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6500 River Place Blvd.
Building 2, Suite 204
Austin, TX 78730

(512) 345-5200
1-866-480-RISK (7475)
newsletter@actrisk.com



Welcome to Risk Review

By Corwin Zass

Welcome to the first edition of Risk Review! You are receiving this introductory newsletter because we consider you a valuable member of our network and because we want to provide you with the latest news on actuarial issues, which affect you in your daily work. Through our newsletter, we hope to keep you updated on the ever changing risk environment and the associated actuarial processes to minimize those risks.

Our newsletter will cover all actuarial disciplines: Employee Benefits, Property & Casualty, Retirement, Managed Care, Life & Annuity, and Individual Health. The newsletter will consist of articles on the key issues occurring across industries but synergistically tied to both actuarial and accounting professions.

An Introduction to Actuarial Risk Management

Over the years we have received many inquiries such as, "how can you help me?" and "what do you actually do?" It's impossible to answer those questions in one sentence, but I'll try since I only have a few lines here.

Actuarial Risk Management (ARM), an Austin based actuarial firm, is a privately held consulting firm that has been an Independent Member of the BDO Seidman Alliance since November 2006. ARM has actuarial experts spread across the U.S. to support our diverse client base by providing analytical business skills to help manage risk. One of the benefits of using ARM is that it serves as the single entry point for all actuarial services. One phone number gives you a universe of actuarial experts.

Actuarial Risk Management competes with national actuarial consulting firms through ARM's dedicated network of independent actuarial professionals covering all facets of the industry. Our experts design creative solutions to reduce the likelihood and decrease the impact of adverse events that actually do occur.

Our practice covers the following areas:

- Employee Benefits
- Property & Casualty
- Retirement
- Managed Care
- Life & Annuity
- Individual and Group Health

Events

February 19-22

Reinsurance Association
of America:
Cat Modeling 2008
(Tampa, FL)

February 28-March 2

National Conference of
Insurance Legislators:
2008 Spring Meeting
(Washington, DC)

March 5-7

22nd Annual
Legislative/Regulatory
Conference
(Washington, DC)

March 9-11

Corporate Benefits
(Phoenix, AZ)

March 11-12

Medical Professional
Liability Symposium
(Chicago, IL)

March 18-19

Insurance and Risk
Linked Securities
Conference
(New York, NY)

March 29 – 31

NAIC Spring 2008
National Meeting
(Orlando, FL)



ARM: Who We Are

Actuarial Risk Management (ARM) is an independent member of the BDO Seidman Alliance. ARM's staff, along with the expert actuaries from ARM's Actuarial Consulting Network, provides all necessary actuarial expertise and tools to ensure we can cover all actuarial disciplines.

All ARM representatives must comply with strict ethics and standards. We have access to the latest technological tools, ranging from modeling software of TAS and AXIS for our life clients to proprietary claims analysis tools for our health clients.

Our fees are aggressively competitive and our experienced actuaries provide you with objective, independent, and responsive actuarial consulting services.

Actuarial services include:

- Valuation and Financial Reporting
- Predictive Modeling & Loss Forecasting
- Corporate Modeling
- Reinsurance Expertise
- Expense Allocations and Analysis
- Capital Management
- Mergers and Acquisitions, Due Diligence
- Statutory, Tax and GAAP Audits of Actuarial Assets & Liabilities
- Data Management
- Product Development and Competitor Analysis
- Sarbanes-Oxley Assistance
- Retirement and Pension design and valuations
- Alternative risk management solutions, including captive and self-insurance



**Discover what BDO Seidman knows,
the next generation in actuarial delivery...**

Around the Actuarial World in 2 Minutes...

This month's highlights

By Corwin Zass



1. Living to 100

The Society of Actuaries recently sponsored a "Living to 100" Symposium, which is an international triennial symposium on high-age mortality and related issues. The almost 200 attendees, ranging from actuaries to biologists from across the globe, gathered in early January 2008 in Orlando. The conclusions from the meeting were that with increased life expectancy and rising healthcare costs, individuals will face many growing challenges to maintain their quality of health and lifestyle as they live to older ages. This extension in life expectancy will place new challenges on employers and governments as they respond to an aging population. On the other side of the coin, the new challenges create opportunities for those in the life and health insurance market to create innovative products. Those companies with a strong foundation in the senior market will have an easier time but complacency will not bode well for those who do not recognize that seniors will follow different lifestyles than previous generations.

2. Sarbanes-Oxley

In this Sarbanes-Oxley era, many regulatory agencies express an increasing interest in the disclosure of the estimated loss liability computation. The Securities and Exchange Commission (SEC) has always focused on accuracy, thoroughness and comparability of information in company disclosures. A recent industry survey of 10-K statements from P&C companies showed that most companies could benefit from extra disclosures with respect to the IBNR liability. Some highlights are:

- Nearly all companies describe at a high level the process by which they derive an actuarial point estimate, including discussion of differences by line of business. However, the amount of detail offered varies widely and is inconsistent between the companies.
- Some companies explicitly discuss differences between the actuarial estimate and the recorded "management's best estimate," including factors driving the difference. Unfortunately, there are many companies that do not offer details in this area, and there are some that state that there is no difference.
- Some companies calculate and disclose ranges of estimates, including discussion of the process for deriving ranges. Others explicitly state that ranges are not reliable or are not calculated at all.
- Some companies make explicit reference to statistical levels of confidence associated with recorded reserves, while many companies do not.
- Several companies directly address the process of testing prior estimates against developed results.

3. CFO Survey

One of the larger insurance consulting practices just concluded their annual survey of North American Life Insurance Chief Financial Officers. The highlights of the survey include:

- Principles-based Reserve and Capital Requirements: Respondents report a new level of familiarity with principles-based regulation of reserves and capital. In 2007, 92% of respondents indicate that they "understand the basics of new principles-based regulation", up dramatically from only 40% a year earlier. While most CFOs do not expect full implementation of the new regulatory framework until 2010 or later, more than half report that they are actively preparing for it. This, too, is a marked change from a year earlier, when most companies were in a wait-and-see mode. Cost is one major theme from the CFOs.
- Fair Value Accounting: Market-consistent financial reporting is gaining ground, spreading beyond the subsidiaries of multinationals. The most popular methodologies are embedded value (EV), value of new business (VNB) and economic capital (EC). Few CFOs (8%) are very knowledgeable about the IASB discussion paper, issued last May, giving the organization's preliminary views on accounting for insurance contracts. This statistic is of a great concern, in recognition of the ongoing drive for convergence in global accounting standards.

Actuarial Data Integrity – Claim Reserves

By Lawrence Scott

In the course of auditing an insurance company's claim reserves, the auditor will need to collect information from both the valuation actuary and management. The information obtained and the steps involved in the audit will be similar for Life, Property & Casualty, and Health organizations.



A review of historical methodology should be made, including whether current estimates are based on historical methods, or the reasons for changes from historical methods.

Controls must be in place to ensure that the data used in the claim reserve liability is both complete and appropriately classified. Tests must be put in place to ensure that the controls are functioning as intended. If the insurance company is subject to Sarbanes-Oxley (SOX) or the upcoming NAIC Model Audit Regulation (MAR), the controls and tests should be documented in the company's SOX/MAR processes, narratives, flow charts, and risk control matrix. These controls and documentation need to be in place regardless whether the liabilities were prepared by an internal or external actuary.

The auditor needs to understand what data the valuation actuary deems significant, and whether additional testing needs to be performed on data that may not have been classified as significant. This could be the case with a small block of business that has grown steadily over time and has passed the materiality threshold.

Data testing should be performed to ensure that the data the actuary has relied upon is materially correct. Data should be consistent, complete, and accurate. Actuarial Standard of Practice (ASOP) #23, Data Quality, provides guidance to the valuation actuary in the selection, reviewing and disclosing the quality of the data.

Calculations and spreadsheets need to be reviewed to ensure that the methodology is actuarially sound and working as intended. The runoff of prior period claim reserves should be examined to ensure that the methodology produces a reasonable liability. For products with long-tailed claims, the liabilities should be tested regularly for adequacy. A roll-forward reserve should be compared to the actual reserve for continuing claims. The Western Electric Rules may indicate whether the method is appropriate and does not produce random results.

For additional information and assistance, please contact us.

A helpful resource for the auditor of insurance companies is the annual series from the AICPA, specifically Audit Risk Alert: [Insurance Industry Developments – 2007/08](#).

Looking forward to hearing from You – How and where can we work together?



If you have comments or suggestions for this newsletter, or if you have questions about our business, do not hesitate to e-mail us at newsletter@actrisk.com

Modeling Healthcare Costs

By Corwin Zass



Defining and executing an effective strategy is an enormous challenge. Health care costs have increased dramatically over the last few decades and are now perceived as excessively high. With group health costs climbing annually, new plan designs, contribution strategies, and proactive cost-containment measures are being analyzed and implemented.

One of the examples of industry trying to determine solutions for this crisis is The Corporate Benefits Summit, an event organized by Marcus Evans, which aims at Senior Benefit Executives of Fortune 500 companies by matching them up with Industry Solution Providers. This Summit allows both sides to discuss the concerns and provide solutions to issues such as executive benefits, transitioning to deferred contribution plans, drug costs, retirement benefits, and legislative issues. The Spring 2008 Summit will be held in Phoenix, AZ and Actuarial Risk Management is the only actuarial service provider invited to assist industry with managing these challenges in the employee benefit arena.

In 2006, the Society of Actuaries' Pension Section and Health Section Research teams began constructing a resource model for the projection of long-term healthcare cost trends. The driving motivation for creating the model was to assist actuaries who estimate liabilities for retiree healthcare benefits as specified under FASB and GASB accounting statements.

Actuaries performing retiree medical valuations have a very long-term projection horizon. On a closed group valuation, the actuary will need to project benefits for a young employee under age 25 for a period as long as 80 years. Even though the projection horizon is similar, the valuation magnitude is materially different between pension costs and retiree medical costs. With pension payments, the actuary discounts relatively level future benefit payments at a valuation interest rate making amounts payable more than 50 years into the future of very little value to the current valuation. Conversely, the cost for retiree medical benefits payable in 50 years time may be 7 to 28 times larger than the current cost, depending on the assumed annual rate of increase in health care costs. Therefore, those costs have a large impact on the valuation even after discounting at the valuation rate.

The purpose of the SOA project, *Modeling Long Term Healthcare Cost Trends for Valuation*, is to provide a benchmark projection of medical cost increases as one element in the estimation of retiree health benefits liabilities and premium increases for the next 5 to 75 years, and to provide a user-friendly model for making alternative projections. The modeling project is not an attempt to encompass all of the elements needed for full blown cost projections (benefit limits, numbers of eligibles and dependents, mortality rates, age and tenure classes, tax considerations, etc.) but only to illustrate trends and provide insight into the future percentage increases in per-person medical costs.

The extent of media publicity in recent years reflects the importance of managing and quantifying healthcare costs. Those healthcare costs have been rising faster than general inflation for many years. Similar to supply and demand constraints affecting the rate of growth of any country, healthcare capacity and available resources will constraint the share of the healthcare sector within the US economy.

Please contact our office, if you would like to learn more about the new tools aiding actuaries for retiree valuations.

Meet Our Experts

Here is a brief profile of some of the ARM experts available to you. All of them are members of the American Academy of Actuaries and members of one of the North American Actuarial Societies.

Corwin Zass, ASA, MAAA, FCA is the Principal of Actuarial Risk Management, Ltd. (ARM). Cory is responsible for providing consulting services that include acquisition analysis, product development, financial accounting, profitability analysis, asset/liability projections, policy form drafting, audit supervision, financial statement preparation, and other aspects of insurance company consulting, along with expert witness services.

Prior to founding ARM, Cory worked as a Consulting Actuary in a couple of small Texas based insurance consulting firms. Prior to his consulting career, he served as the Chief Actuary for a mid size insurance organization.

Cory is active in various American Academy of Actuaries working groups, including the principles-based valuation initiative.



Tom Donlon, FSA, MAAA is the Consulting Actuary at Donlon & Associates, Inc. (D&A), an actuarial consulting firm specializing in providing strategic planning advice for insurers, employers, health care providers and public sector clients regarding the design, pricing, funding and administration of health and welfare plans.

Prior to founding D&A, Tom was an Executive Vice President with Aon Consulting, a subsidiary of Aon Corporation in Chicago. At Aon, Tom was the National Practice Leader for the Health & Welfare Consulting Practice. During his eight years with Aon, Tom was a member of the Board of Directors of the Association of Private Pension and Welfare Plans (APPWP).

Prior to joining Aon, Tom was a Principal with William M. Mercer, Inc. (Mercer). There he consulted with both large employers and health care providers. While at Mercer, Tom served as a member of the National Managed Care Strategic Planning Committee and Regional Quality Assurance Committee.

Roberta J. Garland, FCAS, MAAA is the President of Garland Actuarial LLC., which provides a broad range of actuarial consulting services to insurance companies and self insured entities. She specializes in litigation support, reserve evaluations, captive evaluations, asbestos and other environmental evaluations and risk financing alternatives. Her area of expertise is in workers' compensation and liability business.

Roberta worked at the Insurance Services Office in New York City. Roberta also worked as an Assistant Vice President and Corporate Reserving Actuary for the Fireman's Fund Insurance Companies.

Prior to founding Garland Actuarial, Roberta spent more than ten years as a consulting actuary with Arthur Andersen, serving clients in the U.S., Europe, and Asia, and leading their West Coast operations.

Mickey G. McDaniel, ASA, MAAA, EA is a Principal and founder of Retirement Horizons Inc., with overall responsibility for business strategy and practice management. Retirement Horizons is a full service retirement benefits consulting firm, offering employers one-stop assistance with all aspects of retirement planning for their employees.

Prior to founding Retirement Horizons, Mickey was Director-In-Charge of the Human Resource Advisory consulting practice of Cooper's & Lybrand L.L.P. in Houston, Texas. He held a similar position as a Principal at William M. Mercer managing the office in Tulsa, Oklahoma. Mickey has also served as a consulting actuary at Hewitt Associates and Towers Perrin.

James P. Galasso, FSA, MAAA is the Founder and President of Actuarial Modeling, an actuarial firm specializing in Healthcare Financial Modeling and Managed Care Consulting.

Jim has over 25 years of experience in all aspects of the health care insurance and managed care industry, as the Chief Financial Officer of two major Healthcare Companies, as a Chief Actuary and as a Partner with Ernst & Young LLP.

He has developed several sophisticated proprietary software models focused on the health care industry (IBNR estimation models, software used to "recast" financial statements to reflect the most current actuarial estimates and to analyze trend patterns, and a model used for projecting financial results and evaluating health care firms).

He is also a certified arbitrator with ARIAS US.

Carl M. Harris, FSA, MAAA, FCA is a Principal in the Des Moines office of Insurance Strategies Consulting, LLC. He has over 22 years of experience in life insurance of the U.S.A., Canada, South America and the Caribbean and has worked for stock and mutual life insurance companies and as a consultant.

Carl has worked with clients in such areas as litigation support; product development and pricing; mutual reorganizations; demutualization & mutual insurance holding company; reinsurance strategies including financial reinsurance; corporate appraisals, mergers & acquisitions, statutory, GAAP and tax reporting; strategic planning; cash flow testing; financial modeling; financial projections; distribution and compensation systems; not-for-profit and regulatory valuation.

Prior to founding ISC, Carl served as the Principal at Deloitte & Touche, LLP in Des Moines.

Karl G. Volkmar, FSA, MAAA, FCA is the President and the Consulting Actuary of United Health Actuarial Services, Inc. which provides health actuarial and management consulting services for a wide range of individual and group medical and supplemental insurance products. He also provides health & welfare actuarial and benefits consulting for both insured and self-insured plans.

Prior to working at United Health Actuarial Services, Karl worked as a Consulting Actuary at TIC International Corporation/United Actuarial Services. Prior to that Karl served as Vice President at Conesco Services and Pioneer Life Insurance Company.



Our Services

2007 Actuarial Risk Management

Risk Review is published electronically by Actuarial Risk Management, an independent member of the BDO Seidman Alliance, to provide members the latest news and information about managing risk.

EDITORS

Corwin Zass

Evelina Kaminski

If you have questions or comments about Risk Review, please send an email to

newsletter@actrisk.com



Actuarial Risk Management offers a wide range of services. Some of our services include:

Life & Annuity:

- Financial Reporting Duties for Statutory, Tax, GAAP, and IFRS
- Audits of Actuarial Liabilities
- Principle Based Capital and Reserves
- Economic Capital
- Value Based Management
- Merger, Acquisitions and Restructuring
- Products, Markets and Distribution
- Risk Assessment
- Reinsurance
- Expert Witness
- Experience Studies
- Sarbanes-Oxley / Model Audit Implementation

Who Are Our Clients?

- Insurance Companies
- Regulators
- Agencies
- Business Owners
- Hospitals
- Managed Care Providers
- Employers
- Hedge Funds
- Private Investors

Employee Benefit:

- Medicare Part D Assistance and Analysis
- Pricing of Group Medical, Dental, Disability, Life, Drug Plans
- Strategic Planning and Management Analysis
- Plan Funding (fully insured or self-insurance)
- Actuarial Plan Projections and Forecasts
- Self-Insurance Feasibility Studies
- Cost Containment Program (identification & evaluation)
- OPEB Valuations and Program Assessments (under FASB, GASB)

Managed Care:

- Valuation & Financial Reporting
- Provider Network Evaluations
- Benefit Plan Pricing & Premium Rate Filings
- Small & Large Group Underwriting
- IBNR Analysis
- Financial Reporting & Projections
- Predictive Risk Modeling
- HSAs & Consumer Driven Health Plans
- Actuarial Training Programs (Managed Care specific)
- Payor Drug Cost Reviews
- Expert Witness

Property & Casualty:

- Outstanding Claims Liability, IBNE, IBNR and Loss Reserve Analysis
- Product Profitability & Company Capital Management
- Excess Insurance Evaluations
- Loss Forecasts and Historical Profitability Analysis
- Models for Dynamic Financial & Cash Flow Analysis
- Cost Driver Analysis
- Reinsurance & Risk Transfer
- Relativity Factors
- Deductible Credits
- Regulatory Assistance
- Self-Ins. and Captive Prgms
- Audit Support
- Expert Witness

Retirement:

- Actuarial Funding Valuations
- Accounting Valuations and Disclosures (FASB 87, 88, 106, 112, 132, 158)
- Government Plan Valuations (GASB 25, 27, 43, 45)
- Claims Analysis
- Forecasts and Projections
- Plan Design, Evaluation and Re-Design
- Opinions / Recommendations on Assumptions