

LifeSelect™

Fasano Associates' top priority is providing Accuracy, Consistency and Professionalism in estimating life expectancies!

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Life Expectancies — A Different View

By Michael Fasano

In recent months it has become evident that my views on life expectancies and Actual to Expected analyses are different than most, if not all, of my friends in the life expectancy underwriting business. The consensus position was expressed in a well written and thoughtful article penned by Darwin Bayston, “*Life Expectancies — What Next?*”, published in the June issue of Life Settlement Review (see www.lifsettlementreview.com). Although I agree with many of Darwin’s arguments, there are some significant points that I would take issue with:

1. *“The LE changes by all LE underwriters in 2008 were triggered by the Society of Actuaries issuing the revised 2008 VBT tables.”*

This statement is simply not true. My firm, Fasano Associates, made minor adjustments to its older age debiting and implemented new mortality tables in May of 2008 — months before the 2008 VBT tables were issued. Unlike the changes that were implemented by some of the other LE underwriters later that year, our changes had only a very minor impact on the length of our life expectancies.

But more important than quibbling about the timing of the 2008 LE changes, I think it is important to point out that the magnitude of the changes made by some of the LE underwriters was totally out of proportion to the amount of change that could be attributed to the 2008 VBT. Other LE underwriters implemented new mortality tables in fall of 2008 that reportedly had the impact of extending their life expectancy estimates by 16% to 30%. Yet the LE extension attributable to 2008 VBT was far less than that. As compared with 2001 VBT, the 2008 VBT

extended life expectancy for a standard, male non-smoker from a minimum impact of 0% at age 85 to a maximum impact of +10% at age 65. For females, the impact was even less, ranging from -6% at age 90 (a reduction in LE) to +5% at age 65.

Although the *LE extensions in fall of 2008* were attributed to the 2008 VBT, I think it is far more likely that the changes *were an attempt to correct for LE estimates that were far too short*. Although I support such corrections, as our industry needs more accurate LE estimates, I don’t think it is the best approach to implement these kinds of changes exclusively through mortality table adjustments. While overall mortality improvements can be addressed through changes in our mortality tables, impairment specific mortality improvements are best addressed by debiting changes for those impairments. For example, both our Actual to Expected analyses and industry research document a substantial reduction in cardiovascular mortality — far greater than the average improvement in longevity. If these impairment specific changes are averaged along with all other changes — the result will be significant and costly errors in life expectancy estimates. We will underestimate cardiovascular life expectancies while overestimating other LEs.

2. *“In today’s world of probabilistic pricing, the mortality rating is the most important factor.”*

I know of one underwriter who has argued this point. In the past he reportedly applied his mortality rating to the mortality tables used by his clients — resulting in different

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life expectancy estimates being given for the same person. This is only one of the dangers of giving primary significance to the mortality rating. Focusing on the mortality rating can be dangerous. I can generate a 10 year life expectancy for a 75 year old male non-smoker by applying a mortality rating of 111% to the 2001 Ultimate Valuation Basic Table (Age Last Birthday) and can generate the same 10 year LE by applying a mortality rating of 242% to the 2008 Select and Ultimate Valuation Basic Table. The fact is the *mortality rating and the mortality table are inextricably linked*. With both, you can generate the mortality distribution that underlies the life expectancy estimate and provide the most helpful information to the investor. On this latter point, I think Darwin and I are in agreement.

3. *“If past performance for equity markets is not a predictor of future performance, past performance for life settlement transactions is even less relevant.”*

I disagree with both the premise and the conclusion of this statement, as I do with Darwin’s subsequent argument that because LE underwriters lengthened their LEs in 2008, all pre-2008 A/E results are unreliable as a predictor of current and future performance.

For good reason, SEC regulations require mutual funds to put disclaimers to the effect that past performance is not a guarantee of future performance. That does not mean it is irrelevant. If it were, the SEC would not also require that mutual funds publish their past performance. Any good investor is going to look at past performance in as many different scenarios as possible and in the context of the level of risk taken. If you were considering two mutual funds investing in the same asset class over the last decade, and one had an average annual return of 5% with no down years, while the other had an average annual return of 1% with several down years, which one would you pick?

Similarly, ***past performance for life expectancy underwriters is critically important***. The fact that some underwriters may have made changes doesn’t negate this. Indeed the past will not be the same as the future, and because of that, *I question the*

precision and the value of applying current methodologies to past files reviewed to do an “adjusted” A to E analysis. But the fact is that an LE underwriter’s Actual to Expected performance over time, based on his **actual**, not restated, life expectancy estimates does tell us something very relevant about his ability to simply get it right. Changes in methodology have been and will be made, and we all should be trying to achieve a 100% Actual to Expected performance. But I daresay that your chances of getting to 100% are going to be greater starting with an LE underwriter whose historic Actual to Expected accuracy has been in the range of 96% than with one whose A to E has historically been less than 80%. That is just common sense.

4. *“For investors, one A/E number representing the accuracy of an LE underwriter’s work across the entire spectrum of work, is misleading, inappropriate and not within the spirit of full disclosure.”*

I agree that LE underwriters should provide as much granularity as possible in the Actual to Expected reports that they share with investors. A/E results should be presented by durational band, by gender, by smoking status, and by as many variables as is statistically meaningful based on the size of the underwriter’s database. But I don’t consider presentation of the underwriter’s A/E for all cases underwritten since he started underwriting to be misleading, inappropriate or inconsistent with the spirit of full disclosure. Avid baseball fans will follow more than a player’s batting average. They will look at slugging percentage, on-base percentage, strike out history and a seemingly endless array of performance statistics. But the bottom line is that if you have a player who has had an overall batting average of over .300 during his career, he is a good hitter — no matter how you slice it. On the other hand, if you have a player with a batting average of less than .200, he needs to go back to the Minors.

Similarly, *if you have an LE underwriter whose historic Actual to Expected ratio, based on actual — not restated — estimates, has been between 90% and 110%, you have a good underwriter; but if his A to E has been less than 80% or more than 120%, he may need to find another line of business.*