The Beta Continuum: *From Classic Beta to Bulk Beta*

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Much work in the current economic literature has focused on the separation of alpha and beta. While alpha can be elusive, considerable effort in the asset management industry is dedicated to active management—the quest to find and capture excess return. As alpha can be expensive to acquire, it normally commands a fee premium. Hedge fund and private equity managers are renowned for the high fees they charge their investors in the generation of active returns.

Conversely, beta is defined as the efficient capture of risk exposures tied to broad asset classes. Beta represents the systematic risk exposure associated with the equity markets, bond duration, exposure to commodities, credit exposure, and even the systematic returns associated with volatility embedded within stock options. Beta should be acquired cheaply because active management is not necessary to capture the systematic risk premium associated with an asset class.

For the most part, alpha and beta are considered as two points of an economic compass, as diametrically opposed as east and west. Generally, beta is considered to be the art of passive portfolio management, while alpha represents active portfolio management. In fact, economic reality is different. There is a continuum between beta and alpha; starting with classic beta at the one end to pure alpha at the other end. Along this continuum are different forms of beta that recognize the efficiency of risk premium capture, but also acknowledge that one-size beta doesn't fit every investor.

In this article, I define the *beta continuum*. Beta is not a point estimate; rather, there is a range of risk premium capture that can be described as beta. Note that what is sometimes labeled alpha is really more beta, and belongs along the beta continuum.

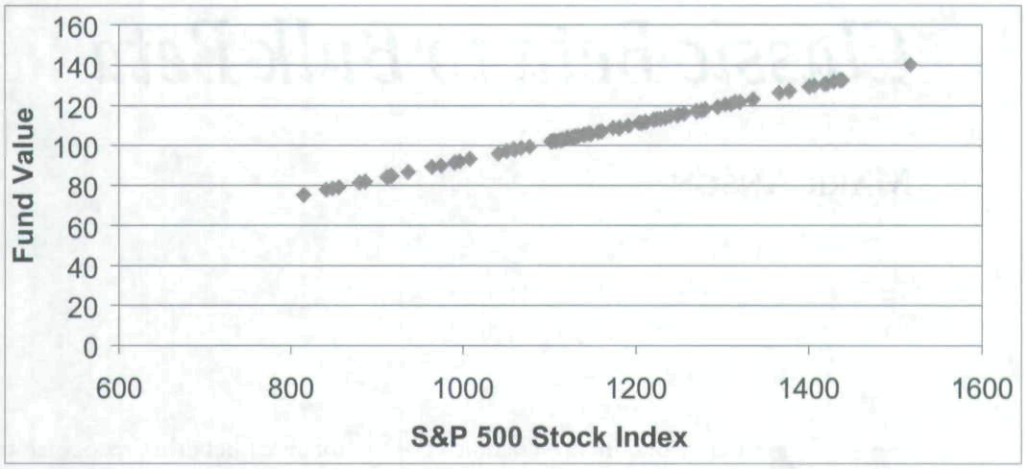
I begin by describing classic beta, and then move along the continuum as we get closer to active management.

CLASSIC BETA

Classic beta is the beta we all grew up with. It is the market beta, the broad-based beta, the beta of the capital asset pricing model as defined by Sharpe. Classic beta is typically defined with reference to a broad stock market index such as the S&P 500, the Russell 1000, MSCI-EAFE, the FTSE 100, or the Nikkei 225. These widely based indexes are designed to track the systematic risk associated with investing in the equity markets.

A simple demonstration will help. Exhibit 1 shows the performance of a U.S. mutual fund that tracks the S&P 500 stock index. This is an example of classic beta—tracking a well-known stock market index. This product produces a nice smooth straight line, which leads to one of the key conclusions about beta drivers: They are linear in their performance.

EXHIBIT 1
Vanguard 500 Index Fund



Linearity is a common element of all beta drivers. The reason is that beta drivers are not designed to provide excess return, or alpha. Their goal is the efficient capture of systematic risk premiums in the market. The more efficiently this is done, the lower will be the cost of the beta driver and the straighter will be the line with respect to the risk premium captured. Lining up all the data points of this index fund compared to the S&P 500 leads to a nice straight line connecting the dots. The returns generated by this index fund exactly match the up and down movement of the S&P 500.

Interestingly, non-linear return patterns can sometimes be induced by imposing an incentive fee. Effectively, when active managers' return patterns are grossed up to include their previously deducted performance fees, a much more linear pattern of returns can appear.[1]

BESPOKE BETA

Bespoke beta describes the method by which asset managers capture local risk premiums. The term, bespoke, comes from Saville Row in London, where it has long been used to refer to custom-tailored clothing.[2] Therefore, bespoke beta is custom beta, designed to match a tailored risk exposure.

Exchange-traded funds are the best example of bespoke beta. ETFs divide the broad financial markets into submarkets, sectors, industries, and other localized risk exposures. ETF managers slice and dice the equity, bond, currency, and commodities markets to bring investors wedges of market risk for targeted economic exposures. Through ETFs, investors can make size, style, sector, subsector, country, and region bets in their portfolios.

Exhibit 2 shows the iShares Russell 2000 Value ETF, which tracks so-called value stocks in the small-capitalization range of the U.S. equity markets, compared to the Russell 2000 Value Stock Index—a stock index of smaller-capitalization companies that exhibit value characteristics such as a higher book-to-market value and higher earnings payout ratios. From Exhibit 2 we can see that the iShares product tracks the benchmark extremely well, offering investors cheap and tailored exposure to small-cap value stocks.

The first ETF was the Standard & Poor's Depository Receipts (SPDRs or Spiders), first introduced in 1993. From that start, ETFs have exploded in growth as represented by Exhibit 3. There are now over 200 ETF products trading globally, representing close to $700 billion of assets. ETFs have grown at a 51% cumulative average rate over the past 10 years.

Investors seek bespoke beta for several reasons. First, bespoke beta is a cheap and efficient way to make sector, style, size, or country bets. Even if an investor has no knowledge regarding individual securities, he or she may have some insight into macroeconomic fundamentals that may impact certain sectors differently.

For example, a rise in interest rates would have an adverse economic impact on heavily leveraged industries like the automobile industry, but would be beneficial for the income statements of banks and other financial lenders. With this macro view and through ETFs, an investor could short the auto industry and overweight the financial sector.

EXHIBIT 2

iShares Russell 2000 Value versus Russell 2000 Value Index

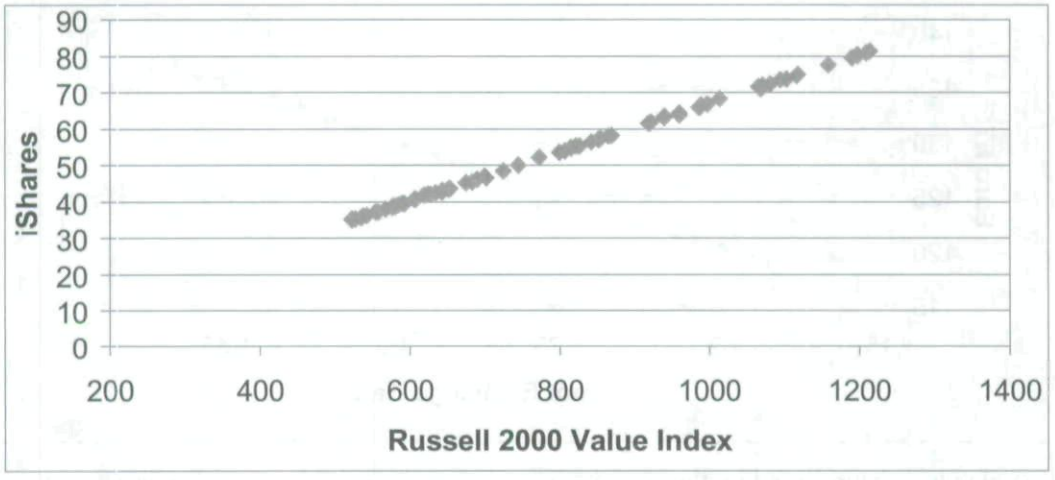
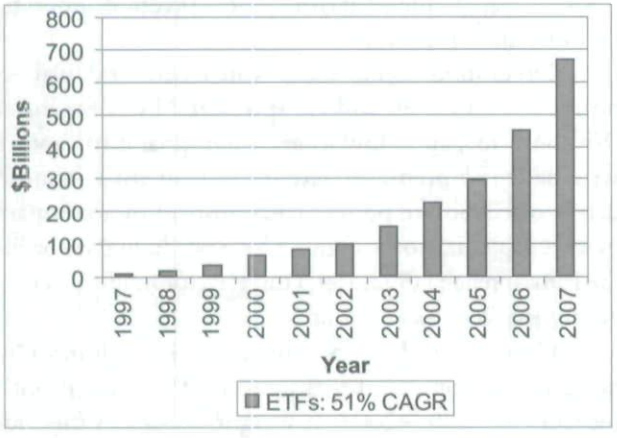


EXHIBIT 3

Growth of Bespoke Beta



In fact, it is the ability to short that makes ETFs so popular. As their name indicates, ETFs trade like stocks and other securities. Therefore, they can be purchased on margin, can be traded throughout the day, and can even be borrowed from a prime broker and shorted. These benefits make ETFs efficient tools for adjusting the tilts within a portfolio.

In fact, the advent of ETFs makes for more efficient construction of portfolios. The ability to add a macroeconomic top-down overlay to a stock or bond portfolio allows an active manager to extract the most from an information set. Even though ETFs are passive products themselves, they can be used in an active fashion to maximize the value of a portfolio manager's information coefficient.

ALTERNATIVE BETA

The growth of the ETF market has also given rise to another development: *alternative beta*. These are other systematic risk exposures once closed to investors because of the difficulty of accessing the risk exposure. Yet with the advent of ETFs and the slicing and dicing they can produce, new betas—alternative betas—have been identified and made available.

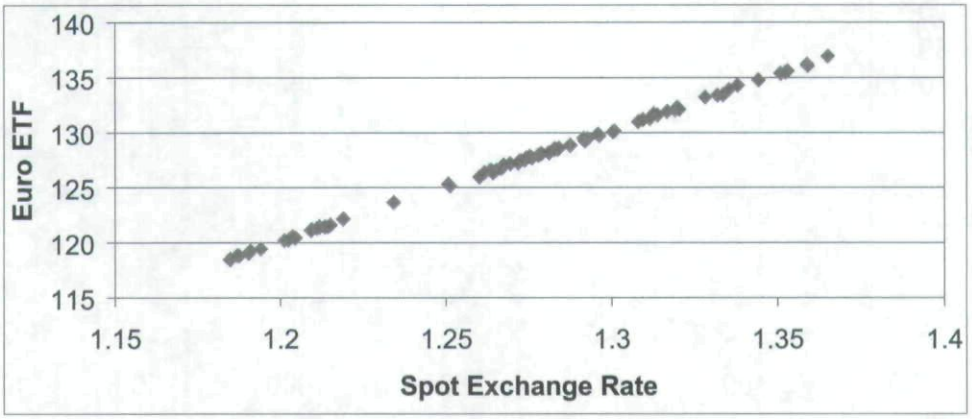
Consider the currency markets. Currency exposure has generally been considered a by-product of international economic exposure. For the most part, currency risk has been considered a necessary evil of globally diversified portfolios. Currency risk is often hedged out of institutional portfolios to provide a return that is consistent with the returns earned from assets in the investor's home currency.

Now new ETFs allow investors to access this systematic risk and to include it as a return generator in a diversified portfolio. Consider Exhibit 4. This is a currency ETF linked to the price of the euro denominated in dollars. If the euro appreciates in value compared to the U.S. dollar, the net asset value of the ETF will increase, and if the euro depreciates relative to the U.S. dollar, the net asset value of the ETF will decline as well. For investors who have watched the U.S. dollar decline in value relative to foreign currencies, this is a targeted manner to capture the systematic risk exposure associated with the variation of the U.S. dollar vis-à-vis other currencies.

The euro ETF is supported by a grantor trust—the common vehicle of most ETF structures—and the grantor

EXHIBIT 4

Euro ETF versus the Euro/USD Exchange Rate



trust backs the individual shares issued by the ETF with euro deposits in London. In the past, if investors wanted to gain exposure to the currency markets, they would have to buy futures or forward contracts. Futures and forward contracts expire by the specific tenor of the instrument—the investor must reinitiate or roll the futures or forward contracts to maintain the exposure. The euro ETF alleviates the burden of managing the economic exposure and allows the investor to access the systematic risk of the euro currency market in a consistent and efficient manner.

Exhibit 4 shows the euro ETF compared to the euro/U.S. dollar spot rate. We see a nice smooth line—another linear beta driver. With a beta of 0.99 and a correlation of 1.00 and a tracking error of 10 basis points, this product offers a new form of systematic risk for investor portfolios—the systematic exposure to the fluctuation of the U.S. dollar versus the euro.

FUNDAMENTAL BETA

A new form of beta—*fundamental beta*—has sprung up in the last few years, prompted by the research of Arnott, Hsu, and Moore [2005] into *fundamental indexation*. The thesis is that capitalization-weighted stock indexes are inherently inefficient in that they force index providers to purchase more and more of stocks that have a higher weighting in the index and that may be overvalued and to buy less and less of stocks that have less of a weighting in the index and that may be undervalued. This can produce a systematic bias of buying high and selling low in the returns associated with the cap-weighted index.

Cap-weighted indexes also produce a large-cap bias by the very nature of the index construction. Arnott, Hsu, and Moore thus devised a new stock index based on five fundamental factors associated with public companies: book value, dividend payout, sales revenue, operating income, and employees.

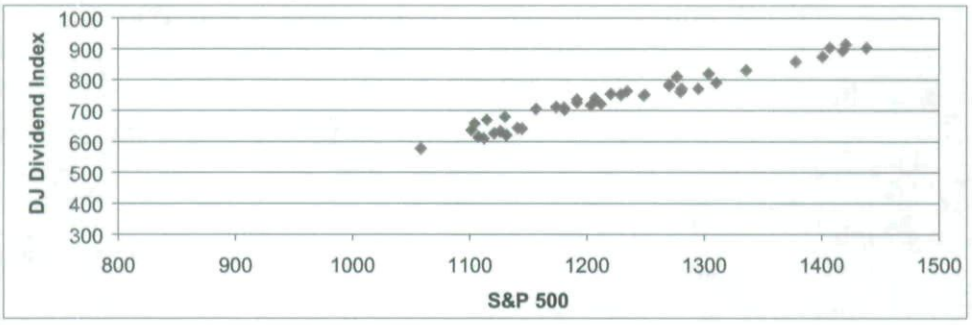
Other fundamental indexes are based on similar economic fundamentals and are sponsored by Morningstar, Wisdom Tree, and Dow Jones. Their goal is to capture a systematic risk premium tied to a fundamental economic driver of corporate performance instead of a company's market capitalization weight. These products date back to the Fama-French [1992, 1993] three-factor model describing equity market risk premiums.

Consider Exhibit 5. This is the Dow Jones Dividend Index compared to the S&P 500, with monthly returns over 2003–2007. It weights stocks in the index by their dividend payout ratio instead of market capitalization. We can see that the beta associated with this index is lower than the S&P 500 stock index beta, 0.76 with a correlation coefficient with the S&P 500 of 0.82. This is not surprising, given that high dividend-paying stocks tend to be value stocks, companies that are more mature in their growth cycle, generate more cash, are less risky than growth stocks, and have a higher dividend payout rate.

Exhibit 5 also presents the average excess return, tracking error, and information ratio for the Dow Jones Dividend Index compared to the S&P 500. The index generated an impressive monthly excess return of 0.37% compared to the S&P 500, with an equally impressive information ratio of 0.35.

EXHIBIT 5

DJ Dividend Index versus S&P 500



We call this form of excess return *endogenous alpha*, to recognize that the source of the alpha extraction comes from the index construction itself (see Schoenfeld [2006]). This is in contrast to *exogenous alpha*, where the source of the excess return comes from actively managing a portfolio of stocks through underweights and overweights relative to a capitalization-weighted benchmark.

Nonetheless, fundamental beta products reflect an attempt to outperform a capitalization-weighted index. It is a form of active management based on the efficient capture of the fundamental factors that drive corporate value, although the capture of these fundamental values does lead to erosion of the excess return.

Exhibit 6 plots the iShares Dow Jones Dividend Select ETF compared to the S&P 500. The goal of this ETF, which has operated since 2003, is to offer passive exposure to the Dow Jones Dividend Index.

It provides very similar values for beta, correlation, and tracking error as the Dow Jones Dividend Index when compared to the S&P 500, but its monthly excess return compared to the S&P 500, while still positive at 0.09%, is much lower than that demonstrated by the Dow Jones Dividend Index. Therefore, while fundamental beta products can produce excess return compared to capitalization-weighted indexes, the cost to capture these fundamental economic drivers reduces some of the alpha embedded within the fundamental index construction.

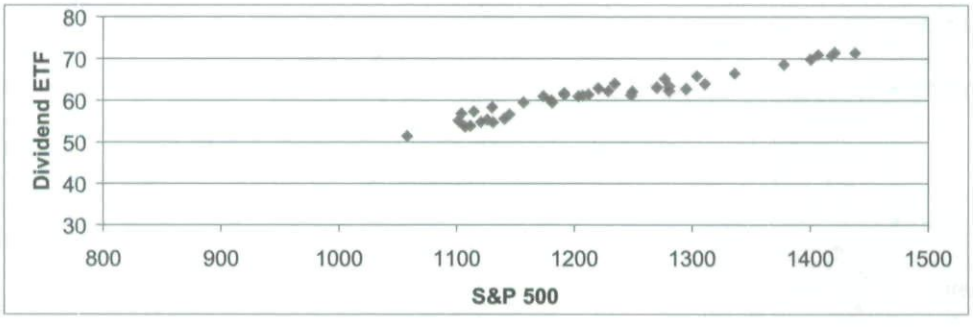
CHEAP BETA

Beta is not always accessed by traditional methods of risk premium capture such as index funds or ETFs. Instead, beta can be embedded as a complex basket of risk exposures incorporated within one security.

Consider convertible debt. Convertible bonds are a mix of debt and equity, and this hybrid nature makes their risk exposures less transparent. We consider this issue by examining the returns to convertible arbitrage hedge fund managers.

EXHIBIT 6

iShares DJ Select Dividend ETF versus S&P 500



To determine whether convertible arbitrage hedge fund managers can generate alpha, we need to apply some economics to determine what potential risk factors—betas—might affect the value of convertible bonds. There are five potential systematic risk factors that can influence the value of a convertible bond:

1. Interest rate risk—it's a bond.
2. Stock market risk—it is convertible into stock.
3. Credit risk—convertible bonds are usually issued by below-investment-grade companies.
4. Volatility risk—there is an embedded call option in the bond.
5. Autocorrelation risk—convertible bonds are illiquid, and current prices may be influenced by past prices (the absence of a random walk). Essentially, autocorrelation risk is a proxy for lack of liquidity, and some of the biggest losses in the convertible arbitrage industry have come because of a mismatch between investors' ability to redeem their interests in a convertible arbitrage hedge fund and the ability of the hedge fund manager to unwind arbitrage positions. Weisman [2002] provides a nice discussion of some of the pitfalls of hedge fund strategies.

To measure the alpha and the beta, we resort to a standard factor model including the five risk factors:[3]

$$\text{Return to Alpha Manager (t)} = \alpha + \Sigma_i \beta_i \times \text{Factor}_i + \varepsilon_{i,t}$$

where:

α is a measure of active manager skill, the ability to select undervalued securities;
β is a factor loading—it measures how sensitive the active manager's returns are to the beta factor;
Factor is a systematic risk premium in the market that constitutes a component of the active manager's return; and
ε is a measure of random noise.

This equation is used to measure the alpha of an active manager by subtracting out all the beta factors. What is left over is either alpha or epsilon, where alpha represents genuine skill that has statistical significance and epsilon represents random noise.

We use the equation to regress the Hedge Fund Research, Inc., Hedge Fund Convertible Bond Arbitrage Index on the five beta factors. We use the Russell 1000 to reflect stock market risk; 10-year Treasury bonds to reflect interest rate risk; the Salomon Brothers Cash Pay High Yield Index to represent credit risk; the change in the volatility index (VIX) to represent volatility risk; and ConvArb(–1) to represent the prior month's value of convertible arbitrage (autocorrelation risk).[4]

Exhibit 7 presents the results.[5] We start with summary return, risk, and Sharpe ratio statistics for convertible arbitrage hedge fund managers. The Sharpe ratio is positive, indicating a positive risk and return trade-off. That is, convertible arbitrage managers offer investors a positive risk-adjusted rate of return, a demonstration of value-added.

EXHIBIT 7
Factor Analysis of Convertible Arbitrage

Summary Statistics

Average Return	0.72%
Stand. Deviation	0.95%
Sharpe Ratio	0.50

Factor Analysis

Factor	Intercept	Russell 1000	10 Yr U.S. Tbond	High Yield	VIX	ConvArb(-1)
Value	-1.02%	0.002	0.26	0.21	0.03	0.54
T Statistic	-2.13	0.075	2.58	5.42	0.91	6.89

We next look at the intercept in our factor analysis; this value represents the alpha offered by convertible arbitrage hedge fund managers. Note that once we account for the five systematic beta factors associated with convertible bonds, the alpha associated with convertible bond arbitrage hedge fund managers is statistically significant and negative, at –1% per month.[6] Therefore, what we define as alpha—finding undervalued securities—does not add value in convertible arbitrage returns.

So how do convertible arbitrage hedge fund managers generate a positive Sharpe ratio? First, we can see that the beta associated with stock market risk is virtually zero (0.001) with no statistical significance. In addition, the beta for volatility risk associated with the equity call option is also virtually zero at 0.03. It is clear that convertible arbitrage hedge fund managers hedge out the equity and volatility components embedded in convertible bonds.

What's left? Credit risk, interest rate risk, and autocorrelation risk. Not surprisingly, after the liquidity and credit crisis of 1998, credit spreads rose dramatically. After peaking in 1998, credit spreads generally became compressed in 1999–2006, and this made it economically desirable to load up on credit risk exposure. Interest rates also peaked at the height of the tech bubble and then declined as the Federal Reserve Bank in the U.S. cut interest rates dramatically. This was a good time to load up on interest rate exposure, as interest rates fell and bond prices soared. Both the credit risk and the interest rate risk variables have high positive betas, which are statistically significant at the 1% level.[7]

Given the negative intercept term, the source of the good convertible arbitrage positive risk-adjusted returns is not manager skill (alpha) at selecting undervalued securities. Instead, convertible arbitrage hedge fund managers search for *undervalued beta*. They hedge out the expensive beta risk components of the convertible bond and keep those systematic risk premiums embedded in the convertible bond that are cheap. We call this undervalued beta *cheap beta*.

Convertible arbitrage managers carve up a convertible bond into its systematic risk components, keep the beta pieces that are priced cheaply, and hedge out (sell) the beta components that are overpriced. Some might call this skill and a form of active management. Value is clearly added, but it comes from managing beta exposure, not from insights into undervalued securities.

ACTIVE BETA

We find *active beta* in the world of products that use quantitative tools and models to capture systematic irregularities (an economic oxymoron, of course) in the equity markets. The most popular of these products are 130/30 funds. These are equity-based products that can short individual stocks or the broader stock market up to 30% of the net assets of the fund while simultaneously leveraging the long portion of the portfolio up to 130% of the net asset value. Either the cash generated from the short positions is used to leverage the long positions, or the fund borrows cash from a prime broker to leverage the long side of the portfolio.

130/30 funds can increase the active risk versus active return trade-off of an asset manager along two dimensions. First, a manager can increase the number of active bets in her portfolio if she can use both long and short positions in the portfolio. Second, relaxing the long-only constraint, allows the asset manager a greater opportunity to act upon her bets through greater overweights and underweights—again this increases the information ratio.

But there is no magic to 130/30. It could be 120/20, 150/50, 200/100, and so on. A more appropriate name for these type of products is *beta one* products—there is a continuum from 100/0 to 200/100. There is no special limit to 130/30—some clients might want more octane in their account and others less. It really depends upon the risk tolerance of the client.

The key point is that asset managers can go both long and short in a client's portfolio while synchronizing the overall risk of the portfolio to the beta of a chosen benchmark. Hence the term beta one, because the systematic risk of the resulting portfolio can be finely tuned to equal the systematic risk of a benchmark, but with greater active security selection around the selected benchmark.

Another name to describe these products is *active beta*. The goal is to maintain a similar systematic risk profile for the equity benchmark while adding excess return through long and short positions. Typically, the long and short positions tend to be small- to medium-sized so as to manage the tracking error of the 130/30 fund. In other words, the long and short positions are monitored within a tight tracking error range to ensure that the active beta portion of the fund does not stray too far from the benchmark. Some users and purveyors might also call this type of fund an enhanced index fund.

Despite the high demand for active beta products, the track record of these products is short. Exhibit 8 presents the weekly track record of the ING 130/30 Fundamental Research Fund, an open-end mutual fund in the U.S., compared to the S&P 500. This fund has been in operation since 2006 and has a large-cap focus.

We can see that the beta of this fund closely tracks the S&P 500, with a value of 1.05 and with a correlation coefficient of 0.96. While it has a small negative IR of 0.13 to date, its track record is brief. The key point is that this is an equity long-short product that maintains a beta very similar to a large-cap stock benchmark.

Another form of active beta is tactical asset allocation. TAA is a process of over- or under-weighting systematic risk premiums depending on macroeconomic conditions.

In Anson [2007] we provide a mapping of the equity risk premium for the U.S. equity markets and demonstrate times the equity markets were overvalued and undervalued relative to the U.S. Treasury bond market. TAA takes advantage of risk premiums distorted from historical norms by overweighting or underweighting equities accordingly. In fact, TAA could be considered another method of buying cheap beta and selling expensive beta.

BULK BETA

Finally, we come to the heart of the active management industry. Traditional long-only equity management has for some time been the mainstay of the active management industry. Traditional active products are judged in comparison to a benchmark. This means that these products combine a blend of beta, or systematic market risk, with alpha, excess return. The question is how much of the product return is beta, and how much is alpha?

Exhibit 9 answers this question. This is a large-cap active equity product benchmarked to the S&P 500. Exhibit 9 does not provide the nice straight line of a pure beta driver such as the one presented in Exhibit 1—there is quite a bit of variation between the returns to this product and the returns of the S&P 500. This is demonstrated by a relatively high monthly tracking error of 2.69%. This active product does take active risk, and there is a trade-off for the active risk-taking—a positive (monthly) information ratio of 0.09 and an average monthly alpha of 0.24%.

EXHIBIT 8

A 130/30 Equity Long-Short Product versus S&P 500

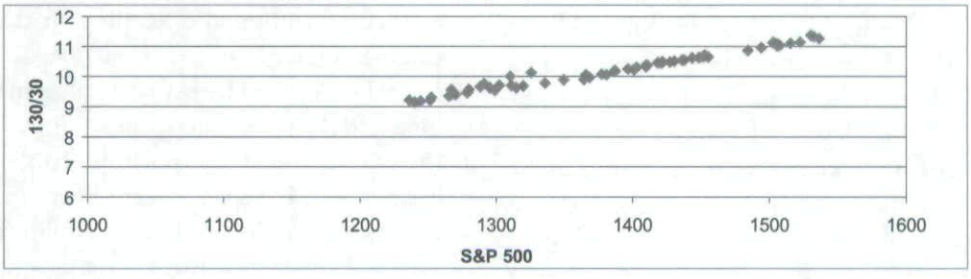
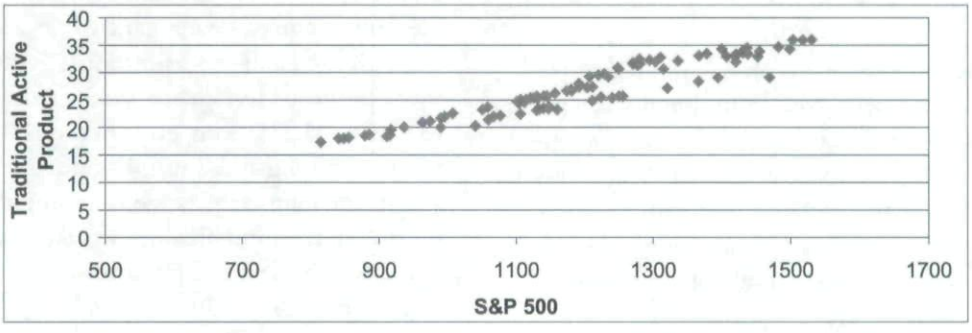


EXHIBIT 9

A Traditional Long-Only Active Equity Product versus the S&P 500



Although this active product is not a closet beta driver, by the very nature of its link to a large-cap equity benchmark, a considerable amount of systematic risk remains in the return stream associated with the product. The correlation coefficient for this product, while less than 1.00, is still quite high at 0.84. This demonstrates that a considerable amount of the variation of returns associated with this active product is influenced by the returns to the S&P 500 stock index.

We call these products *bulk beta* to recognize that there is a considerable amount of systematic risk in their returns, but the trade-off is that there is a large capacity for assets under management. Indeed, the product in Exhibit 9 has close to $50 billion under management.

THE BETA CONTINUUM

Beta does not come in a single flavor. There are many forms of beta and it seems to be taking more exotic forms with each passing day.

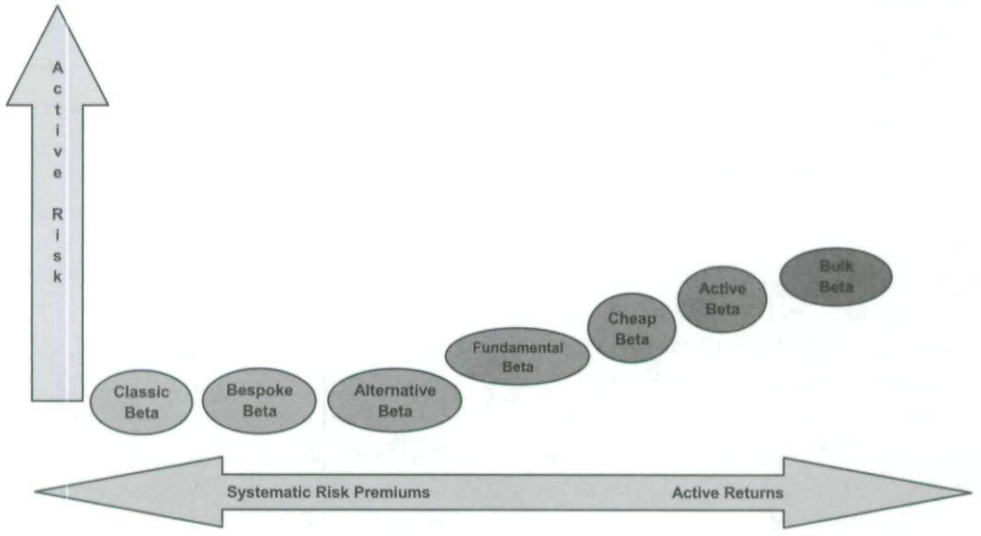
Exhibit 10 summarizes the *beta continuum*. As we move left along the horizontal axis, toward zero, an investor is driven to collect systematic market risk premiums (beta) as cheaply as possible, while farther out on the horizontal axis appears the opportunity to collect active returns. Along the vertical axis, higher points on the axis represent a greater amount of active risk-taking.

We classify classic beta, bespoke beta, and alternative beta as devoid of active risk-taking. The purpose of these beta products is to capture systematic risk premiums in the financial, commodity, and currency markets. Classic beta is designed to capture broad asset class risk premiums, while bespoke beta captures more local risk premiums (e.g., small-cap value premiums), and alternative beta captures systematic risk premiums that are typically beyond the standard asset classes of stocks and bonds.

Moving along to the right of the horizontal axis, we find beta products that begin to take incremental amounts of active risk. Fundamental beta is a form of endogenous alpha—alpha embedded within the index construction itself to outperform traditional capitalization-weighted benchmarks. Cheap beta is the search for undervalued risk premiums embedded within complex securities such as convertible bonds. Active beta describes quantitative, 130/30, and enhanced index products, where tight risk control maintains a beta exposure close to 1.0 with the benchmark while adding some form of enhanced return.

Finally, traditional active management incorporates the greatest amount of active risk-taking along the beta continuum, but still retains more beta exposure than alpha exposure. Bulk beta is at the farthest end of the beta continuum.

EXHIBIT 10
The Beta Continuum



CONCLUSION

My analysis prompts a variety of conclusions.

Polarization in the Asset Management Industry

The separation of alpha and beta continues to divide the asset management industry. Large-scale asset gatherers will continue to leverage their scale to extend their position in main distribution channels. At the same time, there will be a continued growth of specialist asset management companies with the capability and flexibility to exploit new opportunities. Generally, the large-scale asset managers strive for consistent beta-like returns to attract large pools of assets while sacrificing innovation and flexibility.

The polarization of the industry need not be as black and white as many consider it to be. The separation of beta leads to a diverse range of systematic risk exposures. Beta is no longer one-dimensional. Within the beta universe there are many different ways to carve up and capture systematic risk premiums, and new risk premiums are made accessible on a daily basis through the ETF process. This provides opportunities for both large-scale asset gatherers and the specialist asset management shops.

Pricing Governance

The clarity and transparency of what is beta and what is alpha has led to better pricing governance in the asset management industry. For example, 130/30 products generally charge 1% to 2% in total fees. Compare this to hedge funds. Ten years ago hedge fund managers could go 110% long and 10% short and charge clients 2-and-20 for such a product.

But now, in a bid to attract and retain clients, many traditional asset management companies have launched products that invade the hedge fund space. The ability to short securities had long been the domain of the hedge fund manager, but risk management tools have become sufficiently robust that traditional asset management companies can now short stocks, bonds, and derivative products within tight risk-controlled parameters that meet clients' expectations while also limiting the downside exposure of the asset management company. The development of 120/20 and 130/30 products has provided better pricing governance of long-short products in favor of asset owners instead of asset managers.

Similarly, with respect to active products like convertible bond arbitrage, one can see that security selection does not add value to this process. Rather, it is the ability to find cheap beta that generates a positive Sharpe ratio. Investors should ask themselves whether the search for cheap beta is worth the 2-and-20 that convertible bond arbitrage managers charge.

Tactical Asset Allocation

I touched in the discussion of ETFs on the idea that a portfolio manager can provide a form of active management by underweighting or overweighting certain industry sectors depending on macroeconomic insights rather than company fundamentals. This is a form of tactical asset allocation—overweighting or underweighting systematic risk factors based on broad views of GDP, interest rates, commodity prices, financing costs, currency fluctuations, equilibrium risk premiums, mean reversion, and the like.

Essentially, TAA is a form of active beta—making beta bets on market risk premiums rather than alpha bets on individual securities.[8] In fact, with greater clarity on what is beta along the continuum, TAA managers have a greater opportunity to add value through active management of macroeconomic fundamentals.

What's Next?

The next part of the asset management industry development is to determine where the beta continuum ends and the alpha continuum begins. While this point cannot be measured with precision, we suspect that the alpha continuum begins where the long-only constraint is fully removed from portfolio management.

The long-only constraint can be responsible for up to a 42% erosion of the transfer coefficient in the *fundamental law of active management* (see Clarke, de Silva, and Thorley [2002]).[9] This loss of an information advantage is the key limiting factor in active portfolio management and the factor that most divides the beta and alpha domains.

Unfortunately, many traditional active management shops, in a bid to mimic hedge fund manager fees, have introduced very active management into their long-only portfolios. This is a suboptimal approach for a number of reasons. First, the single greatest competitive disadvantage of traditional active managers is the long-only constraint.

That hedge fund managers can maximize the value of their information coefficient through both long and short positions allows them to extract the greatest amount of value for their information advantage. Hedge fund managers have more degrees of freedom to extract value from their insights than traditional long-only managers.

Second, trading more frequently in long-only portfolios will not necessarily increase the information coefficient of the traditional active manager. In fact, it will most likely reduce the transfer coefficient through more transaction costs which, in turn, will erode the information coefficient. It would be better for long-only managers to move away from the trading mentality that tends to grip the hedge fund world with respect to their convergence trades, to focus instead on capturing long-term value premiums associated with fundamental research.

In fact, traditional long-only managers should take advantage of the one main competitive edge that they have over hedge fund managers: the ability to take a longer-term view, which allows them to weather a string of down months that would otherwise rock a leveraged hedge fund manager. Again, this approach focuses on long-term value extraction—a form of alpha that hedge fund managers rarely pursue—as well as the long-term collection of risk premiums by finding the right point along the beta continuum.

ENDNOTES

Thanks to Lawrence Pohlman, Eric Sorenson, and Andrew Weisman for comments that saved the author from some embarrassing mistakes and contributed additional insight.

[1]This is a good point contributed by Andrew Weisman.

[2]In days gone by, when British Lords visited their tailors on Saville Row to look at clothing swatches, they would buy the complete bolt of cloth associated with a particular swatch so that no one else could use the same fabric. When a bolt of cloth was claimed in this manner, it was said to "be spoken for." From that phrase we get the word, bespoke.

[3]Fung and Hsieh [1997] were the first to apply factor modeling to hedge.

[4]I also included lagged variables for stock market risk, interest rate risk, volatility risk, and credit risk but found that only credit risk had some lagged impact on the returns to convertible bond arbitrage hedge fund managers and the explanatory power of the factor model improved only slightly.

[5]I use monthly data over the eight-year period 1999–2006. The period is chosen because of a fundamental shift in the way convertible arbitrage managers managed their portfolios after the liquidity crisis of late summer and early autumn 1998. In August 1998, the Russian government defaulted on its outstanding bonds (spreads on Russian bonds increased to 5,000 basis points), and then there was the near-collapse of Long-Term Capital Management and its subsequent bailout by large money center banks. Virtually all hedge fund arbitrage strategies suffered extreme losses during this period, which led them to change the way they subsequently managed their portfolios. See Anson [2006].

[6]One can conclude that this is (negative) alpha and not epsilon because of the statistical significance of the intercept term—this is not random noise.

[7]Also note that autocorrelation risk has a significant and positive beta. This is a reflection of two factors. First, the convertible bond marketplace is an illiquid market—these are privately issued bonds that do not trade on an exchange, and the pricing of the underlying convertible bond may be dependent on the prior month's price. Second, hedge fund managers have significant control over the pricing of their portfolios. Undoubtedly, there is some price smoothing embedded in the returns to convertible bond arbitrage managers.

[8]Lawrence Pohlman pointed this out to me, but I wish I had thought of it myself.

[9]The fundamental law of active management may be expressed as: $IR = IC \times TC \times \sqrt{Breadth}$ where:

IR = information ratio, a measure of active return per unit of active risk;
IC = information coefficient, a measure of active manager skill;
TC = transfer coefficient, a measure of how efficiently a manager's skill is applied through active positions; and
Breadth = number of independent bets in the portfolio.

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