The Downside of Variable Annuities

Variable annuities offer some seemingly appealing benefits. The two most touted benefits are "income you can't outlive" and tax-free growth. At first glance these look pretty good but they come at great expense. In fact the expense and other downsides are so significant that some commentators have described variable annuities as products that were designed to be sold, not purchased. In this paper we'll dissect these benefits as offered in a variable annuity from a major insurer. This particular product comes with a 2.5% annual expense.

As a primer, a variable annuity is a contract with an insurance company. Within the contract there are subaccounts in which the investor can select various mutual funds. The insurer provides some additional "living" and death benefits that can be added as riders. The "income you can't outlive" promise is one of these riders.

Tax-free growth

While it is true that the investments contained within that annuity contract grow tax-free, the amount that would otherwise be lost to taxation is fairly minimal and much less than the 2.5% fee that the annuity investor is paying. Instead of an annuity, our investor could simply purchase shares of an exchange traded fund (ETF) which are very tax efficient due to their construction. For example, the popular ETF, "SPY", which tracks the S&P 500, has a current taxable yield of 1.9%. If someone has $100,000 invested in SPY she would receive $1,900 in dividends over the course of the year which would be taxed at 15% resulting $285 tax bill. If you compare that amount to the $2,500 annual annuity expense, the tax-free growth suddenly looks less appealing.

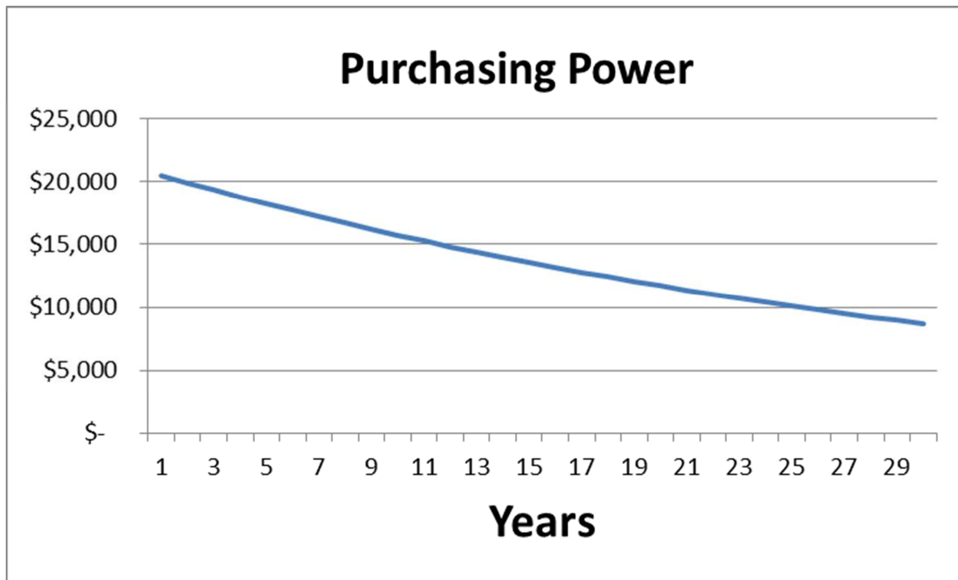
But it gets worse. Investment gains that are withdrawn from an annuity are taxed as ordinary income while the same amount withdrawn from an ETF or mutual fund held in a taxable account are taxed at the capital gains rate of 15%. If an investor in the 28% income tax bracket withdrew $10,000 in investment gains from an annuity they would get hit with a tax bill of $2,800 as opposed to a tax bill of $1,500 had the same amount been withdrawn from a mutual fund.

Income you can't outlive

With this benefit, the devil is very much in the details and fine print. This contract offers a Guaranteed Minimum Income Benefit (GMIB) which *"may provide protection in the event of lower Contract Values that may result from the investment performance of the contract".* In the case of this contract, the GMIB will be based on a 5% annual return if the investments in the account return less than that. This sounds pretty good considering that the stock market has only returned 6% annually over the ten years ending 2011, and that return was anything but guaranteed. Is there a catch? Yes, a big one. This 5% guaranteed return is only available if, and only if, the investor decides to annuitize the contract. Annuitization is an irrevocable decision to surrender the contract in exchange for a stream of payments. The 5% annual return is used to derive the Guaranteed Annuitization Value (GAV). The GAV is only a theoretical value used to calculate the annuity payment. You don't own it and can't take it as a lump sum.

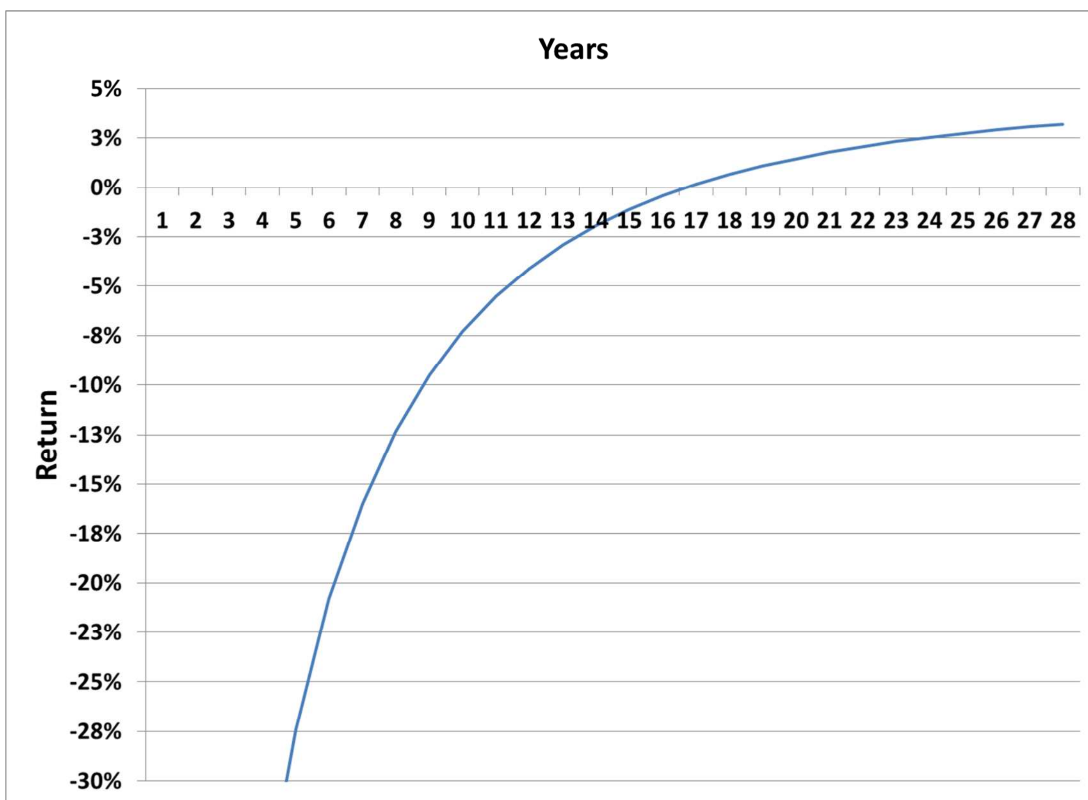
A contract we recently analyzed had a market value of $285,000 and a GAV of $415,000. The insurer quoted us a lifetime monthly benefit of $1,761 if we annuitize the $285,000 contract. At first glance this doesn't look too bad. The first annual payment is 7.1% of the surrendered value. However, there's another big catch. These payments are not indexed to inflation and if we assume 3% annual inflation our $1,781 payment will buy only $975 worth of goods and services in twenty years.

The graph below shows the purchasing power of these payments going forward.



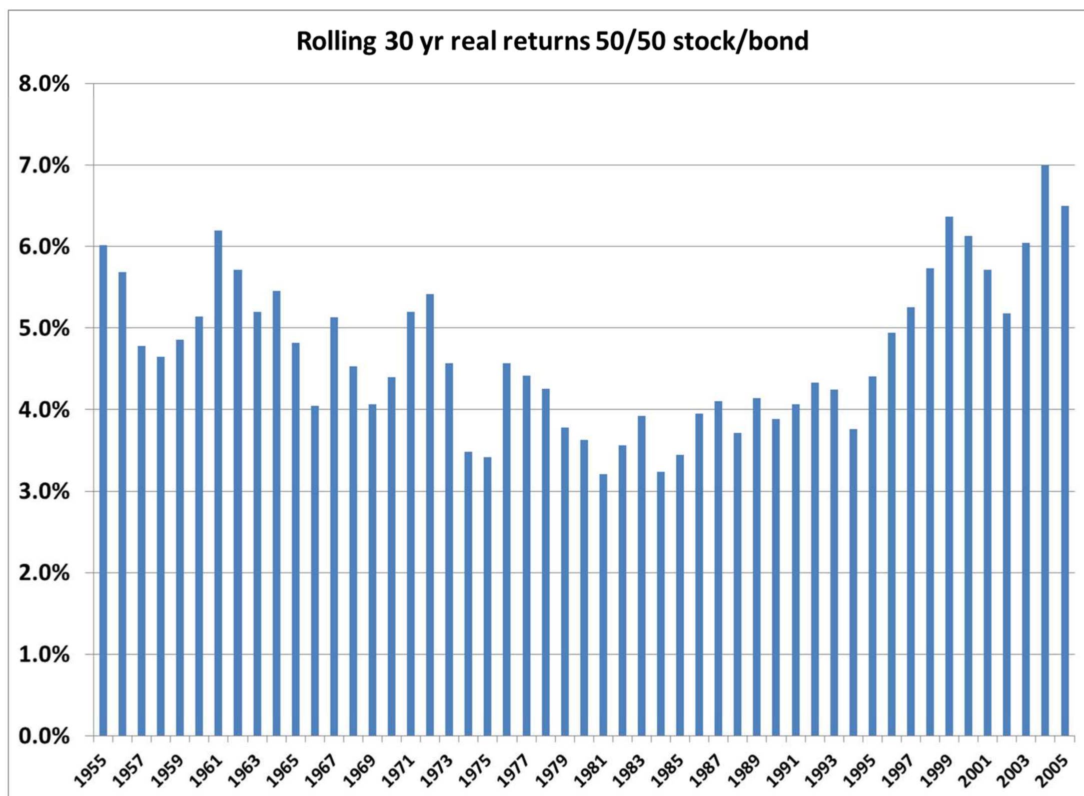
Note that the purchasing power is halved in 25 years.

In the graph below we calculated the investment return represented by the stream of income.



Note that it would take a full seventeen years just to get back the $285,000 contract value that we surrendered (after adjusting for inflation). At that point our investment return equals zero. In other words for the first seventeen years the insurer is simply metering our $285,000 back to us. By the thirtieth year the stream of income has provided us a 3.4% annualized return above the rate of inflation. The rate of return above the rate of inflation is referred to as a “real return”. As you can see, the 5% guaranteed return touted in the GMIB rider is effectively nullified through the required annuitization.

Is a 3.4% real return a good deal? Well, it depends on what our investor would have received had they been invested in the stock and bond markets for thirty years. Of course we don't know whether these markets will be able to provide a 3.4% real rate of return in the future but we can get a sense of whether this would be a realistic assumption by looking at consecutive thirty year periods that occurred in the past. The graph below shows rolling thirty year real returns for a portfolio of 50% U.S. stocks and 50% U.S. Government bonds from 1926. The first column shows the annualized rate of return from 1926 to 1955, the second from 1927 to 1956, etc.



In fact, there were only two thirty year periods (ending in 1983 and 1984) in which investors did not receive a 3.4% real return. The average real return of these thirty year periods was 4.7%

Of course, investing in the stock and bond markets entails risk and our annuity provider "guarantees" lifetime income. What if our annuity provider goes out of business? These cases are rare but do happen. There have been two notable cases in which an annuity provider went bust and their annuitants got less than they had been promised. In other cases the insolvent insurer is taken over by a healthier firm. Absent that remedy, all states have a guarantee association that will insure annuity holders up to a limit, the most common of which is $250,000.

Of course a constituent of the S&P 500 could go bankrupt. In that case the stock portion of our portfolio will decline by 1/500, or 0.2%. Since in this example our investor is only fifty percent invested in stocks this ultimately means a 0.10% loss (0.2% x 50%), or $1 for every $1,000 invested.

The value of the benefits touted by annuity providers is minimal at best. The tax-free growth is overwhelmed by the high expense. Part of the high expense is charged to fund the "guaranteed lifetime income" that, historically, was only needed in two thirty-year periods.

Prospective variable annuity purchasers and current owners should pay careful attention to the fine print of these contracts as well as market history and forecasts before determining if these products suit their needs.

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