HEALTH WEALTH CAREER

THE ROLES OF ALTERNATIVE INVESTMENTS

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Alternative investments is an umbrella term encompassing a wide variety of investments and strategies that can offer enhanced return opportunities, diversification and/or some measure of inflation protection to investors. We believe that the key to successfully capturing these benefits is dependent upon conducting thorough due diligence on each potential alternative investment opportunity, and then building a well-diversified alternatives portfolio. Prudent sizing of allocations to individual alternative investments is also essential to mitigate the potential for performance to be derailed by idiosyncratic risks.

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INTRODUCTION

What are alternative investments? Broadly speaking, alternative investments is an umbrella term encompassing a wide variety of investments and strategies that can offer enhanced return opportunities, diversification and/or some measure of inflation protection. This paper provides an overview of the alternative investment space and identifies the potential benefits that the various types of alternative investments might bring to an institutional asset portfolio. It also identifies some potential concerns with allocating to alternative investments and how best to address them.

This paper aims to address the following areas:

- An overview of alternative investments
- Utilizing alternative investments: Return enhancement and diversification
- Implementation considerations
- Summary and conclusions

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OVERVIEW OF ALTERNATIVE INVESTMENTS

Alternative investments encompass a wide variety of investments and strategies. A helpful and distinguishing characteristic when defining alternative investments is to consider what they are *not*, as opposed to what they are: They are not long-only investments in highly liquid stocks or bonds. Generally speaking, they are investments that may be relatively illiquid, that are not publicly traded or that use nontraditional strategies.

Alternatives can be organized into the following broad categories:

	PRIVATE EQUITY	PRIVATE DEBT	REAL ASSETS	HEDGE FUNDS	OTHER
Composition	Buyouts, venture capital, distressed debt	Corporate real estate, infrastructure, other	Real estate, natural resources, infrastructure, commodities	Long/short equity, long/short credit, event-driven, macro/managed futures, multi-strategy, other	Various
Purpose	Improve returns relative to public equity markets, access new sources of alpha	Generate income with some cushioning of downside risk	Diversification, generate income, provide some inflation-sensitive exposure	Generate alpha with less volatility than public equity markets, improve diversification, access strategies likely to assist in tail-risk hedging	Diversification, enhance returns by taking advantage of niche opportunities and other return drivers/risk factors not captured in other categories

When considering an alternative investment category in isolation, risk levels can vary. Therefore, careful review and analysis are required before allocating to ensure that the allocation is appropriate given the investment objectives for the investor. We can subcategorize major alternative asset categories along a risk spectrum within each category as follows:

RISK SPECTRUM			
ASSET CLASS	LOW	MODERATE	HIGHER
Private equity	Buyout	Distressed/special situations	Venture capital
Private debt	Senior secured	Real estate and infrastructure mezzanine	Corporate mezzanine
Hedge funds	Multi-strategy	Single strategy	Directional opportunistic
Real estate	Core	Core plus	Value add/opportunistic
Infrastructure	Core	Core plus	Value add/opportunistic

Some of the characteristics that may be found in alternative investments, to varying degrees, include:

- Less efficient markets
- Less liquidity
- Higher fees
- Increased complexity
- Survivor bias in some indices
- Infrequent and/or appraisal-based valuations of some assets
- High idiosyncratic risks
- Greater headline risk
- Wide dispersion of manager returns

Investing in the alternative space could complement investment portfolios with one or more of the following characteristics:

- Expectation of enhanced returns
- Increased diversification with exposure to nontraditional risks that stocks and bonds cannot provide
- Inflation protection

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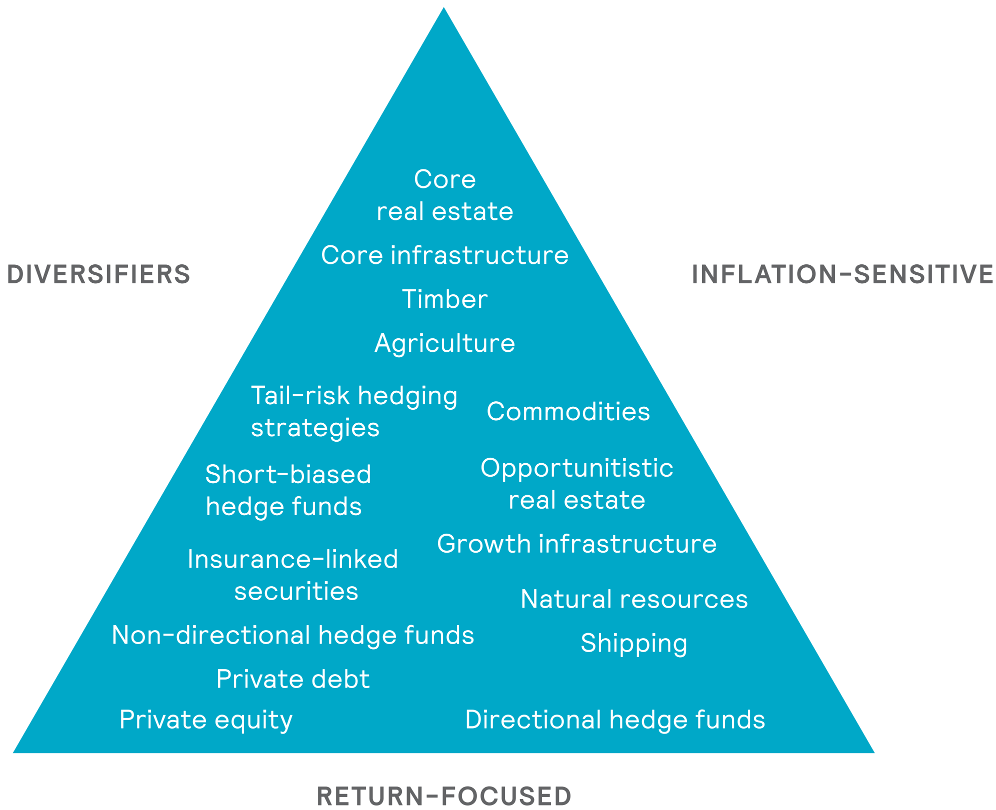
UTILIZING ALTERNATIVE INVESTMENTS

No two investors are perfectly alike, and investors will all have distinct objectives for their investments. However, if an allocation to alternative investments is appropriate for investors, their objectives — which can include (but are not limited to) return enhancement, diversification and inflation protection — may be more effectively achieved by allocating some portion of their investment portfolio to various alternative investments.

Given the broad nature of alternative investments encompassing a wide variety of assets and strategies, some form of alternative investment allocation is available to most investors.

RETURN ENHANCEMENT AND PORTFOLIO DIVERSIFICATION

The continuum on the next page illustrates where various alternative investments fall relative to the objectives of enhancing returns, providing diversification and offering inflation protection.

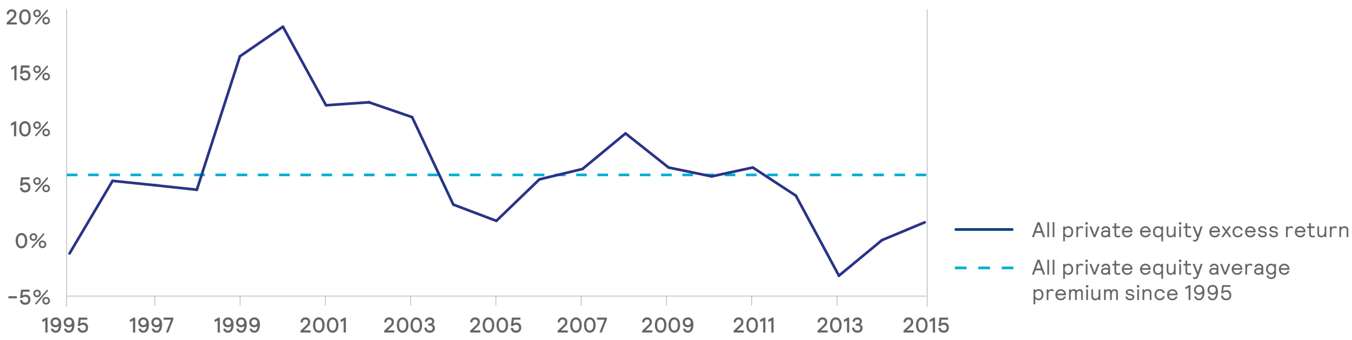


In general, the investment returns of alternative investments can be split into two parts: market exposure (beta) and active management (alpha generation). On average, the dominating risk factor in an investment portfolio tends to be equity market risk; therefore, by allocating to alternative investments that offer diversifying characteristics, a portfolio can introduce a return pattern that differs from prominent equity market movement.

Diversification benefits come from two primary sources — non-equity market beta (for example, risk premiums gained from taking legal process risk, deal failure risk or catastrophe risk, or from gaining exposure to style-based alternative risk premia) and alpha generation (that is, where returns are derived from active management decisions to exploit market inefficiencies rather than market movement). Hedge funds arguably provide greater scope for alpha generation than traditional long-only funds. This is because their less constrained mandates, with a focus on absolute return, provide the option to invest in a much wider range of alpha generation opportunities that are not available to long-only investors and furthermore often owe their existence to the impact of constraints in mandates for long-only investors.

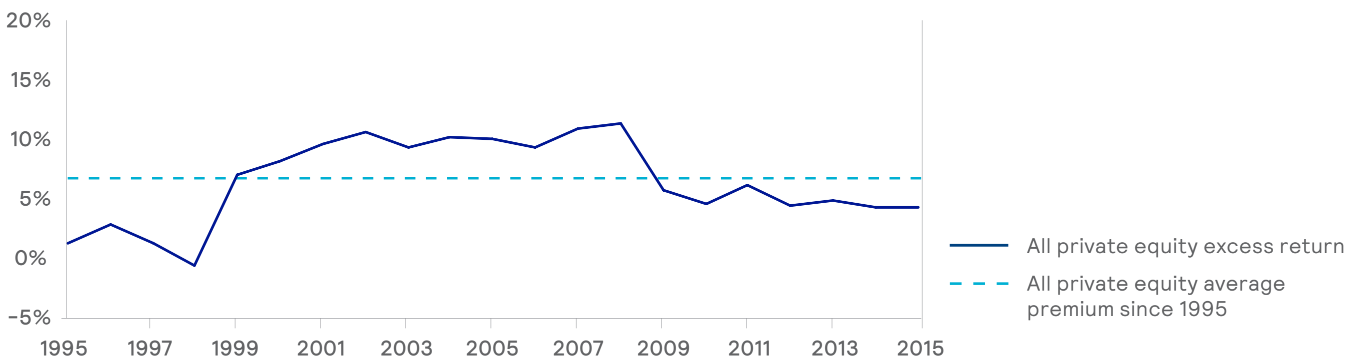
Looking at the more illiquid end of the alternative investment spectrum, the historical return performance of a broad universe of private equity investments over publicly traded equities provides an example of the potential return enhancement available through allocation to alternative investments. This is examined in detail in the following exhibits. According to Burgiss, private equity earned an average excess return over public equity markets of approximately 5% annually over trailing five- and 10-year periods. This is due to a combination of factors, including an illiquidity premium through the lock-up of investment assets, the longer-term focus of underlying investments, as well as the impact of value-creation initiatives to enhance the value of the underlying assets.

EXHIBIT 1. ROLLING FIVE-YEAR RETURNS: PRIVATE EQUITY HORIZON RETURN VS.RUSSELL 3000



Source: Burgiss

EXHIBIT 2. ROLLING 10-YEAR RETURNS: PRIVATE EQUITY HORIZON RETURN VS. RUSSELL 3000

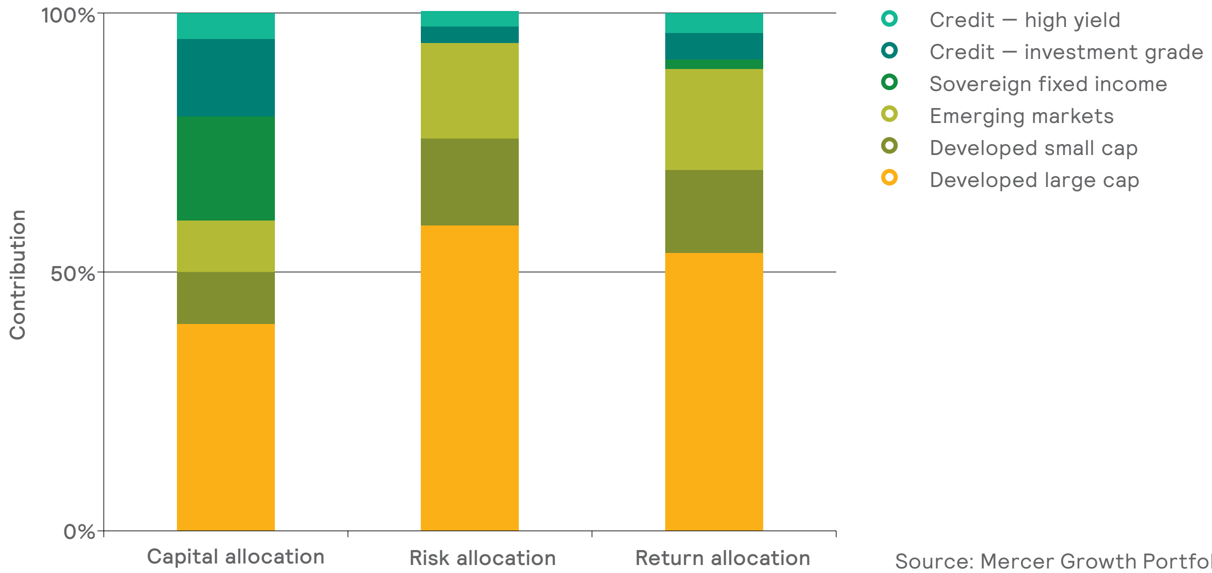


Source: Burgiss

If we evaluate the risk exposures of a typical portfolio of equities and fixed income securities, a disproportionate amount of risk is attributable to equity market risk. Many investors are unaware of this bias and the impact it can have on portfolio outcomes. One way to reduce this dominant equity market risk exposure could be to introduce an allocation to alternative investments that have displayed a historically lower correlation to equity markets. As such, we believe that adding alternative asset classes can help reduce the large risk allocation to equities and may provide greater diversification benefits than a traditional "diversified" portfolio.

Equities generally have a much higher risk impact when compared to alternatives, as illustrated in the following example. In the next chart, the risk of a conventional asset allocation (~60% equity/~40% non-equity) comes almost entirely from equity assets.

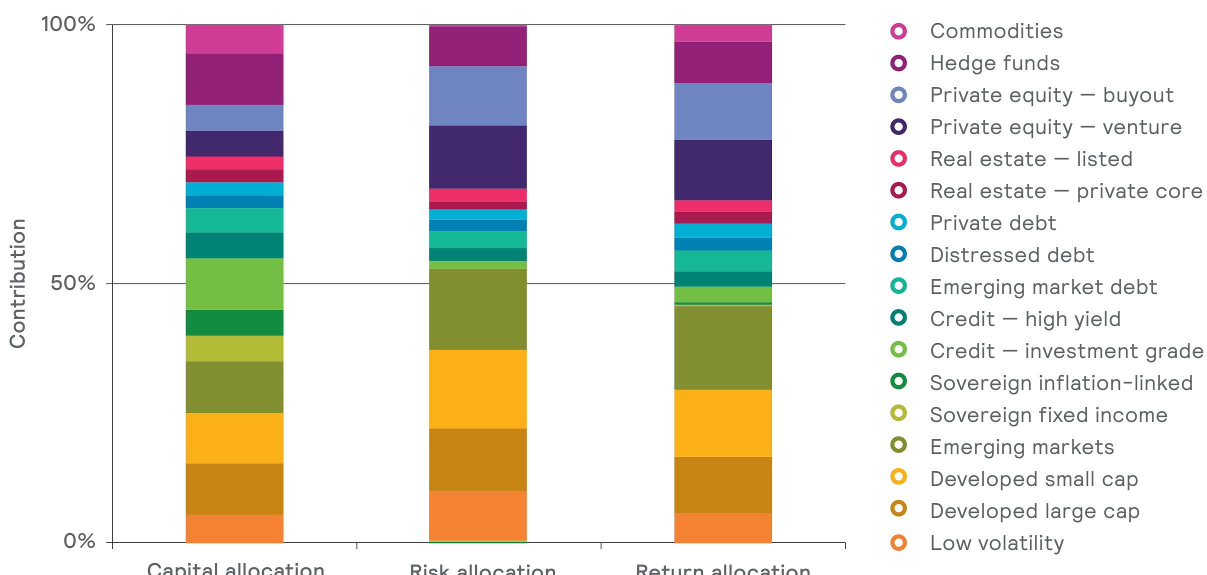
EXHIBIT 3. ALLOCATION BY ASSET CLASS EXCLUDING ALTERNATIVES



Source: Mercer Growth Portfolio Toolkit

Analysis has shown that by adding an allocation to alternative investments, an investor may be able to diversify away a portion of a portfolio's overall equity risk due to the diversifying characteristics of alternative investments. For example, Mercer estimates the long-term correlation between private equity and traditional equity markets to be between 65% and 70%; for value-added or opportunistic real estate and traditional equity, the correlations are estimated to be between 40% and 60%. Depending on the focus and need of the particular portfolio, an allocation to alternative investments can help balance diversification and inflation protection requirements by allocating to investments that can possess lower correlations to the equity markets.

EXHIBIT 4. ALLOCATION BY ASSET CLASS INCLUDING ALTERNATIVES



Source: Mercer Growth Portfolio Toolkit

CONSIDERING FACTOR SCORES AS RISK MEASUREMENTS

In assessing risks in alternative investments, investors need to be aware that traditional expected returns, risk and correlation do not properly reflect the many dimensions of risk. For example, asset correlations tend to be variable in volatile market environments. Factors such as liquidity, transaction costs, as well as other non-investment risks, such as operational risk, also add to the uncertainty of investment returns.

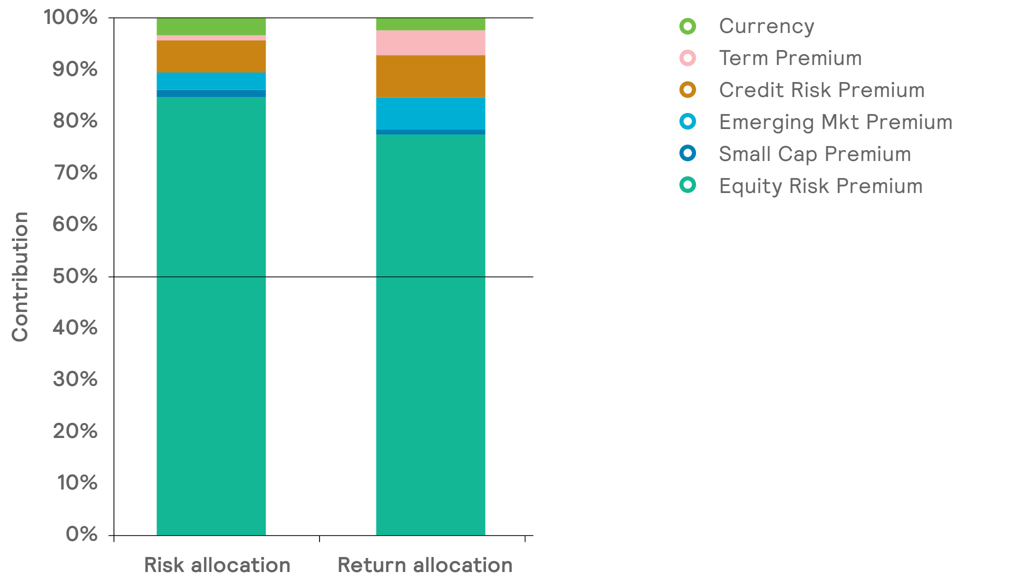
A useful way to understand the risks and return drivers of various investments is to categorize their exposure to various base market exposures. Defining, measuring or scoring some of these risk factors can improve an investor's ability to properly judge the risk and potential return of different portfolios. Mercer's model of factor exposures is shown below. Hedge funds have been excluded from the table below because this category covers a diverse range of different strategies, each with different investment characteristics.

Asset classes		Quantitative return drivers									
		Equity risk premium	Small cap premium	Emerging market premium	Credit risk premium	Unexpected inflation	Term premium	Illiquidity premium	Non-corporate GDP growth	Alpha	Other
Equities	Developed large cap	High									
	Minimum volatility	High	Some								High
	Emerging markets	High		High							
	Developed small cap	High	High					High			
	Private equity — venture	High	High		High			High		High	
	Private equity — buyout	High			High			High		High	
Fixed income	Sovereign fixed income high						High				
	Sovereign inflation-linked					High	High	Some			Moderate
	Credit — investment grade				High		High	Some			
	Credit — high yield				High		High				
	Bank loans				High	Moderate		Some		Some	
	Emerging market debt	Some		Moderate	Moderate		High	Moderate			
	Distressed debt				High		High	High			Moderate
	Private debt		Some		High		High	High			High
Real assets	Infrastucture — listed	High					High				
	Infrastucture — private core	Moderate			Moderate	High	High	High	Moderate		Moderate
	Real estate — private core	Some			Moderate	High	High	High	Moderate		Moderate
	Real estate — listed	High			Moderate	High					
	Timberland							High			High
Other	Commodities					High			High		
	ILS — catastrophe bonds							Moderate			High

Source: Mercer Growth Portfolio Toolkit

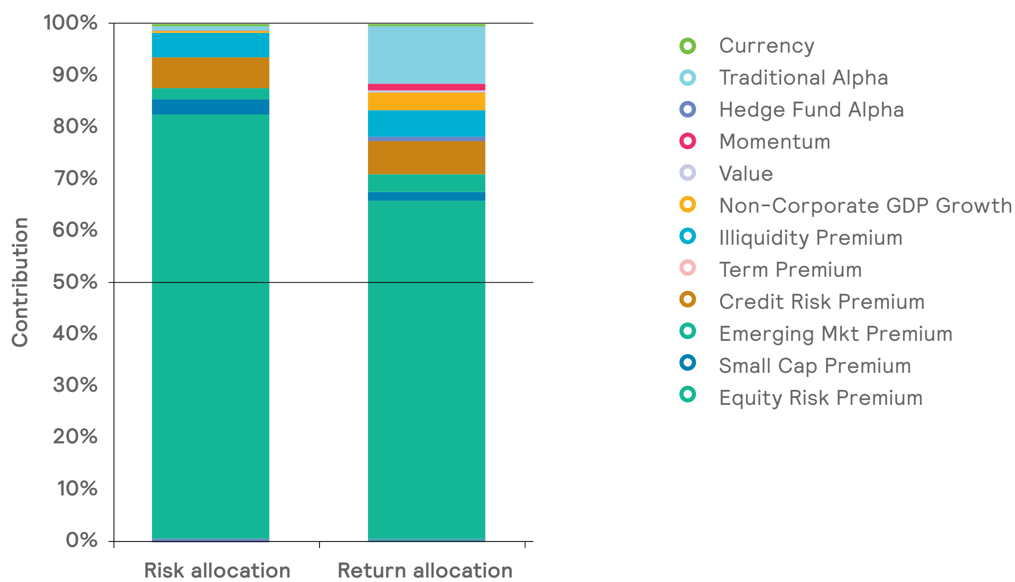
The benefits of adding alternatives to the growth portion of a portfolio can be seen in the risk exposures of the same sample portfolios, comparing a traditional investment portfolio to a portfolio that includes diversification through alternative investments.

EXHIBIT 5. ALLOCATION BY RISK PREMIUM WITHOUT ALTERNATIVES



Source: Mercer Growth Portfolio Toolkit

EXHIBIT 6. ALLOCATION BY RISK PREMIUM INCLUDING ALTERNATIVES



Source: Mercer Growth Portfolio Toolkit

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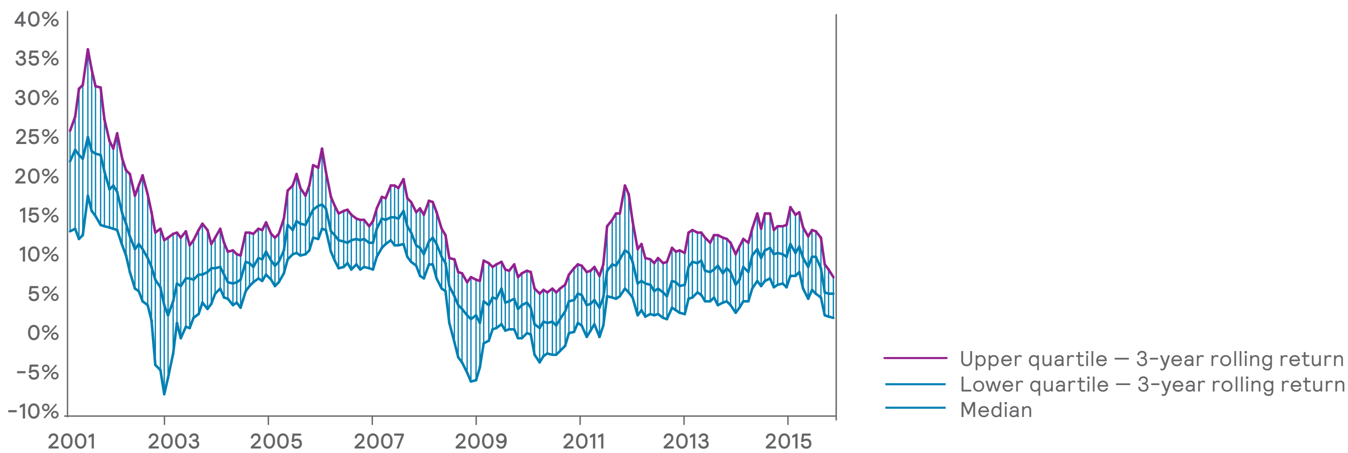
IMPLEMENTATION CONSIDERATIONS

The following are some additional considerations when making alternative investment allocations.

MANAGER SELECTION

There are large dispersions of returns between top quartile and bottom quartile managers within each of the main categories of alternative investments — greater than traditional asset classes. Peer groups will also need to be carefully selected, as managers within the alternative space may span a broad range of different sub-strategies. The charts on the next page show the interquartile spreads of rolling three-year returns for International Equity Directional Long-Short hedge fund strategies and International Equity Long-Only strategies based on data submitted by managers to the Mercer Insight database. Comparing the dispersions of returns for long-short equity hedge funds and traditional equity strategies illustrates clearly that thorough due diligence on potential managers is even more important in the alternatives space than it is in the long-only space, as a larger proportion of return is driven through manager skill (alpha) rather than market returns.

EXHIBIT 7. INTERNATIONAL EQUITY DIRECTIONAL LONG-SHORT MANAGER RETURN DISTRIBUTION JANUARY 1998–JUNE 2016



Source: MercerInsight™

EXHIBIT 8. INTERNATIONAL EQUITY LONG-ONLY MANAGER RETURN DISTRIBUTION JANUARY 1998–JUNE 2016

Source: MercerInsight™

DIVERSIFICATION OF ALTERNATIVE INVESTMENTS

Diversification within a class of alternatives is also important. Thorough due diligence can help to reduce the risk of a disappointing outcome, but cannot eliminate it entirely. The only surefire way to defend against the risk of performance being derailed by idiosyncratic risks stemming from individual alternative investments is true diversification. Investments with long horizons (for example, private equity or private real estate) not only have individual manager risks that require diversification, but also have a "vintage year cycle" that varies over time. Consider venture capital and its focus on internet startups in the 1990s or real estate in 2006–2007: High-priced (at least in retrospect) assets in both cases implied low returns to investments in those periods. Yet venture capital and real estate have yielded very high returns in other periods. Diversification over time — spreading investment over multiple vintage years — can smooth and improve the return streams and reduce the risk of performance being derailed by what may, with hindsight, be seen as poor timing.

LIQUIDITY

Some alternative investment strategies are illiquid, whereas others are liquid when markets are stable but turn illiquid during periods of market crisis. Liquidity is an important issue to keep in mind when investing in alternative investments. In high liquidity periods, such as during 2003–2007, the liquidity premia is very small. Unfortunately, access to liquidity can change rapidly and liquidity can become expensive. Given the risk of a sudden shift in liquidity premia, it is desirable for investors to examine the extent to which they may need to liquidate assets in a range of potential stress-test scenarios, and to set formal liquidity budgets specifying the maximum allocations to illiquid and less liquid assets that they would be willing to tolerate. Once this has been done, subsequent discussions on potential alternative investments that could fit within the liquidity budget can focus on their investment merits, rather than on the broader issue of the investor's tolerance for illiquidity.

Although the illiquidity of some types of alternative investments can be seen as a drawback, it is also a source of return enhancement as investors can expect to be compensated for the illiquidity through a return premium.

LEFT TAIL RISKS

Many individual alternative investments carry "left tail risks," which may or may not be captured in traditional quantitative measures. In some cases, catastrophic losses have resulted — for example, Long Term Capital Management (1998), Amaranth Advisors (2006) and Peloton Partners (2008) all collapsed due to what can arguably be described as unforeseen "left tail events," leaving their investors nursing catastrophic losses. However, this needs to be kept in perspective. Many individual listed stocks, such as Enron, Worldcom and others, have also generated catastrophic losses. We advocate mitigating this type of risk in the same way that equity investors normally do — by adopting a policy of prudent diversification.

FEES

Fees for most categories of alternative investments have been trending down over recent years, but are still much higher than those for traditional long-only equity and bond investments. Implementation costs per dollar invested are higher too, both because of the need for diversification across alternative investments and because of the need for more intensive due diligence on each investment. For every investment opportunity, the expected return should be considered net of these fees and costs to ensure that any potential advantages are not eroded by costs. In some cases where investors have explicit constraints on the maximum level of costs that they can bear, this may influence the types of alternative investments that investors are willing to consider and their maximum allocations to each of these.

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SUMMARY AND CONCLUSION

Alternative investments broaden risk and return opportunities with the diversification benefits they bring to traditional equity and fixed income portfolios. We believe that the keys to successfully capturing these benefits are to conduct thorough due diligence on each potential alternative investment opportunity and to build well-diversified alternatives portfolios, with prudently sized allocations to individual alternative investments, to mitigate the potential for performance to be derailed by idiosyncratic risks.

Investors considering alternatives for the first time should focus on the main benefit that each alternative can bring to a portfolio. Some of the key considerations are shown in the table on the next page.

GROWTH ASSET COMPARISON: TRADITIONAL AND ALTERNATIVE

Investment category	Public equity	Private equity	Growth-oriented fixed income	Real assets	Hedge funds	Other/ opportunistic
Long-term expected return premium over cash (net of all fees)	Moderate to high	High	Low to moderate	Moderate	Moderate	Varies
Effectiveness as a diversifier against equity market risk	Nil	Nil	Low	Moderate	Moderate	Varies
Effectiveness as a form of protection against inflation	Low	Low	Low	Moderate	Low	Varies
Ease of implementation	High	Low	Moderate to high	Low to moderate	Moderate	Varies
Liquidity	High	Low	Moderate to high	Low	Moderate to high	Varies

We believe there are compelling reasons investors should consider the use of alternative asset classes to build out their investment portfolios based on their specific goals and objectives, within a risk-managed framework.

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