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# Relevant Industry Mortality Experience and Guaranteed Issue Mortality

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The implementation of principle-based reserves (PBR) has brought an increased focus on developing industry tables and tools to extract relevant industry data from aggregated industry experience studies. When a company's own relevant experience is not fully credible, the Valuation Manual (VM) requires that the company calculate anticipated experience assumptions by credibility-weighting the relevant company experience with relevant industry experience. In the absence of other relevant industry mortality experience, the company is currently required to use the 2015 Valuation Basic Table (2015 VBT) as the industry experience in this process. However, there may be life insurance products sold in niche markets for which the 2015 VBT would not be representative of industry experience in that market.

The process of developing relevant industry experience started many years ago. For example, the valuation table for industrial life insurance is still the 1961 Commissioners Standard Industrial (CSI) Mortality Table. The Society of Actuaries (SOA) has studied credit life and generally found it to be less than the 2001 Commissioners Standard Ordinary (CSO) male ultimate mortality. The SOA has also studied preneed life insurance—first in 2008 and most recently in 2015. Mortality for final expense life insurance is currently being collected and studied by the Final Expense Consortium organized by LIMRA and Lewis & Ellis to help companies in this market. The consortium has developed a tool to enable participating companies to identify relevant experience out of the aggregated final expense lapse and mortality experience. The SOA is currently in the process of refreshing the 2014 study of post-level premium term insurance lapses and mortality. It is also working to provide tools and data from industry experience studies that will enable companies to select relevant subsets from the aggregated industry data to facilitate company assumption setting.

In 2011, the SOA began data collection for guaranteed issue (GI), simplified issue (SI) and preneed mortality (resulting in



the preneed mortality study already mentioned). Because the Life Actuarial Task Force (LATF) of the National Association of Insurance Commissioners (NAIC) recently adopted a valuation table for GI (2017 CSGI), the remainder of this article focuses on the GI mortality study and subsequent valuation mortality table. For more information about the study, see the full GI mortality report at [SOA.org/experience-studies/2016/2017-gi-mortality-tables/](http://SOA.org/experience-studies/2016/2017-gi-mortality-tables/). If you have previously accessed the GI basic tables, it may be prudent to download the current version of these tables from this link.

With three data collections for products with limited underwriting, the definition of each category was essential to allocating the mortality experience into the three categories. To qualify as GI, the criteria for denial of insurance *could* be based on an issue age range or lack of membership in an association group or other group used in a direct-to-consumer context but *could not* be based on an actively at work requirement, any health-related questions or information, or waived underwriting requirements due to minimum participation thresholds. Preneed life insurance issued on a GI basis was excluded from the GI mortality study except for those under 50 and over 90 for whom GI data was sparse. After analysis of the contributed data, the decision was made to exclude all smoker/nonsmoker data from the GI study. In addition, based on the data sources available to the research team, the resulting GI table is most relevant to GI life insurance sold direct-to-consumer for less than 25 units (each unit representing \$1,000 of ultimate death benefit) with a modified death benefit in the first two years.

The GI mortality study produced the 2017 Basic GI Composite S&U ALB mortality tables for males and females with a five-year select period. As input to the development of a GI valuation table, the research team's project report provided the coverage of companies and exposures at different levels of loading the Basic table (see Table 1).

Table 1  
Contributing Company Coverage by Loading Percentage

Approximate Coverage Percent of Contributing Companies	Percentage of the 2017 Basic GI S&U Table to Achieve Coverage Percent	Exposure Covered by Count
55%	17%	98.9%
64%	45%	99.5%
73%	57%	99.8%
82%	118%	99.9%

Data from 2017 *Guaranteed Issue Mortality Tables Report*, American Academy of Actuaries and Society of Actuaries, March 2017, page 13, <https://www.soa.org/resources/experience-studies/2016/2017-gi-mortality-tables/>.

The first column in Table 1 demonstrates the variation of experience by company, while the third column indicates that the data provided by larger contributors are reflected in the final tables.

When an Amendment Proposal Form (APF) with respect to GI valuation mortality was presented at the 2018 NAIC Summer National Meeting, the LATF added GI contracts to the list of exclusions from VM-20 reserve requirements (along with preneed life contracts and industrial life contracts that were already excluded).

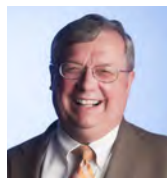
In addition, the LATF selected a 75 percent load to the GI Basic table to create the 2017 Commissioners Standard Guaranteed Issue Mortality Table (2017 CSGI) with male, female and unisex mortality rates.

The definition of GI adopted by the LATF expanded the list of eligibility requirements, resulting in the disqualification of employer groups, corporate-owned life insurance/bank-owned life insurance, credit life, juvenile-only products, and

policies resulting from the exercise of a policy option such as a term conversion or a guaranteed insurability option.

With adoption of the APF, the same mortality table must be used for GI reserve requirements and minimum nonforfeiture requirements. The new 2017 CSGI Mortality Table *may* be used for reserves and minimum nonforfeiture standard values in 2019 but is *required* to be used for GI business beginning in 2020. If the 2017 CSGI mortality tables are not elected for 2019, a company has the option of using either the ultimate form of the 2001 CSO or the 2017 CSO table for reserves and minimum nonforfeiture standard values.

A valuation table for SI remains a work in progress because definitional issues have been challenging to overcome. ■



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