



AMERICAN ACADEMY of ACTUARIES



SOCIETY OF ACTUARIES

July 28, 2009

Mr. Larry Bruning, Chair
Life and Health Actuarial Task Force
National Association of Insurance Commissioners

Re: May 20, 2009, ACLI Comment Letter on the 2008 VBT Table

Dear Larry,

Recently, comments were provided to LHATF by the American Council of Life Insurers (ACLI) expressing its concerns related to the construction and proposed use of the 2008 VBT tables under the principle-based approach now in development by the NAIC (referred throughout this correspondence as "PBA"). The 2008 VBT tables were designed to serve multiple purposes. First, they represent industry individual life mortality experience and are the first attempt to develop tables that classify or stratify the risks into multiple classes beyond smoker and nonsmoker. They are also designed to become the basis for the valuation tables to be used in PBA.

This letter attempts to address the concerns expressed by the ACLI regarding the development of the 2008 VBT Tables only. No attempt is made to address how the tables are proposed to be used in PBA, as comments regarding their use within PBA regulation is the purview of the NAIC and not the Valuation Basic Table Team (VBT Team) responsible for the table development. The intention is not to go back and "fix" the 2008 VBT Tables, but rather, to use the comments as constructive feedback and consideration for development of future industry experience tables that will be part of PBA.

1.) Structure of tables to accommodate juvenile ages.

The originally published 2008 VBT Tables treat juvenile-aged insureds as the same smoking class until attainment of age 18, at which point, the rates are blended into the smoker and nonsmoker distinct tables. The ACLI expressed concern that the migration of juvenile rates to a smoker/nonsmoker distinct rate class was inconsistent with the way in which many of its member companies treat juvenile rates and that an aggregate, uni-smoke table would be more appropriate.

Subsequent to publication of the original 2008 VBT Tables and report, the VBT Team developed aggregate, uni-smoke tables. The interim tables are available on the SOA website. Companies will be able to select the rate class structure that best aligns with their business practices for juvenile risks.

2.) Additional RR Table development at lower relative risk levels than RR70.

The 2008 VBT Relative Risk Tables (RR Tables) were developed to reflect the range of preferred mortality in the underlying 2002 to 2004 individual life experience study performed by the SOA.

The VBT Team looked at individual companies' underwriting criteria scores (UCS) and then used an algorithm to convert these underwriting criteria scores to relative risk scores. We then looked for groupings or natural clusters of relative risk scores. The first relative risk score with sufficient credibility was RR70, the lowest level in the current tables. As these are to represent industry experience tables, the VBT Team felt it was important to have enough mortality experience within each cluster to maintain credibility. The VBT Team agrees that there is a need for RR tables that reflect better mortality experience than the RR70, but believes the tables should be expanded as the experience warrants, and this will be taken into consideration in future table development.

3.) Alternative structure utilizing a single table with an algorithm to adjust rates to reflect various risk classes rather than individual RR Tables.

The VBT Team's objective was to develop tables that were best reflective of industry experience and that were as simple as conceptually possible without sacrificing accuracy. There are challenges with any approach. One challenge with a single algorithm is that it makes maintaining appropriate relationships between tables very cumbersome. It is unlikely a single algorithm can be developed to effectively take into consideration the wear-off of preferred underwriting and convergence of risk classes into population or some other aggregate mortality level at later attained ages, while still maintaining appropriate age and duration relationships and smoothness of rates. Even with the separate tables, considerable time was spent to ensure appropriate relationships were maintained.

4.) Grading to an ultimate table at the same attained age.

The ACLI suggests it may be inappropriate to grade all preferred risk classes to the same ultimate table at the same attained age. Within the 2008 VBT Tables, the preferred distinctions wear-off by attained age 90 and eventually grade to the population mortality by attained age 105 for males and 107 for females. The ACLI also suggests that this structure may result in illogical reserve patterns at advanced ages.

The VBT Team deliberated the appropriate age in which to converge the various preferred risk classes and there was not total agreement among the group as to the most appropriate age. Unfortunately, there is very little credible preferred mortality experience at the more advanced ages, making any argument as to the most appropriate age difficult to support. The VBT Team does feel strongly that, until experience says otherwise, it makes sense that mortality converge at some age and that at the most advanced ages, insured life mortality converge with population mortality.

The VBT Team did a lot of research with respect to the ultimate mortality level that was most appropriate and with respect to the age at which there was no longer a difference between insured mortality and population mortality. While there is no credible experience (population or insured) at the most advanced ages, the VBT Team believed the population mortality reflected in the Social Security Administration data was the most appropriate for purposes of the VBT.

We recommend this continue to be an area researched and refined in future industry mortality table development as more experience emerges.

5.) A.) Business included in older age experience and use of CPI rather than average face amount.

The ACLI notes that not all business subject to "full underwriting" was considered in the table development. It suggests that thresholds based on average face amounts rather than CPI factors may have been more appropriate in determining "full underwriting" equivalency to \$100,000 for older blocks of underwritten business. The VBT Team reviewed the levels determined using average face amount and did not believe the results would have been materially different from those determined using the CPI. One complicating factor was the split of tables and mortality experience into the Limited Underwriting and Primary Tables. In trying to keep the underlying mortality experience unique for each table, some of the lower face amount experience was included in the Limited Underwriting Table rather than the Primary Table.

B.) ILEC data demonstrated insured mortality significantly below population mortality regardless of the level of underwriting.

The VBT Team agrees that the underlying experience data did show a lower mortality level than the population mortality. However, there was also limited mortality experience at the most advanced ages, regardless of face amount and risk class. The mortality in the 2008 VBT does not reach 100% of the population mortality until attained age 105 for male risks and 107 for female risks. Currently, there is no credible level of mortality experience at the most advanced ages. Even the Social Security Administration mortality experience is only credible to age 95, with projections used thereafter. In our judgment, grading to population mortality in the early 100s may be conservative; however, we do not have sufficient experience to know for certain.

The VBT Team has requested that the experience analysis team more closely look at the attained age data above age 100 and that this assumption continue to be refined in future mortality table development as more experience emerges.

6.) Lack of a terminal age.

The ACLI recommends the valuation basic tables be developed with a terminal age at which the mortality rate is defined as 100%.

The valuation basic tables are used for many purposes, including as an underlying basis for company experience studies, individual pricing, reinsurance pricing, etc. Recent mortality research suggests that using a forced terminal age may not be appropriate and that at some age, the mortality rate continues as a constant rate, rather than continuing to increase. One of the intentions of the valuation basic tables was to best reflect insurance mortality experience. It was always recognized and communicated with the regulators that, while a terminal age may not make sense for an experience table, it is necessary when considering a valuation table for developing reserves and cash values. As such, we do not recommend that a terminal age be used in future industry experience mortality tables (i.e., valuation basic tables) but do concur in their necessity in any valuation tables to be developed.

7.) Other factor consideration in the UCS scoring tool.

As the ACLI notes, there are many considerations in addition to specific underwriting requirements that affect a company's overall mortality experience, including how closely they hold to their underwriting requirements, quality of the agent, and customer demographics. Two companies with the same underwriting requirements can experience different mortality due to some of these other factors. The difficult part in any scoring tool is making it as objective as possible. Most, if not all, of these other factors and their impact on the resulting mortality level are subjective in nature and specific to an individual company. As such, they are not the type of items that can easily be quantified, collected, studied and incorporated into a UCS tool.

One possible suggestion in the use of the tables is to allow some judgment to use a higher or lower table depending upon the individual company circumstances, rather than rounding up to the next highest RR table. This would need to be incorporated into the PBA regulation and is not within the scope of the VBT Team.

The VBT Team does recommend performing more comparisons of the underlying mortality data based on relative preferred classes and that it continue to revisit and refine the UCS tool to the extent it is able. It will take a significant effort to do this on the 2002-2004 ILEC data. With limited resources, the VBT Team believes it would be prohibitively expensive to revisit this issue. However, new data is in the process of being collected and the VBT Team recommends this type of analysis be performed and incorporated into future experience analysis and table development.

8.) UCS scoring tool for debit/credit underwriting approaches.

The ACLI accurately notes that the current UCS scoring tool does not appropriately handle underwriting programs that utilize a debit/credit scoring approach to determine the rate class for an insured. A debit/credit scoring tool is in its final development and will be published in the near future. Other comments regarding the limitations of any UCS scoring tool aside (see comments under item 7), the release of this new tool should address these concerns.

On behalf of the VBT Team, we appreciate the ACLI's careful consideration of the 2008 VBT Tables. As noted throughout our reply, we will take these comments into consideration as future industry experience tables are developed.



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