Retirement Income
JOURNAL

Take the ‘Gauss’ Work Out of Saving

By Kerry Pechter *Tue, Mar 15, 2011*

Using "non-Gaussian" analysis, Jim Otar has created a benchmark for evaluating retirement savings vehicles--and discovered that cautious savers might want to hold fewer equities.

You may remember Jim Otar from several October 2009 issues of *Retirement Income Journal*, when we featured excerpts from his book, “Unveiling the Retirement Myth,” which provided some refreshingly plain talk about decumulation.

In the book, the Toronto-based engineer-turned-advisor assigned hypothetical near-retirees to a Green, Grey or Red Zone according to their account balances and chances of running out of money. He then described financial strategies for those in each zone.

Eighteen months later, Otar is back with an equally ambitious new white paper. But this time he’s writing about *accumulation* strategies. Entitled “Retirement Income Accumulation: Non-Gaussian Analyses of Accumulation Strategies and Products,” the 45-page article contains some unfamiliar assertions—and some unfamiliar terms—that have unsettled at least a couple of the advisors who have seen it.

Regarding his assertions, Otar (below) contends that the equities markets are much less predictable than most investors are led to believe. If you hope to reach a long-range savings goal with a high degree of certainty, he argues, you’ll therefore need more time, more savings and a lower equity allocation than commonly thought.

As for terms, he introduces us to “non-Gaussian” distributions, “Capital Accumulation Equivalency” and “Aftcasting.” The first refers to his departure from the use of normal return distributions or Monte Carlo simulations; the second and third refer, respectively, to his proprietary methods for benchmarking a variety of accumulation strategies and for analyzing the history of stock market returns.

Otar’s sober conclusion: To be 90% certain of reaching your minimum accumulation goal by age 65—i.e., to be prepared for what he calls the “unluckiest” performance scenario—then you should have an equity allocation of only 50% or less in the bucket of money that you’ve designated for producing retirement income.

How does he arrive at such a conservative number? By calculating the asset allocation that would require the least amount of savings for an investor who needed to accumulate $1 million by retirement under the 10% worst possible performance scenarios, as identified by his Aftcasting technique.

His results, which are tabulated in the white paper, show that even if your time horizon is 30 or 40 years, a 50% equity allocation requires saving the least per year: $15,270 and $8,121, respectively. At 20 years, a 40% equity allocation requires the least ($31,151) and at 10 years, a 20% equity allocation requires the least ($81,706). That's *if* you want a 90% chance of successfully hitting your goal.

In what may be an important contribution to retirement planning, he then uses these numbers as a benchmark to assess other retirement savings vehicles. In the process, he finds that people who are within 10 to 15 years of retirement may get better results with the same 90% certainty by investing in a fixed indexed annuity or a variable annuity with a guaranteed rollup and a lifetime income guarantee.

(In the interest of full disclosure: Otar has given paid, educational presentations on behalf of companies that manufacture those products, but his research and his paper were not sponsored.)

Otar insists that he's not predicting a dismal future for stocks, but merely describing a savings strategy that could withstand one. "The charts [in my paper] do not reflect my opinion or optimism or pessimism," he told RIJ recently. "They just show the optimum asset allocation based on market history of meeting your target dollar amount at a target future time horizon with 90% certainty."

Two advisors who were shown Otar's paper found it perturbing, however. "He's making, what seems to me, to be a very odd argument that future rates of return will be lower than historic returns," said one advisor.

"My own prognostication is that we may see about 8% going forward vs. the 9% historic, but he's implicitly predicting 4.7%," the advisor said. "I'm not comfortable he can justify his approach. Because of his quirk of leaving out dividends, he's actually projecting returns going forward that are in the doomsday category."

Another advisor said, "I found this a frustrating read. 'Aftcasting' is presented as a new and vastly superior methodology that uses 'actual market history.' So does Monte Carlo analysis. I looked up the definition of 'Gaussian,' but I'm still not fully clear on what a 'non-Gaussian' approach to retirement planning means.

"Otar makes no mention of the fact that some investors are happy to die broke, and others want to leave a legacy," this advisor added. "He suggests a significantly different approach for those who 'have the capability of selecting excellent managers,' but, of course, every reader of *Smart Money* magazine thinks he has that capability. He seems to lump all annuity products into two simple categories, not mentioning that some have far, far greater expenses than others."

But a third advisor had only praise for Otar's paper. "It's a fabulous article," said Doug Short, who charts the markets at dshort.com. "It provides a mechanism for analyzing and comparing the kinds of retirement solutions." He also liked the non-Gaussian approach: "Monte Carlo does randomized historical returns, but trends are never random."

The paper may leave the casual reader wondering whether Otar recommends very low equity allocations or merely uses them as a baseline strategy for worst-case scenarios. When questioned, he admits to being very conservative. But he clarified matters by saying that it's best to take as little risk as possible with the savings that you intend to rely on for your floor income during retirement.

"It all depends to your objective: If you want to reach a certain dollar amount at a certain future date with only 10% certainty, then you can place your money to 100% equity. Who knows, it might work occasionally. But that 'occasionally' is not good enough for me as an engineer," he said.

He also thinks people should begin thinking about retirement earlier. "To me, long-term investing means starting at 25 years," Otar added. "Any investment time horizon that's 10 years or under is short-term." As for advice on what to do today, he said, "The market has been going up for 18 or 20 months, and eventually it will roll over. For a person near retirement, I wouldn't put more than 40% in equities." For his own money, he currently favors cash.