August ▪ 2013

John Hancock INVESTMENTS

Evaluating and implementing alternative investment strategies

John Hancock has partnered with Wilshire Associates to provide an overview of institutional best practices and case studies for alternatives.

Key takeaways

- Alternative investment strategies continue to offer the potential for increasingly rare sources of persistent diversification.[1]
- Opportunities to introduce alternatives into portfolios have expanded with the emergence of high-quality managers in the open-end mutual fund universe.
- Evaluating and selecting exceptional alternative investment managers requires a higher level of analysis than for traditional long-only equity and fixed-income managers, and the stakes are higher.
- Strict adherence to due diligence principles can yield a successful selection of alternative investment managers.
- A robust manager selection process combined with savvy implementation can reduce portfolio volatility and ultimately enhance returns.

Wilshire Associates

Executive summary

Asset class diversification has long been the mantra of advisors for individual and institutional clients alike. As capital markets have matured, the investment opportunity set of asset classes has increased, only to watch the benefit of diversification decrease with rising correlations among satellite asset classes, particularly in times of market stress. Meanwhile, alternative investment strategies, most commonly operated in hedge funds, have continued to offer the potential for increasingly rare sources of persistent diversification. Institutional investors and ultra-high-net worth individuals have appreciated the benefits of alternative investment strategies for decades. Demand for incorporating these offerings into portfolio solutions for individual investors has grown as a result of equity market declines in 2008 and early 2009. Meanwhile, opportunities to introduce alternative investments into portfolios have expanded with the emergence of high-quality alternative investment strategy managers in the open-end mutual fund universe.

However, regardless of the investor type, what makes alternative investment strategies attractive options for diversification also makes these options difficult to analyze and successfully select. Unlike traditional long-only investment options, which are driven primarily by market beta, it is often manager skill or alternative risk premia that are more substantial factors in the absolute return of an alternative investment strategy.

1 Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Reflecting this additional complexity, the process of evaluating and selecting exceptional alternative investment managers will vary from the process used to identify traditional, long-only investment managers. While many of the same qualitative and quantitative metrics are used during the review of both types of managers, a deeper level of due diligence is required in evaluating alternative investment managers.

Advisors with the knowledge and resources to effectively evaluate and select alternative investment managers can succeed in differentiating their services and improving clients' portfolio outcomes.

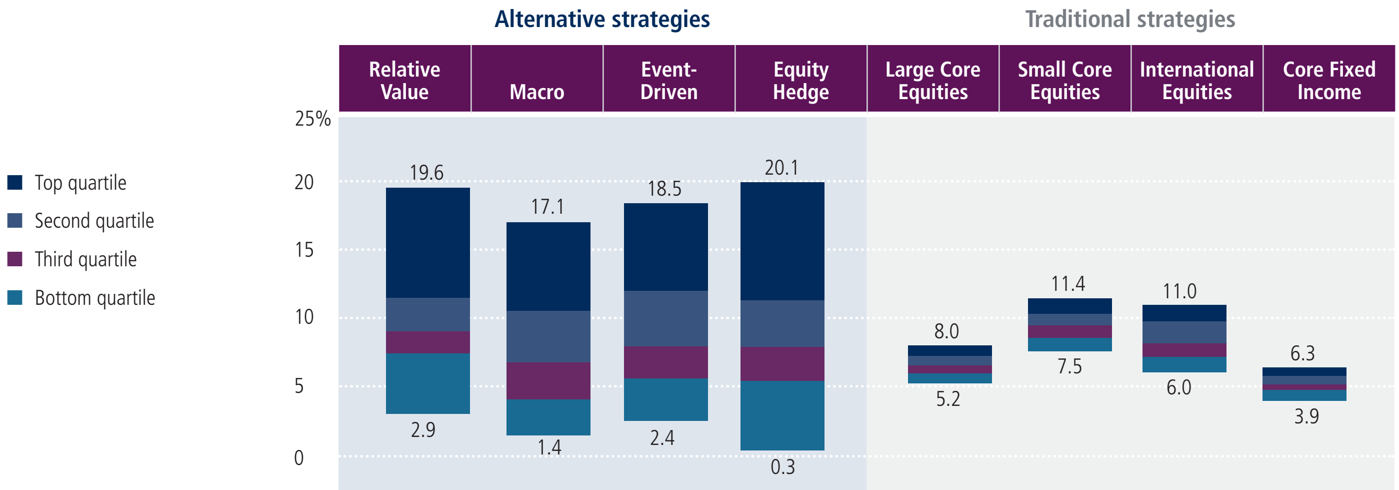
What are alternative investment strategies?

Alternative investments include nontraditional asset classes such as commodities, real estate, and emerging-market debt, while alternative investment strategies are those that may be less constrained by limitations regarding investment style, asset class, concentration, leverage, investment thesis, or legal structure. Often these alternative investment managers fall under the "hedge fund" umbrella. Wilshire broadly defines alternative investment strategies as having one or more of the following characteristics:

- An absolute return mandate
- Significant use of hedging techniques (e.g., shorting or derivatives)
- Use of leverage
- Investment in illiquid securities or private placements
- Primarily delivering alpha or nontraditional systematic sources of return
- A tactical beta component

Large spread between top and bottom

Annualized 10-year performance 1/1/03–12/31/12



Manager dispersion	Relative Value	Macro	Event-Driven	Equity Hedge	Large Core Equities	Small Core Equities	International Equities	Core Fixed Income
Top 5% to bottom 5%	16.7%	15.7%	16.1%	19.8%	2.8%	4.0%	5.0%	2.5%
Top 25% to bottom 25%	4.2%	6.5%	6.5%	6.1%	1.3%	1.8%	2.6%	1.1%

Source: Wilshire Compass℠, PerTrac, as of 12/31/12. Traditional strategies are represented by constituents of their respective Lipper classifications. Large core equities are represented by the Lipper classification "Large-Cap Core Funds"; small core equities by "Small-Cap Core Funds"; international equities by the Lipper objective "International"; and core fixed income by "Intermediate Investment Grade." Alternative strategies are represented by their respective Hedge Fund Research Index (HFRI) constituents. Relative value includes constituents of the HFRI Relative Value Index. Macro includes constituents of the HFRI Macro Index. Event driven includes constituents of the HFRI Event-Driven Index. Equity hedge includes constituents of the HFRI Equity Hedge Index. It is not possible to invest directly in an index. Past performance does not indicate future results.

Examples of common investment strategies employed include convertible arbitrage, merger arbitrage, long/short equity and equity market neutral, long/short credit, distressed debt, global macro, and managed futures.

Hedge funds are a much more heterogeneous group than traditional long-only funds because they can utilize virtually any investment strategy, market-cap focus, geographic focus, capital structure bias, or investment horizon. Even managers operating within the same stated strategy area tend to generate a wide dispersion of returns and volatility, and many traditional measures and methods of judging the quality of a manager cannot be properly applied to hedge funds.

A manager research philosophy

The idea that past performance does not predict future results is an industry truism. Over the short term, luck and skill may be indistinguishable purely on quantitative performance metrics. Therefore, Wilshire's manager research effort relies heavily on qualitative analysis, seeking to identify managers with true skill—managers that Wilshire believes will be most likely to sustain the production of alpha over the long term.

> *Advisors with the knowledge and resources to effectively evaluate and select alternative investment managers can succeed in differentiating their services and improving clients' portfolio outcomes.*

For traditional long-only managers, Wilshire's manager research process is designed to identify and evaluate the most critical functional attributes of managers that are most likely to produce benchmark-relative alpha consistently. The fundamental premise of active management is that, due to differences in acquired information, analytical skill, and execution, certain managers are able to outperform peers and benchmarks. Effectively, long-only active management can be thought of as a zero sum game. In order to identify the potential winners, it is important to evaluate active managers on the fundamental basis upon which they compete for alpha.

The same concept applies to alternative investment strategy managers seeking absolute instead of relative return. Only, without a consistent source of market beta supporting the return, the stakes of manager selection are materially higher.

"At John Hancock, we recognize successfully executing alternative strategies is by no means a simple exercise, and that's one reason why it's important to focus so much attention on evaluating alternative managers. Take managers of currency strategies, for example. We began our evaluation of these type of managers by first examining whether a track record in nonliquid accounts truly reflected sustainable generation of alpha from individual currency selection. A thorough analysis of historical security-level data indicated that taking a relative value approach to currencies could provide alpha, as individual currencies ultimately revert to the mean."

Robert Fanelli
Head of Manager Research
John Hancock Investments

"An evaluation of an alternative manager should look beyond investment results and include a close review of how the management firm operates. Key considerations are how it manages risk and how it's organized to support the investment strategy. When John Hancock evaluated absolute return managers, for example, we learned that one of the investment firms we looked at has a risk manager who is also a portfolio manager with trading authority and veto power for every security held in the portfolio. The risk manager as investor brings the critical perspective that risk ultimately generates return. The information-gathering process is also distinctive at this organization. The entire portfolio management team sits together in an open trading floor, with no regard to level of seniority or hierarchy. This physical layout helps foster a team environment, and information is easily shared. It also could help ensure continuity. If one key person were to leave the firm, the process can move on and the strategy doesn't suffer."

Phil Fontana
Head of Product Development
John Hancock Investments

Qualitative evaluation process

A key tool in Wilshire's search for alpha is the firm's six-category qualitative evaluation process designed to assess the critical attributes managers need to successfully compete for alpha. Wilshire believes managers that score above average are most likely to produce positive alpha over the long term. Each manager's organization is evaluated, along with five functional components every investment manager must undertake to execute their investment process. Individual category scores are then weighted to determine the total manager qualitative evaluation score. Wilshire finds that this approach is well suited to alternative managers, given the intense competition for alpha and how important it is to identify where a manager has an edge versus their peers.

Wilshire's qualitative categories include:

1	**Organization**	Review of the structure and stability of the organization in order to assess noninvestment risk.
2	**Information**	How does the firm gather and process information related to its opportunity set and how unique are its sources of information?
3	**Forecasting**	How the manager develops its outlook for the future values of its investments, how disciplined and repeatable its process is, and what environments are beneficial or detrimental to the strategy.
4	**Portfolio construction**	Understanding of how the portfolio is built and the firm's risk management processes and systems.
5	**Implementation**	Transaction costs and ability to actually create the optimal portfolio.
6	**Attribution**	Understanding the firm's feedback loop, how it makes money, and what types of risks are associated with its performance and positioning.

How does the due diligence process differ for alternative investment managers?

Although the six qualitative factors are identical for traditional long-only managers and alternative investment strategies, the manner and depth in which those qualitative areas are reviewed differ significantly. Greater focus is placed on risk management, operational due diligence, and the manager's ability to continue to generate alpha. Alternative investment managers have more "levers" available in their quest for alpha, which only serves to make the due diligence process more complicated, time-consuming, and critical. The prevalence of performance asymmetries creates the need to utilize alternative quantitative measures when evaluating alternative investment managers.

> *Standard deviation, correlation, and value-at-risk are common (and useful) traditional risk measures, but they tend to significantly underestimate the true risk of alternative investment managers due to their reliance on normal return distributions.*

Standard deviation, correlation, and value-at-risk are common (and useful) traditional risk measures, but they tend to significantly underestimate the true risk of alternative investment managers due to their reliance on normal return distributions. Measures such as skewness (the degree of return symmetry) and kurtosis (a measure of the probability in the tails of distribution) are essential to incorporating the higher likelihood—relative to what traditional measures indicate—of a significant, negative performance event occurring. Additional measures such as drawdown and downside deviation can also be useful tools. In total, investment and operational due diligence on alternative fund managers generally takes two to four times longer than for traditional managers. It typically involves several conference calls, onsite visits, and reviewing multiple manager documents, as well as conducting detailed reviews of historical positioning, performance, and changes to the investment strategy over time.

Answers are needed about important operational items such as how holdings are valued (when and by whom); how collateral is managed; cash, trading, and fraud controls; counterparty risk management; position reconciliation; and the quality of the fund's service providers.

Benchmarking absolute return

One of the most challenging aspects of understanding and evaluating alternative strategies is deciding how managers should be benchmarked. Measuring traditional long-only asset manager returns relative to a market benchmark (e.g., a large-cap U.S. equity manager versus the S&P 500 Index) is straightforward. Unfortunately, benchmarking alternative investment strategy managers is not as straightforward. Without a primary

> *"Performing ongoing due diligence on alternative managers requires more than access to a list of holdings on a daily basis. At John Hancock we have found it critical to know what the objectives are for the individual holdings and how they are implemented in relation to each other. That way we can have a full understanding of the fund's risk profile and return expectations."*
>
> Robert Fanelli
> *Head of Manager Research*
> *John Hancock Investments*

source of return coming from market beta, alternative strategies are often considered "absolute return," and therefore should produce return profiles independent of traditional asset class performance.

Without the ability to tie a primary driver of performance to a consistent systematic risk factor, an investor in alternative investment strategies could be better served to take a multidimensional perspective on performance analysis. Common alternative strategy benchmarks include using an annual absolute return target (e.g., 5% over U.S. Treasury bills) or creating a custom-weighted market benchmark index (e.g., 40% Barclays U.S. Aggregate Bond Index plus 60% S&P 500 Index). These types of benchmarking may better reflect the manager's investment goals and sources of risk and return of the investment strategy, but they still fail to capture the dynamic nature of most alternative strategies.

Another option for benchmarking alternative investment managers is to use custom peer groups or peer group indexes, such as those offered by Hedge Fund Research for hedge funds. These are used to analyze a manager's performance relative to a group of managers operating the same or similar strategies and are typically a better gauge of success over shorter time periods. However, dispersion in a manager's assumption of risk relative to the average of the peer group may render this form of benchmarking imperfect. More sophisticated solutions of manager performance evaluation include quantitative methods to attribute return to individual manager decisions.

Accessing alternative investment strategies via mutual funds

Both hedge funds and mutual funds may implement alternative investment strategies or traditional, long-only mandates; however, hedge funds have significantly less regulatory oversight and often, more flexibility to execute alternative strategies.

Mutual fund versus hedge fund structures

Structure	Mutual fund	Limited partnership hedge fund
Liquidity	Daily	Varies—lockups common
Typical fees	1%–2%	2% + performance incentive
Transparency	High	Low to none
Regulation	High	Low
Investment minimum	Low	Often high
Accredited investor	No	Yes
Leverage	Low	Unrestricted
Taxes	Form 1099	Form K1

Although limited by regulation, open-end mutual funds may implement most of the strategies listed above in some form. While managers must adhere to the mandated liquidity, transparency, and leverage rules, they are often still able to execute a meaningful portion of their alternative investment strategy under the '40 Act structure.

Wilshire Associates would be remiss not to highlight the potential cost advantages mutual funds offer over limited partnership hedge fund structures. While the mutual fund-based alternative managers will command higher management fees versus traditional fund managers, the typical performance fee charged by hedge funds is simply not allowed by regulation in most circumstances. Additionally, mutual fund investors enjoy daily liquidity over less frequent liquidity profiles common in hedge fund structures, which may include provisions that limit the amount of a withdrawal a hedge fund investor can make during redemption periods.

A common concern among potential investors in alternative strategy mutual funds is centered on what caliber of manager would be attracted to a vehicle with lower fees, higher transparency, and more regulation. While difficult to quantify, the invisible hand of market efficiency has been addressing this concern. Recent investor demand for alternative investment strategies offered via mutual funds has prompted alternative managers to embrace it as an untapped market for their products. Such demand is not only coming from the retail marketplace; well-publicized hedge fund blowups and frauds have caused many institutional investors to reevaluate the operational and tail risk associated with unregulated investment funds. In fact, the alternatives category is the fastest-growing segment of the mutual fund market today, with more than 300 unique alternative investment mutual fund offerings currently available. Assets in hedge fund mutual funds and exchange-traded products totaled more than $300 billion as of June 30, 2012, representing more than 3% of the entire mutual fund industry, according to Financial Research Corporation.

Conclusion

Opportunities for stronger risk/return profiles exist for investors who have the knowledge and resources necessary to successfully evaluate and select alternative investment managers. However, finding and vetting high-quality managers is a cumbersome activity requiring significant knowledge and resources. The growing universe of alternative mutual funds alleviates many of the key operational due diligence issues, allowing knowledgeable retail investors to access strategies that would bring their portfolios more in line with large, sophisticated institutional investors.

About Wilshire Associates

Since its founding in 1972, Wilshire Associates has evolved from an investment technology firm into a global advisory company specializing in investment products, consulting services, and technology solutions. Wilshire was an early innovator of the integrated asset/liability modeling technique, as well as risk management and portfolio optimization models to help plan sponsors and institutional investors arrive at optimal portfolios based on their specific needs. Two very familiar products in today's investment community—the Wilshire 5000 Total Market Index℠, and the Wilshire Trust Universe Comparison Service® (Wilshire TUCS®)—were developed in Wilshire's first decade. In the mid-1990s, Wilshire launched its first private equity fund of funds, meeting the growing needs institutional investors' appetite for alternative investments. More recently, Wilshire developed its managed alternatives platform to serve as the investment chassis for hedge fund managed accounts.

Oversight and best practices: John Hancock's approach

The company began investing in liquid alternatives within its John Hancock Lifestyle Portfolios in 1997, when liquid alternatives were recognized as mispriced, creating investment opportunities.

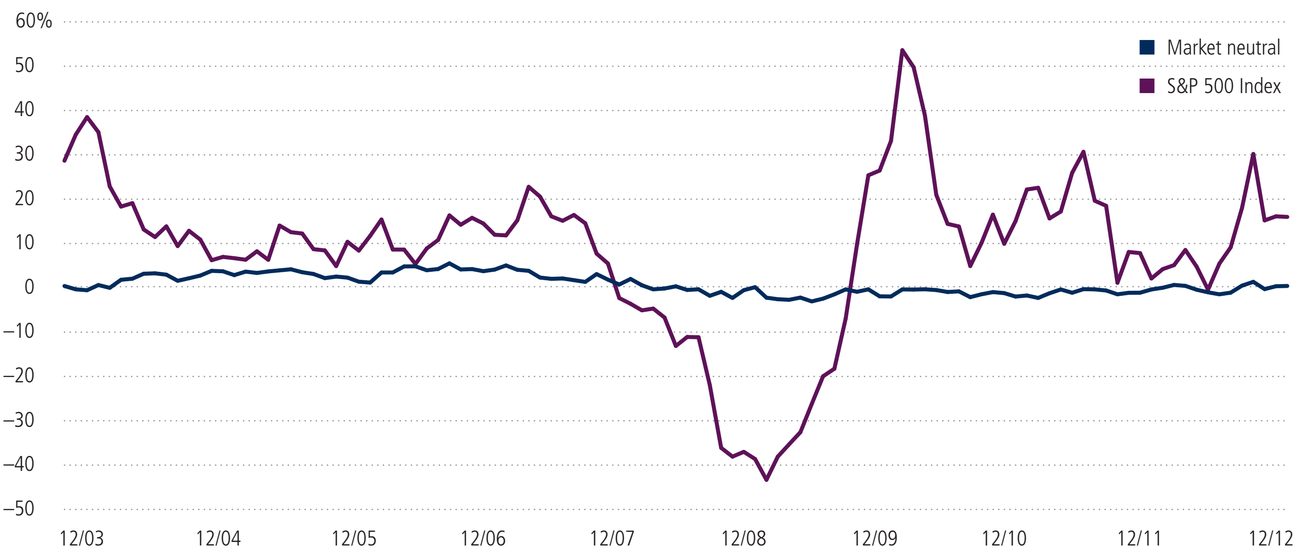
John Hancock has a long history with alternative investments. The company began investing in liquid alternatives within its John Hancock Lifestyle Portfolios in 1997, when liquid alternatives were recognized as mispriced, creating investment opportunities. Over that 16-year history, assets that were once considered alternative have moved toward the traditional realm as they have drawn more attention from investors and their correlations with broader markets have increased. Examples include assets that John Hancock introduced into its nascent alternative portfolios in the late 1990s: real estate investment trusts, international small-cap equities, and multi-sector fixed-income strategies.

In the '90s, these assets were broadly categorized as alternatives in part because they were little understood due to their complexities or were regarded as unsuitable investments because of their illiquidity. Initially, the overall alternatives component amounted to just 2–3% of diversified portfolios.

Over the years, John Hancock's team rotated some of these assets out of the alternative buckets within its portfolios as the correlation benefits of traditional assets diminished. The firm responded by embracing newer asset categories that appeared to offer greater potential to meet portfolio objectives, such as diversification and volatility reduction. Among them were emerging-market equities and currency, asset classes that often generate returns that are uncorrelated with the performance of stocks and bonds in developed markets.

Market-neutral funds have not delivered

Rolling 12-month total return (%)



Source: FactSet as of 12/31/12. Market neutral represents average of Morningstar, Inc.'s market-neutral open-end fund category.

The S&P 500 Index is an unmanaged index of 500 widely traded common stocks. It is not possible to invest directly in an index. Past performance is no guarantee of future results.

In some instances, John Hancock's ability to avoid alternative assets with unfavorable performance characteristics or outlooks has helped improve investors' outcomes. For example, over the past decade John Hancock opted not to follow the path taken by other asset managers that added exposure to market-neutral funds in the alternative buckets of their diversified portfolios. John Hancock avoided the category because it appeared to show little potential to achieve overall portfolio goals. Indeed, long-term performance of market-neutral strategies has been disappointing. Over rolling 12-month time periods from December 2003 through December 2012, funds in Morningstar, Inc.'s market-neutral open-end universe posted average annualized returns of less than 1%. Average 12-month returns within the category were never greater than 6% during this period.

New iterations

Growth in demand for uncorrelated alternative investments, particularly since 2008, has fueled an increase in the number of alternative strategies and investment vehicles. While many portfolios today include alternative strategies, the allocations to these strategies still vary significantly across investor types. For many institutions, illiquidity and high investment minimums are not major concerns, so investors such as large endowments and foundations have historically used hedge funds. However, vehicles such as comingled hedge funds and '40 Act alternative funds have increased in the United States. These products can meet the needs of other investors who require liquidity and transparency, while also seeking the diversification and potential alpha that alternatives can provide. Consider that more than 620 strategies are currently loaded to the eVestment Alliance database of alternatives, which is used by many institutional consultants. Nearly 10% of those strategies offer a mutual fund vehicle.

As foundations and endowments get bigger, their allocations to alternatives increase

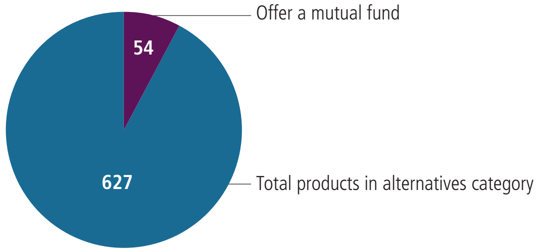
AUM of foundation/ endowment	Alternative strategies	Domestic equity	Domestic fixed income	International equities
>$1B	32.5%	23.9%	13.4%	12.2%
$100M–$500M	6.7%	31.5%	16.0%	16.5%
<$100M	0.0%	36.8%	22.1%	20.0%

Source: Wilshire TUCS®. Median allocation as of 12/31/12.

Despite the broad growth, one special consideration is that many mutual funds specializing in alternative investments are relatively new. Although a firm may have a lengthy record managing alternative hedge funds or overseeing portfolios for private clients, the mutual fund iteration of that manager's alternative portfolio may have just a few years of results to assess. In other instances, traditional long-only asset managers have recently introduced alternative strategies.

Mutual funds investing in more traditional alternatives like global real estate tend to have more established records, on average. Histories tend to be much shorter among funds using strategies such as equity long/short and multi-alternatives.

Mutual fund alternative strategies are growing



Source: eVestment Alliance global alternatives database as of May 2013.

Indeed, performance record duration has been shrinking for newly launched strategies in traditional asset classes as well. The median track record length has declined more than 20% during the past 18 months among strategies initially loaded by asset managers in the eVestment Alliance database. This trend is more pronounced for strategies in the global debt universe, where the median length track record has dropped more than 70% during this same period and recently stood at 1.2 years at launch.

Despite the relatively short records of many alternative managers in the '40 Act space, an abundance of talent exists. In many instances, veteran alternative managers from the hedge fund world have chosen to bring their skills to the mutual fund industry, despite potentially lower fees, a more stringent regulatory regime, and greater liquidity requirements. For some, a key objective is to avoid revisiting the liquidity challenges that many hedge funds faced during past financial crises. For others, the growing interest from retail investors and institutions requiring these vehicles is compelling.

Assessing performance

In addition to accounting for the frequently short track records, performance assessments of alternative managers typically require a higher standard of care than with traditional managers. Alternative strategies are often complex, and tactical approaches can vary widely, complicating performance comparisons with benchmark indexes. Indeed, identifying an appropriate benchmark or peer group is often challenging because many alternative managers pursue investment objectives that are unique to them.

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The example of absolute return funds is instructive. This category shares the broader goal of generating positive returns with low volatility over reasonably long timeframes, regardless of market conditions. Some funds in the category have broad mandates to achieve this goal generally. Others set specific targets, such as generating returns at set percentage point levels above inflation, as measured by U.S. Treasury bill performance or the Consumer Price Index as measured by the U.S. Bureau of Labor Statistics.

Special consideration is merited in reviewing alternative manager performance during the financial crisis of 2008 and early 2009, or over any period shorter than a full market cycle. A unique aspect of that market downturn—one that took many seasoned institutional investment managers by surprise—was the degree to which a majority of traditional and alternative asset classes appeared to lose value in near-lockstep, despite having historically generated highly uncorrelated returns.

It is instructive also to consider performance covering 2006 and 2007, when asset values appreciated precrisis, to gauge under- or outperformance. That assessment could be paired with an analysis of the market rebound covering 2009 through 2011. Key questions to examine include whether an alternative manager made tactical moves to reduce portfolio risks precrisis; whether that defensive approach ultimately helped limit any losses as market liquidity deteriorated in late 2008; and whether any relatively strong results during that period offset any underperformance that may have occurred due to the fund's defensive positioning precrisis. Did the manager appropriately manage risks without mitigating potential rewards through all stages, including the subsequent recovery?

Validating processes

Perhaps equally important to assessing past performance is analyzing whether an alternative manager can convincingly validate its investment theory and practice. Explanations of performance dynamics entering and exiting the financial crisis provide a critical window for such a review. Does a manager's explanation instill confidence in its ability to navigate future periods of market stress and illiquidity? It is important to assess whether a manager is living up to its value proposition. Is a fund achieving return objectives by operating within specified parameters, such as standard deviation, or is it occasionally veering outside those limits?

Such analysis is complicated because risk controls are complex for many alternative investments compared with traditional equities and fixed income, and not easily articulated. Risk-adjusted performance of hedging or risk-parity strategies is not as easily quantified as the risk management of an equity fund as measured by upside and downside capture ratios, for example.

Any difficulty a manager may have in explaining a return pattern could indicate that the performance might be a product of luck. Further research could be merited if the returns appear to exceed what could be reasonably expected, considering the constraints the manager faces with its investment approach.

Given the relative scarcity of alternative strategies with demonstrated track records, John Hancock is, in a sense, looking for diamonds in the rough as it generates a universe of potential managers. This can mean evaluating firms that are too small to make it onto most due diligence radar screens.

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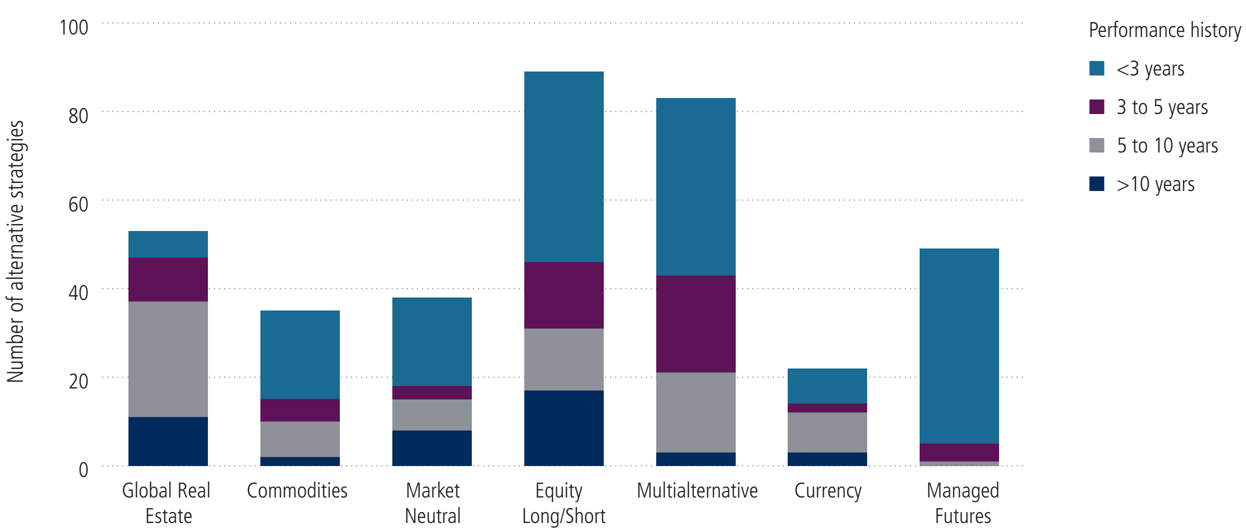
Alternative funds still lack performance history



Source: Morningstar Direct. Number of alternatives within each Morningstar, Inc. category as of 12/31/12.

In some cases, one or two individuals may be responsible for overseeing asset management. Appropriate scrutiny is merited in such instances.

An important aspect of such an analysis is whether the manager is adequately invested in its own performance, and whether the organization and individuals in it have sufficient incentive to avoid disappointing their investors through underperformance or straying from their established risk parameters. Consider that Standard Life Investments initially developed the Global Absolute Return Strategies Portfolio to satisfy the requirements of its own defined benefit pension plan. The plan now has a majority of its pension assets invested in this portfolio. This provided John Hancock some comfort from the outset that Standard Life is fully committed to the approach.

Implementing alternatives

Caution must be used in introducing alternative assets or strategies to a portfolio primarily invested in equities and fixed income. Funding the new alternative positions requires removing other portfolio components. Deciding what to take out depends on such factors as whether the goal of introducing alternatives is to reduce portfolio risk, to increase returns, or a combination of both. Implementation is a process that requires analyzing which among the portfolio's equities and fixed-income components are deemed most likely to underperform, or to achieve other objectives such as volatility reduction.

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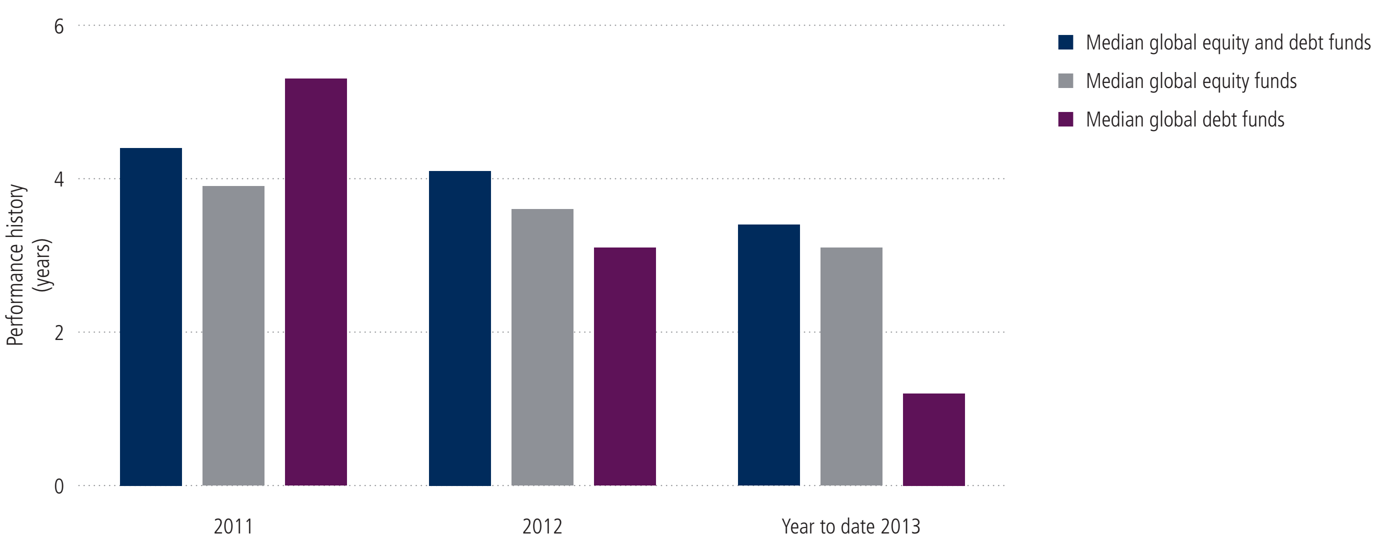
In the current low-yield environment, a pressing concern is the risk of shrinking returns or capital losses from the fixed-income component of a portfolio once interest rates rise. For many clients, the goal in introducing alternatives will be to add a portfolio component that could generate returns higher than fixed income and lower than equities, and to achieve those results in a manner that reduces volatility of the overall portfolio.

Funds are launching with shorter track records



Source: eVestment Alliance as of May 2013.

Unless done carefully, introducing alternatives to a portfolio could create the possible unintended consequence of increasing volatility, as the risk and reward dynamics and diversification benefits are altered. For example, commodities and real estate can exhibit volatility levels similar to those of traditional equities, while other alternatives, such as absolute return strategies, come close to traditional bonds on the volatility scale. To limit the risk of unintended consequences, a diversified approach is appropriate in implementing alternative investments, and in trimming exposure to traditional equities and fixed income to make room for the alternative component.

John Hancock's framework for implementing alternatives identifies three categories: alternative markets, alternative investment approaches, and absolute return strategies. Alternative markets include nontraditional asset classes, such as commodities, real estate, and emerging-market debt. Alternative investment approaches are those that may be less constrained by limitations regarding investment style, asset class, concentration, leverage, investment thesis, or legal structure. Absolute return strategies have similar distinguishing characteristics to alternative investment approaches. Additionally, they are completely market-agnostic and are designed to generate returns that are entirely independent of any market beta.

A diversified alternative allocation might include a combination of alternatives across this spectrum. When creating such a diversified alternatives allocation, it is critical to take into account the sources of alpha for each strategy utilized. Moreover, it is essential to look at actual exposures for each manager on a daily basis.

For multi-asset portfolios with risk-driven strategic guidelines, implementing both traditional and alternative strategies within each portfolio is a dynamic process, with exposures adjusted according to the outlook for various asset classes.

The investment opportunity continuum

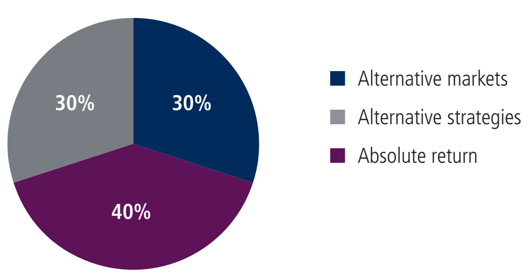
	Traditional		Alternative		
	Traditional markets	**Traditional investment approaches**	**Alternative markets**	**Alternative investment approaches**	**Absolute return strategies**
	Broad market exposure to traditional or familiar markets.	Active, long-only investment strategies focused on relative risk/return.	Niche or nonmainstream market exposures.	Unconstrained and opportunistic investment strategies with the flexibility to increase or decrease market exposure, among other things.	Market-agnostic strategies with minimal or no correlation to traditional markets, designed to generate positive return in various market conditions.
	▪ Developed market equities ▪ High-quality fixed income	▪ "Style box" investing ▪ Lower tracking error portfolios	▪ Emerging-market bond ▪ Global real estate ▪ Commodities	▪ Multi-asset strategies ▪ Multi-sector strategies ▪ Long/short equities	▪ Currency long/short ▪ Managed futures ▪ Market neutral
Ability to:		**Increase return**	High	Varies	Low
		Decrease risk	Mid–low	Varies	High
		Impact correlation	Varies	Varies	High

Only by knowing what each strategy currently holds is it possible to determine the appropriate position sizes. In reviewing each manager's positions, John Hancock seeks to develop a deep understanding of the risks being taken, how positions relate to one another, and the potential for capital loss. For multi-asset portfolios with risk-driven strategic guidelines, implementing both traditional and alternative strategies within each portfolio is a dynamic process, with exposures adjusted according to the outlook for various asset classes.

Case studies

In working with Standard Life and First Quadrant to develop liquid iterations of their strategies, John Hancock had a well-defined target investor in view. The goal was to provide equity-like returns with less than half of equity volatility. Thus, in developing liquid products, John Hancock has sought to guard against "maverick risk," the risk that a strategy would lack meaningful equity beta during a strong bull market. This is a practical consideration for investors, who understandably want their portfolios to fully participate in rising markets. The trade-off in ensuring that reasonable beta persists is that some risk of loss remains, although volatility could remain low relative to the market. In the case of Standard Life and the Global Absolute Return Strategy, John Hancock was assured that the approach could consistently meet these parameters through analysis of the back data that this strategy displayed. With respect to First Quadrant's currency strategies, the desired profile was engineered by looking at past returns and correlations and adjusting the amount of leverage that would be applied to the strategy in practice.

Hypothetical diversified alternative portfolio



For illustrative purposes only. Diversification does not guarantee investment returns and does not eliminate risk of loss.

Importantly, absolute return and currency strategies generally can be complementary within a portfolio. While much less volatile than the equity market, absolute return strategies typically demonstrate a slight positive correlation with equities over the long term. In contrast, currency strategies can display significant negative correlations, particularly in down markets when it's most beneficial. Consider that during 2008, when equity markets dropped almost 37% as measured by the S&P 500 Index, the average returns for currency funds in Morningstar's multicurrency, open-end fund universe were roughly flat. The correlation of these funds' average daily returns with the S&P 500 Index during this period was –0.27. Paired use of such strategies can achieve certain overall portfolio objectives by providing offsetting return characteristics in a variety of market environments.

Conclusion

This paper grew out of a partnership that pairs Wilshire Associates' deep advisory expertise in alternative investing with John Hancock's wealth of experience identifying top alternative managers and implementing alternative strategies within diversified investment portfolios. The firms embrace common themes about the elements needed to successfully introduce alternative investments into a portfolio and achieve objectives such as improving diversification and strengthening the risk/return profile. Foremost among these is robust due diligence of alternative managers. The broad range of alternative assets and strategies as well as their complexity demand a detailed validation of a manager's theory and practice, and a sophisticated understanding of how alternative assets and strategies can fit together to offset volatility in the traditional component of a portfolio. The expanded availability of alternative investments in mutual funds has created new opportunities for investors seeking alternative exposure, without the high management costs and illiquidity associated with hedge funds. However, these developments underscore the need for robust manager selection and monitoring, given the broader range of potential investment outcomes from the wider universe of managers available.

The Barclays U.S. Aggregate Bond Index comprises government securities, asset-backed securities, and corporate securities to simulate the universe of bonds in the market.

The HFRI Equity Hedge (Total) Index includes 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. Equity hedge (EH) managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.

The HFRI Event-Driven (Total) Index includes 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.

The HFRI Macro (Total) Index includes investment managers trading 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 relative value (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 EH 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 of the company are the most significant and are integral to investment thesis.

The HFRI Relative Value (Total) Index includes 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 event-driven exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

The S&P 500 Index is an unmanaged index of 500 widely traded common stocks.

Standard deviation measures performance fluctuation—generally, the higher the standard deviation, the greater the expected volatility of returns. These measures of past risk are not completely or necessarily representative of future risk and cannot predict a fund's performance.

Correlation is a statistical measure that describes how investments move in relation to each other, which ranges from –1.0 to 1.0. The closer the number is to 1.0 or –1.0, the more closely the two investments are related. A perfect positive correlation (1.0) implies that as one investment moves, either up or down, the other investment will move in the same direction. A perfect negative correlation (–1.0) means that if one investment moves in either direction that is perfectly negatively correlated, the other investment will move by an equal amount in the opposite direction. If the correlation is 0.0, the movements of the investments have no correlation.

Value-at-risk measures the level of financial risk within an investment portfolio over a specific timeframe.

Beta measures the volatility, or systematic risk, of an investment portfolio in comparison to the market as a whole.

Absolute return strategies are not designed to outperform stocks and bonds in strong markets, and there is no guarantee of a positive return. Fixed-income strategies are subject to interest-rate and credit risk. Foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability. The market price of commodities may be volatile due to fluctuating demand, supply disruption, speculation, and other factors.

Currency transactions are affected by fluctuations in exchange rates. The use of hedging and derivatives could produce disproportionate gains or losses and may increase costs.

Real estate risk investing in securities of companies in the real estate industry subjects an investor to the risks associated with the direct ownership of real estate.

The use of hedging and derivatives transactions could produce disproportionate gains or losses and may increase volatility and costs. The issuer or grantor of a security, or counterparty to a transaction, may be unable or unwilling to make principal, interest, or settlement payments. If an investment strategy invests in illiquid securities, it may be difficult to sell them at a price approximating their value.

John Hancock Lifestyle Portfolios' performance depends on the advisor's skill in determining the strategic asset class allocations, the mix of underlying funds, and the performance of those underlying funds. The underlying funds' performance may be lower than the performance of the asset class that they were selected to represent. The portfolios are subject to the same risks as the underlying funds in which they invest, which include the following: Stocks and bonds can decline due to adverse issuer, market, regulatory, or economic developments; foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability; and the securities of small-capitalization companies are subject to higher volatility than larger, more established companies; high-yield bonds are subject to additional risks, such as increased risk of default. For additional information on these and other risk considerations, please see the portfolios' prospectus.

A fund's investment objectives, risks, charges, and expenses should be considered carefully before investing. The prospectus contains this and other important information about the fund. To obtain a prospectus, contact your financial professional, call John Hancock Investments at 800-225-5291, or visit our website at jhinvestments.com. Please read the prospectus carefully before investing or sending money.

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