



## Income Annuities versus GLWBs: A Product Comparison

By Joe Tomlinson

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*Here is the first in what will be a monthly column by Joe Tomlinson on topics related to retirement investing strategies.*

The variable annuity with a guaranteed lifetime withdrawal benefit (VA/GLWB) has become the most popular form of annuity, as retirees seek income protection and equity-market participation. But VA/GLWBs are often costly, and the typical purchaser has few tools with which to assess the costs. Investors need a straightforward way to gauge the fees for VA/GLWBs versus other retirement income alternatives.

The income annuity is another type of retirement income product, which, at first blush, might seem quite different from the VA/GLWB. It is a bond-like investment that provides payments that last for life, whereas the VA/GLWB allows individuals to invest the bulk of funds in equities and take systematic withdrawals with lifetime guarantees. But when examined more closely, there are in fact more similarities than differences. The purpose of this article will be to compare these two products, including real-world examples, with a goal of providing information that will help advisors and clients make product choices.

### Basic Comparison

A comparison of these two products begins with a simple example. Let's say that a 65-year-old individual has dedicated a portion of his or her retirement savings to provide regular monthly payments equal to 5% of the initial fund balance, with the payments increasing each year for inflation. One alternative would be to invest the funds in an inflation-adjusted immediate annuity. A check of current market rates from Income Solutions®<sup>1</sup> – which offers income annuities from a number of different insurance companies – indicates that a 65-year-old could purchase an inflation-adjusted annuity with a payout rate a bit over 5%, so this strategy could provide the needed income and eliminate the risk of outliving one's savings. Downsides of this approach include inability to control one's funds, lack of liquidity and flexibility, and the elimination of a possible bequest to one's heirs.

Another alternative would be a VA/GLWB, which would guarantee a base level of lifetime withdrawals. Unlike the income annuity, the VA/GLWB would allow the purchaser to retain control over funds, invest in equities, and have liquidity and flexibility. However, current VA/GLWBs do not offer inflation guarantees. A typical guarantee for a 65-year-old is a flat 5%. The products do provide for increases in guaranteed payments if account values increase (i.e., if returns more than offset withdrawals), but such increases are likely to fall

<sup>1</sup> To view these rates, you must be a Vanguard online customer. Go to [www.Vanguard.com](http://www.Vanguard.com), go to annuities, and ask for an income annuity quote. This takes you to [www.incomesolutions.com](http://www.incomesolutions.com), where you sign in and get quotes.



short of inflation. An Ibbotson [study](#) in 2007 estimated that such increases would average 1.35%, compared to historical average inflation of 3%. (For a more extensive treatment of this issue, see Wade Pfau's article [GLWBs: Retiree Protection or Money Illusion?](#) in the December 13, 2011 issue of *Advisor Perspectives*, which provided an in-depth analysis of GLWBs and highlighted the lack of inflation protection.)

The VA/GLWB is a more popular product than the income annuity, and it is often touted as providing stock market participation with downside protection, like "having your cake and eating it too." This is largely a mischaracterization, because the fees one pays to obtain the GLWB's guarantees take a substantial bite out of the equity returns. Given the dictates of financial markets, it is not reasonable to expect to both hedge downside risk and enjoy equity-like returns.

### **Market rate comparison**

Comparing these two products requires special adjustments to illustrate that VA/GLWBs only partially protect against inflation. I did the comparison by estimating VA/GLWB income increases and then constructing a matching income annuity. For the VA/GLWB, I used the Vanguard product discussed in Wade Pfau's article, which provides a 5% withdrawal guarantee for a 65-year-old. It has an annual fee of .95% for the GLWB rider and an average of .59% for other annuity and investment management fees, bringing the total to 1.54%. I developed an estimate based on Monte Carlo analysis that projected annual income increases of 1.28% for this particular fee level.

For the income annuity, I used market rates from Income Solutions®. (Vanguard is one of their partners, so I was able to compare two products offered through the same distribution system.) I used an annuity with a cash-refund feature, which guarantees that total payouts will at least equal the amount of funds invested in the annuity, thus matching as closely as possible the liquidity features offered by VA/GLWBs. I used a 50/50 blend of male and female rates because VA/GLWBs are not gender-specific.

At today's market prices, the initial payout rate for a cash-refund annuity, built to match the VA/GLWB's 1.28% income increases, is 5.51%. (This particular annuity, built to match the VA/GLWB income, falls between a traditional single-premium immediate annuity that provides level income, and an income annuity that fully adjusts for inflation.) With the payout rate of 5.51%, I could match the 5.0% payout rate for the GLWB and have some money left over to invest in a side fund.

For investments in both the VA/GLWB and the income annuity side fund, I assumed a 65/35 stock/bond mix, with stocks estimated to earn a nominal 7.5% and bonds a nominal 2% annually. The individual in this example was assumed to be 65 years old with 20 years remaining in his or her lifetime. I assumed this individual had \$100,000 to invest and needed income of \$5,000 per year with 1.28% annual increases.



Of course, the two approaches I describe above are not a retiree's only options. Besides comparing results for the two products, I also estimated outcomes for a strategy of taking unguaranteed systematic withdrawals matching the annuity and VA/GLWB payouts. I used a 65/35 stock/bond portfolio with an investment expense ratio of .2% (i.e., assuming index funds).

The table below shows the comparison. Because the initial deposits and income are the same for all strategies, the major difference is the expected bequest values. The shortfalls in present value of a potential future bequest experienced by those who choose the VA/GLWB or the income annuity are comparable to fees for the guarantees, which are also shown. (Present values were calculated using a 5.38% nominal rate, based on the same 65/35 stock/bond mix and .2% expense assumption.)

### Comparison of Retirement Income Alternatives

Product Choice	PV Expected Bequest	"Fee" per \$100,000 for Guarantee
Unguaranteed Systematic Withdrawal	\$31,882	
Cash Refund Income Annuity	\$9,256	\$22,626
Vanguard VA/GLWB with Total Fees of 1.54%	\$17,824	\$14,058

Two implications jump out from these figures:

- Under the particular pricing structures for these products, the VA/GLWB provides a larger expected bequest than the income annuity. This result is sensitive to VA/GLWB fees, and I'll show an example below where the results are reversed.
- Guaranteeing an income that lasts for life requires a significant sacrifice of expected bequest value. Advisors and clients need to give serious thought to whether guarantees are worth the cost.

These results are based on an expected lifetime (at age 65) of 20 years; it is worth considering how results vary by lifespan. For this particular example, although the expected bequest is greater for the VA/GLWB than the income annuity at 20 years, the values cross over at about 24 years, and are higher for the income annuity thereafter. As discussed above, the income annuity leaves extra money that can be invested in a side fund, and this money can be expected to keep growing regardless of lifespan. On the other hand, based on the assumptions used here, VA/GLWB bequest values decline over time, which is why the values cross over.



## Effect of VA/GLWB pricing

Vanguard's VA/GLWB is a low-cost product by industry standards, so it is also worth looking at estimated bequests based on an average fee level. I used a total fee of 3.50% (rather than Vanguard's 1.54%) to represent such a product. Raising the assumed fee necessitated a number of other changes to produce comparable numbers. The higher fee reduces the product's potential to generate income increases, lowering my estimate of the expected increase rate from 1.28% to .66%. A matching systematic withdrawal program would involve lower withdrawals and therefore generate higher expected bequests. Less funds would be needed to purchase a matching annuity, freeing up additional funds to invest on the side.

### Comparison of Retirement Income Alternatives—Average Fee VA/GLWB

Product Choice	Expected Bequest	Cost per \$100,000 for Guarantee
Unguaranteed Systematic Withdrawal	\$35,380	
Cash Refund Income Annuity	\$14,966	\$20,414
VA/GLWB with Total Fees of 3.50%	\$6,749	\$28,631

The results are quite clear: At this higher fee level, the VA/GLWB becomes a more costly way to provide guarantees than the income annuity. Income guarantees for these higher-fee versions are typically the same as Vanguard's (5% at age 65), so an unsophisticated buyer may not be aware of the bequest impacts. It is also unlikely that such a buyer would understand the impact on potential income increases in the VA/GLWB.

The recent addition of a VA/GLWB by Vanguard will definitely strengthen its lineup of retirement income products. Income annuities will meet the needs of those who want maximum retirement income, while the VA/GLWB will work well for those who can give up some income for more liquidity and flexibility. As for the overall retirement income market, I expect the low-cost products like Vanguard's to gain market share, but it will be a slow process. Commission-driven sales of the high-fee VA/GLWBs dominate the market today, and I do not see much appetite for sales forces to give up commissions in favor of improved customer value.

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