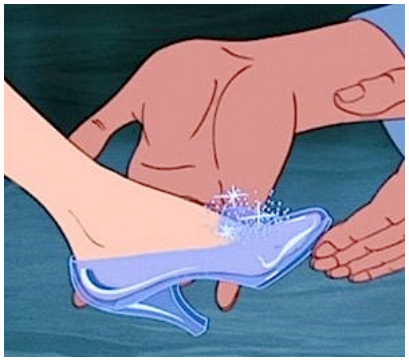
The Cinderella Annuity

By Kerry Pechter *Thu, Jun 16, 2016*

Has the time finally arrived for the variable income annuity? At TIAA, where the VIA was invented, they say it never left. New research from the TIAA Institute compares the VIA with a variable annuity with a lifetime withdrawal benefit.



Variable income annuities. I first encountered them while writing annuity product literature for Vanguard clients in the late 1990s. People weren't as focused on retirement income back then, and Vanguard didn't sell much of its white-label version of those contracts.

The more I learned about the VIA (and as I struggled to describe its "Assumed Interest Rate" or AIR mechanism to lay readers), the better it looked. Here was a income annuity that offered equity exposure, mortality credits, and period certain options for those afraid of the proverbial "bus" that stalks life-only annuitants.

My respect for this design increased at an annuity conference in 2008, where Peng Chen (then of Morningstar) demonstrated that the VIA blew all other income vehicles away in terms of risk/return efficiency. The presentation was meant to showcase the deferred variable annuity with a guaranteed lifetime withdrawal benefit (VA/GLWB), but the VIA somehow snuck into the slides.

Last month, the TIAA Institute, the thought-leadership arm of the $854 billion retirement plan for higher-ed professionals, produced new evidence of the VIA advantage. TIAA's David P. Richardson (below), Ph.D., and actuary Benjamin Goodman published a **white paper** showing that a VIA combined with a mutual fund portfolio outperforms a 100% allocation to a VA/GLWB with a 5% lifetime payout in terms of safety, adequacy, inflation protection and

estatevaluewhenbotharesubjectedtoback-testingagainsthistoricalmarketreturns.

The paper is part of the TIAA Institute's joint research partnership with the Pension Research Council at the University of Pennsylvania's Wharton School of Business. According to Richardson, the project will focus on behavioral finance tools that might melt or at least soften the public's resistance to irrevocable income products and help solve the "annuity puzzle."

How a VIA works

If you're unfamiliar with VIAs (aka IVAs or SPIVAs), here's a 10-second primer. When designing the product, actuaries calculate a first-year payment based on the contract owner's life expectancy, the premium size, and an "assumed interest rate" (AIR) that proxies for the future rate of return of the underlying investments. In practice, the AIR ranges from 3.5% to 5%.

The AIR also acts as an anchor for determining future variable payouts. Suppose for example that a life-only VIA with a $100,000 premium and a 4% AIR generates a first-year payment of $6,550 for a 65-year-old man. In subsequent years, if the underlying portfolio's annual returns are exactly 4%, the following year's payout will be $6,550. When the return is 8%, however, the subsequent payout rate will be 4% higher, or $6,812. When the return is 0%, the payout rate is 4% lower, or $6,288.

What happens if you chose a higher or lower AIR at purchase? A client who chose a 5% AIR, for instance, would receive a higher first-year payout than one who chose a 4% AIR, but he or she would be less likely to see annual increases because of the higher trigger rate. Conversely, a client who chose a more conservative 3.5% AIR would see less income in the first year, but he or she would be more likely to see an annual increase in the future.

Two simulations

The TIAA Institute paper contains a lot of detail and includes comparisons between the VA/GLWB and both the VIA/mutual fund combination and a 5% systematic withdrawal from a balanced portfolio. For brevity, we'll focus on the simulation that compares the benefits of a VA/GLWB investment and a portfolio with equal parts VIA and mutual funds. Each portfolio has a starting value of $100,000.

The VA/GLWB in this case offers a 5% annual lifetime payout from a portfolio of half stocks and half bonds. It costs 140 basis points a year (100 for the income rider and 40 for the investments). The first year payment is $5,000. The other portfolio is comprised of a $50,000 VIA (life with 20 years certain) and a $50,000 half-stock, half-bond mutual fund portfolio with all-in fees of 40 basis points. The starting VIA payment, based on a 4% AIR, is $3,132. The VIA owner draws an additional $1,868 from the $50,000 mutual fund portfolio, which is intended to provide liquidity and legacy potential.

The performances of the two portfolios are compared over 709 different 30-year retirement periods, beginning in 1933. One big takeaway: the VIA-plus-funds solution is more likely to provide rising income that matches inflation over the retirement period. Why? Because the 1% insurance drag on the VA/GLWB pushes the hurdle rate for income increases to 6.26%—much higher than the VIA's 4% AIR hurdle rate or the 40-bps drag on the accompanying investments—and makes it hard for the GLWB to grow the initial $5,000 payout, all else being equal.

"For all simulated runs over the last eight decades (1933 to 2015), if the 65-year old retiree lived at least 10 years, then the partial VIA strategy produced the same or more annual income, provided better inflation protection, provided greater liquidity, and provided a larger estate relative to the GLWB strategy," the authors wrote. "Overall, the historical results favor the partial VIA strategy. While the GLWB strategy provided the best income floor protection, it was at a substantial cost to other objectives."

Not a slam dunk yet

This research paper is new, but the VIA concept at TIAA ("TIAA-CREF" until rebranding a few months ago) is about 65 years old. TIAA introduced the first group variable annuity (the College Retirement Equities Fund, or CREF) in the early 1950s. Until the late 1980s, Ben Goodman told *RIJ*, participants had to distribute the employer-paid portions of their TIAA account as fixed annuities and their CREF accounts as VIAs. Today, between 30% and 40% of the non-profit firm's participants annuitize part of their savings. That's historically low for TIAA, but much higher than most other defined contribution plans.

The paper tends to be a bit academic, but offers red meat for annuity junkies. Perhaps because it emerged from a life insurer's thought-leadership shop, it focuses not on returns, which advisors typically want to hear about, but on insurance value, which is dear to actuaries. Note, for instance, that the study holds income from the two strategies constant, and looks at the relative legacy values they produce.

"We wanted to make sure that each strategy had to generate the same amount of income, because then it becomes more of a risk management exercise or, rather, a *cost* of risk management exercise. In the literature, there's been a focus on income generation without considering risk, and this paper examines that," Richardson told *RIJ*.

TIAA and the Pension Research Council want to use their research to change hearts and minds (and wallets) in favor of partial annuitization. "From a purely financial standpoint, these products look like a slam dunk," he said. "But when it comes to annuities, people also have psychological barriers. They view the pricing as opaque, for instance.

"Our hope is that this paper will help people overcome the psychological bias. We find that a lot of people are open to the idea of partial annuitization as an alternative to the simple 4% withdrawal rule. But the question is not simply, 'Do I annuitize?' It's 'How or when do I annuitize?' People get stuck on those questions and then end up not annuitizing at all. We think this paper will help people in those situations."