INVESTING IN LIQUID ALTS: AN OUTCOMES-BASED APPROACH

April 2017

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To learn more about QMA's liquid alts capabilities, please contact Stephen Brundage, CFA, Managing Director and Portfolio Strategist, at stephen.brundage@qmallc.com or 973.367.4591.

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As more investors seek new sources of returns that are less correlated with the downward swings of the equity and bond markets, liquid alternative strategies have emerged as one of the more viable, and popular, investment options. The past decade has seen more than a tripling of assets allocated to these strategies,[1] which generally mirror nontraditional investments like hedge funds but in a daily liquid, transparent, and regulated mutual fund format. The Lipper mutual fund database today lists hundreds of different liquid alts funds representing a wide range of approaches and risk/return profiles.

But that's also part of problem. Many investors have been conditioned to select managers based on the asset class they invest in, rather than assessing liquid alts for what they were designed to do. As the number of choices grows, the critical distinctions between the different roles, for example, a high-beta equity long-short and low-beta equity market neutral strategy play in a portfolio are getting lost in translation. This has led to buyer's remorse, with many people failing to understand why their strategies haven't kept pace with the broader equity market. Flows in some categories have reversed, and there is now the risk investors could be left unprotected.

In this paper, we will focus on how the broad classifications used by retail databases can make it harder to find the strategies that best suit an individual's portfolio. We also introduce a new framework that may help investors get more out of the information available to better align their choices with their ultimate objectives.

Why Liquid Alts Must Be Viewed through Their Own Lens

Many investors select strategies based on what the manager invests in. If a strategy trades individual stocks, it's considered an equity strategy. If it trades bonds, it's a bond strategy. The same categorizations, however, can be meaningless in liquid alternatives. For example, while equity long-short and market neutral managers both trade equities, they have very different purposes and outcomes. Equity long-short strategies are designed to produce directional performance with lower volatility but a high degree of dependence on equity market performance, whereas equity market neutral performance is meant to be completely unrelated to market performance (i.e., non-directional). At a basic level, all liquid alts strategies take one of these two approaches, seeking returns that are either based on the direction of a market or that are independent of the market. Directional strategies seek to improve on the performance of the broader market on a risk-adjusted basis, while non-directional strategies seek returns that eliminate broader market risk. Some liquid alts may do some of both, but all do more of one or the other.

A useful way of determining where a strategy falls on this spectrum is in terms of the tradeoff between beta and upside capture (Figure 1). A traditional equity index fund provides beta of 1 and upside capture of 1 with the equity market. The fund will closely follow any appreciation of the equity market. On the flip side, it will fully participate in any market downturn or bear market as well.

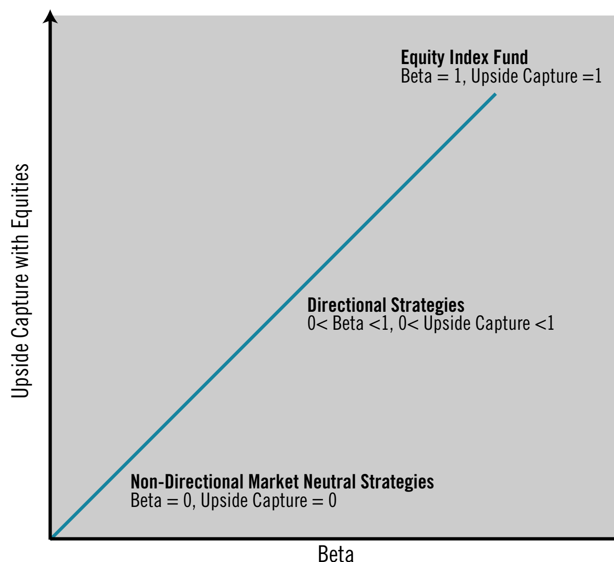
On the other extreme are fully non-directional strategies. Non-directional funds like equity market neutral and managed futures will typically hold long and short positions in roughly equal measure, resulting in an average beta of approximately zero to the major asset classes. (Equity market neutral will generally maintain this balance fairly consistently; managed futures tend to be long or short at any given time but broadly market neutral over longer periods.) Since these strategies have no sustained systematic exposure to the broad market, they tend to employ significant leverage to achieve meaningful return levels.

Directional strategies like equity long-short, certain types of global macro or multi-strategy offer more equity exposure than market neutral strategies and less than a traditional long-only strategy, putting them in the middle of the beta range. These strategies provide less diversification benefit than non-directional strategies but more than a long-only equity fund, delivering returns roughly comparable to equities but with lower risk. The mutual fund versions also tend to employ less leverage than the hedge fund versions.

Going Inside the Liquid Alts Data

We looked at the breakdown of returns and performance for the major liquid alts styles in the Lipper database from January 2001 to December 2016. We chose that start date because before then many liquid alternative categories were either not available or had only a few funds. As it turns out, it was not a particularly strong period for equities compared to their long-term performance. Nonetheless, all categories (except for managed

Figure 1. Spectrum of Fund Outcomes in Relation to the Equity Market



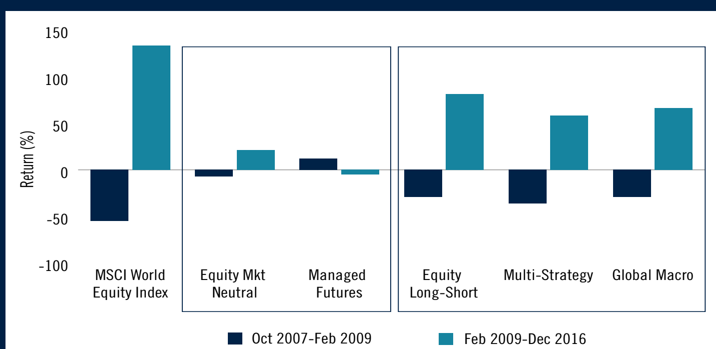
Source: QMA.

Shown for illustrative purposes only. Please see 'Notes to Disclosure' for important information including risk factors and disclosures.

futures) performed well across the period in terms of returns per unit of risk (Figures 2a-2b), albeit with very different return characteristics. The two main types of market neutral strategies, equity market neutral and managed futures, both exhibited low beta to equities and low upside and downside capture of equity returns. Interestingly, even they arrived at those characteristics in very different fashion, with equity market neutral achieving its low beta through low volatility and relatively high correlation to equities, and managed futures doing almost exactly the opposite. The key benefit of these strategies was their diversification and uncorrelated alpha.

The directional strategies, namely equity long-short, multi-strategy and global macro, experienced beta of approximately 0.5 with equities and upside and downside capture of also

Liquid Alts Performance During the Global Financial Crisis and Subsequent Bull Market



From the bottom of the bear market in February 2009 through 2016, global equities rallied by 133%. As shown here, none of the main categories of liquid alts fully participated in that rally. However, it's important to remember the stock market does not always go up. During the bear market around the Global Financial Crisis when global equities lost 55% of their value, directional liquid alts strategies lost approximately half as much. Equity market neutral registered only single-digit losses, and managed futures actually posted *positive* returns.

Sources: Lipper, MSCI, QMA. Data through December 2016.

Notes: Each Lipper category is represented by the average return of the funds in the category. Global Equities is proxied by MSCI World Equity Index in USD. MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as basis for other indices or investment products. Please see 'Notes to Disclosure' for additional MSCI disclosures. Past performance is not a guarantee or a reliable indicator of future results.

Figure 2a. Performance Characteristics of Lipper Alternative Funds: Non-directional (2001-2016)

	Equity Mkt Neutral	Managed Futures	Global Equities
Average Annual Return	3.08%	1.37%	3.47%
Volatility	2.63%	8.10%	15.48%
Avg Return/Volatility	**1.17**	**0.17**	**0.22**
Correlation w/Global Equities	0.54	(0.14)	1.00
Beta to Global Equities	**0.09**	**(0.07)**	**1.00**
Max Drawdown	-7.8%	-16.6%	-55.4%
Max Drawdown/Volatility	(2.97)	(2.04)	(3.58)
Upside Capture	**0.16**	**0.08**	**1.00**
Downside Capture	**0.02**	**0.02**	**1.00**

Sources: Lipper, MSCI, QMA. Data through December 2016. Past performance is not a guarantee or a reliable indicator of future results

Figure 2b. Performance Characteristics of Lipper Alternative Funds: Directional (2001-2016)

	Equity Long-Short	Multi-Strategy	Global Macro	Global Equities
Average Annual Return	4.73%	3.81%	4.18%	3.47%
Volatility	8.12%	8.30%	8.39%	15.48%
Avg Return/Volatility	**0.58**	**0.46**	**0.50**	**0.22**
Correlation w/Global Equities	0.95	0.90	0.94	1.00
Beta to Global Equities	**0.50**	**0.48**	**0.51**	**1.00**
Max Drawdown	-29.4%	-36.3%	-28.6%	-55.4%
Max Drawdown/Volatility	(3.63)	(4.38)	(3.41)	(3.58)
Upside Capture	**0.59**	**0.53**	**0.59**	**1.00**
Downside Capture	**0.44**	**0.44**	**0.47**	**1.00**

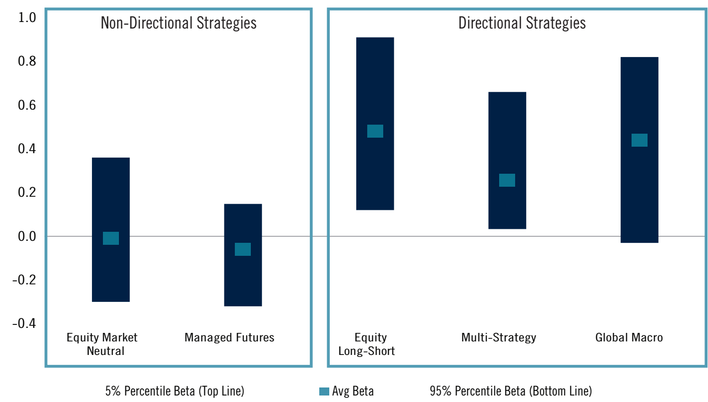
Sources: Lipper, MSCI, QMA. Data through December 2016.

Notes: Start date for Lipper Managed Future category is 4/2007, start date for Lipper Multi-Strategy category is 7/2004. We use 1/2001 as the start date for all other Lipper categories. Global Equities is proxied by MSCI World Equity Index in USD. Global Bonds is proxied by Bloomberg Barcap Global Treasury Bond Index hedged to USD. MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as basis for other indices or investment products. Please see 'Notes to Disclosure' for additional MSCI disclosures. Past performance is not a guarantee or a reliable indicator of future results.

approximately 0.5. They had a high correlation with the directional movements of the equity markets and achieved comparable performance but with substantially lower volatility due to their more diversified sources of return.

What is missing from this high level summary is the additional variety within the various categories (Figure 3). While the average beta for equity market neutral was essentially zero, individual managers in the category could have had a beta anywhere from -0.30 (5th percentile) to 0.36 (95th percentile). On the directional side of the table, global macro managers ranged from -0.03 (5th percentile) beta all the way up to 0.82 (95th percentile), with an average beta of around 0.5.

Figure 3. Lipper Liquid Alternative Fund Betas (2001-2016)



Sources: Lipper, MSCI, QMA.

Notes:Start date for Lipper Managed Future category is 4/2007, start date for Lipper Multi-Strategy category is 7/2004. We use 1/2001 as the start date for all other Lipper categories. Fund betas are calculated against MSCI World Equity Index. Lipper funds with more than 6 months of life as of 12/2016 are included in this calculation. MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as basis for other indices or investment products. Please see 'Notes to Disclosure' for additional MSCI disclosures. Past performance is not a guarantee or a reliable indicator of future results.

How can this be? Broad categories used by the retail databases are simply unable to capture certain key distinctions between types of alternatives funds. For example, Lipper lumps together many risk parity strategies and global macro funds under the same general banner of "global macro." Yet, almost by definition, these sub-types are going to have very different betas and correlation to equities. Risk parity funds typically use leverage to construct long-only allocations to the major asset classes in equal risk contributions. As such, they have relatively high beta and equity correlation. Meanwhile, one of the most classic types of global macro holds long and short positions in a wide variety of assets, including equities. It isn't even directional, but rather aims over a full market cycle for approximately market neutral exposure to the broader equity market. To confuse matters further, this same type of long-short strategy can also come with a long bias, which can result in even higher beta than risk parity and much higher than its close market-neutral cousin.

Getting More Granular

To shed more light on these differences between and within categories, we next looked at the Hedge Fund Research Inc. (HFRI) database of traditional institutional-class hedge fund strategies (Figure 4). This institutional database has a longer history of fund returns over more market cycles. The data broadly reinforce our earlier observations. However, we can see immediately that it incorporates much finer classifications. Global macro is, again, a good example. In HFRI, we can see that the category is itself divided into three subcategories: discretionary thematic global macro, which grants huge leeway to make concentrated bets in liquid and highly illiquid assets; multi-strategy global macro, a kind of hedge fund grab bag that can include disparate pieces of other approaches, from

Figure 4. Performance Characteristics of Hedge Funds in the HFRI Database
(1995-2016)

	High Level HFR Category		Relevant HFR Global Macro Subcategories			
	Equity Hedge	Global Macro	Global Macro-Systematic Diversified	Global Macro-Discretionary Thematic	Global Macro Multi-Strategy	Global Equities
Average Annual Return	9.50%	7.30%	8.39%	0.64%	2.34%	5.88%
Volatility	9.01%	6.09%	7.67%	4.88%	4.34%	14.98%
Avg Return/Volatility	1.06	1.20	1.09	0.13	0.54	0.39
Correlation w/Global Equities	0.81	0.34	0.35	0.78	0.63	1.00
Beta to Global Equities	0.49	0.14	0.18	0.25	0.18	1.00
Max Drawdown	-30.6%	-8.0%	-11.8%	-13.9%	-9.1%	-55.4%
Max Drawdown/Volatility	(3.40)	(1.32)	(1.54)	(2.86)	(2.11)	(3.70)
Upside Capture	0.69	0.37	0.47	0.26	0.24	1.00
Downside Capture	0.37	0.07	0.15	0.27	0.15	1.00

Sources: Lipper, MSCI, QMA. Data through December 2016.

Notes: Start date for HFRI Discretionary Thematic, Multi-strategy categories is 1/2008. We use 1/1995 as the start date for all other HFRI categories. Global Equities is provied by MSCI World Equity Index in USD. MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as basis for other indices or investment products. Please see 'Notes to Disclosure' for additional MSCI disclosures. Past performance is not a guarantee or a reliable indicator of future results.

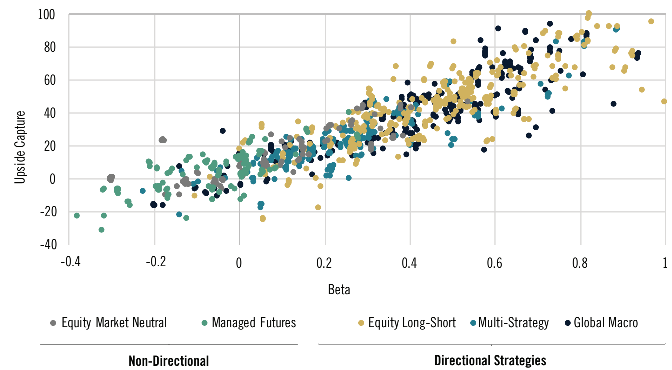
event-driven to statistical arbitrage; and systematic diversified global macro, which uses quantitative models to invest across multiple asset classes.

Of the three, it's clear that systematic has the best performance and equity upside capture. Yet, it would be difficult for an investor to drill down into the retail databases to find such a fund. Indeed, some systematic global macro funds aren't even listed under "global macro" in Lipper, but are grouped instead under its separate stand-alone "multi-strategy" category. Even though these strategies use factors and other systematic methods to select their investments, the fact that they use different kinds of factors and processes for weighting the factors for each different asset class is enough in the simpler taxonomy to make them seem more multi-strategy- than global-macro-like.

Toward a More Fluid Approach

It's probably unreasonable to expect the retail databases to incorporate the same level of granularity as the institutional alternatives databases. The HFRI was developed for sophisticated institutional investors with a fine-tuned appreciation of the differences between the various classifications and sub-classifications of hedge funds. While a finer slicing of the liquid alts categories might help more knowledgeable mutual fund investors find what they are looking for, it might also add to others' confusion.

Figure 5. Mapping Funds to Beta vs Upside Capture Trade-off
(2001-2016)



Sources: Lipper, MSCI, QMA. Data through December 2016.

Notes: Start date for Lipper Managed Future category is 4/2007, start date for Lipper Multi-Strategy category is 7/2004. We use 1/2001 as the start date for all other Lipper categories. Upside capture and beta are calculated against MSCI World Equity Index. Lipper funds with more than 6 months of life are included in this calculation. Some outliers may have been left out of the chart due to rescaling of the axis for better visibility. Past performance is not a guarantee or a reliable indicator of future results.

However, there is one simple way for all investors and their advisors to find the liquid alts strategies that best fits their needs: by focusing first on the characteristics they are searching for in a fund and the role it will play in their portfolios. We liken the approach to the "Build Your Own" functions on many car company websites that let shoppers generate their ideal vehicle from the ground up. For example, if you're looking for a fund that has equity-like returns with more diversified payoff, you should screen for directional funds, which, all else being equal, will have beta well north of 0 but lower than 1. You should also see what upside capture these funds come with, and get comfortable with some sacrifice in that area in exchange for better downside protection. If you hold onto these funds for a full market cycle, our analysis suggests there is a good chance they will deliver a balance of payoff and protection.[2]

The dot plot (Figure 5) illustrates how the funds in the current categorizations would start to remap to such an approach. Since there will still be multiple funds that serve the same general outcome with different investment philosophies or asset universes, you will likely need additional criteria to further explore your tradeoffs and winnow the field. The checklist below provides some key questions to help guide your search.

Will this outcomes-based approach require a little more work upfront? Perhaps, but given its potential to finally harness the liquid alts revolution to better meet some very real and pressing investor needs, we think it's worth the effort.

10 Questions: A New Checklist for Evaluating Liquid Alts

1. **What is the targeted or average beta of the fund to global equities or bonds?**

   This is the first question for determining if a fund is directional and meant to generally follow the broader market with less volatility, or non-directional and primarily intended as a diversifier of market risk. Depending on your exact tolerance for volatility, you may also want to break beta into its component parts and look at how much the low beta actually comes from steady returns, or how much from a very low correlation to equities and quite jumpy return pattern.

2. **What is the upside/downside capture with global equities?**

   Especially important for directional strategies, which offer upside capture but with some sacrifice in returns for less downside. Here you're looking for the funds that strike the right balance for you.

3. **Is the fund systematic or discretionary? Is it factor-based?**

   A good place to start in getting to the next level of differentiation between different types of directional or non-directional funds. Are pre-set rules and models used to select the fund's investments, or are decisions left to the discretion of the individual manager? Both approaches have their advantages, but with potentially very different risk profiles. Many systematic managers also employ commonly available market factors like "value" or "momentum" to score potential investments, which can help make returns more consistent and minimize fees.

4. **What asset classes does the fund invest in? Does it invest in illiquid assets?**

   While the asset classes a fund invests in are generally just a means to an end, they can still help you gauge the likelihood of success and where the strategy fits into your portfolio. Beyond basic asset classes like stocks, government bonds and commodities, certain types of more thinly traded investments may provide an "illiquidity premium" and an even deeper level of diversification. However, during times of market stress they can also make it harder for the manager to liquidate positions (see No. 7) and redeem shares.

5. **How many positions are held typically?**

   Holding larger numbers of positions is another way to mitigate risk, but potentially at a cost of less upside. Conversely, fewer numbers of concentrated positions can help raise the return ceiling and the risk ante.

6. **Is the strategy a fund of funds or integrated single portfolio?**

   Fund of funds, which purport to group several best-in-class managers under a common theme, offer the advantages of doing some of the shopping for you and spreading around the risk of any one manager underperforming. Downsides include the possibility of some return opportunities and risks within the strategy working at cross-purposes, and another layer of fees.

7. **How much leverage does the fund employ? Is there outright borrowing?**

   Most liquid alts use some degree of leverage to stretch their capital to generate higher or more diversified returns. The total leverage, or "gross notional," is a function of both the money the fund borrows outright against its assets, and the derivative contracts it employs to gain exposure to certain assets with less money down. Neither necessarily equates to higher risk, which is largely driven by the investments the money is used for. However, in times of stress the outright providers of capital may demand it back, exposing the fund to the risk of having to sell into a declining market. The same thing can happen in certain over-the-counter corners of the derivatives market, but is far less likely on the highly liquid exchanges where most liquid alts managers do the bulk of their trading.

8. **How much does the fund charge? For fund of funds, what's the final fee charged?**

   While liquid alts charge substantially less than traditional hedge funds, there is a fairly wide dispersion in many categories between the highest and lowest fees. Choosing a fund or share class with a lower fee can be a not-insignificant factor in meeting return objectives. Be sure, though, to read the fine print: Particularly with fund of funds, it is important you look at the expense line that captures both the master fund and all underlying manager fees.

9. **What is the benchmark used? Is the strategy tightly managed against it? What's the tracking error relative to the benchmark?**

   The benchmark says a lot about a fund's objective. If the benchmark is cash, the strategy primarily views itself as a diversifier, while a fund measuring itself against a global stock index has improving risk-adjusted returns as the goal. For funds managing multiple asset classes, the tracking error vis-à-vis the benchmark is likely to be higher – but not necessarily. For example, certain systematic strategies may be able to target a specific tracking error, dialing it up or down for different client segments.

10. **What is the fund's targeted or realized rate of return?**

    At the end of the day, a liquid alts fund, like any investment, must be judged on whether it makes money. Still, making money is also a function of limiting losses. This more holistic perspective has particular relevance in the liquid alts space, where a strategy may be designed all or in part to reduce overall portfolio risk.

FOOTNOTES

[1] Morningstar, as of December 31, 2016.

[2] There is no guarantee this can be achieved.

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