Liquid Alts

Netherby Research

Primer on Liquid Alternatives 2nd Edition

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THE ALTERNATIVE VIEW

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Summary:

- **Publicly-traded vehicles using alternative strategies are an exciting and growing investment option offering unique opportunities for investors;**
- **While the strategies and assets they use may be similar to those employed in hedge funds, there are critical differences;**
- **The analysis of these "Liquid Alternatives" requires a different approach to identify which funds will best meet the investor's goals.**

Introduction

In addition to the traditional world of long-only investing, there exists an ever-growing set of non-traditional investments commonly referred to as '*alternatives*'. Investors typically add *alternatives* to their overall investment portfolios to attempt to lower volatility and reduce down side risk.

As the name implies, *alternatives* are assets and strategies that are not commonly held in individual investors' portfolios but have historically been limited to institutional and High Net Worth investors. We use a simple criteria to identify those investments that qualify as alternative – they are either 1. non-traditional investment strategies, like merger arbitrage or equity long-short, and/or 2. strategies that employ less common asset classes, such as energy infrastructure or private equity, or instruments, such as futures and swaps. Whereas the performance of traditional investments is measured on a relative to benchmark basis, most alternative strategies are judged on an absolute basis.

These strategies may be active or passive and often use leverage and short-selling. Very often the techniques and strategies used are intended to significantly alter the basic return and risk characteristics available from the assets themselves. Some of the more prevalent strategies include long/short equity, global macro, managed futures, event-driven, merger arbitrage and fixed income arbitrage.

Many alternative strategies are well-developed and have been available in private placement limited partnerships ("hedge funds") [i] since the 1950s. While the structure and limited regulation of hedge funds gives them almost unlimited flexibility to use leverage and shorting (selling a security not owned to participate in its anticipated decline), it also limits their availability to institutions and very high net worth individuals and families.

Over the last decade, however, alternative strategies have been seeping into the public mainstream and investment managers are finding ways to offer hedge fund strategies in packages available to almost everyone. Perhaps the most important feature that sponsors are seeking to provide in structuring and promoting these new strategies is daily liquidity. The vehicles used to package the strategies include open-end mutual funds ("OEF"), closed-end mutual funds ("CEF"), Exchange Traded Funds ("ETF"), Exchange Traded Notes ("ETN"), and Unit Investment Trusts ("UIT"), all of which fall under the regulation of the Investment Company Act of 1940 (the '40-Act)[ii]. A revision to the tax laws in 1997[iii] enabled the use of hedging and derivative instruments in mutual funds, facilitating the recent expansion.

Products that fuse alternatives with liquid vehicles are commonly referred to as "liquid alts," a name derived from their use of non-traditional investment strategies and daily liquidity. As you might expect, these products are difficult to categorize and new instruments are continually being created.

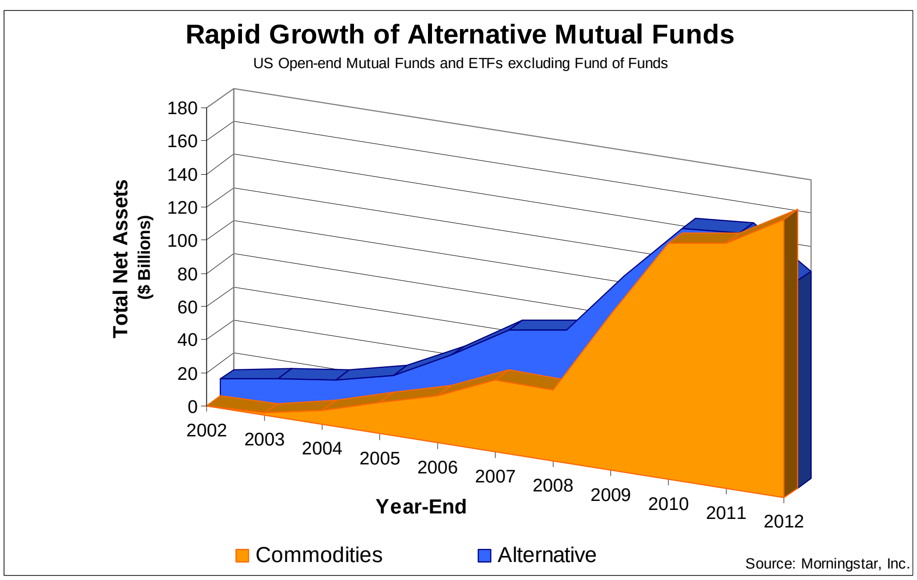
The purpose of this discussion is to review the quickly developing landscape of liquid alternatives, highlight some general advantages and disadvantages, and raise some important issues to consider before using them.

Recent History

According to a June 2012 study by McKinsey & Company[iv], global alternative assets under management (AUM) nearly doubled from $2.9 trillion to $5.7 trillion between 2005 and 2007. In 2008, AUM fell to $5.0 trillion, due to poor performance, converging correlations, illiquidity and market scandals associated with many hedge fund and structured product investments.[v] However, during the three subsequent years, investors returned to the alternative markets. McKinsey points out that AUM climbed to $6.5 trillion at the end of 2011, growing at a five year rate of over seven times that of traditional asset classes.[vi]

Much of this resurgence has come from U.S retail investors targeting liquid alts. According to data provided by Morningstar, for the ten calendar years ended 2012, assets in funds that Morningstar categorizes as "Alternative" grew from $10 billion to $125 billion, an average annual growth rate of 28%. Similarly, assets in Morningstar's "Commodities" category grew from less than $260 million to almost $168 billion.[vii]

Meanwhile, assets in all other mutual fund categories combined grew at a rate of 10%. Since the Alternative and Commodities categories still make up only a fraction of the $13 trillion mutual fund universe, we expect liquid alts AUM to continue to expand.



Why Alternatives - The Search for Effective Diversification

Ever since Markowitz's 1952 demonstration of Modern Portfolio Theory, investors have been seeking to reduce the risk of their stock and bond portfolios through diversification into assets with low correlation and/or low volatility. On the one hand, it is fairly easy to find both low correlation and low volatility by allocating to low return investments. U.S Treasury bills and other cash instruments have repeatedly proven to be very effective diversification tools for almost any portfolio. They have many attractive characteristics except that they offer negligible returns going forward.

However, a number of alternative strategies have historically demonstrated moderate volatility, moderately low correlation to traditional asset classes, and attractive returns as displayed in the table below.

Return Characteristics for Ten Years Ending February 2013

	Annualized Return	Annualized Standard Deviation of Monthly Returns	Correlation with S&P 500	Correlation with BarCap US Aggregate Index
S&P 500	8.2%	16.1%	1.00	0.03
BarCap US Aggregate Index	5.0%	3.7%	0.03	1.00
3-month T-bill	1.8%	0.6%	-0.10	0.01
DJ CS Long/Short Equity Hedge Fund Index	7.4%	8.6%	0.81	0.01
DJ CS Global Macro Hedge Fund Index	9.3%	5.8%	0.29	0.29
DJ CS Event Driven Hedge Fund Index	8.2%	6.7%	0.73	-0.09
DJ CS Managed Futures Hedge Fund Index	3.7%	11.5%	0.09	0.10
DJ CS Convertible Arbitrage Hedge Fund Index	4.8%	8.5%	0.56	0.14
DJ CS Multi-Strategy Hedge Fund Index	7.1%	6.2%	0.68	-0.02
DJ CS Hedge Fund Index	6.9%	6.3%	0.74	0.03

Sources: Standard & Poors Financial Services LLC; Barclays Bank PLC; Credit Suisse Hedge Index LLC; Netherby Advisors LLC

Over the past 30 years, large and institutional investors were attracted to strategies offering both effective diversification and compelling returns. As alternative strategies become more broadly available, these same qualities are driving increased public interest.

Why Not Hedge Funds?

Although alternative strategies have many attractive attributes, private placement hedge fund vehicles have a number of defining characteristics that are important to understand. Generally speaking, hedge funds can be illiquid, difficult to access, require a hefty net worth, more expensive, less transparent and less regulated than most other available investments. They also have more complicated tax reporting.

1. **Liquidity -** Most hedge funds provide only monthly, quarterly and annual redemptions. Some have hard lock-ups from one to seven years. Others have soft lock-ups where early redemptions are penalized in a manner similar to a load fund. During the second half of

2008, many hedge funds had difficulty meeting planned redemptions and some were forced to lock-up their investors for an extended period of time.

2. **Restricted Access -** Investors must be accredited investors, qualified eligible participants or qualified purchasers and therefore must meet certain suitability and relatively high minimum net worth requirements.

3. **Minimum Investments -** Hedge funds have minimum investment levels, usually $1 million. This can be problematic for investment portfolios with less than $40 million. For example, if 20% of an investment portfolio were to be allocated to hedge funds and properly diversified across 8 to 10 managers that had $1 million minimums each, the overall portfolio would need to be $40 to $50 million.

   Of course, a lower net worth investor can gain diversification through a fund of hedge funds which provides access for a minimum usually as low as $250,000. But there is another layer of fees and a loss of control of manager selection. In addition, there are firms that have hedge fund platforms offering a low minimum but a limited set of managers.

4. **Fees -** Hedge funds usually charge annual management fees in the range of 1% to 2% of assets and incentive ("carry") charges from 10% to 20% of gross performance. Interest (for leverage), borrowing (for short positions) and trading costs can be significant and often very difficult to quantify.

5. **Transparency -** Portfolio holdings are rarely communicated to investors on a timely basis. Most managers will provide performance updates on a monthly or quarterly basis and may reveal all, some or none of the fund's holdings.

6. **Regulation -** With significantly less required regulatory compliance and agency oversight , hedge funds should be subject to a more comprehensive due diligence process that can take several months to complete.

7. **Tax Forms -** Hedge funds issue K-1s, which may or may not be advantageous from a tax perspective, but in any case add complexity to tax calculation and reporting.

Why Liquids Alts?

The evolution of the tax code and investment company regulations has allowed the marketplace to respond with products providing the following benefits:

1. **Liquidity -** Liquid alts are available for daily trading, at the close or intra-day through the public markets, and closing NAVs and prices are distributed at session end.

2. **Open Access -** Products are readily available on most brokerage platforms.

3. **Minimum Investments -** Each OEF offering usually has several share classes, including retail and institutional classes, with minimum initial investments ranging from $2,500 to $1 million. Closed-end and exchange traded funds have virtually no minimums.

4. **Fees -** Expense ratios are typically higher than long-only traditional mutual funds due to leverage and higher management fees, but less expensive to use than hedge funds.

5. **Transparency** - Unlike hedge funds, underlying positions are disclosed on a more frequent basis, usually monthly or quarterly and occasionally more often.

6. **Regulation -** Liquid alts are structured as '40-Act mutual funds and thus are subject to its regulatory compliance. The investment advisor is also subject to supervision by the SEC. As a result, operational aspects of due diligence are less of a burden for the investor.

7. **Tax Forms -** Liquid alt investments issue 1099s.

Important Considerations

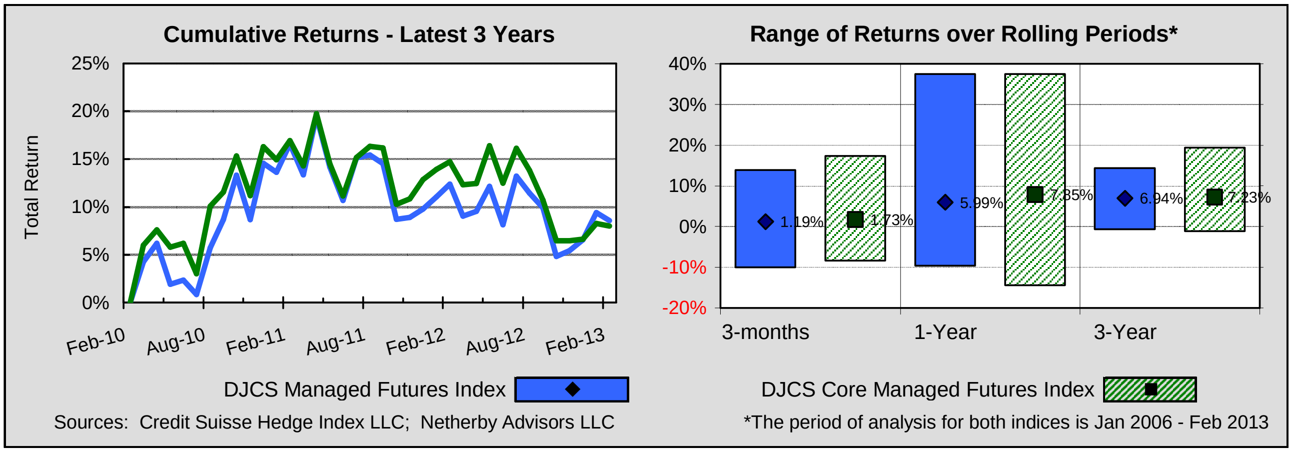
While the potential benefits of liquid alternatives are many, there are also several caveats and important questions to consider before including them in your portfolio.

Most liquid alternative funds have limited track records relative to hedge funds and traditional mutual funds, and for the lack of a better choice, many investors (including ourselves) will look to hedge fund return data to evaluate categories, strategies and individual managers.

Importantly, there are a number of factors that raise questions as to whether liquid alts will perform as well as similarly managed hedge funds. For instance, unlike hedge funds, '40 Act registered funds are limited as to leverage, gross position size, concentration, and illiquidity. The use of more shorting, leverage, concentrated positions or illiquid securities (e.g., distressed and emerging market securities and structured products) allows hedge fund managers more flexibility to take and manage risk, for better or worse. There is also a common belief that hedge funds generally attract the most talented and experienced managers because the profits available for remuneration tend to be higher than those earned by traditional and regulated offerings. Whether or not the "cream of the crop" will be willing or able to work within the confines of registered liquid alternatives remains to be seen.

Recently, Dow Jones and Credit Suisse, developed a set of indices that specifically track liquid alternative investments. These are named the Dow Jones Credit Suisse *Core* Hedge Fund Indexes[viii] and they will serve as a useful comparison to the *Broad* Hedge Fund Indices which Credit Suisse developed in 1993[ix]. Unfortunately, the operative word is 'recently', and although the core indices show performance back to 2005, they have been back-filled until the beginning of 2011[x]. Nevertheless, comparing the DJCS Core Indices with their respective DJCS Broad Indices can shed some light on whether liquid alts can live up to their hedge fund cousins.

The charts below compare the performance of the Dow Jones Credit Suisse Managed Futures Hedge Fund Index (hedge funds – shown in blue) with the performance of the Dow Jones Credit Suisse Core Managed Futures Hedge Fund Index (liquid vehicles – shown in green). Since futures contracts are typically very liquid, and leverage and short exposure can be achieved without borrowing, we would expect that managed futures investment strategies would be among the easiest to implement within a registered, liquid vehicle. There are, however, some constraints that '40-Act funds are subject to with respect to futures exposure.

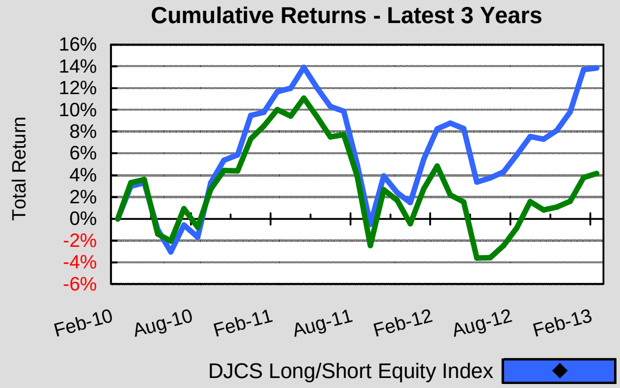


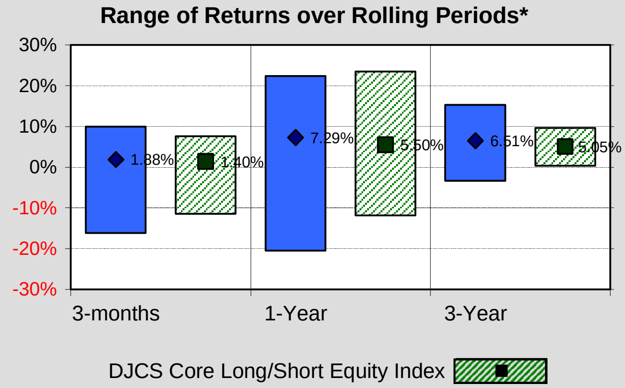
So far the results suggest that, on average, liquid forms of managed futures strategies perform similarly with managed futures hedge funds. For the years leading up to and including the 2008 financial crisis, the Core (liquid) managed futures index performed significantly better than the managed futures hedge fund index. But given the back-filling, those results should be discounted. For the most recent three years, a bit more than half of which are live, the Core Managed Futures Index performed virtually in line with its hedge fund counterpart.

Trailing 3-Year Statistics	DJCS Managed Futures Index	DJCS Core Managed Futures Index
Annualized Return	2.78%	2.60%
Annualized Standard Deviation	10.96%	10.56%
Kurtosis	(1.00)	(0.53)
Skewness	(0.02)	0.25
Sharpe Ratio	0.24	0.24
Maximum Drawdown (Since 2005)	-13.92%	-15.11%

Sources: Credit Suisse Hedge Index LLC; Netherby Advisors LLC

In the category of Long/Short Equity, where leverage and hedging may be significantly constrained in the liquid vehicles compared to hedge funds, the recent performance is significantly different. Again the Core (liquid) index outperformed the Broad (hedge fund) index during the financial crisis, which shows in these exhibits as significantly lower (better) drawdown and better average rolling returns. But, the performance of the Core index falls off significantly at just about the same time as the index goes live. This doesn't prove anything, but it does raise questions that deserve further analysis.





Sources: Credit Suisse Hedge Index LLC; Netherby Advisors LLC

*The period of analysis for both indices is Jan 2006 - Feb 2013

Another area of caution should be in the statistics one uses in evaluating liquid alternatives and constructing portfolios with them. Many alternative strategies are specifically designed to create return distributions that are significantly different than *normal*. Hence, statistics that are built around the assumption of a normal distribution, such as standard deviation and tracking error may be misleading. In addition, the correlation of alternative strategies to traditional asset classes may be asymmetric. For example, the correlation may be significantly higher in up-markets than in down-markets (or the reverse), which would render an average correlation across all market environments misleading.

Trailing 3-Year Statistics	DJCS Long/Short Equity Index	DJCS Core Long/Short Equity Index
Annualized Return	4.41%	1.37%
Annualized Standard Deviation	8.94%	8.84%
Kurtosis	0.04	0.30
Skewness	(0.42)	(0.55)
Sharpe Ratio	0.48	0.14
Maximum Drawdown (Since 2005)	-21.97%	-14.63%

Sources: Credit Suisse Hedge Index LLC; Netherby Advisors LLC

It is important to differentiate between correlation and beta. Unsophisticated investors mistakenly seek low (equity) beta alternative investments, not realizing that beta is an estimate the accuracy of which is dependent upon high correlation. If there is high correlation, regardless of whether the strategy is low beta or high beta, it is not providing significant diversification. That does not mean that the strategy does not add value, it is just that it should likely be considered part of an equity allocation (as opposed to part of an alternative allocation).

On the other hand, a strategy with low correlation to equity returns suggests that its performance has been independent of the stock market's returns and that the accuracy and relevance of the Beta estimate is low. High or low, here the beta should be ignored. However, due to its low correlation, the investment has the potential to provide diversification that can reduce the overall portfolio's downside and its volatility.

Incidentally, the same is true for the alpha estimate. Beware of wholesalers touting funds with low correlation and high "alpha."

The table below lists the correlation to stocks, beta estimate, and volatility for various hedge fund indices for the most recent ten years and separately for bull markets and bear markets. Several of the indices exhibit low correlation so that the beta estimates are unreliable (crossed out). In addition, a few of the indices have significantly different correlation or volatility during bull and bear markets.

Return Characteristics for:	Ten years ending February 2013			Equity Bull Market (sample size 36 months)			Equity Bear Market (sample size 36 months)		
	Correlation with S&P 500	Beta (S&P 500)	Standard Deviation*	Correlation with S&P 500	Beta (S&P 500)	Standard Deviation*	Correlation with S&P 500	Beta (S&P 500)	Standard Deviation*
S&P 500	1.00	1.00	16.1%	1.00	1.00	17.1%	1.00	1.00	13.3%
BarCap US Aggregate Index	0.03	~~0.01~~	3.7%	-0.47	~~-0.08~~	2.5%	-0.01	~~0.00~~	4.8%
3-month T-bill	-0.10	~~0.00~~	0.6%	-0.12	~~0.00~~	0.0%	0.02	~~0.00~~	0.5%
DJ CS Long/Short Equity Hedge Fund Index	0.81	0.44	8.6%	0.93	0.53	8.9%	0.62	0.26	7.1%
DJ CS Global Macro Hedge Fund Index	0.29	~~0.11~~	5.8%	0.24	~~0.06~~	4.0%	0.10	~~0.04~~	8.1%
DJ CS Event Driven Hedge Fund Index	0.73	0.31	6.7%	0.85	0.40	7.4%	0.53	0.18	6.2%
DJ CS Managed Futures Hedge Fund Index	0.09	~~0.07~~	11.5%	0.13	~~0.09~~	11.0%	-0.55	-0.36	13.7%
DJ CS Convertible Arbitrage Hedge Fund Index	0.56	0.31	8.5%	0.73	0.21	4.6%	0.32	~~0.20~~	11.1%
DJ CS Multi-Strategy Hedge Fund Index	0.68	0.27	6.2%	0.87	0.25	4.7%	0.39	~~0.15~~	6.8%
DJ CS Hedge Fund Index	0.74	0.29	6.3%	0.85	0.30	5.5%	0.51	0.18	6.2%

*Annualized Standard Deviation of Monthly Returns

Sources: Standard & Poors Financial Services LLC; Barclays Bank PLC; Credit Suisse Hedge Index LLC; Netherby Advisors LLC

The final caveat goes along with one of the introductory observations: alternative strategies are, by definition, difficult to categorize. Hence, analyzing strategies based upon or relative to peer group averages such as the hedge fund indices discussed above is problematic. Furthermore, the indices do not give any indication of how disparate the returns within each category are. They are, in fact, much more disparate than manager returns within most traditional asset class categories. This places much more importance on effective manager selection and due diligence.

The best alternative strategies are unique and seek to add value through the investing prowess, expertise and resources of the manager. After all, there is no point in paying a relatively high management fee for services that are not distinctive. Thus, each manager and strategy must be evaluated individually, from the standpoints of investment thesis, process, infrastructure, risk management and performance, to decide whether to invest at all, and if so, how much to allocate within a portfolio.

Summary: The Benefits and Challenges for Liquid Alts

Liquid alts have many positive attributes necessary to perform as an attractive diversification tool: daily pricing, low fees, transparency, regulatory oversight, lower correlations to traditional assets and focus on absolute return.

Again, for most investment portfolios, adding liquid alts should reduce both overall volatility and down side risk. And, for those investors who do not meet the suitability and net worth requirements necessary to access traditional hedge funds, liquid alternatives may provide a viable choice.

On the other hand, liquid alts have short track records and could prove disappointing in one critical area: absolute performance relative to hedge funds. As noted above, liquid alts are restricted as to leverage, shorting, position concentration and illiquid security selection, as well as talent and investment opportunity sets. Thus, it would not be surprising to find most liquid alt funds consistently underperforming hedge funds.

However, there is ample opportunity for talented managers to add significant value within liquid alts vehicles. There will be at least a few shining stars. Identifying them, doing due diligence, evaluating performance and determining allocations requires an expanded analytical framework from traditional asset classes.

On balance, most investors will have greater confidence in an investment portfolio that can exhibit lower volatility and down side risk over time, and particularly during periods of market stress.

Looking Ahead

McKinsey predicts that the U.S. institutional appetite for alternative strategies will continue to grow, with alternatives accounting for a simple average of 28% of total portfolio assets by the end of 2013, up from 26% in 2010[xi].

Additionally, a growing trend among institutional allocators is to align alternative strategies with asset classes by degree of correlation, a melding of traditional asset classes with non-traditional strategies. McKinsey expects 20% of institutional managers to implement this form of portfolio construction in the near future, up from 5% in 2010[xii]. Retail advisors should begin to reflect a similar investment process.

It is reasonable to anticipate a multitude of strategies and products, with all their implicit complexities, will be coming to the marketplace to meet this combination of “demand pull” by retail and “supply push” from sponsors.

We look forward to providing clarity and expertise to this area, and in helping practitioners find solutions to portfolio diversification needs using liquid alternative products. We believe that all ideas are enhanced and refined though active discussion and invite you to contact us directly and visit our website at www.netherby.com.

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In the coming months, we will highlight many of the liquid alt strategies, both active and passive, and investigate new analytical tools to help evaluate funds, determine appropriate allocations, and manage costs.

About Netherby

Netherby Advisors was founded in 2007 and provides strategic consulting and investment solutions to wealth management firms including bank and trust companies, family offices and independent advisory firms.

Netherby launched its Liquid Alternatives Research initiatives in 2012 to help investors and industry participants make more informed investment decisions. The Netherby Research Team provides in-depth analysis and due diligence of liquid alternative products and strategies as well as portfolio construction services.

Notes

[i] Hedge fund is a term that has become commonly used to describe private partnerships specifically structured to be exempt from the regulations of the Investment Company Act of 1940 as described in sections 3(c)-1 or 3(c)-7 of the Act.

[ii] A follow on to the Securities Act of 1933 and the Securities Exchange Act of 1934 which instituted regulation of the securities industry in the interest of the public, the Investment Company Act of 1940 (the '40 Act) defines investment companies, including mutual funds, and sets separate standards by which investment companies should be regulated.

[iii] In 1997, the Taxpayer Relief Act repealed the "short-short rule" (SSR) which required that mutual funds derive less than 30 percent of their gross income from securities held less than three months.

[iv] *The Mainstreaming of Alternative Investments: Fueling the Next Wave of Growth in Asset Management,* June 2012, © McKinsey & Company.

[v] *Ibid.*

[vi] *Ibid.*

[vii] Using data provided by Morningstar, Inc., Netherby analyzed the total assets and calculated net subscriptions for open-end mutual funds, exchange traded products (ETPs) and money market mutual funds, excluding fund-of funds, for the calendar years from 2001 through 2011. The categories "Alternative" and "Commodities" are defined by Morningstar, Inc. and include open-end mutual funds and ETPs.

[viii] According to Credit Suisse Hedge Index LLC, "The Dow Jones Credit Suisse Core Hedge Fund Index is the industry's first asset-weighted, UCITS III compliant, daily valued hedge fund index with an unconstrained selection universe. It is unique in that performance reflects that of managed accounts and other regulated fund structures sourced from across a range of platforms. This approach expands the universe for fund selection, allowing for the broadest representation of the liquid hedge fund universe without platform bias." More details can be found at www.hedgeindex.com

[ix] "The Dow Jones Credit Suisse Hedge Fund Index[SM] is compiled by Credit Suisse Hedge Index LLC and CME Group Index Services LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index uses the Credit Suisse Hedge Fund Database (formerly known as the "Credit Suisse/Tremont Hedge Fund Database") which tracks approximately 8,000 funds and consists only of funds with a minimum of US$50 million under management, a 12-month track record, and audited financial statements. The index is calculated and rebalanced on a monthly basis, and reflects performance net of all hedge fund component performance fees and expenses."

[x] Backfilling in this context is the practice of evaluating a population of participants (managers/funds) in hindsight. It is extremely difficult to include participants that were in the population during the period of consideration but ceased to exist at the time of the analysis. If there is no statistical difference between survivors and non-survivors then there would be no bias and no problem with the results. However, there is good reason to believe that non-survivors were inferior to survivors. Hence, backfilled results are likely to have survivorship bias. It should be noted that even live hedge fund peer groups have some survivorship bias because some funds do not report results until they achieve success and some funds stop reporting results if they are unsatisfactory.

[xi] *The Mainstreaming of Alternative Investments: Fueling the Next Wave of Growth in Asset Management,* June 2012, © McKinsey & Company.

[xii] *Ibid.*

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THE ALTERNATIVE VIEW

The Netherby Research Team provides in-depth analysis and due diligence of liquid alternative products and strategies as well as portfolio construction services. Netherby has established a set of proprietary ratios designed to help wealth managers better understand the impact of integrating liquid alternative strategies into client portfolios.

If you have any questions or comments regarding this article or if you would like to find out more about what we do, please contact one of our partners below.

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