

SOCIETY OF ACTUARIES

Article from:

# **Product Matters**

February 2015 – Issue 91

# Evolving Strategies to Improve Inforce Post-Level Term Profitability

By George Hrischenko

An increasingly popular topic at industry meetings is how companies can best manage the post-level term (PLT) for level premium term life. Indeed, the SOA's Annual Meeting devoted not one but two sessions to this specific topic.

And for good reason: many 10 and 15-year level premium term policies are reaching the end of the level period. Because of the product design, this raises both selection and pricing issues that, left unaddressed, may create a vortex of deteriorating mortality. (For more information on this topic, we strongly suggest "Post-Level Term Survey Results," by Jason McKinley, FSA, in the June 2014 issue of SOA's *Product Matters!*)

### The Pricing Approach

In the early years of level premium term life, many carriers reported minimal—and in some regulators' views, insufficient—reserves for the business. Companies justified their reserving approach by arguing that at a future date, premiums would change from a level premium to an increasing scale of yearly-renewable term rates, thereby mitigating the need to carry significant reserves in the early durations. The unitary reserve method allowed actuaries to value the reserves using the entire product horizon including both the level period and the YRT period. With the high end of term lapse rates actually observed in recent years, and the lack of lapse consideration in unitary reserves, this is clearly an optimistic view of premium income.

Regulation XXX came into effect in 2000 aimed to curb this practice and resulted in significantly increased reserves. XXX required the segmentation of reserves which in essence resulted in a separate valuation of the level period from the increasing ART period. The rule also accounted for lapses which the unitary reserve methodology did not. Very few in force policies were expected to renew following the post-level period, especially at a time when life companies were "racing to the bottom" with their premium rates.

Companies eventually adapted to the new regulation with the help of coinsurance capacity and reinsurance competition and a growing availability of affordable outside financing. The PLT period was but a glimmer in their eye. Today, however, as the years since the first level term plans were issued carries on, many carriers find themselves in the thick of the PLT and confronted with a number of questions:

- How do initial PLT lapse assumptions compare to our expected, calculated more than a decade ago?
- What mortality experience can we expect on the residual, persistent PLT inforce?
- What options do we have to encourage more lives to renew at the PLT?

Answers to these questions, for many companies, remain incomplete as we have just started to experience the first wave of policies entering the PLT. While we have seen some limited lapse experience emerge in recent years it is quite likely that we will not have a clear picture on the resulting mortality effects for some years to come.

# What Limited Experience Tells Us

As mentioned above, there is currently limited credibility of mortality data at this point. What we have seen in our own data in the few years since the first generation of level premium term life policies have reached their PLT are lower lapses in the early durations than assumed. There are a number of potential reasons for this including policy owner complacency which could easily occur if premiums are paid through automatic bank draft, some may keep the policy in place while they shop for a lower rate, some may feel the higher rates are worth the cost (at least early on) of not having to go through the efforts of applying for a new policy and the battery of underwriting tests, unemployment may cause some to persist or lapse, and policy owners going through a divorce settlement may be forced to delay lapse. The good news is that any of these persisting policyholders likely improves the mortality of the residual pool.

This seems to support the idea that, if a carrier could retain even a small portion of lives they expected to lapse, the effects on pool mortality may be highly accretive. However, this remains a theory until we can collect sufficient claims experience to analyze pre- and post-level premium mortality, and then address alternatives by current level of interest.

But the promise is so alluring that many carriers are exploring ways to encourage policyowners to persist in the PLT, even for just a few years. In the next section I



George Hrischenko, FSA, MAAA, is vice president & marketing actuary at SCOR Global Life in Charlotte, N.C. He can be reached at ghrischenko@scor.com. examine four approaches that companies are weighing, and some of the potential benefits and drawbacks of each. I include the original model as a logical starting point.

# Varying Approaches, Uncertain Outcomes: The Original Approach

As originally structured, level-premium term can be thought of as two components: a fixed of level premium and a YRT rate schedule thereafter. Depending on company, the rate difference between the last level premium and the first YRT rate can be significant. While most rate jumps average 5-8 times, we have seen some schedules that allow for up to a 30-multiple jump, with rates continuing to climb from there. Moreover, in most cases the rates switched from select to aggregate rates, combining all risks into a single rate schedule (and eliminating risk classes). An illustration of such an approach appears in Figure 1.

#### Figure 1 – Traditional Approach to PLT (All Figures Illustrative)



The traditional "shock" rate to a YRT schedule would cause a corresponding "shock lapse," wherein most policyowners would cancel coverage due to the new, much higher cost.

The jump, or "shock," rate was designed to accomplish two goals. First, healthier lives would have good reasons to seek other coverage and lapse the existing, now expensive product. For some companies replacement was the goal, while others including mutual insurers sought conversion to permanent products. The aggregate rate design is much simpler to administer than a multi-class structure. Second, the shock illustrated a ceiling rate, much in line with annual cost of insurance (COI) rates. As such, reserving became much less stressful than in the level period. By setting the ceiling high, the company had leeway to alter rates to reflect emerging mortality.

The PLT YRT rates go back to pre-level term days, when for decades all the market had to offer was a YRT policy. Companies have a certain confidence in pricing such products, pricing and administration is simple, and pricing flexibility allows the company room to change rates as mortality emerges.

On the other hand, the shock rate led to the shock lapse, wherein all but the worst risks are almost guaranteed to lapse and seek new, more affordable coverage. The remaining lives are expected to be amongst the worst of the worst mortality-wise, as they have the greatest incentive to keep their policies in force. With such limited credibility, claims volatility is almost certain, which can make rate setting a guessing game.

**Bottom Line:** The combination of uncertain mortality combined with the loss of the best lives (perhaps to a competitor) make the traditional approach the least appealing in today's environment. This option also is potentially the most dangerous from an image perspective: one can imagine the investigative news reports featuring an elderly couple who has seen their premiums jump 20-fold. And while some better risks may persist for the first year, early experience indicates that any hopes of continued persistency are likely remote.

#### Simplified Re-Underwriting

This is the newest iteration of alternatives to the model described above, and therefore it should not be surprising that a PLT re-underwriting strategy is garnering the greatest interest. So far, a few companies have experimented with a variation of the class-continuation option to mitigate selection issues, with at least one company having implemented a trial run. In this scenario, the company offers the insured the option to answer a simplified issue underwriting questionnaire as the PLT approaches. The carrier uses these answers to determine the insured's PLT risk class, possibly simplified from 5-7 to 2 smoker/nonsmoker classes. Those who decline to reply default to the traditional guaranteed YRT rate (Figure 2).



Figure 2 - PLT with Simplified Underwriting

The simplified underwriting approach gives the insured the option of answering a few medical questions and perhaps obtaining a better PLT rate. Regardless of outcome or if the insured declines, the rate will not exceed the traditional guaranteed YRT rate (the solid curve).

Duration

This idea has a number of advantages over the other options discussed below. First, it is less arbitrary. Even with a simplified underwriting questionnaire, the carrier can learn much about the insured's current mortality profile. This sense of fairness, companies believe, may make the pricing and rate schedule appealing to both customers and regulators.

Perhaps most importantly, it helps address—at least somewhat—the selective lapsation issue that many of the other approaches have to varying degrees. Even with a simplified underwriting questionnaire, the carrier is apt to learn more about the specific risk the persisting insured presents.

But because this is a novel approach, it raises a number of questions that remain unanswered. For example, what signal value is communicated to the policyowner by offering the re-underwriting? Our experience has demonstrated that many level term policies for the best risks stay inforce for at least for a short time post level term because policy owners do not react to the rate change until after it has taken effect. Offering the simple questionnaire before the PLT anniversary may alert the insured of the pending premium jump. This could cause the policyowner to lapse sooner, especially the best risks. Conversely, many level term policies contain conversion provisions. The notification of a jump in rates may incent impaired risks to exercise this option, locking in lower rates than the shock rate.

Implementation also poses challenges. How will the insurer communicate this option to the consumer? What questions will the insurer ask? How will the insurer ask the questions and collect the answers? What will the insurer do with incomplete questionnaires? How can the insurer guarantee that the largest number of policyowners responds?

Perhaps the simplest approach would be to enclose in the notification a postage-paid postcard with "Yes/No" questions and possibly an authorization to examine pharmaceutical and driving histories. Unless some incentive is offered to producers, it is highly unlikely that the company can recruit agents to perform this valuable task. However, call centers may be useful.

Carriers with an automated simplified issue process in place may be able to direct insureds to a secure website and process the decision immediately. For example, SCOR's Velogica solution for middle market sales may be an effective and relatively easy tool to implement. Velogica was originally designed as a solution to allow life insurers to access the middle market, using webbased technologies to access databases and produce a logic-based underwriting decision at the point of sale. Such a technology could allow a call center employee to inform an existing policyholder of their approval for more favorable rates under the re-underwriting approach. The major labs, including ExamOne, have developed lab scoring tools based on blood and fluid panels. Other reinsurers and consulting firms may have similar available technologies.

**Bottom Line:** A simplified affirmation of the insured's continued (relative) risk profile could be a big win-win for both the consumer and the insurer. The policyowner obtains the benefit of a possible PLT rate discount, while the insurer can be somewhat confident that the discount

is warranted. In a world where we want the policyowner to persist, this approach may offer the most promising results.

#### The Graded Approach

About five years ago, several companies began experimenting with an approach somewhat similar to what is being done in Canada. This involves using a graded approach, where PLT rates increase at much smaller increments until a future anniversary (e.g., 5 durations post end of term). Following the end of this graded period, rates jump to the original YRT schedule (Figure 3).

#### Figure 3 – The Graded Approach



Following the PLT, rates increase gradually and for a fixed period, with perhaps additional "steps," before converting to a YRT schedule. The dashed line simulates the original YRT shock rate.

The graded approach allows insurers to ease in higher rates that are much more attractive to the policy owner than those originally illustrated, while retaining the right to increase rates up to the ceiling if need be as experience emerges. By moderating the premium jump, many policy owners may be encouraged to retain the current coverage rather than go through the ordeal of being reunderwritten (at a new attained age and with any impairments) for a new policy. While slightly more complex than the traditional approach, rates generally do move to an aggregate rate, easing administrative requirements. Perhaps the most positive development with this approach is that experience so far seems to support that this approach generates results in the right direction. Early indications are the PLT lapse rates are emerging much lower than we see with the traditional approach, which should imply a better overall mortality profile.

Two issues remain outstanding, however. First, the best risks still have motivation to replace coverage, as a new level premium policy will likely have lower rates—which happen to be level again for another decade or so. While the residual mortality pool may exhibit better experience, this is of course relative (i.e., worse than experience during the level term). Second, most of the companies that have experimented with this approach have yet to collect any reliable YRT experience. In a way, then, this may be considered a salve, not a cure, to an underlying problem that exists under the traditional model—namely, selective lapsation.

**Bottom Line:** Of all of the alternatives to the traditional approach discussed in this article, the graded approach seems to have the most actual supportable experience. So far, that experience appears to be positive from both a mortality and lapse perspective. However, we cannot determine how much of this better experience is attributable to an overall better risk pool of the company and how much is directly due to the new pricing structure. In addition, it should be noted that companies in the market where this approach has been used for some time, i.e. Canada, are now examining what benefits might be had by switching to the traditional U.S. approach outlined above. Do they know something we don't?

#### The Class-Continuation Approach

A few companies have experimented with modifying the rate increase based on the insured's select risk class, with rates converging to an ultimate rate in later durations (Figure 4). The key difference with this approach versus the previous variations is that class structures continue into the PLT period, not aggregating to a single rate. As in the other models, an aggregate YRT ceiling provides the company with some pricing maneuverability. Like the traditional approach, all policyowners experience a rate increase and move to a YRT schedule. However, the magnitude of the jump is dependent on the insured's original risk classification. The best risks would experience the lowest increases, though as was said before, all rates would eventually converge to an ultimate rate in the future.



#### Figure 4 – Continuing Class Structure

Under this approach, all policies experience a rate increase, with the lowest PLT rates being for those originally rated Preferred. Note that all rates converge to an ultimate rate in the future. The dashed line simulates the traditional shock rate.

From an actuarial perspective, the continued-class approach rewards the best risks by raising their rates the least. If properly priced, the rates could be competitive relative to what the insured may expect to be quoted for a new product, at least for the first few PLT durations. Conversely, the worst risks are priced most closely to the YRT ceiling, providing potential encouragement to lapse coverage as the policy becomes increasingly costly. Pricing actuaries anticipate that this approach may help optimize the number of favorable risks to persist.

Additionally, from a risk perspective, actuaries can call upon a wealth of permanent insurance experience to help model appropriate rates for each class as they reach the PLT.

But due in part to its novelty, experience is still scarce, and we have insufficient data to determine how this approach is working in the real world. Post level period jump rates for the best classes would need to be sufficiently low to be competitive with existing preferred rates for new policies, and the convergence to an ultimate rate necessarily implies that the preferred risk's rates will increase at a faster rate than other classes.

Additionally, while we may have a large amount of data on whole life and other permanent insurance to use as a benchmark for pricing, we must understand that purchasing habits vary across product lines—permanent pricing data cannot be used as a direct proxy. Lastly, selective lapsation risk may be highest in this approach, as those originally issued preferred policies who have since suffered an impairment have strong motivations to keep the policy inforce.

**Bottom Line:** The continuing-class approach seems to be the fairest approach in that is relies upon the select underwriting to determine the magnitude of the PLT jump. However, the structure, also lends itself to the highest selective lapsation risk among the approaches. Only time will tell whether the structure will result in improved PLT profitability.

#### Conclusion

Level-premium term life insurance introduced an affordable, readily marketable alternative to expensive permanent life and secured its place in the market as a staple product for the consumer. The pricing structure has evolved into a limited pay level premium period followed by a steeply increasing YRT rate scale. With many term products now reaching the PLT, carriers are revisiting the model they built more than a decade ago to determine whether the profitability of these blocks can grow. The wild card in all designs, however, remains consumer behavior: how will the policyowner react to any structural incentives?

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Unfortunately, by the time we determine the answer to that crucial question, a large portion of business either will have lapsed or be well into the PLT, possibly generating losses. However, carriers are not alone in their search to optimize their PLT blocks. Reinsurers, consultants and other financial institutions are ready to assist in the financial or risk burdens, or both.

