



Risk Models and Common Sense

By Lester G. Detterbeck, CPA/PFS, MBA, CFP®, CFA



The world can be a dangerous place, particularly, in the last few years. A lot can go wrong. How would you like to have lived in New Orleans when Katrina hit? Or been a Bernie Madoff investor? Or

as a business owner, had a GM supplier be your primary customer? Or have a family medical problem? For many people, it's not the good old days.

Has the risk profile changed or were things always this risky?

Actually, one of the best summaries of risk management was outlined by none other than former Secretary of Defense Donald Rumsfeld who said:

“As we know, there are known knowns. There are things we know we know.

We also know there are known unknowns. That is to say we know there are some things we do not know.

But there are also unknown unknowns, the ones we don't know (that) we don't know.”

There can be substantial risk in each one of these categories.

Some of you may remember back in 1998 when Long-Term Capital

Management (LTCM) “blew up”. LTCM was started and run by some of the finest financial minds in the world including University of Chicago Nobel Prize winners. LTCM was a fantastically successful hedge fund famous for its quantitative trading approach and its belief, supposedly derived from its risk models, that it was taking minimal risk. They thought they had quantified the known unknowns very well.

But they were wrong and LTCM collapsed. It was brought down by a “black swan”, an unknown that they didn't know. Twin financial crises in Asia and Russia were never contemplated in their financial models. More over, the firm's partners had so much confidence in their models that as the numbers got worse, they increased their exposures, figuring that the market would revert to “normal” soon and recover their losses. It didn't.

One of the primary models used by LTCM was VaR or Value at Risk. This is a quantitative model used by scientists and mathematicians at many of the large banks and wirehouses to calculate risk. The beauty of VaR was that it showed

risk as one figure, a dollar amount. How simple. And, despite LTCM's demise using it, VaR was still being used by “quants” through our latest financial disaster.

VaR is actually a group of financial risk models that are used to measure deviations from “normal” markets for all types of asset classes. Calculations could be done by risk manager and by firm. At the end of a day, a firm could determine the amount of money it needed to set aside to cover risks that might go bad.

The problem was, the unknown that no one knew was “what happens if there is a financial meltdown?” And, just like LTCM, as the VaR calculations started looking “strange” in late 2006 and into 2007, certain firms (Bear Stearns, Lehman Brothers, Merrill Lynch and the rest of Wall Street) stayed with the VaR calculations and suffered greatly. However, Goldman Sachs, recognized that the model must be flawed and, based upon their subjective belief about the uncertain future, made changes and didn't suffer the damages most of the others did.

(Continued on page 2)

INTRODUCING OUR NEWEST TEAM MEMBER

Danielle Hershon



Danielle is our Charleston branch office manager. Prior to joining DWM, she worked in television and film.

She graduated from the College of Charleston with a degree in communications.

She is also spearheading our new weekly blog: Sherpa Snapshots.

Risk (continued)

Actually, VaR didn't fail simply because it neglected the unknown unknowns, it also didn't do a good job with the "known knows". For example, the "triple A" rated mortgage-backed securities from Wall Street turned into junk. Why? Because, according to Joe Nocera, in the New York Times Magazine on January 4, 2009 "VaR generally relied on a two-year data history; measuring historical data in a tame period". If they had taken a larger sample, they might have realized that the risk for default was much greater.

The fact that these models weren't using the right data was confirmed by Alan Greenspan in late 2008. He summed up the financial malaise this way "The whole intellectual edifice, however, collapsed in the summer of last year (2007) because the data input into the risk-management models generally covered only the past two decades, a period of euphoria. Had instead the models been fitted more appropriately to historic periods of stress, capital requirements would have been much higher and the financial world would be in far better shape today, in my judgment."

So, it seems our financial crisis may have been caused by a breakdown in all three categories, "knowns" that really weren't quantified correctly, "known unknowns" which weren't adequately

considered, and the "unknown unknowns" that jumped up as well.

Does that make you feel any better? Probably not. But we can learn from all of this, understanding though, as Yogi Berra has often said, "It's tough to make predictions, especially about the future."

First, we need to be skeptical about the "known knows". For example, just because some publication recalculates the length of the average recession over the last three decades as 18 months, that certainly does not mean the current recession will end in 18 months. Furthermore, just because stocks have done better than bonds for the last 25 years, it doesn't mean they will outperform bonds for the next 3-5 years. We need to make sure that the knowns represent unbiased, reliable data and understand that the investment landscape is ever changing.

Second, try to understand and quantify "known unknowns" and make plans accordingly. For example, the stock market could go up or down in the next 3-5 years, no one knows for sure. But, if you can't afford to lose big, then you probably shouldn't be making big bets on unknowns.



Third, recognize that there are "unknown unknowns." These are the "Black Swans" and "the Outliers". These are the 9/11s, Katrinas, the LTCM collapse, the financial meltdown. They do happen. This is why we stress diversification and conservatism. It's also the reason that in this current environment, our focus is on growth and, most importantly, asset protection.

Lastly, don't get too married to the numbers. Successful investing combines not only a thorough understanding and evaluation of the numbers, but also the use of judgment based upon a skepticism, a knowledge of long-term economic history and good common sense.

Feel free to give us a call to discuss the level of risk that makes sense to you.



220 N. Smith Street, Suite 410 • Palatine, IL 60067

Tel (847) 359-6262 • Fax (847) 934-5495

39 Broad Street, Suite 205 • Charleston, SC 29401

Tel (843) 577-2463 • Fax (843) 937-9407

www.DWMfnclgroup.com