Taylor Frigon Capital Management Special Report:

The Anatomy of a Modern Variable Annuity

(in plain English)

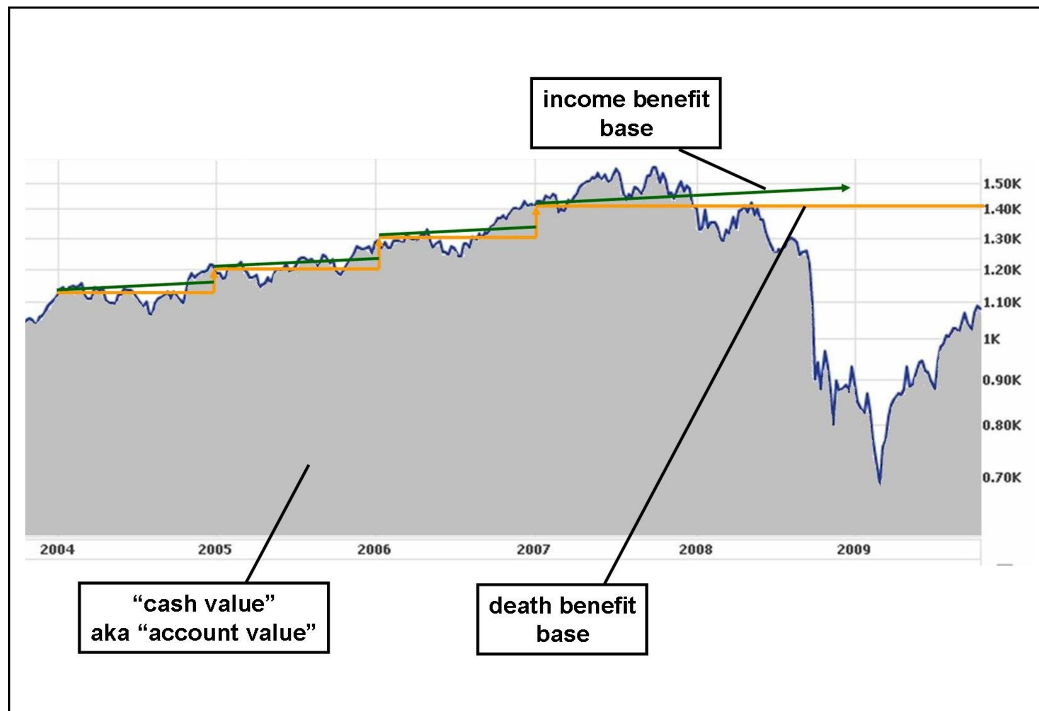
In the aftermath of the most recent bear market, sellers of variable annuities have ramped up their marketing efforts. They are hoping to take advantage of two current conditions, which they realize will not last forever.

First, of course, is the shock investors still feel due to the trauma of the sickening stock market plunge of 2008 and first quarter 2009. Second is the historically low interest rate environment currently in place due to **extremely easy monetary policy from the Federal Reserve**, which plays an important role in annuity payout calculations at the life insurance companies who issue them, as we will see.

While many investors may be tempted to take capital that is invested in financial market assets and put it into a variable annuity that still offers participation in those markets plus guarantees of some sort of "downside protection," it is overwhelmingly clear to us as those with professional experience in the financial industry that the vast majority of investors do not have a complete understanding of how these products actually work (Taylor Frigon is a fee-only investment advisory firm and does not sell insurance products of any kind, including annuities).

This widespread ignorance of the ins and outs of the variable annuity -- even among those who are ready to place the majority of their financial assets into one -- is not surprising, and we are not criticizing investors for this condition. The fact is that the modern version of the variable annuity is an extremely complicated apparatus, with daunting terminology that is very difficult to penetrate by anyone who does not have an insurance license (insurance companies also sell fixed annuities, which are somewhat less complicated and which can also be properly called an "annuity," but in this post we are referring to variable annuities when we use the term "annuity"). There is also a lack of literature explaining variable annuities to the non-professional, other than marketing literature produced by the sellers of annuities themselves.

A variable annuity is an insurance contract, which makes it very different from the kind of investments in financial markets with which most investors are familiar*. While it may seem to be very similar to an investment in stock mutual funds and bond mutual funds -- with the additional protection of guarantees of certain values -- it actually differs in several important ways. In the diagram below, we have attempted to sketch out the "anatomy" of a variable annuity.



The gray shaded area represents the "cash value" or "account value" of the annuity, which is typically tied to the performance of investment vehicles called "sub-accounts," which are very similar to the stock and bond mutual funds with which investors are familiar. In the above diagram, if the investor purchased an annuity contract on the first day of 2004, with a contribution of some amount of cash, his account value would begin to move up and down in conjunction with the performance of the sub-accounts (very similar to mutual funds) that he selected.

Because the variable annuity is an insurance contract, however, the investor cannot simply take his money out in the same way that he can with other financial market instruments (such as mutual funds, for instance). He can surrender the contract (which is an insurance term for canceling an insurance policy) and get his money back, although variable annuities typically come with significant surrender charges that last for the first several years of the contract -- often the first five to ten years, with seven years being perhaps the most common these days. Otherwise, he can make withdrawals from the account value only as the insurance company contract stipulates, typically no more than 10% of the account value every year.

These withdrawals, if taken, will have a significant impact on the guarantees discussed below that are the main reason investors purchase annuities in the first place, so it is important that investors understand that capital placed into an annuity contract is no longer liquid -- in fact, it can in an important sense be seen as the insurance company's capital at this point. The annuity owner now has a contract with certain promises from the insurance company, but he does not have his capital any more.

One of the promises in the contract is that the insurance company will pay a death benefit to the beneficiary or beneficiaries named in the contract upon the death of the annuity owner. This is a familiar term to most investors, similar to death benefits found in other insurance products, although in this case the death benefit is tied to the cash value of the sub-accounts, which are invested in the stock and bond markets, and therefore can go up or down quite a bit more than the death benefits of other insurance products.

One of the primary attractions to investors about most variable annuities is the fact that the issuing insurance company will guarantee that the death benefit will not be less than the initial contribution. This is represented in the diagram above by a level orange line labeled "death benefit base." It may be called something else by different issuers, but common to almost all modern variable annuities is the pay back of at least the same amount as the original contribution upon the owner's death.

In fact, almost all modern variable annuities not only have this level "floor" but also a "ratchet" feature in which the floor can be raised if the market performance of the account value (tied to the sub-accounts) is higher on subsequent account anniversaries. In the diagram above, we see that the cash value of the variable annuity purchased on the first day of 2004 is higher on the first day of 2005, and so we see the orange "floor" ratchet higher to the cash value on the anniversary date. Again, in 2006 on the anniversary, the cash value was higher still, and we see the floor ratchet up again. The same happens in 2007.

In 2007, although the markets and the cash value rose for part of the year, by the beginning of 2008 the cash value was not higher than it had been on the anniversary date at the start of 2007, so no ratchet up took place on the first of 2008. We see the orange line stay flat from that point in the diagram.

These ratchet features cost the annuity owner an annual fee (although when he buys the annuity he could choose to forgo the ratchet feature and get a non-ratcheting level "floor" to his death benefit, which is generally not charged an additional annual fee above the insurance fees common to all annuities and discussed below). Some annuity contracts enable the investor to purchase a death benefit floor that not only ratchets when his market investments in the subaccounts go up, but also that will go up by some percentage (typically 4% or 5% per year) even if the market were to be flat or down for the rest of his life.

While potential annuity investors take great comfort in these ratchet features and (if selected) ratchet-plus-guaranteed-increase features, and in the diagrams similar to the diagram above which shows a floor that ratchets upwards and stays there even as the market tumbles, it is very important to realize that this ratchet is affecting the *death benefit*, and not the actual account value! We have found in many discussions that investors are commonly unaware of this important distinction, and think that in an annuity they have found that elusive investment where their account value will always go up (with the full growth potential of the stock market) and never go down!

In order to get the amount represented by the orange line in the above diagram, the account owner has to actually die. The amount that ratchets is the death benefit base, not the account value itself. If the owner wants to take all of the account value -- say, at the end of 2008 in the above diagram -- he gets the cash value represented by the gray shaded area (minus any surrender charges if he is still within the surrender period, which as mentioned previously typically runs between five and ten years, with seven being a common surrender period).

There is another way to get money back from an annuity besides through death, surrender, or the permitted withdrawals each year, and that is through annuitization. Annuitization means the conversion of the account value into a stream of payments, typically annual payments for the remainder of the owner's life (hence the origin of the term "annuity").

At annuitization, the insurance company makes an actuarial calculation based on the age (and therefore the life expectancy) of the owner, and promises a payout of a certain amount each year for the rest of his life. The interest rate on cash will also play a role in this calculation, because the insurance company must essentially set aside cash to meet these payments, and if the rates are high they can offer a slightly higher amount each year to the annuitant, while if the rates are low the insurance company will be more conservative and will offer a lower amount each year. Also, if the owner chooses to have the payments stretch to the second-to-die between himself and his spouse (sometimes called a "joint" option), the payments will of course be somewhat lower than if they are only over a single lifetime. If the owner chooses a "period certain" in which the payments will last for, say, twenty years even if he dies the day after he annuitizes, then the payments will also be somewhat lower than if he chooses to have payments for as long as he might happen to live.

At annuitization, it is important to understand that the investor's cash value goes away altogether, to be replaced by a stream of payments lasting for some period of time (usually for either the rest of his life, the rest of the time until the second spouse dies, or the rest of the "period certain"). The death benefit goes away as well. All that is left is the payment stream.

Many modern variable annuities contain provisions by which the "income benefit base" from which annuitization payout is calculated will rise as well. These are depicted by the green line in the diagram above, and they will often increase both by a set annual amount (such as 4% or 5%) and also by a ratchet feature, similar to the optional death benefit feature described earlier that not only can ratchet upwards but will increase by a set percentage each year even if the market is flat or down forever.

Again, while potential investors are often all ears when the words "guaranteed increase of 4%" are used in conjunction with an investment vehicle that can also be tied to the stock and bond markets, it is important to realize that this guarantee is not on the account value but on the "income benefit base" from which annuitization will be calculated in the future, when and if the owner annuitizes. If the owner wants to get his lump sum account value instead of a limited stream of payments, that will be from the cash value portion determined by the market performance (of course, once he annuitizes, he no longer can ask for that lump sum cash value back at all).

It is also important to realize that, due to the unusually low interest rates right now, the annuitization payouts tied to this guaranteed rising base will be extremely conservative -- so conservative that they might actually be lower than annuity payouts calculated in the future from a lower amount, assuming prevailing rates are higher than rates today. An annuity payout calculated on the cash value -- even if it is lower than the benefit base (green line) at time of annuitization -- may actually be higher (due to higher prevailing interest rates) than an annuity payout calculated at the level of the green line but using the low interest rates locked in at time of purchase, in which case the owner would be allowed to use the higher payout value from his cash value instead.

Of course, he does not get all the insurance fees he paid over the years to have the benefit of that increasing green line benefit base. In other words, the insurance companies are quite happy to offer this clause in their contracts, because it is like selling an insurance policy by which they collect annual fees but which is not very likely to actually be utilized by the policy owner.

We firmly believe that variable annuities are not a wise investment choice for most investors. There may be situations in which a variable annuity could be appropriate, but even in those situations there are usually other insurance products -- such as fixed annuities or even regular insurance -- which might be a better fit.

The reasons we believe variable annuities are typically an unwise choice are several.

First, we believe that most investors are not crystal clear regarding what is being guaranteed in these products, as we have explained above.

Second, we have noted that annuities are extremely illiquid, meaning that getting at "your money" is very difficult. You can always surrender the contract and take a lump sum (after surrender charges), but that lump sum will be from the account value without benefit of any of the guarantees and ratchets that were such selling points in the first place. You can also take withdrawals (up to the amount allowed each year by the insurance company in the contract, typically 10% per year), but if you take a withdrawal it will reduce the account value by a corresponding amount, and it will also reduce the benefit base amounts (in other words, it will lower the orange and the green lines in the diagram above).

In fact, taking allowable withdrawals will typically lower these benefit base lines on a "pro rata" basis, meaning by an equivalent percentage. For example, if your account value is down to $75,000 and your benefit base has ratcheted up to $125,000 and you take a withdrawal of $7,500, the benefit base will be reduced by the same percentage that you reduced your own cash value. Since $7,500 is 10% of $75,000 this means that your benefit base of $125,000 will be reduced by 10% as well -- in other words, it will go down by $12,500 to $112,500. Some modern annuities do have a provision by which an owner can withdraw up to a certain percent per year (such as 5%) without decreasing the benefit base, but these annuities typically cost more annually than other annuities, and the amount withdrawn still comes out of the owner's cash value.

In addition to the problems with liquidity, variable annuities are tremendously expensive, far more expensive than other market investments with which investors are more familiar. A variable annuity such as the one described above will typically have basic insurance company fees ranging from 1.00% to 1.55% annually, just as a base amount (before we add any of the ratcheting-type guarantees described).

To get the death benefit (orange line) to have the ability to ratchet upwards on anniversaries will cost an additional 0.25% or so per year -- and this additional fee will be charged on the level of the benefit base (the orange line), not on the level of the account value (these fees come from the prospectuses of some of the most popular variable annuities being sold today). If you want the death benefit to not only have the ability to ratchet up in up markets but also to go up by a guaranteed amount each year even in flat or down markets, it will cost in the neighborhood of 0.80% per year instead (also assessed at the benefit level, rather than the account value level).

To get the income benefit (green line) to ratchet up, it will cost yet another 0.80% to 1.20% per year. Additionally, if it actually does ratchet up, the fee can increase under some contracts. Again, these annual fees are assessed on the level of the benefit (assessed, in other words, at the level of the green line), not at the level of the account (unlike a typical managed portfolio, in which the manager at least gets paid less money when the account he is managing for you is down).

Thus, the variable annuity described above could cost in the neighborhood of 2.90% per year, and that is without the additional management fee which is charged by the subaccount managers. The subaccounts charge fees similar to mutual funds, meaning that they will charge between 0.60% and 1.25% or so per year -- in addition to the 2.90% that is being paid to the insurance company. It is therefore almost certain that the owner of an annuity will be paying well above 3% per year, and usually over 4% per year, depending on his investment choices.

Further, we have previously given **many reasons** why we do not believe that the mutual fund model itself is always the best way to invest. We believe that all of the drawbacks of mutual funds pertain to subaccounts in variable annuities as well, with the added drawbacks of very high expense and very low liquidity discussed above.

Finally, we believe that a serious drawback of the variable annuity is the fact that the principal is traded in for a stream of payments in situations in which it may have been possible to manufacture a similar stream of payments without loss of the principal. For example, for every $100,000 that an investor could put into an annuity, the investor could take some percentage every year (in the neighborhood of 5% to 6%) for the rest of his life, after which the remaining balance of the principal could go to his wife or children or other heirs or causes he cares about.

Of course, the defenders of annuities would argue that, depending on the performance of the markets and the longevity of the individual, such a stream may deplete the entire account, leaving him in serious trouble. However, in many cases there are ways to mitigate such dangers by having different capital assets working together to mutually reinforce one another, as we have touched

on in other **previous discussions**.

Annuities do have a tax-deferral aspect which enable the subaccounts to grow each year without being taxed until money is withdrawn. Tax-deferred growth may or may not be an advantage, depending on the individual situation of each investor, including age, growth rate, current and future income tax rates, liquidity needs and other circumstances*.

There may be times when variable annuities are the most appropriate option for someone's situation, but we believe those situations are rare and fairly desperate. We believe that both the actual workings and the significant drawbacks of variable annuities are not widely known, and that during this season in which annuities salesmen are becoming increasingly aggressive, investors should be sure that they fully understand these issues.

** Variable annuities are primarily an American product sold in the United States by insurance companies with permission to sell them in individual states. The comments in this report primarily pertain to this U.S. product. Specific details vary by product, by insurance company, and by state. The tax-deferral aspects of annuities should be discussed with your tax professional.*