On the eve of Berkshire Hathaway’s annual meeting this weekend, it is worth remembering that, three years ago, Warren Buffett warned that the global financial system was held hostage to ticking “time bombs” and at risk of a “megacatastrophe.”

He was talking about financial derivatives: the options, swaps, forwards and more-exotic investment tools that have blossomed into a $270-trillion global market. He warned they had created a “daisy chain risk,” that one Long Term Capital Management-style pratfall would topple the whole global house of cards.

But the Oracle of Omaha’s crystal ball seems to have been cloudy -- so far, at least. Three years since his warning, there have been no such meltdowns, and global financial markets have blissfully avoided systemic apocalypse. In fact, there are some deep thinkers -- including former Federal Reserve Chairman Alan Greenspan -- who, while acknowledging some potential pitfalls, believe derivatives are generally good medicine, helping investors share risk. We asked two outspoken Wall Street veterans, author Michael Panzner and money manager/blogger Roger Nusbaum, to explain their very different positions on this subject.
Michael writes: First, let me start off with an easy question: What do Berkshire Hathaway Chairman Warren Buffett, PIMCO Managing Director William Gross, New York Federal Reserve President Timothy Geithner, and Goldman Sachs managing director Gerald Corrigan have in common?

Answer: They are all knowledgeable and well-respected individuals who have warned about the structural deficiencies and systemic risks associated with the burgeoning market for over-the-counter derivatives.

Now, for a tough one: What do David Li and Nicole El Karoui -- both of whom have been profiled in the Wall Street Journal -- have in common?

Hint: Mr. Li is a Stanford professor widely credited with developing a computerized model that helped turn credit derivatives into the fastest-growing segment of a $270 trillion global market. (See Mr. Li’s profile.) Ms. El Karoui is a French mathematics professor whose courses have become, as the Journal noted, “an incubator for experts in the field.” (See Ms. El Karoui’s profile.)

Answer: Both have warned that some of those who buy and sell these complex instruments don’t fully understand the risks involved. Instead of reducing their exposure to unwanted perils, they may well be adding to it.

Unfortunately, the very nature of these synthetically created securities makes it difficult for those outside Wall Street to debate their merits. For some, the definition alone is enough to cause eyes to glaze over. Essentially, derivatives are risk-shifting agreements whose value depends on -- is “derived” from -- an underlying asset, financial instrument, or event.

Making matters more difficult, however, is the fact that the value of certain complex varieties, such as options, asset-backed securities, and credit-default swaps, depends on many inputs. That often necessitates the use of complicated formulas and high-powered computers, especially when portfolios of derivatives are involved.

Yet the mathematical certitude this conveys is misplaced. In truth, pricing often depends on fickle or otherwise fast-changing financial relationships, less-than-adequate histories of how certain markets will perform under a wide range of scenarios and guesstimates about how volatile conditions will be in future.

That means a major financial institution with significant derivative exposure
could easily find itself hit with a very expensive and potentially destabilizing loss if even one of its assumptions is wrong -- as, for example, a large hedge fund [GLG Partners’ GLG Credit Fund] did when a multi-billion dollar portfolio shed 14.5% in May 2005, reportedly because of a “flawed model.”

A lack of transparency and inadequate regulation, particularly where OTC derivatives are concerned, make it difficult to identify where the dangers lie. Historically, banks, Wall Street firms and hedge funds have been left to their own devices, on the assumption they were sophisticated operators who would act appropriately.

Unfortunately, as the classic example of the “tragedy of the commons” suggests, one firm’s self-interested behavior, especially when large amounts of money are involved, is not necessarily in everyone else’s interest.

When you add it all together -- the complexity, the opacity, the warnings, and the miscalculations -- it paints a rather unsettling picture.

Roger writes: As I understand the topic, this is an exploration of whether the umpteen-gazillion dollars in derivatives could lead to some sort of a meltdown. The issue is not whether they could cause a market correction, is not whether some institutions are knowingly taking risks that they should not, is not whether there is another Robert Citron buying product he may not fully understand.
In the next few years we could see another Procter & Gamble or Gibson Greetings arise, where a company claims they did not know what they were buying and then seeks restitution from their counter-party. [editor's note: P&G and Gibson Greetings, along with Federal Paper Board Company and Air Products and Chemicals, lost hundreds of millions of dollars in bad derivatives bets in the mid-1990s. The four companies sued their shared investment bank, Bankers Trust, now part of Deutsche Bank, accusing it of not disclosing the risks associated with derivatives.] None of those episodes resulted in a deathblow.

The fear is not derivatives, but the misuse of derivatives via too much leverage.

In fact, the market has already faced a potential derivatives meltdown in 1998 with the LTCM saga. The fund was leveraged at about 100-to-1, made a fatal (for itself) trade that threatened economic instability and blew up.

The S&P 500 was at a high when this happened and dropped a painful 19% in just six weeks. But the S&P 500 retraced what was lost in less than three months. In fact, looking at a long-term chart, the magnitude of that decline does not stand out as being particularly noteworthy. So there was pain, but no meltdown. It is also worth pointing out that LTCM was not the only crisis that summer; the market was also dealing with the dislocation caused by the Russian debt crisis.

The market fears the unknown; some sort of problem from too much leverage with derivatives is not an unknown.

Past episodes have caused painful disruptions, not meltdowns. The investment community as a whole has become more sophisticated, as have the products. There are derivatives on countless types of investment products, not just one derivatives market.

The take-away here, from my point of view, is that someone’s misuse of the product, which is likely to happen, has a very low probability of triggering a widespread meltdown.

Michael writes: It seems we both agree that the risk of a derivatives-related
blow-up is high. Where we differ is on the magnitude and likely fallout from such an event. From what I can tell, Roger’s view that a far-reaching financial disaster is unlikely to occur rests on three arguments: First, similar events have happened in the past without causing a full-scale meltdown. Second, the investment community is more sophisticated nowadays and is therefore better able to cope. And third, there is little significant difference between current conditions and the way things were before.

Undoubtedly, the fact that the United States has weathered all sorts of challenges and threats in its long history gives some basis for optimism. Nonetheless, the idea that because a meltdown has not yet happened, despite a plethora of known systemic risks, mirrors the logic subscribed to by many people before Hurricane Katrina hit last summer. In other words, since the long-forecast “big one” had never come, it never would.

The idea that Wall Street now has the skills, experience, and emotional resolve to cope with anything that might crop up also fails to take account of reality. Emotions such as fear and greed haven’t gone away, and the likely response to the next crisis will be the same as always. People will panic, liquidity will evaporate, and fear will run rampant.

The difference this time, though, as opposed to when LTCM imploded, is that it will be very difficult for the New York Fed chief to gather myriad global financial operators into a room and “persuade” them to pony up the billions -- or perhaps the trillions -- necessary to stabilize the situation.

Do you really believe that if a derivatives bomb is unleashed by the failure of a London-based hedge fund, a banker in the Cayman Islands, an investor in Japan, an insurer in Germany, and a regulator in France will feel similarly inclined to respond, or even to take the lead in resolving a crisis -- assuming, of course, they even realize what is going on or why it may be relevant to their own interests?

Finally and perhaps most importantly, there are key differences between then and now. For one thing, the absolute level of risk has reached hitherto unseen levels. Total U.S. debt, for example, is more than three times output, the U.S. current account deficit is 7% of gross domestic product, unfunded U.S. retirement-related obligations add up to more than $50 trillion, and the notional value of derivatives outstanding is approaching the $300 trillion mark.

At the same time, risk has become more concentrated with respect to firms,
markets and “events.” In 1997, for example, the 10 largest banks controlled less than 34% of industry assets; by 2005, it was 44%. At the end of last year, the top five banks accounted for more than 96% of outstanding derivatives contracts versus 83% in 1998. And reportedly, there are more than $200 billion of credit default swaps riding on the financial health of General Motors alone.

To paraphrase the old cliché, this time will likely be quite different when the derivatives levee breaks.

Roger writes: Michael noted that my opinion rests on three points. Actually there was one other point I made, which is that we are not talking about every bank having exposure to only one type of derivative market. A bad trade in products tied to commodities does not have an immediate cause and effect on, say, a product line tied to mortgages or, say, the Hungarian forint.

I would also add that history does show that market reactions to events similar to past events are less severe. Compare the reaction in the U.S. to the September 11, 2001, terror attacks to the reaction in Spain to its bombing and the U.K. to its bombing.

In terms of trying to manage against reasonable probabilities, the chance of a financial Armageddon is quite low.

Michael writes: It is clear that Roger takes a balanced and thoughtful approach to analyzing risk, and he may well be right in his assumptions. Nonetheless, the argument that Wall Street’s exposure to a broad range of derivatives mitigates the dangers seems at odds with the way the investment world has changed and how these instruments are increasingly being used.

For one thing, globalization and industry consolidation have ensured that many different markets, financial systems, and economies are more closely linked than ever before. Moreover, increasing sophistication and an aggressive hunt for higher returns have spurred hedge funds and proprietary trading desks to exploit a growing array of intermarket arbitrage opportunities, which frequently depend on derivatives to circumvent structural and operational hurdles.

More important, perhaps, is the fact that despite their differences, the one thing many synthetic securities have in common, as Roger seems to have alluded to earlier, is an inherent leverage component. In that respect, he may have made a more salient point. Maybe derivatives won’t be the trigger for financial disaster.
Maybe they represent just one small part of a far greater threat: too much debt.

Now that is a problem that has led to financial Armageddon--again and again throughout history.

Roger writes: I don’t make the connection between a more globalized market with more participants as an immediate cause and effect for a meltdown. To my way of thinking, more participants mean less chance for a systemic problem. More participants should mean greater liquidity in most derivatives markets. More liquidity should mean less risk of a systemic problem.

It does create more chances for a single player in these markets to have a problem, which circles back to what I said before, that there reasonably is some institution out there taking a risk they can’t afford to take.

When Barings Bank blew up, it was due to bad, and then hidden, trades with futures contracts (a type of derivative product). It was a big trade that went bad and caused a localized problem. No one should expect localized problems are gone forever, but I still feel no realistic concern that a localized problem will domino into a systemic problem.

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