

Under the Hood: What You Need to Know About Annuities With GMIB Riders

Annuities with guaranteed income benefit riders are popular and appear valuable, but let's run the numbers

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Running the numbers on an annuity with a GMIB rider provides some surprising results.

After the market turbulence which began when the tech bubble burst in 2000, annuities offering certain guaranteed benefits experienced a surge in popularity. Many offer a guaranteed minimum income benefit rider, or GMIB. Are these benefits as good as they appear? In this article, we'll look at what they are, how they work and discuss a few lesser known but very important details surrounding these annuity riders.

If you are a proponent of them let me be clear. My goal is not to dissuade anyone from investing in one of these annuities. To the contrary, my goal is to help advisors gain a better understanding of often ignored but highly relevant information which should be considered before choosing this product. Additionally, if you have a client who is invested in an annuity with a GMIB, we'll examine their choices (i.e.; stay in or get out), factoring in all applicable taxes.

Note: This is assumed to be a *non-qualified annuity* and the word *annuitant* is used in lieu of client.

Now, let's take a look Under the Hood.

How They Work

These annuities have two separate account values. The first is the actual market value which is derived from the performance of the underlying mutual funds. The second is the GMIB account. It should be noted that the GMIB value only applies when the contract is annuitized. As such, it is used to calculate the amount of income the annuitant will receive.

The *guaranteed* percentage is the annual interest rate credited to the GMIB account each year until the annuitant reaches a certain age, at which point its value is frozen. Regardless, at some future date, if the annuitant decides to trigger the income option (i.e.; annuitize the contract), the income he receives will be calculated based on the greater of:

the market value of the annuity
or
the value of the GMIB account.

To clarify, consider the following example:

Initial Investment: \$100,000

GMIB Annual Return: 7.0%

Actual Annual Return: 5.0%

Period of Years Until Income Option Is Triggered: 10

GMIB Account Value at End of Year 10: \$196,715

Market Value at End of Year 10: \$162,889

In this example, the annuitant's income will be based on the value of the GMIB account since it's higher than its market value. The GMIB essentially provides a minimum return which is credited each year, and again, if this value is greater than the actual market value when annuitized, the GMIB will be used to calculate the income. Now let's look at how the income is determined.

Determining the Income

When the annuitant decides to annuitize the contract and selects a payout option, there are two basic steps, which are:

- 1) Calculate the number of 1,000s in the greater of the GMIB or actual market value; and
- 2) Multiply #1 by the appropriate annuity factor.

For example, using an actual annuity contract I viewed recently, the annuity factor for a 20-year payout is 5.53. Therefore, the calculation would be as follows:

Step 1) $196,715 / 1000 = 196.7$

Step 2) $196.7 \times 5.53 = \$1,087.85$ per month or $\$13,053$ per year.

Now that we have determined the amount of income and the term of years, we have one final step before deciding if this is a good product for the annuitant. That step is calculating the internal rate of return (IRR) needed on the lump sum to provide this income for the 20-year period.

In other words, what annual rate of return does the insurance company need to earn to generate this amount of income?

However, there is one additional wrinkle. The insurance company doesn't actually have the \$196,715 (the GMIB value). Rather, the lump sum the insurer has to work with is the account's market value of \$162,889. Therefore, the question becomes: What average annual rate of return is required on \$162,889 to generate the promised income for the 20-year period?

Fortunately, this is a simple *time value of money* calculation, and the answer is 5.14%. This now becomes the insurance company's hurdle or breakeven rate.

But what if the annuitant doesn't want to remain in the annuity? Does it make sense to get out? On the surface, it would seem foolish to cash it in, especially since the GMIB is so much greater than its market value and taxes would be due. Let's look at this issue in detail.

The Annuitant's Choices

If the annuitant wanted out of the annuity, assuming the surrender period has expired, he should list the options and give careful consideration to each. Here are his choices:

- 1) Do nothing and maintain the annuity;
- 2) Annuitize the contract and begin receiving an income; or
- 3) Cash in the annuity, pay tax on the gain and invest the net proceeds in a taxable account.

Cashing In the Annuity

Let's focus on Choice #3. With this option, because the annuitant would cash in the annuity, he would be required to pay taxes in the amount of \$18,867 on his \$62,889 gain. Assuming this additional income of \$62,889 puts him in the 33% marginal bracket, his net proceeds after cashing in his annuity and paying the tax due would be approximately \$144,000.

Note: I used a tax rate of 30% rather than 33% because of the progressive nature of the marginal tax brackets. Although this is not precise it is close enough for our purpose.

At this point we are left with \$144,000, which is less than the annuity's market value of \$162,889 or the GMIB value of \$196,715. Hence, the rate of return required on the \$144,000 would be greater than the 5.14% mentioned earlier.

However, because the income received under the annuity in Choice #2 is subject to income tax, we must calculate its *after-tax* income and use this amount as the income we must generate under Choice #3 (taxable account). To calculate the tax due on the annuity's income stream, we must determine the *annuity exclusion percentage* which is established when the contract is annuitized. This determines the percentage of each annuity payment that is subject to income tax. The formula for this is:

$$\frac{\text{Total Investment(s) minus Periodic Lump Sum Withdrawals (i.e.; Cost Basis)}}{\text{GMIB Value When Annuitized}}$$

Here is the calculation for our example:

$$\$100,000 / \$196,715 = 51\%$$

Therefore, 51% of each payment would be a return of basis (not taxable) and 49% would be subject to income tax. If the payments continued to a point in time where the basis was fully recovered, then the entire annuity payment would be taxable. This actually occurs around year 16 in our example. Assuming the annuitant is in a marginal tax bracket of 25% (after year one which included the \$62,889 gain), the net income of each year's payment would be calculated as follows:

- 1) Annual Gross Payment: \$13,053
- 2) Amount of Gross Payment Subject to Tax: \$6,396 (#1 x 49%)
- 3) Tax on #2 @ 25% Bracket: \$1,599
- 4) Net Income (Years 1-15): \$11,454 (\$13,053 - \$1,599)
- 5) Net Income (Years 16-20): \$9,789 (\$13,053 - \$3,264)

Note how the net income declines after year 15 as the basis has been fully recovered and the entire payment is taxable.

Now that we have all the data, we can create an apples-to-apples comparison between choices two and three above. To be fair, it becomes necessary to provide the same annual income on an *after-tax* basis. Therefore, using a lump sum of \$144,000 (i.e.; the amount of the annuity after cashing it out and paying tax on the gain), the rate of return required to generate an after-tax income equal to that from the annuity is about 4.80% per year. This also includes the following tax assumptions on the taxable account in Choice #3.

Percentage of Total Annual Return Subject to Tax as:

- 1) Interest Income: 10%
- 2) Dividend Income: 5%
- 3) Capital Gains Income: 5%

Conclusion

The analysis is fairly straightforward, but I suspect the results are not what most advisors would have anticipated. Paying tax on the gain in the annuity and reinvesting the net proceeds in a taxable account seems to be a better option than annuitizing the contract. Of course, if you accept this as true, then it may be better not to invest in the annuity in the first place.

In short, these products appear to be favorable on the surface, but when you consider the full picture, they lose some of their luster. Typically, clients who have invested in them would have received an illustration containing the GMIB account projection, a market value accumulation using a hypothetical return, and a future income stream of a certain dollar amount.

However, what the illustration lacks, and perhaps what the advisor failed to mention or understand, is the internal rate of return the insurance company would need to earn to deliver the promised income when the contract is annuitized. This is where the needle-in-the-haystack resides.

In other words, this rate is usually quite low and easy to achieve. This is not a knock on the insurance company. After all, they're in business to earn a profit and must price their products accordingly. Otherwise, they wouldn't be able to meet their obligations which would be a catastrophic event for their customers.

However, it should be noted that since the client is largely unaware of all of the nuances contained within an annuity contract, they rely on the agent/advisor who recommends it. Therefore, the advisor must tell the entire story, or perhaps more accurately, the advisor must have a full understanding of what they're recommending.

One final item. The income from a non-qualified annuity is subject to the net investment income tax (NIIT).

I hope you've found this helpful.