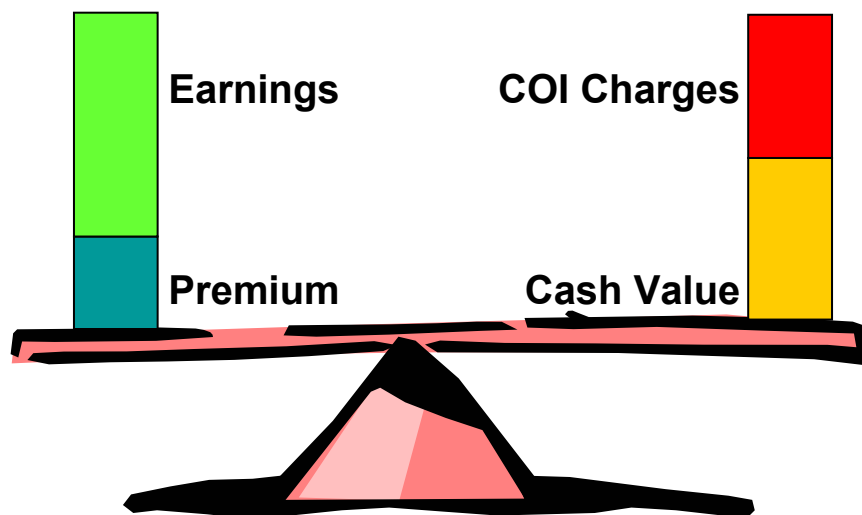


## WHEN IS A PREMIUM *NOT* A PREMIUM?

Here's the problem in a nutshell: you've decided to buy life insurance, and you're exploring several policy offerings. One presents a solution with a premium of \$9,000 a year, and the other suggests it can do the same thing for \$8,000 a year. The choice is obvious, isn't it? Maybe not!

Since the introduction of the IBM-PC in 1981, buying life insurance has never been simpler ... or more complicated. *SIMPLE* because the computer appears to allow the agent to customize a policy to your needs. *COMPLICATED* because when the computer-generated illustration is used to project the annual amount you should pay for the policy, the calculation will be based on current assumptions projected so far into the future as to make problematic the resulting premium recommendation. This is especially a concern when you (reasonably) ask the agent to use the illustration to calculate the "lowest" possible premium for a given amount of coverage.

The dilemma is in the very use of the word "premium." You probably first think of what you pay for car insurance or disability insurance: you get a quote – and if "shopping" – often choose policies on the basis of the best price. You then pay that "premium," and you've got your coverage. But many of today's *life insurance* policies don't actually have a "premium!" These policies behave more like an investment: what you get out of it depends both on what you put in *and* the impact of future market conditions that will affect the policy. Universal Life and Variable Universal Life allow you to pay pretty much whatever you want, subject to minimums and maximums determined both by tax law and by the insurance carrier. Policy values will earn a return based on future economic conditions, and the expectation is that the combination of calculated "premium" and earnings on the cash value will pay for the ever-increasing Cost of Insurance (COI). A policy is considered "in balance" if it can pay the COIs and still have a cash value that is likely to equal the death benefit by the insured's age 100. The higher the chosen premium, the more likely the policy will be able to sustain itself for the life of the insured. But if "lowest price" is the objective, you're counting more on uncertain and uncontrollable future market conditions to keep the policy in balance.

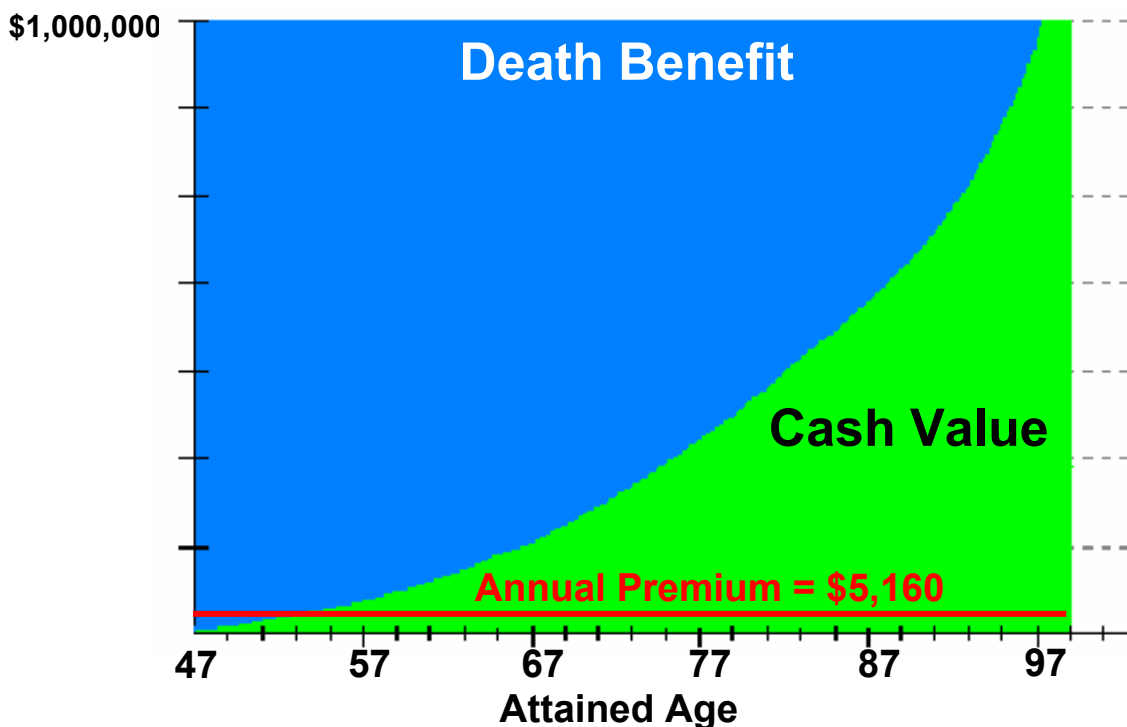


**Policy "Balance Sheet"**

The calculation of a premium based on the projection of current assumptions is *especially* a problem for consumers buying **Variable Universal Life** policies. The reason? Because the computerized illustration *assumes* that the specified investment return is *fixed* and *constant*, completely ignoring the reality of *volatility* in the equity markets in which these types of policies invest their cash values. So if an illustration is “run” at an assumed return of 12% per year - gross of expenses – suggesting the policy will sustain for all years as a reflection of the long-term results of the equity markets over the last 75+ years, it’s reasonable to assume the *policy* has a good chance of sustaining far into the future with the calculated premium.

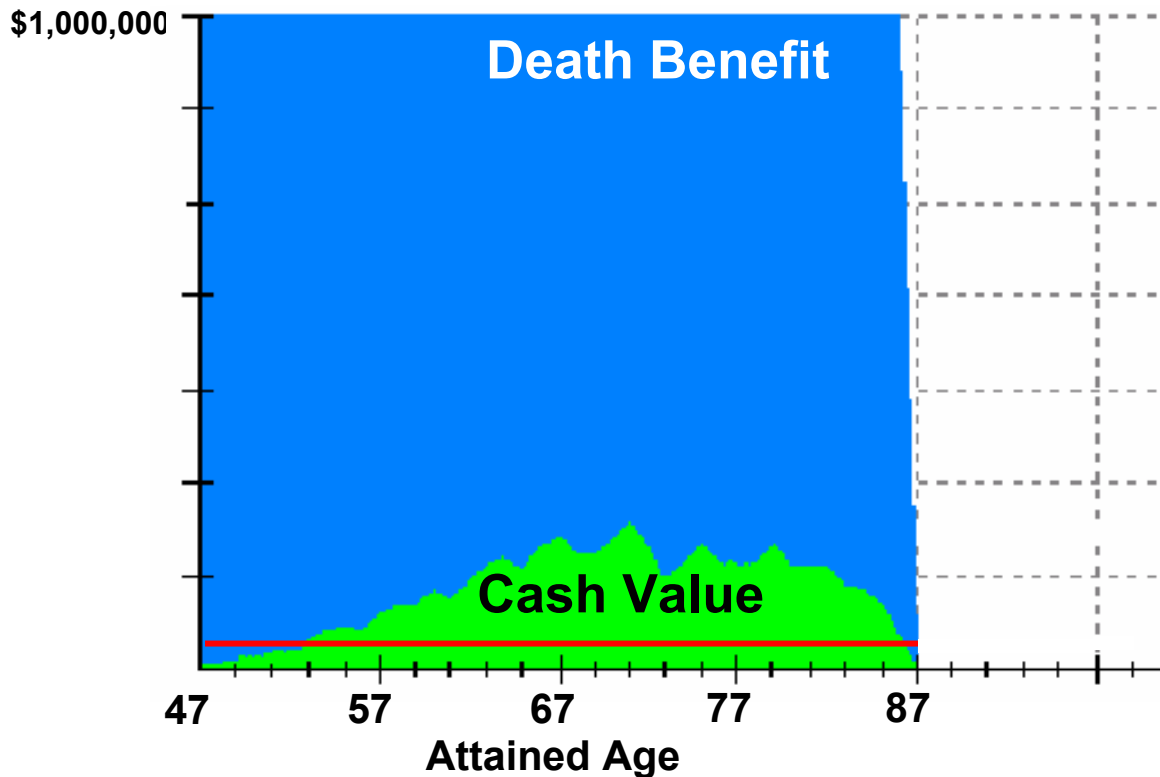
In other words, the “premium” for a Variable Universal Life policy is “made up” using an illustration that is based on the assumptions both the agent and the insurance company have made about future expenses and potential investment returns. Remember the dilemma of a policy solution with a premium of \$9,000 a year versus the one with a premium solution of \$8,000 a year? What you *didn’t* know was that we were *making it up* and in doing so that the process was making unrealistic assumptions about the future! The question for the agent/advisor is ... did s/he *make it up* appropriate to the client’s needs and tolerance for risk?

The best assumptions allowed by federal regulators and the standard means of calculating illustrations are used to create the following graphic view. It depicts a \$1,000,000 policy for a 47-year old healthy woman seeking the “lowest annual premium” to maintain her policy to age 100.



This graph represents the *possibility* that the calculated, annual “premium” of \$5,160 will earn a constant and fixed return of 12% gross of expenses, that the current *scale* of charges to maintain the insurance will be used for all years, and that as a result the policy will sustain to age 100 with slightly more than \$1,000,000 of cash value.

However, we now have tools that give us a better method of assessing and replicating market volatility and its potential effect on variable life insurance illustrations. The results of this process may surprise you. In the following graph we “go back” 53 years in time (the number of years the policy should sustain in the future) and look at the actual historic market performance of “S&P500™” stocks as if they had been the underlying investment from 1948 through the year 2000. When these returns are substituted for the assumption of a constant 12% return *and* the calculated \$5,160 “premium,” the results are quite dramatically different:



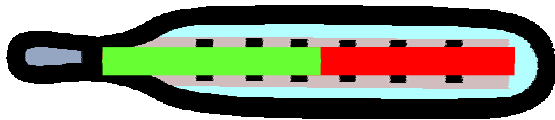
As you can see, the cash value of the policy dropped to \$0 by age 87, the consequence of which – *absent an immediate infusion from the policyholder of \$380,000 into the policy* – is the lapse of the policy.

Of course, you might say, this is perhaps an unreasonable scenario, since we’re going back to 1948 and projecting results from a stock market that’s unlikely to repeat itself in the future. And you’d be right. So perhaps we should borrow from the statisticians a mathematical model with a fancy name called Stochastic Analysis. In this approach, we’ll *randomize* the underlying investment returns of the historical database. That’s as if we took the 636 monthly returns of the past 43 years and inscribed each of those returns on individual bingo cubes. We then twirl the cage and pull out the first cube; that becomes the basis for the first month’s illustration calculation. We’ll throw the cube back into the cage, twirl, and pull out a cube for the 2<sup>nd</sup> month’s calculation. And we’ll do that process 636 times until we have determined whether the illustration would take the policy to age 100. If so, it’s deemed a “success;” if not, it’s deemed a “failure.” Now we’ll perform this analysis at least 1000 times!

In the example of the 47-year old healthy female, when 1000 randomized illustrations are calculated, there's only a 60% probability that the \$5,160 premium will sustain the policy to age 100. To increase the chance of success to 90%, the policy's premium would need to be increased to \$7,000 – more than 35% higher than the starting point of this discussion, basing a premium calculation on a *constant* return of 12%.

Probability of Success with **\$5,160**

0 20 40 60 80 100



Probability of Success with **\$7,000**

0 20 40 60 80 100



### What's the right premium for YOU?

Since the “premium” for Variable Universal Life is “made up,” and the tool we use to make it up is the policy illustration, and the policy illustration does not make a “premium” calculation using any assumptions for volatility ... perhaps you're beginning to see the problem!

That problem is made more difficult when trying to assess two or more illustrations suggesting that there's a good “deal” to be had from one over the other. The *investment choices* made now and in the future will have a significant impact on whether a given “premium” will work out (or not), and that is a result of unpredictable market conditions operating on their unique “asset allocation.” *Cost of Insurance* charges are the other significant element that will affect the success of the program, but while COIs may initially differ in the policy illustration, most insurance professionals expect those charges to be more *alike* amongst peer companies than different, over long periods of time. The appropriate advice to a consumer: if an agent suggests they can get you a “better deal” on a Variable Universal Life ... the agent doesn't understand the risk/reward underpinnings of the policy, and it would be wise to look for another agent – not another policy. The policy and its issuing insurance company should be evaluated on its history, reputation, features and benefits ... illustrated premiums should *not* be a qualifier.

The nature of the Variable Universal Life policy hasn't changed; we'll still have to *make up* the “premium,” but it can be made up out of things that matter *to you*. Assess the probability of success with which you can be comfortable; if it's 100%, perhaps you're looking at the wrong type of policy. If it's 70 – 90%, consider the following chart to give you a general *sense* of the level of “premium” you'll need to consider:

| AGE  | Calculated Premium @ 12% | Probability of Success | Revised Premium @ 90% | Funding Increase |
|------|--------------------------|------------------------|-----------------------|------------------|
| 35-M | \$3,020                  | 60%                    | \$4,750               | 57%              |
| 45-F | \$4,510                  | 55%                    | \$6,900               | 53%              |
| 55-M | \$11,870                 | 63%                    | \$17,000              | 43%              |
| 65-F | \$18,610                 | 60%                    | \$26,000              | 40%              |