FINANCIAL SENSE ONLINE

Newshour's Ask The Expert

TRANSCRIPTION OF INTERVIEW

November 27, 2000

Roger Lowenstein, Author and Columnist

"When Genius Failed: The Rise and Fall of Long-Term Capital Management"

Editor's Note: We have edited the interview in this transcription for clarity and readability. The original real audio interview may be heard on our Ask The Expert page.

JIM PUPLAVA: Joining me on the program today is Roger Lowenstein. He is the author of the best selling book *Buffett: The Making of an American Capitalist.* He also reported for *The Wall Street Journal* for more than a decade and wrote the *Journal's* stock market column "Heard on the Street" from 1989 to 1991. He also wrote the "Intrinsic Value" column for the *Journal* from 1995 to 1997. He now writes a column for *Smart Money* magazine and has written for *The New York Times* and *The New Republic*. We're going to talk about his new book, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*. Mr. Lowenstein, welcome to the program.

ROGER LOWENSTEIN: Jim, it's a pleasure to be on the show.

JIM: Before we get started on your book, I wonder if we might talk about the cast of characters of *When Genius Failed*. We have a gentleman by the name of Meriwether, a Federal Reserve Governor, and two Nobel Laureates. Tell us about these people.

ROGER: The fund was started by a guy named John Meriwether who was a steam trader, a bond trader at Salomon Brothers for many years, and then went off on his own to start this hedge fund, Long-Term Capital Management. What he did was something that no one had ever done before. He surrounded himself, not with other professional traders, but with people who had gotten their start in academia, with people who had learned from models and designed models on how to trade. Two of them were pretty famous academics. One was Myron Schoels and the other was Bob Merton. They were people who had helped invent the formula for pricing in stock options and they would go on to win a Nobel Prize in economics. The other gentleman was David Mullins, who was Alan Greenspan's number two at the Fed before he hooked up with Meriwether at Long-Term Capital. So this was really a fund like no other. You not only had the most famous bond trader on Wall Street, you had two Nobel Prize winners and Alan Greenspan's number two. Not bad.

JIM: This almost sounded like the A-Team or the Dream Team.

ROGER: It was the Dream Team. And if it hadn't been a Dream Team, it wouldn't have happened because so much of what went wrong with Long-Term was a function of people having so much confidence in them. The partners themselves, the investors who gave them the money, and most of all, the Wall Street investment banks who gave them the financing. If you or I walked in and asked to borrow 100 billion dollars, we couldn't do it. We're not the Dream Team.

JIM: This was an unusual fund. They had 100 investors, they borrowed over 100 billion dollars, and they controlled over 1 trillion dollars in derivative contracts. I mean, when these guys went down, the financial

system was in serious trouble.

ROGER: That's right. It's almost like the political system seems like today. It seems to be going along fine and then all of a sudden, we have an election and there's a butterfly ballot. What we thought was a smooth system is in chaos. In the summer of 1998, the financial system was a little bit like that. Everything seemed pretty hunky dory. Suddenly there was trouble in various Asian countries followed by the real "butterfly ballot" of that year, Russia, which had a default, and suddenly bond markets just went haywire. Long-Term Capital Management, a bond trading firm, which had bet on risk factors in bond markets to go down all around the world, was suddenly dangerously exposed and on the verge of going bankrupt. As you noted, because it was so big and controlled so much in the way of assets and derivative exposure, Wall Street and even the Federal Reserve was afraid that if it went down, it would take down much of Wall Street with it. In fact, the Federal Reserve was afraid that markets would not only crash, but would cease trading and that the system would stop.

JIM: Let's talk a bit about John Meriwether and his background. He rose at Salomon as a star trader. He discovered that, if you can ride losses long enough, until they can turn around, you could get big gains by doing so. That influenced much of his thinking in terms of his investment strategy. Sort of like a calculated gamble.

ROGER: That's right. You know the old strategy of the guy at the Roulette table who says, "I'll just keep doubling up until I win." Meriwether and company could take pain like nobody else. When I say "take pain," of course, I mean stick with losses. That's okay as long as two things are true. One, you have to be sure that your strategy is right and it's going to work out in the long run. But, there's something more important than that for them and I think for all your listeners, Jim. To win in the long run, you have to first get *to* the long run, survive *to* the long run. That means you can't be too leveraged. What happened to Meriwether and company was this: because they were so leveraged and their losses accumulated so quickly, they never got to that end-day of reckoning where, hopefully for them, trades would turn around. Because in the interim, when markets went against them, they went bust.

JIM: Roger, tell us a little bit about a hedge fund. They're sort of unusual for one thing. I'd love to manage one. These guys earned fees, in their case, what was it? 2% plus 25% of the profits?

ROGER: You and me both. Yes, the typical hedge fund charges about 1% of assets and takes 20% of the profits on top of that. These fellows charged 2% of assets plus 1/4 of the outside investor's profits. The listener is going to wonder why would somebody pay them that much. The reason has to be that people think that they're worth it -- that they're that much better than the ordinary garden-variety mutual fund, which typically charges something like 1%. The hedge funds in the 1990's acquired a cache for another reason. Everybody was making, or seemed to be making, so much money in the stock market. People began to look for a way to keep invested, but to somehow stay immune should the stock market ever finally fall, as it seems to be doing this year. Hedge funds, so named because they hedge their bets, were positioned so as to not go down in sinc with markets. That was one of the big attractions of hedge funds and the reason why people like Meriwether could attract so much money and on such sweet terms to themselves.

JIM: Now, from the beginning, Meriwether planned to leverage the capital of the fund almost 20 to 30 to 1 on the money. Talk about that for a moment. Meriwether is once again featured in our top five stories today. He has not raised the money for his new hedge fund. In the Bloomberg story, they're saying he's already planning to leverage 12 - 18 to 1. I mean, that's quite a bit of leverage.

ROGER: That's right. Let's talk about the leverage in LTCM. And I'm glad you asked. 30 to 1, actually a little more, 33 to 1 was a typical figure. What that means is that for each $33 of assets that you're playing with, only one of them is yours. Or for every $100 you're playing with only $3 of them are yours. What that means is, if those $100 of assets should shrink only by 3% to $97, your $3 is wiped out. You're wiped out. The rest belongs to the banks or whoever has financed you. So, you can imagine that to play with $100 and to have the confidence that you will never go down to $97, well that's a lot of confidence, bordering on hubris. Actually, their leverage was worse, because that 33 to 1 is only the leverage that's showed on their books, only the balance sheet debt. Long-Term was also very exposed, a very big player in these newer securities, newer instruments called derivatives, which are basically just bets on which way market prices will go. Their *effective* leverage was something in the order of 50 to 60 to 1.

JIM: Let's talk about their track record. When they opened up for business -- it was a very difficult year in 1994 -- the markets were in turmoil. Their first bet out of the gates was $2 billion without using a dime of their own money.

ROGER: That's right. They went to the various Wall Street banks and they asked for financing on much sweeter terms than even the typical high-power hedge fund got. Because the lure of this fund was so great, the other banks JP Morgan and so on were willing to give it to them. Essentially, what they would do is borrow a security from somebody and then sell it. Then at the same time, they would lend the security to someone else and through a series of matched trades like that, they would be simultaneously borrowing and lending securities, but never putting down their own nickel to buy one. That way they were never putting out much in the way, sometimes anything, in the way of cash, as you or I would when we simply bought a stock or a bond. What they were betting on wasn't that bonds would go up or bonds would go down. They were betting that the *differences* between like pairs of bonds would change. Usually, they were betting that these differences would go down.

That's a fine way to make money. That's called arbitrage. And it's actually a safer way to make money than to bet on a bond outright, because, like securities generally do, they move in tandem. So if you bet on one bond and bet against another or if one goes up, the other will probably go up. You'll lose back on one what you make on the other, hopefully plus a little. They were looking just to make a little shaving -- just a little bit of a difference on each pair of bonds -- and because the hope for profit on each pair was so small, the only way to make a bigger profit was to leverage many times. And on each transaction to borrow and borrow and borrow. So instead of making a little slice, they could aim for a big slice.

JIM: Now in most firms, Roger, as I understand it, even at Salomon Brothers, you have somebody that is a risk manager that oversees the traders. He watches the bets and the positions that they're taking for the firm so that the firm doesn't get overexposed to any kind of risk. In the case of Long-Term Capital Management, these guys were taking big bets, taking big risk, but their was nobody watching them.

ROGER: That's right, Jim. That's a very good point. The partners were their own risk managers. There was no one above the level of trader at the firm. The traders traded and the traders ruled. That was sort of a basic management problem. It was as if the quarterback was also the offensive coordinator, the head coach, and the owner. When they had been at Salomon Brothers, they had occasionally run up very big bets and the old CEO, John Goodfriend, was always there to say, "Fella, that's enough on this trade. I know you're good. I know you think it looks good, but we don't have to bet the ranch on it." At LTCM, it was just the 16 of them, these partners, two of them who invented the options formula -- all of them with very esteemed records on Wall Street by then. So there was nobody really minding the store -- nobody outside the trading process -- who was minding the store or had some perspective on what they were doing.

JIM: Roger, I want to talk about one of the remarkable aspects of the 1990's and this was Wall Street's trading rooms, which were dominated by this almost mystical faith, or the Holy Grail, in this Black-Scholes Option-Pricing Formula. The volatility became the real thing that Wall Street concentrated on and if they could watch that and control it, that became the new risk parameter.

ROGER: That's a real interesting topic. Every firm on Wall Street, all the investment banks, Goldman, JP Morgan in particular, Merrill Lynch, had something called value-at-risk. Some gave it different names, but the concept was this. If you looked at what the volatility, meaning the variance or how much a security would bob up and down in a typical day, if you looked at what the volatility was of all of their investments in their portfolio, for these banks, they could figure out how much was the variance on a typical day and therefore how much they might be at risk of losing. Firms use value-at-risk on a typical day, or even on an atypical day, as a guide for how much they should have at risk. The trouble with value-at-risk (a colleague has called it "a lighthouse for the soon-to-be shipwrecked") is that it's based on the volatility yesterday.

You know, Jim, if the volatility *yesterday* told us all we needed to know *today*, we'd all be rich. It would be pretty easy. What happens in financial markets is assets tend to be tranquil until suddenly something hits and then yesterday's volatility doesn't mean anything anymore. We've seen it recently in the high tech stocks. Apple was bobbing along at $60 then all of a sudden it fell one day, I believe in the past month or so, from $62 to $28 or something like that. Nothing in the past volatility would have told you that Apple was going to fall by more than 50% in a day. That's always

true with these shocks. Otherwise, they wouldn't be shocks. If you looked at the price histories of Mexican bonds before Mexico had it's currency collapse in '94-'95 you would've figured that Mexico was safe. If you'd looked at mortgage bonds in the United States, you would've figured that they were safe until they collapsed in 1994. We're seeing it with the Internet stocks this year. Financial markets don't tell us ahead of time. They don't telegraph when the storm's going to come. But what we do know from experience is that they do come. I think that these investment banks, who rely on value-at-risk, are as eager as anyone would be for some sort of guide and some sort of security blanket. There is no security blanket. It's very hard for people to accept that the future is unknowable. So they turn to these seemingly safe formulaic guides. I think people tend to take comfort in mathematical precision, even if the math is based on yesterday and not on tomorrow.

JIM: Roger, I want to talk about the beginning of the demise of Long-Term Capital Management. In 1997 you saw the partners placing huge bets in the stock market, particularly playing both sides of Royal Dutch Shell, betting on one company and against the other company. But, their positions were so huge. I think this is one of the problems when you get into this kind of a position. When your position is that big, you almost become illiquid because you are the market.

ROGER: You do become illiquid. Royal Dutch Shell was a very interesting trade. Shell Oil Company is owned by two companies. One of them is Royal Dutch and the other is Shell. One of them is mostly Dutch and the other is mostly British. The income streams of each company are the same. They both derive from the parent oil company. So, in theory, these two oil companies should trade at about the same level. When Long-Term noticed that one of them was higher than the other, they made a sensible trade. They bought the stock of the cheaper oil company and they sold short and bet against the stock of the more expensive one. This is just a way of betting that the two prices would converge. In fact, a lot of traders had this bet on. The problem was, as you said, they have something in the order of ten times what anybody else would've had on that trade, and sometimes when prices are out of line, as we've seen in that and many other markets before they correct, they get more out of line for whatever reason. Sometimes it can be because the market in England generally gets depressed. So the English company gets more depressed relative to the Dutch company. It may have nothing to do with oil, but it happens. When markets go against you, and you're so big when you own so much of a position, and you turn around to sell the old, the question is, as the Hunt's once discovered with silver, sell to whom? There's just no one around.

JIM: Despite this, you write about the danger of derivatives in your book. Recent quarterly reports from the Comptroller of the Currency show that even our large New York banks, such as JP Morgan and Chase, now control over 39 trillion in notional value in derivatives. The Comptroller says 91% of those are OTC derivatives, which aren't as liquid. So, it's not only occurring with funds such as Long-Term Capital Management, but it's also taking place in the banking industry. Doesn't that pose some risk?

ROGER: I think it does. Derivatives are *side bets* on markets. Instead of going out and saying "I'm going to buy this bond" or "I'm going to sell this bond", I might say to you, "Why don't we agree that, if a certain bond goes up, I'll pay you x-dollars for every amount that it goes up. Or if it goes down, you pay me." What we've just done is each of us has taken an exposure in this bond. One of us *for* and one of us *against*, but neither of us have had to lay out any cash. This means that the amount of exposure we have is sort of limited only by our willingness to take a roll. If we want to add a zero to our exposure, we can. If we want to add three zeros, we can. When you have people who have the ability to take such risks, the best check on that system is disclosure. Because, if the people who invest in those banks and the people who trade with those banks can clearly see from their books that they're taking on this exposure, that's going to inhibit the risk takers. Or, if it doesn't, sooner or later we hope their stocks will trade down. Their ability to get credit and so on will diminish and the market will exact a punishment. The trouble with the derivative markets, particularly the OTC derivative markets that you referred to, is that we don't have the type of required disclosure that gives outside investors the clear idea that they have a firm's balance sheet risk. When you look at Chase, you have a pretty good idea of their assets and their liabilities or what's on their balance sheet. It's still very hard, based on what they are required to disclose, to figure out what their risks in derivatives are and I think that is a risk.

JIM: Additionally, the problem with derivatives is when they blow up. It's like a nuclear explosion. We saw that in Orange County, Banker's Trust, Barings Bank, the German Company, and Sumitomo Bank. And yet our regulators, the Fed, and Wall Street, say, "Hands off."

ROGER: Well that set has been enamored of derivatives, particularly. I shouldn't speak of this set as though it just had

one voice. It's a system of banks and bankers. But Alan Greenspan, in particular, has been enamored of derivatives. I think the reason he's been enamored of them is they do provide more flexibility in liquidity of the markets. They are a very easy way of taking on or laying off more exposure. They're seamless. It's easier than going out and buying a bond. But it's that very ease, I think, that should make us stand up and say we need some safeguards here. It's sort of like a casino where they don't charge anything. That's the kind of casino where you really want to be watching out what's going on because you know that all the high rollers are going to be attracted to that type of casino.

JIM: But isn't this also another way to bypass, let's say, margin requirements? I mean, if you and I went into Charles Schwab and we wanted to borrow money to go into the stock market, we'd have to post 50% margin. And if our account went down, they would ask us for more money. With derivatives the amount of leverage that you can take on is incredible.

ROGER: That's right. If you were to buy stock in Amazon, let's say, you can't borrow more than half. The margin requirement right now limits you to that. However, you and I could make a derivative side bet. I could bet that Amazon's going up and you could be that it's going down. So each of us is exposed to Amazon and we could put no money down on that bet, so in effect, we have total leverage on that bet. As you said, it's a way of averting or avoiding the margin requirements. For some reason the Fed, Greenspan's Fed, is not enamored of their own margin power. In fact, he testified a few years ago in Congress that the margin ought to be eliminated entirely. We've seen, even in the recent run up of tech stocks and the market, generally before the recent crash I'd guess you call it, many people were wondering. We knew that the Fed thought the market was pricey, Greenspan was using terms like "irrational exuberance," but he hesitated to use the margin lever. He could've raised the margin, which is a way of saying we're not going to allow credit to fuel speculation where it exists. He hasn't wanted to touch margin.

JIM: Let's talk about the fall of Long-Term Capital Management. In 1998 they had about $3.6 billion in capital. 40% of it belonged to the partner's themselves. As we started 1998, it looked like fair and sunny weather. All of a sudden we had the carry over from the Asian problem in 1997 and we had widening credit spreads. When the losses came to Long-Term Capital Management, they came from every direction and came swiftly. Next thing you know they were under.

ROGER: That's right. Long-Term had diversified and they put a lot of faith in their diversification. By diversification, I mean that they had bet on many different types of bonds, they had bet in many different countries, the bonds of countries around the world. They felt diversified. Perhaps in *normal* markets, they *were* diversified. But, in every market, they were betting on the riskier bond. If you looked at every bond pair they were playing, they were invested in the riskier bond and betting against the less risky one. What that meant was they were betting on the world's perception of risk to narrow, to go down, all around the world. They were betting that risk premiums would drop all around the world. And when people around the globe shuddered, that went wrong all at once.

Although they were geographically diversified, they were not *thematically* diversified. It's not an unknown occurrence. When the stock market of the United States crashed in 1987, so did Japan's. Markets sometimes react singly, but sometimes we have market contagions that spread from one to the next. Their bets were thematically linked. They had a value-at-risk program. We spoke about that earlier in the show. That program told them that based on the historic volatilities of their assets, they'd be unlikely to lose more than $35 or 40 million a day. When the trouble hit, they lost more than $500 million on a single day. In fact, they lost that much on two separate single days. It was just catastrophic.

JIM: Roger, we're running out of time, but what would you say is the most important lesson we all can learn from Long-Term Capital Management?

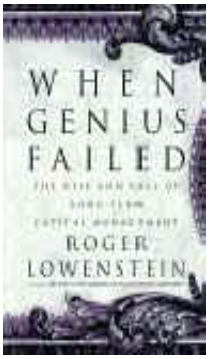
ROGER: You know, there are two lessons. And they're as good for everyday investors like you and me as they are for big hedge funds. One of them is, watch the leverage. Anytime somebody leverages 20, 30, 40 to 1, the margin for error is so small, so microscopic, you just don't want to go there. The other lesson is, we always see year in year out, some formula presented that *looking backwards* worked. Don't make the mistake of thinking that a formula that worked in the past, that it is predictive of the future if the past repeats fairly, works. Those formulas and models are all they are. Those things are in the past. You've got to weigh out the future for itself.

JIM: That's kind of ironic, as you and I are talking about this fund that failed and yet today, Bloomberg was talking about the founder of Long-Term Capital Management back in the business. I've got a line here that says, "The money manager told prospective clients that he intends to leverage or borrow between $12-$18 for every dollar of capital." So, he is continuing on with the same strategy.

ROGER: That is less leverage than before. So within his league, they are changing.

JIM: Roger, unfortunately we've run out of time. I want to tell you I'm going to include your book in my top ten for the year. I want to thank you so much for joining us on Financial Sense Newshour.

ROGER: Jim, I really enjoyed talking to you.



Roger Lowenstein, Author
When Genius Failed: The Rise and Fall of Long-Term Capital Management
Book Information FSO Expert Page

#1 of FSO's Top 5 Financial Books for 2000
#4 of FSO's Top 10 Ask The Expert Interviews for 2000

Home | Broadcast | WrapUp | Storm Watch | Perspectives | Sitemap | About Us | Contact Us

Send this site to a friend!