CERTAINTY OF INCOME: THE LARGEST SOURCE OF UNCERTAINTY IN RETIREMENT PLANNING

Optimizing and Managing the Benefits of Today's Variable Annuity

BY MOSHE A. MILEVSKY

Moshe A. Milevsky is a Professor and Chair of the Finance Department at the Schulich School of Business at York University in Toronto. He has published 12 books, over 60 peer-reviewed papers and hundreds of magazine and newspaper articles. In this article, he has partnered with Jackson National to uncover the *Fisherians*, overview variable annuity optimization, and highlight and emphasize the economic value of freedom … in asset allocation that is.

It has been almost 20 years since I wrote and published my first article on the topic of annuities, which was in late 1997. For the record, my initial venture into the world of annuities was published in the *Journal of Risk and Insurance*, and I'll always have a soft spot for that first one. It was aimed at fellow researchers and used Monte Carlo simulations to analyze various withdrawal and annuity purchase strategies. That (ivory tower) publication was followed with over 100—yes, I counted—papers, articles and columns on all aspects of variable, fixed and indexed annuities. Over the past two decades, I have written about the value of death benefits* to the young, the value of living benefits* to retirees, the importance of deferred annuities to everyone, the history of annuities in the 17th century, and how to explain mortality credits to (little) old ladies. At times my comments have annoyed different segments of the insurance industry—or individual companies—and other times they have been used as vindication for the use of annuities. Either way I am thankful that, as a tenured professor, I can speak freely without worrying about personal career risk.

Glancing through my dossier—which is what someone on the verge of age 50 has the right to do—it seems to me that I have written everything there is to say about annuities. In some sense, any attempt to write (yet) another piece on the topic brings to mind King Solomon's words (and admonition to authors) in the book of Ecclesiastes, where he writes: *What has been will be again, what has been done will be done again. There is nothing new under the sun.*

In fact, while on the topic of history and the existence of nothing new, I should note that the controversy or disagreement over the value of *any-and-all* annuities goes back centuries. During my sojourn at the insurance archives in London (England) I came across centuries-old documents in which financial advisors (of that time) wrote pamphlets to dissuade their clients from buying any annuities. Instead they recommended investing in traded stocks and government bonds as a more suitable alternative. Note that I am talking about the early 18th century here.

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Indeed, the innocent sounding question about whether smart investors should own any (variable) annuities can generate a wide range of responses. I can think of no other financial product with such heterogeneity of expert opinions, often requiring a Solomonic level of dexterity and sensitivity when debating its merits. On the one side you have the view—which I will call *Fisherian*, for reason obvious to insiders—that the optimal allocation to any variable annuity is simply 0%. *Fisherians* firmly believe that one can replicate the payout or benefits from any variable annuity—bells, whistles and all—using conventional (non-insurance) investments. The variable annuity is therefore a redundant asset at best and a suboptimal (evil?) one at worst.

Personally, I beg to differ with *Fisherians* for the simple reason that you or I will never be able to manufacture mortality credits—the most important ingredient in any annuity. Longevity pooling takes a village and your local insurance company is the only intermediary capable of offering this benefit. The embedded put options are bespoke, which is yet another feature that cannot be replicated on the retail level. So, a 0% allocation to annuities might make sense and be optimal for a segment of the population that is receiving most of its income from Social Security or Defined Benefit pensions and has only a small amount of liquid or discretionary savings. But at the same time, I have argued for an allocation on the annuity side of 20% to 40% for many investors.

At the other extreme of the radical *Fisherians*—although to their credit they are not 100% extremists—is a diverse group of industry participants (I'll call them *Believers*) who argue that variable annuities play an important role in securing a sustainable retirement. And while their motives might be questionable, I do believe their basic logic is impeccable. And it's not just me. In fact, most *bona fide* researchers—and by this I mean dispassionate academics—have published peer-reviewed and carefully vetted research that supports the role of annuities in retirement.

As an editorial board member of numerous scholarly journals, I have a ringside (and early) seat to cutting edge research in this area, research that is produced by impartial observers who want to advance knowledge—as opposed to pushing or promoting product. To my colleagues and I, the value of risk pooling and mortality credits has acquired the same scientific prestige and power as Newton's law of gravity. You simply can't deny it.

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Now, just to be crystal clear, even those who "like" annuities aren't necessarily fans of all types and are quite careful—often hypersensitive—to differentiate between immediate and deferred annuities versus equity-indexed or fixed annuities, and rightfully so. The legal or marketing terms can be confusing and often have little resemblance to the annuities that have smitten pension economists. But even the most nuanced of advocates must admit that once a variable annuity's living benefits* have been triggered it becomes an income annuity, which then generates income for life†. The ends justify the means once these retirees are annuitized and have longevity insurance.

Beating Solomon's Benchmark

So let us then move beyond the debate about whether individuals should own variable, fixed or indexed annuities—which bears some resemblances to a (tedious) debate on family planning and the optimal number of children—and instead focus on how to raise children assuming you have some at home.

Whether you believe in having a very large family or a small one, you don't just bring kids into the world and let them fend for themselves. You nurture, manage and perhaps even fine-tune them over time. At this point in the narrative my intended audience has shifted from the *Fisherians* to the

Believers (a.k.a. parents) of variable annuities and the actions they can take to help improve their long-term outcomes. For better or worse, they own a variable annuity. Is there anything new to tell them?

But if I scan the landscape of annuity research, one area that doesn't appear to have generated much coverage is the following question: Assuming your clients own variable annuities—whether they be 10% or 50% or 90% of their investable assets—what exactly should they do with them over time? Unlike a car or home insurance policy, a variable annuity should not just sit in a drawer and wait for the unwanted disaster. A variable annuity should be "optimized." What I mean by optimization is the ongoing maintenance of the product in a way that takes advantage of all its features. If you were to actively manage a variable annuity with the goal of optimizing its features, how could you do it? To answer that, let's look at the opportunities to manage the contract at various stages of the buying process; for those *considering* an annuity, those *buying* an annuity contract, and those *owning* their own variable annuities.

Considering an Annuity

I suspect that perhaps *Fisherians* focus their argument on what an annuity is (a higher cost, commission-paying investment product) instead of why it might actually make sense for many people who could benefit from its many unique features, such as income for life and tax advantages[‡]. As an advisor, you have to start with *why* your client should consider an annuity, which will help guide the decision regarding "how much of one's total assets should go into one?" While I have suggested a 20%-40% range for most, an optimal allocation can only be determined by looking at one's unique situation and the structure of their personal balance sheet and income statement. Models for these sorts of choices are plenty and this isn't the place to delve into who should be closer to 20% vs. 40%. But once again, it isn't zero.

Most folks purchase a variable annuity for one reason—lifetime income regardless of market performance. Annuity income, often generated by benefits[*], has become a popular "pension replacement" alternative for those who are concerned about living longer than their nest egg. What causes apprehension is the chance that a retirement nest egg will not last as long as its owner does. Paying for over 30 years of retirement can create quite a burden on a portfolio, and perhaps even your client's children. If you have a client with an inflation-linked pension or high percentage of income-producing investments (i.e., bonds, dividend-producing stocks), it might not be optimal for them to pay for guaranteed[§] income if they have a high certainty that they don't need it. But for most Americans, certainty of income is the largest source of uncertainty in retirement planning.

> "Annuity income, often generated by benefits, has become a popular 'pension replacement' alternative for those concerned about living longer than their nest egg."

This inspires me to introduce a concept known as "Utilization Conviction," which is the (subjective) probability the owner will actually take income for his/her lifetime. Since these annuities are designed to be "long-term investment vehicles," many annuity shoppers have a high conviction for using the insurance feature. However, there are other reasons people purchase annuities, which could lead to a lower conviction level, meaning, quite simply, there is a higher probability that the client will not need income for life. Opting to decline an income rider may occur if there is a strong belief in the future growth of markets/personal assets, or because the annuity is being used for another reason, such as to optimize the tax-deferred[‡] growth of otherwise tax-inefficient investments. More to come on this once we look at *buying* the annuity.

For those "considering an annuity," I implore them to optimize an annuity by considering the way it fits into an overall investment strategy, and focusing on *why* various features like lifetime income riders* and tax advantages may be justified given the costs. I would also suggest, given the *Fisherian* concern about advisor compensation, that everyone should have an open and honest discussion about how an advisor is paid for an annuity sale.

Buying an Annuity

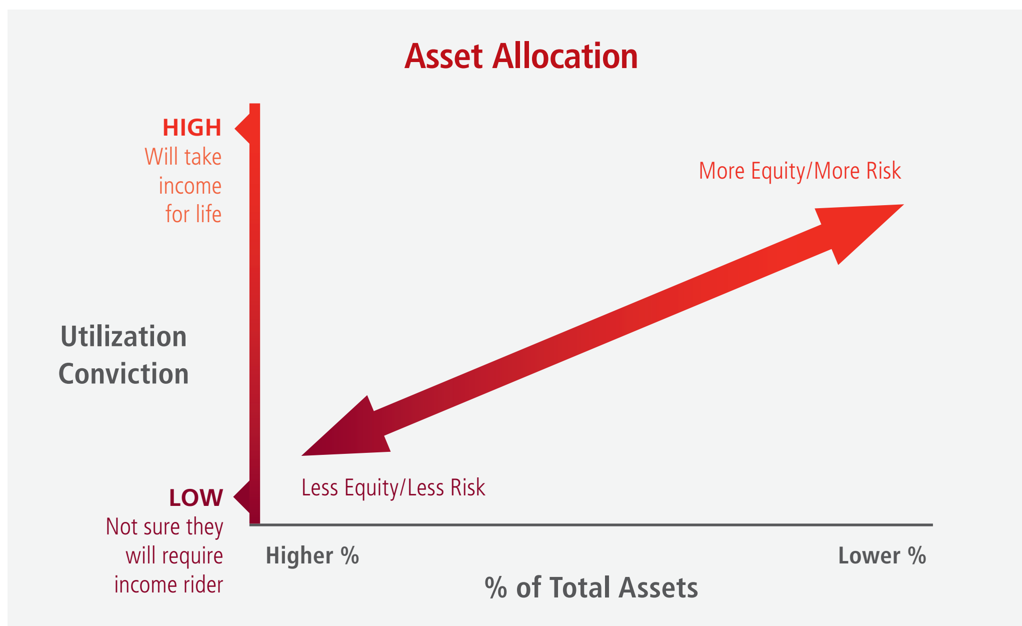
So the day has come that your client has decided to purchase a variable annuity contract. The two most important considerations at this point are asset allocation (a.k.a. what investments to put into the annuity), and which riders to select *vis a vis* their costs. Let's look at some ways to manage these important pieces of the puzzle.

Remember that a variable annuity is just a *box* with certain legal or regulatory features. Occasionally I'll call it a "vox" to remind the reader of its *raison d'être*. Advertising that a box is made of a titanium alloy (e.g., a triple A credit rating) with seven-inch walls (e.g., a 7% living benefit*) is somewhat meaningless if I can't place the nest egg I want in the box you are offering.

I make this point for multiple reasons. The first of which is the importance of having the *freedom* to control the investments that are put in this "vox." I will also take this opportunity to confess and disclose my bias here. Namely, the sponsor and patron of the document you have in your hands is one of the few companies in the insurance industry that allows for investment freedom even when an income rider is added.

So, assuming your clients have it—what do you do with this freedom inside the "vox?"

"The sponsor and patron of this document is one of the few companies that allows for investment freedom even when an income rider is added."



Let's start at the upper-right corner of the chart, or the northeast corner, which represents an investor (retiree) who has only invested a small fraction of his/her investable net worth in the variable annuity and independently is very committed to receiving lifetime income. While these odds are obviously subjective and might change over time, the finding is that the optimal asset allocation inside that variable annuity should have more risk, which typically means a higher exposure to equity (a.k.a. stocks). This helps maximize the value of the embedded guarantee[§] and optimize the variable annuity.

But the situation is a bit more tricky or complicated when the variable annuity represents a larger part of the individual's investable assets, and/or if the investor has less conviction they will take a lifetime income stream given its other valuable uses such as protection against inflation and tax deferral[‡]. For example, in the lower left-hand corner, where the annuity represents a greater portion of the client's assets and the usage conviction is lower, the optimal asset allocation is less risky, or simply more bonds and fewer equities. Why the change?

Well, there are two effects here. One is the possibility your client might need to redeem or sell the variable annuity for its cash surrender value, which dissolves the living benefit guarantee[§]. In that case, risky asset allocation might come back to 'bite you' at the worst possible time. Second, if your client's utilization conviction is low, the variable annuity is just another investment tax shelter and should be tilted to have more bonds!

Now, some readers might rightfully wonder why a retiree or investor who lacks "Utilization Conviction" would buy a variable annuity with a guaranteed living withdrawal benefit (GLWB)[*] to begin with. Well, yes, in a fully rational and dynamic model (Utopian world), in which everyone knows exactly what their preferences will be for the 30 years following their retirement, this would make no sense. But in the real world, inclinations change, tastes shift and products with flexibility will allow your retirement to better adapt. (Do you know what flavor of ice cream will be your favorite in 30 years? I don't.) Right now, I'm thinking that I might want to enjoy the lifetime income stream, but perhaps circumstances will change. Admittedly this is a soft (or difficult) constant to estimate, but captures a real dimension in the tradeoff. Regardless of how well one's utilization conviction is known, the variable annuity is a great choice because it is the only investment vehicle that checks all the boxes for lifetime financial preparedness. *Insurance is about protection. It makes you feel better for now, but do you think you will actually ever use it?*

"…The variable annuity is a great choice because it is the only investment vehicle that checks all the boxes for lifetime financial preparedness."

This is the first step to determining your client's optimal allocation to an annuity; combine his/her utilization conviction with the percentage of overall assets to establish an approach to constructing a portfolio based on the points presented above. The second step looks past the asset allocation to the underlying asset classes, and focuses on how to optimize the tax advantages[‡] offered by an annuity by locating tax-inefficient assets in their vox.

To my main point, if utilization conviction is low, then these voxes are more likely to end up as tax shelters, plain and simple. A huge reason for owning this sort of variable annuity is that the inside of the box shelters realized capital gains, dividends and especially (highly taxed) interest income from ongoing (yearly) income taxes. Instead, taxes are paid upon withdrawal or removal from the box—which can be decades away—at which point your client might be in a lower tax bracket and/or can take advantage of tax-advantaged[‡] exclusion ratios. Either way, these tax sanctuaries can be used to house investments with the most punitive form of income, i.e., government and corporate bonds that are paying regular coupons.

The ideal optimization strategy is therefore to place bonds — or alternative[††] asset classes like commodities and hedge funds that also generate highly taxed income — inside this variable annuity box.

At this point, you may be wondering how to synchronize overall asset allocation from the chart, with the desire to simultaneously manage tax implications. In most cases, the answer will be to balance the two concepts and meet somewhere in the middle. If my inputs into the chart suggest taking more risk with higher equity exposure, but the bonds and alternatives your client currently holds in a managed account are incurring large tax liabilities every year, then a combination of stocks and bonds can address both issues. If your client has a low utilization conviction and does not add a living benefit[*] rider to his/her contract, then optimizing the tax efficiency of their annuity, which was the premise for all first-generation annuities in their early form, becomes the goal.

Now, it might seem odd to readers that we are 3,000 words into a white paper on variable annuities and I haven't yet focused on the odious fees, which appear to be the biggest single objection among the *Fisherians*. Obviously, I can't overemphasize that fees are extremely important in deciding whether to allocate any wealth to a variable annuity. Oddly enough though, for almost every person who objects to their fees, there is another person who first learns about what an annuity offers and then claims that it sounds too good to be true. My earlier point about not being able to replicate the risk pooling an insurance company accomplishes is relevant for reminding the skeptics why (i) an insurance company can in fact make these sorts of promises, and (ii) it's unlikely a consumer can replicate this on their own at a lower cost. The good news is that one can insure against this kind of risk, and at a very reasonable price. But that doesn't mean they should blindly accept fees without understanding what is being received in exchange and carefully limiting fees that can eat away at investment growth over time.

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Think about your last car-buying experience. A variable annuity starts as a "base model" that comes with a few standard options such as tax deferral[‡] and a death benefit[*]. But you can purchase options, just like with a car, for an additional fee. Investments come at a wide range of costs, so you can be cost conscious, while also building a portfolio that utilizes the points made in the previous section. Want a sun roof or a lifetime income rider? Those are available for an extra cost as well. And just like you wouldn't pay for a sunroof if you only planned to drive at night, you wouldn't pay for an optional annuity benefit[*] unless the value it provided was justified. Recall one of my main points about utilization conviction. If it's zero, then don't bother at all with the so-called "sun roof." If you are not quite sure about your own conviction, get the riders but gravitate to the middle of the figure for your asset allocation. And, if your utilization conviction is very high, then by all means ride into the northeast corner.

One thing is for sure, I have yet to find a suitable alternative that provides all the features of an annuity and the implicit freedom to make all of these choices. That's right, the variable annuity checks all the boxes and it allows you the flexibility to change your mind later if personal preferences change — no auto dealership lets you do that!

Owning an Annuity

To end on a personal note, let me conclude with the following. Like any principled advocate I too own a variable annuity with a guaranteed living benefit*. I purchased my "vox" over five years ago—and I have had no regrets since. As you'd suspect, I have optimized my annuity wherever possible, through determining my optimal asset allocation, managing my tax implications, and electing (and paying for) the income rider that made the most sense for me. At this point, I do live in the northeast corner, but will continue to carefully monitor this over time, because the dynamic management of an annuity does not end at the point of sale. The asset allocation will need to be rebalanced as market conditions change, but the good news is it can be done at no cost and without tax implications. My annuity also offers legacy planning options that will become more relevant for me to manage as I age and begin to focus more on how my annuity will be passed on, although between you and me—my current plan is to live to the proverbial age of 120 and enjoy every minute of my lifetime of income.

To conclude where I started, I've now written about the topic of annuities for almost 20 years and could probably fill an entire ocean with a review of all the papers that have analyzed their merits. Indeed, even my views have shifted somewhat over time, as the facts, products and riders have changed—as the economist John Maynard Keynes would say. Note that King Solomon also said that, "all rivers run into the ocean and yet the ocean is not full," so here it is one last time. My personal conviction about the value of protection against life's hazards remains as high as ever.

"My personal conviction about the value of protection against life's hazards remains as high as ever."

* Optional benefits are available for an extra charge in addition to the ongoing fees and expenses of the variable annuity.

† The timing and amounts of withdrawals have a significant impact on the amount and duration of benefits. The closer your clients are to retirement may provide a more reliable forecast of their needs to make withdrawals prior to the ages where certain benefit features are locked in. Conversely, the younger ages may provide less reliable forecasts. Consider the amount of money and age of the owner/annuitant and the value to them of potentially limited downside protection a GMWB may provide.

‡ Tax deferral offers no additional value if an annuity is used to fund a qualified plan, such as a 401(k) or IRA, and may be found at a lower cost in other investment products. It also may not be available if the annuity is owned by a "non-natural person" such as a corporation or certain types of trusts.

§ Guarantees are backed by the claims-paying ability of the issuing insurance company.

** Diversification does not assure a profit or protect against loss in a declining market.

†† Alternative investment strategies such as leveraging, arbitrage and commodities investing are subject to greater risks and volatility than more traditional investment offerings. Although asset allocation among different asset categories generally limits risk and exposure to any one category, the risk remains that management may favor an asset category that performs poorly relative to the other asset categories. The subaccounts expect to invest in positions that emphasize alternatives or nontraditional asset classes or investment strategies and, as a result, are subject to the risk factors of those asset classes. Some of those risks include general economic risk, geopolitical risk, commodity-price volatility, counterparty and settlement risk, currency risk, derivatives risk, emerging markets risk, foreign securities risk, high-yield bond exposure, noninvestment-grade bond exposure commonly known as "junk bonds," index investing risk, industry concentration risk, leveraging risk, market risk, prepayment risk, liquidity risk, real estate investment risk, sector risk, short sales risk, temporary defensive positions, and large cash positions.

Before investing, investors should carefully consider the investment objectives, risks, charges and expenses of the variable annuity and its underlying investment options. The current contract prospectus and underlying fund prospectuses, which are contained in the same document, provide this and other important information. Please contact your Internal Wholesaler to obtain the prospectuses. Please read the prospectuses carefully before investing or sending money.

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Investing involves risk, including possible loss of principal.

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