

On 7/5/05, the SoA CLICE provided the following correction relative to the first sentence of the second paragraph below: "The NAIC provided Annual Statement expense and expense related data by life insurance company for each of calendar years 2000 through 2004 (ranging in number from 1,289 companies in 2000 to 1,058 companies in 2004)."

Attachment Twenty-Nine
Life and Health Actuarial Task Force
6/9-10/05

May 20, 2005

To: Mark Peavy, NAIC

From: Sam Gutterman, Tim Harris
co-chairs, SoA Committee on Life Insurance Company Expenses (CLICE)

cc: Steve Siegel
staff actuary, Society of Actuaries

Re: Society of Actuaries' (SoA) 2006 GRET Analysis

Mark, first we would like to express our appreciation for the Annual Statement expense data that the NAIC provided that has enabled us to perform the following analysis that could provide support for a proposed 2006 Generally Recognized Expense Table (GRET). The following describes our analysis. For definitions of certain terms, please refer to our 2001 GRET analysis available from the NAIC website.

The NAIC provided Annual Statement expense and expense related data by life insurance company for each of calendar years 2000 through 2004 (ranging in number from 1,289 companies in 2004 to 1,058 companies in 2004). As indicated in a planning memorandum submitted to you in February, we intended to review several issues related to the methodology used in earlier GRET studies. The following is a description of the issues analyzed and our findings / recommendations.

- 1. Distribution channel categories.** Last year, based on expense information for calendar year 2003, we had tentatively recommended a combination of the Direct Marketing and Other distribution categories. This recommendation was based on the small number of Direct Marketing companies included in our sample and the large increase in factors indicated. Based on a review of expense data over the last five years, even though a large unit expense factor increase is indicated, we recommend keeping the four category system at this time. Nevertheless, the same factors affect the results in this year's study. The unit expenses for the Direct Marketing category remains significantly greater than those for the Other category.
- 2. Distribution channel assignments.** Last year we reassigned the distribution channel of several insurance companies, based upon discussions among CLICE members. This modification was the primary contributing factor to the inconsistent trend observed by distribution channel, which resulted in our recommendation not to proceed with implementation of the proposed 2005 GRET. This year, we conducted a survey of companies included in the NAIC data base – about one-third of those surveyed responded (about 350 companies). We used the results of this survey to reassign distribution channel categories for those companies, with distribution channels assignments previously used for the remainder. The large majority of companies were included in the Other category (see the accompanying excel spreadsheet for the number of companies by category included by year. We identified several companies that were self-categorized that certain members of CLICE would have characterized differently; however, the number of these were relatively small. We do not believe that the reassignment of those few companies would affect the results in a significant manner. We do however recommend that further enhancement of the distribution categorization be conducted in conjunction with next year's review, through follow-up surveys where indicated, to increase the percent of companies with self-designated distribution channel assignments.
- 3. Universal life and variable universal life pour-ins.** The lack of explicit reflection of pour-in premiums for these products (similar to the treatment of single premiums) has previously been identified as a deficiency with the application of prior GRETs. Although industry-wide data as obtained from LIMRA was obtained, CLICE was unable to develop a methodology for application of that information relating to pour-ins to the Annual Statement data being used. We recommend that this information be obtained from the company survey conducted to obtain information useful for this purpose next year.
- 4. Unit expense relativity seeds.** We have continued to apply the unit expense relativity seeds used in prior studies. This set of seeds (i.e., unit expense factor relativities by distribution channel and type of expense factor) was derived

from a LOMA eMap study conducted in the mid-1990s. LOMA discontinued this study two years ago and was unable to provide a more recent set of factors than that used. We recommend that this be reviewed next year, possibly reflecting the results of the most recent SoA Inter-Company expense study.

5. **Number of companies included.** In part due to practical reasons, the basis for all prior GRETs was the expense and expense related data for the 200 largest life insurance companies (after the exclusion of outliers and those companies with significant reinsurance involvement – see the Appendix for a description of the criteria applied for these exclusions). For this year’s GRET study, we also reviewed expense and expense related data for all companies in the NAIC data base that met the acceptability criteria. As a result, for example for 2004, 415 companies were included, rather than just the 200 companies with the largest amount of expenses. As a result, an increased number of smaller companies were included. We believe that the use of a larger number of companies that is more representative of the average company in the industry should be preferable to the limited number of companies previously relied upon. As a result, we recommend that the NAIC consider the results from the larger sample of companies.

6. **Number of years included.** Previously, experience from the most recently available single calendar year of experience was the base used in the calculation of a GRET (for example, calendar year experience for 2001 was used for the 2003 GRET). As a result, some GRET values have tended to vary significantly from year to year. To study this effect, two and three year averages were also calculated. The use of a two or three year average appears to result in less variation by year, while not sacrificing the currency of values. Nevertheless, since the GRET will generally be applied two years after the experience for the year, it is desirable to use as recent experience as practical. As a result, we recommend that the most recent two year average values be used.

7. **Measure used.** In prior studies, the calculated unit expense factors for the company with the median expense factors in each distribution channel category were used. Our analysis this year also included an alternative measure consisting of the average of the factors for all companies in each distribution channel category. CLICE did not study the use of a weighted value (using company size as weights), as it was felt that too much weight would be given to the very large companies. We believe that it is more appropriate to use the unweighted average of the expense factors of the companies in the study, rather than just those of a single company with the median expense factors.

The resulting values generated from (1) 2003-2004 experience for (2) the entire data base (after elimination of outliers and those with heavy reinsurance concentrations), based on (3) unweighted average values are shown below, along with the 2003 GRET. Although the change in methodology contributed to some of the difference in relativities indicated, a significant portion of the differences is due to the improved assignment of companies by distribution channel.

Factors Based on 2003-2004 Data – Average of Company Factors				
	Acquisition Per Policy	Acquisition Per Unit	Acquisition Per Premium	Maintenance Per Policy
Branch Office	\$ 76	\$ 1.35	84%	\$ 38
Direct Marketing	\$ 111	\$ 2.00	61%	\$ 56
Home Service	\$ 72	\$ 1.30	40%	\$ 36
Other	\$ 78	\$ 1.40	43%	\$ 39

Current Factors – 2003 GRET				
	Acquisition Per Policy	Acquisition Per Unit	Acquisition Per Premium	Maintenance Per Policy
Branch Office	\$ 66	\$ 1.15	73%	\$ 33
Direct Marketing	\$ 80	\$ 1.40	44%	\$ 40
Home Service	\$ 61	\$ 1.10	34%	\$ 31
Other	\$ 85	\$ 1.50	47%	\$ 43

If any questions arise about the results or this analysis, please contact Steve Siegel (847-706-3578) at the office of the Society of Actuaries.

attachment

APPENDIX – Process used to calculate GRET related data

The first step that the Committee on Life Insurance Company Expenses (CLICE) followed in the analysis used in developing 2006 GRET recommendations was to obtain expense and expense related data. This was provided by the NAIC for 2000 through 2004 from life insurance companies' Annual Statements. The expense categories included were the same as used in prior GRETs (see the Society of Actuaries' report describing the process used to develop the 2001 GRET, available from the NAIC and SoA websites). The data provided covered about 1,050 companies' Annual Statements each year. Previously the 200 largest life companies as measured by life insurance expenses were included, subject to the following adjustments.

The companies were grouped into four distribution system categories: Branch Office, Direct Marketing, Home Service and All Other. Companies were previously placed in the appropriate category based on research performed by Conning and Co. in the early 1990s, supplemented by public information (e.g. Best's Reports) for our analysis. This year, CLICE conducted a survey of these companies, directly to the correspondents indicated in the electronic version of their Annual Statements. Somewhat more than one-third of the companies responded. For those companies that did not respond, the previous assignments were used

This expense information for each group was used to modify the LOMA expense factors that have been the seed factors in all prior GRET calculations (\$63.13 of acquisition expense per policy issued, \$1.123 of acquisition expense per \$1,000 of face amount issued, 34.8% of acquisition expense per first year premium, and \$31.59 maintenance per policy for all categories except for Branch Office companies, for which 69.9% of acquisition expense per premium was substituted). This modification was accomplished by multiplying the LOMA expense factors by the appropriate units from each company. An adjustment factor was calculated as the ratio of the total group of companies' expenses to the totals produced from the LOMA factors. This ratio, when applied to the LOMA seed factors, and multiplied by the appropriate units, then reproduced the total expenses for the group.

Actual to expected ratios were then calculated using each companies' units and the adjusted LOMA factors and the companies are sorted by their actual to expected ratios.

To reduce the effect of reinsurance on the analysis, companies were eliminated if life reinsurance commissions and allowances were at least 25% of the sum of life general expenses and life commissions. In prior studies, additional companies were added to replace those that were dropped so that the 200 company base was maintained. Companies considered to be "outliers" were then excluded. Outliers were generally determined to be those companies with expenses that were less than 20% or greater than 300% of the expenses produced by the median factors applied to that company's units. Again, new companies were selected to bring the number back up to 200.

In the current study, two sets of companies were studied separately: (1) the former approach of using the largest 200 companies after those eliminated as described immediately above and (2) all companies after those eliminated as described immediately above. The number of companies was expanded, in part due to the relatively limited number of companies in the three specific distribution channel categories and in part due to a desire to obtain an overall larger sample size, that would at the same time better match the characteristics of the non-reinsurance industry.

In prior GRET studies, the final expense factors for each group were then derived by applying the A/E ratio of the company in each distribution channel category whose expense factors were the median value to the modified LOMA seed factors. In the current study, the expense factors for both (1) the company with the median values, as before, and (2) the average of the company ratios in each category were calculated.

Finally, the factors were rounded in the following manner: "Per Policy" expenses were rounded to the nearest dollar, "Per Unit" expenses were rounded to the nearest \$0.05 and "Percent of Premium" expenses were rounded to the nearest percent.

As a result, we obtained for the four distribution channel categories, the following four sets of expense factors, that are included in the attached excel spreadsheet:

- (1) The company in each distribution category from the largest 200 companies with the median expense factors
- (2) The company in each distribution category from the total data base with the median expense factors
- (3) The unweighted average factor for the largest 200 companies
- (4) The unweighted average factor for the total data base.

The 2003-2004 factors in the attached spreadsheet for (4) are currently recommended to form the basis of the 2006 GRET.