

Memo to: Oaktree Clients

From: Howard Marks

Re: Getting Lucky

Sometimes these memos are inspired by a single event or just one thing I read. This one – like my first memo 24 years ago – grew out of the juxtaposition of two observations. I'll introduce one here and the other on page seven. Contrary to my wife Nancy's observation that my memos are "all the same," the subject here is one I've rarely touched on.

The Role of Luck

The first inspiration for this memo came in early November, when I picked up a copy of the *Four Seasons Magazine* in my hotel room in Riyadh, Saudi Arabia. I happened to turn to an article entitled "In Defence of Luck" by Ed Smith. It's been in my Oaktree bag ever since. In his two opening paragraphs, Smith presents a thesis for dismantling:

"Success is never accidental," Twitter founder Jack Dorsey recently tweeted. No accidents, just planning; no luck, only strategy; no randomness, just perfect logic.

It is a tempting executive summary for a seductive speech or article. If there are no accidents, then winners are seen in an even better light. Denying the existence of luck appeals to a fundamental human urge: to understand, and ultimately control, everything in our path. Hence the popularity of the statement "You make your own luck."

That's all it took to get my juices flowing. I – along with Smith – believe a great many things contribute to success. Some are our own doing, while many others are beyond our control. There's no doubt that hard work, planning and persistence are essential for repeated success. These are among the contributors that Twitter's Dorsey is talking about. But even the hardest workers and best decision makers among us will fail to succeed consistently without luck.

What are the components of luck? They range from accidents of birth and genetics, to chance meetings and fortuitous choices, and even to perhaps-random but certainly unforeseeable events that cause decisions to turn out right.

In discussing the existence and importance of luck, Smith cites the popular book *Outliers* by Malcolm Gladwell:

Attacking luck has never been more fashionable. No matter how flimsy the science behind the theory, popularized by author Malcolm Gladwell, that success must follow from 10,000 hours of dedicated practice, it has hardened into folklore.

Outliers is best known for Gladwell's observation that it's this magic number of hours of practice that makes the difference for those who are most successful. But that's only part of Gladwell's message, and people who think his book is all about hard work and practice miss the point. Having set out the "10,000-hours" thesis, Gladwell largely stops talking about it and turns to spend much more time on something he calls "demographic luck." This is actually the antithesis of an insistence that hours of effort suffice.

Demographic Luck

Gladwell's term for this key ingredient in success has a simpler everyday label: "being born at the right time and the right place." Gladwell's examples are compelling:

- By the time the first hockey tryouts take place for all the little Canadian boys born in a given calendar year, those born in January will be eleven months older – and thus much bigger and stronger and more coordinated – than those born in December. They're likely to be put on better teams, receive better coaching, and spend more time on the ice. They're more likely to get 10,000 hours of practice and – all other things equal – to have their skills honed and showcased.
- When I went to college in the mid-sixties, we inputted computer projects via punch cards; they ran overnight; and we went back for our results the next morning. But going to a private high school a few years later enabled Bill Gates to enter his work via a time-sharing terminal connected directly to a central computer, and to see the results in real time. Thus he could perform hundreds of iterations a week, not seven, and develop his skills and his ideas much faster. In addition, the University of Washington was a short bus ride from his home, and his family's contacts enabled him to use its computer lab.
- When Joe Flom and his Jewish cohorts graduated from law school in the 1930s, there were no jobs for them with prestigious Wall Street law firms. They formed their own firm, Skadden, Arps, Slate, Meagher and Flom, but their work was largely confined to matters the "white shoe" firms rejected as unseemly and disreputable. Thus when proxy fights and hostile takeovers became commonplace in the 1970s and '80s, Joe Flom had superior experience and became a leader in advising on them, earning multi-million dollar fees.

It seems like more than a coincidence that not only was Bill Gates born in 1955, but his Microsoft co-founder Paul Allen was born in 1953; Sun Microsystems founders Bill Joy and Scott McNealy were born in 1954; Steve Jobs and Eric Schmidt were born in 1955; and Steve Ballmer was born in 1956. Ten years earlier and there would have been no remote computer terminals for them to work at in high school and college; ten years later and the kids born before them would have beat them to the "new, new thing."

Likewise, the greatest pioneers of the M&A bar were born at the right time to benefit from the upsurge in corporate activities that the legal establishment had frowned upon: Joe Flom in 1923 and all four founders of Wachtell, Lipton, Rosen and Katz in 1930-31.

During the holidays, I enjoyed spending time with three legends of the pop music business: producer David Geffen, entertainment attorney Allen Grubman, and Robbie Robertson, leader of the group "The Band." I was struck by the fact that they were all born in the same year: 1943. I came along three years later, and I remember my parents picking me up from summer camp in 1956 and telling me about a new singing sensation, Elvis Presley, and a new kind of music called rock and roll. The three men listed above were born at the right time to become leaders of the newly minted rock and roll industry. It's a good thing they weren't born a few decades later, since cheap downloads and file sharing have now decimated the profitability of the record business.

The bottom line is simple: it's great to be in the vanguard of a new development. Talent and hard work are essential, but there's nothing like getting there early and being pushed ahead by the powerful trends in demographics and taste that follow.

Perhaps the ultimate description of demographic luck comes from Warren Buffett:

I've had it so good in this world, you know. The odds were fifty-to-one against me being born in the United States in 1930. I won the lottery the day I emerged from the womb by being in the United States instead of in some other country where my chances would have been way different.

Imagine there are two identical twins in the womb, both equally bright and energetic. And the genie says to them, "One of you is going to be born in the United States, and one of you is going to be born in Bangladesh. And if you wind up in Bangladesh, you will pay no taxes. What percentage of your income would you bid to be the one that is born in the United States?" It says something about the fact that society has something to do with your fate and not just your innate qualities. The people who say, "I did it all myself," and think of themselves as Horatio Alger – believe me, they'd bid more to be in the United States than in Bangladesh. That's the Ovarian Lottery. (*The Snowball*, Alice Schroeder)

Buffett is insightful enough to realize – and secure enough to admit – that he isn't solely responsible for his success. What if he'd been born in Bangladesh instead of the U.S.? Or a woman rather than a man in 1930, having much fewer opportunities? Or in 1830 (when there would be no hedge fund industry for a century) or 2014 (when there are smart people crawling all over it)? Or to different parents? Or if he'd missed out on studying under Ben Graham at Columbia? Or if he hadn't partnered with Charlie Munger?

I'm impressed when people credit others – as well as luck – for the essential part they played in their accomplishments. And I agree 100% with the following sentiment from Smith's article:

Michael Young, the sociologist who coined the term "meritocracy," described the danger of thinking that success must be deserved just because it has happened: "If meritocrats believe, as more and more of them are encouraged to, that their advancement comes from their own merits . . . **they can be insufferably smug.**" (Emphasis added)

Did You Do It All Yourself?

Buffett's mention of "people who say, 'I did it all myself'" reminds me of one of President Obama's reelection campaign speeches, which included a comment that became a lightning rod: "If you've got a business – you didn't build that. Somebody else made that happen."

His remark serves quite poorly when taken on its own. It suggests he thinks that there's no such thing as individual success, only group accomplishments. It denies the efficacy of hard work and grit. In short, it reflects a very un-American view of success.

It's hard to be sure that every sentence we speak or write can stand on its own. When taken in context, Obama's statement makes more sense:

If you were successful, somebody along the line gave you some help. There was a great teacher somewhere in your life. Somebody helped to create this unbelievable American system that we have that allowed you to thrive. Somebody invested in roads and bridges. If you've got a business – you didn't build that. Somebody else made that happen.

Clearly Obama omitted a few key words from those two last sentences, perhaps assuming his listeners would carry them over from those that went before. The addition of just four words (italicized below) would have made his message more palatable: “If you’ve got a business – you didn’t build that *alone*. Somebody else *provided assistance that* made that happen.”

In other words, you were lucky enough to get help. Weren’t we all?

Did I Do It All Myself?

You may think of me as intelligent, insightful and/or hard-working. I hope you do. But when I finished reading *Outliers*, I was moved to write down for my kids all the ways in which demographic luck contributed to my success. To illustrate my point, I want to share the list with you:

- First of all, it was great to be born in America at the very beginning of the “baby boom.” Baby boomers – the generation born right after World War II – benefitted from the return of servicemen from the war; the ending of war-time limits on consumption; and explosive subsequent growth of the population, which fired strong economic growth. I was conceived during the war and born just after it ended. You couldn’t get much closer to the front of the line.
- I was born to middle-class parents – members of the first generation in their families to be born in America – who encouraged me in education and work. They made me the first member of our family to receive a college degree.
- The timing of my birth enabled me to get a good, free education in the New York City public schools. The schools benefitted from the presence of smart women teachers to whom corporate careers weren’t available, and who liked being on the same vacation schedule as their kids.
- My high school guidance counselor said my grades weren’t good enough to get me into Wharton, but I was lucky to have had an accounting teacher whose letter of recommendation may have done the trick. Or perhaps it was the college entrance exams or SATs, standardized tests that had been introduced shortly before to counter the elite universities’ bias against public-school kids.
- Regardless of what made it possible, it’s clear that attending Wharton taught me a lot, exposed me to finance (previously I had planned on a career in accounting) and burnished my resume. Would my career, and thus my life, have been the same if I hadn’t gotten into Wharton and instead had attended my second-choice school, a large state university?
- When I went off to college, I’d never heard of something called an MBA. But the existence of the Vietnam War provided an incentive to stay in school, and three years for law school seemed like too much, so business school it would be. Turned down by Harvard because of my lack of work experience, I instead attended the University of Chicago, whose theoretical, quantitative approach provided the perfect complement to my pragmatic Wharton undergraduate education.
- Just as I was lucky to be at the front of the line of baby boomers, my timing was fortuitous in attending Chicago. I arrived on campus in 1967, just a few years after the new Chicago approach to finance had begun to be taught. No more than a few hundred students could have beat me to the capital asset pricing model, modern portfolio theory, the efficient market hypothesis, the random walk, and the other components of today’s investment theory.

- I'm not one of those investors who started reading prospectuses at age ten. In fact, even as I approached graduation from Chicago in 1969, I was unsure of my career direction. I accepted a permanent position in investment research at First National City Bank (the predecessor of Citibank), largely because I'd had a good summer job there a year earlier. Ten years in equity analysis there, including three as director of research, provided an ideal foundation for my investment career.
- And then, when a new chief investment officer wanted to make room for his own head of research in 1978, he asked me to start up funds in convertible bonds and – in the ultimate stroke of luck – the newly created field of high yield bonds. How could anyone have been better positioned to participate in the financial developments of the last 35 years?
- And of course, I was at my luckiest when I teamed up with my wonderful partners – Bruce Karsh, Sheldon Stone, Larry Keele and Richard Masson – between 1983 and 1988. Bruce had the idea to organize a fund to invest in “distressed debt” at TCW, the first one from a mainstream financial institution. And then the five of us left to start Oaktree in 1995. The rest, as they say, is history.

You make your own luck? Success is never accidental? Bull!! I contributed to some of the positive developments described above, but many of them were pure luck. Pull out a few of the steps on this progression, and where would I be today? Here's one more: Of all the jobs I applied for when leaving Chicago in 1969, I wanted one much more than the rest but didn't get it. A few years ago, the company's campus recruiter told me I had been chosen, but on the relevant morning the partner in charge came in hung over and failed to call me with the positive message he was supposed to deliver. **Just think: but for that bit of “bad luck” I could have spent the next 39 years at Lehman Brothers!**

I know how lucky I've been. I find it incredibly uplifting and the source of great optimism regarding the future to know and appreciate my good fortune. Rather than detract from my satisfaction over the success I've enjoyed – because of having to admit it wasn't all my own doing – this realization makes me feel fortunate to have been born when and where I was and to have benefitted from the developments that came along. I revel in my good luck.

And what about the things I may have brought to my career: perhaps intelligence, insight and a talent for writing? **Isn't having these things a form of luck?** Intelligent and innately talented people didn't do anything to earn their gifts. No one can take credit for them as “something I did” or “something that was within my control.” These things, too, are luck, and something for which we should give thanks rather than take credit.

Luck in Investing

Rather than “you make your own luck,” there's an old saying that provides a better way to put it: “luck is what happens when preparation meets opportunity.” If you prepare through study and practice, work hard and bring your talents to bear, you'll be positioned to make the most out of opportunities that arise. This way of looking at life is in line with my formulation regarding investment results: **performance is what happens when events collide with an existing portfolio.**

We arrange our lives – or, in investing, our portfolios – in expectation of what we think will happen in the future. In general, we get the desired results if future events conform to our hopes or expectations, and less-desired results if they don't.

What about people – like those of us at Oaktree – who don't consider themselves macro forecasters or market timers? Even the most devoted value investor acts on the basis of expectations: that an asset selling at x will turn out to be worth $2x$, and that one of these days everyone else will recognize its value and bid it up. And the agnostic buy-and-hold equity investor operates under the assumption that the economy will expand, companies will increase their profits, and stock prices will rise as a result.

Let's say investors reach their conclusions about current intrinsic value or future earnings growth by applying skillful analysis to accurate data and reasonable assumptions. Let's grant, in short, that their conclusions are "right" in some abstract sense. It still takes a great deal of luck for their version of future events to materialize.

Elroy Dimson of the London Business School is responsible for one of the most trenchant observations: "Risk means more things can happen than will happen." In other words, the future isn't a predetermined scenario that's sure to unfold, but rather a range of possibilities, any one of which may happen. Investors formulate opinions as to which of them will happen. Those opinions may be well-reasoned or dart throws. But even the most rigorously derived view of the future is far from sure to be right. Many other things may happen instead.

Nassim Nicholas Taleb's views, expressed in *Fooled by Randomness*, connect up with Dimson's. The world is an uncertain, even random, place. What "should happen" might be totally clear, meaning we know what the future should hold. But the things that should happen may not happen – and other things may happen instead – for any of a variety of reasons, many of them extraneous, unpredictable and even nonsensical. **Those things can be described as random: the result of luck, either good or bad.**

The point is that we assemble our portfolios, and future events determine whether our performance will be rewarded or punished. People whose expectations are borne out generally make money, and those whose aren't lose. That process sounds very fact-based, meritocratic and luck-free, and thus dependable. But that's only the case on average and in the longest-term sense.

- Sometimes, even though an investor's projections may be far too optimistic relative to what he should have expected – a.k.a. "wrong" – the investor is bailed out by unforeseeable positive developments, or even by non-fundamentally based price appreciation. Either way, the stock rises and the investor is applauded. I'd say he was "right for the wrong reason" (or "lucky").
- Alternatively, a prudent, skillful investor may formulate a reasonable view of the future, only to see the world go off the rails and his investments fail. He might be described as "wrong for the wrong reason" (or "unlucky").
- An investor may take an appropriately cautious stance – let's say toward tech stocks in 1997 or residential mortgage backed securities in 2005 – only to see an irrationally overpriced market become more so, as prices soar for years. He looks terrible, a victim of the old adage that "being too far ahead of your time is indistinguishable from being wrong."
- Further, in a special case of being wrong as to timing although perhaps not fundamentals, an investor may take a concentrated position in a laughably underpriced stock, using a huge amount of borrowed money. But before the expected appreciation can take place, a market crash brings on a margin call, and he's wiped out. As John Maynard Keynes said, "The market can remain irrational longer than you can remain solvent."
- Last year marked the passing of Joe Granville, a technical analyst whose warning in 1976 was followed by a 26% two-year decline, winning him respect and fame. But his next accurate call wouldn't come for 24 years, when he told people to sell tech stocks in 2000. Was it skill back in 1976, or a lucky call that turned out right when events went his way? Regardless, he became one of many in the investment business who get famous for having been "right once in a row."

The first thing I remember learning at Wharton in 1963 was that the correctness of a decision can't be judged from the outcome. Because of the randomness at work in the world and the unpredictability of the future, lots of bad decisions lead to good results, and lots of good decisions end in failure.

In other words, for an investor to both be right *and* make money:

- his view of what will happen in the future – and what should be done about it – has to be analytically correct *a priori*,
- the things he thinks will happen have to actually happen, and
- those things have to happen on schedule.

But in investing, it's hard to know what will happen and impossible to know *when* it will happen. Many things influence performance other than (a) investors' hard work and skill and (b) the market's dependable discounting of information about the future. Luck – randomness, or the occurrence of things beyond our knowledge and control – plays a huge part in outcomes.

Investment success isn't just a question of whether the investor put together the “right” portfolio, but also whether it encountered a beneficial environment. Thus being successful requires a significant degree of luck. No one gets it right every time. (That's why even the best investors diversify, hedge and/or limit their use of leverage.) But the skillful investor is right more often, over a long period of time, than an assumption of randomness would permit. **We say about such investors, “it can't be luck.”**

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Where Is It Easiest to Get Lucky?

The second inspiration for this memo came from a report entitled *Alpha and the Paradox of Skill* by Michael Mauboussin of Credit Suisse. In it he talks about Jim Rutt, the CEO of Network Solutions. As a young man, Rutt wanted to become a better poker player, and to that end he worked hard to learn the odds regarding each hand and how to detect “tells” in other players that give away their position.

Here's the part that attracted my attention:

At that point, an uncle pulled him aside and doled out some advice. “Jim, I wouldn't spend my time getting better,” he advised, **“I'd spend my time finding weak games.”**

Success in investing has two aspects. The first is skill, which requires you to be technically proficient. Technical skills include the ability to find mispriced securities (based on capabilities in modeling, financial statement analysis, competitive strategy analysis, and valuation all while sidestepping behavioral biases) and a good framework for portfolio construction. **The second aspect is the game in which you choose to compete.** (Emphasis added)

Mauboussin goes on to talk primarily about changes in the relative importance of luck and skill. But for me, what his words keyed first and foremost were musings about market efficiency and inefficiency. What they highlighted is that the easiest way to win at poker is by playing in easy games in which other

players make mistakes. **Likewise, the easiest way to win at investing is by sticking to inefficient markets.**

Luck and Efficiency

Here's my take on the efficient market hypothesis: Thousands of intelligent, computer-literate, objective, unemotional, highly motivated and hard-working investors spend a great deal of time searching for information about assets and analyzing what it means for their value. For this reason, all available information is incorporated instantaneously in market prices. This causes the market price of every asset to accurately reflect its intrinsic value, such that an investor in the asset will enjoy a risk-adjusted return that is fair relative to the return on all other assets: no more and no less. Thus there are no "inefficiencies," or instances where assets are priced incorrectly so as to provide an "excess return" or a "free lunch." For this reason, no individuals are able to demonstrate superior investment skill ("alpha"). Even if some people were smart enough to take advantage of pricing errors, the market doesn't present errors for them to take advantage of. As a result, nobody can beat the market.

I have one main disagreement with the theory as presented above. Whereas the academics say in an efficient market the price of each asset **accurately reflects** its intrinsic value, I say the price set by the consensus **does the best job of estimating** the asset's intrinsic value. In other words, the academics say market prices are right, while I say they may be wrong but can't consistently be improved upon (and the errors taken advantage of) by any individual. A market may not be efficient in the sense that prices are "right," but it can be efficient in that it swiftly incorporates new information. The resulting prices may not be equal to the value, but they reflect everyone's best collective thinking at a point in time. **The result is the same: no one can beat the market.**

I think of the test for market efficiency as being twofold: if markets are efficient, (a) one market's risk-adjusted return can't be better or worse than any other market and (b) no investor in the market can outperform the rest in risk-adjusted terms. **In other words, there can't be opportunities for outperformance . . . either through skill or luck. In an efficient market – as with a Swiss watch (or, as Taleb would say, in dentistry) – luck plays no part.**

Are Markets Efficient? Is the Hypothesis Relevant?

Let me say up front that I have always considered the reasoning behind the efficient market hypothesis absolutely sound and compelling, and it has greatly influenced my thinking.

In well-followed markets, thousands of people are looking for superior investments and trying to avoid inferior ones. If they find information indicating something's a bargain, they buy it, driving up the price and eliminating the potential for an excess return. Likewise, if they find an overpriced asset, they sell it or short it, driving down the price and lifting its prospective return. **I think it makes perfect sense to expect intelligent market participants to drive out mispricings.**

The efficient market hypothesis is compelling . . . as a hypothesis. But is it relevant in the real world? (As Yogi Berra said, "In theory there is no difference between theory and practice, but in practice there is.") The answer lies in the fact that no hypothesis is any better than the assumptions on which it's premised.

I believe many markets are quite efficient. Everyone is aware of them, basically understands them, and is willing to invest in them. And in general everyone gets the same information at the same time (in fact,

it's one of the SEC's missions to make sure that's the case). I had markets like that in mind in 1978 when, on going into portfolio management, my rule was, "I'll do anything but spend the rest of my life choosing between Merck and Lilly."

But I also believe some markets are less efficient than others. Not everyone knows about them or understands them. They may be controversial, making people hesitant to invest. They may appear too risky for some. They may be hard to invest in, illiquid, or accessible only through locked-up vehicles in which some people can't or don't want to participate. Some market participants may have better information than others . . . legally. **Thus, in an inefficient market there can be mastery and/or luck, since market prices are often wrong, enabling some investors to do better than others.**

(Time for an aside: the fact that a market is inefficient doesn't mean everyone in it gets rich. It simply means there are overpricings and underpricings, to profit from or fall victim to. Thus there can be winners *and* losers. Even in an inefficient market, not everyone can be above average.)

Ultimately, there's one reason why I think no markets are perfectly efficient. Remember the assumptions underlying market efficiency: the participants have to be objective and unemotional. Regardless of the market, few investors pass that test. How many are unemotional enough to resist buying into a fast-rising bubble, or selling in a crash when the price of an asset appears to be on the way to zero?

The bottom line for me is that (a) you mustn't ignore the concept of efficiency, and at the same time, (b) you mustn't accept it as universally true. As I wrote in *What's It All About, Alpha* (July 2001):

If we entirely ignore theory, we can make big mistakes. We can fool ourselves into thinking it's possible to know more than everyone else and regularly beat heavily populated markets. . . . But swallowing theory whole can make us turn the process over to a computer and miss out on the contribution skillful individuals can make.

Rather than expect markets to routinely provide a free lunch, I think there should be a presumption that they're efficient. The burden of proof should be on anyone who thinks a market provides underpriced investments that no one else is smart enough to detect and pursue. It's safer to be skeptical of the existence of freebies than to assume unappreciated bargains are rife for the taking.

It's important to note, however, that market efficiency shouldn't be considered something that's universally applicable, but rather what Bruce Karsh has taught me to call a "rebuttable presumption." You should start out thinking it's the general rule, but its applicability can be disproved in individual situations. The possibility of inefficiency shouldn't be ignored.

In the old story on this subject, the professor of finance theory is taking a walk across the campus with one of his students. The student says, "Look professor: isn't that a \$10 bill on the ground?" The professor answers, "It can't be a \$10 bill. If it were, someone would have picked it up by now." The professor turns and walks away, and the student picks it up and has a beer.

My History with Inefficiency

As mentioned above, I was lucky in 1978 when Citibank asked me to manage a portfolio for the brokerage house Bache, which wanted to offer a high yield bond mutual fund. This was the first of many opportunities I've enjoyed for free lunches.

Thirty-five years ago, the high yield bond market was a classic example of market inefficiency.

- It was little known and little researched.
- There was little reported performance history.
- There was no centralized trading and no reported data on prices.
- Few professionals invested in them.
- Most importantly, high yield bonds were viewed as unseemly and investing in them was considered improper. I'll never forget Moody's definition of a B-rated bond: "fails to possess the characteristics of a desirable investment."
- For this reason, they were banned under most institutions' policies, which limited investment to bonds rated "A or better" or "investment grade (triple-B or better)."
- And, of course, they were known by the derogatory term "junk bonds." Like the finance professor in the story, most investors turned up their noses and walked away.

The elements listed above caused high yield bonds to be disrespected and shunned, **and thus to be underpriced and offer yields that were too high for the risk involved.** How do I know? Because (a) the yield spread offered as compensation for bearing risk has proved to be excessive, (b) the bonds have outperformed other forms of fixed income investing over the long term, and (c) Sheldon Stone has been able to compile a risk-adjusted net return above his benchmarks for the 28 years over which he's managed our portfolios. High yield bonds have provided the foundation for much of Oaktree's success and many of its subsequent initiatives.

Ten years later, in 1988, Sheldon and I agreed with Bruce Karsh that we should organize our first distressed debt fund, and Bruce hired Richard Masson to join him in the task. While the prominence of Drexel Burnham and Michael Milken had attracted attention to high yield bonds by that time, distressed debt was still little known and poorly understood. What could be more unseemly and frightening than the debt of companies that were bankrupt or that appeared overwhelmingly likely to become so? No mainstream financial institutions invested in distressed debt or offered distressed debt funds, leaving an open playing field for us. Bruce's aggregate since-inception return of 23% per year before fees (17½% after) – without the benefit of leverage – certainly suggests that inefficiencies have been present. And the fact that he has earned that return over 25 years while investing \$35 billion says it wasn't luck.

My point here is that these markets – and others that Oaktree entered over the years – have been inefficient markets. The lack of information, infrastructure, understanding and competition created many opportunities for us to find bargains, and for our clients in those markets to enjoy favorable returns with less-than-commensurate risk.

The Durability of Inefficiency

If efficiency should be the going-in presumption, so should "efficientization." That's my term for the process through which a market becomes more efficient. In short, over time the actions of diligent investors should have the effect of driving out bargains. If at first bargains exist, their holders will enjoy superior risk-adjusted returns, other investors will take note, and they'll study them and bid them up enough to eliminate the bargain element and thus the potential for further excess returns. If the inefficiency is caused by underdeveloped market infrastructure, you can expect centralized trading, price reporting, performance data and consultant focus to develop.

It requires a certain degree of malfunction for the market to allow an investor to find a bargain, buy it on the cheap and enjoy an excess return. But it takes a much greater degree of malfunction

for everyone else to fail to notice that investor's success, fail to emulate his methods, and thus allow the bargain to persist. Usually a free-lunch counter should be expected to be picked clean.

The Current State of Market Efficiency

Let's compare the current environment for efficiency with that of the past.

- Data on all forms of investing is freely available in vast quantities.
- Every investor has extensive computing power. In contrast, there were essentially no PCs or even four-function calculators before 1970, and no laptops before 1980.
- "Hedge fund," "alternative investing," "distressed debt," "high yield bond," "private equity," "mortgage backed security" and "emerging market" are all household words today. Thirty years ago they were non-existent, little known or poorly understood. Today, as I say about the impact of the browsers on our mobile phones, "everyone knows everything."
- Nowadays few people make moral judgments about investments. There aren't many instances of investors turning down an investment just because it's controversial or unseemly. In contrast, most will do anything to make a buck.
- There are about 8,000 hedge funds in the world, many of which have wide-open charters and pride themselves on being infinitely flexible.

It's hard to prove efficiency or inefficiency. Among other reasons, the academics say it takes many decades of data to reach a conclusion with "statistical significance," but by the time the requisite number of years have passed, the environment is likely to have been altered. Regardless, I think we must look at the changes listed above and accept that the conditions of today are less propitious for inefficiency than those of the past. **In short, it makes sense to accept that most games are no longer as easy as they used to be, and that as a result free lunches are scarcer. Thus, in general, I think it will be harder to earn superior risk-adjusted returns in the future, and the margin of superiority will be smaller.**

People often ask me about the inefficient markets of tomorrow. Think about it: that's an oxymoron. It's like asking, "What is there that hasn't been discovered yet?" **The markets are greatly changed from 25, 35 or 45 years ago. The bottom line today is that there's little that people don't know about, understand and embrace.**

How, then, do I expect to find inefficiency? My answer is that while few markets demonstrate great **structural inefficiency** today, many exhibit a great deal of **cyclical inefficiency** from time to time. Just five years ago, there were lots of things people wouldn't touch with a ten-foot pole, and as a result they offered absurdly high returns. Most of those opportunities are gone today, but I'm sure they'll be back the next time investors turn tail and run.

Markets will be permanently efficient when investors are permanently objective and unemotional. In other words, never. **Unless that unlikely day comes, skill and luck will both continue to play very important roles.**

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Performance Disclosures

The performance of Oaktree's U.S. High Yield Bond composite is for the time period January 1, 1986 through November 30, 2013. During this period, the since inception cumulative and annualized returns have exceeded the primary benchmark, Citigroup High Yield Cash-Pay Index through June 30, 2002 and Citigroup High Yield Cash-Pay Capped Index thereafter. While the since inception cumulative and annualized returns have exceeded the strategy's primary benchmark, there are certain years in which the annual return did not.

The aggregate performance of Oaktree's Distressed Debt Funds presented herein represents dollar-weighted internal rates of return ("IRR") on an absolute basis for the time period October 15, 1988 through September 30, 2013.

Prior to the formation of Oaktree in the second quarter of 1995, this record includes performance which the U.S. High Yield Bond and Distressed Debt teams achieved at Trust Company of the West.

Legal Information and Disclosures (continued)

Benchmark Disclosures

Benchmark returns are presented before fees and expenses.

Oaktree U.S. High Yield Bond Strategy's primary benchmark, Citigroup High Yield Cash-Pay Capped Index: The Citigroup indices generally acquire only those bonds that have a non-investment grade rating by Moody's and S&P. The Citigroup indices include only cash-pay bonds. Prior to 1991, the Citigroup index was known as the Citigroup High Yield Index. The Citigroup Cash-Pay Capped Index is represented by the High Yield Cash-Pay Index beginning January 1, 1991 through June 30, 2002 and the High Yield Cash-Pay Capped Index thereafter, which limits the aggregate par per issuer to \$5 billion. During 1998, the returns are that of the North American subset of the Citigroup Cash-Pay Index. Source: ©2013 Citigroup Index LLC. All rights reserved

Oaktree's Distressed Debt Funds: Oaktree is not aware of any benchmarks that, in Oaktree's opinion, provide a basis for measuring the performance of the Distressed Debt Funds, particularly in light of the managers' investment philosophy, strategy and implementation.