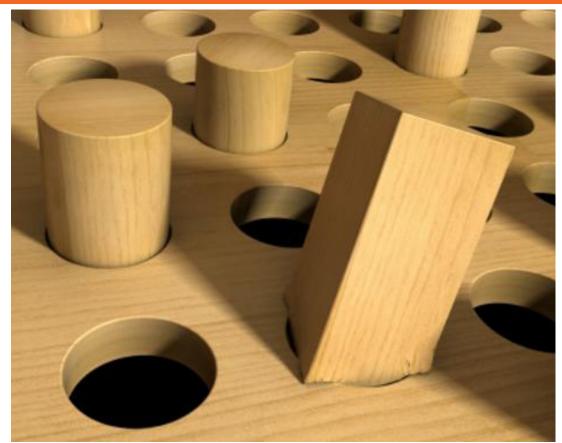
What a CAIA Member Should Know



Alternative Beta: Redefining Alpha and Beta

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Associate and Client Portfolio Manager, Multi-Asset Solutions, J.P. Morgan Asset Management Alternative beta (alt beta) strategies extend the concept of "beta investing" from long-only traditional strategies to strategies that include both long and short investing. Although alt beta approaches have relevance for different categories of alternatives, this article focuses on hedge fund-related strategies, currently the most prevalent form.

Alt beta strategies are rules-based strategies designed to provide access to the portion of hedge fund returns attributable to systematic risks (beta) vs. idiosyncratic manager skill (alpha). As a result of these new strategies, a component of hedge fund returns previously viewed as alpha has been redefined as beta.

We see this redefinition of alpha as beta to be a transformational trend in hedge fund investing:

Alt beta strategies are designed to provide access to the potential diversification, downside protection, and risk-return efficiency for which hedge fund strategies are valued—in a more liquid, low-cost, and transparent format. These strategies can complement traditional, actively managed hedge fund allocations and provide more discriminating tools to support alternative manager due diligence.

Alternative beta (alt beta) strategies have opened a new avenue for accessing the investment characteristics for which hedge funds have become highly valued.

These strategies provide ready access to uncorrelated returns that can help improve portfolio diversification, risk-return efficiency, and volatility management—without the high fees, lock-ups, and limited transparency often associated with hedge funds.¹

A passive, rules-based approach gives alt beta strategies the ability to provide liquid, lowcost, and transparent access to the beta (vs. alpha) portion of returns typically associated with hedge funds. As a result, these strategies can be a valuable complement to portfolios for investors that want to:

- Access investment characteristics previously available only via hedge funds
- Expand an existing hedge fund allocation or improve its fee, liquidity, and transparency profile
- Have hedge fund exposure while conducting manager due diligence to initiate or enhance a hedge fund program
- Gain new perspective on the performance of active, alphagenerating hedge fund strategies by comparing them with alternative beta benchmarks

In general terms, beta is the return an investor earns for being exposed to the risks of the overall market; alpha is the additional return a manager generates through skilled investing.

For example, returns from investing in an actively managed U.S. large cap equity fund can be thought of as a combination of the reward for bearing market risk, or *beta* (as measured by the correlation of the fund's returns to those of the S&P 500 index), and *alpha*—the additional layer of returns the manager is able to generate over the S&P 500.

In both the traditional and the alternatives spaces, today's "alpha" is morphing into tomorrow's beta. So-called "beta strategies" are blurring the alpha/beta distinction, introducing new terminology and raising questions in the minds of investors attracted to the characteristics these strategies are designed to provide.

In the rest of this article, Soheil Galal, Managing Director with J.P. Morgan Asset Management's Global Multi-Asset Solutions and Rafael Silveira, a Portfolio Strategist with JJ.P. Morgan Asset Management's Institutional Solutions & Advisory group, address some of the key questions they are hearing from clients regarding beta strategies in general and alt beta strategies in particular. We hope their insightful answers and definitions will enhance an understanding of what alt beta strategies are—and what they are not.

Question: Let's start with some basic definitions. Broadly speaking, what are beta strategies?

Soheil Galal: Beta strategies are strategies designed to provide investors with the portion of returns attributable to a market's overall systematic risk (or beta) vs. returns attributable to idiosyncratic manager skill (or alpha), using a methodical, rulesbased approach.

Q: What types of strategies are included under the "beta strategies" moniker?

Rafael Silveira: Market index, strategic (or "smart") beta and alternative beta strategies all fit under the classification of beta strategies. What distinguishes them from one another are the different markets and associated beta risks (and rewards) they are designed to gain exposure to. Specifically:

Traditional capitalization-weighted (cap-weighted) equity index strategies are intended to provide exposure to market risk (beta) as represented by traditional, cap-weighted indices, in a costeffective, investable format.

Strategic/smart beta equity strategies are designed to provide exposure to the risks associated with traditional, long-only equity investing, using non-market-cap-weighted approaches. Strategies may include equal-weighting the stocks in an index, or weighting the stocks based on exposures to factors such as value, size, momentum, and volatility, in an attempt to improve the riskreturn-efficient capture of general risk premia in equity markets.

Alt beta strategies, which take long and short positions, are designed to provide systematic exposures to the factors (betas) associated with hedge fund investing, given that hedge fund returns can now be separated into alpha and beta components.

Q: Historically, how did beta investing arise—and why is this trend so important?

Rafael: Initially, returns from active investment management were attributed almost entirely to security selection—that is, to manager skill (or alpha). Over time, more and more of that "alpha" is being redefined as "beta." In other words, through rules-based strategies, these underlying drivers of return are becoming more readily "investable." That's extremely important for investors because it means more ways to access and combine the different components of traditional and alternative returns, more opportunity to optimize management fee expenditures and more-objective benchmarks for assessing manager-generated returns.

Q: Can you take us through the key developments in beta investing?

Rafael: Sure. Let's start with market index funds—the reincarnation of market indices in an investable form (See Exhibit 1). In 1975, John Bogle launched the first mutual fund designed to track a cap-weighted index. This offered investors a passively-managed, low-cost way to gain exposure to systematic market risk—by essentially buying the market. More recently, with the introduction of exchange-traded funds (ETFs), investors now have additional intra-day trading flexibility when investing in these strategies.

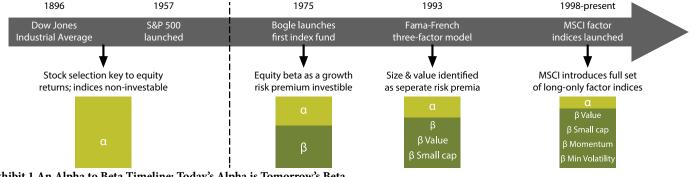


Exhibit 1 An Alpha to Beta Timeline: Today's Alpha is Tomorrow's Beta Source: J.P. Morgan Asset Management Less than two decades later, academic research began to identify other systematic risks, behavioral anomalies, and structural inefficiencies driving equity returns, such as value, size, momentum, and low volatility.

Cap-weighted indices and their associated index funds provided some exposure to these systematic risks. However, experience showed that long-only active managers were able to "beat" capweighted market indices by "tilting" toward stocks with these particular characteristics. This suggested that there were more efficient ways to access these return drivers than through capweighted indices.

Q: And the search for a more risk-return-efficient approach to accessing these systematic risks led to the development of strategic (or "smart") beta strategies?

Rafael: That's right. Research has indicated that there are better equity investment approaches than cap-weighting that can provide investors with equity exposures in a more risk-reward-aligned manner. With these developments, another slice of market return, previously viewed as alpha, was reclassified as beta.

There are a variety of equity strategic beta approaches. Borrowing the terminology used in a 2013 paper by Clare, Motson, and Thomas, these beta strategies can be bucketed into three categories:

Fundamental indexation, which uses different fundamentallydriven definitions of company size to determine weights. These measures include total annual dividends, cash flow, sales, and book value.

- **Optimization**, in which weights are found through the maximization or minimization of some mathematical function and include procedures such as minimum variance and maximum diversification
- Heuristic indexation, which uses concepts such as equal weighting, market-cap weighting with restrictions on concentration, and equal risk contribution (from stocks or sectors)

Interestingly enough, the study found that each of these approaches was able to beat a cap-weighted approach over the long run, delivering a higher risk-adjusted return. The authors also point out that these strategies have higher turnover than the traditional market-cap-weighted scheme, with fundamental indexing having the lowest turnover. However, their research suggests that the incremental transaction cost should not be sufficient to wipe out the excess return of the strategic beta strategies over the traditional market-cap-weighted approach.

Q: What, then, is alternative beta?

Soheil: Alternative beta (alt beta) extends the concept of beta investing from long-only traditional assets (i.e., equities and bonds) to long-short investing in traditional and alternative assets. These strategies are designed to build exposure, for example, to hedge fund-related risk factors by following specified rules and investing in individual securities.

Alt beta strategies include a variety of hedge fund styles, such as equity long/short, global macro, merger arbitrage, and convertible

bond arbitrage (See Exhibit 2 for examples).

Q: Can you give an example of a hedge fund strategy or factor and what you mean by constructing it through a rules-based strategy that invests in individual securities?

Soheil: A strong example of this is a strategy for capturing the "deal risk premium" in merger arbitrage (the return for taking on the risk that a deal will not be completed, post-announcement). A skilled hedge fund manager may be able to improve returns (that is, add alpha) by carefully analyzing and selecting the most profitable deals. However, the systematic deal risk premium can be captured through a more passive, rules-based strategy, namely going long the target (acquiree) stock while shorting the acquirer stock, across all announced deals, within defined parameters.

In other words, we build these risk exposures from the bottom up. This approach has allowed hedge fund factors to move out of the halls of academia and into investors' portfolios.

Q: So, like owning a market index to gain exposure to the risks of "being in the equity market," investing in alt beta strategies is intended to provide exposure to the inherent risks of hedge fund strategies, including, for example, merger arbitrage?

Soheil: Yes, that's right. And this is just one example of how investors can gain access to a hedge fund style premium without paying the 2-and-20 fees often associated with actively managed hedge funds. What's more, capturing the different hedge fund style-related betas in a diversified portfolio has the potential to offer highly risk-return-efficient access to these risk premia.

Q: How are institutions typically accessing alt beta strategies?

Soheil: Most investors are relying on experts who offer high quality alternative beta strategies. We have seen some investors that have tried to build up alt beta exposures internally. However, consider the merger arb example: While the rule may be simple, the buying, tracking, and selling involved would be difficult for a single investor to do.

- Alternative beta comes in multiple flavors that typically have low correlation to one another:
- Equity long/short invests in top-ranked stocks while shorting bottom-ranked stocks from a global developed market universe, capturing momentum, value, size, and quality factors.
- Global macro seeks some of the liquid and systematic risk premia captured by macro hedge funds, including term premium, fixed income carry, commodity roll yield, commodity momentum, foreign exchange (FX) carry, and FX momentum factors.
- Merger arbitrage focuses on the deal risk premium factored into the price of the merger-target stock until the deal is completed.
- Convertible bond arbitrage focuses on the illiquidity and small cap premia available in the convertible bond market by capturing the underpricing of the embedded optionality.

Exhibit 2 Hedge Fund Styles and Alternative Beta Factors Source: J.P. Morgan Asset Management

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Investors should consider their specific objectives, policy constraints and the following questions when evaluating alt beta managers:

- What are the strategy's volatility and return targets?
- If investing in a multi-strategy portfolio, what are the underlying strategies?
- What vehicles are used in implementing the strategy

— For example, to what extent are derivatives employed? Does the manager have the resources required for effective execution?

- What level of transparency does the manager offer?
- What is the fee structure?
- How liquid is the strategy?
- Is the strategy designed to be neutral to traditional market beta?
- Does the manager express market views in managing the strategy?
- How does the strategy correlate with existing alt beta, hedge fund or traditional allocations in the investor's portfolio?
- What is the manager's experience and track record in managing the various underlying alt beta strategies?

Exhibit 3 Alt Beta Managers: An Investor Checklist Source: J.P. Morgan Asset Management.

Q: There are a lot of terms out there—such as "alt beta," "hedge fund replication," and "liquid alternatives." Do they all refer to the same thing?

Soheil: The term liquid alternatives (liquid alts) actually refers to an expanding category of investment approaches, including alt beta, hedge fund replication strategies, and liquid versions of active alternative managers' funds (that is, those offered in the form of U.S. registered mutual funds and ETFs under the Investment Company Act of 1940). By some definitions, less-benchmark-constrained strategies not confined to long-only investing in equity, fixed income, and commodity markets are also considered liquid alts.

The common theme in all of these strategies is that they can provide exposure to at least some of the return components of actively managed alternative/hedge fund strategies, but are generally more liquid and accessible. It is important, however, to note some of the differences between alt beta and hedge fund replication strategies.

Alt beta strategies, as we have defined them, are designed to build beta exposures common to specific hedge fund styles through rules-based processes that invest in individual securities and use long/short techniques. These strategies tend to be beta neutral. What's more, the individual hedge fund style betas generally have low correlation to one another. Combined in a well-constructed portfolio, they can therefore provide an attractive, diversified source of hedge fund beta returns. Hedge fund replication approaches the problem from a different angle. These strategies attempt to capture the performance of hedge fund strategies based on historical statistical relationships and then use that information to establish the fund's exposures going forward. Overall, this is fundamentally different from alt beta's real-time, bottom-up approach and may result in significant correlation to traditional markets.

Q: Are all alt beta strategies created equal?

Soheil: Assuming that different providers are applying the same type of rules-based approach in constructing their strategies, there are going to be a lot of similarities among alternative beta products. But there are significant differences as well. For example, each alt beta strategy has its own volatility and return targets. Among multi-strategy portfolios, strategy composition can differ. Even at the individual strategy level, definitions of and approaches to accessing given risk factors are not necessarily uniform.

There can be differences in execution as well. For example, some managers, even within generally rules-based strategies, do express market views. Given the different construction techniques used by different managers, alt beta strategies can often be complementary and diversifying when used within a portfolio. Fees, liquidity, transparency, and leverage can also vary. The right choice depends on the investor's own objectives and sensitivities. We provide a checklist for investors considering an allocation to alt beta strategies (See Exhibit 3). And because alt beta strategies are often imperfectly correlated, we encourage investors to diversify among those they view as the best providers.

Q: How should clients think about using alt beta strategies within their portfolios?

Rafael: As a lower fee, more transparent, liquid way to access alternatives/hedge funds, alt beta strategies can be incorporated into investor portfolios to meet a number of objectives. Some investors are taking a core/satellite approach to hedge fund investing, using a multi-strategy alt beta portfolio to establish a core allocation. Investors value these strategies as a way to help build a hedge fund allocation with a more cost-effective fee structure and attractive liquidity profile.

Alt beta strategies can also be used as placeholders while investors research active managers. Investors starting up or building out a hedge fund allocation can invest initially in a diversified portfolio of alt beta strategies—and then replace some or all of that allocation with the skilled active managers they identify through their due diligence efforts.

Beyond their hedge fund allocations, investors are looking to alt beta strategies as a supplement to fixed income allocations—an approach to gaining diversification benefits without the interest rate sensitivity of bonds in a rising rate environment. And, of course, some investors' policy statements don't permit investing in hedge funds. For them, alt beta strategies provide a way to gain exposure to the characteristics of hedge funds (such as diversification, risk-return efficiency, and volatility management) without a major policy change.

Q: What other applications do you envision?

Soheil: Well, just as traditional market indices have become the benchmark against which active managers are evaluated, we

believe there is a similar role for alt beta. Now investors can more clearly assess what portion of a hedge fund manager's returns are idiosyncratic or non-replicable alpha vs. more readily accessible alternative beta.

Q: So where do we go from here?

Soheil: The access to alternative beta strategies in an investable form is having a profound impact on the shape of alternative investing. Alt beta strategies cannot only provide liquid, low-cost, and transparent access to investment styles typically associated with hedge funds, they are also raising the bar for alternative managers. Before the industry accepted that there was something called alternative beta, there was no beta; everything was seen as alpha. With the identification of the systematic, beta portion of these strategies, beta becomes the bar. You have to outperform the beta. We anticipate a continuation of these advances in rules-based generation of alternative risk premia and further reclassification of today's alpha as tomorrow's beta. In our view, these developments should benefit investors by providing more efficient access to the diversifying, return-enhancing characteristics they look for from alternatives, as well as more discriminating tools for identifying highly skilled alternatives managers.

Endnotes

- 1. As the term implies, alternative beta strategies are not restricted to strategies designed to provide exposure to the beta portion of hedge fund returns. This paper, however, focuses on hedge-fund-related strategies, currently the most prevalent form.
- 2. Although this article focuses on strategic beta equity strategies, similar techniques can be applied to other asset classes, such as commodities or bonds.
- 3. Among the most familiar multi-factor models is the Fama-French three-factor model, which includes the market, size, and value factors. Eugene F. Fama and Kenneth R. French, "The cross-section of expected stock returns," The Journal of Finance, Vol 47, Issue 2 (1992); Fama and French, "Common risk factors in the returns on stocks and bonds," The Journal of Financial Economics. Vol 33, Issue 1 (1993).
- 4. Andrew Clare, Nick Motson, and Steve Thomas, "An Evaluation of Alternative Equity Indices—Part 1: Heuristic and Optimized Weighting Schemes," (March 30, 2013). Available at Social Science Research Network (SSRN): <u>http://ssrn.com/abstract=2242028</u> or <u>http://dx.doi.org/10.2139/ssrn.2242028</u>.
- Clare, Motson, and Thomas, "An Evaluation of Alternative Equity Indices—Part 2: Fundamental Weighting Schemes," (March 30, 2013). Available at SSRN: <u>http://ssrn.com/abstract=2242034</u> or <u>http://dx.doi.org/10.2139/ssrn.2242034</u>.

Authors' Bios



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Soheil heads a team at J.P. Morgan Asset Management dedicated to working with institutional clients to deliver multi-asset and OCIO solutions based in New York. He also leads the development of the

firm's Alternative Beta offering in the Americas. Before joining the firm he was a Partner and co-Chief Investment Officer

of Averos Capital a NY-London based Hedge Fund Manager where he oversaw the development and management of a suite of multi-asset class funds including the flagship Global Opportunities Fund as well as the Global Equities, Liquid Macro, and Momentum Commodities funds. Prior to Averos Capital, Mr. Galal was a Managing Director with Claredon Partners, a New York based private equity firm focused on middle market investments in the U.S. and Europe. Prior to Claredon, Mr. Galal was a Principal with international consulting firm Booz•Allen where he led large scale strategy and restructuring projects in the financial services space. Mr. Galal holds an MBA in Finance from Columbia Business School and an MS in Operations Research from Columbia University. He received his BA from the City University of New York in Computer Science and Mathematics. He holds Series 7 and 63 licenses.



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Rafael is a Portfolio Strategist of J.P. Morgan Asset Management and part of the Institutional Solutions & Advisory team, an internal think tank providing portfolio recommendations and advice to investors.

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Alison is a Client Portfolio Manager with J.P. Morgan Asset Management's Multi-Asset Solutions team in New York and is a leader in the development of the firm's Alternative Beta offering. Prior to joining Multi-Asset

Solutions, Alison was a founding member of the Alternative Investment Strategies team, a specialist team responsible for coordinating hedge fund, private equity, and real asset institutional sales, marketing, and new product construction. An employee since 2011, Alison previously was an analyst in Institutional Advisory & Sales. Alison graduated magnum cum laude from the University of Pennsylvania, Wharton School, with a Bachelor of Science in Economics with concentrations in Finance and Operations & Information Management and a minor in Psychology. She also holds series 7 and 63 licenses and is a CFA charterholder.