THE FINANCIAL REPORTER

NEWSLETTER OF THE LIFE INSURANCE COMPANY FINANCIAL REPORTING SECTION

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Editor's Notes

by G. Thomas Mitchell

This issue emphasizes a number of U.S. statutory valuation and tax issues for individual life insurance. The new XXX rules on valuation techniques and mortality rates are discussed by Veeta Ewan and Andrew Boyer from the viewpoint of universal life, particularly with secondary guarantees. I summarize various discussions that took place since the last issue on Larry Gorski's article on selection of the "X" factor, for mortality, the ratio of mortality used in reserves to a tabular standard.

Universal life gets more discussion in a letter from David Hippen, suggesting that the guaranteed maturity premium (the valuation net premium, if you will) for flexible premium contracts should be capped by the U.S. tax premium limits. Allan Ryan and I comment with two differing views.

Speaking of taxes further, Cherri Divin and Arthur Schneider outline a complex new IRS rule allowing remedies for companies that have inadvertently subjected U.S. life policies to become Modified Endowment Contracts subject to stricter taxation.

Jim Reiskytl brings us up-to-date on developments in Dynamic Financial Condition Analysis in the U.S. and Canada.

As fair value accounting looms up on the U.S. GAAP and international IASC fronts, Mike McLaughlin and Joan Lamm-Tennant summarize in amazingly succinct fashion the Fair Value Seminar earlier this year sponsored by the Section and New York University. Read this one slowly; it is chock full of insight, varying viewpoints, and condensed wisdom.

Your Section continues to be quite active. Shirley Shao covers much of the Section's activities and hope for the future in her Chair's comments. We are very thankful for her active and imaginative leadership this last year. Ed Robbins updates us on the money (plenty of it in the till) and also the Mexico City seminar, part of an ambitious and well received series of seminars around the world. Thanks to Ed, Shirley and many others for their efforts in this area.

Finally, thanks for the opportunity to be your editor. Thanks to all the authors, editorial review board, Joe Adduci at the Society, and Section officers and Council members for all the support. Best wishes to Tom Nace, the new editor.

***G. Thomas Mitchell, FSA, is President, Aurora Consulting, Inc. in St. Louis, Missouri, and is editor of* The Financial Reporter.**

Canterbury Tales of Fair Value (Fair Value of Life Insurance Seminar—March 1999)

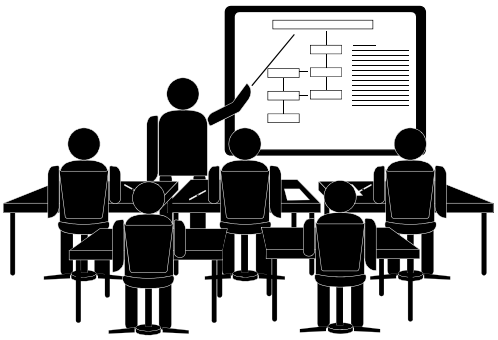
by Mike McLaughlin & Joan Lamm-Tennant, Ph.D.

Members of the POG (project oversight group) for this conference, wondered aloud, in a planning conference call, whether there had been enough new developments in fair value reporting of life insurance business to justify another conference. After all, SFAS 115 had been around since May 1993. Stock company analysts and management had come to terms with the idiosyncrasies of mixed (fair value and book value) accounting. One survey concluded that SFAS 115 was a "non-event."

Nonetheless, it had been over three years since the previous Society of Actuaries conference on fair values of insurance business was held in December 1995. Despite some uncertainty as to the likely quality and quantity of conference content, the POG decided to carry on regardless.

The conference, presented by New York University Salomon Center and the Society of Actuaries and sponsored by Deloitte & Touche LLP, Ernst & Young LLP, and Milliman & Robertson, Inc., was held in New York on March 18-19, 1999, at the NYU Stern School of Business.

With over 110 registrants from several countries including the United States, Canada, the UK, Japan, and the Netherlands, participants enjoyed a detailed and diverse review of the subject. Speakers included actuaries, accountants, academics, investment bankers, rating agencies, analysts, and senior company management. Five refereed papers were presented by their authors; 16 other invited presenters gave views based on their own specialized perspectives.



As to content, no one was disappointed.

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Highlights of Financial Reporting Section Treasurer's Report

by Edward L. Robbins

I am happy to report that calendar year l998 was a prosperous year for the Financial Reporting Section. The fund balance continued to grow from December 31, l997, through December 31, l998, from $210,674 to 298,094. The main drivers of this increase were seminars ($61,000) and dues($45,000).

A portion ($23,000) of the $298,094 fund balance is currently dedicated to future commitments, namely:

- The distribution of an expense monograph to the Section membership ($20,000). This is a paper that Sam Gutterman has been writing, which the Council believes will be of great benefit to the profession.
- Professional Actuarial Specialty Guides ($3,000)

This leaves the Section with $275,094 of Unrestricted Fund Balance as of December 31, l998.

The first quarter of l999 continued the upward movement of our fund balance, to $301,587 as of March 31, l999. An additional future commitment of $5,000 for a Society of Actuaries Library indexing project, brought future commitments from $23,000 to $28,000, resulting in an Unrestricted Fund Balance at March 31, 1999 of $273,587.

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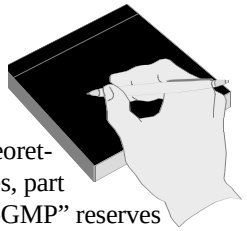
This newsletter is free to Section members. A subscription is $15.00 for nonmembers. Current-year issues are available from the Communications Department Back issues of Section newsletters have been placed in the Society library and are on the SOA Web Site. Photocopies of back issues may be requested for a nominal fee.

Help a Future Actuary

Through an agreement with bookseller amazon.com, readers can purchase books directly through the American Academy of Actuaries magazine *Contingencies* Web site, *www.contingencies.org*, and help raise money for minority scholarships for students interested in becoming actuaries. Under this agreement, *Contingencies* receives 15% of the price of books reviewed or recommended in the magazine and 5% of the price of all other books and CDs purchased. As an investment in the future of the profession, *Contingencies* will contribute 25% of all revenues earned to the work of the CAS/SOA Joint Committee on Minority Recruiting. The program focuses on minorities under-represented in the actuarial profession: African Americans, Hispanics, and Native North Americans.

Simply go to *www.contingencies.org*, click on the "diversity" or "amazon.com" banner, and select a reviewed or recommended book from this "Book Link" page and double-click on it. This puts you in the amazon.com virtual bookstore, where you can browse or make a purchase right away.

Letter to the Editor...



Caution Needed in Applying CRVM to Guideline Premium UL

Dear Editor:

Commissioners Reserve Valuation Method (CRVM) for Universal Life (UL) is defined by the NAIC UL Model Regulation, which in turn defines the Guaranteed Maturity Premium (GMP) as a level gross premium payable to maturity under the contract. This method essentially substitutes a level gross premium for the statutory net premium in the standard CRVM formula. Although this substitution is convenient, it has the potential for unexpected results. Recent decreases by some insurers in long-term interest crediting guarantees on UL could cause unwelcome complications.

UL contracts which are subject to the Guideline Premium Test of Section 7702 could be a particularly troublesome example. Because the maximum level gross premium under such contracts is guideline annual premium (GAP), GMP equals GAP. So CRVM reserves are based on the term to maturity assuming annual payment of the GAP and policy guarantees at issue, which define the GMF.

Many systems could be miscalculating CRVM reserves on guideline premium UL with low interest guarantees. Failure to compare GMP with GAP could produce reserves unequal to CRVM, possibly resulting in reserves below the minimum. If the reserves produced are higher than CRVM, the actuary would need to judge (e.g., through scenario testing) whether decreasing the reserves to minimum CRVM levels is appropriate.

The problem lies with the tax code definition of life insurance. Section 7702 defines GAP in terms of 1980 CSO mortality and 4% interest. However, many insurers use long-term interest guarantees below 4%. For guideline premium UL with a 3% guarantee, paying GAP might not endow it based on guarantees at issue. (This could also happen if Cost of Insurance [COI] charges exceed 1980 CSO, or if expected charges used in the calculation of GAP are less than guaranteed maximum charges.)

Some may argue that Section 7702 allows higher premiums to be paid as necessary to continue the contract. However, this would make the GMP non-level, which does not fit the UL Model definition. This argument would also lead to the incorrect conclusion that GMP (and the resulting GMF) could be based on payment of the guaranteed COIs (i.e., increasing by attained age) plus policy charges.

There are a few contracts which require an initial minimum premium higher than GAP, e.g., as high as the guideline single premium (GSP). For those contracts, it seems appropriate to assume that GMP is the minimum initial gross premium followed by the maximum level gross premium payable. (This could mean a single premium, followed by a period of zero premiums, followed by level GAP to termination.)

Valuation systems might not readily calculate reserves based on using GAP as the GMP. For statutory reserves, this may require the actuary to determine whether reserves to be held (i.e., as calculated by the valuation system) will exceed GAP-basis CRVM reserves. If this cannot be demonstrated, the CRVM minimum reserve basis may have to vary by issue age, sex and class.

Many systems calculate UL reserves based on the level premium which would endow the contract (i.e., the "theoretical GMP"). The actuary should evaluate whether this will always exceed the minimum CRVM reserves (which should be calculated using GAP). This seems to involve testing reserves for all possible cases, i.e., where accumulation value is higher or lower than (GAP-basis) GMF and theoretical-GMP- basis GMF.

Tax reserves may be a greater concern if calculated reserves exceed CRVM minimums. CRVM (i.e., as defined in the UL Model) is recognized as the methodology for tax reserves. If the GAP-basis reserves are lower than "theoretical-GMP" reserves, part of the "theoretical-GMP" reserves may not be deductible for tax purposes, even if the valuation actuary feels they are needed.

David J. Hippen, FSA

The opinions expresssed above are purely my own, an in no way represent positions of either current or any prior employer.

Allan Ryan, Editorial Advisory Board, comments:

The guaranteed maturity premium (GMP) is a theoretical calculation that could easily exceed the guideline annual premium (GAP). But that should not affect the calculation of reserves in accordance with the Model Regulation. The GAP calculation is another theoretical calculation which limits the premium payments that can be made in order to remain tax qualified. There might be product design issues, but not valuation issues.

I don't agree with the statement "Because the maximum level gross premium is GAP, GMP equals GAP." Rather, GMP, if it exceeds GAP, may present a policy design issue if it is desired to have a premium which is guaranteed to keep the policy in force, and this is to be communicated to the policyholder. In that case, the guarantees may have to be revisited. And, as the author points out, 7702(f)(6) allows a premium to be paid to keep the policy in force as long as the ending cash value is zero, even if that premium exceeds the guideline premium limitation.

Editor's note:

This raises an interesting point. The UL Model Regulation speaks clearly to setting the GMP so that it matures the

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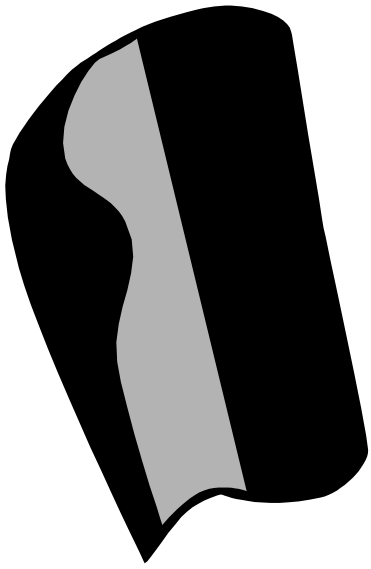
Triple X Implementation—with an Emphasis on Universal Life

by Veeta A. Ewan & Andrew C. Boyer



The NAIC adopted revised "Triple X," the "Valuation of Life Insurance Policies Model Regulation" at the March 1999 meeting in Boston. With NAIC adoption, the reserve method became the definitive Commissioners' Reserve Valuation Method (CRVM) for U.S. tax reserves for policies issued on or after the effective date of January 1st, 2000.

It is expected that the Model Regulation will be adopted in a number of key states by the NAIC effective date. The new requirements will increase minimum reserves for some familiar product designs. All life insurance forms must be reviewed for tax implications due to the change in the U.S. federal income tax CRVM. The Model Regulation changes the CRVM for basic reserves, which are tax deductible, as well as for deficiency reserves, which are not tax deductible.

The Model Regulation singles out universal life products with "secondary guarantees" in Section 7. The industry response is likely to be an evolution in the product design of universal life products. Universal life product design will evolve along two paths—one path for those that are exempt from the Model Regulation guidance and a second path for those products with "secondary guarantees" that are subject to the new CRVM. Not surprisingly, the new round of product design will be driven, in part, by features that grant exclusion from the reserve requirements, or that minimize the cost of providing for the minimum reserves.

The Model Regulation excludes a subset of these new universal policies from the "secondary guarantee" reserve requirements.

"This regulation shall not apply to any universal life policy that meets all the following requirements:

a) Secondary guarantee period, if any, is five (5) years or less;
b) Specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the CSO valuation tables as defined in Subsection F of Section 4 and the applicable valuation interest rate; and
c) The initial surrender charge is not less than 100 percent of the first year annualized specified premium for the secondary guarantee period."

The universal life "secondary guarantees" can take several forms, as is demonstrated in the first set of questions that follow.

Q1. My company is contemplating a UL policy form that has a minimum premium requirement to keep the policy in force. While the policy remains in force, the policyholder has the contractual right to catch-up on prior period payments. Should Triple X reserves be calculated for all policies, whether or not they have met the minimum premium requirement on the valuation date?

A1. The short answer is "yes." Let's examine the policy language that specifies the conditions for satisfying the minimum premium requirement. In this case, the guarantee period test is satisfied if (a) the policy is in the guarantee period, and (b) the paid premiums less partial surrenders, accumulated at 3%, are greater or equal to "the monthly minimum premiums" accumulated with 3% interest.

The amount of the contractual "monthly minimum premiums" will determine whether the policy has a secondary guarantee. The threshold amount is defined in Section 7A(3):

> "Specified premiums mean the premiums specified in the policy, the payment of which guarantees that the policy will remain in force at the original schedule of benefits, but which otherwise would be insufficient to keep the policy in force… if maximum mortality and expense charges and minimum interest credits were made and any applicable surrender charges were assessed."

We have assumed that the policy form specifies "monthly minimum premiums" that meet the above criteria. In that situation, Triple X reserves should be calculated for every policy within the guarantee period, both those that have met the minimum premium requirements at the valuation date as well as those that can catch-up on the requirements in the future.

Q2. Assume that the applicable UL policy form has a scheduled minimum premium requirement to keep the policy in force, and the policyholder has paid enough premium to satisfy the minimum premium requirements for the full secondary guarantee period. Should the calculation of the Model Regulation reserve treat the gross premiums as zero for the premium period extending after the valuation date to the end of the secondary guarantee period?

A2. No. The basic reserves for secondary guarantees are calculated with the gross

premiums set equal to the specified premiums, as defined in Section 7A(3).

Q3. My company has proposed a single premium UL policy that has no explicit no-lapse guarantee, but there are explicit policy guarantees that no COI or expense charges will be deducted in the first 10 policy years. Does this policy form require Triple X secondary guarantee reserves?

A3. The Model Regulation identifies a second category of UL policies with "secondary guarantees," which feature minimal or non-existent mortality and expense charges. This category is defined by having a "minimum premium" that is less than the one-year valuation premium. The "minimum premium" is defined in Section 7A(4):

> "…the minimum premium for any policy year is the premium that, when paid into a policy with a zero account value at the beginning of the policy year, produces a zero account value at the end of the policy year. The minimum premium calculation shall use the policy cost factors (including mortality charges, loads, and expense charges) and the interest crediting rate, which are all guaranteed at issue."

A "secondary guarantee" exists when this "minimum premium" is less than the one-year valuation premium.

Your company's policy would have "minimum premiums" equal to zero in the first 10 years as there would be no premiums, no charges, and no accrued credited interest on a guaranteed basis. These "minimum premiums" are less than the one-year valuation premiums, triggering Triple X requirements. The Triple X reserve would be for a single 10-year segment, with the gross premiums set equal to the (zero) minimum premiums. Note that in this situation, the "minimum reserves required by other rules" are greater than the Triple X reserves. The reserves under the Universal Life Insurance Model Regulation would approximate the gross single premium, and thus can be expected to determine the applicable minimum reserve. The point, though, is that this policy must comply with the Triple X reserve requirements.

Q4. Sections 7B and 7C specify that reserves are to be calculated "for the secondary guarantee period." This seems to conflict with Sections 4H and 4K, which use the "mandatory expiration of the policy." How should these be reconciled?

A4. Section 7B describes the basic reserves for the secondary guarantees, and refers to Section 4B for the method of determining the contract segments. However, Section 4B describes segmentation from issue to the mandatory expiration of a policy. Since the basic reserves for the secondary guarantees are "for the secondary guarantee period" it seems that the intent is to limit the span of the segments to the secondary guarantee period.

Similarly, Section 7C describes the deficiency reserves for secondary guarantees, and refers to Section 6B for the manner of calculating deficiency reserves. The same segments used for the basic reserves would be used for the deficiency reserves.

The Section 7D(1) reserve is the sum of the basic reserve for secondary guarantees and the deficiency reserve for secondary guarantees.

Note that the Section 7D(2) "minimum reserves required by other rules or regulations governing universal life plans" presumably would go to the contract maturity date.

Q5. My company has a policy form with multiple secondary guarantees: one applies to age 65, another to age 90. For the calculation of reserves for the shorter guarantee, should the secondary guarantee period be to age 65? Age 90? The contract maturity age? In each case the premiums paid to date must equal or exceed the cumulative total of a required specified minimum monthly premium, say $20 for the age 65 guarantee and $45 for the age 90 guarantee.

A5. Section 7A(2) was expanded to cover policies with multiple guarantees:

> "When a policy contains more than one secondary guarantee, the minimum reserve shall be the greatest of the respective minimum reserves at that valuation date of each unexpired secondary guarantee, ignoring all other secondary guarantees."

Assume that the policy will lapse at age 65 (or age 90) when the respective guarantee conditions are not met. Both the basic and deficiency reserves (for the age 65 secondary guarantee) would assume a benefit to age 65 and a monthly specified premium of $20. Similarly, both the basic and deficiency reserves for the age 90 secondary guarantee would assume a benefit to age 90 and a monthly specified premium of $45. The greatest reserve on the valuation date (basic plus deficiency) would be the Section 7D(1) reserve. It would be reasonable to assume that this comparison should be performed on a seriatim basis.

Q6. Another proposed UL policy features a guaranteed bonus at the beginning of the 21st year, equal to 10% of the total interest credited in the first 20 years, to be added to the policy fund value. Does this policy form trigger Triple X reserves for secondary guarantees?

A6. The "minimum premium" in year 21 would be negative due to the bonus. However, there is no "secondary guarantee period" as there is no period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. Hence, this form does not trigger Triple X reserves for secondary guarantees.

However, actuarial principles would require that a liability be accrued for the guaranteed bonus. Arguably, that determination could consider both expected mortality and expected lapse during the initial 20 years.

The remaining questions deal with the calculation of Triple X reserves.

Q7. When is it appropriate to use the reserve method defined by the Universal Life Insurance Model Regulation? There is no mention of the "r-ratio" in

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the calculation of reserves for UL secondary guarantees.

A7. Apparently, only in the final test for minimum reserves during the secondary guarantee period as specified in Section 7D:

> "The minimum reserves during the secondary guarantee period are the greater of: (1) The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or (2) The minimum reserves required by other rules or regulations governing universal life plans."

Note that the Alternative Minimum Reserve, as defined in the Universal Life Insurance Model Regulation, is retained in the Section 7D(2) benchmark minimum reserves.

Consider that the presence of secondary guarantees makes these plans look like a traditional plan during the secondary guarantee period. Hence the Model Regulation treats these contracts like traditional term contracts, and develops a basic reserve and a deficiency reserve that reflects the secondary guarantees.

Q8. The minimum reserves during the secondary guarantee period are the greater of the Section 7D(1) and Section 7D(2) reserve. At what level should the minimum reserve be determined—in a policy-by-policy test or at a higher level?

A8. The same amount of minimum reserves would result only if, for each and every policy, one alternative always exceeds the other. Otherwise, a policy-by-policy comparison would produce the largest reserve amount, and the greatest comfort from a solvency perspective. This question is comparable to other floors used in reserving: the unearned portion of the current period premium (½ cx) or a cash surrender value floor, which is called into the determination of tax reserves. Both (½ cx and the cash surrender value) floors are commonly applied at the policy level.

Q9. Universal life policies don't seem to be subject to the tabular cost of insurance reserve floor in Section 6C. Is this an oversight?

A9. It seems appropriate to have a minimum reserve during the secondary guarantee period and as long as the policy remains in force, such as the unearned portion of the minimum premium as it is defined in Section 7A(4) or the unearned portion of the tabular cost of insurance.

Q10. Universal life policies don't seem to be subject to the cash surrender value floor in Section 6C. Is this an oversight?

A10. Most probably.

Q11. The mortality ratio Rt "may be increased or decreased by one percent…". Does this mean that it can be multiplied by 1.01 (or 0.99), or that 0.01 can added (or subtracted)?

A11. A greater range in adjusted values is obtained by multiplication, as Rt is constrained to be no less than 1.0.

Q12. Are unitary reserves ever used in calculating reserves for UL secondary guarantees?

A12. Well, we disagree on the answer to this one.

Basic reserves for UL secondary guarantees use segmented reserves. Deficiency reserves for UL secondary guarantees are calculated in "the same manner as described in Section 6B," which says that segmented deficiency reserves use the same segments as the corresponding basic reserves in Section 6A.

The authors have agreed to disagree on the intent of this language. One of us contends that because Section 6A describes basic reserves that are the greater of unitary and segmented reserves, both calculations must be made in order to determine the deficiency reserve method per Section 6B. The other author argues that since basic reserves for UL secondary guarantees always use segmented reserves, then Section 6B would require that the deficiency reserves always use the same segments as well. The authors agree that this language is not altogether clear. We recommend that the individual states adopt guidance with clearer language, or that the NAIC adopt an Actuarial Guideline for that purpose.

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Un-MECing a MEC

by Arthur C. Schneider & Cherri R. Divin

Can a recently issued IRS revenue procedure reduce potential market conduct issues related to inadvertent Modified Endowment Contracts ("MECs")? For some companies, the answer is "yes," and this could be the time to "un-MEC a MEC." These inadvertent MEC's are of concern because of the potential for adverse policyholder taxation related to distributions. They are often discovered after policies are converted to a more sophisticated administrative system or during due diligence activities for acquisition candidates. Unlike the procedures in place to cure a failure of the definition of life insurance (as defined in Internal Revenue Code section 7702), prior to this new revenue procedure, there were no procedures to restore non-MEC status to policies that have been MECs for a period extending beyond the 60-day window for returned premiums.

Revenue Procedure 99-27 permits a life insurance company to remedy an inadvertent and non-egregious failure to

comply with the modified endowment contract ("MEC") rules under section 7702A of the Internal Revenue Code ("Code"). Submitting a request for ruling with a proposed closing agreement to the IRS initiates the formal process of restoring non-MEC status. Additionally, the issuing company must pay a toll charge to cure the contract, which includes imputed tax charges on overage earnings and distributions plus deficiency interest attributable to distributions. Pursuant to the closing agreement, the issuer agrees to bring the contracts into compliance with Code section 7702A by an increase in death benefit or the return of excess premiums with earnings thereon.

Overview of Section 7702A

A MEC is a life insurance contract that satisfies the federal tax definition of a life insurance contract under Code section 7702, but fails to satisfy a "7-pay" test under Code section 7702A. To reduce the ability of life insurance contracts to serve as investment vehicles, Congress established limits on the pre-funding of contractual future benefits. If the accumulated premiums paid at any time during the first seven contract years exceed the cumulative 7-Pay Premiums, the contract is classified as a MEC. However, life insurance contracts that were never designed with a heavy investment orientation may inadvertently fail the 7-pay test due to a variety of reasons, such as Code section 7702A's complex calculations, its reliance on error-free administrative systems, or unscheduled premium payments.

If a contract fails the 7-pay test and is a MEC, actual distributions and deemed distributions (e.g., policy loans) are subject to the same income-out-first rules that are applicable to annuities. This treatment compares poorly to the general rule for non-MEC life insurance contracts under which borrowings do not create income and distributions are taxed on an income-out-last basis. Additionally, a MEC distribution is usually subject to an additional tax under Code section 72(v) of 10% of the includible income amount, unless the policyholder qualifies for one of several exceptions; e.g., age 59½ or older. Other than these distribution rules, MEC status does not alter the general tax principles

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policy on a guaranteed basis for flexible premium contracts. This is not the case for a fixed premium contract—there the GMP is actual fixed premium.

For a fully flexible premium contract, the GMP, by regulation, would not be affected by GAP, as I read the plain words of the Regulation. The concept of premium limits on a flexible contract is not a new one, and the drafters of the UL Model Regulation would have had every opportunity to cap the GMP at maximum permitted premium if they had so wished or thought of the issue.

On the other hand, it certainly is peculiar to premise the valuation on a premium greater than is either permitted or is at all likely to be paid because of compelling tax reasons.

As Mr. Hippen points out, the effects of a cap on GMP could be complex and unintuitive. I suspect that in the garden-variety case where mortality is the same on GAP and guarantees, and interest is higher on GAP than on guarantees, that the cap would produce slightly higher reserves, as the effect of valuing at a higher interest rate will be muted as the plan of insurance valued is changed from whole life to a long-period term coverage.

We invite your opinions and comments on current practices on the issue of capping the GMP by premium limits.

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applicable to life insurance contracts, such as the tax-free death benefit.

Prior to the release of Rev. Proc. 99-27, the only way to cure an inadvertent overfunding error that created MEC status was to return the excess premium with interest to the policyholder within 60 days after the contract year. The tightness of this rule provided insurers with limited means to correct a funding problem and to return a contract to non-MEC status. Another approach was to rescind the contract, tax all the gain and start over, clearly not an appealing option.

Basic Elements of Rev. Proc. 99-27

The voluntary corrections program adopted by Rev. Proc. 99-27 to return a MEC to non-MEC status has been designed with the following administrative objectives and efficiencies:

➢ The procedure does not rule on MEC status, but corrects the errors of contracts admitted by the issuer to be MECs. Hence, the applicant must admit the error.

➢ The request for a closing agreement must be filed by May 31, 2001.

➢ The procedure is available to a broad variety of insurance contracts but contracts with intentional or egregious failures (e.g., those designed to be a MEC or those deemed by the IRS to have an excessive investment orientation) are not eligible. The revenue procedure supplies three examples of ineligible situations. The degree of reasonableness associated with the failure does not appear to be a relevant factor. Corporate-owned policies, except for those insuring a "key person," are also excluded.

➢ The procedure is available to insurers, not policyholders

➢ A toll charge consisting of the following amounts is imposed, where applicable:

- Charge on overage earnings
- Tax on actual or deemed distributions plus deficiency interest
- Additional 10% tax on actual or deemed distributions plus deficiency interest

➢ The earnings from excess premium ("overage earnings") is determined by simple formulae that assume proxy earnings rates for general and separate account funds, rather than the actual earnings rate for each contract. To both the company and the IRS, this approximation avoids the administrative complexity associated with determination of the investment earnings for each contract.

➢ Civil penalties for the failure of the issuer to satisfy reporting, withholding, and/or deposit requirements will be waived.

➢ The toll charges and additional amounts paid by the issuer to bring the contracts into compliance are not deductible, refundable or creditable in any way by the issuer, and do not adjust the contract holder's investment in the contract (i.e., basis).

➢ Relief under the revenue procedure cannot be requested periodically or gradually. Except as otherwise provided, the insurer must submit all affected contracts at one time.

➢ The MEC will be cured and restored to compliance once the insurer takes corrective action by either increasing the death benefit or returning any remaining excess premium with interest thereon to the policyholder.

Computation of the Toll Charge

The toll charge imposed to cure the contract consists of the following amounts:

➢ A charge on overage earnings designed to tax excessive or inappropriate inside build-up

➢ A tax on actual or deemed distributions which substitutes for the income tax that would have been due by the policyholder

➢ Additional tax on actual or deemed distributions, i.e., the 10% penalty tax, if applicable

➢ Deficiency interest on taxes associated with distributions

For all contracts the tax on overage earnings is equal to the product of the following four items:

- Overage (i.e., Excess Premium)
- Specified Earnings Rate
- Applicable Percentage (i.e., Imputed Tax Rate)
- Distribution Frequency Factor

The overage (i.e., excess premium) is determined for each policy for each calendar year and equals the excess of the cumulative amounts paid over the cumulative 7-pay premiums during the "testing period" (i.e., the 7-year period described in Code section 7702A(b) or the additional period required under Code section 7702A(c)(3) if the contract undergoes a material change).

The specified earnings rate for each calendar year is different for general and separate account contracts. For general account contracts, the earnings rate for a contract year is equal to the arithmetic average of the of the monthly interest rates described as Moody's Corporate Bond Yield Average - Monthly Average Corporates for the calendar year in which the contract year begins. The rates from 1991 to 1997 are published in the revenue procedure and vary from 7.5% to 9.2%.

The IRS selection of the formula for determining the earnings rate for separate

account contracts appears to have considered the fact that (a) investments in these contracts are typically a combination of equities and fixed income investments, (b) the contracts typically have a general account option, and (c) the rates of return are lower than pure investment products due to various charges applicable to a variable contract. The separate account specified rates are published in the revenue procedure and range from negative 1% in 1994 to 25.4% in 1991. For post 1998 years, the separate account rate is equal to 10% of Moody's Corporate Bond Average plus 90% of an adjusted blended rate composed of the S&P 500 Total Return Index and the Merrill Lynch Corporate Bond Master Bond Index, less a spread.

The earnings associated with the overage are referred to as the "overage earnings" and are equal to the overage for the contract year plus cumulative overage earnings for all prior contract years multiplied by a specified earnings rate. The overage earnings that are calculated during the testing period appear to terminate at the end of the seventh contract year, although that is not entirely clear from the revenue procedure. That is, an overfunding of the contract after the end of the testing period should not result in overage earnings, and the carryover of cumulative prior period overage earnings should terminate.

The graduated applicable percentages (i.e., the imputed tax rates of 15%, 28% and 36%) are based on the size of the death benefit and appear to assume that life insurance contracts with higher death benefits are more likely to be owned by individuals in a higher income tax bracket.

The purpose of the distribution frequency factor is to address the likelihood of policy loan or withdrawal activity based on contract design. If a MEC owner does not borrow against or withdraw money from the contract, there is no income tax liability. To reflect this concern and to reduce the harshness of taxing excess investment earnings that may otherwise never be subject to tax, the IRS established a 0.8 factor (e.g., a 20% reduction) for certain specified contracts and a 0.5 factor for all other contracts. It is unclear if the established factors constitute an equitable convention.

Potential Concerns

The goal of Rev. Proc. 99-27 is to promote voluntary compliance in an administratively simple manner at a cost that is not punitive. However, there are at least three areas that may need further development or comment.

"...the MEC correction of errors program provides much needed guidance to life insurers that have issued or acquired inadvertent MECs."

The first area of concern is the one-shot only relief allowed to an issuer, notwithstanding the IRS's discretion to permit exceptions. The exception examples do not cover assumption reinsurance transactions after a closing agreement is obtained, nor contracts that inadvertently become MECs subsequent to the closing agreement.

Secondly, the method created by the IRS for calculating overage earnings assumes that a significant portion of earnings are accrued for an entire calendar year, even if the overage existed only for a short period. Actual payment dates are ignored. This may unfairly create disproportionately high toll charges in many accounts that become overfunded for a short period of time as a result of early payments of an annual premium.

A third area of concern is the appropriateness of the method of selecting the distribution frequency factor. It appears that substantially all contracts may fall into the 0.8 factor category (i.e., a 20% reduction). One situation in which the distribution frequency factor is 0.8 is where any portion of a policy loan interest rate is guaranteed to be no more than 1% higher than the contract's crediting rate on borrowed funds. Many universal life policies include such a provision.

Furthermore, the distribution frequency factor also is 0.8 if the contract holder has an option to make a partial withdrawal of cash value that reduces the contract's death benefit by a percentage that is less than the percentage reduction in the contract's cash value. It appears that the mathematical formula prescribed for this purpose will capture substantially all contracts that permit partial withdrawals. It is not clear if that is the intended result.

Conclusion

Regardless of its strong or weak points, the MEC correction of errors program provides much needed guidance to life insurers that have issued or acquired inadvertent MECs. Without Rev. Proc. 99-27, companies had little or no viable alternatives to cure MEC problems. Once companies and their advisers begin working with the procedure, it is certain that many questions and issues will arise. It is hoped that life insurers and the IRS will continue to exchange knowledge and experience under the program and that modifications be made, where appropriate. The purpose of a voluntary compliance program is to encourage taxpayers to come forward and not to impose sanctions that outweigh the severity of the noncompliance event.

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Cantebury Tales of Fair Value (Fair Value of Life Insurance Seminar—March 1999)
continued from page 1

Theoretical limits, academic studies, and practical, down-to-earth experience were all covered. Computer simulations were conducted live, on-the-spot, and in color. While the speakers did not all agree, each ex-pressed their views forthrightly and with conviction. This was not a conference marred by hemming and hawing! Inter-active sessions were lengthy and outspoken. The last session of this lively conference was a debate, which surprised everyone with an unexpected turn. The diversity was labeled a Canterbury Tales by one of your authors (Lamm-Tennant).

For more details, see the speaker summary following.

The conference made a significant contribution to the study of this topic, reflecting advancing thinking on the subject. The POG is delighted with the level of interest and participation. Proceedings may be ordered from the NYU Stern School of Business at 212-998-0700.

Irwin Vanderhoof (New York University) began the Fair Value of Insurance Business Symposium by highlighting many critical issues in need of further research and deliberation. A few of these issues are the appropriateness of the alternate fair valuation methodologies, the use of a risk-free versus risk-adjusted discount rates and the recognition of cash value as a minimum value.

Paul McCrossan (Eckler Partners Ltd.) defined fair values by noting that the fair value of liabilities exceed the "best estimate" by the "market value margin" which reflects the reward for risk. Paul cited three interesting observations regarding fair valuations: (1) a lock in is inconsistent with fair valuations, (2) C3 mismatch is important to disclose, and (3) information on net expected cash flow is easier to understand than bouncing fair value assets and liabilities. Paul developed a case study comparing "Aggressive Life" to "Giant Life," and clearly articulates the importance of reporting value-at-risk, a priori. If the VaR of "Giant Life" had been reported, then we may have anticipated its dismal outcome sooner.

Wayne Upton (FASB), after singing the FASB disclaimer hymn, reported on the status of fair valuation. It was encouraging to learn that the FASB believes instruments should be carried at fair values when conceptual and measurement issues are resolved. Wayne defined fair value as a price that settles the insurer's obligations. He noted that reinsurance does not provide a fair value for liabilities since the insurer's obligations are not totally settled. The various methods for deriving fair value were reviewed—cash surrender value, replicating portfolios, embedded value and present value. The cash surrender value method is not popular in spite of its attractive simplicity. Replicating portfolios are debatable since typically the portfolio does not, in fact, replicate. Embedded value is dependent on the asset base and therefore introduces complexity, although Wayne acknowledged that there was gold in them thar (embedded value) hills. The present value approach introduces the debate surrounding the appropriate discount rate.

Bob Wilcox (Deloitte & Touche LLP) reported that the objective of the NAIC is to agree on a single system meeting all needs holistically. Bob reported on the chronology of the NAIC's efforts in defining fair valuation. In 1999 the NAIC accepted the 1998 report and agreed to set priorities to complete the development. Bob reviewed the Probability S-Curve, which evaluated the relationship between the probability of survival and resources/

Financial Reporting Seminar Was Held in Mexico City

by Edward L. Robbins

The Financial Reporting Section sponsored a full-day seminar in Mexico City on October 5, 1999 to the Mexican College of Actuaries on recent developments in actuarial practice in the United States. Subjects included cash flow testing, mergers and acquisitions, and capital management.

The faculty was Jim Bridgeman, Carl Harris, John Nigh, Ed Robbins, Roger Smith, and Jim Toole. Financial Reporting Section members were invited to attend, and simultaneous translation facilities were arranged.

Space for our Section members was limited to 25 attendees.

Edward L. Robbins, FSA, is Senior Vice President and Chief Actuary, Zurich-Kemper Life Insurance Companies, Long Grove, Illinois, and Treasurer of the Financial Reporting Section Council, and an organizer of the Mexico City seminar.

obligations. The NAIC's approach is to look at the cash flows and if you can derive the future value of assets then you have the future value of liabilities by default. Concerns surrounding further developments of fair valuations is that knowledge/understanding is not widespread, therefore a need exists for broad exposure and discussion. Also, a significant amount of time is needed to implement fair valuations.

Martin Ruby (ARM Financial Group, Inc.) currently reports fair valuation of liabilities and is clearly a front runner in his practice. Martin indicated he used the appraisal method with sensitivity/ stress testing. Fair valuation calculations are problematic due to embedded options throughout the balance sheet, assumption setting and the degree of conservatism. After inquiring among analysts, Martin concluded that the FAS 115 adjustment is not recognized.

Tim Roff (Ernst & Young UK) reported on the embedded value method endorsed in the United Kingdom. The embedded value is composed of two parts—the operating component and the adjustments due to such issues as investments and exchange rates. Embedded value profit will be volatile, hence key assumptions must be disclosed and subject to external review. The challenge is that embedded values result in too much profit in the beginning and future year's profit become mechanical. After surveying European analysts, Tim reported that the usefulness of embedded value versus U.S. GAAP versus U.K. GAAP. Generally, analysts liked embedded values more than U.S. GAAP but wanted more sensitivity testing. Also analysts tend to agree that embedded values are better indicators of economic value added.

Colin Devine (Salomon Smith Barney) rained on our parade by articulating that "FAS 115 does nothing for analysts." He cited one exception whereby the analysts recognized the unrealized gains in an equity portfolio when valuing a recent acquisition due to the magnitude of the unrealized gains. Colin did clarify that his role as an analyst is to choose good stocks, not good companies. The analyst community begins by assuming that management has hedged the liability risk with the asset portfolio. Consequently they focus on (1) how fast the company can grow earnings, and (2) how fast the company can grow product.

Luke Girard (Lincoln Investment Management) reconciled two methods for determining fair valuation—the option pricing methodology and the actuarial appraisal methodology. In the prior symposium, the actuarial community appeared at odds with the financial community in terms of methodology and in terms of the appropriate discount rate. David Babbel, a very well-regarded financial economist, indicated that the appropriate discount rate is the risk free rate plus the debt spread less the adjustment for taxes. Luke brilliantly derived the same discount rate by using the appraisal method thus bridging the gap between the actuarial and financial professions.

Thomas Ho (BARRA) began by asking the participants to imagine a symposium whereby we were deliberating the methodologies for deriving market values for assets. We would not begin by focusing on accounting issues, rather we would begin by agreeing on a framework. Tom then demonstrated an approach where the link between assets and liabilities becomes the transfer-pricing curve. In his paper, Thomas actually values a SPDA product and illustrated that the assumptions are the only differences in the dueling methods for fair valuation. Tom also described the components of the spread, as arising due to profit targets plus credit and market risks.

"Simulation techniques are based on models, and all models are inadequate in one or more important respects."

Marsha Wallace (Transamerica Occidental Life) reported on their asset liability initiative and the inconsistencies between asset liability measures and accounting measures. Marsha made five observations. Market values are preferred as opposed to book values for both assets and liabilities (book values overstate value and this is particularly true when interest rates are volatile). If management focuses on market value measures, then the total return on assets and total return on liabilities become paramount. Current accounting does not capture all components of the change in value. Alternative performance measurement systems need be considered. The pilot test resulted in clear benefits from the alternate performance measurement system but also resulted in inconsistencies with accounting.

Mary Michel (Manhattan College) examined the role of earnings, historical book value and fair value disclosures in the valuation of stock life insurance companies. Her statistical analysis indicated that historical cost book values and earnings before security gains were significant in explaining market-to-book ratios. Unrealized gains on fixed income securities were not priced. Her conclusions support observations made by many, namely that market valuations of companies discount the effect of unrealized gains in equity.

Peter Duran (Ernst & Young LLP) reported results from an investigation of fair valuation financial reporting as it applies to SPDA products. Peter discussed alternate approaches but had an explicit preference for discounted cash flows consistent with product price structure. Numerous issues were discussed—gain or loss on sale, how to reflect risk, refreshing assumptions, discount rates, impact of asset portfolios, the insurer's credit standing and stochastic versus deterministic modeling. Of interest to many was the very short observed duration of the liabilities.

Sam Gutterman (Pricewaterhouse-Coopers) discussed his paper which gave an excellent overview of concepts under-

(continued on page 12, column 1)

Canterbury Tales of Fair Value
continued from page 11

lying valuation of future cash flows. He discussed valuation models, the estimations and adjustments involved, and related issues. He highlighted the differences in perspectives between a company's own measure of value versus the market value, which reflects the aggregation of many investors' expectations. Sam also elaborated on the difficulty of defining risk: there are many types of risk, and they can be reflected in cash flows, the discount rate, or both.

David Babbel (Wharton School, University of Pennsylvania) described the "ultimate" black box, as created by Fischer Black, in a paper published only after his death. The black box is a set of equations that solve for the term structure and distribution of interest rates and allows the prices of instruments to be determined. Dave emphasized the differences between solving a set of equations (closed form approaches) and simulation. Simulation techniques are based on models, and all models are inadequate in one or more important respects. For example, simulated interest rate models can be used to validate prices only at limited points in time. Dave also provided an interesting graphic showing the term structure of interest rates: a sort of Mandelbrot set among the Canterbury tales.

Tom Herget (PolySystems) would have won the prize, if there was one, for the best multimedia presentation. Tom described work he had performed relative to the Numeric Example sub-group of the Unified Valuation System group. He built a model of a 20-year term contract issued to 1,000 lives. Each year, individuals would lapse or die in accordance with a Monte Carlo simulation. A gross premium valuation was performed on the cash flows in each scenario. Tom not only summarized his work but also ran live simulations for the audience, thus showing not only the range of liability values at different points in time, but also his versatility as an actuarial entertainer. He also presented balance sheets and income statements and showed how different levels of risk (e.g., S-curve at 80% versus 95%) would affect the emergence of profits.

Jim Reiskytl (Northwestern Mutual), speaking first in a debate against Dave Becker, declared that there was no one answer to fair value methods. The "right" method would depend on what one is trying to accomplish. Jim described the Rip van Winkle method as the approach in which, 20 years later, it is clear what the value of the business was. Other than that, there may be no way to agree on the right value. Until the objectives are clear, perhaps a rush to judgment on fair value methods may be inappropriate.

Dave Becker (Lincoln National Life) had been set up against Jim in a debate, with the expectation that while Jim might oppose fair value as a concept for liabilities, Dave would provide an eloquent rebuttal. Such is the devious nature of the POG. After all, Dave had eloquently explained the option adjusted method for fair valuation of liabilities at the previous conference. In a surprise statement, Dave suggested that it was premature to move to fair value. Needs of users of financial statements were diverse and the challenges of implementing methods and defining the concepts were too great. Dave suggested that a well-defined function, first of all, had to exist to be measured. And it had to be independent of its representation. And, of course, the question is, does a fair or market value of insurance liabilities exist?

Mike McLaughlin (Ernst & Young LLP) summarized the proceedings of the conference, relying in part on the summary of the first day by Joan Lamm-Tennant. But he took the opportunity to reemphasize points made in his paper, the Indexed Discount Rate Method for Fair Valuation of Liabilities, part of the prior conference. The IDR method relies on multiple scenarios of cash flows, reflecting variability (i.e. risk) from mortality, persistency, earned interest rates, and other assumptions. The multiple cash flows are to be discounted for valuation purposes at a risk-free rate, because cash flow risk is expressed explicitly rather than indirectly through an interest rate spread. Tools are becoming available that would permit this approach to be used on a practical basis.

Has the state of the art in Fair Value advanced? The accomplishments of the conference include (a) reconciliation of direct and indirect methods (i.e. option pricing with discounted cash flows and appraisal methods); (b) examination of alternatives used in other countries; (c) rigorous academic demonstrations of our impressions about company value; (d) deeper understanding of spread and risk and the need to define level of risk; and last but not least, (e) discussion of real world practical experience with fair value of liabilities. The POG was very pleased with the outcome.

In conclusion, McLaughlin suggested an old aphorism, let the perfect not be the enemy of the good. Let us not reject good methods while we search for a perfection that does not exist.

The POG included Shirley Shao (chair), Paul Hekman, Mike McLaughlin, Georgene Palacky, Wayne Upton and Irwin Vanderhoof. Thanks also go to Barb Choyke and Zain Mohey-Deen of the Society of Actuaries.

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***Joan Lamm-Tennant, Ph.D., is a professor at Villanova University in Indiana. She can reached at* jlammten @genre.com.**

Everything Was "Peachy" in Atlanta!

The Life Insurance Company Financial Reporting Section Council and the Spring Program Committee would like to extend its sincere gratitude to each of the following individuals that participated in the Spring Meeting on May 24th and 25th in Atlanta:

4PD, "Current Events in Financial Reporting"
Frank Buck - Deloitte & Touche
Thomas Campbell - Hartford Life Insurance Company
Arnold Dicke - New York Life Insurance Company
J. Howard Stecker - Deloitte & Touche

21PD, "Performance Measurement (And Anxiety!)"
John Tillotson - Transamerica Occidental Life
Mark Milton - Kansas City Life Insurance Company
Alton Cogert & Michael Murphy - Avon Consulting Group LLP

22PD, "XXX Update"
Don Maves - PolySystems, Inc.
Larry Gorski - Illinois Department of Insurance
Michael Palace - Transamerica Occidental Life
Robert Foster - CNA Insurance Companies

34PD, "GAAP Implications For Mutual Insurance Holding Companies and Demutualizations"
Jason Morton - Deloitte & Touche
Ed Morrissey - Deloitte & Touche
Alan Brinkman - Guarantee Life Insurance Company

41RP, "Resolving Conflicting Demands on the Valuation Actuary"
Bruce Sartain - Illinois Department of Insurance
Howard Kayton - Security First Life Insurance Company
Greg Carney - IL Annuity & Insurance Company
Donna Claire - Claire Thinking, Inc.

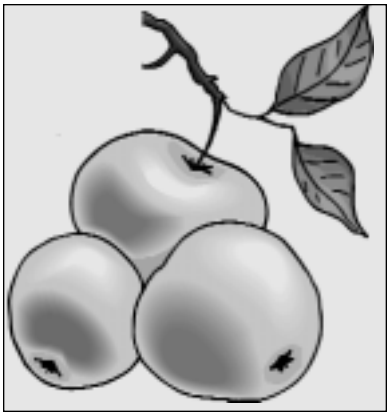
43TS, "The Forthcoming International Accounting Standards"
Sam Gutterman - Pricewaterhouse-Coopers LLP
Edward Robbins - Zurich-Kemper Life Insurance Company
Daniel Kunesh - Tillinghast-Towers Perrin

59PD, "Current Issues for Mutual Company GAAP"
Harold Darak & Al Reznicek - Deloitte & Touche
Ken LaSorella - Sun Life of Canada
Lou Weisz - New England Financial

60PD, "Organization of the Actuarial Function"
Yiji Starr - Ernst & Young LLP
Bob Beuerlein - Franklin Life Insurance Company
Phil Gath - Nationwide Financial Services

71PD, "Use of Reinsurance in Mergers and Acquisitions"
Jeremy Starr - Guardian Life Insurance Company
James Dallas - Reinsurance Group of America, Inc.
Timothy Gaule - Security Benefit Life Insurance Company

75CS, "Cash-Flow Testing Issues for Equity-Indexed and Variable Products"
Larry Gorski - Illinois Department of Insurance
Noel Abkemeier - Milliman & Robertson, Inc.
Alan Downey - Keyport Life Insurance Company



81WS, "Current Issues for Mutual Company GAAP"
Yiji Starr - Ernst & Young LLP
Scott McAlpine - Ernst & Young LLP

85PD, "ASOP-No Fables"
Allan Ryan - Deloitte & Touche
Dan McCarthy - Milliman & Robertson, Inc.
Lauren Bloom - American Academy of Actuaries

86PD, "Trends and Issues in Financial Institution Convergence"
Stephen Lash, David Nolton, Mark Olson & Joe Piscarella - Ernst & Young LLP

91CS, "The Role of the Actuary in Litigation Support"
Stephen Hildenbrand - Pricewater-houseCoopers LLP
Allan Horyich - Schiff, Hardin, & Waite

The spring meeting was a tremendous success, in large part due to the significant efforts of the Section Council, Session Coordinators, Moderators, Panelists, and Instructors. Thank you all!

Dynamic Financial Condition Analysis Update

by James F. Reiskytl

What is DFCA ("Dynamic Financial Condition Analysis")? Is it Dynamic Solvency Testing? Dynamic Financial Analysis? Viability Analysis? Viability Reports? Yes, it is the concept underlying each of these and it is quite likely that you may be doing this type of analysis for a product, a line of business, or the whole company and have created your own name for it. DFCA (and each of these other efforts) focuses on risk analysis, risk management and planning. The variability in actual practice by actuaries can also be quite diverse—including everything in the range from a back of the envelope approach to an issue to a full-blown cash flow analysis.

Current DFCA efforts and possible future uses are highlighted in this report. For some it will be an update. For others hopefully it will tweak your curiosity so that you will want to learn more, follow-up, and maybe even begin doing it when appropriate at your company.

Your Questions/ Suggestions

If after reading this, you have any questions/suggestions or descriptions of current use of DFCA, please send them to James Reiskytl (Northwestern Mutual Life Insurance Company), chair of the Society of Actuaries Task Force on DFCA at his *Directory* address or via e-mail, to any of the DFCA editors (listed on page 99 of the *Yearbook*) or to Kevin Long at the Society office who would like to hear from you.

Canada

Dynamic Capital Adequacy Testing (DCAT) is required in Canada for both life and property casualty business. Regulators want well-run companies with well-informed management and boards of directors. One part of this effort is an annual financial condition report that is presented to the board of directors, and is later filed with the Office of the Superintendent of Financial Institutions.

This report continues to evolve with increased emphasis and reliance on individual company assumptions and experience and fewer standardized assumptions. Its value to management depends substantially on the quality of the actuarial analysis, explanation of the results and the changes over the past year.

Overall, it seems to be well accepted by the key parties. They are actively trying to make it valuable and useful—and not simply something else that must be done.

"The variability in actual practice by actuaries can also be quite diverse—including everything from a back of the envelope approach to an issue to a full-blown cash flow analysis."

United States

Pete Hepokoski, Vice President of the Society of Actuaries' Finance Practice Area, in working with his Advancement Committee, has identified various ways to encourage the use of Dynamic Financial Condition Analysis. These include (1) revising the introduction to the DFCA Handbook to make it more user friendly; (2) possibly creating a new column in the Actuary on frequently asked questions about DFCA—(these might also be added to the Handbook); (3) increasing the focus on its use as a management tool; (4) preparing more examples of possible reports; and (5) developing a new name.

CAS Success/Possible Joint Seminar

Many Casualty Actuarial Society (CAS) members consider dynamic financial analysis to be a fundamental tool and as such, it is increasingly becoming more widely used. Casualty business can be quite volatile, so this type of analysis is essential for understanding, assessing and improving risk management.

Their DFA seminars have been very popular. The SOA is looking into the possibility of a joint seminar with the CAS next year with one day focused on either life and annuity or casualty topics and a second day on common topics of interest such as assets and modeling techniques.

Unified Valuation System Viability Report

The Academy of Actuaries Valuation Task Force has proposed that the NAIC's Life and Health Actuarial Task Force (LHATF) consider three fundamental concepts for future actuarial valuation, one of which is an internal "viability report" to management and the Board. This annual report would involve dynamic financial analysis of a company's viability based on its business plan. It would include new business and would "stress" the plan and overall company financial results under various economic scenarios. A description of the current draft of a possible future viability analysis is available from the Academy of Actuaries office.

The LHATF is interested in this concept and plans to establish direction for this possibility by year end.

Future NAIC Financial Reporting

A NAIC task force chaired by Terry Vaughn, Insurance Commissioner of Iowa, is taking a fresh look at effective regulatory oversight in the next century. The task force has drafted a set of objectives and is reviewing the statutory

statement to see if it appropriately supports these criteria. It is also looking at various ways that companies assess and manage risks to determine what, if any, place DFCA may have in their future efforts. The Society of Actuaries Financial Reporting Section initial response includes consideration of an internal management "viability analysis."

SOA Big Tent Concept

Howard Bolnick's "Big Tent" concept of actuaries "as the leading professionals in the global financial services industry" is built on broadly defined financial risk analysis and management. Arguably, rigorous risk management is becoming increasingly essential for financial enterprises to be successful. DFCA supports his concept and this need. In fact, a number of companies are already using this analysis as part of their capital allocation and other business decisions.

SOA Research

The SOA Website describes the results of recent studies, many of which could be quite useful for DFCA. These studies are summarized as part of the DFCA presentation at the last Valuation Actuary Symposium. You may contact Syed Ali at the Society office for specific needs or to determine what is "in the works" to be released soon.

Handbook

Copies of the Dynamic Financial Condition Analysis Handbook published in a loose-leaf binder format for easy addition of periodic updates are available through Beverly Haynes in the SOA Books Department (Phone 847/706-3526; Fax 847/706-3599). The cost is $40 for the complete handbook. Updates are $15.

An order form for the Handbook is also available through *www.soa.org.*

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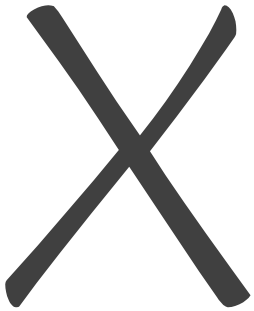
Setting the X Factor Percentile— Commentary

by G. Thomas Mitchell



Alan Sturm raised a question on the Society of Actuaries Website on Larry Gorski's XXX Select Factor article in the May, 1999 issue of *The Financial Reporter,* which I believe is summarized as follows:

"In setting the X factor (a multiple of tabular mortality rates used in reserving), conservatism would indicate a percentile (in the distribution of claims) vs. expected claims at or less than 50%, not greater than 50% as indicated in the article."

I believe this involves a distinction between two processes:

1. Setting the X factor prospectively where there is significant relevant experience available. In the case of fully credible experience, one would want to use a percentile somewhat lower than 50% to reflect appropriate conservatism.

2. Reviewing a previously set X factor, to determine if it might be inadequate. Here the X factor would be rejected if actual experience is statistically significantly higher than the X factor. Hence a percentile greater than 50% would be used. The other view would require that in event of random higher claims, the factor would be reset annually to a level somewhat higher than actual claims indicate, even though evidence would point at this possibly (or probably) being by chance. This could lead to bizarre results on small blocks.

Section Chair's Notes

by Shirley Hwei-Chung Shao

When approached to write an article as the chair, I tried very hard to remember what kind of articles the previous chairs had written. The only one that came to mind was from Craig Raymond (two chairs ago for anyone who is tracking) about a big hole in his backyard. While I don't recall his point (I am sure there was one), it made an im-pression on me, which is not easy for this type of article to do. However unmemorable my own article may turn out to be, I would like to first say that it has been a most memorable experience for me to serve on the Council and as the chair.

Our Section has nearly 4,000 members of which 92% and 8% are from North America and elsewhere, respectively. The Council serves members' needs related to financial reporting through a variety of activities. The ongoing activities include newsletters, seminars, and sessions at the SOA meetings. In addition, in 1999 the Council is focused on:

- Working with the E&E Committee to ensure that financial reporting needs are covered and to the extent to which they are not, the Council will step in and fill the gap
- Preparing a book on GAAP for financial professionals
- Expanding our exchanges with the financial actuaries abroad
- Bringing more discussions, and hopefully more consensus, on the fair valuation of liabilities
- Seeking ways to respond to the "big tent" proposal
- Creating fun for our members at the 50th SOA anniversary meeting

The Council works very diligently and closely to initiate and execute these activities. I would like to thank the wonderful Council: Mike Eckman, Larry Gorski, Mike Lombardi, Karen MacDonald, Steve Preston, Howard Rosen, , Ed Robbins (treasurer) and Mike McLaughlin (vice chair) for their devotion. Following are highlights of our activities this year.

Newsletter

Our most visible activities are related to the publication of this newsletter (about 3-4 times a year). This year, Tom Mitchell will retire after serving two years as the editor. A substantial amount of effort and energy is required to be as successful as Tom has been. Tom is very resourceful, persistent and yet easy to work with.

Tom Nace will succeed Tom Mitchell as our new editor. Tom is well qualified with many years of experiences in different areas. Most importantly, he is enthusiastic about this role and has already helped out with this issue. I only have one complaint about this appointment: he is the third consecutive Tom in the role as the editor, starting with Tom Herget.

Seminars

The Council creates and puts together seminars on topics that are of interest to our members. So far this year, we have sponsored two seminars for which I had the opportunity to work with many people who worked very hard to make them a success. One seminar was co-sponsored with the Caribbean Actuarial Association, where we exchanged our thoughts on solvency issues and the role of actuaries. Benefiting from multiple cultures, I am interested in promoting the exchange of professional activities and educational opportunities with our counterparts around the world.

In the last couple of years, we have extended our seminars to Asia and South America. The 8% of our members outside the North American area have been underserved in the past, and hopefully this is the beginning of reaching out to members globally.

The other seminar, co-sponsored with the Finance Practice area, was on Fair

Value of Insurance Business (second conference). Fair valuation is the cornerstone of many things we do, such as accounting, ALM, risk management, and investor's values. I am a strong believer that actuarial professionals have to move forward with these issues. Please read more about these seminars in this newsletter.

The upcoming attractions are seminars on basic GAAP, advanced GAAP (Mike McLaughlin), a seminar in Mexico, a joint seminar with the International Section (Ed Robbins), Eastern European seminar (Shirley Shao), and possibly joint seminars with the Investment and Product Development Sections (Howard Rosen).

Spring and Annual Meetings

The Council sponsors about 15 sessions at each SOA meeting. The sponsorship involves coming up with hot topics, recruiting, and sometimes doing the sessions. John Bevacqua and Anna Manning helped coordinate the Spring and Annual meetings respectively for the Council.

To celebrate the SOA's 50th anniversary, Mike McLaughlin has prepared a monograph with articles from *The Financial Reporter* and other publications. This monograph will be a special gift for our members to be passed onto future generations.

Of course, we have to party too. Lois

Chinnock from the SOA looked into many possibilities before finding an old-fashioned river boat for our members. This party cruise will be on Sunday evening (October 17) before the annual meeting. We will enjoy the beautify view of the bay, good food and drinks and the excellent company. Don't miss this wonderful party.

Examination & Education

The new examination system will be in place in year 2000. We must ensure a smooth transition that provides adequate support to our future financial actuaries as well as to employers. Larry Gorski has been involved in studying the implications of the new syllabus from financial reporting perspectives. In fact, he is writing part of the new syllabus. Additionally, he is looking for ways our Section may provide more emphasis on professional development and continuing education. We may have to do more seminars, for example.

I am also very proud to announce that our Section will sponsor a GAAP textbook focused on actuarial issues. Tom Herget, our last chair, is the editor who plans to accomplish this huge task in about one and half years. Anyone who knows Tom knows that he gets things done. This will be a great service to our members, as evidenced by the popular basic and advanced GAAP seminars we run every year. This is the first such project that the Council has taken on.

The idea of doing a GAAP textbook came from my own painful experience of learning GAAP three years ago. I started with one textbook that was 30 years old and supplemented it with various SOA study notes, and *Financial Reporter* articles. It seemed to be an unnecessarily confusing learning process. I guess I am claiming credit for the original idea, but more importantly, this illustrates what the Council can do and why I have enjoyed my experience with the Council.

Research

The Council looks for research proposals that may be beneficial for our members. The insurance and financial services industry is rapidly changing, and actuaries need to be responsive to change in order to be recognized as the leading professionals in the modeling and management of financial risk. We need to be more focused on forward-looking activities such as research.

It may be hard to believe, but we have had difficult time finding/funding proposals, despite Howard Rosen's continuing efforts. One recent idea under SOA President Howard Bolnick's Big Tent proposal is to fund research projects in target colleges.

"I would encourage members to continue to provide input to the Council on how it can best serve members' needs...I also enjoyed working with Council members...."

Web Page

Our Section has a website page which currently contains our newsletters. Larry Gorski is investigating how better to use this page to enhance communication between our members.

Financial

Since the Council is run by financial actuaries, our Section's surplus has been very healthy. I remember the first topic at my first Council meeting two years ago was what to do with all this surplus. Our surplus has grown even higher since then. However, under my leadership, I am happy to report that several initiatives such as the GAAP text book, 50th anniversary activities, and international seminars, will mitigate this problem. We have also decided not to raise the dues (our dues are among the lowest at the SOA Sections) and to give seminar discounts to our members.

The above are the major activities the Council is involved in this year. Please feel free to contact me or Lois Chinnock at the SOA with your thoughts and comments.

I have the pleasure of meeting some members in this role. I would encourage members to continue to provide input to the Council on how it can best serve members' needs. I also really enjoyed working with the Council members mapping out our visions, brain storming ideas, debating perspectives, and executing plans. This is a very effective Council with a can-do attitude and good humor. I will definitely miss my Green Jacket after my term ends this year. Tom Herget instituted the tradition of a Section Green Jacket from his own funds after he became fed up with my constant effort to oust him from the chairpersonship before his time (time as defined by Tom). The jacket is in green to symbolize my hunger for the chair's green ribbon and is size 20 to make me swim in it. Mike McLauglin, the incoming chair, has been inquiring about the jacket and the time to transit. Well, I will always be a loyal Section member!

Shirley Hwei-Chung Shao, FSA, is vice president and assistant actuary at the Prudential Insurance Company in Newark, New Jersey, chair of the Financial Reporting Section Council, and newly elected member of the SOA Board of Governors.

Annual Meeting Overview

The Society of Actuaries Annual meeting this year in San Francisco promises to be a memorable one. Not only is the Society celebrating its 50th anniversary, but the sessions planned look to be something you won't want to miss.

The following is a summary of the topics being covered of particular interest to financial reporting actuaries. So, take a look and then make your reservations for the Annual meeting. Hope to see you there!

Program Summary

SUNDAY, OCTOBER 17

6:00 p.m. - 9:00 p.m.

- "Cruisin' on the Bay"

MONDAY, OCTOBER 18

10:30 a.m. - 12:00 noon

- Data Standards - Bringing Good Things Through Olife
- Fair Value Reporting - Is There a "Fairer" Way?
- "Once More Unto the Breach": An Overview of the Disability Insurance Market
- Economic Value - Added (EVA) vs. Value-Added for Life Companies
- What's It Worth to You? (Asset Valuation Methods)
- Historical Perspective on Investment Practice
- Risk-Based Capital (RBC) for Managed Care Organizations (MCO)
- Joint CAS/SOA Statement of Actuarial Principles
- Low Interest Rates Again - What's Different this Time?
- Health Reserves: Know When to Hold 'Em; Know When to Fold 'Em
- Regulatory and Tax Issues

12:15 p.m. - 1:45 p.m.

- American Academy of Actuaries Luncheon
- Section Luncheon: Actuary of the Future/Management and Personal Development - "Values, Ethics and the Lone Ranger"

2:00 p.m. - 3:30 p.m.

- Data Warehousing for Actuaries
- The Cost of Capital-Everything an Actuary Needs to Know
- The Risk-Based-Capital C-3 (Interest Rate) Project
- Emerging Reinsurance Markets
- Equity-Linked Notes-What's New?
- The New European Union
- How Do They Do It?
- Security Blanket for Life (and Health)
- Successful Bancassurance Programs - A Look Behind the Scenes
- Mining the SOA Web Site
- Turning Around an Unprofitable Group Long-Term Disability Case
- Value, Ethics and the Actuary

TUESDAY, OCTOBER 19

8:00 a.m. - 9:30 a.m.

- Codification of Statutory Accounting Rules
- Guaranteed Separate Account Products - NAIC Reserving Proposals
- Approaches to Underwriting Disability Insurance
- Demographics and Longevity into the Next Century
- May the In-Force Be with You
- Mortality-Do the Limbo?
- 'R' Rated-Risk in Capital Management
- Investors View of Insurance Industry
- Getting up to Virtual Speed on the Internet
- Appraisals of Foreign Operations
- Monte Carlo Derivative Pricing

10:00 a.m. - 11:30 a.m

- Actuarial Software: Build or Buy
- Generally Accepted Accounting Principles (GMP) for Nontraditional Products
- Mutual Companies-Extinct in Canada?
- The Asian Flu-Is Anyone Immune?
- New Models in Credit Risk Management
- Transfer Pricing: Insurance Companies vs. Banks
- Industry Convergence - Bank Participation
- It's 11 O'clock, Do You Know Where Your Data Is?
- A Mini-Course in Financial Economics with Applications to Investments, Insurance, and Pensions - Part I

2:00 p.m. - 3:30 p.m.

- The Future of Mutual Life Insurance Companies
- Financial Services on the Internet
- International Financial Reporting Standards
- Purchase Generally Accepted Accounting Principles (GAAP)-Where Are We Heading?
- Asset-Backed Securities
- Variable Product Guarantees: Assessing the Risks
- Is the Group Reinsurance Marketplace on LTD?
- Professional Standards-What Is Your Awareness Level?
- Credibility and Health Insurance
- A Mini-Course in Financial Economics with Applications to Investments, Insurance, and Pensions - Part II

WEDNESDAY, OCTOBER 20

8:00 a.m. - 9:30 a.m.

- Jim Anderson's Predictions
- International Valuation-Coming Soon to a Country Near You
- The Actuary's Role in Risk Management
- Variable Annuities and Segregated Funds - Guaranteed Benefits Valuation Issues
- Long-Term-Care (LTC) Regulatory Developments
- Current Reserving Issues for Disability Insurance
- Risks in Investment Accumulation Products: Recent Research
- Underwriting Strategies in the 21st Century
- Regulation of Life and Health Insurance State, Federal, or Both?
- Life Insurance and the Internet: Where Do We Go from Here?
- Large Group Insurance Issues

Annual Meeting Cruise

The Financial Reporting Section was the sponsor of a cruise on San Francisco Bay in connection with the Annual meeting in October. What better way to accent your trip to San Francisco!

Participants were able to enjoy the grandeur of a Fall evening aboard the Empress, a cruise ship modeled after a turn of the century (the Twentieth, that is) riverboat. Taking in the view of the Golden Gate Bridge, Alcatraz and the city of San Francisco itself from a totally aquatic perspective, was one of the highlights.

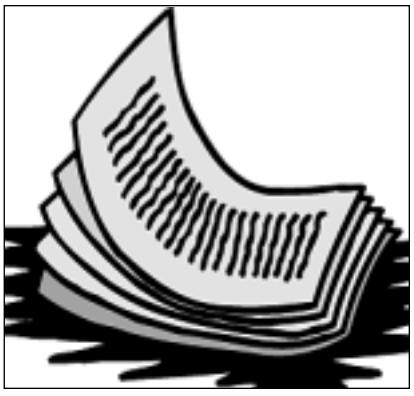
The excursion was held on Sunday, October 17th, from 6:00 p.m. to 9:00 p.m.

This mini getaway offered the opportunity to socialize with friends and associates while at the same time enjoy good food and drinks and the best nature has to offer.

The ship was commissioned for use entirely by the Financial Reporting Section. Onboard, there was a buffet dinner plus open bar. There was a non-refundable charge of $45 for each member and $55 for all non-members. Bus transportation was available from the hotel.

The cruise was completely booked and is deemed to have been a great success.

Financial Reporting Section Monograph



NEWLY-ELECTED LIFE INSURANCE COMPANY SECTION COUNCIL MEMBERS

- ***James P. Greaton,*** Keyport Life Insurance Company, Boston, MA ******
- ***David Y. Rogers,*** New England Financial, Boston, MA ******
- ***Barry L. Shemin,*** John Hancock Mutual Life Insurance, Boston, MA ******
- ***John F. Bevacqua,*** Deloitte & Touche, New York, NY (one-year term)

**** Denotes a three-year term***

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