The Real Flaws – A response to "Understanding Variable Annuities with GMWBs"

By Peng Chen, Ph.D., CFA
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I am writing in response to Robert Huebscher's March 1 article, Understanding Variable Annuities with GMWBs. While we encourage debate and scrutiny on all papers we publish, I would like to point out that Mr. Huebscher's article is filled with material flaws that are a disservice to the investing community. We'd like to set the record straight.

The analysis Mr. Huebscher covers refers to two Ibbotson white papers that are freely available for all to judge on their own.

1) "Retirement Portfolio and Variable Annuity with Guaranteed Minimum Withdrawal Benefit (VA+GMWB)."

2) Allocation to Deferred Variable Annuities with GMWB for Life. (also published in Journal of Financial Planning February 2010.

Below are the key errors in Mr. Huebscher's article and our factual responses. Anyone who took the time to read our papers knows that his claims are patently false.

A. Huebscher: The Ibbotson analysis …" a key issue that was not addressed in Chen's study: the amount and cost of the longevity insurance a VA+GMWB provides."

   Ibbotson response: From Ibbotson's paper (2) Figure 3, Figure 4, Figure 5; the numbers we present are estimated GMWB fees, which are the costs of longevity insurance in VA+GMWB. We clearly labeled the Figures, the calculation formula (in appendix B), as well as the discussions about the numbers and their interpretations. It is puzzling that Mr. Huebscher did not notice any of these figures or discussions, and just jumped to his claim that we did not address the costs. I wonder whether he actually read the research papers or truly understands the figures presented in our papers.

B. Huebscher: The Ibbotson analysis only considers the income component of total return.
   In his paper, he wrote …"First, and most importantly, Chen's methodology considers only the income component of total return; it ignores the return of principal from bonds that mature or are called."

Ibbotson response: From Ibbotson paper (1) Table 2B and Ibbotson paper (2) Table B in appendix, the expected average total returns of U.S. Aggregate Bonds is 5.24% while for Short-term Bonds it is 4.10%, respectively. These numbers do not simply reflect income returns as Mr. Huebscher claims. It is troubling that he does not grasp this simple investment concept of total return vs. income return.

C. Huebscher: The Ibbotson analysis ignores the contract value of the VA+GMWB.

   Ibbotson's response: Ibbotson paper (1), Chart 1B and table 1 both show the CONTRACT VALUE and benefit base for VA+GMWB. It is also discusses contract value thoroughly on page 7. In Ibbotson paper (2), CONTRACT Value is discussed on page 5, the specific formula we use to model contract value are presented on page 19, page 21, page 22, page 23, and page 24. A simple search through the document will show how many times we discuss contract value. Mr. Huebscher's assertion that we did not consider the "contract value" in our papers is completely false.

D. Huebscher: The Ibbotson analysis does not consider mortality.

   Ibbotson's response: From Ibbotson paper (2) appendix B and appendix C, we showed the detailed formulas that drove our analysis. Each formula clearly considers the mortality rate (or the survivorship probability). Again, Mr. Huebscher's piece is blatantly incorrect.

Finally, I could not help but notice that Mr. Huebscher doesn't seem to know what GMWB stands for. On page one of his article, he wrote …"an increasingly popular variable annuity (VA) rider known as a guaranteed minimum *wealth* benefit (GMWB)." Anyone who has a basic understanding of VA knows that GMWB stands for guaranteed minimum *WITHDRAWAL* benefit.

We don't understand why Mr. Huebscher failed to conduct a simple fact check before publishing his story. Clearly he has an agenda, and I encourage investors to read our research papers in their entirety so you can separate fact from Advisor Perspectives' false claims.

ADVISOR PERSPECTIVES

Editor's Note:

I appreciate Dr. Chen's response. Much of his response is devoted to a personal criticism and the accusation that either I did not read or understand his papers. I read them and understood them. I stand by our analysis. I will let our readers judge whether our analysis or his represents the more comprehensive and more objective appraisal of the VA+GMWB product.

In regard to the specific points he raised:

A. *The only way the true cost of the longevity insurance can be judged is through a comprehensive, mortality-based framework. Our analysis did this. His analysis considered one scenario, where the investor lived to age 90.*

B. *This claim pertains to an earlier version of our study, which we supplied to Chen as a courtesy. In that version, we criticized the metrics Chen used to assess the performance of the VA+GMWB. Chen's paper states that his analysis is based on "income" flows; but he confuses "income" meaning withdrawals from a VA+GMWB with "income" meaning dividends and interest from a stock/bond portfolio.*

   Withdrawals from a VA+GMWB, which Chen defines as VA+GMWB "income," can include principal draw-downs and receipts upon the maturation of bonds as well as dividend and interest income. It is guaranteed by contract to be at least 4.5% of the initial portfolio.

   On the other hand, "income" as defined for a stock/bond portfolio means only dividends and interest and does not include any principal draw-downs or receipts upon maturation of bonds.

   By combining the "income" – meaning the guaranteed withdrawals, however constituted – for the VA+GMWB sub-portfolio with "income" – meaning only dividends and interest for the stock/bond portfolio – Chen mixes apples and oranges. These are, furthermore, mixed in such a way as to guarantee an advantage to the VA+GMWB as compared with the stock/bond portfolio on Chen's income return / income risk graph. As we noted, this definition of "income" would guarantee an advantage to an immediate annuity even greater than to a VA+GMWB, and would make an immediate annuity look much better than any other portfolio on an income return / income risk basis.

C. *This claim was part of the issue raised in point B above. Based on our reading that Chen was basing his analysis on "income" flows, we assumed that those "income" flows did not include the contract value of the VA+GMWB. This was part of the section we removed.*

D. *The key aspect of Chen's analysis, to which our criticism was directed, did not consider mortality. It considered only one scenario, that which the investor lived to age 90. Chen confirmed this to me in an email, as is documented in the study.*

I want to thank Dr. Chen for pointing out the typographical error in our study. That indeed was an error on my part. It has been corrected.

Robert Huebscher