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## Road to “ruin” should be less traveled: Milevsky

By Editorial Staff    Thu, Feb 4, 2016

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*Finance professor and decumulation expert Moshe Milevsky, writing in an upcoming issue of the Financial Analysts Journal, thinks that the practice of using “probabilities of ruin” when creating an retirement investment plan is overused and subject to abuse.*

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In a forthcoming “Viewpoint” column in the *Financial Analysts Journal*, Moshe Milevsky reconsiders his former positions on using probabilities of ruin to evaluate a retirement income strategy and offers a more direct way for retirement advisors to talk to clients about reducing the risk of ever running out of money.

In the opinion piece, “[It’s Time to Retire Ruin \(Probabilities\)](#),” the York University finance professor and well-known author revisits and questions the belief, now embedded in the algorithms of numerous retirement planning software products, that it’s possible to establish a precise probability that someone will run out of money in retirement, or that any investment plan in retirement that minimizes that number must be good.

After apologizing for helping popularize that belief, Milevsky points out that “this approach can get out of hand and is subject to abuse.” One problem is that, if many different investment strategies can produce the same probability of ruin—and they may—how does an advisor or a client choose among those strategies?

Assigning a probability of ruin at all, Milevsky says (in one of the metaphors that are trademarks of both his popular and scholarly writing), assumes that clients won’t take measures to avoid it, but “continue driving blindly at the same speed until they run out of gas in the middle of the desert.”

That can happen, but Milevsky doesn’t expect it to be the norm. “The presumption that a client will adhere to a deterministic spending schedule, wake up one morning, go to an ATM, and discover that the ‘money process’ has reached zero is silly and naïve,” writes the author of *The Calculus of Retirement, Are You a Stock or a Bond?*, and the recent [King William’s Tontine: Why the Retirement Annuity of the Future Should Resemble its Past](#) (Cambridge, 2015).

Milevsky’s articles typically cite colorful anecdotes or legends from financial history, and this one is true to form. To illustrate the point that our planning tools themselves can be biased, he describes the Harvard professor whose students threw dice thousands of times and found that the numbers five and six came up surprisingly often. Instead of heading for

the craps tables in Las Vegas, they wisely examined the dice and found that the extra dimples on those sides had skewed the distribution. They had neglected to use professional-grade dice.

Instead of relying on high probabilities of ruin to jolt clients into an awareness of longevity risk (or relying on low probabilities of ruin to lull them into complacency), Milevsky suggests using an equation, populated with numbers that the clients themselves provide, “to introduce the idea of *longevity of the portfolio* (his italics).”

The equation was created by Leonardo Fibonacci (1170-1250). It can be used to show how many years a sum of money will last if subjected to a constant rate of withdrawal and a constant rate of growth. Advisors can plug in best-estimates of a client’s withdrawal amount (not percentage), his or her estimated number of years of life expectancy (based on health and average life expectancy at retirement), current savings, and estimated future real investment returns, after fees, taxes and inflation.

The equation generates the number of years that the client’s savings can be expected to last. If it’s less than the expected life expectancy, the client hopefully hears a wake-up call. “It’s a conversation starter,” Milevsky writes. “The doctor gave you 20 years of longevity, and your portfolio has only 14 years of longevity. There is a mismatch. Tell your client to do something about it.”

In short, Why beat around the bush with probabilities? They are always questionable and can easily be massaged into any shape that makes the client or advisor happy. Better to bring clients face to face with their dilemmas, and show them why they need to consider strategies—working longer, delaying Social Security, reducing expenses, buying annuities or getting a reverse mortgage—that will help their savings last longer.

Of course, not all advisors will prefer this “tough love” approach to retirement planning. Those who have predetermined goals (either self-imposed or externally-imposed) may continue to embrace the use of probabilities. A low probability of ruin can help justify almost any strategy.