On August 9, 2011, SCOR SE, a global reinsurer with offices in more than 31 countries, acquired substantially all of the life reinsurance business, operations and staff of Transamerica Reinsurance, the life reinsurance division of the AEGON companies. The business of Transamerica Reinsurance will now be conducted through the SCOR Global Life companies, and Transamerica Reinsurance is no longer affiliated with the AEGON companies.

While articles, treaties and some historic materials may continue to bear the name Transamerica, AEGON is no longer producing new reinsurance business.

**Archive Materials**

**Lapse Rates: Focus of More Attention**

*Reprinted from the June 2009 Messenger newsletter*

By David Wylde, Research & Development Actuary
Lapse rates play an important role in the profitability of a guaranteed level premium term insurance portfolio. A new study from Transamerica Reinsurance shows that the downward trend in early duration term lapse rates that the industry has been experiencing since the turn of the millennium is continuing unabated.

In a 2007 report, LIMRA indicated that annual face amount lapse rates for term insurance decreased from 10.3 percent during calendar years 2001-02 to 6.2 percent during 2003-04. Transamerica’s early duration experience for its block of reinsured level premium term supports this trend with an overall annual lapse rate of 5.8 percent for 2004-05 and 5.2 percent for 2006-07.

**Dissecting the Transamerica Experience**
The Transamerica study covers exposure periods 2004-05 and 2006-07 and focuses on 10-, 15-, 20- and 30-year guaranteed level premium term plans. Additional filters on the data include:

- Original ceded face amounts of $100,000 and over
- Issue ages 18-72
- Standard risks only (no table or flat extra ratings)
- Policy years 1-9

While there was additional experience beyond policy year nine, the study did not want to skew any combined results with the high tenth year “shock” lapse coming from the 10-year term.
**Lapse Rates by Level Premium Plan**
The chart on the next page contrasts the lapse rates for the two exposure periods for each of the level premium plans. The 10-year plan has historically exhibited higher lapses compared to the other plans, and recent experience continues to validate this relationship. Note that each plan shows a marked decrease in early duration lapses from 2004-05 to 2006-07, with only the 30-year perhaps indicating a modest slowdown.

**Lapse Rates by Issue Age Group**
The decrease in lapse rates from 2004-05 to 2006-07 occurred consistently across nearly all issue age ranges. It is also interesting to note in the chart below that the pattern of higher lapses at the youngest and oldest issue ages remains intact. This makes some intuitive sense. In both age groups, the perceived cost of term insurance is high relative to net income and the perceived need for term insurance is low, which results in higher lapses.

**Lapse Rates by Policy Year**
In previous eras, early duration lapse rates were reasonably flat, as illustrated by the Transamerica 2004-05 experience depicted in the following chart. The most recent study period implies, however, that while very early duration rates (policy years one and two) remain close to this level, they quickly drop to around 4.5 percent during policy years three through nine.

**Lapse Rates by Smoking Status**
The following chart presents face amount lapses by smoking status. The two-to-one relationship between early duration rates for smokers and nonsmokers continues a trend that has been observed for many years.

Additional analysis by policy year shows that the ratio of smoker to nonsmoker lapse rates starts out at about 250 percent in duration one and linearly decreases to 150 percent by duration seven and remains level until duration nine (the self-imposed last duration of the study).
Lapse Rates by Gender
During the current decade, term lapse rates have been almost the same for both females and males. As this chart indicates, this relationship continues even as overall rates decrease. The 2003-04 LIMRA experience validated the early duration equivalence for both 10- and 20-year term plans.

Lapse Rates by Policy Size
The final chart below compares lapse rates by original policy size (not of the size of the reinsurance cession). Current term insurance lapse rates are about one percentage point higher for policies with face amounts of $100,000 to $249,000 compared to policies of $250,000 and over. This difference is not due to a skewing of issue ages, as all three size groups have an average issue age of around 40. Nor is it due solely to large differences in the percentage of smokers by policy size, as less than 10 percent of the policies within each group are smokers. Finally, it is not due to a preponderance of 10-year term in the $100,000 to $249,999 group, as about 25 percent of the exposure in each size group is from this plan.

One possible explanation for this difference is the general socio-economic position of policyholders purchasing lower face amount term insurance.

Summary
Getting the lapse rate assumption correct on a portfolio of term insurance is one significant key to successfully modeling financial performance. As most pricing actuaries know, lower-than-expected lapse rates can actually have a negative impact on the profitability of an inforce block. For this reason, the continuing downward trend may be a little disconcerting to those who had priced their term products during an era of higher lapse rates.