



## Alpha Hunters and Beta Grazers

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Active alphas are derived from exploiting acute and chronic inefficiencies. They are hard to capture, but the great investors have been able to do so over many, many years.

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There is a great philosophical divide between passive, efficiency-based “beta grazers” and active “alpha hunters.” The explosive growth of hedge funds, of both the traditional and the long-only format, has contributed to this widening chasm between intensely proactive investors and those funds that are indexed or semi-indexed.

This Reflections article presents my personal observations on the general subject of active investing and on the nature, persistence, and discernibility of various market inefficiencies that could give rise to such investment opportunities. Ironically, these behavioral biases can act as frictions as well as opportunities, and this ambiguity may help explain why a few notable investors appear to be almost continuously successful while other active investors fall well short of their alpha targets.

At the outset, we should note that there is a middle ground where relatively passive, non-zero-sum forms of alpha return can be found. As described in a series of articles (Leibowitz 2004; Leibowitz and Bova 2005a, 2005c), these “allocation alphas” arise because the volatility risk of typical institutional portfolios is overwhelmingly dominated by their home-market equity exposure. By tilting their strategic allocations toward a more balanced allocation, institutions can often garner enhanced expected returns with only modest increases in marginal volatility. The level of expected benefit obviously depends on the institution’s specific return–risk assumptions.

Unlike truly active alphas, *allocation* alphas are broadly accessible through a semipassive process of moving toward an effective strategic allocation. As such, they are akin to the civilized sort of protein-seeking found in shopping at the local supermarket, with the selections determined by personal taste and dietary constraints. These readily available allocation alphas serve a critical and valuable role in moving a fund toward optimal strategic allocation. Allocation alphas are quite distinct, however, from the truly active alphas derived from tracking down—and bagging—the fleeting and elusive opportunities that arise from market inefficiencies. Both forms of alpha offer the potential for enhanced return, and they can sometimes be combined to create exceptional opportunities. They are quite different concepts, however, and are pursued in different ways. Having made this distinction, I focus the remainder of this article on the truly active-skill-based investments that are intended to add alpha above and beyond the returns passively available in any asset class or strategic portfolio.

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## Truly Active Alphas

Much of the literature on truly active investing has focused on so-called anomalies—sources of incremental return that appear to have some degree of persistence. In addition, a number of elegant formalizations have been developed for incorporating active return–risk prospects into the investment decision process (Sharpe 1991; Grinold and Kahn 2000; Waring and Siegel 2003; Asness 2004). This discussion should be broadened, however, to include consideration of all frictions and behavioral biases—persistent as well as occasional—that might serve as fundamental sources of inefficiency. Such inefficiencies are not always exploitable: They may take the form of overshoots at certain times and undershoots at other times, their exploitation may be blocked by counterforces or technical restrictions of various sorts, or they may resolve themselves very slowly—or never.

We need to understand, however, that these sources of inefficiency are multifold, broad based, and continually renewing themselves. Most importantly, we need to understand that they really do exist—even if they are not always available, discernible, or directionally consistent. Such pockets of inefficiency at times become reasonably discernible and actionable—to certain active investors. Thus, their very existence becomes one facet of an argument (albeit an admittedly still incomplete argument) for the possibility of successful active investing.

Another argument (also incomplete) is the historical fact that a handful of investors has produced extraordinary performance over a span of many years—often together with equally extraordinary cross-sectional success in their choices of disparate investments. The approaches of these great investors—Warren Buffett, Bill Miller, Leon Levy, Dave Swensen, Jack Meyer—differ in numerous aspects, but as pointed out by Peter Bernstein (2005), the investors share the common feature of not being in the mainstream (i.e., they are all contrarians in one way or another). **The great ones share a number of positive characteristics—focus, patience, a clear-cut philosophy, a willingness to go beyond the diversification mantra and accept high concentration risks, an innovation-prone attitude, the organizational sponsorship and personal fortitude to endure significant periods of underperformance, and a disciplined process for pursuing their goals.** And in various ways and at various points

in time, they have all been willing to stake significant chips on their convictions.

With respect to this latter point, one might well recall Charles Ellis's (1998) wonderful characterization of most investors as playing what in tennis parlance is called "the loser's game." In the loser's game, weekend players, with their readily returnable forehands and backhands, square off against each other and the one who misses the last return loses. The message is to play a consistent game and to avoid miss-hits. It is generally good advice for B players—and beta grazers!

The great ones, however—in tennis and in investing—go one big step beyond. They play a disciplined game until the moment they see what looks like a grand opportunity. At that moment, they move into *carpe diem* mode, gather up their prowess, and take a calculated risk to proactively and aggressively force a win.<sup>1</sup>

Even the great Fischer Black was fascinated by the potential for exploitable inefficiency, although he certainly knew that such opportunities would not be easy, widespread, or available to all. He once famously answered a question about how his view of the investing world had evolved after moving from the Massachusetts Institute of Technology to Goldman Sachs with "the view is much clearer from the banks of the Charles than from the banks of the Hudson." Earlier in his career, he had delivered a wonderful talk at the University of Chicago under the title "Yes, Virginia, There Is Hope," which was later published in the *Financial Analysts Journal* (Black 1973). In that talk, he reported on his study of the Value Line Ranking System, which would have produced superior performance over a long span of years if followed religiously (and with transactional-cost efficiency!).

## Chronic and Acute Inefficiencies

Some of my pet sources of inefficiencies are behavioral and organizational distortions that I have observed over the years. I certainly do not mean to imply that they are exploitable anomalies, but they do represent the raw nuclear material out of which discernible opportunities could arise.

In perfectly efficient markets, all information would be immediately embedded in prices. The market would go through a sequence of quantum leaps from one equilibrium value to another. Investors would have no need to trade except for liquidity purposes. It would be hard to make a living



working in such an idealized world. Fortunately, for those of us in the financial arena, the reality is that the markets are always in transition from one state of inefficiency to . . . maybe equilibrium but, more likely, a new state of inefficiency.

Inefficiencies come in many forms and sub-forms, but they can be roughly classified as either chronic or acute. *Acute inefficiencies* are the discernible opportunities that can be exploited by accessible arbitrages. With acute inefficiencies, the surrounding uncertainties can be hedged or minimized. Their resolution occurs quickly, well within the relevant time frame of arbitraging participants. *Chronic inefficiencies* tend to be less discernible, more ambiguous, more resistant to rapid resolution from available market forces, and generally longer term in nature. This distinction relates to Jack Treynor's (1976) wonderfully suggestive concept of "fast ideas versus slow ideas."

Obviously, one would prefer to hurl fast ideas at acute inefficiencies, but by their very nature, fast ideas have a short half-life. And that half-life may be condensing with the explosive growth in hedge funds. But even in this era of the hedge fund, only a small minority of market participants spend their days in a high-performance hunt for acute inefficiencies. The vast majority of investors, and certainly the bulk of the assets, swim with the broad currents, while looking for less-fleeting incremental opportunities.

Within this mainstream, one has expanses of apparent efficiency coexisting with pockets of chronic inefficiencies. Chronic inefficiencies arise from structural and behavioral sources, such as trading frictions, organizational barriers, imbalances in capital flows, valuation ambiguities, lack of catalysts for resolution, convoy or herding behavior, artificial peer comparisons, rebalancing inconsistencies, compulsive confirmation seeking, filtering of conflicting data, misreading of market signals, inertia, formulaic action plans, and overly rigid "policy portfolios." These types of chronic inefficiencies can be quite persistent. Few arbitrageurs have mandates that allow them to pursue long-term opportunities, and their absence contributes to the longevity of such inefficiencies. As the well-known saying goes: The market can remain irrational far longer than you can hang onto your position—or your career.

**Process vs. Outcome.** A much-discussed behavioral bias is the tendency to overemphasize

recent historical results. As every mutual fund prospectus states, "Past performance should not be taken as a guide to future performance." That warning, although true, is not much help when few other hard facts are available. A more ominous rephrasing would be, "Past performance is not even a good guide to the *quality of the decisions* that went into that past performance." **Yet, the ultimate issue is the soundness of the decision process itself:** Was all knowable information incorporated? Was the reasoning thorough and sound? Were alternative scenarios considered and contrary views sought? Was a well-planned implementation and monitoring program established—and then followed? Was there a routine postmortem analysis of lessons learned? And are organizational discipline and staff continuity sufficient to achieve consistency in the decision process itself?

Unfortunately, the sort of retrospective analysis that includes these questions occurs more often when the outcomes are bad than when they are good. **Participants would be well advised to conduct such postmortems even when the outcomes are happy ones, however, and to ask what *really* led to success. Was the positive result achieved for the reasons thought, or was it simply good fortune in this particular instance?**

Even when presented with a regime that has every evidence of success—but only a probabilistic success—few investors are able to bring themselves or their organizations to consistently follow its path. The pressures of benchmarks, peer comparisons, standard accounting, liability and expenditure demands, limited organizational risk tolerance, managerial self-doubt—all can lead to lurching departures from prescribed disciplines, even ones with a high—but probabilistic—success prospect. After all, even a strategy whose success is mathematically provable will generate long runs of underperformance. Indeed, a topic in probability theory deals specifically with the risk of ruin—and the ultimate odds of ruin always favor the infinitely resourced casino.

**Convoy Behavior.** Traditional modes of investing in the financial markets involve absolute or relative valuations of various market segments or securities—a process in which ambiguities, complexities, and externalities abound. Inefficiencies and opportunities do exist in this area, but they are far from clearly discernible and can only be seen "through a glass darkly."



Many chronic inefficiencies have their roots in the behavioral biases of mainstream participants. For example, consider the herding behavior of institutional funds. Participants in the financial markets find themselves on a sea of ambiguity. They may try to climb up the mast to see what lies ahead, to look for islands of opportunity, but they are always battered by the waves, the weather, and the uncertainties of navigating in uncharted waters. Is there any surprise that one sees so many sailing in convoys?

It is no coincidence that most institutional portfolios are tightly clustered, with total volatilities falling in the 10–11 percent range—regardless of the fund’s mission, liability structure, sponsor strength, or funding status (Leibowitz and Bova 2004). When such ambiguity abounds, people naturally assume that their peer groups might just have the right idea. This behavior is not totally irrational where theory is more art than science and where the expertise-to-luck ratio is often tilted in favor of luck. Moreover, a sufficient critical mass of investors with a common belief, even an erroneous one, can forge a pricing consensus that becomes a *de facto* reality that must be taken seriously.

Another issue is the valuation horizon of the average investor. The true efficient marketer might argue that the market is continuously efficient over time. It is interesting to speculate, however, whether most investors have some specific span of time—perhaps from six months to three years—on which they focus their investment and valuation decisions. If so, then investors with longer horizons may reap a somewhat larger risk premium than average investors do. In terms of Treynor’s fast–slow dichotomy, the advantage might go to investors who are either faster or slower than this hypothetical norm.

Another behavioral bias is the tendency to seek the opinions of other “experts” who can confirm one’s own views, which results in what might be called a “compounding consensus.” Actually, instead of seeking confirmation, one should actively solicit *contrary* views, hear them out, consider them objectively, and then try to recognize that the financial markets themselves always reflect some balance of conflicting views. In theory, one should always start with the hypothesis that the market is well priced. Then, before acting on any potential opportunity, one should (1) try to ascertain why the market is priced where it is, (2) become convinced that the basis for this current price does

not fully reflect the true opportunities, (3) believe that there is some process whereby one’s views of the true state of affairs will eventually come to be widely discernible (and in a more compelling fashion than has obviously happened to date), and (4) conclude that this “discernment” will transpire within a relevant time span.

**Bayesian Rigidity.** The compulsion to seek confirmation also relates to how the unfolding of events is interpreted. The “rigid Bayesians” will relentlessly try to retain their old views in the face of new information. To help counter this all-too-human inclination, one could write down the explicit reasoning behind a projected outcome and then establish the milestones that would have to occur if events took the anticipated path. Such a write-up would be akin to the contingency plans military establishments routinely create for a wide spectrum of geopolitical scenarios.

A French marquis once said:

He who makes detailed plans about every potential course of action, and then decides—in advance and in great detail—how to respond to the various contingencies that might arise, and then further proceeds to address the subsequent situations that could follow each possible outcome, etc., etc.—this man will make very few mistakes [actually, I’m not sure that this part is true], but he will also do very little [I *am* sure that this part is true].

Yet, although the market’s fast pace may limit how much contingency planning makes sense, the investment management profession surely could devote more effort in this direction.

**Price-Target Revisionism.** Another area of curious behavior has to do with price targets. When a long position is taken and the market moves favorably, the price rise tends to be taken as a confirmation of the wisdom of the purchase decision. To the extent that a price target was established at the outset, the investor may then be tempted to find some rationale for revising the target upward. This revisionism has some rather obvious dangers. A more rational approach would be to assume that as the price moves toward the original target, the prospect for further incremental return decreases while the risk increases. So, as a first cut, one should think in terms of selling off a portion of the position as it moves up. Thus, investors would be well advised to have a plan to reduce



the positions as the original target is approached—the burden of proof (or at least the burden of argument) being placed on the investor who wishes to maintain the original position and/or revise the price target upward.

When the market moves against one's position, one might reasonably conclude that the market is giving a clear signal that one is wrong. A more common belief is that the market is wrong and that greater return is to be expected from the lower price. To counter the natural tendency to avoid a frontal look at deteriorating positions, a help, again, might be to have a series of adverse-event milestones that could act as trip wires to signal serious reconsideration. A substantive adverse move should be the basis for asking what the market is trying to reveal and for vigorously seeking those contrary views.

**The Ebullience Cycle.** Another common behavior is the “unopened envelope” syndrome. Back in the old days when physical envelopes were the primary delivery vehicle for individuals' portfolio statements, a persistently dreary market would lead to these envelopes being redelivered—unopened—into the “circular file.” Such a state of denial when the market moves against one is totally human, especially when deciding what to do about it, if anything, is not easy. The unopened envelope reinforces individuals' propensity for inaction in the face of losing positions.

The opposite phenomenon is, of course, that when the markets are moving up, the incoming envelope is eagerly awaited and ripped open with great vigor. High spirits are rampant, and risks are more comfortable. In this ebullient atmosphere, both individual and institutional investors are inclined to hold on firmly to their winning positions, which are shining examples of their brilliance. They may even invest more aggressively, leading to the phenomenon that Jack Bogle (2005) cited of markets providing one return, the mutual funds providing something less, and the investors getting even less (a number that is rarely measured, except by the individuals in pain). This problem of making ever-greater investments as the market rises is a classic cycle that is not likely to abate.

**Rebalancing Behavior.** Market movements typically elicit different responses from four types of actors: holders, rebalancers, valuers, and shifters (Leibowitz and Hammond 2004).

■ *Holders.* As noted, in a deteriorating market, individuals tend to leave their envelopes unopened and positions unchanged. This “holding pattern” effectively reduces their equity allocations.

■ *Rebalancers.* Institutions behave very differently from holders. When the market pushes an institutional fund away from its policy portfolio allocation, it usually quickly rebalances back to the original percentage weights. In essence, institutions act as “formulaic rebalancers.”

■ *Valuers.* Valuers take positions based on the belief that the market is either cheap (or rich) or that it will continue (or reverse) its recent direction. Valuers can obviously play in two directions. As the market moves down, they may, based on the belief that the market has become cheap and will reverse itself, act as contrarians. As momentum players, they may view the market's decline—on either a technical or a fundamental basis—as a harbinger of further downward pressure.

■ *Shifters.* This category really represents a transient reaction rather than an ongoing style. Investors in any of the first three categories may find themselves becoming shifters at some point in time. Shifting occurs when a fundamental change in asset allocation is required because of circumstances intrinsic to a fund's or an individual's situation rather than because of their assessment of the market's valuation.<sup>2</sup> That is, shifting is a fundamental move from one strategic stance to another. For example, individuals may increase their short-term fixed-income allocations when suddenly faced with an imminent liquidity need—loss of a job, an upcoming move, a looming major purchase, medical contingencies, and so on.

Institutions are more resistant to shifting behavior. Most institutional funds have a policy portfolio that serves as an anchor for their overall strategy. The policy portfolio is intended to be the best possible passive portfolio that encapsulates all relevant information about the nature of the fund, its purpose, and how it interacts with prospective returns and risks in the financial markets. Policy portfolios have great organizational value in forming a baseline for structuring and controlling the investment management process. Following normal market movements, institutions try to rebalance back to their policy portfolios. Significant shifts tend to take place only after a major reallocation study or under extreme organizational duress. A downside to policy portfolios is that they tend to be defined somewhat arbitrarily, to be specified in greater detail than



is justified, to be sustained over a longer time than is appropriate, and to form a high barrier for any tactical departure. Bill Jahnke (1999), Rob Arnott (2004), and Bernstein (2004) have written eloquently about the behavioral distortions that can arise from an overly rigid commitment to policy portfolios.

## Market Impact

These different responses may either exacerbate or moderate market movements. Obviously, the holders will have little effect on the market; they are out of the game, so to speak. The rebalancers will tend to have a smoothing effect: As the market goes down, they buy more; as the market goes up, they sell. Within the valuator category, the contrarians and “reversionists” will act as moderators whereas those pursuing momentum strategies will have an exacerbating effect. Because shifting tends to become more urgent (and probably more widespread) in adverse conditions, shifters will generally exacerbate market moves.

This four-part categorization also indicates something about how new flows are invested. Holders and rebalancers will usually invest their new funds congruently with their existing allocations. (However, individuals do seem to exhibit somewhat more proactive flexibility in investing their new funds than with their existing allocations. This behavior is rather curious.) Valuators, of course, will make fresh decisions about where to deploy new funds, but this type represents a relatively small part of overall new fund flows. The bulk of flows is concentrated in holders and rebalancers—those with relatively rigid channels who tend to direct new investments largely toward their current allocations.<sup>3</sup>

## Rebalancing and Market Efficiency

The rebalancing behaviors themselves may become sources of market inefficiency. Consider which of the behaviors really make sense. Suppose a fund starts with a portfolio that mirrors the market as a whole. One could argue that, in a strictly efficient market, price movements would move the fund’s portfolio in concert with the evolving equilibrium, and in this case, holding behavior might make eminent sense. Most funds do not, however, have a portfolio that reflects the market as a whole (cer-

tainly not on purpose). Moreover, at least in the case of individuals, holding behavior is more likely to be the result of inertia, not sophisticated reasoning.

Some formulaic rebalancers believe they are adhering to an appropriate response in an efficient market. There is some inconsistency, however, in reestablishing the same allocation after an “efficient market” has made a major alteration in global asset weights. After all, a downward move reduces the asset’s weight in the market portfolio, which argues for rebalancing back to an allocation somewhat lower than the original policy portfolio weight.

One sometimes hears the rationale for formulaic rebalancing presented in terms of buying cheaper after a decline and selling expensive assets after a rise. But if one really believes that the market has become discernibly cheaper as a result of a decline, shouldn’t the right move be to establish an even larger position rather than to rebalance back to the original position? After all, if the policy allocation were done afresh, then (given the newly cheaper valuation) the revised allocation should be even more aggressive than before. Thus, one can reasonably argue that rebalancing should, in general, lead not to a resurrection of the original allocation but, rather, to a higher or lower percentage weighting!

Ideally, rational rebalancing should not be rigidly tethered to a fixed policy portfolio but should respond more fluidly to market signals—to the extent they are interpreted either as an efficient restructuring of the global portfolio or as a *discernible* change in valuation. The problem, of course, is that large investment organizations are not designed to facilitate such judgmental flexibility. And as one astute chief investment officer put it, “Better to have a rigid rebalancing by prior agreement than a portfolio that deteriorates into a holding pattern because the organization lacks the confidence or the will to reestablish the policy portfolio weightings—or to even move back in that direction.”

The behavior of valuers is integrally tied into the issue of *discernibility*. To the extent that discernible valuation opportunities truly exist, why not try to take advantage of them? Of course, with valuers, the big question is whether their business models *compel* them to make tactical and timing decisions even when no market opportunities meet this test of “reasonable discernibility.”



## Risk as Risk to the Policy Portfolio

A fund's strong reluctance to being forced to shift away from its policy portfolio may play an underappreciated role in setting the fund's risk tolerance and in shaping its policy portfolio in the first place. When an institution shifts to a lower-risk allocation, it departs from the policy portfolio that was previously considered to represent an optimal allocation. Institutional funds are understandably reluctant to move away from pre-established policy portfolios. Indeed, their rebalancing behavior is specifically geared toward sustaining this portfolio structure. Most institutional managers view it as most unfortunate if the fund is forced by an extreme market movement—or by the fund's investment committee—to abandon the presumably optimal approach and shift into a lower-risk strategy.

Potential trigger points for such mandated shifts lurk in the background of every investor's mind, however, acting as fence posts that define the outer limits of tolerable risk. These fence posts may also play a feedback role in setting the policy portfolio's overall risk level in the first place. For example, suppose adverse movements of 15–20 percent are considered to be the tolerable outer limit of the risk envelope. Then, a fund might reasonably wish to control the prospect of any such triggering event by reducing its probability to a minimal level (say, 10 percent). This shortfall constraint implies a portfolio volatility (risk) level in the 10–11 percent range, which happens to be exactly where most institutional funds are clustered.

Two further observations on this issue of risk. One is that the standard measure of risk, volatility, is an estimate of the range of returns *at a given horizon*. As pointed out by Mark Kritzman (2000) and by Kritzman and Don Rich (2002), this end-of-horizon distribution is not the same as the distribution of outcomes that could occur at some intermediary time. That distribution is much wider. And logically, this "riskier" intermediary distribution should determine when trigger points might be activated.<sup>4</sup>

## The Illusion of Growth Eternal

Participants in the financial markets are intrinsically oriented toward an optimistic view of a world with a continuously compounding growth of value. Reality reminds us, however, that wealth can also be destroyed—both by "whimpers" and by

"bangs." Sidney Homer and I (2004) once posed the following question: If a Roman soldier put just one drachma in a savings account and let it compound at 4 percent throughout the ages, how much money would his descendants have today? The answer turned out to be so many drachmas that, at virtually any exchange rate, it would amount to far more than the total existing wealth in the world. This outcome led to a follow-up question: What happened to it all? The sobering answer is that wealth is destroyed by war, inflation, devaluation, pandemic, political collapse, repudiation, obsolescence, virulent competition, bankruptcy, financial debacle, revolutionary technology, nonproductive investment, and so on. The natural inclination to deny the phantom of such discontinuities may be necessary for moving things forward, but it may also be a chronic source of inefficiency.

## Conclusion

Participants in the financial markets often find themselves sailing on a sea of ambiguity through broad patches of fog, bouts of heavy weather, and occasional balmy periods that may prove only to be the center of passing storms. One can elect the passive approach—fly the beta flag and allow one's portfolio to float on the "index currents." Or one can choose to be an active alpha-seeking investor and try to chip away at the many chronic inefficiencies and behavioral biases that we know exist, even though we can't clearly discern how they are priced and whether they will profitably regress toward equilibrium within a reasonable time. With chronic inefficiencies, by their very definition, discernibility will always be somewhat clouded. (Otherwise, they would become acute—and would be long gone.) So, with these opportunities, one is always acting on imperfect knowledge and playing the odds. But without actively scanning the horizon and being poised to move on reasonably discernible opportunities, investors will surely have no chance of reaping the incremental return inherent in the grand continuous march toward efficiency.

The great investors are like the great sailors: They have the courage to set forth, they know where they want to go, they have a strong gyroscope to keep them on course, they have appropriate respect for the dangers of the sea and its potential for radical shifts in weather and currents, and they are not afraid to be alone for long stretches.

## Notes

1. Although I argue for the possibility of successful active investing, I do not wish to suggest that everyone can be a winner. Indeed, they cannot. And the narrowness of the list of great investors attests to that dour fact. The great mass of investors should treat the market as being highly efficient and should start with the null hypothesis that all assets are fairly priced.
2. In some cases, market movements do ultimately lead to a portfolio shift. For example, a rule of thumb says that many individuals will let their allocations drift until a 15–20 percent decline from some high-water mark forces them to seriously reconsider their risk tolerances. I am drawing a distinction, however, between shifts based on a market-driven change in risk tolerance and those reallocations that are directly valuation motivated.
3. The large majority of existing dollar assets are also controlled by holders and formulaic rebalancers, which leads to the interesting question of whether the key risk premiums between asset classes are being priced by a relatively minor segment of the investing universe.
4. An even more severe criterion would be based on the range of declines from a high-water mark (Leibowitz and Bova 2005b).

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