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Projecting Policy Persistency

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Many LTCI actuaries were watching the LTCI reserve assumption developments in NAIC committees over the past couple of years. One particularly sensitive assumption was the policy termination rate. As LTCI tended to be termination supported, some of the regulatory actuaries were naturally concerned that LTCI termination rates were much smaller than had been anticipated even four or five years ago. They wanted to indiscriminately impose very small termination rates on all insurers. Yet some company actuaries argued that the terminations were not always small, and varied from company to company.

We can understand why regulatory actuaries might want to apply one standard to all companies. As a pricing actuary for some small LTCI carriers during the late 1990s, I was personally concerned about using the actual historic company experience for an issue-age priced product. I speculated that the smaller company terminations may have been higher than those of larger companies because of the company financial ratings, and I considered that the small companies might sell their LTCI to a highly rated company.

Yet recent persistency studies reveal an explanation for the varying termination rates among LTCI carriers, that is intrinsic to the business itself, rather than to the company. Persistency varies significantly according to policy benefits, marital status, risk classification and distribution channel. These factors are apparent in the 2004 report, "Long-Term Care Insurance Persistency Experience," sponsored jointly by LIMRA International and The Society of Actuaries LTC Experience Committee. They are also apparent in a study that the Penn Treaty actuarial department recently prepared. This study included regressions, separately by policy duration, of a variety of factors on persistency.

Policy benefits. Reviewing the LIMRA/SOA study, most significant among the mainstream benefit options appears to be the automatic increasing benefit option, which tends to have higher persistency than policies without it. Yet having unlimited benefits or a lifetime benefit

period also experiences better persistency. The Penn Treaty study had mixed results on both of these options, as the predictor coefficients did not behave consistently by duration. For example, the increasing benefits option appeared to reduce persistency in early durations, but increase it in later durations. One interpretation of this is that the high premium has more of an impact on the early-duration persistency than it does on the later.

Marital status. Both the LIMRA/SOA study and the Penn Treaty study identify better persistency for married individuals. With a termination-supported product, this suggests there should be pressure for increases in premium rates for married couples, possibly in the form of smaller spouse discounts. Spouse discounts are normally based on lower morbidity for married couples than for singles, yet varying persistency assumptions by marital assumptions may be appropriate as well.

Risk classification. The small amount of data in the LIMRA/SOA study identifies a lower lapse rate for substandard policies than for standard. The Penn Treaty experience includes much more exposure in substandard classes, and it suggests that total terminations are significantly higher for substandard classes. Penn Treaty data does not identify mortality and voluntary lapses separately. The substandard classes may have much higher mortality. Yet a reasonable conclusion is that substandard classes experience lower persistency.

Distribution channel. The LIMRA/SOA study provided confirmation of what the industry has known for some time. The LTCI business that is sold through captive agents experiences higher persistency than that sold through independent producers.

Because persistency varies significantly by the character of the business, actuaries will do well to consider the intrinsic character variations in their projections, whether they be for pricing, financial modeling, asset adequacy analysis or GAAP recoverability testing. ✱



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