This review was written

by Aaron Brown. Brown

Vice President of Risk

Systems and Technology

at Citigroup in New York

and a member of GARP

Risk Review's editorial

board – also performed

a one-on-one interview

with Roger Lowenstein

"A Conversation with

Roger Lowenstein").

(See sidebar:

# Origins of the Crash:

## The Great Bubble and Its Undoing

Author: Roger Lowenstein • Publisher: Penguin Press • ISBN: 1594200033

consider myself among the best-qualified people to understand the 1998 disaster at Long-Term Capital Management. I knew many of the people there, and was employed in risk management by an institution with credit and trading relationships with LTCM. I paid close attention to LTCM's quantitative methods, and attended presentations by the principals both before and after the collapse. Yet it was not until I read When Genius Failed - one of the books Roger Lowenstein authored prior to Origins of the Crash - that I under-

stood what happened.

The remarkable thing is that millions of other readers, many with little financial training or prior knowledge about LTCM, found When Genius Failed as comprehensible as I did. I don't know whether Lowenstein discovered the truth and reported it compellingly, or just wrote such a convincing account that it immediately became the conventional wisdom. But either way his book is the only important account – and by far the most popular account - of what happened. That's a rare and impressive combination.

Lowenstein is a careful reporter who makes his case through carefully refined presentation of facts, not through adjectives or argument. So I

opened Origins of the Crash with high hopes. However, I also distrust after-the-fact analyses of disasters. It's painful to read pompous retellings of the recent past, with the authors airily explaining everything as if it is superior intelligence - rather than hindsight - that makes them so smart.

Some of these types of books are written by the same types of people, or even the same people, who were enthusiastic about the stock market when it was going up. Other books are authored by people who correctly predicted the last disaster - but only after inaccurately

prognosticating that same disaster on nine other occasions. In that scenario, yes, the crash confirms all their warnings. But if they cannot explain why it happened when it did, and not the previous nine times they predicted it, they haven't added much to our understanding.

People still argue over the nature and causes of the Crash of 1929, so it's unreasonable to expect a definitive analysis of the Crash of 2000 and subsequent events particularly while those events are still unfolding. Moreover, even when authors go beyond explaining to us that what happened happened, there is a tendency to overemphasize the disaster. Without risk managers, people tend to ignore risk before anything bad happens, then over-criticize afterwards. We should judge by how wellcalculated the bet was given the information at the time not whether it won or lost. Good risk calculators win in the end; lucky winners are as likely to be unlucky as lucky tomorrow

The first hint that Lowenstein's book is more thoughtful than the usual is the word "origins" in the title. Events since 2000 are described only briefly, and this book is instead concerned with how the world that emerged from the 1929 crash changed to the world that produced the inflated bull market of the 1990s. The financial reforms of the 1930s solved many of the problems that caused the 1929 crash, but by the 1970s the stock market seemed dead.

The Dow Jones Industrial Average first hit 1,000 in January 1966, but did not go above that level to stay until 1983. In the intervening time, capital seemed tied up in stagnant companies losing out in international competition, and was not available for innovation or growth. Capitalism itself seemed exhausted and - if it didn't destroy the globe first through nuclear war or environmental disaster - seemed destined to be replaced by Communism. There were a hundred historical examples of capitalist countries going communist, and none of communist countries turning capitalist.

The post-1983 era was ushered in by radical change in many areas. Tax rates were slashed. Industries, including

finance, were deregulated. The Fed got strong and the elected government got weak. Corporate raiders, junk bonds and derivatives expanded to an unprecedented degree. Innovation soared. Kids in west coast garages thoughtlessly or gleefully kicked over the largest companies in the world. Some of the least developed countries in the world beat both superpowers in wars. Entirely new branches of science were invented and immediately privatized.

## **Culture Shift**

Lowenstein carefully picks through the threads of the 1980s to reveal the ones that connect to the excesses of the 1990s. The result is surprising. For the most part, the headline problems of the 1980s either burned out or were controlled. Lowenstein shows that many of the headline problems of the 1990s were manifestations of a deeper cultural shift. The result is an original explanation of financial events that uses familiar ingredients to bake a novel cake.

This pulls the book out of the Current Events sections and places it firmly in History. To understand how cultures change – via turning a blind eye towards dishonesty and preferring greed over rationality – Lowenstein goes back to the 1920s. In self-conscious imitation of The Great Crash, John Kenneth Galbraith's well-known analysis of the 1929 stock market plunge, Lowenstein proposes a cultural transition – rather than an economic transmission vector – as the driving force behind his bubble virus.

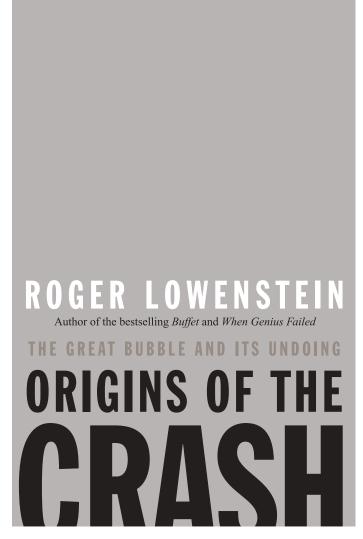
In the first 30 years after the 1929 crash, economists methodically gathered the economic data to acquit the crash of causing the Great Depression. Thus it was argued that the crash simply anticipated the Depression, and proved the foresight of the market rather than its irrationality. Galbraith's revisionist argument started from the culture of the late 1920s and demonstrated how the crash shattered its foundation. Thus the crash did cause the Great Depression, but through non-economic means. This is a heavy charge, because the Great Depression, in turn, led to the rise of brutally efficient totalitarian regimes and the horrors of World War II.

Lowenstein traces parallels between the 1920s and the 1990s, but is careful to note the differences as well. This leads to an interesting discussion of why the 2000 crash did not do as much economic damage as the 1929 Crash, or indeed of many smaller crashes.

But why was the Crash of 2000 less catastrophic? Part of the answer comes from the market reforms of the 1930s, despite their rollbacks in the 1980s. Another factor is that the 1990s economy was basically healthier and far more diverse than the economy of the 1920s. It also didn't hurt that the crash occurred in a time of relatively relaxed international relations, because counterproductive national retaliations exacerbated the problems of the 1930s.

Lowenstein is very critical of Fed Chairman Alan Greenspan in the book, but another person might credit that he at least avoided the perversity of the Depression-era Fed. It is precisely this willingness to discuss differences, as well as similarities, that makes this book valuable.

For all this careful reporting and thoughtful analysis, Lowenstein has not done for the Crash of 2000 what he did for Long-Term Capital Management. Still, this is the first account of these events that is both thoughtful and comprehensive. A few books qualify as one or the other, but most are neither.



Other voices will be heard before anyone writes the definitive account of the Crash of 2000. Events are still unfolding, and new information comes to light daily about the past. Lowenstein has staked out some solid ground, at once iconoclastic and conservative, and fortified it well. He has set a high standard for anyone who disagrees. But, at least for me, he did not shake my basic faith that the reactionism of the past two years has been excessive, and that the future will look more like the dreams of the late 1990s than the more familiar visions that comfort people today.

## A Conversation with Roger Lowenstein

**AB:** The factors your book blames for the crash – excessive and badly structured executive compensation, irrational investor exuberance, misleading accounting and inattentive or conflicted gatekeepers – have been widely criticized for a long time. Is there anything we learned in the period covered by your book that your father¹ didn't know 20 years ago?

**RL:** I think so. All the factors you mentioned were present, to some degree, 20 years ago. That's why the emphasis in my book isn't that a bunch of individual things happened, it's that a culture went bad. 20 years ago executive compensation wasn't awful. Everyone always knew that the boss made too much, but it wasn't a big deal. The uproar first began with Pat Buchanan criticizing the CEOs (President) Bush took to Japan<sup>2</sup>. (The) 20 CEOs (that traveled with Bush) each made a million or two each, okay.

(Separately), the problem of auditors doubling as consultants developed to a degree it never had before. One of the most deleterious aspects of the culture was people starting looking the other way and ignoring conflicts.

Yes, investors (had) been irrational and exuberant before (the crash of 2000). Every speculation seem(ed) unique, junk bonds were nuts, biotech got out of hand. But the 1990s speculation, and I make this comparison in the book, is closer to the 1920s. The last time there was systemic and cultural breakdown was the 1920s. 20 years ago there was not the degree of corruption in mainstream corporate America (that) we saw after the 2000 crash.

AB: I was in the finance PhD program at the University of Chicago in 1981 and was taught firmly that a diversified portfolio of common stock was the best long-term investment, despite the fact that stocks had been a terrible investment for 15 years. Roger Ibbotson had just come out with his first projections of investment returns, based on simple averages since 1925, and had to defend them against charges that the numbers for stocks were too high and too volatile. But he was almost exactly on the mark. Doesn't this suggest that investors should ignore accounts of booms and crashes like yours? That the medium-term past is irrelevant? If you were transported back to the early 1980s, is there any general investment advice you could give superior to "buy and hold a diversified portfolio of common stock?"

**RL:** Buy Gillete<sup>3</sup>. Gillete is trading at six times earnings and they have pretty much a monopoly on razor blades. I don't think anything is going to happen to stop men's

beards from growing anytime in the near future. In general, apply the principles of Benjamin Graham and Warren Buffet<sup>4</sup>.

**AB:** Managers have their reputations, salaries and possibly a good part of their financial wealth tied up in one company. Assume for the sake of the argument that makes them more risk averse than shareholders who own a few shares as part of a diversified portfolio. Then options align interests better. If the average manager has the proper incentive, some managers will have too much incentive. Is it possible that the horror stories in your book of manager overcompensation, obsession with short-term share price and dishonesty are just one tail of a properly-centered distribution?

**RL**: I think it's a good idea to incentivize CEOs with stock. But the problem with options is they didn't work as you described. If you want a horse to run a mile you can incentivize him with oats, but you have to put the oats a mile away. Options vested too quickly and executives exercised and sold the stock, cashing in when the stock price went up briefly. New options were granted when the stock price fell. Your own ex-boss, when the stock tanked after the analyst scandal, got a million-anda-half new options<sup>5</sup>. I have a lot of examples in the book. There are just too many examples, (and) it was just way to common to be the tail. People earned far too much for a good job, and far, far too much for a bad one.

Steve Jobs got 20 million options, plus an airplane. That means if the stock moves up a buck, and this was not a ten-cent stock, he makes \$20 million. I can't believe the board did the math (and) said if the stock goes up \$5, Jobs should make \$100 million. But the stock didn't go up, it went down. So he got eight million more options. Remember the point of the options was to incentivize him to make the stock go up. Unfortunately, the eight million options didn't work either, (and) the board said the hell with it and just gave him \$75 million<sup>6</sup>. This is the guy who symbolized the entrepreneurial spirit.

(But) Gates works for free (and) Buffet works for free. At a certain point, you have enough money, you own enough stock, (and) you should work for free.

**AB:** During this same period there has been rapid inflation in salaries of top athletes and entertainers. It seems that technology allows the most successful people to leverage their value. Is it possible that the increase in CEO compensation is just a reflection of this trend?

RL: There's a book on that subject, Winner Take All<sup>7</sup>. No

GARP Risk Review JAN/FEB 04 ISSUE 16

man who works for a salary can be overpaid. What George Steinbrenner pays Derek Jeter, what Arnold Schwarzenegger grosses at the box office – that's a private business decision. What GE shareholders pay Jack Welch would be a private business decision too – if there were a free market in executive compensation. But the boards of directors might as well be the CEOs' brothers-in-law. When directors are not insiders, there's an old-boy network that assures overcompensation. The difference is the CEOs were paying themselves.

**AB:** On page 94, you wrote: "Since [airline] deregulation [in the 1970s], more than 130 airlines had filed for bankruptcy. And the problems of airlines were hardly an accident." Later on the page you attack telecommunication deregulation with the question "Do you want two dozen ways to make a phone call?" When I read that I thought home telephone, mobile phone, Blackberry, DSL connection, calling card and pay phone – and, yes, I do want a lot of ways to make a telephone call. Countries with monop-

oly telephone companies provided generally poor and expensive service, and were slow to offer consumers important new choices. For all the problems of deregulated air carriers, they have won almost all the business from old-fashioned government monopoly carriers. Is deregulation so bad?

**RL:** It's not so bad. The point is there are businesses where competition does not lead to good results. I went to school at Cornell and there used to be flights all the time, priced the same as other flights of the same distance. Now my son goes to Cornell and there are

essentially no flights<sup>8</sup>. That's the free market solution, good or bad. I guess it's probably good, from a social point of view. I don't want to go against deregulation as a general goal, but it has sometimes been pushed too far.

**AB:** On page 98, you wrote: "Private investment capital is crucial to development, and it was not controversial. Free capital flow is something else. One relates to direct investment in factories, trading and so forth. The other relates to trading, often short-term and speculative, in financial assets, including local currencies." Every country would love foreigners to say "here's a few billion dollars, take it and do whatever you want for fifty years." But realistically, people are reluctant to make investments that they cannot trade at will. Can you have a voluntary investment without liquidity, and hence volatility?

**RL:** A theme that runs throughout the book is a belief that arose that the market model is supreme. Embedded in the market model is a preference for liquidity: a permanent investment for society but liquidity of funds for the

individual.

You can't get out of your house easily. If there were a futures exchange in houses, I guarantee there would come a day, unrelated to your neighborhood, when Greenspan would say something or something else would occur, and the price of your house would drop 60%, and another day it would go up 60%. There's a free market in housing, but not a lot of liquidity. That's a good thing.

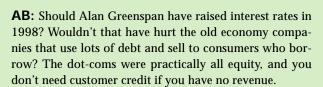
**AB:** On page 102 you wrote: "[I]t was [Fed chairman Alan] Greenspspan's nature to trust the market. Even now [September, 1998], when the market was turning manic, Greenspan was reluctant to choke it off. It was his greatest error." On the next page you give stock index values at the time, 1,720 for the Nasdaq, about 15% lower than today, and 8,000 for the Dow, about 25% lower than today. Is reducing volatility the goal of the Fed? Suppose Greenspan had waved a magic wand and the stock market had risen steadily to its current level, rather than shooting up and then crashing. Would we have had the traumatic but nec-

essary restructuring of the last five years? Would the world be a better place today?

**RL:** Greenspan would say it was. I know the argument: without speculation, we wouldn't have railroads. You're saying if we didn't have all these problems, we wouldn't have all these solutions.

Reducing volatility is not the goal, but it should be the goal of Alan Greenspan, and a former fed chairman said<sup>9</sup> that (we need to) "remove the punch bowl when things are getting out of hand." There were all sorts of things -- they're listed in Chapter 6, but you

remember them – that showed the system was not working the way it was designed. Capital was being misallocated. A lot of money was invested in things that no longer exist.



RL: Raise interest rates? No. I would have outlawed margin, raised requirements to 100%. I said in the last book<sup>10</sup> that I'm not a fan of untrammeled derivatives. More derivative regulation might have helped with telecoms and Enron, probably not Internet stocks. You can find any Alan Greenspan you want. I quote him as warning about a bubble, but he could have done more, spoken out more.

**AB:** He coined the phrase, "irrational exuberance."



Roger Lowenstein

### BOOK REVIEW

**RL:** That was in 1996. It wasn't about technology or dotcoms, it was about the Dow breaking 6,000. Almost in every sentence he's on both sides of the coin. I would have called the heads of the investment banks in, and jawboned them about IPOs. They were selling worthless junk. The system expects more than caveat emptor. It would have saved a lot of headaches with Eliot Spitzer.

**AB:** I admit that most dot-com business models sound silly today, but are they any sillier than Coca-Cola? Pay bottlers to mix artificial ingredients and carbonated water, then sell it for five times the cost of indistinguishable generic products mixed from the same ingredients by the same bottlers, and pay huge fees to advertising agencies to push it on the public? And make growth projections that imply people will drink more of your product than water by 2010? How can you distinguish Coke from the most insubstantial dot-com?

**RL:** You threw me a softball there. One of them has made money for a hundred years; the other has never made money and has no plausible scheme for making money.

**AB:** That sounds like simple conservatism. If it's worked in the past, it's good. If it's never been tried, it's bad.

**RL:** No, no, there was nothing bad about eBay. I don't like Coke stock. I liked it back then, when Warren Buffet bought it. But then it got way too high, and I said that. I don't like "Coke at any price." It's the "at any price" that's the problem, whether it's Coke or eBay.

My crusade is for rational valuation of things, not for banishing new ideas. These things were new ideas, and good new ideas, (and that's when) they had value. But not that much value. When Mary Meeker was asked how she defended Internet valuations, she said "bull market." Bullshit.

**AB:** On page 131, you wrote: "[E]xpertise was less critical than talent, which is to say, Skilling believed Enron could fearlessly enter terrain in which it had little or no experience. Enron thus became something of an open laboratory." You imply that is a bad thing. I like courage and willingness to use brains to challenge conventional wisdom. Aren't laboratories good?

**RL:** It depends (on whether you're) experimenting with one thing or 20. Business wisdom says it's not good to try everything, that's my bias. Would Wal\*Mart make great pizzas?

If you're planning to say I'm biased to conservative ways of thinking, it's true. I hope I don't come off as risk averse, but to do what Webvan.com did, and say 'we'll go into every market at once,' is foolish. eBay stuck to one thing. Amazon had one core business but even it expanded too fast, (so)it had to retrench. It was a bold leap, but it was a focused leap.

Better take risk in a focused way, than a scattershot, 'we're so good we can do anything' (manner). I think a risk manager would say, the more risk you take, the more you want to focus. It's the Buffet rule: they don't call strikes, so swing at the right pitches<sup>11</sup>. Don't be like Soriano<sup>12</sup> swinging at every pitch.

#### Footnotes:

1) Louis Lowenstein, Professor Emeritus of Finance and Law at Columbia and author of the 1989 book, What's Wrong With Wall Street: Short-Term Gain and the Absentee Shareholder, among other works.

2) In January 1992, President Bush led a delegation of twelve US CEOs to Japan to ask for trade concessions. The Japanese undercut that purpose by quietly pointing to the excessive salaries of the people looking for handouts, both compared to American workers and Japanese CEOs. Presidential hopeful Patrick Buchanan emphasized the same theme. But the salaries were more than "a million or two." According to Business Week, in 1992 the highest paid Japanese CEO made \$6.3 million while Thomas Frist of HCA made \$127 million and Sandy Weill of Primerica made \$67.6 million. Perhaps even more significant, Roberto Goizueta of Coca-Cola received a multi-year compensation package that was worth approximately \$1.3 billion by the time of his death in 1997.

3) Gillette was traded for \$32 at the time, and is still \$32. However it has split so that each early 1980s share has become 16 shares today. Taking into account dividends, Gillette shareholders have enjoyed a 22% annual return with relatively little volatility, easily beating any broad-based stock index.

4) Warren Buffet's Berkshire Hathaway has also outperformed the S&P500 with less risk.

5) From April to October 2002, Citigroup stock fell from \$50 to \$25, in line with many other financial institutions. Much of the loss was generally attributed to fallout from financial scandals, including the equity analyst scandal. However, the market as a whole fell 30% during the same period. In February 2003, Citigroup's board awarded CEO Weill 1.5 million stock options at an exercise price of \$32.

6) Steve Jobs has taken \$1 per year salary as CEO of Apple since 1997. In 1999, the board gave him a bonus of a \$90 million airplane. In 2000 Jobs was given 20 million options at \$43.59. The stock fell sharply and in 2001 Jobs was given 7.5 million more options at \$18.30. The stock continued to fall and, in 2003, Jobs voluntarily canceled his options and was give 5 million shares of stock, worth about \$75 million at that time.

7) Robert Frank and Philip Cook The Winner-Take-All Society: Why the Few at the Top Get So Much More Than the Rest of Us. Penguin, 1996.

8) There are an average 32 commercial flights to Ithaca airport daily, 21 major carrier and 11 commuter, plus 111 other flights (private plane, military, freight and miscellaneous). But flights are fewer, less convenient and more expensive than 30 years ago.

9) William McChesney Martin, Fed chairman from 1951-1970.

10) When Genius Failed: The Rise and Fall of Long Term Capital Management

11) This refers to a story Patrick Byrne, CEO of Overstock.com, told Nicholas Stein of Fortune. "When Byrne was 13, Buffett told him to think of himself at home plate, waiting for a pitch. 'There was no one calling balls and strikes, and I could take as many pitches as I wanted,' recalls Byrne, who got to know Buffett because his father was a colleague and friend of the legendary investor's. Buffett's advice was simple: 'Every year or two, the perfect pitch comes along, and you swing from the heels.' But few people have the courage to do that, Buffett explained. 'Most people just try to bunt.'"

12) New York Yankee Alfonso Soriano, who is always among league leaders in strikeouts and rarely walks. In the 2003 postseason, Soriano struck out 26 times, and walked only 3 times, in 71 at bats.

GARP Risk Review JAN/FEB 04 ISSUE 16