The Alternatives Evolution

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SUMMARY

Alternative Investments (AI) can help to further diversify traditional portfolios by providing access to different investment strategies and specialized investment management skills. We believe including AI could be an important consideration for qualified investors[1] and their advisors given the current investment landscape; traditional asset classes are not cheap and central bank policy differences may create more volatility. While Alternative Investments are not appropriate for all investors based on factors such as risk tolerance and liquidity preferences, they can play a key role in constructing goals-based portfolios by helping to calibrate the market risk as defined in the Wealth Allocation Framework (WAF).[2]

Most investors are familiar with traditional investments such as stocks and bonds, often including both in a diversified portfolio. We believe that AI such as hedge funds, private equity, real estate and commodities can complement these assets by improving risk-adjusted returns over the long term. They expand the available opportunity set by investing in a broader range of markets and securities, including less liquid assets, and by employing investment strategies and techniques typically not found in traditional vehicles, such as short selling, leverage, derivatives and concentrated positions.

Six years after the financial crisis, traditional investments such as stocks and bonds have recovered to new highs. Higher starting valuations for traditional asset classes, with an uncertain economic and policy outlook, implies lower expected returns and higher volatility. Investors will need to manage portfolio risks more assertively and seek additional avenues to generate returns. We believe

The Wealth Allocation Framework

LIFE PRIORITIES

The Wealth Allocation Framework helps you put your goals and aspirations at the center of decisions about allocating your financial resources. **This paper focuses on strategies that may be appropriate for the Market asset category.**

Market: Investors seek to maintain their lifestyle. Investors also seek participation in market growth but also market risk that comes along with exposure to financial markets. A well-diversified portfolio provides risk and return in line with efficient market performance.

To learn more, read the whitepaper, *Investing in a Transforming World: The Wealth Allocation Framework*

[1] Many products that pursue Alternative Investment strategies, specifically private equity and hedge funds, are available only to pre-qualified clients. Alternative Investments are speculative and subject to a high degree of risk. Although risk management policies and procedures can be effective in reducing or mitigating the effects of certain risks, no risk management policy can completely eliminate the possibility of sudden and severe losses, illiquidity and the occurrence of other material adverse effects.

[2] The Wealth Allocation Framework (WAF) is Merrill Lynch's investor-centered approach which organizes an investor's wealth by intended goals: Essential, Important, and Aspirational. Risks are classified as Personal, Market or Idiosyncratic. Assets are classified as Protective, Market or Aspirational. Alternatives can improve efficiency in the Market portfolio and can aid in achieving Aspirational goals such as the potential for significant wealth mobility. AI wouldn't be included in the Protective asset bucket under any circumstances.

AI can play an important role in a long-term portfolio and that the current environment might warrant an increased allocation to them. **We present a framework to help investors integrate alternatives with their goals, and outline certain risks they should be aware of.**

A Framework for incorporating Alternative Investments

Alternative Investments are not a homogenous group of assets, but rather offer ways to target different market strategies and opportunities (see Exhibit 1). In order to better customize portfolios to pursue a broader set of goals, we group AI into outcome-oriented styles according to their intended role within portfolios. We identify four major styles:

1. **Credit-Oriented AI Strategies** seek stability and consistency of returns, and may offer income in some cases.
2. **Diversifying AI Strategies** seek to offer differentiated returns on the basis of low correlations with the equity and bond markets. Some strategies act as a store of value, limiting the impact of inflation over extended time horizons.
3. **Equity and Growth-Oriented AI Strategies** seek capital appreciation and enhanced returns. They may employ nontraditional techniques such as concentration and / or use public and private equities and credit instruments.
4. **Multi-Strategy Solutions** can employ a mix of the other three categories to help investors achieve a broad range of goals in the context of the Wealth Allocation Framework.

For investors incorporating AI into their portfolios, the optimal mix of AI strategies depends on an investor's risk tolerance and liquidity needs, among other factors. Allocations to Credit-Oriented strategies tend to be higher for conservative investors than for aggressive ones, reflecting their emphasis on stability and capital preservation. Equity & Growth-Oriented strategies tend to be used by aggressive investors more than conservative ones, reflecting their emphasis on growth and capital appreciation.

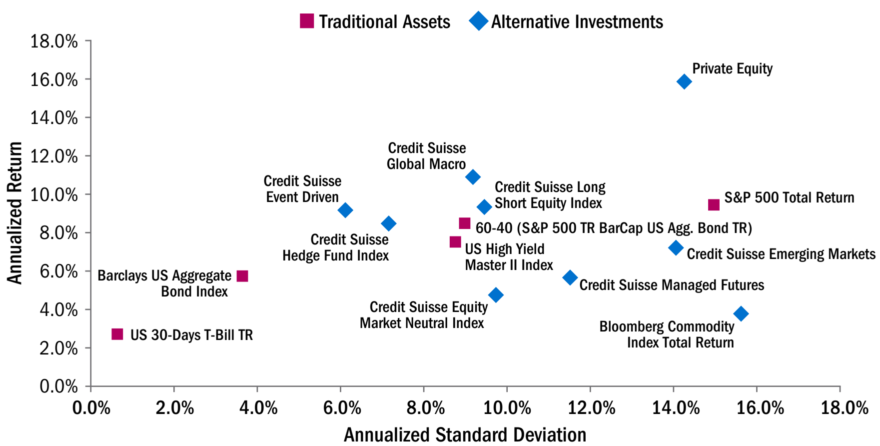
Potential benefits of Alternative Investments

First, alternatives typically help to further diversify a portfolio. When combined with traditional assets, alternatives offer the opportunity to achieve better risk-adjusted returns over medium to long investment horizons. Hedge funds that have exhibited strong performance over the last two decades also provided downside protection during severe equity market declines; they've historically experienced shallower drawdowns than equities during market sell-offs (see Exhibit 2 on the next page).

Second, alternatives can broaden the available investment opportunity set. Adding them to a traditional portfolio generally expands the range of asset classes in it, potentially enhancing returns. These additional asset classes—commodities, currencies, real estate, volatility strategies and others—tend to have low correlations with stocks and bonds, which can help reduce the risk of a portfolio (see Exhibit 2).

Third, alternatives typically offer access to managers with specialized investment skill sets. Even when AI managers operate in the same asset classes as traditional ones, they use a broader toolset. They may employ an expanded set of strategies, such as arbitrage, short-selling and leverage, and a broader range of financial instruments, such as futures, options and swaps, so they can better exploit market inefficiencies and hedge against unwanted risks.

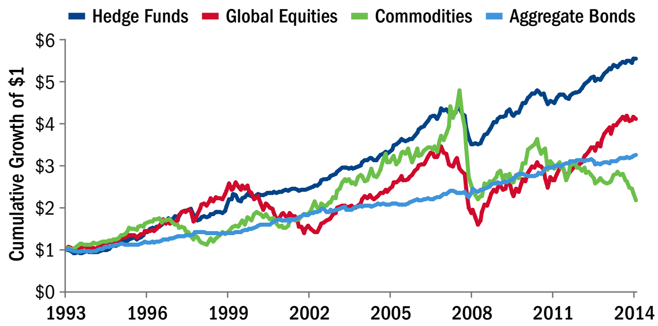
Exhibit 1: Alternative Investments have provided an expanded universe of solutions beyond stocks and bonds and not all strategies are created equal



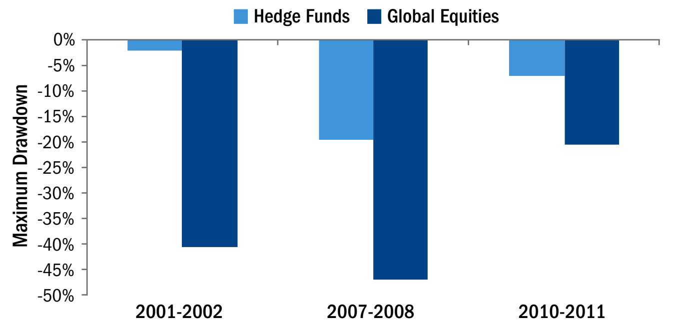
Source: IMG - Investment Analytics, CIA System. Data 1994 - 2014. Private Equity is based on the Cambridge Associates Private Equity US Benchmark Total Return Index, which is reported and calculated quarterly.

Results shown are based on indexes and are illustrative; they assume reinvestment of income and no transaction costs or taxes. Indexes are unmanaged. Direct investment cannot be made in an index. Index definitions can be found in the appendix. There can be no assurance that an allocation to alternative investments would provide higher real returns. **Past performance not indicative of future results.**

Exhibit 2: Hedge funds have performed well during periods of equity sell-offs



Source: Bloomberg and ML GWM Investment Management & Guidance.
Data as of 12/31/2014. Hedge fund returns proxied using Credit Suisse Hedge Fund Index Index; Global Equities returns proxied using MSCI World Total Return Index; Commodities returns proxied using Bloomberg Commodity Index; Aggregate Bonds returns proxied using Barclays Capital US Aggregate Index. For illustrative purposes only. There can be no assurance that an allocation to alternatives would provide higher real returns. Should the study have been conducted over a different time period, the results may have been different. **Past performance not indicative of future results.**



Source: Bloomberg and ML GWM Investment Management & Guidance. Hedge fund returns proxied using Credit Suisse Hedge Fund Index; Global Equities returns proxied using MSCI World Total Return Index. Drawdown is defined as the maximum peak-to-trough percentage decline in value experienced during the given period.

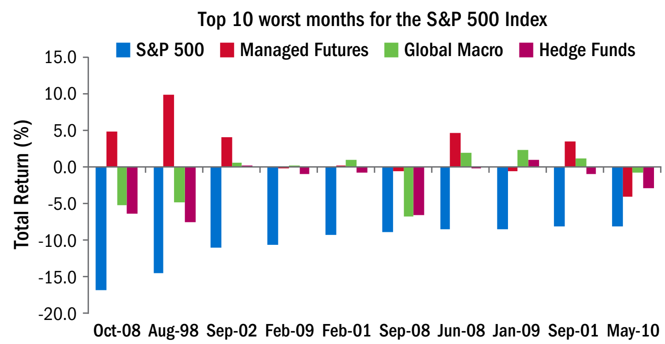
Funding allocations to Alternatives

Within Alternatives, our message is not to simply "fill this bucket" but instead to be selective across styles, strategies and managers. Consideration should be given to how to fund the allocation to AI; we believe that this decision should be premised on whether the potential investment is meant to be risk reducing, return enhancing or diversifying versus the current portfolio. Hedge funds or non-traditional mutual funds (see focus box for more details on non-traditional mutual funds) can reduce portfolio risk through diversification while private equity is most often return-enhancing. As such, the funding decision—which part of the portfolio to sell to allocate to Alternatives—may be unique for each investor and largely dependent on portfolio-specific goals including return, risk, liquidity and tax impact.

For investors who are overweight equity risk in their portfolios, which a traditional 60/40 stock/bond portfolio is, a focus on diversifying strategies may make sense as a portfolio complement. Adding Equity and Growth-Oriented strategies such as equity long/short to a 60/40 portfolio may introduce some diversification but may not provide sufficient diversification during market drawdowns.

Such investors should consider first allocating to Diversifying AI strategies such as global macro and managed futures hedge fund strategies. Historically they have had much lower correlations with both U.S. equities and a traditional 60/40 portfolio. Global macro and managed futures have generally outperformed U.S. equities when financial stress has risen, which coincides with periods of equity drawdown (see Exhibit 3). This pattern is comforting when seeking diversification and we believe global macro can be funded through a combination of fixed income and equity holdings.

Exhibit 3: Global macro and managed futures hedge funds have historically been resilient to equity market declines



Source: Bloomberg, Factset, MLWM Investment Management & Guidance. Data 1994 - 2014. Drawdown is defined as the maximum peak-to-trough percentage decline in value experienced during the given period. Global Macro = Credit Suisse Global Macro Index. Managed Futures = Credit Suisse Managed Futures Index. Hedge Funds = Credit Suisse Hedge Fund Index. Please see the appendix for index definitions. Results shown are based on indices and are illustrative. They do not include fees or taxes. There can be no assurance that an allocation to alternatives would provide higher real returns. See disclosures for more details.
Past performance not indicative of future results.

On the other hand, investors looking to take more equity risk who can be patient with their capital can consider investing in the private markets. **Private equity and real estate, both Equity and Growth-Oriented strategies, fall under**

this category and tend to be less liquid, a characteristic that an experienced and skillful manager can potentially exploit for enhanced returns. Direct real estate offerings also present opportunities for long-term investors as supply in the real estate market remains tight and rents continue to improve with the economy.

Investors who are underweight fixed income but are hesitant about traditional bonds given an uncertain interest rate outlook may want to consider Credit-Oriented strategies. However, it is important to keep in mind that while these may invest in fixed income securities, they should not be considered as a replacement for high-quality fixed income allocations. Lastly, for those investors with longer time frames, certain private equity structures may provide access to mezzanine and/or direct lending strategies that are typically considered in lieu of high yield bonds and/or hybrid fixed income instruments (such as preferred stocks or convertible bonds).

Alternative Investments in the current environment

Traditional asset classes such as stocks and bonds have performed well over the last six years and most people who have stayed invested in them have been rewarded. But risks have risen. Valuations for both U.S. equities and bonds are currently toward the richer end of their historic ranges; we expect such valuations to not only limit expected returns over the medium term but also to make these assets more sensitive to negative economic developments. It is as critical as ever for investors to keep portfolios diversified and AI may help. Additionally, in a market environment dominated by central bank activity and expectations for interest rates to remain lower for longer, unique opportunities could arise. The current AI opportunity set is driven by changing market dynamics such as tighter regulatory bank capital requirements, increasing margin requirements and a favorable environment for mergers and acquisitions (M&A).

Several market trends currently taking shape help strengthen the case for AI in portfolios: 1) increased volatility, 2) continued corporate actions such as mergers and 3) diverging interest rates that help drive further dispersion of market returns.

We expect volatility across markets to pick up as central bank policies diverge across the U.S., Europe and Japan. Recent increases in volatility in the currency and commodity markets are examples, and if skillfully managed they could generate attractive long-term returns for investors. As discussed earlier, global macro and managed futures hedge funds can help lower portfolio volatility emanating from stocks and bonds.

With rising sales and profits, and high profit margins, cash on corporate balance sheets has grown to record levels. Companies have looked to use this cash for deal-making, including mergers, acquisitions and divestitures, and we expect this higher level of activity to continue. Event-driven and merger arbitrage hedge funds as well as private equity buyouts and venture capital are examples of strategies that can position for such opportunities.

The aforementioned volatility also creates the potential for further dispersion of fundamentals across securities, industries, countries, levels of market capitalization and assets. AI strategies that can skillfully navigate them, such as equity long/short, emerging market long/short, and relative value credit, are likely to benefit.

Risks and other considerations

While the potential benefits are clear, there are certain risks and other considerations that investors should be aware of when investing in AI.

Certain types of alternatives, in particular those structured in private placement format, are not as liquid as traditional asset classes. These investments may also involve higher fees and tax complexity. For accredited investors that may need liquidity, private placements should carefully be considered, and greater consideration should be given to nontraditional mutual funds (see Focus Box 1 on the next page).[3]

Many alternative managers pose another risk by investing in securities that are thinly traded, requiring them to consider broader market conditions prior to making a decision to liquidate. It should also be noted that private equity and private real estate offerings require investors to hold them until the ultimate liquidation of the fund, which can take upwards of 12 years before all investments are monetized.

Fees for all kinds of AI are typically higher than those for traditional investments. Fee structures for private placements often include a percentage of assets under management plus a portion of the investment profits, such

[3] Please see the appendix for a description of accredited investors.

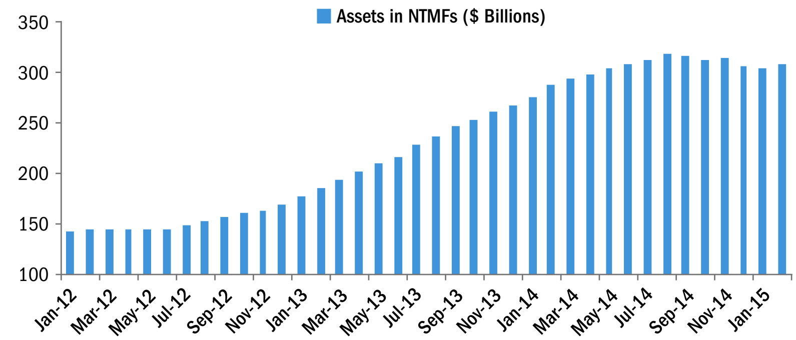
Focus Box 1: The growing interest in nontraditional funds

Nontraditional mutual funds (NTMFs) have recently grown in both assets and popularity. These Alternatives seek to offer risk-adjusted returns similar to hedge funds with the added benefit of increased liquidity.[4] To achieve these goals, they use non-traditional investing techniques, such as shorting and leverage, but are subject to limitations on their investment strategies imposed by the Investment Company Act of 1940, governing mutual funds.

These funds were initially created for individual investors seeking hedge fund-like exposures, but are increasingly used by institutions as well as mainstream retail investors. In deciding to allocate assets to NTMFs, investors need to consider tradeoffs between liquidity, transparency, regulation and expected risk-adjusted performance.

Surging Popularity of Nontraditional Funds

Since the beginning of 2012, assets in non-traditional mutual funds have more than doubled



Source: Morningstar Direct; MLWM Investment Management & Guidance. Data as of February 2015.

as the customary "2 and 20" — 2% of the assets and 20% of profits. This increases the required return that the manager must generate for the investor's portfolio to have a positive return net of fees. Fee agreements that don't reward the manager until all prior losses (if any) have been recovered could mitigate this hazard.

Alternatives require a higher degree of due diligence than traditional funds. Given the large dispersions in performance, manager selection is critical for securing superior risk-adjusted returns, especially net of fees. Since alternatives are subject to less regulation and typically charge higher fees than traditional funds, sound due diligence should be performed by experienced professionals.

Finally, the strong performance of many Alternative Investments in previous decades may not be indicative of future returns. In fact, in strong bull markets, hedge funds and other Alternatives may lag traditional equity investments. This has been the case in the last few years as U.S. equity markets have produced double-digit positive returns with very low volatility.

Conclusion

Investors should be better prepared for a flatter world over the next few years—one where returns from a balanced portfolio of U.S. equities and bonds look set to be lower and more volatile. We believe that, where appropriate, it can be prudent to seek diversification through increasing or introducing allocations to AI. In our view, AI can complement traditional assets by further improving risk-adjusted returns, which can lead to more efficient compounding of wealth. **When allocating to Alternatives, investors should diversify across AI styles (Equity and Growth-Oriented, Credit-Oriented and Diversifying), AI strategies (equity long / short, global macro, relative value, etc.) and managers.**

[4] Non-traditional mutual funds are intended to offer investors exposure to AI strategies, but in a more liquid format with relatively low minimums. NTMFs are registered under the 1940 Act and are subject to 1940 Act restrictions. While Non-Traditional Mutual Funds can offer diversification within a relatively liquid and accessible structure, it is absolutely essential to understand that because of this structure, they may not have the same type of non-market returns as hedge funds and may be imperfect as a hedge fund substitute. The daily liquidity and restrictions on leverage and diversification requirements of mutual funds in particular create limitations compared to hedge funds. However, IMG believes that Non-Traditional Mutual Funds can provide diversification benefits to a traditional stock and bond portfolio, particularly for those clients who are currently ineligible to invest in hedge funds or have a strong preference for liquidity.

Appendix

Table 1: Summary of types of AI

	Hedge Funds Strategies	Private Equity	Real Estate	Commodities
Description	Funds that engage in a wider range of investment and trading activities than more traditional funds	Funds that make investments in private companies unavailable through other types of investment vehicles	Properties including income-producing holdings and new development in commercial and residential sectors	Physical assets that can be consumed or used as economic inputs; subject to supply and demand of the global markets
Credit-Oriented	Credit Long/Short, Event-Driven: Multi, Relative Value	Mezzanine Debt, Private Credit		
Equity & Growth Oriented	Emerging Markets Long/Short, Equity Long/Short, Event-Driven Equity & Distressed	Buyout, Venture/Growth, Specialized Industry Sectors, Multi-Strategy Private Equity, Special Situations, Other Private Equity	Opportunistic/Value-Add Real Estate	
Diversifying	Global Macro, Managed Futures		Core Real Estate	Commodities

Note: Certain vehicles may hold distressed debt and other illiquid, credit-oriented instruments.
Source: Merrill Lynch GWRS Alternative Investments Group

Index Definitions

S&P 500 (Standard & Poor's 500): A market-capitalization weighted index that measures the market value of 400 industrial stocks, 60 transportation and utility company stocks and 40 financial issues.

The **BarCap U.S. Aggregate Bond Index (BarCap U.S. Agg)** is a benchmark index composed of U.S. securities in Treasury, Government-Related, Corporate and Securitized sectors. It includes securities of investment-grade quality or better, have at least one year to maturity, and have an outstanding par value of at least $250 million. Benchmark selected to represent fixed income returns.

The **BofA Merrill Lynch U.S. High Yield Index** tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $100 million.

The **Credit Suisse Long / Short Equity Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of long / short equity funds. Long / short equity funds typically invest in both long and short sides of equity markets, generally focusing on diversifying or hedging across particular sectors, regions or market capitalizations. Managers typically have the flexibility to shift from value to growth; small to medium to large capitalization stocks; and net long to net short. Managers can also trade equity futures and options as well as equity related securities and debt or build portfolios that are more concentrated than traditional long-only equity funds.

The **Credit Suisse Emerging Markets Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of emerging markets funds. Emerging markets funds typically invest in currencies, debt instruments, equities and other instruments of countries with "emerging" or developing markets (typically measured by GDP per capita). Such countries are considered to be in a transitional phase between developing and developed status. Examples of emerging markets include China, India, Latin America, much of Southeast Asia, parts of Eastern Europe and parts of Africa. The index has a number of subsectors, including arbitrage, credit and event driven, fixed income bias, and equity bias.

The **Credit Suisse Event Driven Distressed Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of event driven funds that focus on distressed situations. These funds typically invest across the capital structure of companies subject to financial or operational distress or bankruptcy proceedings. Such securities often trade at discounts to intrinsic value due to difficulties in assessing their proper value, lack of research coverage, or an inability of traditional investors to continue holding them. This strategy is generally long-biased in nature, but managers may take outright long, hedged or outright short positions. Distressed managers typically attempt to profit on the issuer's ability to improve its operation or the success of the bankruptcy process that ultimately leads to an exit strategy.

The **HFRI Relative Value Fixed Income – Corporate Index** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond. Fixed Income: Corporate strategies differ from Event Driven: Credit Arbitrage in that the former more typically involve more general market hedges which may vary in the degree to which they limit fixed income market exposure, while the later typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.

The **Credit Suisse Event Driven Multi-Strategy Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund IndexS that measures the aggregate performance of dedicated short bias funds. Multi-strategy event driven managers typically invest in a combination of event driven equities and credit. Within the equity space, sub-strategies may include risk arbitrage, holding company arbitrage, equity special situations, and value equities with a hard or soft catalyst. Within the credit-oriented portion, sub-strategies may include long / short high yield credit (sub-investment grade corporate bonds), leveraged loans (bank debt, mezzanine, or self-originated loans), capital structure arbitrage (debt vs. debt or debt vs. equity), and distressed debt (workout situations or bankruptcies) including post-reorganization equity. Multi-strategy event driven managers typically have the flexibility to pursue event investing across different asset classes and take advantage of shifts in economic cycles.

Index Definitions *(cont'd)*

The **Credit Suisse Global Macro Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of global macro funds. Global macro funds typically focus on identifying extreme price valuations and leverage is often applied on the anticipated price movements in equity, currency, interest rate and commodity markets. Managers typically employ a top-down global approach to concentrate on forecasting how political trends and global macroeconomic events affect the valuation of financial instruments. Profits can be made by correctly anticipating price movements in global markets and having the flexibility to use a broad investment mandate, with the ability to hold positions in practically any market with any instrument. These approaches may be systematic trend following models, or discretionary.

The **Credit Suisse Managed Futures Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of managed futures funds. Managed futures funds (often referred to as CTAs or Commodity Trading Advisors) typically focus on investing in listed bond, equity, commodity futures and currency markets, globally. Managers tend to employ systematic trading programs that largely rely upon historical price data and market trends. A significant amount of leverage may be employed since the strategy involves the use of futures contracts. CTAs tend not to have a particular bias towards being net long or net short any particular market.

The **DJ UBS Commodity (Cmdty) Total Return Index** is composed of futures contracts on physical commodities. In order to avoid the delivery process and maintain a long futures position, nearby contracts must be sold and contracts that have not yet reached the delivery period must be purchased. No sector may constitute more than 33% of the index, and no single commodity may constitute more than 15% or less than 2% of the index. The index is reweighted and rebalanced annually on a price-percentage basis and is composed of commodities traded on U.S. exchanges, with the exception of aluminum, nickel and zinc, which trade on the London Metal Exchange.

MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. As of February 2014, it consists of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

S&P GSCI Index is a investable commodity index that is production-weighted and meant to be representative of the global commodity market beta. The index consists of 24 commodity futures on physical commodities across five sectors: energy, agriculture, livestock, industrial metals and precious metals.

U.S. 30-day Treasury Bill Index is compiled from Wall Street Journal prices for 1977-Present and the CRSP U.S. Government Bond File from 1926 to 1976. Each month a one-bill portfolio containing the shortest-term bill having not less than one month to maturity is constructed. To measure holding period returns for the one-bill portfolio, the bill is priced as of the last trading day of the previous month-end and as of the last trading day of the current month.

Cambridge Associates Private Equity US Benchmark Total Return Index: Performance data is calculated quarterly by Cambridge Associates and published by Thomson Reuters Venture Economics' Private Equity Performance Database which tracks the performance of thousands of US and European venture capital and buyout funds formed since 1969. Sources are financial documents and schedules from Limited Partners investors and General Partners. All returns are calculated net to investors (net of fees and carried interest) by Thomson Venture Economics from the underlying financial cash-flows using both cash on cash returns (distributions and capital calls) and the unrealized net asset value of funds as reported by private equity fund managers. The “US” category includes only US funds. The "All Venture" category includes data from early / seed, and later-stage financing. Historical data is revised when funds are added or removed.

Terms and important disclosures

Accredited Investor: For purposes of Regulation D under the Securities Act, an “accredited investor” includes among other investors, an individual who: (i) has income in excess of $200,000 (or joint income with the investor’s spouse in excess of $300,000) in each of the two preceding years and has a reasonable expectation of level in the year; or (ii) has a net reaching the same income current worth (or a joint net worth with that person’s spouse) at the time of purchase in excess of $1 million, excluding the value of such individual’s primary residence. For purposes of determining the value of the primary residence to be excluded from net worth, the investor should exclude any net equity in his or her primary residence (i.e., the amount by which the current market value of the residence exceeds the current outstanding balance of any mortgage or other indebtedness secured by the residence). If the current outstanding balance of any such mortgage or other indebtedness exceeds the current market value of the residence, the amount of any such excess shall cause a reduction in the investor’s net worth to the extent that such mortgage or other indebtedness gives the lender recourse to the assets of the investor other than the residence securing the mortgage or other indebtedness.

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