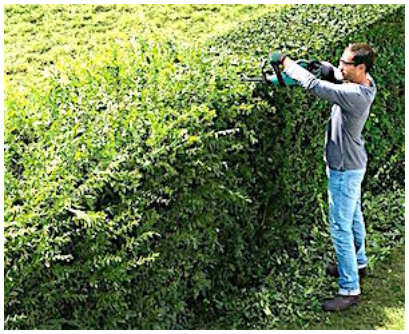
These Hedges (Probably) Won't Clip You

By Kerry Pechter *Thu, Jun 11, 2020*

Listen to an actuary who put $50k into a five-year indexed variable annuity four years ago as an alternative to CDs. We explain how IVAs are priced, and we tell you how his investment has fared so far.



A 53-year-old actuary decided four years ago to buy a indexed variable annuity, or IVA. He wasn't old enough yet for the "retirement red zone," when a badly timed loss can be hard to recover from. He wanted higher yields, but was afraid to go longer into stocks.

After doing a small mountain of due diligence, he decided to move $50,000 from certificates of deposit into an AXA Equitable (now Equitable) **Structured Capital Strategies** IVA.

"My money was in savings or CDs, earning between 1% and 2.5%, and I wanted to earn more without too much risk," he told *RIJ* recently. "So on June 15, 2016, I took $50,000 and bought a contract with a five-year 'lock'" or term.

At the time, the S&P500 Index was between 2,000 and 2,100. The Russell 2000 Index was about 1,150. Within the contract, he put $12,500 each into these four crediting strategies:

- -10% buffer, S&P 500 Index, 86% cap
- -10% buffer, Russell 2000 Index, 67% cap
- -20% buffer, S&P 500 Index, 38% cap
- -20% buffer, Russell 2000 Index, 39% cap

To translate: If the S&P 500 Index rises over the next five years, he receives all of the gain up to 38% or 86% (depending on the buffer). If the Russell 2000 has a net gain, he receives up to 39% or 67%. If the index is down after five years, he loses nothing unless it has fallen more than 10% (or 20%, with the bigger buffer). Note that the larger caps come with smaller buffers.

For example, if the S&P 500 Index were up by 50% after five years, his investment earns 50% with the -10% buffer and 38% with the -20% buffer. If either of the indexes were down 25% after five years, his actual loss would be either 15% or 5%, depending on whether the -10% or -20% buffer applied.

"As long as the markets didn't have a bad five-year run," he said, "I knew I wasn't going to lose any money." Before we tell you exactly how he's fared so far, here's some background.

A member of the IVA target market, from a photo in an Equitable brochure.

How IVAs get priced

Indexed variable annuities, as a product category, have existed for only about 10 years. Only 11 life insurers in the U.S. manufacture them. Five carriers—Equitable, Brighthouse Financial, Allianz Life, Lincoln Financial, and CUNA Mutual—account for about 95% of annual sales. Sales topped $13 billion in 2018 and $17 billion in 2019. LIMRA SRI expects sales of $20 billion in 2020. The products are typically sold by commission-earning, securities-licensed advisers at independent broker-dealers and banks.

A kind of Goldilocks product for our perplexing, Fed-dominated times, IVAs are nonetheless complicated. Few people know much about options, and IVAs involve combinations of options on equity indexes or ETFs (exchange-traded funds). And while most advisers have a seat-of-the-pants sense that equity and bond returns will fluctuate around their long-term averages, they have no feel for the direction of IVA returns. Will these geese lay golden eggs or rotten ones?

Let's walk through one of the purchases made by the actuary mentioned above. He assigned

25% of his $50,000 pool of money to a crediting method where he would receive all of the S&P 500 Index gains over five years up to a cumulative gain of 86%, or (if the index dropped over five years) would absorb any net loss beyond the first 10%.

'Call spreads' set the caps

How are the caps and buffers of these crediting methods achieved? By the life insurer's purchase of a package of options from an investment bank. The IVA packages are priced according to current interest rates, volatility levels of the chosen index (according to the **VIX** Index), as well as the length of the term and the depth of the buffer that the client chooses. The prices of the options fluctuate over time, and caps on new business are adjusted as often as every two weeks.

Different combinations of options are possible, but here's a common one:

- To set the buffer, the insurer sells an *out-of-the money put.* A "put" is the right to sell at a certain "strike price." "Out of the money" means the strike price is below the current index level. If the strike price is 10% below the current price, the client is exposed to net losses beyond that.
- To set the cap, the insurer buys a *call spread*. He sells an *out-of-the-money call* (the right to buy the index at a strike price higher than current market price) and simultaneously buys an *at-the-money call* (the right to buy the index at today's price). The strike price of the out-of-the-money call will be the cap on gains.

Here's how Tim Hill, an actuary at Milliman, described the buffer:

"Suppose the index is down 5%. The 10% out-of-the-money (OTM) put I sold expires with no value," he told RIJ. "I don't have to pay anything and I take nothing from the customer account value. Suppose the index is down 15%. The 10% OTM put expires with a value of 5% (15% – 10%), so I take 5% from the customer's account value. Suppose the index is down 25%. The 10% OTM put expires with a value of 15% (25% – 10%), so I take 15% from the customer's account value."

The insurer buys these options with its "hedge budget." Where does this money come from? Part of it comes from the income generated by the client's premium in the insurer's general fund, minus the insurer's expenses and profit. Part comes from selling the above-mentioned out-of-the-money put and out-of-the-money call. Those transactions generate revenue because the client is selling part of his downside protection (provided by the underlying bond investments in the insurer's general account) and part of his upside potential (provided by the at-the-money call).

"We sell an out-of-the-money put in response to the customer's choice of buffer and get cash up front for that," Stephen Turer of Lincoln Financial told *RIJ.* "We take that cash and our investment yield and together, that's the gross option budget. Then we buy the at-the-money call to set the cap."

The hedge budget and the options prices are affected by many factors, including the insurer's expenses, the sales commissions paid to advisers at broker-dealers or banks, its profit requirements, its sales appetite at any particular moment, as well as the level of market volatility and prevailing interest rates.

"We've heard from the investment banks, anecdotally, that options prices are a little smaller for structured products, especially when volatility is high. That can allow for fairly generous caps because the market is already pricing-in the volatility," said a product manager at an insurance company who spoke on condition of anonymity.

IVAs are said to be well suited to the present environment, where volatility levels are high—which drives up the revenue from selling the put—and market interest rates are low—which reduces the yield of competing bonds, CDs or fixed annuities.

"This product works well in this environment of low rates and high volatility," Lincoln's Turer said. "A put option gets more valuable [for the seller] when rates go down, and a call gets a little more expensive [for the buyer]. When rates go down, it usually means that expected growth goes down, so the call option gets cheaper and downside protection gets more expensive.

"So the customer gets great value by sharing the downside risk," he added. "That's the cool part of it. The customers are sharing the risk, but on their own terms [by picking the level of exposure]. The IVA looks better right now than a fixed indexed annuity. It's better than some of the other places you could put your money. It's a great story."

Our actuary's experience

Last December 7, a *Wall Street Journal* columnist wrote warily (and slightly misleadingly) about IVAs. He focused on the buffer concept, and found its protections against loss too skimpy and unclear to the investor. (He didn't specify that IVAs are not equity investments; they are, as described above, bond investments spiced with options on the performance of equity indexes.)

IVA owners can lose money, of course. Suppose someone's crediting term ended on March

23, 2020, when the S&P 500 closed about a third below its mid-February peak. That investor would have locked in a 13% or 23% loss, depending on whether he had a -10% or a -20% buffer. The buffer would have prevented him from bearing the entire loss; but the contract may have prevented him from participating in the V-shaped rebound that has since followed.

The actuary mentioned at the beginning of this story, who works for a life insurance company (but not one that writes an IVA) seems pleased so far with his gamble on an IVA.

On the day we spoke, the S&P 500 Index was at 3,194 and the Russell 2000 was at 1,507. They were up 55% and 31% in the four years since he bought them as an alternative to CDs. "If the price stays at this level for the next year it means I made much more than if I were still sitting in savings," he told *RIJ.*

"I'm getting the full upside on three out of four of my crediting strategies," he said. Only his S&P 500 Index strategy with a -20% buffer has failed to deliver the entire index return; he gets 38% instead of 55%. "Buyers should also beware of this: I'm getting only 38% and 86% of the S&P 500 Index without dividends. Over the past 30 years, according to my calculations, the index without dividends has returned about 75% of the total return, with dividends.

"I think I understood exactly what I was buying," he added, noting that no one should buy this type of product without understanding it. "If it turns out that I *misunderstood* what I was buying, I'll be writing to you in a year—and totally blasting the salespeople by name."