Milevsky's VA Shocker: Turn on Your Living Benefit, Now

By Moshe A. Milevsky

am frequently asked by financial advisors whether clients should "hurry up"—in light of the declining richness of guaranteed living benefit (GLB) riders—and add money to variable annuities (VAs) they already own, before it is too late and they are closed to new contributions.

To be honest, I too, have been wondering about the same with my own VA policy, rich in riders, which I fortunately purchased a few years ago. Although my particular policy and its unique inflation-adjusted income riders aren't available for sale anymore, I do have the option to add funds.

Now, I wasn't *planning* to invest more in the near future, but I wondered if perhaps I should accelerate my plans—before I completely lost the option. On the other hand, I wasn't comfortable having too much money in any one product and was concerned about subjecting myself to a new sequence of fees and surrender charges on new contributions.
On the one hand, on the other hand: so what to do?

I knew that the answer came down to probabilities, scenarios and risk tolerance, none of which I could do in my head. So, I gathered my notes and headed to the department of mathematics at York University, home to my esteemed colleagues and long-time research collaborators Thomas Salisbury and Huaxiong Huang. There, amongst the blackboards and the chalk, I described my dilemma and we boiled down the issue to a question of pure mathematics: *"Should I add?"*
Well, spoiler alert here. The answer was not quite what I expected. After a few weeks of computer simulations, intense number crunching and much back-and-forth, their answer was pretty blunt: *"No, in fact, you should subtract."*
Alas, the models unequivocally told us that if you own a GLB that is too good to last, then you should actually turn on the income as soon as possible. Exercise the option, initiate the rider and try very hard to "ruin" the account sooner than later. "Ah, but what about the roll-ups?" you wonder. Well, it seems they are red herrings. They are not big enough.

Excuse Me?

The mathematics can get hairy, but here is the nutshell version without the Greek. First, allow me to refresh your memory on the *raison d'etre* of the GLB. You invest money for the long term in a diversified portfolio of stocks and bonds, with the added benefit of not worrying about any income taxes (or fiscal cliffs) along the way. But, you pay 1-3% extra for a unique insurance policy (rider), which—to put it bluntly—gives you the right to 'crash' your account and still get income for life.
The rider is worth something—and worth paying for—because of the non-trivial probability that (a) the investment account might be depleted by withdrawals at some date, and (b) the individual annuitant might live well beyond that date. It's these two factors combined that create the value proposition to the client.

Importantly, your insurance (premium) payments come to an abrupt end if and when the VA account value actually hits zero. So, for starters, the sooner that account can be "ruined" and these insurance fees can be stopped, the better it is for the policyholder. Starting withdrawals sooner than later is a big help in this matter.

Here is the crux of it. The allure of a higher guaranteed base—if you wait a few more years before turning on the income—doesn't offset the value that comes from depleting the account as soon as possible. Remember that as soon as the account is ruined, the annuitant is now living off the insurance company's dime. And, while it might seem odd that trying to increase the cost to the insurance company is in the best interest of the policyholder, our rather extensive utility-based analysis indicates a similar phenomenon. You have to think like a game theorist. They lose. You win.

But it's more than trying to get your money's worth from the insurance company. Even if you (theoretically) pay absolutely nothing in fees you still shouldn't be enticed by the bonuses, roll-ups and ratchets. Yes, they might tempt you to wait, but our main argument is that they are not tempting enough.

Birds in Hand vs. Bush
Here is an example to help with the intuition. Your client is 65 years old. If he turns on the GLB today, he would be entitled to $10,000 per month for the rest of his life, plus the account value. The guaranteed lifetime income might increase if markets do (very) well, but it can never decline.

Guaranteed Size of Birds in Bush Needed to Beat the One in Hand

Current Age (Male)	Guaranteed Lifetime Monthly Income Starting Today…	Is Actuarially Equivalent to Income Starting Next Year…	Which is a 'hurdle rate' for the base, of…
55	$10,000	$10,539	+5.4%
65	$10,000	$10,680	+6.8%
75	$10,000	$10,936	+9.4%

So, assuming they don't initiate the GLB this year, how much more monthly income should they demand starting at age 66, to compensate for the forgone income? This isn't a question of personal preferences. It's purely in the domain of actuarial finance.

If you do the math, the breakeven delayed income would have to be $10,680 starting at age 66. You need an extra $680 per month for the rest of your life, which is an extra $8,160 per year, to make up for the lost $120,000 between age 65 and 66.

Here it is in more technical terms: The actuarial present value of a life annuity of $10,000 per month starting at age 65 is financially equivalent to a delayed life annuity (a.k.a. ALDA) of $10,680 per month starting at age 66. Bottom line: You need 6.8% more income to justify waiting to initiate and forgoing the income for a year. *Are you getting that?*

Is your rider guaranteeing 6.8% more lifetime income for waiting a year? Are you certain your guaranteed base will grow—after all fees are deducted—by more than 6.8% over the next year? If the answer is a very high-probability *yes*, then go ahead and wait the year and reconsider at age 66. But if your answer is no—which I suspect, since roll-up rates are in the 5% region and many account values are underwater already—then the math says initiate, today.

At age 75 the argument is even more compelling. The threshold is now 9.4%, which is almost impossible to beat even in the most perfect market conditions. The table displays the values for three different ages so you can see the age-related pattern more clearly. Yes, perhaps at much younger ages—and for accounts that are packed with high growth assets—there is a reasonably high probability of beating these hurdle rates, but not in your 60s and 70s. Not in this economy.

Now remember that nobody is forcing you (or me) to consume or spend the lifetime income being withdrawn from the VA. In fact, if you want to avoid messy tax implications on the non-qualified ones, then direct the income to another—lower-cost—product and maintain the same diversified asset allocation you had within the original subaccounts (a.k.a. partial-1035 exchanges.)

Don't confuse asset allocation with product optimization.

Here it is again. The sooner you run-down the variable annuity and get the account to ruin, the quicker you start living off the insurance company's dime and stop paying insurance fees. Use the wicked sequence-of-returns to your advantage.

In fact, paradoxically, if your VA account value is at-the-money and the guaranteed base is equal to the account value, the optimal strategy might be to dump in some money and then immediately initiate the lifetime income rider. This strategy would make sense if the account value equals the guaranteed base. Otherwise, you are only helping the company.

So, go on and get strategic. Crash the car, burn down the house and make the insurance claim. Or, if moral hazard and anti-selection isn't in your nature, then—especially for those of you with a fiduciary duty—make sure you have a solid reason for not optimizing the policy.

Exceptions to Simple Rules

Everything I have said thus far applies to a GLB in which the payout rates are a constant percentage of the base, independent of your age. So, for example, if your client gets 5% for life (multiplied by the base) regardless of whether he initiates at age 75 or age 65, then he is better off initiating immediately. But, if your client has a rider with payout rates that are age-dependent, then things are a bit more complicated. But the main idea is unaltered.

For example, if the client is entitled to 5% of the guaranteed base at age 70, but 6% of the base at age 75, then perhaps it is worth waiting just until she reaches the next age band, if she is 74 years old, or nearing 73. But the new band has to offer more than a few meager basis points, to make it worthwhile. And, as soon as they do reach the new age band, they should definitely turn it on.

I'll end with the usual caveats that every Bobbie Sue and Billy Joe situation is different, and I acknowledge that policies with enhanced guaranteed minimum death benefits and joint-life options are trickier to optimize. Moreover, for purely behavioral reasons—the bane of our Vulcan existence—many clients might be reluctant to turn on the cash income if they are not quite ready for retirement. Perhaps they fear that utilizing the GLB will age them! But if that is the case, then drop the GLB rider and stop paying for it all together.

The key word is optimize. For more info on how to optimize these embedded options, visitThe QWeMA Group, a company I founded.

In sum, for those of you who claim to be rational, The Steve Miller band put it best in 1976: “Go on, take the money and run.”

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