small talk

NEWSLETTER OF THE SMALLER INSURANCE COMPANY SECTION

ISSUE 13 MAY 1999

From the Editor

by James R. Thompson

As 1999 rolls along, we are approaching the big year 2000. Thus it is fitting that *small talk* address address the Y2K problem. There has been a lot of talk in the industry, and many of the larger companies have been busily updating their computer systems for the handling of the four-digit years rather than the soon to be ambiguous two digit years (is 00 1900 or 2000?). Do smaller companies feel that the larger ones have too much staff and nothing better to do than pay attention to this problem instead of more pressing ones like writing new business or getting the last new product installed on the system before the sales crush?

Well, time is slipping for complying. Mike Lombardi's lead article deals with this problem and its importance to any companies. Smaller companies that have done nothing should take note. We also have another article by Ara Trembly, who is a staff writer for the *National Underwriter* and some comments from the newsletter of the National Alliance of Life Companies (NALC). All are worth reading.

Another important issue is codification. We have two articles on this. One by Rick Browne deals with reinsurance in codification in particular. The NALC also points out the potential dangers of it.

There is lots going on in the world of regulation. XXX was recently passed. This will affect the pricing, reserving, and product design of term insurance. Through the end of 1999, there will be a "fire sale" on for the selectivity underwritten reentry term insurance with fairly long guaranteed periods (20-30 years). Next year will be a new ball

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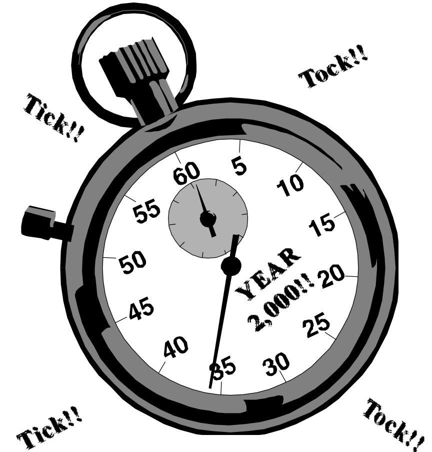
The Year 2000 Clock Is Ticking

by Mike Lombardi



RU Y2K OK? If you're not, you're not alone. With less than eight months before the year 2000 arrives, many businesses, large and small, continue to put off or struggle with their Y2K projects. The insurance industry is no exception.

Jokes may be made about planes grounded because they are 99 years overdue for maintenance, long distance phone calls that get charged for millions of minutes, and credit card bills with a century of overdue interest charges. However, it is indeed a serious problem. In this article, we'll look at the recent developments in the year 2000 issue from the perspective of the insurance industry and some special issues faced by smaller insurance companies.

The Problem Is Real

A RECENT STUDY conducted by A.M. Best revealed that the level of readiness to meet the new year is below expectation. According to a similar survey of Canadian companies by TRAC Insurance Services, it is more than likely that a significant minority of insurance companies will experience serious operational difficulties in the first few months of next year.

For major companies with heavily customized software systems, much of the corrective work has been done by the companies themselves. It's estimated that the insurance industry will spend between $6 and $8 billion to address, disclose and remediate the Y2K problem. Although the costs of corrective action vary from company to company, a common rule of thumb is $1.50 -$2.00 per line of source code to correct the date field problem. Especially for a smaller company, that's a lot of investment, with

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The Year 2000 Clock is Ticking

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zero additional profit, just to stay in business! And these costs exclude considerable additional amounts for project management, communication, routine supervision, analytic support, and training.

A major factor in the complexity of the issue is that we're dealing with many systems that have effectively been on autopilot for perhaps decades. How these systems work is often unknown to the current users. These systems were created many years ago in COBOL, FORTRAN, or ASSEMBLER languages, which few modern programmers understand very well. In general, users may know what inputs are required and what reports or information is generated but they do not understand the detailed code behind these systems. Also, users may not understand how different systems (administration, commission, financial reporting, reinsurance) interact with each other.

Expecting that a third party contractor or consultant can be hired to fix everything while company staff continue with business as usual is not realistic. The reality is that no outsourcing firm can be expected to do it all. Internal staff need to identify all the customized approaches used by a sophisticated insurer and to validate all changes during the testing phase. As the deadline approaches, the cost of corrections will increase due to the shortage of experts and the anticipated increase in demand for their skills. Small companies with little time, resources or money to spend on the Y2K issue may be challenged to find solutions at a reasonable price.

It's not just software, either. Hardware controls critical environmental systems such as elevators, lighting, heating, telephones, voice mail systems, air conditioning, electricity, and security. These need to function, too. Insurance companies will also need to make sure their PCs, operating systems, and peripheral equipment don't have hardware date overrides that invalidate the software changes.

If a company can't get its system running properly, there is the real risk of a traditional liquidity crisis or run on the bank, as policyholders get wind of a troubled company and decide to pull money out fast before the regulator steps in.

SMALL TALK

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Solutions

THE A.M. BEST survey results show that many respondents will not have completed their remediation work until the third quarter of 1999. It shows the life and health industry being only 40% finished with remediation by the end of 1998. A.M. Best predicts that many companies will adopt a "triage" approach, with shortcuts taken and substantive testing plans scrapped. Mergers and joint ventures may also be expected as a solution to the problem.

The use of outside consultants rose considerably in 1998 as compliance efforts became more urgent. While many companies have outsourced some part of their Y2K work, many are using only in-house resources. In any case, testing and verification must be done in-house by employees.

Solutions to software issues follow three broad approaches: upgrade, repair, or replace. In many cases, repairing existing systems is the prudent choice, although software vendors offering Y2K compliant products may see record sales as legacy systems are abandoned.

A large part of the challenge is effective communication. It is very useful to

have a documented conversion plan and to understand how it interacts with other business priorities. Impact analysis should identify the most critical areas that require attention. This can help identify business critical issues. PC based systems, such as sales or illustration spreadsheets with many macros, may give rise to big headaches.

"However, companies will not be able to hide their Year 2000 problems, because disclosure is now required under various accounting standards, securities laws and regulatory policies."

Smaller companies that have put off addressing Y2K issues until the last minute may be facing the challenge of coming up with cost-effective solutions. With fewer integrated systems, lower tech or manual procedures, and smaller volumes of business than their larger counterparts, a smaller company might be ready to accept solutions that fix 95% of cases and to work manually with the rest. A larger company with more rigid job descriptions and specialized capabilities might feel compelled to aim for 100% completion, a goal that may cost multiples more.

The development of formal contingency plans for the most critical systems is essential. Even with the best-laid plans, there is a possibility that Y2K problems will not be resolved in time, or that an unexpected system failure may occur. Business continuation and disaster recovery plans need to be established.

Compliance

IT'S INTERESTING TO note that a significant number of smaller insurers did not respond to the various industry surveys on Y2K readiness.

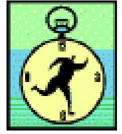
Companies with significant Year 2000 problems may be reluctant to talk about the magnitude of their Year 2000 corrective work, for fear of providing damaging information to future plaintiffs in the event the Year 2000 problems are not corrected in time. However, companies will not be able to hide their Year 2000 problems, because disclosure is now required under various accounting standards, securities laws and regulatory policies.

New York insurers are required to file a readiness report by April 1, 1999. The filing, modeled after the Securities and Exchange Commission's guidelines for publicly traded companies, must address the insurer's current state of preparedness for Y2K, how much it will cost to address the Y2K problem, the risks associated with their Y2K issues, and the company's contingency plans.

Canadian federally regulated insurers are required to notify the Office of the Superintendent of Financial Institutions (OSFI) if renovations to critical internal systems, as well as a review of critical external systems and interfaces, have not been completed by March 31, 1999. OSFI also requires that company actuaries, in their annual Appointed Actuary reports, address the issue of how the actuary's work is affected by the Year 2000 problem. Any problem areas need to be highlighted and a plan of action should be recommended.

One of the GAAP principles promulgated by both the Financial Accounting Standards Board (FASB) in the USA and the Canadian Institute of Chartered Accountants (CICA) in Canada provides that contingencies that are reasonably possible, whether or not the amount can be calculated or estimated, must be disclosed in a note to the financial statements.

The financial impact of the problem is exacerbated by the recommendation of the Emerging Issues Task Force of the Financial Accounting Standards Board. It recommends treating Year 2000 expenditures as current year expenses rather than amortized costs. This hotly argued recommendation will have a direct impact on the bottom line and give rise to additional volatility in company ratings or stock prices.



The possibility of personal liability is usually very effective in moving management away from any inaction or attitude of serene complacency. Corporate law typically imposes standards of care on the company's managers and directors which could be breached if they are negligent in dealing with the Year 2000 problem, resulting in potential personal liability for the directors. If a company fails to adequately disclose its Year 2000 problem in its annual report and subsequently has to shut down its business due to the problem or otherwise experiences substantial operational difficulties, shareholder and policyholder suits are likely to follow.

Policyholders may launch class action suits alleging fraud, breaches of contract, or failure to perform services. In the event of liquidation, other suits will follow from creditors, employees, other investors, reinsurers, or consumer protection plans. One defense can be reliance on the reports of the company's officers and third party experts in the course of making corporate decisions. It would be useful to be able to produce detailed documentation as to the company's Year 2000 corrective plan and the diligence with which it was pursued.

Conclusion

THE Y2K DEADLINE approaches fast and not all is well! The Year 2000 issue is real and it is no joke. Insurance companies that are going to make the headlines are the ones that aren't paying attention. The clock is ticking, 'the stakes are high,' the time to act is now!

Mike Lombardi, FSA, is consulting actuary at Tillinghast-Towers Perrin in Toronto, Ontario.

Reinsurance Codification

by Richard H. Browne

The primary codification documents covering life and health reinsurance are:

- Statement of Statutory Accounting Principles No. 74 (SSAP 74), Life, Deposit-Type and Accident and Health Reinsurance,
- Appendix A-791, Life and Health Reinsurance Agreements, and
- Appendix A-785, Credit For Reinsurance.

SSAP 74, together with Appendix A-791, are in subject and format quite similar to the NAIC reinsurance model regulation, covering both the rules of accounting for reinsurance and deposit-type contracts and the rules for determining whether a particular treaty should be classified as reinsurance or deposit-type.

One interesting change from the NAIC reinsurance model regulation is the incorporation by direct reference of the GAAP accounting's FAS 113 provision, with several differences specifically noted. These differences include:

A. Netting of reserve credits for reinsurance against direct reserves is appropriate for statutory accounting.
B. Initial ceding commissions are to be recognized as income in the initial gain or loss calculations.
C. Statutory rules of risk transfer do not necessarily require that there be transfer of significant mortality or morbidity risk in order for a contract to qualify as reinsurance. For example, a reinsurance treaty that covers investment annuity contracts that have some mortality risk that is not significant, and that does not transfer any of the mortality risk to the reinsurer may qualify as reinsurance under SSAP 74. Such a treaty would not qualify under GAAP.
D. There are unique statutory accounting rules for reinsurance of in-force blocks of business that are different from GAAP.
E. Statutory accounting prohibits any gain or loss to be recognized in connection with sale or reinsurance of blocks of business between affiliates in non-economic transactions.
F. Specific liabilities are required for unsecured reinsurance recoverables from unauthorized reinsurers.
G. Statutory accounting prescribes off setting of certain reinsurance premiums, which GAAP accounting does not.

Four specific issues related to life and health reinsurance have received considerable discussion in recent meetings of the NAIC Life and Health Actuarial Task Force (LHATF). A recent memorandum from the chairman of the reinsurance subgroup examining these issues, Sheldon Summers, summarized these issues and the current position of the subgroup with regard to these issues. The following four issues relate to provisions in Appendix A-791.

> ***"One interesting change from the NAIC reinsurance model regulation is the incorporation by direct reference of the GAAP accounting's FAS 113 provision, with several differences specifically noted."***

Conversion to Coinsurance

A-791 DISALLOWS REINSURANCE credit to be taken by the ceding company if the ceding company can be deprived of assets at the reinsurer's option, or automatically upon the occurrence of some event. A treaty that allows either a coinsurance/modified coinsurance (co/modco) or a coinsurance/funds withheld (co/fw) treaty to be converted to coinsurance at the reinsurer's option is of concern.
The subgroup recommendation is that such a provision be permitted as long as:

I. the triggers for conversion are limited to ceding company violations of treaty provisions,
II. the ceding company surplus is not changed immediately following the conversion,
III. the invested assets to be transferred upon conversion do not exceed the modco reserve (or funds withheld), and such assets have been maintained in a trust account, and
IV. the reinsurance otherwise complies with Credit for Reinsurance requirements.

YRT Exemption

YRT IS SPECIFICALLY exempted from provisions of A-791. This exemption was included because YRT treaties do not typically provide significant amounts of surplus relief. There is a concern among some regulators that some treaties that provide surplus relief are called "YRT treaties" in order to qualify for this exemption. In fact, therse are YRT treaties in name only. The recommendation of the subgroup is to require that a YRT treaty not provide surplus relief in the first year which exceeds the surplus relief that would be provided by a YRT treaty with a zero first-year premium and no additional allowances.

Segregation of Assets

UNDER CERTAIN REINSURANCE treaties covering investment products on a modco or funds withheld basis, it is required that assets backing the reinsured business be segregated for purposes of crediting investment results to the reinsurer. The issue is whether or not the ceding company should be allowed to mix assets supporting reinsured business with assets supporting non-reinsured business in such segregated asset portfolios.

The industry (ACLI) position is that forcing the segregated asset portfolios to include only assets specifically supporting

reserves on the reinsured contracts will unduly restrict the ability to invest prudently. A ceding company may be forced to manage asset pools so small they would be unable to accomplish A/L matching techniques or proper diversification.

Certain regulators have been quite strong in voicing opposition to the industry position. The reinsurance subgroup is willing to compromise somewhat by allowing asset mixing in certain limited situations. The subgroup noted several areas where mixing of assets is felt not to be proper—such as mixing assets covering both flexible premium and single premium annuities.

Since consensus on this issue has not been reached among industry and regulators, the subgroup recommended that language further clarifying this issue not be included in A-791, which some feel will be interpreted to disallow any mixing of assets.

Modco with Funds Withheld

THIS ISSUE IS whether or not funds withheld by the reinsurer violate provisions in A-791 that require payments of amounts owed by the reinsurer to be made within 90 days of the settlement date. The industry position is that modco treaties with funds withheld are really identical to co/modco treaties, the only difference being the recording of the reinsurance credit as a receivable asset in the case of co/fw and as a reserve credit in the case of co/modco.

The reinsurance subgroup believes that the original intent of the drafters of the reinsurance model regulation was to disallow reinsurance accounting for modco/fw treaties, and has therefore taken the position that the proposed industry wording making exception of the 90-day requirement for modco/fw treaties not be accepted.

Richard H. Brown, FSA, is consulting actuary at KPMG LLP in Chicago.

Actuarial Guideline XXXIV

by Cherri R. Divin

Variable annuities generally provide a minimum guaranteed death benefit (MGDB) in the event of an untimely death that occurs when the fund values of the variable annuity have dropped. Examples of MGDB's are a return of premium at interest or the highest fund value on any previous anniversary. Actuarial Guideline XXXIV (AG 34) provides a clarification of the commissioners annuity reserve valuation method (CARVM) for variable annuities with MGDB's and specifically defines a reserve for the risk associated with any potential excess, if any, of the MGDB over the fund value of the annuity. AG 34 is effective as of December 31, 1998.

Although AG 34 addresses the additional risk related to a minimum guaranteed death benefit, it does not, however, specifically address the risk associated with a minimum guaranteed "living" benefit, such as a guaranteed minimum income benefit (GMIB) or a guaranteed minimum annuity benefit (GMAB). The GMIB can provide a guaranteed minimum income benefit that is derived from the guaranteed annuitization rate and the value of an accumulation of premiums at guaranteed interest rate. Alternatively, the GMAB might provide a guaranteed floor value (e.g., 90% of premiums) that is available upon surrender. Working in conjunction with the NAIC, a work group of the American Academy of Actuaries is looking at reserving methods for the types of risk exposure related to these benefits.

The AG 34 minimum reserve is the greatest present value in any one calculation period of the following three integrated benefit streams:

1. Unreduced benefit streams paid on

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From the Editor
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game. As this year rolls on, we will be watching the product trends to see if this atmosphere for the future can be predicted.

The Life Disclosure Working Group is evaluating the impact of the Illustration Actuary Model Regulation. As mentioned in the the article, they are seeking input on any perceived problems. So those of you who want to, can have an impact.

The Unified Valuation System (UVS), a sweeping proposed revision of the Standard Valuation Law, is discussed on page 10. This is making progress. I attend some meetings and keep up-to-date. Although not an immediate priority, it will produce significant change if and when it is passed.

Many small companies perceive the current AOMR as troublesome and expensive, but there are attempts being made to revise it some more. Norm Hill is keeping us abreast of that. Cherri Divin discusses Guideline 34, which affects annuity valuation.

In order for there to be a *small talk,* there must be small companies. Based on big moves in mergers and acquisitions during the past year, this sometimes appears in doubt. We have a condensation of an article by Jacqueline Bitowt on the darker side of these activities.

All in all, this issue covers many different subjects because there are lots out there. We are trying to emphasize the ways each affects the smaller companies.

James R. Thompson, FSA, is a consultant with Central Actuarial Associates in Crystal Lake, Illinois, Editor of small talk, and a member of the Smaller Insurance Company Section Council.

Headlines from NALC Group

by Scott Cipinko

Editor's Note: The following excerpts were taken from the newsletter of the National Alliance of Life Insurance Company (NALC) and are reprinted with permission.

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Regulation XXX Passes Unanimously

The NAIC Valuation of Life Insurance Policies (Regulation XXX) was passed unanimously by the Executive Committee and Plenary on Monday, March 8, 1999. This milestone passage is significant in a number of ways.

This regulation began with a meeting of six people in the NALC Boardroom in August 1997. At the time, the industry was strictly divided along company interests. The NALC was told by numerous parties, including regulators, that we could not amend the Regulation and have it passed prior to the implementation of the original Regulation XXX, which would have forced many insurers out of the term insurance market.

This regulation was drafted by a small group of people which eventually grew into well over 100 regular participants, including regulators. The regulation was also drafted through participation over the Internet by many of the parties. This method provided an opportunity for all of the participants to make comments and have them collected in a central location and circulated quickly for all parties to review.

Finally, this effort marks the cooperation of the industry, regulators, and consumer participants to change a regulation which everyone believed, at the time the effort began, would be impossible to change.

Special recognition should be given to Jim Van Elsen (Van Elsen Consulting), Steven Smith (GE), Armand dePalo (The Guardian) and Michael Palace (Transamerica). There are too many others to thank here in these pages, however, the work of numerous other actuaries, who spent countless hours must also be recognized. We wish to thank you on behalf of the Membership, as well as the consumers and the industry.

Life Disclosure Working Group

THE LIFE DISCLOSURE Working Group (LDWG) met on March 8, 1999. The discussion began with a review of the charges for this year. There was also discussion regarding the adoption of the Life Illustrations Model Regulation. Thus far, 30 states have either adopted or are in the process of adopting the Regulation. The Model is considered by most members of the Working Group and the industry to be "working very well" in the states where it has been adopted. However, Paul DeAngelo (NJ) strongly disagrees and believes that it is not working well. In fact, he was very vocal about his disagreement with that statement. He believes that the Model is too complex and the disclosures are too long.

Ironically, the NALC suggested, during the drafting of the Model, that the length of illustrations would be a problem. We predicted that the illustrations would be approximately 14 pages long. It was this number which Mr. DeAngelo used when criticizing the length of current disclosure.

It was pointed out by the industry and the regulators that in order to comply with the disclosure requirements contained within the Model, as well as the plain language requirements, it is nearly impossible to reduce the length of illustrations. It was also pointed out that the use of the summary pages, including the tabular detail, could suffice in order to explain how the policy would work to the consumer. Mr. DeAngelo believes strongly that the Model should be completely gutted and redrafted. However, millions of dollars have been expended by insurance companies and regulators to comply with the current Regulation.

The Chair, Tom Foley (ND), stated that he is still concerned regarding the use of illustrations by "aggressive companies." Tom Van Cooper (VT) is also concerned regarding the conflicts with other models, as this was a particular problem in Vermont.

A long list of problems or concerns with the Model was drafted. The Chair requested that any additional concerns be forwarded to Carolyn Johnson (NAIC) so that they may be discussed at the June meeting.

There was also a discussion concerning the use of reinsurance and cash flow testing. This issue will be discussed further by the Life & Health Actuarial (Technical) Task Force (LHATF). Additional discussions were held concerning the suggestion by the American Academy of Actuaries (Academy) to transfer practice notes to the Regulation. A proposal should be presented to the LHATF in the near future concerning this matter.

Once again, discussions centered around the use of laptop computers, without the ability to print out the proposal on the screen. The NALC pointed out that Section 9 was drafted by the NALC to take care of this problem. Mr. Foley agreed that it is not possible to require that all producers carry a laptop computer, nor that they be required to carry a printer. Further, he suggested that any changes to the Model in this or other areas may be optional for use by the insurance company.

Y2K: Are You Covered?

WE HAVE RECENTLY been advised that a number of business insurance coverages, are specifically excluding, retroactively, coverage for Y2K. Have you checked your policies yet? The position has been taken by a number of insurers that business insurance does not cover Y2K, because it was not an anticipated coverage at the time the policy was issued. As a

result, at least one lawsuit has been filed against an insurance company by a software maker, who is currently spending over $200,000 to repair its systems in order to make them Y2K compliant.

The NALC continues to get Y2K information from associate members on a monthly basis. Members interested in additional information should contact the NALC office.

Codification Called "Seamless Federalism"

DOUG BARNERT (BARNERT Associates, Inc.) was published in the March 8, 1999 edition of the *National Underwriter,* in a point-counterpoint interview with a representative of the American Institute of Certified Public Accountants (AICPA) concerning the implementation of the Codification of Statutory Accounting Principles.

Mr. Barnert points out that the NALC has frequently opposed any attempts by the NAIC to create a national regulation by usurping state powers. The NALC has been consistently critical of NAIC efforts to regulate by using the Annual Statement Instructions, the Annual Statement Blank and the Accounting Manual. Mr. Barnert stated that this is "a clear attempt by the NAIC to go around the decision to leave accounting to the state level and attempt to set itself up as a super-regulatory body over the insurance industry, even though no statute has been passed that gives a trade association of insurance commissioners, the power to nationally regulate the insurance industry."

The article discusses the NALC's positions on Codification and provides an interesting discussion on the issues.

Codification Resolution Adopted

THE NCOIL EXECUTIVE Committee has been considering the position that it would take in connection with the NAIC Codification of Statutory Accounting Principles. A Resolution was presented by Michigan last year. That resolution has been discussed, debated and the subject of at least one hearing. After a great deal of lobbying by supporters of Codification, the following resolution was adopted by the NCOIL Executive Committee.

WHEREAS, the National Conference of Insurance Legislators ("NCOIL") continues to be a strong supporter of insurance regulation at the state level, and

WHEREAS, since the insolvencies of the early 1990's NCOIL has supported the efforts of the National Association of Insurance Commissioners ("NAIC") to strengthen state insurance regulation through the adoption and maintenance of the Solvency Policing Agenda and subsequent Accreditation Program; and

WHEREAS, an important component of the NAIC's Solvency Policing Agenda was to strengthen and improve the state-based accounting system for insurance companies by creating codified statutory accounting principles; and

WHEREAS, NCOIL has actively monitored and provided testimony regarding the Codification project, resulting in significant improvements to codification, including:

1) removal of any references to the NAIC Investment of Insurers Model Act (Defined Limits Version) or its provisions;
2) removal of any references to other NAIC model acts; and
3) amendments to the Preamble of Codification that recognizes state authority over insurer accounting practices, such amendments specify state laws, regulations, and other regulatory guidance as the basis of accounting for insurers domiciled in their states, and

WHEREAS, the NAIC's Codification project, which was adopted in March 1998 after numerous open meetings and hearings in which NCOIL members were active participants, was the subject of an open hearing at the NCOIL's November 1998 Annual Meeting in San Diego; now therefore be it

RESOLVED, that NCOIL supports the NAIC's Codification project, recognizing that Codification allows states to maintain authority over their accounting rules by continuing to have the ability to prescribe or permit accounting practices that differ from Codification, just as states currently do with the NAIC's Accounting Practices and Procedures Manual; and be it further

RESOLVED, that NCOIL supports that disclosure requirements of the Codification project, acknowledging that without disclosure of accounting practices that differ materially from those that are commonly used in other states, neither regulators nor consumers are able to make informed comparisons among insurers domiciled in different states, further, that such disclosure or other requirements shall not be unduly burdensome to industry; and be it further

> ***"Mr. Barnert points out that the NALC has frequently opposed any attempts by the NAIC to create a national regulation by usurping state powers."***

RESOLVED, that NCOIL recognizes the need for a uniform effective date for Codification, acknowledging the problems that state insurance departments, companies, and auditors would likely encounter in attempting to comply with differing accounting requirements among states; and be it further

RESOLVED, that, consistent with NCOIL's position that the NAIC should impose a moratorium on the adoption of new model laws or other requirements with an effective date between July 1, 1999, and June 30, 2000, so that insurer's can focus on the significant systems changes being made to accommodate Year 2000 readiness, NCOIL supports a January 1, 2001, effective date for Codification, and be it further

RESOLVED, that, as the NAIC's Financial Regulations Standards and Accreditation Program currently requires that states adopt the NAIC's Accounting Practices and Procedures Manual, similarly,

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Experts Debate Minus-28 Fix For Y2K

by Ara C. Trembly

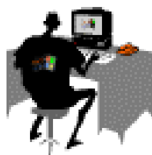
Editor's Note: This article is reprinted with permission by National Underwriter. It ran in the February 8, 1999 issue in the Technology Update Section.

Some Year 2000 Problem experts are asserting that neutralizing the Millennium Bug is as easy as "fooling" computer systems into thinking they are 28 years in the past, but others are questioning the advisability and efficiency of such a solution.

The "minus-28" solution "uses simple math and a calendar to 'trick' the computers into thinking it's really 28 years ago," according to John Jung, CEO of California Casualty Management Company based in San Mateo, Calif. The company says it has already successfully implemented this solution in its own systems.

"In all computer files that exist today, wherever there is a date—such as with policy effective and expiration dates—we took the system and moved it back 28 years," said Mr. Jung. "When a user types in '1998', for example, the computer thinks '1970'.

In California Casualty's systems, all files are modified by "black box" software that covers all date fields, Mr. Jung explained. When files enter the system, 28 is subtracted from the year. When the information leaves the systems, 28 is added. The black boxes were built by California Casualty to carry out these functions.



While the insurer could theoretically have subtracted any number to adjust the year it chose 28 because that would give an exact day/date match even in leap years.

"It was strictly a budgetary issue for us," said Mr. Jung of his company's decision to use the minus-28 solution. "It's the cheapest of the three most common Y2K solutions."

One of the other solutions is "windowing," which is based on the premise that a computer should insert "20" before any two-digit year field with numbers from "00" to "50." Conversely, "19" would be inserted before year fields "51" to "99."

Mr. Jung cautioned, however, that "while this method would work for 95 percent of banks and...property casualty insurance companies, windowing takes on another flavor for mortgages companies and life insurance companies," because they may deal with dates as far back as 1899.

The other and best solution according to Mr. Jung, is to expand all date fields in all database files and all programs. "Date field expansion is the safest but it's also the costliest and most time consuming solution to Y2K compliance," he said, adding that time is too short for anyone to implement this solution in early 1999, unless only one or two systems and less than a million lines of code are involved.

If a company hasn't substantially progressed in Y2K remediation by now, "you don't have any options" beyond minus-28, he said. "Find a new job. Update your resume."

California Casualty said it has saved as much as $7.5 million in Y2K consulting fees by using minus-28.

Not everyone is so enthusiastic about minus-28, however. "We've known about [minus-28] for a long time, but we haven't used it," said Eli Dabich, president of Synergy 2000, a Y2K remediation company based in Pasadena, Calif. "If it were that good a solution, why isn't anybody using it?"

Mr. Dabich said his firm uses the other two methods for its clients.

Commenting on the minus-28 solution, Mr. Dabich stated: "When a solution requires a unique methodology), something will go awry. You're going to miss something."

Mr. Jung conceded that a glitch in the software could cause problems for a user of the minus-28 solution, but he added that "there's no more risk than

with any other kinds of software."

"It's an interesting concept," said Mark Trencher, assistant vice president of insurance research at Conning & Company, Hartford. "It's much easier to identify every date field in your files than to correct all sections of code that involve dates. With this method [minus-28], you don't have to do anything to the program itself."

One issue he thought might be troublesome is that while minus-28 may work well for in-house systems, "what about those you do business with?" Mr. Jung maintained, however, that data exported from minus-28 systems is reconverted before it reaches outside systems.

Perhaps, the biggest challenge for internal users of minus-28 systems is the human factor. Mr. Jung said, "Users have to be aware that when they see data on a 1970 Toyota, it may actually refer to a 1998 Toyota."

All the experts agreed that minus-28 is best used by those who don't have time enough for other solutions.

"Minus-28 is a band-aid, not a solution," said Mr. Jung. "We recognize this and will be replacing our minus-28 treated legacy systems with Y2K compliant systems in the near future."

Ara C. Trembly is associate editor at National Underwriter magazine in Cincinnati, Ohio.

Budget Proposals Bode Well for Annuities

by Thomas Streiff

Editor's Note: This article is reprinted with permission by National Underwriter. It ran in the March 1 1999, issue in the Life & Health/Financial Services Section.

Each year I dedicate at least one of my annuity columns to an explanation of the legislative landscape.

Now that the impeachment trial is over, Washington will turn its attention to budget matters. Therefore, it is now time to turn our attention to what our friends in Washington will be doing for us this year.

The White House has sent forth its budget, and the Republicans of Congress have sent forth their proposals.

Good news. No direct attacks on people who are saving for retirement. It had been rumored from very reliable sources that the White House budget would, in fact, contain a provision that would tax annuity transfers (variable annuity to variable annuity, fixed to variable annuity, and sub-account to sub-account within a variable annuity). This provision would have been similar, if not identical to the proposal in last year's White House budget. Apparently it was dropped at the 11th hour, as the White House chose not to fight against last year's losing battle.

As a practical matter, what's happening is that the Clinton agenda calls for increased spending in various areas. In order to stay within mutually agreed upon increases in the net budget outlay, some tax increases are required to offset the spending increases. Since it is unpopular to talk about tax increases especially with budget surpluses, the White House has chosen to call these items "loophole closing."

The annuity tax provision that would have taxed any unrecognized gain at the time of aforementioned transfers was to have been one of these loophole closings.

To be sure, this provision would have been a serious setback for the insurance industry, but not nearly the setback it would have been for retirement savers who put $126 billion into annuities last year. In any event, that provision is not in anyone's proposal so we don't have to deal with it this year.

"As a practiced matter, what's happening is that the Clinton agenda calls for increased spending in various areas. In order to stay within mutually agreed upon increases in the net budget outlay, some tax increases are required to offset the spending increases."

There is, however, one indirect attack on annuities. The White House proposal contains a provision to modify rules for capitalizing policy acquisition costs of life insurance companies. Its meaning is to lengthen the write-off time of policy acquisition costs. This would mean that annuities (and numerous other types of policies) would become more expensive for a carrier to write. This will result in less competitive products to the public, or lower profits to insurers, or some combination. It is unclear at this time, what the prospects are for this provision.

Now for the good news. Numerous provisions in both the White House budget and Republican proposals would be great for retirement savers, and generally good for the annuity industry. The proposals would:

- Create a new simplified pension plan for small businesses called the Secure Money Annuity or Retirement Trust, or SMART-plan.
- Allow rollovers between employer qualified plans and tax sheltered annuities.
- Allow rollovers from IRA to employer qualified plans and TSAs.
- Allow rollovers from employer-qualified plans to IRAs after-tax contributions.
- Increase the annual contribution limit on IRAs to $5,000.
- Establish both 401(k) and 403(b) plans.
- Raise contribution limits for 401(k) and 403(b)s to $15,000.

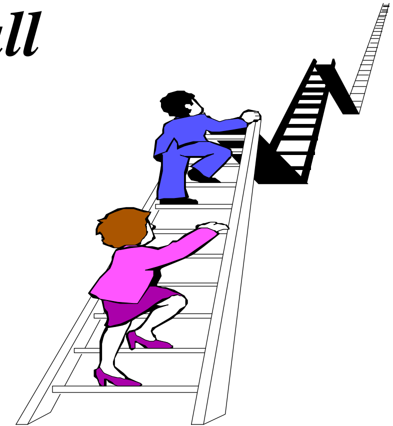
Remember, these are only rough proposals for now. We don't know which, if any, will pass.

It is a good time to do two things. First, make your views on these issues know to your elected officials. And second, look forward to your annuity business getting better and better.

Thomas Streiff is President and CEO of Talbot Financial Services and Chairman of NFC Consulting Group, Chicago.

The Unified Valuation System: A Small Company Perspective

by James R. Thompson



The Unified Valuation System (UVS) is the name for a proposed revision of the Standard Valuation Law (SVL). This is being developed by an Academy committee (dubbed the Wilcox Committee after the chairman). The Academy was asked by the Life and Health Actuarial Task Force of the NAIC to come up with a revision of the SVL.

The committee was supposed to take a fresh look at valuation in general and not just tweak the current SVL. It began holding monthly meetings in 1997 and by year end had produced a written progress report. Last year they held more monthly meetings and produced another report, which was presented to the NAIC in December.

There are some new and different ideas in it. It is the purpose of this article to discuss some of these, especially as they relate to smaller companies.

Scope and the S Curve

EACH YEAR THE valuation actuary is supposed to submit a balance sheet and income statement, various certifications and a list of certain assets. Now the actuary certifies only the reserves, an item in the balance sheet. He does not deal with surplus. The Risk Based Capital calculation is often handled by the accountants.

A key feature of the new law is the use of the S curve approach and various action levels. The actuary must certify that the reserves, in light of the underlying assets, are adequate at least Xn% of the time. There are different percents. If the actuary cannot certify to the highest level, there are certain action levels, called the Company Action, Regulatory Action, Authorized Control and Mandatory Control Events. Essentially, as the percent certified becomes lower and lower, the company goes from submitting a corrective action proposal to coming under regulatory control.

We have various levels of action under current procedures. In the UVS, the key is that the reserves are determined not by a set formula, but by the judgment of the actuary based on stochastic results. At the most recent (March) meeting of the Committee, I asked about the S curve upon which the reserves are based and learned that the theory behind this has not yet been developed. It will be based on multiple scenarios and the company must be able to survive some percent of the time. The model regulation contains an example for term insurance worked out by Tom Herget of PolySystems. Examples for other lines are expected by December.

Implicit in the level of reserves is not just the current statutory reserves as we know them, but also the concept of Risk Based Capital. Riskier lines of business (and underlying assets) will require higher RBC and hence higher reserves.

At the March meeting, there was some discussion of how to phase this in.

Two proposals were made: determine the reserves by the S curve and keep an RBC formula, or the opposite, determine the reserves by formula (as at present) and set the RBC by the S curve.

The meeting emphasized that this committee was using this as an opportunity to go from a formula base to a stochastic base. This is theoretically correct since reserves should be adequate most of the time (with the X% defining most). We only use formulas and established mortality tables and interest rates to make things easier. The Committee is aware that significant research must be done to develop procedures. At the March NAIC meeting, the Society of Actuaries mentioned a research role it could play. I cannot foresee this law passing without some established procedures.

Tax

A SIGNIFICANT IMPEDIMENT is how the IRS might view a stochastic definition of reserves. The IRS has previously been accustomed to a formula approach. The key is that the IRS has stated that the method of computing reserves is whatever the NAIC says it is (without state approval). Only the mortality table and interest require 26 state approval.

If confronted with a stochastic method by the NAIC, what is the IRS likely to do? One possibility is to bring the matter before the Secretary of the Treasury for a ruling.

Reviewing Actuary

AFTER THE VALUATION actuary submits his or her opinion, a reviewing actuary must review the work and submit an opinion accepting it. The fees of this reviewing actuary are to be paid by the company. This may sound redundant, but we must remember that under the UVS the reserves are determined with more actuarial judgment. They are not formula-driven.

One state, New Hampshire, already has a reviewing actuary in force. Why this is done under the current regulatory environment is not known. All nonfraternal domestic companies must submit this additional opinion by March 1, the same day as the valuation actuary must submit his.

The reviewing actuary is definitely a cost issue for smaller companies. What if they have a very traditional and uneventful block of business and assets. Why bother with this? When we get to the stage where we want to include some small company exemptions, we should keep this in mind.

Viability

ANOTHER REQUIREMENT IS the viability report. Annually the company must submit a five-year plan including a new

business projection. Many companies make such plans now. Sometimes a department can require one, but the actuary is usually left out of it. Many is the actuary who does not even know his management has one.

One would think a logical place to begin is the cash flow testing memorandum. Then add the new business. Today managements may include or exclude the valuation actuary's work. Under the proposed UVS, the valuation actuary must opine on the viability report. This is a significant more to involve the actuary, who is guided by professional standards, in the process.

This also will be an expensive process, although not as expensive if an asset adequacy analysis has already been done, since the expense is then only the extra expense. Currently, many small companies may not do an annual memorandum; so this is more likely to be a big increase in expense.

Also, what if a company's situation does not change much from year to year? Can the previous year's plan be used with slight updates? Perhaps when we get to the point where the UVS is close to being finalized, we can lobby for some exemptions. Perhaps doing a five year plan every 3-5 years unless there has been a significant change in operations could be considered.

Conference Call

IN APRIL THERE will be a conference call on the UVS. I will be following this. It would be a good idea for some other small company actuaries to begin following this also. But in light of the need to develop a body of knowledge to be used in calculating the S curve probabilities for various lines of business, the introduction of the UVS is still years away.

James R. Thompson, FSA, is a consultant with Central Actuarial Associates in Crystal Lake, Illinois, Editor of small talk, and a member of the Smaller Insurance Company Section Council.

Reflections on the Supermergers of 1998

by Jacqueline Bitowt
SOA Public Relations Manager

The following is an excerpt from the February article in The Actuary.

Among the thousands of words written about 1998's supermergers, perhaps this phrase from *Fortune's* Jan. 11 issue describes the year best: "biggest by a mile, according to any dollar-volume measure, against any other year, adjusted for anything, as a percentage of whatever you want."

What has pushed the merger machine into high gear? And why this point in time? "A number of factors have fueled the acceleration of M&A activity," noted Terry Lennon, executive vice president, Metropolitan Life Insurance Company, who launched MetLife's mergers and acquisitions (M&A) department. "One is the need to drive down per-policy expense rates by increasing critical mass and eliminating redundant operations. A second is to add competencies or products to one's business portfolio. Another is the desire to find companies with complementary products and services so that you can cross-sell to each other's customers."

Fortune summed it up neatly: "Dozens of industries still carry heavy overcapacity; stocks are still strong; capital is still abundant and cheap," said the Jan. 11 article in predicting another gigantic wave of mergers this year.

Ego: The Dark Motivator

A number of observers see a less rational driver: the minds of executives

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Headlines from NALC Group

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NCOIL believes that states should determine whether or not Codification should become an accreditation standards by utilizing the four-year seasoning process reserved for the consideration of new model laws or regulations, and be it further

RESOLVED, that if the NAIC adds Codification to the Accreditation Program, the accreditation standards should affirm that:

* Codification does not preempt state legislative and regulatory authority, and may be subject to modification by practices prescribed or permitted by a state's insurance commissioner or legislature; and
* any new standards shall not apply to the regulation of companies licensed and writing business only in their state of domicile; and be it further

RESOLVED, that NCOIL encourage all states to review Codification and compare it with their current statutory accounting requirements to decide what, if any, changes should be made to existing states laws, regulations, and bulletins to determine how Codification is best applied within each respective state.

As a result of the work of the NALC, the final resolution includes language that states that Codification would not preempt state legislative and regulatory authority and may be modified by practices prescribed or permitted by a state's insurance commissioner or legislature. The NALC originally brought the issue of Codification to NCOIL and has been working on compromise language since that time.

Scott Cipinko is Executive Director of National Alliance of Life Companies, located in Rosemont, Illinois. He is also editor of their monthly newsletter.

News Flash! Keynote Speakers/Entertainment

Announced for SOA 50th Meeting

by Cecilia Green
SOA Director of Integrated Communications

Plan now to attend this special meeting, October 17-20, 1999, at the San Francisco Marriott, downtown at 55 Fourth Street. Call now to reserve your room for what is sure to be a sell out: 415/896-1600.

The outstanding program includes:

- Keynote speakers William J. Bennett, Ph.D. and Gov. Mario Cuomo, UNICEF Deputy Executive Director Stephen Lewis, and Gen. H. Norman Schwarzkopf
- Outstanding speakers in a full range of continuing education sessions
- 50th Anniversary Gala Dinner (black tie optional) with legendary entertainer Tony Bennett

Registration fees are:

- Members of actuarial organizations worldwide:
  $800 for early bird registration (before 9/17/99)
  $850 for late registration
- Nonmembers:
  $950 for early bird registration
  $1,000 for late registration
- Retired members of actuarial organizations worldwide:
  $250 for early bird or late registration
- Guests/spouses:
  $150 for early bird or late registration
  Includes 3 continental breakfasts, opening and closing general sessions, Exhibit Hall, Monday evening reception, Gala dinner

These events are being supported by 50th Anniversary Sponsors at levels ranging from $50,000 to $5,000. Visit www.soa.org for details on becoming a sponsor.

Here is the current list as of 4/12/99:

Platinum: $50,000
The Equitable
LAI Worldwide
Milliman & Robertson, Inc.
William M. Mercer, Incorporated
Swiss Re Life & Health
Towers Perrin

Gold: $25,000
Aid Association for Lutherans
Lutheran Brotherhood

Silver: $10,000
Actuarial Careers, Inc.
AFLAC
Gerling Global Life Reinsurance Co.
Hewitt Associates LLC
Munich American Reassurance Co.
PolySystems, Inc.
Security Life Reinsurance
State Farm Life Insurance Co.
Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA- CREF)

Bronze: $5,000
American United Life Insurance Co.
Canada Life Assurance Company
Erie Family Life Insurance Company
Federal Life Insurance Co. (Mutual)
Gabriel, Roeder, Smith & Company
Guardian Life Insurance Co.
McGinn Actuaries, Ltd.
Nationwide Financial Services
Paradigm Partners International, LLC
The Penn Mutual Life Insurance Co.
Principal Financial Group
Robert J. Myers, FSA
SunAmerica Inc.

Reflections on the Supermergers of 1998
continued from page 11

overly focused on the power and glory of deal-making.

"We believe a number of insurance company deals resulted from the principals being caught up in the merger frenzy doing a deal just to do a deal," said Larry Mayewski, senior vice president, A.M. Best's. "This doesn't mean some of those mergers won't lead to economic success or that some companies involved aren't better off. It just leads the rating agencies to take a 'wait-and-see' attitude with some of these deals rather than jumping on the bandwagon."

Another Jan. 9 story in *The Economist,* "How to Make Mergers Work," shined a more detailed light on the topic. "However wrapped up in sonorous stuff about synergy, plenty of mergers begin with sheer executive boredom," the editors said. They added that many executives were overly influenced by "the fear of looking foolish or being left behind. All too many boards are carried away by a terror that they will be bought before they can buy."

Update on Selected NAIC Matters

by Norman E. Hill

Two controversial topics involving actuarial reserves have been pending for several years. One involves the type of actuarial opinion and attestation regarding reserves, often described as the "Section 7 versus Section 8" issue. The second involves the question of whether the entire standard valuation law needs a complete revamping. Various industry committees and task forces from the ACLI and American Academy of Actuaries have been involved in studying these matters. The primary regulatory group has been the Life and Health Actuarial Task Force, but the NAIC's A Committee has also participated to some extent.

Actuarial Opinion

THE ORIGINAL ISSUE was whether the actuarial opinion should specify compliance with only the domestic state or all states in which the opinion is filed. Obviously, the latter opinion is more demanding, since the actuary is supposed to be familiar with reserve requirements and regulations of every one of his company's states. Examples of state reserving differences include adoption of Regulation XXX for one-year term plans with level guarantees (such as by New York and several other states), Universal Life reserve requirements (considered more stringent in California than other states), and different effective dates of regulations, new valuation tables, etc.

A separate but related issue is the exemption for smaller companies from reserve opinions that include asset adequacy analysis. Larger companies provide the latter type of opinion every year (Section 8 opinion) while actuaries for smaller companies opine only on reserves independent of assets (Section 7 opinion). Prevailing practice has generally been to equate asset adequacy opinions with very detailed cash flow testing of invested assets versus liability flows. Many regulators and industry representatives believe that the standards for such asset adequacy exemption (however such adequacy is defined) should be tightened.

One argument which has gradually won significant support is that the type of actuarial opinion, i.e., the extent of reserve testing required, should fit each company's risk profile. In other words, the greater the volume of interest-sensitive products, the greater the extent of analysis such as cash flow testing.

This requirement should be imposed regardless of company size. A similar argument has been extended to cover the makeup of invested assets backing reserves. In other words, the more volatile the asset portfolio in terms of credit risk and prepayment risk, the more detailed the required analysis. Some regulators have also called for additional reserve testing for product lines currently without required reserve standards, such as non-cancelable disability income and long term care.

One proposal was to allow a reserve opinion based on domestic state requirements, provided that some disclosure of reserve differences with NAIC-codified standards and models was made. Alternatively, the current state of filing would continue to be required. This proposal became bogged down in controversy such as:

1. Would a separate valuation be required based on NAIC models, regardless of whether they have all been adopted in the domestic state?
2. Would the actuarial attestation cover these codification reserves?
3. What about business issued before these models were adopted by either the NAIC or the domestic state?

The latest proposal provides the option of state of filing or a combination of domestic state together with an asset adequacy opinion. One new, very significant development is that regulators have stated explicitly on several occasions that asset adequacy testing is not synonymous with cash flow testing. Possibly, a revised regulation on the actuarial opinion could make this point clear.

At the same time, a subgroup of the ASB is working on specific standards for when cash flow testing is required. Many believe that current actuarial standards are not sufficiently specific on this point. Alternatives to cash flow testing include gross premium reserves, asset shares, updated profit tests, analysis of average asset and liability durations. Such tests would still require additional work than the current plain Section 7 opinion

This approach shows some promise of receiving wide support.

Valuation Task Force

THIS TASK FORCE of the American Academy of Actuaries has met for several years. At its last meeting, actuarial regulators stressed their desire for this group to continue. Several have stated that the current standard valuation law is completely inadequate and must be scrapped.

There have been problems and delays in fitting new products to the law, such as equity-linked annuities. However, regulators have an Innovative Products Working Group of the Life and Health Actuarial Task Force. This subgroup is supposed to identify new products on a timely basis.

Proposals for reserve requirements on one-year term products started seven or more years ago. It is true that the resulting NAIC model regulation XXX has not been widely adopted. However, an updated version of this regulation was recently adopted, and seems to enjoy broad industry and regulatory support.

Regulators have also complained

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Update on Selected NAIC Matters

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about the lack of reserve standards for products such as long term care. However, the Society of Actuaries has published recent claim cost data, which could serve as the basis for reserve, even on an interim basis.

In short, alleged weaknesses in the current Standard Valuation Law are subject to question. The main problem with current reserve requirements is treatment of products with varying premiums and benefits. The law is not being literally interpreted as to minimum reserves (one-half cost of insurance), CRVM expense allowance in the first duration, and definitive requirements for when coverage effectively terminates (the segment question).

The Academy's Valuation Task Force has submitted an initial proposal to regulators, with the following key elements for change:

1. No formula or prescribed reserves, but actuarial judgment instead. Reserves would include all future liabilities, both guaranteed and non-guaranteed, and future commissions and expenses. Assumptions would be less conservative than under statutory, that is, closer to GAAP. Note that such a drastic change raises the critical question of consistency with tax basis reserves.
2. Use of a reviewing actuary to sign off on all such actuarial opinions. Basically, this reviewer would constantly "camp on management's door," similar to bank examiners. He would probably be appointed by management, but from a list of actuaries acceptable to insurance departments. In one sense, he would be a member of management, without being accountable to management.
3. Use of an "S-curve" confidence level in determining reserves. This approach implies some type of stochastic processing, that is, hundreds or thousands of repeat trials to determine reserves. However, it should be noted that the entire concepts of S-curve, and even confidence levels themselves, have not been defined and incorporated in actuarial standards.

In a recent article, when trying to build a case for stochastic processing, a professor made a point about reserve adequacy. He stated that, over the lifetime of a closed block of life insurance policies, at some point, reserves held (presumably, traditional statutory formula reserves) must be inadequate because of a large claim incurred at that point. He didn't make it clear whether he was referring to reserves held one second before or after the large claim, but this is not the main point.

The main problem is that he overlooked how life reserves are calculated, namely, by an inventory process. Because of this approach, reserves automatically reflect cumulative variations between actual and expected experience (mortality plus lapse) up to the point in time of this large claim. Depending on this relationship, reserves at this time may be redundant as well as inadequate. This characteristic is true for both reserves on a factor per thousand basis or interest-sensitive account values generated from actual cash flows.

> ***"Therefore, a strong argument can be made that a professional actuary can be satisfied with one set of assumptions and the reasonableness of a single reserve calculation."***

When computing gross premium reserves or similar reserves, presumably, an actuary employs his "most likely" assumptions. In this context, I am equating "most likely" with "reasonably conservative, considering the long term nature of the liabilities." In some cases, depending on the volatility of the liabilities and the underlying assumptions, sensitivity tests may be appropriate. Duplicate valuations can provide a range of results.

The need for sensitivity tests depend on:

(a) The margin between the above gross premium reserves and statutory formula reserves computed at the same time for the same block.

(b) If gross premium reserves are calculated to stand on their own, the volatility and range of observed statistical data serving as the base of underlying assumptions.

My understanding of stochastic processing is that it involves hundreds or thousands of repeat tests, that is, duplicate valuations with minute differences throughout a preset range of assumptions. This is not the same as a delimited number of sensitivity tests that are derived from either of the above criteria.

For example, the conceivable range of mortality rates is from zero percent to 100%. However, repeating endless reserve calculations with mortality variations throughout the gamut of this range is useless. Similarly, if the range chosen is from .0000211 to .0000212, hundreds of repeat reserve calculations with mortality variations throughout the gamut of this narrow range are equally useless. Possible interest experience from zero percent to an infinite percentage return can lead to an endless number of interest assumption variations for reserves, but no meaningful results (or exercise of time and expense).

Therefore, a strong argument can be made that a professional actuary can be satisfied with one set of assumptions and the reasonableness of a single reserve calculation. He may run sensitivity tests with two, three, or some number of assumption variations and repeat valuations. However, there is no automatic need or automatic, self evident justification for the hundreds or thousands of repeat valuations that appear to be

inherent in stochastic processing.

Originally, the requirement for sensitivity testing and confidence levels from such testing was based on the volatility of underlying experience data. Lately however, there may be a tendency to rely on elaborate statistical mainframe programs involving some type of modeling. Input data, instead of being based on experience, is based on arbitrary assumptions that may have no tie to reality, but correspond to some type of curve known and desired in advance.

Therefore, the basic questions stemming from work of the Valuation Task Force are:

1. Are formula-prescribed actuarial reserves hopelessly out-dated, or still appropriate for many types of business? In this context, "formula prescribed" extends to fund accumulation reserves.
2. Is some type of stochastic processing the wave of the future in computing actuarial reserves? Is its only limitation to be available computer power and speed? Alternatively, is stochastic processing a flawed theory whose time should never come?
3. Is the insurance regulatory process willing to accept reserves based on actuarial judgment, with assumptions that vary each year?
4. So far, the official ACLI position has been support of statutory accounting, including its framework of prescribed formula reserves. Can this position be changed to support radically new reserve approaches?

Conclusion

CONTROVERSY OVER THE actuarial reserve opinion and the Standard Valuation Law itself will undoubtedly continue for some time. The critical importance of these issues for small companies and the entire actuarial profession cannot be overstated.

Norman E. Hill, FSA, is Senior Vice President and Chief Actuary of Kanawha Insurance Company in Lancaster, SC. and a member of the Smaller Insurance Company Section Council.

Actuarial Guideline XXXIV

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death; e.g., expected death benefits
2. Base benefit streams paid to survivors, e.g., expected surrender values paid to survivors
3. Projected net amounts at risk paid on death; e.g., MGDB's

The first two benefit streams include the elective and non-elective benefit streams described by Actuarial Guideline XXXIII, "Determining CARVM Reserves for Annuity Contracts with Elective Benefits." The third benefit stream covers the projected net amounts at risk for the MGDB upon death. The first two benefit streams are based on projections using a return equal to the valuation rate less appropriate asset based charges.

The projected net amounts at risk for the third benefit stream are based on a projection using an immediate drop followed by an accumulation at the net assumed returns for each asset class, as follows below:

Asset Class	*Immediate Drop*	*Gross Assumed Return*
Equity	14.0%	14.0%
Bond	6.5%	9.5%
Balanced	9.0%	11.5%
Money Market	2.5%	6.5%
Specialty	9.0%	9.5%
Fixed Account	0.0%	***Guaranteed Rate (Net Rate)***

Prior to AG 34, one method of determining the net amounts at risk was to assume a one-third drop followed by an accumulation at the valuation rate. This method is similar to the existing method used in New York. As you can see, a projection based on the above AG 34 rates would generally produce a smaller net amount at risk than the one-third drop method. Thus, the AG 34 minimum reserve would be expected to be less that the minimum reserve produced by this alternative one-third drop method that is used by some states.

The reinsurance reserve credit is defined as the excess of the CARVM reserve using the integrated benefit streams without reinsurance over the CARVM reserve using the same streams but adjusted for reinsurance ceded. This method can lead to an unexpected result. For example, the projection of reinsurance cash flows for some variable annuities can cause the reserve net of reinsurance to exceed the reserve before consideration of reinsurance ceded. In such case, the reinsurance reserve credit would be negative.

The 1994 Variable Annuity MGDB Mortality Table is to be used in the reserve projections. This table is equal to the 1994 Group Annuity Mortality Basic Table, increased by 10% for margins and contingencies, without projection.

It would not be uncommon for a company to hold a reserve equal to the account value in the separate account and not apply CARVM calculations. In the event the company can demonstrate that their total reserve meets or exceeds the total reserve specified by AG 34, no additional MGDB reserve would be required. On the other hand, a company that holds the surrender value in the separate account might need to hold an additional MGDB reserve in the general account. As you can see, AG 34 sets forth a minimum reserve standard in total, but the company may determine the appropriate allocation between the general and separate accounts.

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