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SOA Preferred Risk Surveys

by Douglas C. Doll

The SOA recently released the “Preferred Underwriting Reinsurance Survey Report.” It is available on their Web site under *Research*. In addition, a presentation was made at the SOA’s Spring Meeting regarding the results of this survey and another not-yet-released survey of direct companies (to see the handouts, go to the Web site, under <http://www.soa.org/conted/cearchive/washington/presentations.html>). This article summarizes some of the results.

The direct company survey is a follow up to surveys conducted in 1995 and 1997. It was conducted last fall and covers information as of second quarter 2002. The reinsurance survey also was conducted last fall. It asked for answers based on quotes in 2001, for 10-year level term plans.

The surveys asked a number of questions about underwriting criteria needed to qualify for preferred risk. They also asked questions about the percentage of issues in each underwriting category and the mortality assumptions for the different categories.

The most prevalent number of underwriting categories was five: three non-tobacco and two tobacco. About 40 percent of direct responders answers/reinsurance quotes were on this basis. The second-most prevalent number is six: four non-tobacco and two tobacco.

From the reinsurance survey, the median percentage of issues for each of the non-smoker underwriting classes is shown in Table 1. There is a wide range of percentages among the individual responses.

Table 1
Median Proportion of Issues in Each Nontobacco Risk Class

	2 Classes	3 Classes	4 Classes
Standard	38%	34%	32%
Preferred	62%	29%	22%
Preferred +	-	35%	17%
Preferred ++	-	-	29%

Table 2
Median Reinsurer Nontobacco Assumption as % of 1975-80

	2 Classes	3 Classes	4 Classes
Standard	45%	45%	46%
Preferred	29%	33%	35%
Preferred +	-	25%	28%
Preferred ++	-	-	24%

The median response for reinsurer mortality assumptions, as a percentage of the 1975-1980 table is shown in Table 2 for issue age 45, duration three. In the slide presentation for the direct company survey, median results were shown only for the three-class system, and are approximately two percentage points larger than the reinsurer assumptions.

There was a wider range of mortality assumptions among the direct writing companies. For example, for the three-class system, issue age 45, preferred plus, the reinsurers' assumptions are all in the range of 20-34 percent. For the direct companies, 11 percent were lower and 9 percent were higher than this range.

The surveys asked for mortality assumptions through policy year 10. About half the respondents had level percentages of the 1975-1980 table. The other half varied by duration, with the median result being a slight increase of a percentage point or two by duration 10.

Regarding future mortality improvement, recall from an article in the last issue of Product Matters! that a survey of direct writers showed that only 25 percent assume this. The prevalence was much greater among reinsurers, with 87 percent assuming future

improvement. Several of the reinsurers varied this by age, sex and duration, but the average magnitude appears overall to be about 1 percent per year for 10-20 years.

For tobacco users, reinsurance results are shown for the system of two tobacco classes: preferred and standard. The median proportion of preferred vs standard tobacco issues is 63 percent versus 37 percent. The median mortality assumption, as a percentage of the 1975-80 table, is 80 percent for preferred tobacco, and approximately 100 percent for standard tobacco.

The surveys asked about how companies arrive at mortality assumptions. The results are shown in Table 3. Not surprisingly, the reinsurers have more experience to look at and, on average, have devoted more resources to developing assumptions. Also not surprisingly, most direct companies look to their reinsurers to provide input on assumptions, and the reinsurers make use of their client experience when available. Sixty percent of the reinsurers admitted that at least a portion of their assumptions is an "educated guess." I was somewhat disappointed not to see "consultant input" in this list, but perhaps that is included in the category of "educated guess." □

Table 3
How Do Companies Arrive At Mortality Assumptions?

	Direct	Reinsurer
Internal UW Recommendations	42%	93%
Mortality Study Experience	39%	93%
Mathematical Formula	36%	80%
Industry Experience	16%	33%
Educated Guess	14%	60%
Reinsurer Input	91%	N/A
Client Input	N/A	47%



Douglas C. Doll, FSA, MAAA, works at Tillinghast-Towers Perrin in Atlanta, Ga. He is editor of Product Matters and can be reached at doug.doll@tillinghast.com.