Memo to: Oaktree Clients and Friends

From: Howard Marks

Re: Genius Isn't Enough (and Other Lessons from Long-Term Capital Management)

On September 24, The Wall Street Journal carried an excellent front-page article regarding the inability of the "crack team" of economic policy makers led by Messrs. Rubin and Summers to halt the slide of the emerging markets' economies and currencies. Heading the column was a quotation from David Halberstam's account of the U.S. involvement in Vietnam, The Best and The Brightest:

> If there was ever anything that bound men ... together, it was the belief that sheer intelligence and rationality could answer and solve everything.

Across the page -- just a few columns away -- was another excellent article, this time on the subject of Long-Term Capital Management. I think the Halberstam quotation is just as relevant to this one.

The saga of Long-Term Capital is well known by now. My purpose here is not to discuss the facts, although I'll do so briefly, but rather the lessons to be learned. Long-Term was the creation of former Salomon Brothers vice chairman John Meriwether, along with several other well-respected ex-Salomon Partners, a former vice chairman of the Federal Reserve, and a pair of Nobel prize winners. It was formed to engage in bond arbitrage, the systematic exploitation of bond mispricings. By purchasing undervalued bonds and selling short overvalued bonds affected by similar factors, gains would be earned consistently and without exposure to market risk. The intellect and accomplishments of Long-Term's managers, and its strong annual returns, compelled investors to invest and freed them from feeling they had to understand exactly what the fund did. The fund's approach may not have been fully delineated to investors, its portfolio was never disclosed, and the managers' actions were not even reported after the fact; 40% annual returns were enough to keep investors satisfied.

You've probably heard us say that bond investing is a game of inches. So then how was Long-Term able to earn returns of 40% or more most years? The answer was leverage: they borrowed enough money to buy bonds worth many times their equity. It is now known that Long-Term's general partners' cash equity was increased through borrowings to roughly $1.5 billion and paired with $3.1 billion of limited partners' capital. This $4.6 billion of equity was somehow sufficient to enable Long-Term to hold investments totaling about $150 billion and long and short positions in derivatives believed to have had an aggregate "notional value" of $1.25 trillion!

When your investments so greatly exceed your equity, it doesn't take a big drop in security prices to wipe out that equity. Between August 1 and late September, price declines on all bonds other than Treasurys, appreciation on Treasury bonds (which Long-Term had shorted to offset its exposure to interest rates on "long" positions), and declines on equities (it had invested heavily in takeover stocks) were sufficient to erase 90% of Long-Term's equity. Further, if margin calls had caused its vast positions to be dumped on the world's unsteady markets, the proceeds might have been less than the amounts borrowed, causing write-offs at the banks and brokers that had provided Long-Term's credit and perhaps destabilizing them. Incredibly, articles about Long-Term describe its possible forced liquidation with phrases like "threat to the stability of the world financial system ... " (The Wall Street Journal, September 29). These conditions gave rise to the restructuring and additional investment agreed to by 14 financial institutions. That's the background; now for the lessons.

The techniques employed at Long-Term have been variously described as "rocket science" or "black box." Computers were used to scan thousands of securities to detect instances where historic relationships had been violated and profit could be earned on the return to the norm; these are referred to as "convergence trades." Assumedly, Long-Term used models to assess the probability of history reasserting itself and the risk to the overall portfolio of individual relationships going the wrong way. Thus would they determine the amount of risk and leverage that could safely be taken on.

In his wonderful book, Against the Gods, Peter Bernstein shows how development of the study of probability made possible both informed gambling and informed investing (along with other forms of decision making concerning the future). But the products of this pursuit remain mere probabilities, or reasonable expectations. Likely events sometimes fail to occur, and unlikely events sometimes do. Or, as my friend Bruce Newberg says when I get the one improbable roll of the dice needed to beat him in backgammon, "there can be a big difference between probability and outcome." If you are conscious of the difference between a likely outcome and a certain one, you may not want to bet the ranch.

The same is true in the world of investments; put simply, relationships that are supposed to hold sometimes fail to do so. This may happen because markets and systems don't work (in the Crash of 1987, portfolio insurers couldn't get their stop-loss sales off), because external events aren't fully anticipated (inverse floaters tanked in 1994 because interest rates rose at annual rates of 600 or 700 basis points that had been considered impossible), or simply because of the unreliability of the human participants (scared people often fail to step forward with cash at the times that matter most). A relationship's failure to hold often comes just when faith in it has reached an excessive level and huge sums have been bet on it. **For whatever reason, we have seen many instances when probabilistic models turned out not to have made sufficient allowance for an "improbable disaster."**

As Long-Term's Meriwether wrote in his September 2 letter to investors, "the Fund added to its positions in anticipation of convergence, yet ... the trades diverged dramatically." In other words, sometimes things that are cheap just get cheaper and things that are dear get dearer.

For free markets to operate at equilibrium, there must be healthy tension between two motivating factors: fear and greed. If a participant feels both, greed will push him to take chances but fear will put limits on the risk he assumes. However, the two are not always in balance -- one or the other is often in the ascendancy. For the last few years, too little fear has been present, and greed and risk-taking have dominated. Long-Term's managers' brainpower may have let them consider their process foolproof, so that they felt too little fear and took on too much risk. In every era, one prominent participant becomes emblematic, and Long-Term is likely to be known for a long time as the "poster boy" of the 1990s.

I think investors are always looking for “the silver bullet.” They seek a course of action that will lead to large profits without risk -- and thus they pursued Nifty-Fifty investing in the 1970s, portfolio insurance in the '80s and market-neutral strategies in the '90s. Often, they align themselves with "geniuses" who they hope will make it easy for them -- be it Joe Granville, Elaine Garzarelli, David Askin or John Meriwether.

But the silver bullet doesn't exist. No strategy can produce high rates of return without some risk. And nobody has all of the answers; we’re all just human. **Brilliance, like pride, often goes before the fall**. Not only is it insufficient to enable those possessing it to control the future, but awe of it can cause people to follow without asking the questions they should and without reserving enough for the rainy day that inevitably comes. This is probably the greatest lesson of Long-Term Capital Management. There are others, which I'll review below.

1) As I've written before, **"volatility + leverage = dynamite."** The main cause of Long--Term's collapse probably wasn't its security selection, or the declines in its markets, but rather its leverage. On average, its positions may have declined just a few percent. But when your assets exceed 25 times your equity, even a 4% price decline is enough to wipe you out.

Nowadays, most people use the word "leverage" interchangeably with "debt." But it's better understood in the sense I first learned: the extent to which a change in the top line is magnified by the time it reaches the bottom line. That's why the British call it "gearing." In Las Vegas they say “the more you bet, the more you win when you win.” They never add "… and the more you lose when you lose.” Leverage is just a way to let you bet more than your capital, and it exposes you to more of the good and more of the bad. Leverage can truly be dynamite.

None of Oaktree's portfolios use leverage to invest more than our capital (although our Emerging Markets Fund will be able to do so to a limited extent). We have reviewed several opportunities for leverage, but in the risk-tolerant climate prevailing until recently, we didn't find base returns worth leveraging up. For example, despite repeatedly being invited to do so over the last five years, we declined to organize CBOs (leveraged high yield bond portfolios). This followed from our conviction that **leverage should never be used in an attempt to turn low spreads into wide ones, only to take advantage of already-wide spreads**. The managers of Long-Term used enormous leverage in an attempt to profit hugely from minute spreads, and it eventually did them in.

2) **Hedge funds offer no magic per se**. As we described in our April piece on alternative investments, hedge funds carry only two common threads: private partnership status and a fee mechanism through which general partners share in net gains. The hedge fund investor's birthright certainly does not include either high returns or low risk.

But the hedge fund structure can have ramifications which investors (such as Long-Term's) seem to recognize only after problems arise. Our memo entitled "Risk In Today's Markets" (February 17, 1994) asked the following about 'til-then successful hedge funds:

> With the average stock or bond returning 10-15% last year, how did some hedge funds make 70% or more? It was through bold and heavily-leveraged plays ...What would have happened if the managers' calculations had proved wrong? ... Do the hedge fund aficionados know how much risk they are taking? For how long are they tying up their money? How much do they know about the strategies being employed?

We never hope that our warnings will turn out to be needed, but we usually feel it is inevitable. The case of Long-Term demonstrates that hedge funds represent no panacea and often hold significant drawbacks. The c1osed-end structure should be entered into only after the underlying strategy has been reviewed in depth and confidence in the managers has been fully justified.

3) **"If it seems too good to be true, it probably is."** This old saw goes out of style from time to time, but it makes a comeback each time a get-rich-quick scheme is exposed. Many "riskless" arbitrage, hedge and market-neutral strategies have turned out to involve more risk than was let on.

When I was a kid, I saw in a 1930s movie that the Rothschilds built their fortune because their exclusive use of carrier pigeons allowed them to simultaneously buy a currency at one rate in London and sell it at a different rate in Paris. That's pure arbitrage: trading the same asset at different prices at the same time.

But as soon as you deal in different assets that have less than a 100% probability of moving in tandem, you introduce "basis risk," or the risk that the assets being arbitraged won't go in the anticipated directions. That's what killed Long-Term; their bonds' yields diverged when they were supposed to converge. Historic relationships proved to be less dependable than had been thought.

4) **"It's always something."** That's what Roseanne Rosanadana used to say on Saturday Night Live, and it's very true -- eventually, something always goes awry. Any course of action which depends on everything going right is unsafe, but such an expectation has to have been behind Long-Term's 25-plus times leverage. Warren Buffet, with his insistence on "margin for error," would never make such a bet (although he was willing in the hours just before the restructuring to join Goldman Sachs and AIG in a low-ball bid of $250 million for Long-Term at a time when its net worth is thought to have been $600 million).

In “Are You an Investor or a Speculator” (September 3, 1997), we wrote:

> What could cause a market decline? A drop in investor confidence -- perhaps the commodity that's most freely available today -- would likely be the key, but the reason is hard to foresee. **“We're not expecting any surprises,”** people say, and that has become our new favorite oxymoron. Surprises are never expected -- by definition -- and yet they're what move the market….The next surprise could be geo-political (oil embargo, war in Korea), economic (tight money, slowing profit growth), or internal to the market (competition from bonds at higher interest rates, discovery of a fraud), but it's most likely to be something that no one has anticipated -- including us.

When I was a kid, my dad used to joke about the habitual gambler who finally heard about a race with only one horse in it. He bet the rent money on it, but he lost when the horse jumped over the fence and ran away. **There is no sure thing**, only better and worse bets, and anyone who invests without expecting something to go wrong is playing the most dangerous game around.

5) **“Never confuse brains with a bull market.”** When the 1990s began, the economy and the stock market were at very low levels. As a result, success came easily, risk-bearing paid off and the highest returns often went to those who took the most risk. They and their strategies were accepted as the best.

In my opinion, (a) the three ingredients behind success are timing, aggressiveness and skill, and (b) if you have enough aggressiveness at the right time, you don't need that much skill. But those who have attained their success primarily through well-timed aggressiveness can't be depended on to repeat it -- especially in tough times. When an investment track record is considered, it's essential that the relative roles of these three factors be assessed.

6) **Change in the availability of credit is a powerful force**, and the longer I'm in the investment business, the more I respect the role of the credit cycle. For example, although we hope we added value through our implementation, our 1990 distressed debt funds earned their 50% gross returns largely because (a) fear and the government's actions closed the credit window, (b) the LBOs of the 1980s couldn't refinance their debt and defaulted in droves, and (c) that debt could therefore be bought for a song. A significant recession contributed to the conflagration, but whereas a generous capital market would have let companies finance their way out of trouble (as they did from 1993 through mid-1998), a tight one brought them down in 1990-92.

The product of lenders is money, and it's their job to move it off the shelves. Because money is the ultimate undifferentiable commodity, lenders can compete for market share in boom times only by taking on bigger risks than the next guy, charging less interest or accepting looser terms. All of these tactics turn on a dime when things get tough, inflicting great pain and causing lending to contract.

In times of easy money, companies prosper that should not, just as deserving companies fail when money's tight. Easy money was key in Long-Term's early success and later collapse. The bankers and brokers let the General Partners lever up their equity capital and take on far out-sized positions. They loaned amounts of money that were unsafe both for Long-Term Capital and for themselves. I assume that, seduced by Long-Term's brilliance, they did so without knowing how much it had borrowed in total or what its portfolio looked like.

The violent swings of the credit cycle -- usually far more volatile than the underlying economy -- are behind many of the extreme occurrences in the business and investment world. Excessive lending contributed greatly to booms preceding the collapses in real estate in 1989-92 and emerging markets in 1997-98, just as tight lending added to the bankruptcies of 1990-92. Look around the next time there's a crisis; you'll probably find a lender.

7) **"How Quickly They Forget."** While it would be great (and very profitable) to be able to see the future, the truth is that few of us can. But you don't have to be prescient to be able to invest intelligently while avoiding the most dangerous hazards. Knowledge of the past will get you a good part of the way there.

The relevance of the lessons of Long-Term has nothing to do with knowledge of the future. Leverage is always dangerous. Something always goes wrong eventually. Those who see high returns often mistake risk bearing for genius. The swings of the credit cycle can overwhelm all other factors. Every boom carries within itself the seeds of decline (just as every bust lays the groundwork for recovery). Forget forecasting -- you'll be well ahead if you simply bear in mind the lessons of the past.

We've all heard George Santayana's famous observation that "Those who cannot remember the past are condemned to repeat it." And yet, how many of today's mistakes are just replays of the past? Thirty years ago, the stocks of "the best companies" reached P/Es of fifty and more from which they eventually collapsed. Ten years ago, highly leveraged investments were financed with bridge loans which investment bankers were stuck with when the financing window closed. Five years ago, banks got into big trouble with derivatives. All of these are causing problems again in 1998 for those who forgot history or rationalized its irrelevance in the "new paradigm."

I've previously recommended John Kenneth Galbraith's excellent little book, A Short History of Financial Euphoria. Although I don't appreciate its swipes at high yield bonds, I consider it must reading for anyone who wants to think and invest against the grain. Galbraith says:

> Contributing to ... euphoria are two further factors little noted in our time or in past times. The first is **the extreme brevity of the financial memory.** In consequence, financial disaster is quickly forgotten. In further consequence, when the same or closely similar circumstances occur again, sometimes in only a few years, they are hailed by a new, often youthful, and always supremely self-confident generation as a brilliantly innovative discovery in the financial and larger economic world. There can be few fields of human endeavor in

> which history counts for so little as in the world of finance. Past experience, to the extent that it is part of memory at all, is dismissed as the primitive refuge of those who do not have the insight to appreciate the incredible wonders of the present. [Emphasis added]

Amen. People who acknowledge no limits on their ability to know and control the future have no need to study history. For the rest of us, it's one of the best tools we've got.

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Inability to remember that you can't know what the future holds is a common failing and the cause of some of the biggest financial difficulties. It's one of the greatest contributors to hubris -- the over-estimation of what you can know and do.

General Motors's Charles Froland says the people of Long- Term Credit developed "too much conviction." Henry Kaufman was recently quoted on the subject as saying "there are two kinds of people who lose money: those who know nothing and those who know everything." Dirty Harry weighed in, saying "a man has to know his limitations." I actually think my mother had it best: "He who knows not and knows not he knows not is a fool; shun him."

Oaktree is built on the following axioms (among many others):

-- We can't know everything about the future, and the “bigger picture” the question, the less we can know the answer.

-- We must always expect that something will go wrong and build in margin for error.

-- When the market embodies too much greed, we must be conscious of the risk that's present. When it swings too far toward fear, we should take advantage of the bargains that result.

-- We must constantly remind ourselves of our limitations and dedicate ourselves to the avoidance of hubris. If our methodologies are valid and our people are talented, hubris is one of the few things that could make us fail.

The applicability of the lessons of Long-Term is not limited to that company alone. Instead, they illustrate several of the universal truths in investing. You won't see them forgotten here.

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