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Asymmetric Returns

The Future of Active Asset Management

Alexander M. Ineichen

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Published by John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada.

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Library of Congress Cataloging-in-Publication Data:

Ineichen, Alexander M. Asymmetric returns: the future of active asset management / Alexander Ineichen. p. cm.—(Wiley finance series) Includes bibliographical references and index. ISBN-13: 978-0-470-04266-3 (cloth) ISBN-10: 0-470-04266-4 (cloth) 1. Investment analysis. 2. Investments. 3. Hedge funds. I. Title. HG4529.I54 2007 332.6-dc22

2006020137

Printed in the United States of America.

10987654321

Preface

"I wish Karl would acquire some capital, instead of just writing about it."

-Mother of Karl Marx

For his statue of David in 1501, Michelangelo used a single block of marble. In fact, it was a block that had been started upon but abandoned by another, lesser talent, years earlier. At the time, everyone thought that this block of marble was ruined, that its potential had been exhausted, and that nothing further could be extracted from it. But Michelangelo took on this discarded block, and from it he created one of the masterpieces of all times.

For Michelangelo, to sculpt meant to take away, not to add, because the "work of art" already existed inside the stone. The block of marble was just the covering of a work of art; the sculptor only had to take away the part in excess. The sculptor's hand, guided by skill and experience, could only "liberate" what was already there inside the block of marble. His task was to free the "idea" inside from the superfluous matter surrounding it.

One could argue that, similarly, the alpha in capital markets is already there. But special talent is required to hedge ("take away") all the various unwanted risks in order to carve out the gains—the "alpha."

As markets become more and more efficient, carving out the alpha will be increasingly difficult without using all of the risk management tools available. Constraining managers in their field of expertise and the use of the tools to execute their craft, therefore, cannot be optimal. It's like giving Michelangelo only a hammer. In this book, we argue that the key tools required to extract alpha are risk management tools. In our view, investors cannot manage returns, but they can manage risk. Achieving sustainable positive absolute returns is the result, we believe, of taking and managing risk wisely. The result, when successful, is an asymmetric-return profile.

An asymmetric-risk/return profile is the result of an active risk management process. By asymmetric returns, we mean a return profile that is not available through long-only buy-and-hold strategies. Achieving an asymmetric-return profile requires a dynamic and flexible risk management

process that truly corresponds to the end investors' risk preferences, tolerances, and aims. We claim that the delivery of these asymmetric-return profiles is the goal, and the future, of active asset management. This claim is based on some assumptions about what investors really want. An important one of these is that all investors are loss averse, that is, they do not perceive volatility on the downside in the same fashion as volatility on the upside. Hence our focus on asymmetry and our use of the term asymmetric returns.

The term *hedge fund* is a misnomer because there are no hedge funds that hedge all risks. If all risks were neutralized, so would be the returns. As Mario Andretti put it: "If everything is under control, you're driving too slow." Returns are a function of taking risk. Absolute-return investing implies that the risk-neutral position is cash (i.e., no risky positions at all). Generating alpha by definition means to take some risk. However, there are risks that are more likely to carry a reward, and risks that are less likely. This is where the asymmetry comes in. In financial markets there is both—randomness as well as predictability. The process of differentiating the two, the "sculpting," is then a function of intelligence, knowledge, insight, savvy, effort, experience, and skill. Luck helps, certainly, but in the long run, that cannot be the determinant of success.

The ultimate goal of an active investment management process is "alpha." In traditional investment management, success is typically referred to as outperforming a benchmark. This means that losing 28 percent when the benchmark fell 30 percent is actually quite an astounding achievement because the outperformance was two percentage points. However, in the absolute-return world, there are no benchmarks. The active risk manager, unlike the relative-return manager, has additional objectives that go beyond beating an arbitrary benchmark. We believe this new terminology of asymmetric returns goes beyond "the search for alpha." In fact, the term alpha originally stems from a linear model. We believe alpha is an option.

An asymmetric-return profile is achieved either through absolute-return managers driven by profit and loss or, more passively, through financial engineering using hedging techniques. What we call a hedge fund today is really part of the risk management business. Given that many investors expect the 2000 to 2020 period to be less investor friendly than the 1980 to 2000 period, we could currently be witnessing the convergence between what we referred to as the asset management industry and what we have come to understand to be the risk management business. Taking this line of thought further, we could say there is a convergence between the long term (as in "equities outperform bonds in the long term") and the short term (as in "interim volatility matters"). The synthesis of the two would be, in its active form, managers seeking investment opportunities while managing total risk.

An institutional or private investor allocating money to an active risk manager is essentially outsourcing to that manager the task of managing total risk. This is one of the main differences to the relative-return approach, wherein the manager does not have a mandate to manage capital at risk, but has a mandate to manage tracking risk relative to a market or liability benchmark. We believe that managing tracking risk is a passive risk management process, not an active one. Confusion arises because risk is sometimes defined in relative terms and sometimes in absolute terms. During the 20-year equity bull market, the traditional asset management industry used a more relative metric, whereas the risk management industry (essentially trading departments of investment banks and hedge funds) focused on an absolute metric to define and manage risk. Among the pivotal objectives of active risk management—unlike with relative-return investing—are avoiding absolute financial losses (especially large ones) as well as actively managing downside volatility.

The active approach to risk management has many advantages, but it also has some disadvantages. A major advantage for a hedge fund allocator is the substantial diversification benefits that can be achieved by combining many *independently* managed portfolios. (Diversification is the only scalable and repeatable free lunch in financial economics that is available to all investors.) One disadvantage is that the absence of a market benchmark can result in lower transparency.

With respect to transparency, it is important to distinguish between risk measurement and risk management. Risk measurement is fairly objective. Risk management, however, is subjective. The heterogeneity of the hedge funds industry with respect to the way risk is managed is an indication that this is true. Our main point is that the pure reliance on a process or a few metrics is very dangerous. We therefore believe that an open-minded, dynamic, and flexible approach to risk management is superior to a static (purely rule-based) and dogmatic process. With respect to transparency, this means that investors' demand for transparency should not interfere with the nimbleness and flexible maneuverability of the manager. Successful risk management in an ever-changing environment is like shooting a moving target: It is difficult but improves with practice. We don't think that successful risk management will trade at a discount anytime soon. As Oscar Wilde put it: "Experience is one thing you can't get for nothing."

We believe that in active risk management it is important to apply a skill that carries a reward in the marketplace within an opportunity set where the risk/reward trade-off is skewed in favor of the risk taker. What we herein refer to as *structural change* in the asset management industry is about finding skill (which is difficult enough), as well as the optimal setup for that skill to be operational in a value-added fashion. In terms

of applying skill, we believe there is a trade-off between transparency and standardization on the one hand, and entrepreneurial maneuverability on the other. Interestingly, traditional asset managers are becoming somewhat more entrepreneurial by venturing into the absolute-return space, while hedge funds by and large are moving in the opposite direction, that is, they are becoming more transparent (as in self-constrained, disciplined, and process driven) to cater more to high-quality (quite often institutional) investors.

We believe these trends to be consistent with our claim in our first book, Absolute Returns—namely, that the hedge fund industry is slowly converging with the traditional asset management industry. In other words, from now on we should be talking about product differentiation in asset management—that is, distinguishing between active and passive risk management, and not between hedge funds and non-hedge funds. An active risk management process seeks asymmetric returns. We believe this to be the future of active asset management.

Some investors argue that the market is currently wrong in the way it prices active risk management services—in other words, that the fees in the hedge fund industry are too high. We believe that absolute-return strategies incorporating active risk management techniques and passive long-only buy-and-hold strategies offer entirely different value propositions and therefore merit entirely different dimensions in pricing, that is, costs to the end investor. In other words, we believe the market is right in the way it distinguishes between the two value propositions through different levels of fees. Searching for bargains when selecting an active risk manager is somewhat akin to searching for the cheapest parachute: By the time you notice the deficiency, it is too late. (Of course, this analogy has its limitations, as the parachutist's remorse period is short lived.)

We have designed this book to be readable by all financial professionals, whatever their particular area of expertise. However, at times, we somehow felt the urge to part from the main style. In some instances we have introduced break-out sessions called "Out-of-the-Box." Throughout the book these sections are add-ons that are related to the topic in discussion but are somewhat a digression from the main story line. In Chapter 1, for example, we digress to discuss a conference call with seven luminaries of the financial world. In another vein, we have sometimes added an appendix to a chapter. This is generally where the subject demanded more technical treatment than we gave it in the main body of the text or where we took the liberty to bring across a point more colloquially.

Alexander M. Ineichen, CFA, CAIA Oberägeri, Switzerland May 1, 2006

Acknowledgments

In my close to 20-year tenure in financial markets, I have had the good fortune to meet many interesting and dull, honest and dishonest, wise and unwise, ambitious and lazy, and insightful and ignorant characters. I am blessed to have learned something from all of them.

Many financial professionals have contributed to this book by examining the whole book, parts of the manuscript, or earlier versions thereof. In particular, I would like to thank Larry Chen and Sanjay Tikku, whose reviews and comments of the entire book were invaluable. I also benefited from discussions, debates, comments, and insights from Martin Boldt-Christmas, Bill Brown, Charlotte Burkeman, Meyrick Chapman, Alex Ehrlich, Arun Gowda, Jens Johansen, Kevin Maloney, Alan Scowcroft, James Sefton, and David Smith. I would also like to thank Bill Falloon, Laura Walsh, and Emilie Herman of John Wiley & Sons for their help and flexibility.

Opinions expressed in this book represent solely my own viewpoint and may or may not reflect the opinions or activities of any organization with which I am associated. Anyone interested in investing in an active risk manager should first seek *independent* advice. It goes without saying that all errors, omissions, and ambiguities, as well as any lack of humor, are entirely my own responsibility.

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Survival of the Richest — Volatility Matters

"It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change."

-Charles Darwin

magine you're a frog. You live the good life. You and your comrades, that is, the frog population, live happy and unchallenged lives. Your community prospers and grows. But then, one day, out of the blue and without warning, a frog-eating snake suddenly enters your habitat. What do you do? There are three options: (1) you run; (2) you and your comrades somehow adapt to the change in circumstances; or (3) you end up as snake food. Suddenly, life seems unfair. But you have to act; otherwise, you know it's going to be option 3 and you'll be history.

In our recent work (to be referenced later), we highlighted the aggressiveness, and the appetite, of the snake entering the frog's habitat and also commented on the fear, but also ignorance of large parts of the frog population. Today, things have moved along a bit. The frogs now realize that their environment—and therefore their life—has changed forever. Slowly but surely, the frogs have realized that in order to survive, they must adapt. The snakes, on the other hand, have lost some of their initial edge. They no longer have the advantage of "surprise" that they had when they first entered the habitat of the frogs. With this, they have lost some of their momentum. They, too, have to get smarter. This book is essentially about the coexistence of frogs and snakes.

THE FUTURE OF THE ASSET MANAGEMENT INDUSTRY

The asset management industry (essentially the habitat of both relative and absolute-return managers, beta providers and alpha providers, fish and sharks, frogs and snakes—however you want to think about it) started to change around the year 2000. The year 2000 is the turning point at which hedge funds started to seriously compete with the traditional asset management industry for institutional assets. Since then, institutional investors distinguish more carefully between alpha and beta, absolute returns and relative returns, and skill-based and market-based strategies. Quite early on, we referred to this change as a paradigm shift in the asset management industry. Our most serious advice in the early part of the decade was from John Maynard Keynes:

"When circumstances change, I change my view. What do you do?"

Today—roughly half a decade after our initial hypothesis—we continue to believe that the asset management industry is going through structural change. The difference to five years ago is the evidence for this idea's taking shape in the marketplace, as well as an increasing population of investment professionals who agree that this is indeed a structural change in the asset management industry. We first presented these ideas in Ineichen, "In Search of Alpha" [2000] and continued to refine our thoughts in Ineichen [2001; 2003a, b, c; 2005]. We also believe ourselves to be in good company as we find credible confirmation for at least some of our elaborations in Cliff Asness's "An Alternative Future" as well as Peter Bernstein's five inflection points for the asset management industry.²

Change in Risk Perception

Change in the asset management industry is driven by changes in their investors' change in risk perception. Investor needs are in the process of changing fundamentally, driven on the retail investor front by the looming retirement uncertainty with respect to a huge demographic shift and increased longevity, and on the institutional investor side by a combination of worsening pension deficits and a significant different approach to evaluating and eventually paying for performance. All of this is taking place amid an uncertain market environment that is breeding enormous levels of anxiety among investors of all stripes.

The catalyst that triggered this recent change was the equity bear market starting in 2000. We call this—for want of a better term—the "oops-effect." Following the sharp decline in equity prices, many investors realized that, "oops," ignoring short-term portfolio volatility is not in line

with their investment objectives after all. (In cartoons, this is shown by a light bulb popping up above the head of the character with the effect. We are unaware of a formal term in the behavioral sciences that describes an observer's sudden switch from ignorance to enlightenment of an obvious fact. Nevertheless, an Internet search revealed that this could be called the *light bulb effect*.) More formally, this means that investors migrated to the belief that volatility matters and time does not reduce risk.

Figure 1.1 illustrates the negative effects of a volatile portfolio and its implications for short-term as well as long-term financial health or solvency. The bear market triggered a change in risk perception among a wide array of investors. Note that nothing at all has changed with respect to the underlying concept of "risk." A volatile portfolio is still and always has been a volatile portfolio, irrespective of equity markets going up or going down. Nor were there any significant theoretical breakthroughs in finance that brought about the change in perspective. It was the live experience of capital depreciation that was the catalyst for this change in perspective. We believe that what has changed is not risk itself but how investors perceive risk.

Figure 1.1 shows the impact of large drawdowns on compounding capital over time. We have added the potential time it could take for some

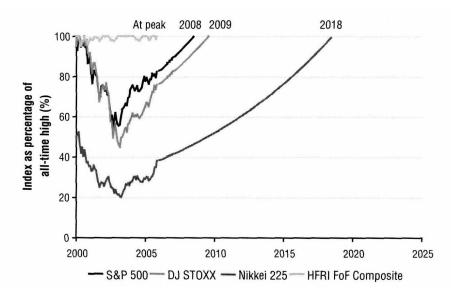


FIGURE 1.1 Underwater Perspective and Potential Time to Recovery *Note:* December 2005 inclusive. Based on local currencies, HFRI in U.S. dollars (USD). Loss recovery line was based on assumption that indices compound at 8 percent per year.

Source: Author's own calculations; data from Thomson Financial and Bloomberg.

of these indices to recover to their previous peak. The Nikkei 225, for example, reached 38,915.87 in December 1989, fell to 7,607.88 in April 2003, and then recovered to 16,111.43 by year-end 2005. In other words, the index fell by 80.5 percent. In Figure 1.1 this is shown as a line falling to 19.5 percent (of peak value). Assuming the Nikkei 225 recovers from 16,111 at an annual rate of 8 percent, the index will not have recovered from its losses until 2018. It is probably true that equities outperform bonds in the long term. However, what the graph shows is that you might not live long enough to experience the long term. We discuss long-term returns in more detail in Chapter 9.

We call this the "underwater perspective" as it shows an index as a percentage of its previous all-time high; that is, it shows by how much an investment is "under water." This book advocates an investment approach that is designed to minimize these "underwater" periods, that is, to preserve capital even when market conditions are difficult. The problem with large drawdowns is that they kill the rate at which capital compounds. Any approach that takes an asset or liability benchmark as a risk-neutral base does not give the avoidance of large drawdowns the high priority we believe it deserves. We could argue that investing is like swimming: In both cases the survival-appreciating economic agent—after diving under water—has an incentive to reach the surface level at some stage in the future. As Warren Buffett—arguably an absolute-return investor—puts it:

"When we can't find anything exciting in which to invest, our 'default' position is U.S. Treasuries... Charlie and I detest taking even small risks unless we feel we are being adequately compensated for doing so. About as far as we will go down that path is to occasionally eat cottage cheese a day after the expiration date on the carton."

The idea of what we believe is an absolute-return investment philosophy is to try and stick close to the surface level in Figure 1.1, as digging oneself out of a deep hole can be rather time consuming. In other words, we prefer an asymmetric-return profile, that is, many and large gains versus few and small losses, to a symmetrical profile. More formally, we argue that the post-dot-com bubble period is characterized by a transition from the second into the third stage of asset management. In the preface of *Absolute Returns*⁴ we defined the three stages as follows:

- 1. Absolute-return approach with low degree of manager specialization.
- 2. Relative-return approach with high degree of manager specialization.
- 3. Absolute-return approach with high degree of manager specialization.

We believe it is fair to argue that there was an asset management industry before there were benchmarks. This first stage was characterized by an absolute-return focus and a low degree of specialization on the part of the manager. Managers had "balanced" mandates in which top priority was given to an asset allocation decision rather than security selection. This approach suffered from poor performance in the mid-1970s. More fundamentally, it suffered from what is known in economics as an "agency problem": The objectives of the manager were not aligned with those of the principal. Managers were incentivized to beat the peer group rather than to invest in an economically sensible fashion based on their individual edge and overall opportunity set.

This first stage was replaced by the second stage: the relative-return game. In this second stage, managers shifted to a relative-return approach. The asset allocation mandate was essentially taken away from the manager and this led, quite naturally, to higher specialization on the part of the manager. Next to poor performance and principal/agent issues, the introduction of the Employee Retirement Income Security Act (ERISA) in the United States in 1974 was yet another catalyst for the industry to move from the first to the second stage. ERISA changed the fiduciary responsibility of the end investor.

The introduction of an index was an improvement of the status quo as it somewhat resolved the agency problem through using a rigid benchmark. Around the same time, the efficient market hypothesis (EMH)* was rising to academic prominence through the work of Samuelson [1965] and Fama [1965, 1970], and the investment community was intellectually gradually moving away from the merits of active asset management in general and the feasibility of stock selection in particular. The main product to emerge from the 1964 to 2000 consensus thinking in the investment community was the index fund. Hedge funds are (or, more precisely, until recently were) somewhat antithetical to the EMH and the consensus view.

We classified active managers exploiting absolute-return strategies as the third stage in asset management. The third stage combines the absolute-return investment philosophy from the first stage with a high degree of manager specialization of the second stage.[†] The absolute-return approach

^{*}As a matter of priority, investment professionals who read small-printed footnotes of finance books (such as this one), should certainly also read "The Adaptive Markets Hypothesis" (AMH) by MIT professor Andrew Lo [2004]. The AMH can be viewed as a new version of the EMH and is based on an evolutionary approach to economic interactions, taking into account some recent research in the cognitive neurosciences that has been transforming and revitalizing the intersection of psychology and economics.

[†]One could argue that there is a fourth stage. Hedge funds now have also launched long-only funds alongside their absolute-return products and there are increasingly