund correlations to equities tend to be higher when equities go down than when equities go up.

Why We Invest in Real Assets

Real assets can be a great diversifier, helping a portfolio play both defense and offense.

Find out how

ABOUT THE AUTHOR

Nathan Barnard is an Investment Research Analyst within Laird Norton Wealth Management's Investment Strategy and Research Group. He is responsible for analyzing developments in alternative assets, including hedge funds and private equity, and providing recommendations to LNWM's Chief Investment Officer, as well as conducting ongoing due diligence and monitoring of asset managers, including mutual funds, separately managed accounts and limited partnerships. Nathan is a Chartered Financial Analyst® (CFA®) and has a Bachelor's degree in finance from the University of Colorado. He has more than a decade of experience conducting investment research and analysis, asset manager due diligence and the sourcing and analysis of investment strategies

ABOUT LAIRD NORTON WEALTH MANAGEMENT

With nearly $5 billion in assets under advisement, Laird Norton Wealth Management is the Northwest's premier wealth management company. Founded in 1967 to serve the financial management needs of the Laird and Norton families, the firm now provides integrated wealth management solutions to more than 600 individuals, families, business leaders, private foundations and nonprofit organizations.

801 Second Avenue, Suite 1600, Seattle WA 98104   206.464.5100   800.426.5105   lairdnortonwm.com

DISCLOSURE

Hypothetical portfolio allocation definitions: **60/40:** 40% Russell 1000 Index; 20% MSCI EAFE Index; 40% Bloomberg Barclays US Aggregate Bond Index.**60/40 w/20% Hedge Funds:** 80% 60/40; 5% HFRI Equity Hedge Index; 5% HFRI Event-Driven Index; 5% HFRI Macro Index; 5% HFRI Relative Value Index **60/40 w/20% Lowest Correlation Hedge Funds:** 80% 60/40; 5% HFRI EH: Equity Market Neutral Index; 5% HFRI ED: Merger Arbitrage Index; 5% HFRI Macro: Systematic Diversified Index; 5% HFRI Relative Value Index: Fixed Income – Asset Backed Index.

All investments involve a level of risk, and past performance is not a guarantee of future investment results. The value of investments and the income derived from them can go down as well as up. Future returns are not guaranteed and a loss of principal may occur. All investment performance can be affected by general economic conditions and the extent and timing of investor participation in both the equity and fixed income markets. Fees charged by LNWM will reduce the net performance of the investment portfolio.

The information presented herein does not constitute and should not be construed as legal advice or as an offer to buy or sell any investment product or service. Any opinions or investment planning solutions herein described may not be suitable for all investors nor apply to all situations. All opinions expressed are those of Laird Norton Wealth Management and are current only as of the date appearing on this material.

Any accounting, business or tax advice contained in this presentation (or communication, including attachments and enclosures) is not intended as a thorough, in-depth analysis of specific issues, nor a substitute for a formal opinion, nor is it sufficient to avoid tax-related penalties.

Some investments may not be publicly traded and they may only allow redemptions at certain times conditioned on various notice provisions and other factors as more fully described in the related offering and subscription documents provided at the time of the investment. Due to the nature of these types of investment funds, hedge funds, fund of funds, and similar partnership-like investment vehicles, they should be considered illiquid. In addition to restrictions on redemption, they often include holdback provisions that may delay a full redemption for several months or longer. There is no guarantee that the amount of the initial investment can be received upon redemption. Due to the nature of the tax reporting that may be available from these types of investments, clients should expect to extend the filing of their tax returns.

A benchmark is an unmanaged index, and its performance does not include any advisory fees, transaction costs or other charges that may be incurred in connection with your investments. Indices are statistical composites and are shown for informational purposes only. It is not possible to invest directly in an index. Indices are unmanaged and are not subject to management fees. Any benchmark whose return is shown for comparison purposes may include different holdings, a different number of holdings, and a different degree of investment in individual securities, industries or economic sectors than the investments and/or investment accounts to which it is compared. Comparisons of individual account or portfolio performance to an index or benchmark composed of indices are unreliable as indicators of future performance of an actual account or portfolio. Actual performance presented represents past performance net of investment management fees unless otherwise noted. Other fees, such as custodial fees or transaction related fees may not be reflected in the actual performance results shown.

Certain information herein has been obtained from public third party data sources, outside funds and investment managers. Although we believe this information to be reliable, no representation or warranty, expressed or implied, is made, and no liability is accepted by Laird Norton Wealth Management or any of its officers, agents or affiliates as to the accuracy, completeness or correctness of the information herein contained. In addition, due to the nature of an investment or the date of the creation of the attached presentation, some values shown or used in the calculation of performance may be based on estimates that are subject to change.

All data presented is current only as of the date thereon shown. Laird Norton Wealth Management is comprised of two distinct entities that may offer similar services to clients. Laird Norton Trust Company is a State of Washington chartered trust company. Its wholly owned subsidiary, Laird Norton Tyee Asset Strategies, LLC, is an Investment Advisor registered with the Securities and Exchange Commission. Such registration does not imply any level of skill or expertise.