



Product Matters!

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Comments from the Chair

Challenge Brings Opportunity

by Noel J. Abkemeier

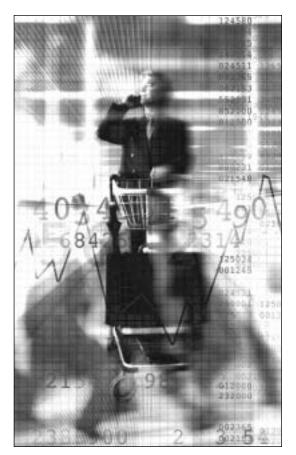
fallback for speakers and writers without an assigned topic is to address the issue that "We are in challenging times." The current circumstances, however, make it a timely topic. The convergence of economic circumstances, regulatory changes, competitive pressures and conscious choices has made product development more difficult, particularly for accumulation-oriented products. But for product developers, challenge is opportunity.

The Bad News Is...

Economic circumstances are marked by low interest rates and reeling equity markets are marked by high volatility. A vision of the future is not encouraging because of the potential impact of terrorism, military actions, budget deficits and political fiscal and economic policy gridlock.

Regulatory changes are stirring the pot with the 2001 CSO mortality table, Actuarial Guideline AXXX for UL with secondary guarantees, and stochastically based C3 riskbased capital for annuities. Rating agencies and investment analysts have raised questions and increased the pressure concerning risk management of derivative-based risks in variable products.

The competitive fight for market share has prodded insurers to ever more competitive and risky product designs. At the same time, reinsurers, who face many of the same pressures as direct writers, have found it necessary to withdraw from areas where



insurers most desire reinsurance. Lifetime settlements have extended insurers' risks.

The greatest problems result from choices that some insurers have made, such as

• Loose policy wording that invites gaming by policyholders



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24 Product Development Section Council Photos from the SOA Annual Meeting

- Aggressive 1035 exchange activities by insurers
- Underwriting inconsistencies between annuities and life insurance that invite arbitrage
- Generous derivative-based benefits (GMDB, GMIB, GMAB, GMWB and GPAF)
- Risk concentration by basing all derivative-based benefits on virtually the same scenario
- Insufficient hedging or reinsurance of derivative-based risks
- Product concentration to take advantage of a hot area
- Product complexity that can lead to market conduct issues
- Aggressive investing, both in duration stretching and reduced investment quality
- Aggressive DAC unlocking strategies on variable products

Know Your Enemy

A basic rule of war is to know your enemy. In the current challenges of product development, our situation can be described in the words of Pogo, "We have met the enemy and it is us." In a sense, that should make it easier to solve the problems. The problems that insurers have brought upon themselves include undiversified reliance on products that hit a down cycle, high risk profiles of derivative-based business, vulnerability to product arbitrage, vulnerability to an interest upturn and more.

There is always pressure to meet and surpass the competition in product design and pricing. But the competitor may be overextending itself to achieve a targeted market share or achieve critical mass. Or it may have diversified its product lines or products within a line in order to reduce its risk profile. Or it may have a justified or unjustified high risk tolerance.

These types of challenges are the reason

that product development actuaries exist. These challenges must be met, but they must be met in the right fashion. They are, in reality, a product development opportunity. But knowledge and education are necessary if the issues are to be dealt with properly.

Much, if not most, of the underlying issues were not covered in actuarial exam studies, particularly for us older actuaries. It is time to make sure we have done our homework to make sure we have all the tools to address the issues. Continuing education in relation to the new products and the new market realities is imperative. With it, better solutions will be found.

The Product Development Section has formed programs that help address these issues and we encourage you to attend one or more of them.

- The third annual Product Development Actuary Symposium, June 12-13, provides a full spectrum of general and breakout sessions that focus on current issues.
- Designing and Pricing Secondary Guarantees on UL and VUL Products is being offered as a symposium pre-seminar on June 11.
- The SOA Spring Meeting, May 29-30, includes 14 sessions specifically designed for the product development actuary plus other relevant sessions sponsored by the Investment and Financial Reporting Sections.
- The SOA Annual Meeting, October 26-29, will include 11 product development sessions.

As I wrote this article, the papers competition on Product Risk and Its Management sponsored by the Product Development Section was coming to a close. We hope it will have produced some valuable analyses that will help in the product development process. Similarly, we are in the final stages of identifying and requesting proposals on a key product development related research issue. With all these pieces in place, I hope the next "challenging times" article will have much more positive overtones. □



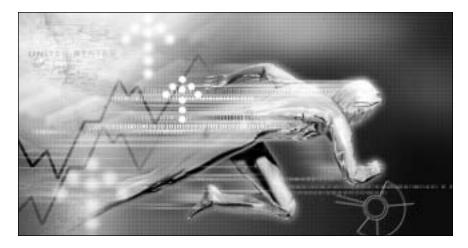
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Implementing Quick Programs: The Bank Distribution Model

by Robert Ireland

Editor's Note: The Product Development Section sponsored a series of three panels at last October's Annual Meeting on the topic of "Implementing Quick-Issue Programs: The Product Development Process." These sessions were #62 (covering distribution), #76 (covering underwriting) and #96 (covering technology). All the handouts for these sessions are available on the SOA Web site under the "meetings/seminars" section. Robert Ireland spoke in the distribution session, and was asked to write up his presentation for our newsletter.

MetLife survey, published at the end of 2002, indicated that almost onethird of Americans over age 18 have no life insurance protection at all. Of the remainder, 30 percent have coverage amounting to less than one year's income. It seems that nearly two-thirds of Americans are under-insured, and it is likely that the majority comes from 'mass market' households-where the income is between \$30,000 and \$100,000 per year.



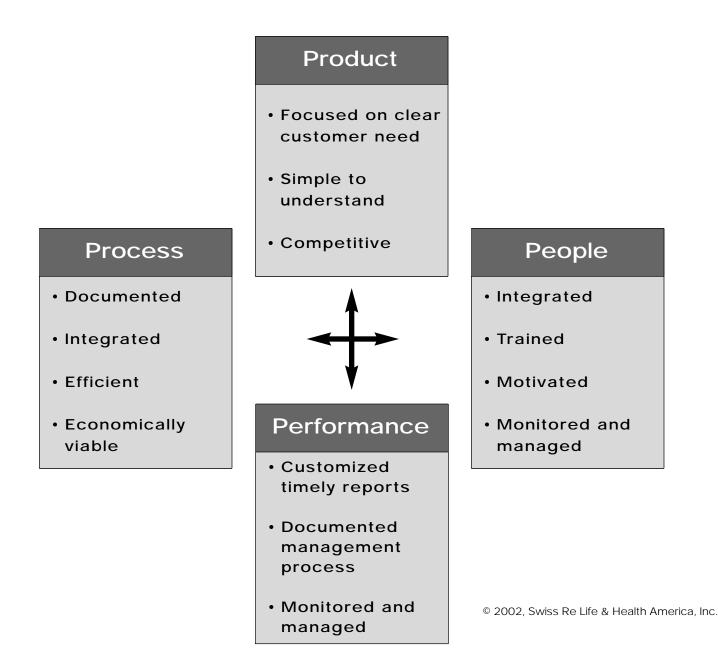
Distributors are tempted to "go where the money is"-meaning upscale. But there are over 54 million households with income between \$30,000 and \$100,000 per year. Swiss Re calculates the aggregate income of these households is \$3,100 billion. This total is \$600 billion more than the aggregate income of those households with income greater than \$100,000 per year. Naturally, the spending power of the higher income segment will be greater. But even if we ignore any moral imperative to help the underinsured, improving penetration of the ignored mass market looks like the proverbial 'low hanging fruit.' The trick is to offer simple life cover solutions through a low-cost distribution method. That's where simplified issue term comes in.

Banks are in regular contact with massmarket customers and are the obvious distribution choice. For bankers to sell life insurance face to face with customers in branches, the product has to be similar to their bank's core products-simple to explain and transact. Distributors in this market are looking for less underwriting and a simple sales and issue process. It all adds up to one of the fundamental sales propositionsconvenience. And convenience has a price.

Bank distributors usually want to compete cost-wise with the most attractive fully underwritten rates available on the Internet. Many of them are reticent about requiring bankers to ask even the few medical questions needed for a simplified issue application. Most bankers will try to persuade carriers to reduce the number and complexity of questions. They have to be helped to understand that any relaxation of underwriting standards must be priced for. For every compromise in risk assessment a distributor asks of a carrier, there is a balancing compromise on price or compensation. The only methods that insurers have of driving down prices in this market are: asking more questions on the application, validating the answers before issue, putting a limit on the face amount and finding proxies for the hard medical information derived from 'fluid' testing. Of these, research into proxies has been a fruitful area for investigation. The protective values of income level, driving history, personal history interview and prescription data are all being either used or tested.

Whatever the distribution channel, the product is merely one of four 'P's' that



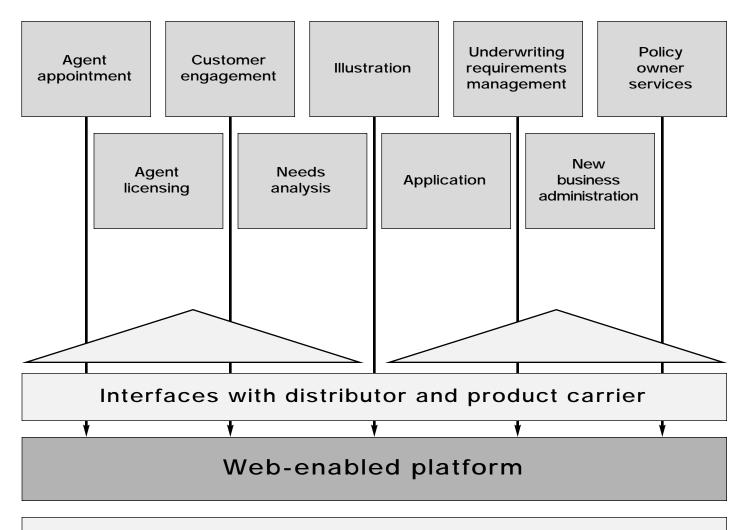


comprise the overall protection solution. The other three P's are; People, Process and Performance management. Each is an important component. The people involved in selling the product have to be trained and motivated to sell. They should follow a documented sales process and their managers should follow a documented sales management process. The performance of all the parties has to be measured, monitored and managed.

This is often difficult for the carrier because three of the P's are in the hands of the distributor. Where this is a third party with a completely different core business (e.g., a bank), it is hard for the carrier to ensure that the people and the processes are performing properly. The carrier's product manager has to be able to influence the distribution management to provide this support. Failure of the product is inevitable without the distributor's retail management support. Wholesalers and sales support tools can encourage retail management cooperation but they involve an extra cost to the carrier that has to be included in the pricing.

Consideration of the lack of control over the sales process brings us to a fifth P—a Web-enabled platform that dictates the process that delivers the product into the hands of the people so that they can perform properly. Carriers are now offering Webenabled solutions that can be integrated with the distributors' internal systems to

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Interfaces with external providers



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lock them in to a particular product. One of the concerns for the industry is that this could lead to a proliferation of such platforms—one per product. Swiss Re has been working on a vanilla solution that could become an industry-wide platform for all protection-based products—simplified issue and fully underwritten.

Of the, now five, P's, Process is the most

important. A properly documented and efficient process ensures that everybody knows how the product is to be put into the hands of the customer. It facilitates training, systems design, management everything. A good process supports the product across the carrier-distributor divide and, if it is adhered to, will ensure the product's success. □

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Arithmetic vs. Geometric Mean Returns

by Douglas C. Doll

Y ou have been pricing your variable annuity product using a singe deterministic scenario with an annual fund growth rate of 9 percent. You want to re-price using stochastic scenarios that are consistent with your single scenario. Since the single scenario has a geometric (i.e., compound) rate of return of 9 percent, you want the stochastic scenarios to have a geometric return of 9 percent, right? Wrong! Assuming that you intend to use the mean of the stochastic scenario results, the right answer is that the stochastic scenarios should have an arithmetic mean return of 9 percent.

Here is a simple example. Consider two scenario returns, (6.80) percent and 25.20 percent. These have geometric annual returns of 8.02 percent and arithmetic annual returns of 9.20 percent. Consider an asset charge of 1 percent at the end of the year, assuming an initial fund value of \$1,000 and using the two scenario returns described above. The fund values at the end of the year are \$932 and \$1,252, and the asset charges are \$9.32 and \$12.52, or an average of \$10.92. Note that the \$10.92 is the same asset charge we would get on our single deterministic scenario if we assumed a 9.20 percent fund growth. So, the single scenario is equivalent to the stochastic scenario when we use the arithmetic return. This equivalency also works for multiple years of returns.

If the stochastic returns have lognormal distribution, there is a simple formula to relate the geometric and arithmetic returns. The arithmetic return exceeds the geometric return by one-half of the variance (i.e., one-half of the square of the volatility). For example, for an annual volatility of 16 percent, the difference is $.5^*.16^2$, or 1.28 percent. This is a fairly sizable difference. Running a single deterministic equity scenario at 9 percent is equivalent to having a geometric scenario of 7.70 percent (assuming 16 percent volatility).

I write this article because I find that these differences are sometimes overlooked. If nothing else, it would be good if actuaries could always take the trouble to document whether the mean returns in their stochastic scenarios are arithmetic or geometric. \Box

Mortality Arbitage—Life and SPIA

by Douglas C. Doll

t the older issue ages, there is an opportunity for a consumer/agent to arbitrage the difference in mortality assumptions between life products and single premium immediate annuities (SPIAs). The arbitrage can exist in at least two scenarios:

- 1. A "super-select" individual buys a preferred life policy from Company A and also buys a standard SPIA from Company B.
- 2. An unhealthy individual buys a standard life policy from Company A (available through table-shaving programs) and also a substandard SPIA from Company B.

Here is how it works. The consumer borrows an amount of money and buys an SPIA. The SPIA payments are used to pay loan interest and the remainder is used to purchase a life policy whose face amount exceeds the amount of the loan amount. At death, there is a guaranteed gain equal to the excess of death benefit over loan amount.

Apparently, structures with the preceding characteristics are being designed and sold. Obviously, at least one of the two insurance companies is mispricing the mortality cost for these insureds by more than the amount of expense and profit loads in the products. Insurers might want to take another look at their pricing of these products and/or at least monitor their sales patterns at high issue ages. \Box



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Fixed Annuities in a Low Interest Rate Environment

by Susan J. Sell

he recent economic environment has presented difficult choices for investors. With the equity markets weak and interest rates low, most investment choices do not appear attractive. Many investors have taken a "flight to safety" and opted for a guaranteed return in a fixed annuity, even at yields as low as 3 percent annually.

Despite the challenges in the fixed annuity market, including some downgrades from the rating agencies, there has been a strong increase in fixed annuity sales. Such products have gained ground on variable annuities (VAs) over the past two years. Some distributors, like stockbrokers, have been selling more fixed annuity products than ever. Increases have been realized in all types of fixed annuities—book value deferred annuities, market value adjusted annuities (MVAs), equity indexed annuities (EIAs) and



fixed immediate annuities. According to LIMRA International, EIA sales in the third quarter of 2002 were 88 percent greater than those in the same period of 2001. Similarly, book value annuities, MVAs and immediate annuities showed increases of 60 percent, 61 percent and 44 percent respectively, over the same period. EIA sales have grown the fastest, perhaps because they are the first refuge for purchasers retreating from VAs.

In recent times, multi-year rate guarantee fixed annuities have dominated the fixed annuity market. Some include guaranteed stair-step credited rates where credited rates are guaranteed to increase by a stated number of basis points each year of the guarantee period. Such stair-step increases have ranged from 10 bps to 25 bps. These types of products have been popular in the bank channel since bank customers are attracted to the certainty of an increasing credited interest rate over a specified period of time despite starting at a low level.

Many of the multi-year designs include a market value adjustment. MVAs have increased in popularity since credited rates may be as much as 25 bps higher than for a book value fixed annuity, due to lower capital requirements and a reduction in interest rate risk. Nearly one-fourth of recent fixed annuity sales have been MVA sales. MVAs have been popular both as standalone products and as fixed accounts within VAs. A number of carriers are developing their first MVA products and are entering the market. Other carriers are dusting off their MVA products and marketing them again. Because insurers are finding it difficult for one-year and three-year interest guarantee periods on MVAs to be attractive (given low investment yields), the focus has moved to longer guarantee periods. In addition, with the exception of the bank channel, compensation has been lowered on many MVA products in order to increase crediting rates.

First year bonuses provide an initial softening of low interest rates. Bonuses in the range of 1 percent to 2 percent still appear on fixed annuities and help to bolster sales. Many EIA products now include a first year percent of premium bonus. According to LIMRA, more than 55 percent of EIA sales in the third quarter of 2002 included such a bonus.

Fixed immediate annuity sales in the third quarter of 2002 equaled \$1.3 billion, according to LIMRA. Sales for calendar year 2001 were \$3.6 billion. Pricing in the large case market has gotten more competitive recently. Some agents have taken a cut in commissions in order to boost payouts. Immediate annuity mortality assumptions appear to be getting more aggressive. From a surplus strain standpoint, it is a favorable environment to sell immediate annuities since statutory valuation interest rates are greater than pricing interest rates.

Fixed accounts within VAs have also attracted more dollars. Fixed account assets were at their highest levels since 1997. Some investors have purchased variable annuities specifically to invest in the fixed account. According to VARDS, fixed account allocations increased from around 22 percent as of December 31, 2001 to nearly 30 percent as of September 30, 2002.

VA fixed account growth has occurred despite the fact that many VA carriers have been forced to take drastic measures due to the volume of allocations to the fixed account. In general, the availability of fixed accounts within VAs is becoming more limited. A number of VA carriers have found it necessary to close down the fixed accounts in their C-Share (no surrender charge) VAs because the combination of 3 percent interest guarantees and no surrender charge provided an overly generous offering. Recently, fixed accounts have been closed down on some L-Share VAs. (L-Share products are also fairly liquid and include a short surrender charge period of three to four years.) An increasing number of VAs have closed down the shorter guaranteed periods of the fixed account.

The Standard Nonforfeiture Law for Individual Deferred Annuities requires that the cash surrender value be at least as great as the net premium (90 percent of gross on single premium products and 65 percent first year and 87.5 percent renewal on flexible premium products) accumulated at 3 percent annually. This creates a de facto floor to interest crediting that can squeeze pricing margins to the point of unprofitability in some cases. At the request of the life insurance industry, the NAIC has taken steps to make nonforfeiture requirements more responsive to the interest rate environment.

In actuality, even without the NAIC actions, insurers have an alternative to achieve lower future crediting rates than 3 percent; however, it is only a partial solution and is seldom used. Lower rates are workable if the cumulative credited interest on the gross premium exceeds the cumulative three percent on the net premium. Several states may, however, require the 3 percent minimum as a year-by-year minimum credited rate.

In early 2002, the NAIC gave its support to having states reduce the nonforfeiture interest rate to 1.5 percent on an interim basis (the legislation is only effective for two to three years). Because only 19 states have changed their laws in this fashion, few insurers have taken advantage of the change. There is general reluctance by many insurers to credit less than 3 percent, especially if competitors still are crediting 3 percent.

The development of a revised model Standard Nonforfeiture Law for Individual Deferred Annuities is progressing and may have already been approved by the NAIC at the time this article is published. The result should be a greater opportunity to offer shorter guarantee products in low interest rate environments.

The uncertainty of the economic markets will continue to present challenges and opportunities to both investors and insurers. The shape of the current yield curve gives fixed annuities an opportunity to offer products that are more attractive than other financial instruments. The added flexibility from nonforfeiture revisions should broaden opportunities further. \Box



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GMIB and the Bear Market

by Eric J. Carlson

he bear market of the last three years has had a substantial impact on variable annuities. Consumer focus has shifted from accumulation of wealth to guarantees and protection. The guaranteed minimum income benefit (GMIB) is a product feature that provides protection to the consumer and has become both popular and controversial.

GMIB is a feature that guarantees a minimum stream of income regardless of the performance of the underlying subaccounts. In addition to the contract value, a separate GMIB value is tracked. In a "traditional"



GMIB, this value is generally equal to purchase payments. In an "enhanced" GMIB, this value typically increases through an annual roll up at a set percentage (usually 5 percent or 6 percent), or it is set to the maximum anniversary value, or the greater of the two. The charge for an enhanced GMIB typically has been 30 to 40 basis points. This charge can be assessed against either the GMIB value or the contract value.

A direct cost, or economic cost, of a GMIB is incurred when the present value of the payout under the GMIB is greater than the contract value, and the policyholder elects the income benefit. This economic cost will vary depending on the utilization rate (the percentage of people who annuitize using their GMIB value). Since GMIB payments are made at the guaranteed payout rate, the utilization rate also varies based on the difference between the current payout rate and the guaranteed payout rate.

Recent changes in capital requirements have had a dramatic impact on the cost and availability of GMIBs. When GMIBs first came out, there was no specific capital requirement other than for regular separate account assets. Capital was held at a fixed rate of about 50 basis points of account value. As GMIBs became more popular, it was recognized that this may not be sufficient. More importantly, holding a fixed percentage of account value meant that capital requirements decreased as account value decreased, which is when the risk is increasing. This is exactly the opposite of the protection capital is supposed to provide. As a result, a C3 working group was established that created interim rules for GMIB capital requirements. The interim rules required 1 percent of account value if the GMIB was out of the money and 2 percent of account value if it was in the money. This better recognized

the risks in the product overall, but it did not look at individual product features and risks.

A C3 phase II working group has proposed GMIB capital requirement changes to go into effect for all inforce products. This proposal is expected to be adopted soon. Companies would be required to do a stochastic projection using a combination of product assumptions and required assumptions. The required reserve plus capital is equal to the 90th conditional tail expectation (CTE). The 90th CTE is an average of the accumulated capital loss for the worst 10 percent of scenarios. What it means is that, at issue, if there is no hedging, the capital requirement for annuities with GMIB could be as large as 8 percent to 12 percent of account value—a very dramatic increase in required capital!

The new requirements from C3 phase II take into account the time to availability of the GMIB and also the difference between the GMIB value and the account value. If the account value has decreased, the required capital will increase on an absolute basis. An interesting capital result occurs if a company invests its capital in equities rather than bonds. If the overall market decreases, such as in the bear market of the past few years, obviously both the account value and the value of that capital will decrease. However, the total required capital will increase. So a company must not only contribute more capital due to the decrease in account value, it must also contribute more capital to replace the decrease in value of the previously held capital.

The corresponding marketplace response to the expected changes in required capital has been predictable. Nearly every company that issues GMIB has made changes in its portfolio. The typical cost now is closer to 70 to 80 basis points. Ironically, increasing the cost does not always reduce capital needs. Since a company must average the required capital over the worst 10 percent of scenarios, and the bad scenarios occur in a down market, a cost increase aggravates the decline in account value, which increases the required capital. Also, companies are changing the GMIB structure. These changes include lower annual roll up amounts, caps on the available increase, longer deferral periods and others. Many companies have made changes to both the cost and the benefit structure. Some companies have even stopped selling the benefit.

Since GMIBs have been available only since the mid-1990s, the typical required deferral period has not elapsed, so there is no industry experience on the utilization of this benefit. With a traditional annuity, consumers have rarely annuitized. With GMIB, there can be an economic advantage to the consumer to annuitize their benefit, and it is expected that, when in the money, more consumers will choose to annuitize. However, the industry may find that although it is in consumer's best interest from an economic viewpoint, consumers may still not annuitize their contract.

The world of GMIB has changed. In the past few years, variable annuities with GMIB have been extremely popular. This benefit gives the consumer desired protection from a bear market plus the opportunity for growth potential. However, annuitization is required in order to receive a benefit under the GMIB, which consumers have not done historically. With the higher costs and lower benefits due to increased capital requirements, will GMIB continue to be a popular product feature? Stay tuned—only time will tell. □

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Death-Benefit-Focused UL

by Michael Joseph Burns

All of this market segmentation has created great opportunities and new challenges for the product development actuary. **W** niversal life (UL) is back— back in a big way. After years of taking a back seat to variable universal life, the industry has seen resurgence in UL popularity. While the recent attractiveness of UL is certainly a reflection of changing consumer attitudes, UL may very well not be enjoying its current success without redefining itself. Not so long ago, UL was a product measured on current performance and cash accumulation, touting the advantages of flexibility, unbundled charges and explicit interest rates.

Today, UL is very much a market-focused product. Some products are designed to have high early cash values. Others are structured to offer low early cash values. Still others place little or no emphasis on cash values and instead focus on low cost, guaranteed, lifetime death benefit protection.

All of this market segmentation has created great opportunities and new challenges for the product development actuary. Clearly each policy needs to be evaluated and priced in a manner that is consistent with its marketing intent. There is perhaps no better example of this than the deathbenefit-focused UL—now currently enjoying so much market success.

The Death Benefit Focused UL

The death-benefit-focused UL is the result of a product evolution that came into emergence during the mid- to late- 1990s. It is an industry solution for the consumer need to have cost-effective, guaranteed, lifetime death benefit protection. Today, this type of product is very common in the market and is a key product for well over 20 UL carriers.

The typical death-benefit-focused UL is structured with a secondary guarantee and some form of maturity extension. A secondary guarantee is a policy provision that essentially provides assurance, that as long as sufficient premiums have been paid, the policy will not lapse; irrespective of the ability of the cash value to fund the insurance charges. Maturity extension is a means by which a company allows a policy to stay inforce upon the insured's attainment of age 100 (the typical maturity age for a UL policy). Combining these two elements, a UL policy can be structured to provide competitively priced guaranteed lifetime death benefit protection.

In providing for secondary guarantees, companies have essentially migrated to one of two structures: the premium-based structure and the shadow account structure. The premium-based structure provides a secondary guarantee as long as a specified premium requirement has been satisfied. The shadow account structure provides a secondary guarantee as long as the net shadow account is positive (where the shadow account is a hypothetical cash value determined using UL processing mechanics and a basis specified in the shadow account provision).

When Regulation XXX became effective in 2000, the premium-based secondary guarantee structure was already fairly common in the market and therefore explicitly reflected in the regulation. The same was not true for the shadow account design, however, which was introduced just prior to the introduction of Regulation XXX. Policies that incorporated a shadow account design could hold a lower reserve than policies designed with a premium-based secondary guarantee when funded at a comparable level. The sections of Guideline AXXX that address shadow account designs were developed with the intent to level the playing field. Now the Guideline AXXX (which became effective January 1, 2003) has seemingly eliminated the reserve advantage that the shadow account design offers over a premium-based structure-the question arises: how will companies respond?

In terms of coming to grips with the new reserve requirements of AXXX, companies can certainly hold the higher AXXX reserves or utilize offshore (financial) reinsurance to provide some reserve relief. In addition, given that the reserve impact of Guideline AXXX varies depending on the policy funding level, companies can control the impact of the additional AXXX reserves by managing the sales volumes across the various funding levels. While there is a cost (whether real or implied) to the reserve impact of Guideline AXXX, recent product offerings suggest that Guideline AXXX will not have a dramatic impact on the market pricing of secondary guarantees.

There is no right answer as to which is the better secondary guarantee structure, as each has its own unique advantages and disadvantages. In many respects, a premium-based structure is easier for the consumer and agent to understand. Because the typical premiumbased structure is normally an offshoot of standard "no-lapse" processing, it is often times easier to implement in an administration system. Offsetting these advantages are the disadvantages that such designs have in adapting to certain elements of UL flexibility such as face amount increases, death benefit option changes and additions of riders after policy issue. While the shadow account design is somewhat more difficult for a policyholder to understand, it is much more accommodating to the elements of UL flexibility. It therefore seems clear that the market will continue to see both structures (even in a post-AXXX world).

Pricing Challenges

While the financial impact of Guideline AXXX is real, it is but one dynamic, posing challenges for the pricing actuary in developing a death-benefit-focused UL. The following is a brief outline of other factors that are at the forefront of those facing the product development actuary in this arena. These challenges apply equally to the premium based and shadow account structures.

• Continued commoditization of the secondary guarantee premium. As the

secondary guarantee becomes more and more of a commodity, the pressures to reduce price have increased. It goes without saying that this price pressure will impact profit margins, but in the case of such policies, it will also add to the relative level of risk assumed.

- The impact of "locking-in" pricing factors imbedded in the secondary guarantee. While the primary policy guarantees can provide temporary protection against adverse deviations in the pricing assumptions, the company is still at a long-term risk for the protection provided under the secondary guarantee. This "locking-in" makes it critical that the actuary fully understands the reasonableness and appropriateness of the underlying pricing assumptions.
- Risk exposure to changes in interest rates. Given that today's UL market is dominated by portfolio-based products, the death benefit focus for this type of product calls into question the degree of disintermediation risk and excess lapses relative to a traditional cash accumulation UL. However, a long-term pattern of low interest rates can result in spread compression and future losses as the policyholder realizes the full value of the secondary guarantee.

While these are just some of the challenges facing the actuary in developing these products, it is clear the product is here to stay. As the market matures, successful companies will need to utilize some new tools in order to stay competitive. What was once a routine exercise in pricing a standard UL policy will continue to evolve into an intensive process focusing as much on the risk of a product as its underlying static profitability. With such tools as stochastic pricing, evolving reinsurance solutions and sophisticated policy management tracking, the continued development of the death-benefit-focused UL will be anything but routine. □

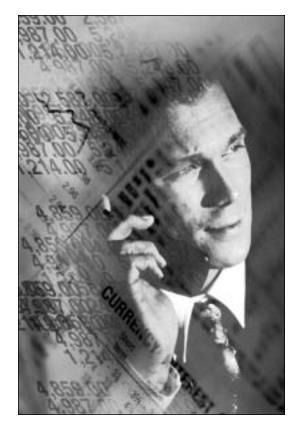
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Annuity Nonforfeiture:

The Sound of Falling Rates

by Noel J. Abkemeier

ow interest rates have created current and potential future squeezes between affordable interest crediting on deferred annuities and the requirements of the Standard Nonforfeiture Law for Individual Deferred Annuities (SNFLIDA). The National Association of Insurance Commissioners (NAIC) responded quickly in early 2002 to facilitate a shortterm solution and is close to implementing a revision to the SNFLIDA Model Act as a long-term solution. These steps both allow lower nonforfeiture interest rates, but there are some tradeoffs, too.



In early 2002, the NAIC membership voted to support the life insurance industry request to lower SNFLIDA interest requirements. This consisted of endorsing the concept of reducing the nonforfeiture interest rate from 3 percent to 1.5 percent on an interim basis and charging the NAIC Life and Health Actuarial Task Force (LHATF) with finding a more permanent solution. Insofar as these solutions are embedded in state laws, they require enactment in each state legislature and thus take a long time to come to fruition. Slow implementation can occur from legislatures not being in session, submission deadlines for bills having passed, deferred effective dates for new laws or lack of support.

Interim Solution

The interim solution to reduce the nonforfeiture interest rate to 1.5 percent was brought before state legislatures in early 2002 through the efforts of the American Council of Life Insurers (ACLI). At the time this article was written, 19 states have implemented interim solutions, two states have no annuity nonforfeiture law and thus need no action, and 18 states have bills in various stages from basic introduction to nearing approval. The interim revisions to the state laws allow contracts that have been approved with the lower rate to be issued until a sunset date in the law. The sunset dates range from July 2004 to July 2005, although four states have not included a sunset provision.

Model Law Changes

Over the last year, LHATF, led by the efforts of Frank Dino and Sheldon Summers, has drafted possible revisions and has reviewed suggested changes made by the ACLI and the American Academy of Actuaries (AAA). On February 20, LHATF released for exposure a draft with revisions to the SNFLIDA Model. These must be approved in turn by LHATF, the NAIC Life Insurance and Annuities (A) Committee, and then by the NAIC membership. These approval steps had



not yet been taken at the time this article was written, although they may have been taken by the time this newsletter is published.

The most significant features of the proposed SNFLIDA model revision are:

- The minimum nonforfeiture interest rate is set at the five-year Constant Maturity Treasury Rate minus 1.25 percent, except for equity indexed annuities EIAs).
- EIA are allowed an additional reduction of 1 percent, but the value of the guaranteed equity indexed benefits must be at least as great as the value of the additional interest reduction.
- The minimum nonforfeiture interest rate cannot exceed 3 percent nor fall below 1 percent (no exception for EIAs).
- The interest rate may be redetermined at specified dates, if any, stated in the policy.
- The interest rate can be determined as of a single date or on the basis of an average over a period within the most recent 15 months.
- The net considerations (which had been 90 percent on single premium products and 65 percent first year/87.5 percent subsequent on flexible premium products) are now 87.5 percent of gross premium on all products.

Other changes are:

- The minimum nonforfeiture amount recognizes an annual contract charge of \$50, regardless of whether premium is paid. Collection charges are eliminated.
- Premium tax paid by the insurer reduces the nonforfeiture amount.
- The reference "increased by any existing additional amounts credited to the company by the contract" is removed.

This wording had been interpreted differently in various jurisdictions.

• The right to defer payment of cash surrender benefits for up to six months is to be subject to approval by the commissioner.

The major tradeoff is the increase in recognized net considerations on flexible premium products in return for the interest reduction and the ability to periodically redetermine the guarantee rate. This affects all fixed deferred annuities but may have the greatest impact on EIAs, where the nonforfeiture floor is a component in defining long-term benefits.

Just as the interim solution is taking several years to be implemented, so will it take an extended period to enact the longterm solution. However, the specificity and comprehensiveness of the long-term solution may allow it to get more attention and more prompt responses in legislatures.

Another Temporary Remedy

It should be noted that additional relief has always existed is available in all but a few states and can relieve some pressures prior to changes in the law. The nonforfeiture law in most states requires minimum cash values equal to the specified percentage of premium less withdrawals, all accumulated at 3 percent (or, temporarily, 1.5 percent). This does not address guaranteed minimum crediting rates (as opposed to nonforfeiture rates). Consequently, there is the possibility of setting minimum guaranteed crediting rates below the nonforfeiture interest rate in the vast majority of states, provided cumulative minimum values meet the nonforfeiture requirements. This is certainly not a full solution, but can provide some limited relief. \Box



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Upcoming PD-Sponsored Sessions

At the 2003 SOA Spring Meeting in Washington, D.C. • May 29-30

Pricing Risk Management

Product development actuaries encounter a variety of risks that need to be considered in pricing life and annuity products. This session demonstrates how some of these risks are reflected in pricing and how they are communicated to management.

Variable Life—Product and Distribution Issues

Sales of variable life reached a peak in 2000 but have suffered since. Consumer confidence in these products suffered due to market downturns and persisting volatility



in the equity markets. Panelists discuss the variable life market focusing on product and distribution issues.

Moving From Accumulation to Income

Product development for annuities focused on the accumulation of assets. As the population ages, there is renewed interest in the products available to convert that accumulation to an income stream.

Variable Annuity Riders: Pricing and Risk Considerations in Today's Market Environment

This session provides an update on variable annuity riders including guaranteed minimum death benefits, guaranteed minimum income benefits, guaranteed minimum accumulation benefits and guaranteed minimum withdrawal benefits. Discussions include pricing and risk considerations as well as the current market environment.

Individual Disability Insurance Opportunities for Life Insurers

The individual disability business is alive and well. After many years of decline, the industry is now experiencing double-digit growth in sales and profits. The panelists in this session discuss the reasons they believe there is an optimistic outlook for the individual disability business.

The Standard Nonforfeiture Law: Impact of Proposed Changes

The NAIC is addressing broad changes to the Standard Nonforfeiture Law (SNFL) through its General Nonforfeiture Project and is also considering interest-related changes to the SNFL for individual annuities in response to the low interest rate environment. Industry experts discuss possible changes and implications that could have an effect on product design and interest rate risk management.

Preferred Underwriting: Survey Says?

This session presents the results of the recently completed Society of Actuaries Preferred Underwriting Survey. Panelists discuss survey methodology, results and implications for product design and pricing.

Improving the Product Development Process

Whether in response to the adoption of the 2001 CSO Mortality Table or the need for a brand-new product offering, an efficient and effective product development process is vital. Powerful, disciplined methods and tools can result in shorter times to market, more projects on budget, fewer errors and more successful launches. The panel provides insight into proven process improvement strategies.

What If You Stretch Investment Yield and It Snaps?

The low interest rate environment led insurers to seek ways to increase investment yield to keep their products attractive. Steps such as investing for longer durations and taking greater credit risk increase yields. However, they also bring additional risk.

Today's Controllership Environment: The Product Actuary's Responsibility

We are operating in an environment of heightened scrutiny from regulatory bodies, the media and the public. The standards of acceptable behavior are changing. This session asks and answers questions around the scope of the product actuary's responsibility.

Universal Life and Variable Universal Life Secondary Guarantees: Where Do We Go From Here?

The statutory reserves for shadow fund accounts and specified premiums with catchup provisions are now clearly defined in Actuarial Guideline AXXX. However, the standard nonforfeiture requirements are still uncertain. These two issues are discussed with respect to universal life secondary guarantees and variable universal life secondary guarantees.

Product Development Section Luncheon

Join other Product Development Section members for lunch, a short business meeting and a speaker. This is a great way to meet and socialize with other section members and learn about section activities. The speaker addresses distribution issues from a marketing perspective. The luncheon is open to all Product Development Section members. Members must register in advance and the cost for admission is \$15.

2001 CSO Mortality Table—The Time Is Approaching

The NAIC has adopted the 2001 CSO Mortality Table. States are beginning to adopt the table with the first products under the new table likely available in the marketplace in 2004. Conversion to the 2001 table will affect product structure, competitiveness and profitability. The reduction in mortality under the 2001 table will be reflected in corresponding changes in premiums, reserves and nonforfeiture values. The life insurance definitional limits under sections 7702 and 7702A of the Internal Revenue Code will be affected. Conversion to the 2001 table represents a significant business problem for life insurance companies operating in the United States.

Bridging the "GAAP": Practical Implications of Using GAAP Profit Measures in Pricing

Pricing actuaries have traditionally used statutory-based pricing measures. Your chief financial officer typically measures profitability on a GAAP basis. Are you able to "bridge the GAAP" between the two? Are you now asked to base your pricing decisions on a GAAP measure? □

Announcing the Third Annual Product Development Actuary Symposium

he Product Development Section, in partnership with the Nontraditional Marketing, Reinsurance and Actuary of the Future Sections, is delighted to present the Third Annual Product Development Actuary Symposium. This year's symposium will take place June 12–13, 2003 at the Oak Brook Marriott in Oak Brook, Ill.

The organizers have built on prior successful programs to bring you fresh and timely topics. The faculty is a full of industry experts and guest speakers. Please mark you calendar now.

Day one starts with a general session. Two noted Wall Street analysts will present their view of the state of the insurance industry. The luncheon speaker on day one will present the product development process from the point of view of a technology firm that is the leader in their product niche.

The remainder of that day is filled with concurrent sessions, most of which will be presented twice. This will give attendees maximum opportunity to cover the topics of most interest to them.

Day two is devoted to concurrent interactive sessions. These sessions are designed for attendees to participate actively in the discussion. For a complete discussion of the symposium, please go to the Meetings/ Seminars page of the SOA Web site. We are looking forward to seeing you there!

Concurrent Session Descriptions

Regulatory and Tax—Life Products

Expert panelists discuss the latest regulatory and tax developments product actuaries need to know in designing and pricing life insurance products. Specifically, what are the tax implications of the new CSO table? What is happening with the Standard Nonforfeiture Law? What are the new regulations or guidelines currently under review by the NAIC?

Serving an Aging Population

Many of us are aware of the aging of society. Some even say we are about to see a retirement crisis. What does this mean, and are there insurance product designs that can address the needs of this growing segment of the population? Experts discuss the demographic trends leading us to this crisis and explore product solutions to meet the needs of this growing segment in the market.

Reinsurance Modeling

Companies now reinsure a majority of life insurance risk and use reinsurance to support other insurance risks. This session is designed to explore how companies model their reinsurance programs. Topics explored include:

- Cost and capital implications of reinsurance
- Risk concentration and counter-party exposure
- Quota-share reinsurance programs
- Financial and risk management advantages

Measuring Profitability

As insurance products become more complex and competition more fierce, companies are forced to compete for thinner margins. Accurately measuring and monitoring profitability is increasingly more important. Greater focus on GAAP earnings has caused some companies to look at profitability in a new way. This session presents the findings from a recent Tillinghast survey on pricing methodology and also explores the link between today's common profit measures and GAAP earnings.

Regulatory and Tax Annuity Products

Expert panelists discuss the latest in regulatory and tax developments product actuaries need to know in designing and pricing annuity products. Potential topics of discussion include:

• AICPA proposal on GAAP reserves for GMDB products

- Revisions in annuity nonforfeiture law
- Impact of FAS133 on annuity modified coinsurance programs
- RBC treatment of modified coinsurance
- Interim Actuarial Guideline MMMM
- New regulations or guidelines currently under review by the NAIC

Middle and Underserved Markets

Much has been made recently about the "underserved middle market." Is there really a vast population of potential insurance company customers waiting for just the right product(s) to purchase? Is there more than one such population? What creates the lines of division between currently served and underserved populations? Are these dividers based only on statistics of household wealth? This session focuses on underserved markets and product ideas to meet these markets' needs. Topics include demographics and design issues underlying products created to fill the needs of these populations.

Competitive Intelligence

Do you know what your competitors are up to? Do you know what your customer wants? Finding out what your competitors are doing and how you compare is imperative when pricing insurance products. This session will focus on both primary and secondary market research. This session will also discuss some of the legal aspects of obtaining data.

Distribution Economics

To better understand where profits emerge, many insurance companies have moved to preparing separate financial statements for the manufacturing and distribution of their insurance policies. Actuaries are in a good position to help with this process and have already assisted in the following areas:

- Determining distribution allowances (an expense for the manufacturer and a revenue item for the distributor)
- Allocating expenses between manufacturing and distribution

- Analyzing the results at the branch and agency level
- Supporting field sales management compensation program design to align with distribution strategy and economics
- Developing projections for the distribution business.

In this session, panelists discuss how insurance companies have used this information and expand on the role actuaries currently play and their potential involvement.

Interactive Session Descriptions

Annuities are big news. Variable products are straining the financials of insurance carriers, while fixed products are enjoying renewed customer interest. This interactive session will focus on current issues in annuity product design, valuation and management. A short presentation on a few annuity hot topics is followed by a question-answer/group discussion.

Hybrid Products

These days disability illness, critical illness, and long-term care designs are all being combined with traditional life and annuity products and are being called "hybrid" products. At this session panelists briefly discuss pricing and marketing considerations for hybrid products including: benefit design trends, pricing considerations, selection and underwriting issues, future growth opportunities, regulatory issues, and long-term outlook for the products. The remainder of the session is spent as an interactive forum.

Rebirth of Fixed Life Products

Have fixed life products experienced a rebirth in these volatile economic times? Are customers now looking for more guarantees? This session explores these questions. A short presentation presents some potential answers and explores the hot current products. Attendees then participate in a discussion of the topic.

Fluidless Underwriting

The costs associated with traditional methods of underwriting (blood and/or urine collection,

continued on page 20



APSs, etc.) have made it difficult for companies to profitably process lower face amount business, especially for term insurance. Less costly fluid collection techniques are available but are problematic in some alternative distribution channels. In this interactive session, participants discuss the practical application of alternative underwriting techniques including:

- The mortality and expense/pricing tradeoffs.
- The legal and privacy issues.
- Do statistics exist to justify tools such as credit scoring, pharmacy databases, etc.?

Process Priorities

One of the key challenges many executives are facing today is how to juggle priorities with

limited resources. This session briefly covers some key considerations in setting priorities before getting into an interactive discussion of how to manage multiple priorities. Discussion also focuses on what processes companies use to help management prioritize their product development initiatives. This session is designed with senior executives in mind.

Equity Modeling

Equity-based products, whether equityindexed or variable, require the ability to model equity market movements. Whether pricing options for a hedging strategy or modeling separate account returns as part of variable product development and risk management, creating a sound equity model is a critical aspect of many actuaries' duties. This interactive session briefly cover some key

Seminar on Designing and Pricing Secondary Guarantees on UL & VUL Products Announced

n conjunction with the Product Development Actuary Symposium, the Product Development Section is presenting a seminar that will take place at the same location on the day before (June 11, 2003 at the Oak Brook Marriott in Oak Brook, Illinois). The seminar will run from 8:30 to 5:00 p.m., followed by a one-hour reception.

The design and pricing of long-term, lowcost secondary guarantees on universal life and variable universal life products have become more complex. Actuaries have been grappling with the adoption of Guideline XXX (Valuation of Life Insurance Policies Model Regulation) and the development of Actuarial Guidelines VL-GMDB and AXXX.

One outcome of these changes in valuation requirements has been an expansion in the number of secondary guarantee structures or riders for Universal Life policy forms. The industry has responded with the development of "shadow accounts" and YRT structured secondary guarantees as well as the older "stipulated level premium" design. Insurers are simultaneously beginning to introduce a new generation of secondary guarantee riders on variable universal Life products. This new generation is designed to be much more price competitive with comparable Universal Life products.

This seminar will take an in-depth examination of secondary guarantees. It will discuss the changes in valuation requirements and the related impact on design options. The seminar will discuss the techniques used by market leaders to develop profitable and competitive offerings.

The seminar will include a regulatory perspective on the statutory approval process for universal life products with secondary guarantees. It will also discuss potential nonforfeiture regulation and other issues related to these products.

As a bonus, there will be a session on the 2001 CSO Mortality Table, which has been adopted by the NAIC and is being enacted by the states. The seminar will briefly discuss the development of the table and the implications on product design issues and focus on developing issues such as state adoption activity and tax issues.

For more information and to register, visit the SOA Web site at the Meetings/Seminars section. \Box

considerations in creating these models with the balance of the session spent in an interactive discussion about aspects of the modeling process.

Risk Management and Management Communication for the Pricing Actuary

The pricing actuary has always been asked to communicate results to management. Risk management is an emerging topic of interest at many organizations. The pricing actuary is now being asked to coordinate with the risk management team or may be a member of the team. Using an interactive format, this session addresses the issues facing the pricing actuary. A moderator leads the discussion after presenting some of the core issues.

Hot Topics in Reinsurance

This interactive session explores many facets of reinsurance. Subjects that may be discussed include market capacity, terrorism, and war exclusions, as well as accounting, tax and regulatory issues. A short presentation on these and other hot topics are be followed by group discussion. \Box

Update on Survey Committee Activities

he Committee on Life Insurance Mortality and Underwriting Surveys of the Society of Actuaries was created to oversee and conduct surveys on topics related to underwriting practices and mortality experience on life insurance and annuities. The following three surveys of this Committee are nearing completion.

Mortality Improvement

The purpose of this survey was to explore life insurance company practices regarding the use of a mortality improvement assumption in the pricing of life insurance products. The survey distinguished between updating base mortality tables for historical mortality improvement versus projecting mortality improvement into the future. The survey was conducted by the Mortality Improvement Subcommittee of the Society of Actuaries Committee on Life Insurance Mortality and Underwriting Surveys.

The survey was based on life insurance company practices in effect during the summer of 2000. Sixty-seven companies responded to this survey. The final report will be available by April 2003.

Preferred Underwriting—Direct

In 1995 and 1997, the Task Force on Preferred Underwriting completed surveys on the preferred risk underwriting practices on U.S. life insurance business. A third survey was sent out by the Preferred Underwriting Subcommittee of the Society of Actuaries Committee on Life Insurance Mortality and Underwriting Surveys in 2002. Sixty-one companies responded to this survey. Data was received and compiled from U.S. and Canadian life insurance companies. The first survey was based on practices in July of 1995 (the report being published in June of 1996) and the second was based on practices as of April, 1997 (the report was published in September of 1998). The final report will be available by June 2003.

The prior surveys are on the Society of Actuaries Web site. The first survey can be found at *http://www.soa.org/research/ rarchive/finalrep.htm* and the second survey can be found at *http://www.soa.org/research/ rarchive/prdsrv4.pdf*.

Preferred Underwriting— Reinsurance

In addition to the survey on preferred risk underwriting practices, it was decided that it would be beneficial to get the opinions of the reinsurance market on this topic. Fifteen companies responded to this survey. This report will be a compilation of data received from U.S. and Canadian reinsurers. The final report will be available by April 2003. □

March NAIC Meeting

by Donna R. Claire

Overview

he March NAIC's Life and Health Actuarial Task Force (LHATF) meeting was almost a non-meeting. A number of states are having budget problems, so there was no quorum to take votes in person. However, it was felt that annuity nonforfeiture was important enough that a conference call vote was arranged specifically for this topic. Other topics of interest to product development actuaries got some discussion, but no definite actions could be made.

Annuity Nonforfeiture

As mentioned in previous articles in this newsletter, some companies are discovering that some of their annuity products do not perform as desired if they must guarantee a nonforfeiture rate of 3 percent when the interest rates are as low as they are currently. This had discussion at LHATF, passed by a conference call vote, passed the parent committee of LHATF at a special 5 p.m. meeting on Saturday (it's nice to know that your regulators are so devoted!), and passed the executive/plenary on the NAIC, so it is a model law.

To recap some of the interesting features: the model law would allow the minimum nonforfeiture interest rate to be reduced to 125 bps less that the five-year CMT Treasury rate. There was a proposal from the ACLI to have this based on the three year Treasury rate, but this was defeated. In the current environment, this would allow current minimum nonforfeiture interest rate to be below 1.5 percent. The term of this nonforfeiture rate would be set in the contract, and could be as long as a lifetime guarantee.

The loads allowed on SPDAs were increased to 12.5 percent from the current

10 percent. The model law also only allows this 12.5 percent on FPDAs for all years. (This was to address the problem some regulators had with some companies with contracts that are sold like SPDAs, but titled FPDA to collect extra first year expense charges). There was a discussion at LHATF as to when these charges, which may be lower than some current FPDA charges would go into effect. Some states are saving immediately-that all FPDAs with higher charges would need to be re-filed as soon as the changes to the annuity nonforfeiture law take effect. Others argued that there should be a two-year grade-in allowed. If a company has a product with a higher expense load, this deserves attention.

General Nonforfeiture Changes

There are a number of regulators who recognize that continuing to squeeze the new product designs into the current nonforfeiture laws is becoming quite a challenge. Having chaired the work on the Equity Indexed Annuity Product, I can testify as to how hard it is to develop rules that are consistent with the current nonforfeiture laws when such products were never contemplated when the law was written. Instead, the thought is that a general overhaul of the laws is needed.

A number of regulators mentioned that they do not want to limit products that consumers want; however, they want to make sure that the consumers understand what they are buying. Therefore, there is a leaning toward relaxing the current requirements for nonforfeiture, but at the same time increasing the disclosure to the consumer as to how the product works.

It is quite possible that new laws will allow for greater product innovations, with more responsibility on companies (and actuaries) to develop products that fit consumers' needs, and to help consumers understand the amount they would receive if they choose to lapse the policy before maturity. One product mentioned at the March LHATF meeting that would be a good consumer product that cannot currently be sold is a single policy that could cover life insurance, LTC, and retirement benefits.

The American Academy of Actuaries' Life Practice Council strongly favors a rewrite of the nonforfeiture laws, and is providing assistance to LHATF on this project. It is a big project, but, if one considers how many hours have been spent in the last 20 years on shoe-horning all sorts of products into the current laws, it is definitely one worth doing.

VAGLBs

One interesting project that is related to the idea that companies should/could have more responsibility to run their business in a reasonable manner but to accurately reflect risks is what is going on in the RBC Phase II project. The proposal is to set up RBC reserves for variable products with guarantees based on company testing using company assumptions and a Conditional Tail Expectation to determine the level of RBC needed. (A Conditional Tail Expectation looks at the worst X percent (e.g., 10 percent) of the economic scenarios tested, and averages the results.) There is a related project to consider how the reserves should be calculated for variable annuities in light of this change.

The RBC work has already been presented to the NAIC work-group involved, and it does appear that it will be implemented by 2004 at the latest. The potential reserve changes to variable annuities are currently being worked on by an American Academy of Actuaries work group, chaired by Tom Campbell. They are looking into having reserves being consistent with the RBC testing that would be done on these products. This can potentially allow for a reserve basis based on stochastic analysis—an interesting concept.

The RBC, and potentially the reserve change, for these variable annuity products can have a major impact on the product design of variable annuities. Instead of focusing on expected results, it would put much more emphasis on how these products could perform in adverse environments, since these adverse scenarios would drive the amount of money that needs to be set up as RBC—and potentially as reserves—for these products (not a bad thing, considering the current slump!)

The Rest of 2003

It will be interesting to set if the NAIC will be plagued with the state budget problems, and therefore lack of attendance, all year. I hope not. There are some worthy projects to be worked on—e.g., developing nonforfeiture and disclosure regulations that are less formulaic, and are more principle based. There could also be more discussions on the reserve and product design impacts of low probability-high risk events. These are interesting times—it would be helpful if the regulation of life insurance could better reflect the changing risk, and changing consumer preferences for coverages. □



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Product Development Section Council Photos from the SOA Annual Meeting



LEFT: Product Development Section Council members together in Boston to plan the 2003 activities of the section—

Left to Right—Doug Doll (section newsletter editor), Paul Haley, Kelly Levy, Nancy Kenneally, Anne Katcher, Noel Abkemeier (2002-2003 section chairperson), Mary Bahna-Nolan, Kevin Howard, Abe Gootzeit, Keith Dall, Susan Kimball, Chris Poirier (section Web liaison).



ABOVE: Thanks, Mary!

Noel Abkemeier (current section chairperson) presenting Mary Bahna-Nolan (retiring chairperson) a gift of appreciation from the Product Development Section for a job well done.

ABOVE: The Product Development Section Breakfast at the SOA Annual Meeting in Boston finds the council enjoying the company of guest speaker Mary Ann Parker—and good food!

Standing: Keith Dall, Kevin Howard, Kelly Levy and Abe Gootzeit.

Sitting: Noel Abkemeir (2002-2003 section chairperson), Mary Ann Parker (guest speaker), Mary Bahna-Nolan (2001-2002 section chairperson), Nancy Kenneally and Susan Kimball.