Six Questions with Moshe A. Milevsky, PhD

Moshe A. Milevsky, an associate professor of finance at the Schulich School of Business at York University in Toronto and executive director of the IFID Centre at the Fields Institute, will kick off IMCA’s 2015 Advanced Wealth Management Conference in Chicago, October 19–20. Professor Milevsky talked with IMCA and offered a sneak-peek of his presentation, “The Seven Most Important Equations for Your Retirement and How to Use Them.”

**IMCA:** Please tell us about the presentation that you will deliver at IMCA’s Advanced Wealth Management Conference in October.

**Milevsky:** The presentation is entitled, “The Seven Most Important Equations for Your Retirement and How to Use Them,” which isn’t as intimidating as it sounds. I’m not going to be doing a math talk, but given the audience and the sophistication of the IMCA group I’m going to raise the level a little bit and talk about the analytics that people need to know as they approach retirement. We will examine some of the fundamental concepts that they need to understand that kick in once people transition from the accumulation phase to the income phase.

**IMCA:** Investor anxiety is increasingly shifting from accumulation concerns to retirement income needs. Are today’s advisors prepared to deliver on retirement income challenges?

**Milevsky:** There are a bunch of mathematical or technical concepts that are very important in the accumulation phase. Every advisor knows about them and what they mean. For example, the Sharpe ratio is a metric that’s used to describe the relationship between return and risk or standard deviation or the efficient frontier, a.k.a. the Markowitz frontier. These are all concepts that anybody in the accumulation phase understands and knows how to work with.

Different mathematical concepts and technical concepts come up in the retirement income and the decumulation phase. So those are the things that I’m going to be discussing and “teaching” the audience.

Whether advisors are prepared for this, I think they’re getting there. I’ve been talking about this now for more than 15 years. Fifteen years ago people looked at me as if I were from another planet. This was just not part of their vocabulary. They didn’t really think it was part of their mandate, and I think there’s a growing awareness that they have to become comfortable with these things. So it’s getting there, but we’re not there 100 percent yet.

I think also it depends on the age of the advisor. I find that people who are toward the end of their careers age-wise and have done very well accumulating wealth for people are thinking that maybe they don’t have to specialize in this. But I’m finding that the younger generation, surprisingly, is realizing that because they’re going to be in this business for a long time they better tool up on these things.

I’m amazed at the number of 27-year-old financial advisors I run into who are up to snuff on exactly how Social Security claiming strategies should work and what the optimal withdrawal strategy is from an individual retirement account, and I’m thinking: “Wow, this is amazing. They’re 30 years away from this decision, but they’re clearly tooling up to help individuals, their clients, manage this.” So there might be almost a generational gap whereby if you look at someone in his 50s, maybe 60s, they did very well. They built a practice. They’ve been very successful and they’re saying: “Why should I mess with something that works? Why do I have to retool and learn this new math? What’s wrong with what I’m doing now and the tools I have been using for years?”

Younger advisors have to be better-versed in the technical side because they can’t really talk about the emotional side. It’s very difficult for a 27-year-old to ask a 57-year-old, “So, what do you want to do with the money when you retire?” It just sounds empty. It’s not reliable. But when a 27-year-old starts to talk about optimal claiming strategies, because they’ve run the

**PROGRAM AT-A-GLANCE**

- **What:** IMCA 2015 Advanced Wealth Management Conference
- **When:** October 19–20, 2015
- **Where:** Swissôtel Chicago, Chicago, IL
- **Continuing Education:** 14 hours of CIMA®/CIMC®/GPWA® CE credit; 14 hours of CFP® CE credit
- **More information:** www.IMCA.org/AWM or 303.770.3377

© 2015 Investment Management Consultants Association Inc. Reprinted with permission. All rights reserved.
numbers on their spreadsheets and they can say with confidence that “these are the probabilities,” it sounds a little bit more credible. So the younger advisor has to back up what they are saying with more analytic statements. This is what I’m teaching my students.

IMCA: You make a connection between popular science and retirement planning; that’s a really interesting combination. Talk about what that means.

Milevsky: Take a look at the heroes, that is the scientific heroes of the accumulation industry, or the names that everybody has heard of that are part of the folklore, the pedagogy, and the body of knowledge. These include household names such as Nobel laureates Harry Markowitz, Bill Sharpe, Bob Merton, and Myron Scholes. These are all noted scholars. Anybody who is in the investment industry has (or better have) heard of these names. They’re the intellectual champions of the accumulation industry. They’ve been around for decades now, and they established the foundations on which the accumulation industry is built.

What I like to do in my presentation is introduce the audience to some of the scientific heroes of the decumulation industry. These are names that people are less likely to know, people such as Benjamin Gompertz, Leonardo Fibonacci, and Irving Fisher. These scholars and scientists are important because they made valuable contributions to the science of decumulation and generating income. It’s time that financial advisors become familiar with them the same way they’re familiar with the people in the accumulation phase.

IMCA: What are black-box retirement calculators and why should advisors be skeptical of them?

Milevsky: A black box is an algorithm that tells me what to do or tells me a number or tells me a probability, which I have absolutely no way of verifying, vetting, authenticating, or auditing. It’s a complete “trust me” phenomenon. So if you’re working with a product or tool that has a Monte Carlo engine or you’re working for some sort of advisor group that does Monte Carlo simulations, and they are telling you that the probability that you will run out of money is 80 percent or 40 percent or 30 percent, where in the world did they get that number? What are the assumptions going into that? How robust are those black boxes?

Part of my agenda in this presentation is to give people the confidence to be able to get at least first-order estimates themselves. So maybe they’ll go to the black box for the second digit, but they should be able to compute the first digit by hand. It gives people a little bit more skepticism toward accepting some of these simulation results or probability results.

I think you should be suspicious about some things that you can’t quite replicate yourself and don’t make intuitive sense. You have to be able to understand the embedded assumptions. What are some of the background statistical parameters? I’m not saying that an advisor should reject black boxes or that advisors should avoid using Monte Carlo tools, but I think they have to approach them with a certain amount of caution.

That’s what I’m really trying to build, the ability of advisors to understand what’s happening inside the black box and where some of the assumptions are, assumptions like volatility and equity risk premium and term structure of interest rates, analyses of where markets are going to be 10 or 20 years from now, let alone longevity assumptions. This is more important in the deaccumulation stage than in the income stage, I think.

I’d much rather use a back-of-the-envelope approximation that I understand in depth and with confidence, than a very sophisticated black box that I don’t comprehend. I’d rather be accused of being simplistic than of relying on something that I have no idea of how the results were generated.

IMCA: What would you like the IMCA conference attendees to get out of your presentation?

Milevsky: I think what attendees can get out of this presentation is something new language, new concepts, perhaps new conversations that they can have with their clients. I want them to leave this and say: “You know what? This is great. I can now have deeper, more-intelligent conversations with my clients.” So they leave after my 60 minutes and they say, “Hey, I actually have some clients I’m going to call right away, or this helps me prepare for my next meeting with them.”

I want that to be the takeaway—as opposed to a new toolbox or a new formula or a new calculator. I want them to come out and say: “Hey, my vocabulary has increased. I can talk about things that I couldn’t quite talk about before. I wasn’t comfortable talking about this before, but Moshe has helped me increase my vocabulary and now I can have this conversation.” That’s what I’d like them to take out of this. The math, the history, and the equations are secondary.

IMCA: Those conversations may take on greater importance in today’s environment with competition from robo advisors. Advisors can have these conversations with clients; robo advisors can’t.

Milevsky: I think that is the weakness of the robo-advisor philosophy. How do you get clients comfortable with the actions they should be taking? And having a box or an algorithm telling me what to do is only one part of the much more-complex relationship, which is convincing me, holding my hand, explaining this to me, and slowly giving me the information I need so that I can feel comfortable.

The do-it-yourself investor with an algorithmic advisor might be okay in the accumulation phase, but come the decumulation phase it’s going to be much more problematic.