



# AMERICAN ACADEMY *of* ACTUARIES

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## **Memorandum**

TO: Larry Bruning, chair, Life and Health Actuarial Task Force

FROM: Donna Claire, chair, Preferred Mortality Project Oversight Group

DATE: June 2, 2009

RE: Discussion of Alternatives Regarding Updating the CSO Table

## **Background**

At the request of the NAIC's Life and Health Actuarial Task Force, the Preferred Mortality Project Oversight Group (POG), a joint committee of the Society of Actuaries and the American Academy of Actuaries<sup>1</sup>, has been working on developing new Valuation Basic mortality tables and the development of a new CSO table. The POG has given updated reports to LHATF and a presentation of the POG's Valuation Table Team was made at the LHATF meeting in March 2009. This was discussed further on a May 6, 2009, LHATF conference call.

This memorandum discusses the pros and cons of three possible alternatives: the development of the "2008 CSO," changing the current interim 2001 tables to more closely reflect current experience, and beginning work to develop a 2012 CSO table instead.

## **Alternatives**

### **Developing a "2008 CSO" Table**

The POG has been working on the 2008 CSO table. It was originally anticipated by LHATF that this table would have been adopted by LHATF, meaning it would be able to be used by companies when the states adopt it. However, at the LHATF meeting in March 2009 and on the subsequent conference call, concerns were raised as to whether the cost of implementing the table was worth it. The pros and cons of going forward with the "2008 CSO" are:

#### **Pros:**

1. The data behind the "2008 CSO" is from more companies (35 vs. 12) and covers more preferred underwritten business than that for the 2001 CSO.

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<sup>1</sup> The American Academy of Actuaries is a 16,000-member professional association whose mission is to serve the public on behalf of the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

2. The tables would likely reduce the total portfolio reserves of competitive term products written with a preferred underwriting structure by about 10% - 20% if using margins consistent with 2001 CSO.
3. Reduction in term reserves would likely reduce the need for expensive letters of credit, securitization, or other methods term writers are using to get reserves to a level more appropriate relative to current experience
4. There is a possibility that consumers would benefit from having lower term insurance rates if companies pass along savings from reserve relief.
5. Actual adoption of a table by states can take many years, so, if the process is started with the "2008 CSO," it could provide appropriate reserve levels sooner than waiting for a 2012 or later table.
6. Typically, the use of new tables is optional for three to five years on a statutory reserve basis, so those companies that do not want to switch to the new tables immediately still have a period during which the switch would not need to be made. If the period were similar to the 2001 CSO table, it would be 2017 before the table would be mandatory.

Cons:

1. Although the table is being designed for reserve issues only, there is a linkage to the nonforfeiture table since the CSO table is used to establish the tax qualification as "life insurance." Consideration of a new table must also take into account the impact of nonforfeiture values to consumers and regulators. There would be significant re-filing expenses for nonforfeiture benefits with no real change in the reserves. No testing has yet been done in this area.
2. The difference in reserves for whole life and universal life products is relatively smaller than for term products.
3. Three more years of mortality data is currently being compiled, so waiting until the 2012 CSO would provide a more robust data set.
4. The 2012 reserve process may need new tables even if a CSO 2008 table is provided.
5. A new CSO table may not be readily or timely adopted by the IRS and Treasury for tax purposes. There are also structural issues (such as the aggregate table and the number of underwriting sub-categories) that need to be addressed to meet tax qualifications.

**Changing the 2001 CSO Table Preferred Structure Tables**

The ACLI developed what is known as the preferred structure 2001 CSO table. It took the aggregate CSO table and developed additional table splits companies could use if they met certain criteria. The male non-smoker table was split into three tables: super-preferred, preferred and residual. The split tables aggregate back to the male non-smoker table originally developed as the CSO Table. Companies whose experience justified the use of the preferred or super-preferred could use these tables for reserving. A suggestion was made by a LHATF member on the May 6, 2009 conference call to reduce the mortality of the super-preferred and preferred splits so that competitive term writers could get some relief. The pros and cons of this alternative are:

Pros:

1. It could be implemented relatively quickly.
2. Since most nonforfeiture values are determined from the aggregate table, there would not be the problem of companies having to re-file their products.
3. It could provide some relief to competitive term writers. Any additional re-filing expenses due to the change would only be borne by companies that would also see a benefit.

Cons:

1. Since the tables must aggregate back to the 2001 CSO tables, if the super-preferred and preferred table values are reduced, the residual table values would have to be increased. This would mean business using the residual table would see an increase in reserves. This is problematic, considering that work done with the 2008 data showed that the residual table mortality rates should be lower.
2. If the qualification as to what business can use the super-preferred tables is changed in order to justify the reduction in those values, some business currently using the super-preferred table may now instead only qualify for the preferred table (or, if currently using the preferred table, may now only qualify for the residual table), so some term reserves may actually increase under this alternative. Overall, it is not expected that total reserves would have a significant change.
3. Since the use of super-preferred and preferred tables depend on company experience, their use may disadvantage small companies that do not have credible experience.
4. The data underlying the 2001 CSO table is out of date. The underlying mortality shape is different than that underlying the “2008 CSO.” This means that results at certain ages and durations will be different than that using the more up-to-date information in the “2008 CSO.”
5. The overall reserves may not change significantly for most carriers – it would only shift reserves around among the risk classes.
6. The revised splits must be carefully reviewed to ensure they do not disturb the tax qualification of life insurance.

**Waiting for the 2012 CSO Table**

If it were determined that it would be better to have a 2012 CSO table instead of proceeding with a “2008 CSO” table, the POG could accommodate that. The pros and cons of this alternative:

Pros:

1. There would be three additional years of mortality data that could be used, so the results should be more up-to-date, and data on the relatively recent preferred split is particularly valuable.
2. Companies would have a few more years before they would need to update the nonforfeiture values.
3. The results, when they become available, may produce even lower reserves for certain competitive term writers than the above alternatives.
4. The new table could be implemented at the same time as the principle-based reserves, which is when some companies may be re-filing products.
5. There would be more time to study the need for and amount of margins, particularly for the preferred structure.
6. From a solvency viewpoint, the current tables provide sufficient (appropriate or excessive) reserves.

Cons:

1. Waiting until 2012 means that the competitive term writers would not get relief for several more years.

2. Reserves may not necessarily be lower than those under 2008 so it may not be worthwhile to wait: if some companies can benefit by acting now, waiting and not improving the amount of relief in the future seems detrimental.

### **Work on PBA**

The CSO table issue is separate from the work on developing the mortality tables for a principle-based approach to reserves. It is expected that the work done on the 2008 Valuation Basic Table will also be used in the subsequent versions of the table for PBA work. In the future, it is anticipated that Valuation Basic Tables would be prepared more frequently as needed.

The Valuation Table Team will continue to work on developing margins to be used in the PBA work.

### **Summary**

The Preferred Mortality Project Oversight Group would like additional direction regarding how to proceed with work on the CSO.

If you have any questions on this memorandum, please feel free to contact me.