Memo to: Oaktree Clients

From: Howard Marks

Re: Risk

The reading materials for a meeting of a corporate board on which I sit – and what turned out to be an eight-hour meeting of the audit committee (thank you, Messrs. Sarbanes and Oxley) – included an article by Rick Funston, a Principal of Deloitte & Touche LLP and its National Practice Leader for Governance and Risk Oversight. The subject of the article was corporate risk, but many of its points were equally applicable to investment risk. It got me thinking.

We're all preoccupied with the quest for excellent investment returns, and most of us understand that risk management has a lot to do with achieving them. From there, investment orthodoxy often takes over, with the discussion turning to the relationship between return and volatility. But I think that tells so little of the story that I've decided to devote an entire memo to the subject of risk.

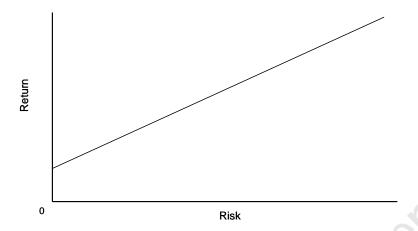
Why Does Risk Matter?

When I joined the investment management industry at the tail end of the 1960s, everyone talked about returns but few people talked about risk-adjusted returns, or the idea that risk matters. I was fortunate, however, to have attended the University of Chicago in the preceding years, during which Capital Market Theory had begun to be discussed.

Of course, nothing underlies the Capital Market approach as much as the relationship between risk and return. This plays out as follows:

- First, because people are risk averse, riskier investments have to offer higher returns in order to attract capital.
- Second, if investors are skillful, they should be able to capture higher returns on their riskier investments, and thus they should show higher average returns in the long run.
- But investors' returns tell just half the story. We have to know how much risk they took to get those returns before we can judge whether they did a good or a bad job. Thus developed the concept of risk-adjusted returns.

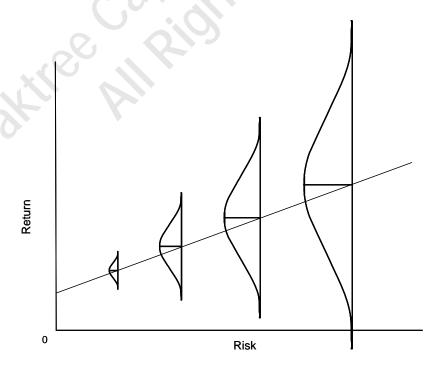
It is from the relationship between risk and return that arises the graphic representation that has become ubiquitous in the investment world. It shows a "capital market line" that slopes upward to the right, indicating the positive relationship between risk and return that is essential.



Before going further, I want to stop for a brief tirade. In my opinion, especially in good times, far too many people can be overheard saying, "Riskier investments provide higher returns. If you want to make more money, the answer is to take more risk." But riskier investments absolutely cannot be counted on to deliver higher returns. Why not? It's simple: if riskier investments reliably produced higher returns, they wouldn't be riskier!

The correct formulation is that in order to attract capital, riskier investments have to offer **the prospect of higher returns**, or higher promised returns, or higher expected returns. But there's absolutely nothing to say those higher prospective returns have to materialize.

The way I conceptualize the capital market line makes it easier for me to relate to the relationship underlying it all:



Riskier investments are those where the outcome is less certain. That is, the probability distribution of returns is wider. When priced fairly, riskier investments should entail:

- higher expected returns,
- the possibility of lower returns, and
- in some cases the possibility of losses.

The traditional graph shown first above is deceptive, because it communicates the positive connection between risk and return but fails to suggest the uncertainty involved. It has brought a lot of people a lot of misery through its unwavering intimation that taking more risk leads to making more money.

I hope my version of the graph is more helpful. It's meant to suggest both the positive relationship between risk and expected return **and** the fact that uncertainty about the return and the possibility of loss increase as risk increases.

What Is Risk?

According to the academicians who developed Capital Market Theory, risk equals volatility, because volatility indicates the unreliability of an investment. I take great issue with this definition of risk.

It's my view that – knowingly or unknowingly – academicians settled on volatility as the proxy for risk as a matter of convenience. They needed a number for their calculations that was objective and could be ascertained historically and extrapolated into the future. Volatility fits the bill, and most of the other types of risk do not. The problem with all of this, however, is that I just don't think volatility is the risk most investors care about.

There are many kinds of risk, and I'll discuss some of them below. But volatility may be the least relevant of them all. Theory says investors demand more return from investments that are more volatile. But for the market to set the prices for investments such that more volatile investments will appear likely to produce higher returns, there have to be people demanding that relationship, and I haven't met them yet. I've never heard anyone at Oaktree – or anywhere else, for that matter – say, "I won't buy it, because its price might show big fluctuations," or "I won't buy it, because it might have a down quarter." Thus it's hard for me to believe volatility is the risk investors factor in when setting prices and prospective returns.

In addition, volatility has a number of shortcomings that aren't often addressed in the literature but are obvious to investment practitioners:

• A stock that meanders from \$50 to \$80 is likely to have the same statistical volatility as one that goes from \$50 to \$20. However, most of us would have trouble saying that proves the former was as risky as the latter.

- A stock that over a few years goes from \$20 to \$80 in a straight line will be described as low in risk, but if it suddenly declines from \$80 to \$50 it will be said to have become more risky. It's hard to think of a given stock as riskier at \$50 than it was shortly before at \$80.
- Generally, those who equate volatility with risk look to the historic volatility of an asset as the indicator of its future risk. But most of us know the future will not necessarily be like the past. And one good way to add value in the investment process is by predicting changes in riskiness, whereas no value is ever added through extrapolation.

For all of these reasons, I find it hard to accept volatility as a comprehensive, sufficient or highly useful measure of risk.

If Not Volatility, Then What?

Rather than volatility, I think people decline to make investments primarily because they're worried about a loss of capital or an unacceptably low return. To me, "I need more upside potential because I'm afraid I could lose money" makes an awful lot more sense than "I need more upside potential because I'm afraid the price may fluctuate." No, I'm sure "risk" is – first and foremost – the likelihood of losing money.

There are other kinds of risk, most of which affect each of us differently. That means they're subjective and personal – rather than intrinsic to the investment itself – and thus they're unlikely to be behind the market prices set by the consensus of investors. Here are a few:

- Falling short of one's goal Investors have differing needs, and for each investor the failure to meet those needs poses a risk. A retired executive may need 4% per year to pay his bills, whereas 6% would represent a windfall. But for a pension fund that has to average 8% per year, a prolonged period returning 6% would entail serious risk. Obviously this risk is personal and subjective, as opposed to absolute and objective. A given investment may be risky in this regard for some people but riskless for others. Thus this cannot be the risk for which "the market" demands compensation in the form of higher prospective returns.
- Underperformance Let's say an investment manager knows she can't get more money from a client no matter how well she does, but she's sure she'll lose the account if she fails to keep up with some index. That's "benchmark risk," and she can eliminate it by emulating the index. But every investor who's unwilling to throw in the towel on outperformance, and who chooses to deviate from the index in its pursuit, will have periods of significant underperformance. In fact, since many of the best investors stick most strongly to their approach and since no approach will work all the time the best investors can have some of the greatest periods of underperformance. Specifically, in crazy times, disciplined investors willingly accept the risk of not taking enough risk to keep up. (See Warren Buffett in 1999. That year, underperformance was a badge of courage, because it denoted a refusal to participate in the tech bubble.)

- Career risk This is the extreme form of underperformance risk. Dean LeBaron of Batterymarch wrote an article that cited "agency risk," or the risk that arises when the people who manage money and the people whose money it is are different people. In those cases, the managers may not care much about gains, in which they won't share, but may be deathly afraid of losses that could cost them their jobs. The implication is clear: risk that could jeopardize return to an agent's firing point is rarely worth taking.
- Unconventionality Along similar lines, there's the risk of being different. Everyone who aspires to superior results has to be mindful of John Maynard Keynes's observation:
 "Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally . . ." Understandably, stewards of other people's money can be more comfortable turning in average performance, regardless of where it stands in absolute terms, than with the possibility that unconventional actions will prove unsuccessful and get them fired. As David Swenson wrote in his excellent book, "Pioneering Portfolio Management,"

... active management strategies demand uninstitutional behavior from institutions, creating a paradox that few can unravel. Establishing and maintaining an unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom.

Concern over this risk keeps many people from superior results, but it also creates opportunities in unorthodox investments for those who dare to be different.

• Illiquidity – If an investor needs money with which to pay for surgery in three months or buy a home in a year, he may be unable to make an investment that can't be counted on for liquidity that meets his schedule. Thus, for him, risk isn't just losing money or volatility, or any of the above. It's being unable when needed to turn an investment into cash at a reasonable price. This, too, is a personal risk. Theoretically, a fund whose life is perpetual and whose liquidity needs are predictable shouldn't be sensitive to this risk and thus should be able to bear it for profit.

The bottom line is that investment risk comes in many forms. Many risks matter to some investors but not to others, and they may make a given investment seem safe for some investors but risky for others. Rejecting risk as synonymous with volatility, as I do, eliminates the one measure of risk that's entirely quantifiable, objective and absolute. This, in turn, makes it hard to argue that the market's an efficient machine that precisely assesses the risk of each investment and allocates prospective return proportionately.

Measuring Risk Prospectively

I'm sure we agree that investors should and do demand higher prospective returns on riskier investments. And hopefully we can agree that losing money is the risk people care about most in demanding prospective returns, and thus in setting prices for investments. An important question remains: How do they measure that risk?

- First, it clearly is nothing but a matter of opinion: hopefully an educated, skillful estimate about the future, but still just an estimate.
- Second, the standard for quantification is nonexistent. With regard to a given investment, some people will think the risk is high and others will think it's low. Some will state it as the probability of not making money, and some as the probability of losing a given fraction of their money (and so forth). Some will think of it as the risk of losing money over one year, and some as the risk of losing money over the entire holding period. Clearly, even if all the investors involved met in a room and showed their cards, they'd never agree on a single number representing an investment's riskiness. And even if they could, that number wouldn't likely be capable of being compared against another number, set by another group of investors, for another investment.
- Third, risk is deceptive. Conventional considerations are easy to factor in, like the likelihood that normally recurring events will recur. But freakish, once-in-a-lifetime events are impossible to quantify or prepare for. The fact that an investment is susceptible to a particularly serious risk that will occur infrequently if at all what I call the "improbable disaster" means it can seem safer than it really is. As Nassim Nicholas Taleb wrote in "Fooled by Randomness,"

Reality is far more vicious than Russian roulette. First, it delivers the fatal bullet rather infrequently, like a revolver that would have hundreds, even thousands of chambers instead of six. After a few dozen tries, one forgets about the existence of a bullet, under a numbing false sense of security. . . . Second, unlike a well-defined precise game like Russian roulette, where the risks are visible to anyone capable of multiplying and dividing by six, one does not observe the barrel of reality. . . . One is thus capable of unwittingly playing Russian roulette – and calling it by some alternative "low risk" name.

The bottom line is that, looked at prospectively, much of risk is subjective, hidden and unquantifiable. But I think one of the most interesting aspects of risk – and one of the least appreciated – is the fact that it isn't quantifiable even in retrospect.

Measuring Risk After the Fact

Let's say someone makes an investment that works out as expected (or better). Does that mean it wasn't risky? Or let's say the investment produces a loss. Does that mean it was risky? Or that it should have been perceived as risky at the time it was analyzed and entered into?

If you think about it, the response to these questions is simple: The fact that something happened doesn't mean it was likely, and the fact that something didn't happen doesn't mean it was improbable. Improbable things happen all the time, just as likely things often fail to occur.

Taleb's book is the bible on this subject as far as I'm concerned, and in it he talks about the "alternative histories" that could have unfolded but didn't. Alexander the Great mapped out his battle strategy, and it succeeded under the circumstances that unfolded. But were those circumstances predictable or just a matter of chance? Thus was Alexander wise to count on them or foolhardy? And did he prudently anticipate and plan for them, or did he overlook them and just get lucky? Lastly, was there a much wiser general somewhere else, who more systematically considered the possibilities and whose plan was more likely to work, but who fell victim to bad fortune (and thus anonymity) when random events conspired against him? Which man deserves to be in the history books: Alexander the Great or Bob the Unlucky?

What a wonderful way this is to look at things! How many people do you suspect of having succeeded despite themselves, rather than because of skill? How many bear out the adage "it's better to be lucky than good"? Certainly many in business have derived fame and fortune from being right once in a row. Was it skill or luck? Can they do it again? Did they accurately assess the risk? Who can tell? Who cares?

In the investing world, one can live for years off one great coup or one extreme but eventually accurate forecast. But what's proved by one success? When markets are booming, the best results often go to those who take the most risk. Were they smart to anticipate good times and bulk up on beta, or just congenitally aggressive types who were bailed out by events? **Most simply put, how often in our business are people right for the wrong reason?** These are the people Taleb calls "lucky idiots," and in the short run it's certainly hard to tell them from skilled investors.

The point is that even after an investment has been closed out, it's impossible to tell how much risk it entailed. Certainly the fact that an investment worked doesn't mean it wasn't risky, and vice versa. With regard to a successful investment, where do you look to learn whether the favorable outcome was inescapable or just one of a hundred possibilities (many of them unpleasant)? And ditto for a loser: how do we ascertain whether it was a reasonable but ill-fated venture, or just a wild stab that deserved to be punished?

Did the investor do a good job of assessing the risk entailed? That's another good question that's hard to answer. Need a model? Think of the weatherman. He says there's a 70% chance of rain tomorrow. It rains; was he right or wrong? Or it doesn't rain; was he right or wrong? It's impossible to assess the accuracy of probability estimates other than zero and 100 except over a very large number of trials.

The celebrated investor is one whose actions yielded good results. Was she lucky or good? How much risk did she take? Since it's risk-adjusted return that counts, can we tell whether her return was more than commensurate with the risks borne or less than commensurate? I'm confident that the answers lie in skilled, subjective judgments, not highly precise but largely irrelevant ratios of return to volatility.

So Is It Risky Or Not?

Casual onlookers rarely see that as a tough question. But like most aspects of investing, the more obvious the answers seem, the less likely they are to be true.

Many considerations on the subject of risk are actually paradoxical. Investing requires us to deal with the future, and the difficulty of cracking the future is the source of most of the risk. The actual riskiness of many aspects of investing depends on the extent to which an investor is capable of knowing something about the future, or – perhaps better put – of knowing more than the average investor.

For example, let's consider diversification versus concentration. Is concentration risky? Not if you know what the future holds. Diversification by definition implies a willingness to trade off return for safety, motivated by acceptance of the fact that knowledge of the future is imperfect. Most investors rank their stocks by potential return, formally or informally, but no one I know buys just the one they expect to deliver the highest return. Why? Because they know their rankings might be wrong and don't want to bet it all on black and see red come up. Concentration is risky for investors who can't see the future with much clarity, but it wouldn't be for one who can. For the latter, it's the way to maximize performance, and diversification can hold it back.

What about illiquidity? Conventional wisdom says liquid investments are safer than illiquid ones. And small holdings are safer than large blocks. So what's up with Warren Buffett and Charlie Munger? They regularly amass stock positions for which there are no other buyers. And in fact, they seem to be more comfortable owning whole companies than public stocks they could sell off. Yet their record continues to be highly superior. The answer lies in the fact that they know what they're doing. They're able to tell good companies from bad ones, and when the price is right. And given that their portfolios are unlikely to go into forced liquidation (and as far as I know, they don't think about losing their jobs), illiquidity isn't a risk they worry about.

Finally, what about buying risky assets? People ask me all the time to answer a simple question: "Are Bruce Karsh's distressed debt funds risky?" They certainly are, in that he buys the debt of troubled and ultimately insolvent companies; the promises of interest and principal payments on the debt he buys invariably are out the window; the range of possible outcomes is extremely wide; his holdings are often illiquid; and he diversifies far less than Sheldon Stone does in his high yield bond portfolios. On the other hand, Bruce often buys in at extremely low prices; he has a lot of experience and a highly skilled team; and the record suggests that he, too, knows what he's doing. Thus one might conclude Bruce's funds aren't risky, and the results to date support this view: in seventeen years he hasn't had a fund that lost money or a year when the aggregate return of his funds was negative. (Of course, this historic record says nothing about future performance.) You can be the judge, but a lot will depend on your definition of risk.

So my answer's the same here: There's no right answer. No one number can tell you how much risk an investor took, or how much risk a prospective investment entails. Few investment assets, strategies or tools are risky or safe in and of themselves. And no answer on this subject is likely to hold true for every investor and every potential application. That's one of the reasons why investing is never easy . . . but always interesting.

Complexity in Risk Assessment

It is my purpose in this section to highlight a few reasons why risk assessment is not simply a matter of one number (as implied by the attention paid to volatility), but multi-dimensional instead. Rick Funston of Deloitte pointed out in our board briefing materials that risk assessment requires us to deal with four complicating factors:

- Scenarios
- Offsets
- Correlations
- Domino effects

By "scenarios," Rick refers to alternative or abnormal future scenarios that go beyond the normal range of outcomes – in his words, "the possible but unusual."

"Offsets" translate in the investment world into something very familiar: diversification. Intelligent diversification means not just investing in a bunch of different things, but in things that respond differently to the same factors. In a well-diversified portfolio, something that negatively influences investment A might have a positive and offsetting influence on investment B.

"Correlations" are somewhat the opposite. The term refers to the chance that a number of investments will respond in the same way to a given factor. Be alert, however, to the fact that when things in the environment turn really negative, seemingly unconnected investments can be similarly affected. "In times of panic," they say, "all correlations go to one."

Finally, "domino effects" refer to the likelihood that a given factor will cause trouble for investment A, which will be a problem for investment B, which will hurt investment C, and so on. Obviously, domino effects can result in combinations that are bigger than any one issue alone and quite hard to anticipate.

Clearly, because of these factors among so many others, risk can't be reduced to a single number or handled simplistically. Because of its multi-dimensional nature, it can only be dealt with by skilled and experienced individuals making judgments that are by their nature subjective. And even those individuals must always be conscious of how much they don't know.

When the emerging markets melted down in 1998, accompanied by the collapse of Long Term Capital Management and the crisis in Russia, most investors thought their risk was limited to their holdings of emerging market securities. But they soon saw firsthand the ability to be affected through the stocks of U.S. companies doing business in emerging markets, high yield bond funds that had dabbled in sovereign debt, and private equity investments exposed to the economies in question.

Fault lines run through every portfolio, adding to the complexity of managing risk. It's hard to anticipate all of them, but trying to do so lies at the heart of effective risk management.

Bring in the Risk Management Professionals

Given the myriad reservations about risk measurement expressed above, I want to inveigh against over-reliance on using outside "experts" to assess the risk the investment people are taking, and on models like VAR (value at risk) to do the assessing.

First of all, given the inextricable linkage between analyzing a potential investment and assessing its risks, I question whether anyone else can know as much about this subject as the investment professionals directly involved. To me, "risk measurement officers" sound like armchair quarterbacks who're brought in to tell the investment pros how they're doing (although I concede that they may be useful in looking across the "silos" in multi-strategy portfolios to aggregate risk and look for fault lines).

Second, I sincerely doubt that the risks that really matter are subject to modeling. Models can tell us what will happen most of the time, and how much risk will be entailed under "normal circumstances." But, as my friend Ric Kayne says, everyone understands the things that happen within two standard deviations, but everything important in financial history takes place outside of two standard deviations.

Rick Funston performs a service by organizing risks into two categories: those that are suitable for probabilistic modeling and those that aren't. He includes among the elements that render a risk suitable for modeling (1) recurring situations, (2) processes that are subject to known rules, (3) conditions that can be counted on to remain stable, (4) controllable environments, (5) a limited range of outcomes, and (6) certainty that combinations of things will lead to known results. What could be less descriptive of investing?

Given the non-recurring situations we face, the fact that many of the rules are unknown, and the largely unlimited range of outcomes (among other things), I would argue strongly that models and modelers are of very limited utility in measuring investment risk at the extremes, where it really matters.

Bearing Risk for Profit

A few years ago, one of my memos quoted Lord Keynes as having said, "... a speculator is one who runs risks of which he is aware and an investor is one who runs risks of which he is unaware." (I admitted at the time that I'd been unable to verify that he actually said it, but now I've identified the source.) Keynes makes an essential point. **Bearing risk unknowingly can be a huge mistake**, but it's what those who buy the securities that are all the rage and most highly esteemed at a particular point in time – to which "nothing bad can possibly happen" – repeatedly do. **On the other hand, the intelligent acceptance of recognized risk for profit underlies some of the wisest, most profitable investments** – even though (or perhaps due to the fact that) most investors dismiss them as dangerous speculations.

I believe in the principles underlying the Capital Market approach. We are (or should be) risk averse, meaning that, if the prospective returns are equal, we prefer safer investments to the more

risky. Thus, we must be induced to make riskier investments by the offer of higher prospective returns. We could accept the risk-free rate available on Treasury bills, but most of us choose instead to strive for more by taking on incremental risk. When you boil it all down, it's the investor's job to intelligently bear risk for profit. Doing it well is what separates the pros from the rest.

What does it mean to intelligently bear risk for profit? I'll provide an example. In the early 1980s, a reporter asked me, "How can you invest in high yield bonds when you know some of the issuers will go bankrupt?" Somehow, the perfect answer came to me in a flash: "The most conservative companies in America are the life insurance companies. How can they insure people's lives when they know they're all going to die?" Both activities involve conscious risk bearing. Both can be done intelligently (or not). The ability to profit from them consistently depends on the approach employed and whether it's done skillfully. For companies selling life insurance, I said, the keys to survival and profitability are the following:

- It's risk they're aware of. They know everyone's going to die. Thus they factor this reality into their approach.
- It's risk they can analyze. That's why they have doctors assess applicants' health.
- It's risk they can diversify. By ensuring a mix of policyholders by age, gender, occupation and location, they make sure they're not exposed to freak occurrences and widespread losses.
- And it's risk they can be sure they're well paid to bear. They set premiums so they'll make a profit if the policyholders die according to the actuarial tables on average. And if the insurance market is inefficient for example, if the company can sell a policy to someone likely to die at age 80 at a premium that assumes he'll die at 70 they'll be better protected against risk and positioned for exceptional profits if things go as expected.

We do exactly the same things in high yield bonds, and in the rest of Oaktree's strategies. We try to be aware of the risks, which is essential given how much our work involves assets that some simplistically call "risky." We employ highly skilled professionals capable of analyzing investments and assessing risk. We diversify our portfolios appropriately. And we invest only when we're convinced the likely return far more than compensates for the risk.

We've said for years that risky assets can make for good investments if they're cheap enough. The essential element is knowing when that's the case. That's it: the intelligent bearing of risk for profit, the best test for which is a record of repeated success over a long period of time.

Risk Management vs. Risk Avoidance

Clearly, Oaktree doesn't run from risk. We welcome it at the right time, in the right instances, and at the right price. We could easily avoid all risk, and so could you. But we'd be assured of avoiding returns above the risk-free rate as well. Will Rogers said, "You've got to go out on a limb sometimes because that's where the fruit is." None of us is in this business to make 4%.

So even though the first tenet in Oaktree's investment philosophy stresses "the importance of risk control," this has nothing to do with risk avoidance.

It's by bearing risk when we're well paid to do so – and especially by taking risks toward which others are averse in the extreme – that we strive to add value for our clients. When formulated that way, it's obvious how big a part risk plays in our process.

Rick Funston said in the article that prompted this memo, "... you need comfort that the ... risks and exposures are understood, appropriately managed, and made more transparent for everyone ... This is not risk aversion; it is risk intelligence." That's what Oaktree strives for every day.

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