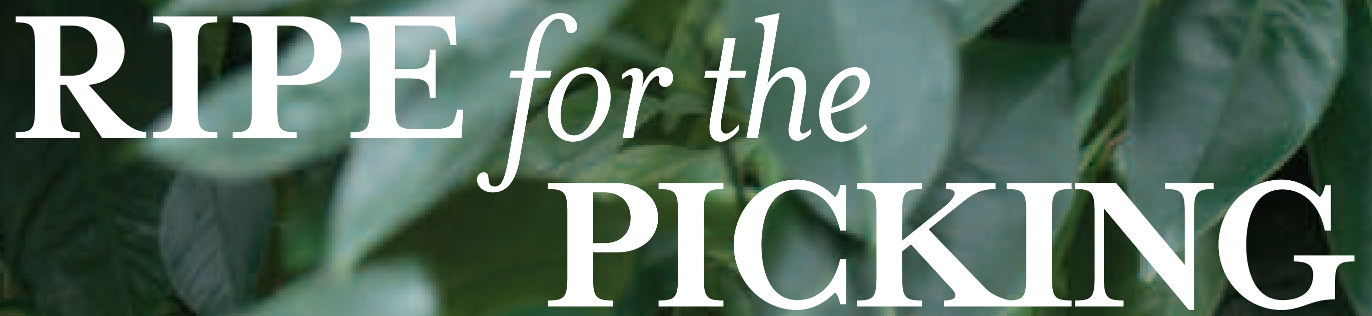


RIPE *for the* PICKING

Does alpha grow on trees, and if so, is it being overharvested?

In today's low-return environment, excess return is at a premium, as witnessed by the growing demand for absolute-return strategies and other active methods for adding value. But is it a case of overconfidence or irrational exuberance or just plain desperation? Certainly, it flies in the face of what had been conventional wisdom for the past few decades: that active managers cannot beat the market with any kind of regularity (after fees and costs). Passive investing, through which investors simply sought exposure to various asset class "betas," became the default portfolio strategy for many. In recent years, however, investors have begun to rethink their assumptions about alpha and beta, and many are pursuing the former much more aggressively and trying to target it with ever greater precision, treating beta exposure as a commodity. Is the beta manager doomed to irrelevance, or is the new zeal for alpha just a fad? Our two feature stories examine the phenomenon from both perspectives.

FRESH *and* JUICY

BY CHRISTOPHER WRIGHT

Alpha is sweet, but investors may be trying to squeeze too much from too little

Richard Ennis, CFA, gets a chuckle whenever he hears pension trustees throw the term alpha around loosely without understanding what it means. "We need to go into private equity and get some alpha" is the kind of statement he hears them make. "Oftentimes, they just mean more return," says Ennis, a principal at Ennis, Knupp & Associates, an investment consulting firm in Chicago.

Pension trustees and other investors could use a little more return. The easy 10–20 percent gains of the 1990s vanished after the US market turned down in 2000. It's been a low-return environment across standard asset classes ever since, with many observers forecasting more of the same for years to come.

Active portfolio management has been squeezed on one side by hedge funds with their claims of superior returns and by low-cost indexing on the other, hence the search for alpha and the selling of alpha products to remain competitive and satisfy the investment objectives of ever-more-demanding clients. Some observers believe managers who cannot produce alpha are headed for extinction.

Alpha has gone from academic innovation almost to hackneyed cliché seemingly overnight. The term originated in the 1960s, but only within the past few years has alpha assumed such central importance in portfolio management and become part of the popular investing lexicon.

Indeed, much of the thinking in the profession has realigned around the concept of alpha. Many strategies now call for separating alpha from beta, which affects many important aspects of portfolio management including how managers are evaluated and selected, how portfolios are constructed, what markets managers consider, what strategies they employ, and how risk is viewed and budgeted.

What Is Alpha?

Various experts date the term alpha back to a William Sharpe article setting forth the basic capital asset pricing model (CAPM) in 1964. Sharpe decomposed total return into the risk-free rate plus the volatility of a security relative to its asset class times a market risk premium plus excess return not explained by the market. In the equation, the term representing relative volatility was symbolized by the Greek beta character. Thus, "beta" is often used to signify the market return. Likewise, the Greek alpha character symbolized the unexplained excess return, so alpha has come to mean the excess

Photographs: Double Image Studio

"The fact that [alpha] was **bundled** [with beta] was completely **lost** on the manager and on the client.

return to active management.

Although theoreticians have offered various refinements by which to distinguish "naive" from "true" alpha and have used the word in different ways, the term alpha is used in this article in the unrefined sense of incremental return to manager skill over and above what could be earned from passive indexing. Such active returns stem from "the outperformance a skilled manager can bring to the table," says Phil Green, managing director and senior portfolio manager at Merrill Lynch Investment Managers (MLIM) in Plainsboro, N.J. In short, alpha is the amount of return by which a manager beats the market.

Or fails to beat the market. Alpha can be negative. Also, as has been pointed out, alpha can arise from luck, not skill. But although disputes remain, commonly cited sources of alpha include security selection, market timing, sector rotation, trading prowess, investing outside the benchmark, deviating from benchmark or policy weights, portfolio concentration, shorting (described more fully below) — any active process. Where you find alpha depends on market conditions and the skills you have in your organization, according to Lee Thomas III, a managing director at Allianz Global Investors in Newport Beach, Calif. In his view, different firms will find alpha in different places.

Where to look? Many observers point to inefficient markets and often give small-cap and international stocks as examples. But just because you find an inefficient market does not mean that alpha is guaranteed. For example, Richard Ennis derides the "small-cap myth," as he calls it. He has found no evidence that active small-cap managers are able to consistently add value after research, trading, and market impact costs. Part of the problem, in his view, is that survivorship bias and unsatisfactory benchmarks, such as the Russell 2000, have skewed database results and put small-cap managers in a better light than they deserve. Small-cap investing generally is "no more fruitful" than large-cap management, Ennis concludes, although he does not deny that there are some managers who can successfully generate alpha in the small-cap arena.

Harindra de Silva, CFA, is opportunistic about where his alpha comes from (within the bounds of his assigned investment style and asset classes). As president and portfolio manager of Analytic Investors, an active quantitative shop in Los Angeles with US$4.7 billion under management, de Silva goes

"where the alpha is greatest." If he sees more mispricing in the currency markets, he will shift somewhat from equities to currencies in the multistrategy funds where he has been given the latitude to sell call options, employ long and short currency strategies, and pursue other techniques. In those funds, he says, "we're able to dynamically allocate capital to where the opportunity for alpha is greatest."

At the client level, alpha is more about identifying successful alpha managers than it is about generating alpha per se. Richard Ennis advises institutional clients that the key questions are: "What is the manager's edge? What insights does the manager have?"

Some institutional advisors start by identifying successful alpha managers and are agnostic about the arena in which those managers operate. Barton Waring, a managing director and head of the client advisory group for Barclays Global Investors in San Francisco, argued in a 2005 CFA Institute conference proceedings ("The Future of Active Management," *Points of Inflection: New Directions for Portfolio Management,* available at cfapubs.org) that chief investment officers "should simply go out and hire the best sources of pure alpha, regardless of the betas that come with them, wherever they

Alpha and beta **separability** just was not part of the discussion — but separability is definitely a hot topic

can be found.” The betas can be fixed later, he says, through hedging techniques (see discussion of portable alpha below).

This approach can take a client outside the normal range of markets usually considered. “For the alpha portfolio, if bond managers exist who can actually beat the market and add alpha, plan sponsors should use them, even if the asset allocation calls for zero bonds,” Lee Thomas argued in a recent presentation (“Asset Allocation in the New Millennium,” *Exploring the Dimensions of Fixed-Income Management*, 2004 CFA Institute conference proceedings).

Although the alpha concept has been around for decades, managers and clients alike did not begin trying to distinguish between alpha and beta exposures until relatively recently. “The fact that [alpha] was bundled [with beta] was completely lost on the manager and on the client. Alpha and beta separability just was not part of the discussion,” Barton Waring observed in his presentation “The Future of Active Management.”

But separability is definitely a hot topic now.

Manager Selection and Evaluation

Some investors are systematically weeding out managers who fail to produce alpha. At the 2005 CFA Institute Annual Conference, Mark Anson, CFA, the chief investment officer of CalPERS (the mammoth state retirement plan, with US$186 billion in assets), summarized his evaluation process: if the manager's performance record shows beta returns at best, that manager will be terminated. Anson does not accept the excuse that a manager is unable to find good investment opportunities at the moment, because CalPERS has other managers who can. The weeding-out process was “ongoing” at the time of this writing, a CalPERS spokesperson told *CFA Magazine*.

This development is “an inevitable consequence of the separation between alpha and beta,” Lee Thomas says. “More and more clients are going to be culling managers who are unable to produce alpha. There's no way of obfuscating because the alpha you make is very obvious to the client.” Thus, alpha has made the environment much tougher and more competitive for managers.

On the receiving end of this kind of scrutiny is alpha manager Harold Bradley, senior vice president and chief investment officer for small-cap growth equities at American Century Investment Management in Kansas City, Mo., a mutual fund company running US$100 billion. American Century distributes a lot of its funds through third-party financial advisors who hire consulting firms that are now confronting Bradley with questions he's never been asked before. The gatekeepers evaluate all the managers for alpha in the due-diligence process and award limited fund distribution space only to the best candidates. The clients want to know if they're getting what they're paying for. “What is your alpha?” they ask Bradley, and “How much of this is just high-beta product?” Like Bradley, managers who attempt to pass off de facto index funds as alpha products are facing tougher going these days because clients are getting smarter and figuring out what's going on behind the curtain.

And intermediaries aren't the only ones asking about alpha. Higher-ups in Bradley's own firm now require him to document where his alpha comes from so they can gauge how his fund will perform over time and through cycles. But he

welcomes all the new accountability because it adds rigor and discipline to his process.

"It allows our customers, our board of directors, and our investment oversight committee to know what the expectations should be, who's performing, and that we are consistent in our methodology despite huge temptations from the market to drag us away from our core discipline," says Bradley, alluding to style drift.

Bradley himself uses alpha to parcel out manager bonuses — the most significant part of their compensation. He also uses alpha in his role as a member of the investment committee of a local university endowment fund. Some of the endowment's external managers are "running closet index funds and charging fully active management fees," he says. The first question he always asks: "Are we paying them 90 basis points to have exactly the same sector bets and predicted risk as the S&P 500?"

All of this stands in stark contrast to traditional methods of choosing managers. For the past 30 years, institutional investors have been "framing their investment processes around the betas expected from various asset classes and segments of the market," Phil Green says. "By focusing on beta first, they would come up with their strategic asset allocations and then make a decision whether they wanted to use passive portfolio management techniques or bring on an active manager to fill that beta bucket." If active, "then they would go out and find the best active manager who fits that bucket. You basically had all these beta buckets and looked for best-of-breed managers to fill the beta buckets."

Instead, according to Green, clients should conduct their alpha and beta searches independently. "If you free the search for alpha from the constraints of a beta bucket, you'll be able to identify a whole new range of skilled managers and opportunities to generate alpha that you don't even see when you just look for certain active managers to fill certain beta buckets," Green says. "There's a whole universe of skilled managers out there who run strategies that don't fit neatly into the beta buckets that have been developed over the years." He offers the example of a sector specialist who has an edge in technology stocks.

Because any manager's alpha may prove fleeting or unsustainable, the next step, in Green's view, is to build a diversified portfolio of alpha managers. "The key is how you put them together," he says. Using managers in combination is where the real power of the alpha manager concept resides.

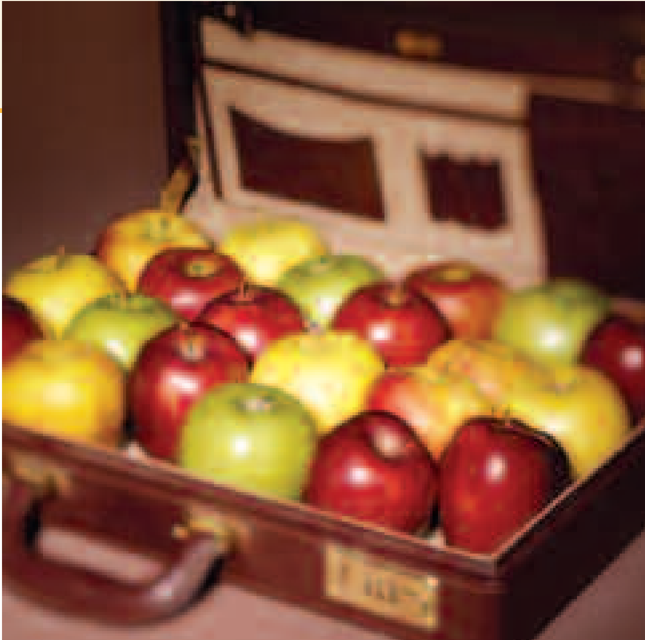
Barton Waring and Larry Siegel, director of research at the Ford Foundation, advocate using active risk–return optimization techniques to identify managers along an efficient frontier who provide the highest alpha returns on a risk-adjusted basis. As they described in the *Journal of Portfolio Management* ("The Dimensions of Active Management," Spring 2003), building a portfolio of alpha managers is like building a portfolio of anything — they simply treat each manager like a stock. An information ratio (alpha divided by standard deviation of alpha returns) determines where each manager plots on the graph. The information ratio levels the playing field for managers and allows comparison across asset classes, style boxes, and risk levels. By using the familiar Markowitz mean–variance framework, clients can identify managers whose forecasted alpha is sufficient reward for the forecasted active risk involved.

Waring says BGI has been doing this type of optimization research and educating clients about it for nearly 10 years. The approach has influenced how most of BGI's institutional clients think about hiring managers, but only about a third of them actually crunch the numbers in the hiring process, according to Waring's estimates.

Portfolio Construction

Alpha is changing the way portfolios are designed and constructed. In what Phil Green calls "the new investing environment," alpha takes center stage and is placed on a par with strategic asset allocation as a primary organizing principle. Lee Thomas uses what he calls an "alpha-centric" approach. "What that means simply is that decisions are made as to how to create alpha and those decisions are applied to accounts with different benchmarks," Thomas says. "First you make the alpha decisions and then you attach them to different betas." In other words, asset allocation is no longer the central concern and is done as the last, not the first, step.

Thomas is not the only one who has elevated the importance of alpha in the way they build portfolios. "We've gotten a lot more specific about how much of the return from a particular strategy is coming from its beta exposure and how much from its alpha exposure," says Analytic's de Silva. He uses two strategies in which he consciously separates alpha from beta. Enhanced indexing overlays some alpha on top of a lot of beta (e.g., S&P 500 plus 200 basis points). His mar-



"Because any manager's alpha **may prove fleeting or unsustainable,** the next step is to build a **diversified portfolio** of **alpha** managers."

ket-neutral strategy is sort of the reverse. It has "a beta of zero and all the return in the strategy is basically alpha," de Silva says (e.g., T-bills plus 4–6 percent expected alpha).

Portable Alpha and Other Strategies

The search for alpha has led managers to consider new strategies for boosting returns. Some alpha-generating strategies are moving into the mainstream of traditional portfolio management.

BGI's Waring has called shorting in ordinary portfolios "the future of active management." BGI has put a major stake and much of its research effort into loosening the long-only constraint in market-neutral long–short portfolios. "It has turned out very well for us," Waring says. "We now have something on the order of US$10 billion under management in market-neutral long–short funds. Our clients are thrilled with the results that they're getting from following our advice. If you are willing to be equally long and short in a market-neutral long–short portfolio, then you can multiply your expected alpha by a factor of two or three or sometimes even more — it's a very powerful amplifier of skill."

Analytic Investors' de Silva agrees that shorting offers prime opportunities for gaining alpha. "If you restrict the manager just to going long, the ability to generate alpha is very limited," he says. "We've been missionaries the last three years telling plan sponsors that if they want more alpha in their portfolios, they have to allow the manager to go short." For example, think of the tech bubble. The best that most managers could do, according to de Silva, was park their assets in cash and sit out the ensuing collapse. "If you actually had the ability to short in the portfolio, you were able to generate tremendous returns," he adds.

Despite the risks of shorting, clients are proving receptive to de Silva's message. Some of his corporate and public pension clients as well as union Taft-Hartley plans have converted to long–short investing.

De Silva's "Defensive Equity" fund typically takes four long positions for every short position. He uses covered call options to reduce portfolio beta to 0.3 when he expects markets to go down and to raise it to 0.5 when he expects them to go up. "We'll go long the stocks we like, short the stocks we don't like, and then we'll find overvalued call options and sell those," de Silva says. Thus, the fund has multiple sources of alpha: stock selection (long and short), selling overpriced calls, and market timing (to the extent he is able to forecast market direction accurately).

Portable alpha is a big tent comprising a multitude of strategies. Many replicate desired market returns synthetically (e.g., with S&P futures), place an unrelated alpha bet with

Doubts, Fears, and Misgivings

Before the profession goes all alpha, all the time, some observers have concerns. Richard Ennis worries about leverage. "Many of the portable alpha and long–short strategies involve leverage in one way or another," he says. "I see leverage creeping into institutional investment management in a way that's unprecedented."

Ennis and Harold Bradley are concerned that clients have unrealistic expectations for returns that alpha can't deliver. According to Bradley, no traditional manager gets close to pension plan actuarial assumptions these days. But from Ennis's perspective, clients don't judge managers on whether they beat their benchmarks or generate alpha. "That just falls on deaf ears with [investment] committees," says Ennis. "Success in the final analysis often is gauged on how big a return you got."

Ennis and Harindra de Silva question whether successful alpha managers will be able to replicate their performance if the world gravitates to the leaders of the pack and hands them bigger piles of money to manage. "There's every reason to think that they won't," says Ennis. "Warren Buffett has been very outspoken in saying from time to time that he just can't find opportunities. At times, he's held significant amounts of cash or gone into bonds."

De Silva points to the problem of diminishing returns. "One of the challenges of active management is figuring out how much money you can manage in a strategy before your alpha goes to zero. There's not a strategy in the world that has unlimited scale," he says, noting that this is why some firms find it more profitable to close their funds to new investment than run more money.

Lee Thomas has a different view. Some strategies, such as arbitrage, are size limited but others are not. "If what you're doing is making a timing decision when to buy stocks," he says, "you can buy an awful lot of S&P 500 futures contracts before you start moving the market."

the freed-up cash, and use futures or swaps to screen out the beta from the alpha source. The goal is to boost returns by unbundling alpha from one asset class — fixed-income securities, for example — and grafting it onto a beta portfolio from a different asset class where strong market returns are expected.

A second type of portable alpha strategy invests the cash in a beta source (e.g., an exchange-traded fund) and leverages the alpha source.

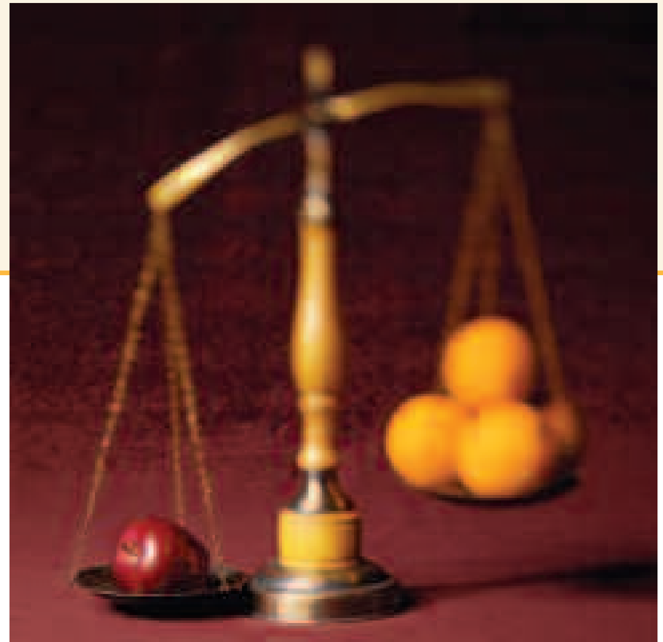
Because beta is hedged, the arena in which the alpha manager operates is essentially irrelevant. The manager's ability to beat whatever the benchmark may be is all that matters. As Phil Green puts it, portable alpha "allows you to take the best managers you can find and fit them into your overall strategic asset allocation. By freeing alpha from the shackles of beta, you can deliver superior performance" over many traditional investment products. Portable alpha strategies are generally expected to outperform by 100–200 basis points, which is considered meaningful, particularly in a low-return environment. As far as Green is aware, however, no central database exists to report performance results for portable alpha.

Portable alpha had to await the development of swaps and futures markets, which only began to gather momentum in the 1980s. Although no one knows when the term "portable alpha" was coined, some portable strategies predate the term, according to Green. For example, PIMCO's StocksPLUS strategy, which Green calls "the lion" of all portable alpha strategies, has been around since the late 1980s and has a lot of money behind it, Green says. StocksPLUS purports to combine alpha returns from PIMCO's skill in managing short-duration debt with market returns from the S&P 500.

Portable alpha is not without its risks. First and foremost, the manager selected may fail to produce the expected alpha. Second, there are costs associated with hedging out beta. "Portable alpha is easier said than done," Richard Ennis says. "Liquidity and costs are huge issues." As many have observed, acquiring or removing market exposure with S&P 500 futures contracts is cheap, but for markets other than large-cap stocks, costs go up, liquidity goes down, and hedging vehicles may not even exist. In those areas, "it's not possible to cleanly separate alpha and beta at a price you can afford," Lee Thomas says. "If you're dealing with small-cap US stocks, it's not simple at all; it's expensive."

The costs of beta-hedging trades will vary depending on where your skilled managers operate and how much beta

exposure is embedded in what they do. Thus, according to Phil Green, alpha will not always exceed the costs of hedging out beta, although optimists say liquidity and cost factors are improving all the time. Direct dealing between institutions interested in taking the opposite sides of a trade may lower costs in the future.



"You should have a budget where you know how much of **your risk** is being taken in **beta** exposures and how much is being taken in **alpha** exposures."

With regard to swaps, "the main pitfall is counterparty risk," Larry Siegel says. "When used on a large scale, the swaps or other contracts used to add beta exposure to the portfolio of alpha bets are risky, in that the counterparty (broker) might not be able to pay all of the claims against it. This risk has to be monitored very carefully by anyone using portable alpha."

Despite the drawbacks, some predict that portable alpha will sweep through the field of portfolio management and eventually dominate all other strategies. This prediction should come true, Lee Thomas says, "but this is a very conservative profession that we're in, so it could well be that these ideas don't catch on."

Risk Budgeting

Alpha has also made its mark on the way managers think about and budget for risk. Separating alpha from beta allows funds to think about how much active risk they're taking and where they think the risk will be adequately rewarded, according to Richard Ennis.

"You should have a budget where you know how much of your risk is being taken in beta exposures," says Lee Thomas, "and how much is being taken in alpha exposures." Currently, most institutions don't budget risk that way, but according to Thomas, "it's almost inevitable that's the way it will be done in the future."

Barton Waring also believes that alpha and beta risk budgets should be consciously set and managed. "Typically, today, people only put about 10 percent or less of their risk budget into alpha," he says. "That may be the right answer to represent the community's confidence about their alpha estimates. More of your risk budget should go to alpha as your confidence in your alpha estimates increases." Lee Thomas thinks that clients would ask for more alpha risk if they knew how low it was relative to their beta exposure.

The Elephant in the Living Room?

It used to be that alpha was considered an "extremely scarce commodity" and that earning it was "next to impossible," Peter Bernstein observed in the *Journal of Portfolio Management* (Summer 2004). But now "it grows on trees, ripe for the picking." You can expect it, drive it, multiply it, and port it, Bernstein wrote with more than a little sarcasm.

Bernstein is not the only one to question whether the contemporary discussion of alpha has lost touch with reality. "Alpha is much rarer than people want to admit," Richard

Ennis says. As markets have become more efficient, opportunities for finding alpha have diminished, he says. A body of research supports the view that active managers commonly underperform their passive benchmarks. For example, Michael Jensen demonstrated in the 1960s that it is difficult for mutual funds to beat the market. More recently, Vanguard founder John Bogle said in 2005 that 95 percent of all actively managed mutual funds underperform the market by the amount of their fees.

Ennis's own cost-recovery research indicates that active management is actually perverse, that the average fund underperforms the market by more than its costs and fees. "My big bugaboo is that most clients don't have a snowball's chance in hell of profiting after costs," he says.

Moreover, most persistence studies show that top-performing funds in one period do not repeat in the next, according to Ennis. In other words, the weight of the evidence is against the notion that alpha can be generated consistently. In discussions about money managers who can consistently beat the market, only a few names repeatedly come up, with Warren Buffett, Peter Lynch of Fidelity, and Bill Miller of Legg Mason chief among them.

Barton Waring and Larry Siegel have called alpha "rare." They and many others are of the view that money management is a zero-sum game. In the words of Lee Thomas, "For every investment manager earning positive alpha, somewhere else there's an investment manager earning negative alpha."

As Waring observes, the average airline pilot gets you to your destination and the average restaurant serves you a decent meal. But active investment management is the only profession he knows where the average professional destroys value. "This is the hardest profession in the world. You have to be above average to deliver value to your clients," he says.

Unfortunately, we don't live in Garrison Keillor's fictional Lake Wobegon where everybody is above average. Alpha is not a solution for the entire industry, Harindra de Silva argues, noting that getting more alpha as a group is impossible (a thought he attributes to William Sharpe).

All of which prompts the question: if alpha is rare, how can managers depend on it to boost returns? How can portfolios be constructed with alpha as the centerpiece? How can managers plan whole strategies around alpha when there's not enough to go around? How can clients select managers based on past alpha performance when past results are, at best, a weak predictor of future results? How can so much time, attention, and tool building be wrapped into something that's not available on a reliable basis? Is the entire field of portfolio management being taken off the track by an increasingly reductionist focus on alpha?

Maybe, maybe not. In the final analysis, alpha may prove to be a scientific advance in obtaining for investors what they have always wanted: good returns. "If you go right back to Sharpe '64, alpha is always going to be part of the equation for how to explain returns and there's always going to be an effort to try to beat markets and benchmarks," Barton Waring says. "It's a long-term concept. It's an embedded part of the whole reality of the investment experience. Alpha and the search for alpha are here to stay."

"As long as people differ in their abilities and in access to information," says Larry Siegel, "some investors in an asset class will be able to earn alpha at the expense of others. Thus, alpha will always be available to somebody, so the search for alpha will continue. Plan sponsors will not be content to earn index returns."

Earning alpha is difficult but not impossible. By Waring's calculations, there is a better than 40 percent chance of successfully hiring a manager who can generate positive alpha after fees and costs over a one-year time frame. The figure falls to 15 percent over 25 years if you hire randomly from the universe of active managers. Apparently, this is enough to convince clients to keep trying. As Waring and Siegel wrote in the *Journal of Portfolio Management* ("The Dimensions of Active Management," Spring 2003), the all-passive institutional portfolio is a rarity. "Hope springs eternal in the human heart," Waring says, paraphrasing the 18th century English poet Alexander Pope.

The search for alpha is not futile. Some managers will beat the market in any given year through a combination of market inefficiency, special skill, and luck. Whether a manager will add alpha in the future depends in part on original thinking, according to Larry Siegel. "Insights that are correct but that are widely known do not add alpha, because the insight is already in the price," he says. Alpha "is not reliable enough to plan around, but it is very much worth seeking, as long as you plan for the possibility that you will not achieve it."

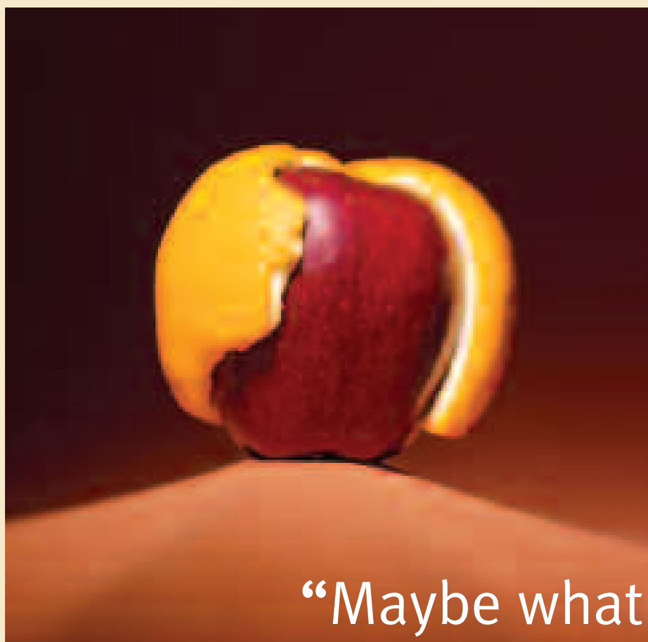
Christopher Wright (www.sinewaveinvestor.com) is a freelance writer in the Washington, DC, area.

A Brave New World

What's next for alpha? Will it remain an animating force and take the field of portfolio management further, or has it run its course?

HAROLD BRADLEY: "The next five years will be very interesting. With the increased scrutiny regarding alpha, the active managers who are very good, you'll see who they are."

LEE THOMAS: "We're in the very early stages of people thinking of alpha first and beta as a secondary decision." Watch for some fund sponsors to increase their alpha risk allocations once they begin to monitor their risks more carefully, Thomas says.



HARINDRA DE SILVA: "Generally in our Defensive Equity fund, what we try to do is maximize the alpha and adjust the beta later using futures. We can dial the beta to whatever we want it to be. Increasingly, the industry is going to go in that direction."

"Maybe what we're calling alpha really isn't alpha," he continues. It may turn out that alpha can be partially decomposed into what have come to be called the Fama/French risk factors — the small-cap premium, the value–growth spread, the momentum effect, etc. Discussion may turn to how the excess returns now attributed to alpha are actually coming from such factors. Then, the question will become whether managers can structure their exposure to such factors better. "We may go from a world of asset allocation to factor allocation," de Silva says. "The skill becomes how you build portfolios to exploit the correlations between these factors and how these factors pay off at different points in time." As shown by beta, returns to risk factors are not a zero-sum game, and de Silva hopes that repeatable and scalable ways of capturing excess returns can be devised that will prove sustainable and benefit the entire industry.

RICHARD ENNIS: "What if all the current alpha stuff — portable alpha and so forth — doesn't work out? Will everybody put their money in index funds? I don't think so. People will be developing new ways to talk about exploiting security mispricing."

"Maybe what we're calling alpha **really isn't** alpha."