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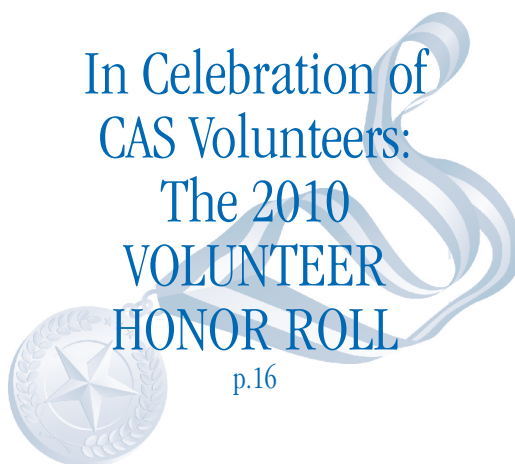
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CAS Volunteers:  
The 2010  
VOLUNTEER  
HONOR ROLL

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Next year's CLRS is scheduled for September 2011 in Las Vegas, NV. Contact Mike Boa at the CAS Office (mboa@casact.org or 703-562-1724) for details on sponsorship and exhibitor opportunities for the 2011 event. 

# Got Skills?



**W**hat is the skill set of actuaries in the United States? Consider the following two quotes from reports of the two United States-based actuarial organizations focused on actuarial education and research.

Actuarial skills, particularly their analytical and technical/mathematical skills, are valuable and difficult to find in other professionals. However, a common criticism of actuaries from the CEOs was that some actuaries are too narrow and too technical and that they need to develop general business skills and a broader business perspective.

—CAS Report of the CEO Advisory Task Force, November 1999

The traditional perception of actuaries—as having strong quantitative/financial problem-solving skills as well as high ethical standards—prevails. . . . In positioning actuaries for senior positions, it will be important to enhance perceptions of their softer business skills, such as team leadership, business acumen, informed risk-taking, and innovative thinking. At the same time, however, it will be necessary to continue reinforcing actuaries' quantitative strengths.

—“Attitudes and Usage of Actuarial Services among Employers in Key Sectors: Findings from Benchmark Survey,” Society of Actuaries, March 2008

The two studies cited above were taken nine years apart and surveyed on two different sets of actuarial employers, but both give reasonably consistent pictures. Actuaries are highly skilled technically but may face challenges moving from a technical position to a more senior business leadership position. There are probably a large number of reasons that this picture emerges. In my last column as CAS President, I will explore one factor that may be contributing to this image.

We point with justifiable pride to our method of qualifying actuaries. In order to become a member of the CAS, a candidate must prove worthy by passing a series of very rigorous examinations. To become a Fellow, that candidate needs to pass yet more, similar examinations. Looking at those examinations may shed some light on why the two views expressed above are so close.

Those examinations are based on a set of syllabus readings and designed to test specific learning objectives. The syllabus readings tend to be wide-ranging and cover a number of different concepts and details. The examinations tend to have a relatively large number of fairly detailed questions. Very often on some

examinations, the focus is on calculations of specific amounts. Even nonquantitative questions tend to focus on details in syllabus readings. By and large the questions touch on specific items covered in individual readings.

With this focus on specific calculations in specific situations covered in specific readings, it may not be surprising that candidates who can apply specific calculations or specific notions in specific situations covered in the readings tend to be favored. This then gives preference to just the individuals described in the two pictures above, those skilled at applying specific methods to specific situations with a focus on technical details.

There is no doubt that these skills are valued and will continue to be valued in the future. However both of the quotes indicate that something more than these technical skills is needed for an actuary to become an integral part of the senior management team. I ask you to consider how we can step up our game and develop Fellows who have the kinds of skills that will enhance their worth within their firm.

It is often said, with good reason, that we cannot teach business skills, that business skills are more appropriately addressed in business schools and not on actuarial examinations. There is substantial truth to this observation. However, maybe there is something we *should* do in our examinations that does assure our employers that at least some of our members have skills beyond the mere quantitative that fit well into the qualities required in a senior manager.

One aspect of the “business skills” mentioned above is the ability to step above the detailed calculations and be able to see the big picture and to clearly communicate that understanding to others. Another aspect is the ability to take the considerable tools under our command to address problems not directly faced before. These skills *can* be tested but they are not in our current examinations. However, to do this would require tests of a substantially different nature than those we now give.

We can have examinations with fewer but much broader questions that require applying a variety of tools covered in the syllabus readings to problems that were not directly discussed in those readings. Such questions would require synthesis of a variety of concepts, sufficient understanding of the techniques covered to adapt them to novel situations, and a clear communication of conclusions and recommendations. Such examinations would require a major change in our approach to exams and would not

From the President, page 5

## The Case *For* Stochastic Reserving

### **Dear Editor:**

In his 2010 “Random Sampler column” (“The Case Against Stochastic Reserving,” *AR*, August 2010), Ralph Blanchard criticizes stochastic loss reserve models because they overlook information that can be used to develop a more accurate reserve. This is an interesting (and widely held) theory, but I have seen no evidence that this theory works in practice. The claim settlement process is complex and messy. The enormous number of facts that one can consider, and the high financial stakes riding on loss reserve, make the situation ripe for what psychologists call “confirmation bias.” Confirmation bias refers to a human tendency to give more weight to information that supports their preconceptions. Despite some claims to the contrary, my experience with actuaries is that they are very human.

I addressed this question in a 2007 *Variance* paper titled, “Estimating Predictive Distributions for Loss Reserve Models.” In Section 8 of that paper I did a retrospective test that compared the predictions of a stochastic model with the posted reserve for 109 insurers. In that test, the stochastic model did significantly better than the posted reserve. In the same vein, Mike Wacek came to a similar conclusion in his paper, “A Test of Clinical Judgment vs. Statistical Prediction in Loss Reserving for Commercial Auto Liability” (*CAS Forum*, Winter 2007). Although the actuarial role in posting the reserve varies by insurer, those with access to all the information have not been able to post a more accurate reserve. While two studies such as these should not be viewed as conclusive, I submit that the stochastic models are ahead.

I do agree with Ralph that predictive models can be used to “identify the drivers of uncertainty.” But we should keep in mind that most of the predictive models used by actuaries, such as the GLM, rely on stochastic assumptions. As I illustrated in my Brainstorms column in the same issue of the *Actuarial Review*, an understanding of the stochastic nature of the data can lead to more accurate point estimates. In the effort to identify the drivers of uncertainty, it is important to distinguish the noise from the signal. I think the best way to identify the drivers is to estimate the predictive distribution of a future statistic of interest, such as the total payments, reflecting both parameter and process risk, for the next calendar year. When the future comes, we should do a retrospective test on that statistic. If the statistic is far out in the tail, one should look for systematic departures from the model assumptions, maybe a black swan, or investigate the underlying model.

I do have problems with the way stochastic models are being used. First, posting a range for the reserve, and then allowing other (usually opaque) considerations to determine where to post the point estimate within the range, is not the way to go. Instead, the presence of a wide reserve range should either indicate the need for increasing capital, or putting a larger risk

margin on the reserve. Solvency II requires the latter.

My second problem is that we actuaries are not very good at stochastic modeling for loss reserves. I suspect this is the source of the widespread frustration with stochastic models. While there is a lot of good work going on, we will not get good at stochastic loss reserving until we have gained considerable experience with retrospectively testing our predictions.

In summary, we live in a world where the future is uncertain. We need to develop the best tools to quantify that uncertainty and develop better procedures for dealing with that uncertainty. I submit that the stochastic models are the best tools we now have available, but further development with retrospective testing is necessary.

—Glenn G. Meyers, FCAS

### **Dear Editor:**

As I read this piece, I found myself nodding in agreement, despite the fact that I spent much of my 36-year career developing and using both stochastic and predictive models in my work.

I concur with Ralph that we have to be wary of our models, which are often constructed from limited data and unproved assumptions. It is here where I think it is wise, if not imperative, to follow the actual results versus the results of such models to see (a) how they worked (or failed!) and (b) try to see the extent to which actual differences are “random” (i.e., not found to have a nonrandom explanation).

In short, I agree with Mr. Blanchard’s essay. I do, however, think the title is somewhat misleading, because I don’t believe the essay is “against” stochastic reserving but is, rather, recognizing potentially major pitfalls in its use and giving such models blind obedience.

—Brad Gile, FSA, MAAA, AFFI

## Another View on Point Estimates

### **Dear Editor:**

I would like to comment on Glenn Meyers’ “Brainstorms” column (“Point Estimates,” *AR*, August 2010). In his first example, for a sample from a LogNormal Distribution, Glenn compares the sample mean and maximum likelihood estimator of the mean. Although it was not the main thrust of his article, his results do depend very significantly on the sample size. Maximum likelihood estimators are asymptotically unbiased and asymptotically efficient. Thus they perform well for large sample sizes. However, maximum likelihood estimators may perform relatively poorly for small sample sizes. For samples from a LogNormal, one can determine the bias and variance of his two estimators in closed form. I have included the mathematics in an appendix [available on the CAS Web Site]. In

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**From the President,** From page 3

necessarily be for every member.

One paradigm could be to maintain the more technical examinations for those who do not aspire to more senior positions and produce very competent members with technical mastery of actuarial methodology and principles. For those aspiring for more, we could continue with examinations that focus more on understanding and synthesis than rote application of reading calculations. We do not even have to invent new terms for these two levels of actuaries, we already have those names, Associate

and Fellow.

In my first “From the President” column, I called on us to be creative in finding better and more imaginative ways to test skills that do not lend themselves to timed, written testing. Here, in my last one, I ask us to take a critical look at *what* skills we are looking for in our members, with a call to do better for ourselves now and for our members and our employers in the future. **AR**

**From the Readers,** From page 4

his example, Glenn simulates a sample of size 1000 from a LogNormal Distribution with  $\mu = 6$  and  $\sigma = 2$ . For this case, for various sample sizes, below are listed the bias, standard deviation, and root mean squared error:<sup>1</sup>

Sample Size	Sample Mean		RMSE	Maximum Likelihood		RMSE
	Bias	StdDev		Bias	StdDev	
4	0	10,912	10,912	$\infty$	$\infty$	$\infty$
8	0	7716	7716	2879.69	$\infty$	$\infty$
10	0	6901	6901	1927.50	21,957	22,042
15	0	5635	5635	1060.73	6421	6508
20	0	4880	4880	733.04	4161	4225
25	0	4365	4365	560.31	3223	3272
100	0	2182	2182	123.79	1138	1144
1000	0	690	690	11.97	330	330
10,000	0	218	218	1.19	103	103
100,000	0	69	69	0.12	33	33

For this example, for samples of size less than 17, maximum likelihood has a larger root mean squared error than the sample mean. For samples of size more than 16, maximum likelihood has a smaller root mean squared error than the sample mean.<sup>2</sup>

—Howard Mahler, FCAS **AR**

<sup>1</sup> Mean Squared Error = Variance + Bias<sup>2</sup>. The Root Mean Squared Error is the square root of the Mean Squared Error.

<sup>2</sup> The crossover point depends on the sigma parameter of the LogNormal Distribution. The larger the sigma, the higher the crossover point.

For sigma=1, for samples of size less than 12, maximum likelihood has a larger root mean squared error than the sample mean. For sigma=3, for samples of size less than 27, maximum likelihood has a larger root mean squared error than the sample mean.

# Correction

The August 2010 “Brainstorms” column contains two errors.

- (1) The last formula in the last sentence of the second paragraph should read as follows:

$$\hat{\sigma}^2 = \frac{1}{1000} \sum_{i=1}^{1000} (\log(x_i) - \hat{\mu})^2.$$

- (2) The second footnote is missing. It is as follows:

Taylor, Greg, “The Chain Ladder and Tweedie Distributed Claims Data,” *Variance* 3:1, 2009, pp. 96-104.

The **AR** regrets these errors. **AR**



# Ziegler Appointed CAS Secretary and Treasurer


**TORONTO, On.**—The CAS Board of Directors appointed CAS Executive Director Cynthia Ziegler as the association's secretary and treasurer at its meeting here in September 2010. During a vote held in conjunction with the 2010 CAS elections, 89% of Fellows approved revisions to the Constitution and Bylaws clarifying that the chief staff executive (the executive director) is an officer of the Society and that an officer will henceforth be designated by the CAS Board to serve as secretary and treasurer.

While the language allows for flexibility about whom can serve as secretary and treasurer, it was the board's intent to appoint the chief staff executive to serve in those roles.

In 2006, the CAS Fellows approved a set of changes to the Constitution and Bylaws that described the duties of the chief staff executive as they relate to record keeping and financial matters, the common roles of a secretary and treasurer. However, specific references to the secretary and treasurer were removed at that time, and the chief staff executive was not designated as an officer of the CAS. Since there are times when the organization needs an officer

to legally fulfill the duties of a secretary or treasurer, Fellows were asked to approve changes to the Constitution and Bylaws to clarify the situation.

"The best approach to association management is one in which the volunteer leadership partners with the paid professional staff to carry out the mission and goals of the organization," said Ms. Ziegler. "Together we serve as partners in leading the organization forward. In addition to recognizing what currently exists in practice, being identified as an officer and appointed as secretary and treasurer is an acknowledgement of the value of the member-staff partnership."

CAS Executive Director since 2001, Ms. Ziegler has over 20 years' experience with four non-profit organizations, all within the property-casualty insurance discipline. In addition to the CAS, she has worked for the Independent Insurance Agents of North Carolina, the Professional Insurance Agents of New England, and the Chartered Property Casualty Underwriters. 

## Frees, Shi, and Valdez Awarded 2010 Hachemeister Prize


**T**he Hachemeister Prize Committee has awarded the 2010 Charles A. Hachemeister Prize to Edward W. Frees, Peng Shi, and Emiliano A. Valdez for their paper, "Actuarial Applications of a Hierarchical Insurance Claims Model."

Designed to promote property/casualty-oriented papers published in an international forum, the Hachemeister Prize was created to honor Charles Hachemeister's many contributions to Actuarial Studies in Non-Life Insurance (ASTIN) and his efforts to establish a closer relationship between the CAS and ASTIN. Papers eligible for the prize are those that were published in the previous year's *ASTIN Bulletin* or presented at the previous year's ASTIN or AFIR Colloquia.

Nearly 100 papers were eligible for the 2010 Prize. The winning paper was published in Volume 39, Issue 1 of the *ASTIN Bulletin*. A CAS Committee chaired by David Cummings narrowed the papers down to one winner. Judging criteria includes impact to the

industry, practicality of application, originality, readability, and completeness.

The winning paper demonstrates actuarial applications of the modern statistical method that are applied to detailed, micro-level automobile insurance records. The hierarchical statistical model allows the authors to study the accident frequency, loss type, and severity jointly, and to incorporate individual characteristics such as age, gender, and driving history that explain heterogeneity among policy holders. They investigate three specific actuarial applications of their model: (1) calculating the predictive mean of losses for individual risk rating; (2) modeling the predictive distribution of a portfolio of business, including the calculation of various risk measures useful in determining economic capital; and (3) examining the predictive loss distributions for an insurer and reinsurer under various reinsurance treaties.

The 2010 Hachemeister Prize paper will be presented at the 2010 Annual Meeting in Washington, DC. 

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Not only do Society Partners receive exposure to a focused audience through participation in individual events and activities of their choosing, they also receive exclusive benefits, including a 20% discount on the regular cost of individual sponsor, exhibitor, and advertising opportunities.

In 2010-2011, the Program has been expanded to include even more ways to help firms carry out their marketing objectives. The CAS is now offering a new chance for exposure in its most popular publication, the *Actuarial Review*. Details can be found in the downloadable prospectus, which describes the Society Partners Program and full range of options for CAS sponsorships, exhibits, and advertising.

A Society Partnership runs for 12 months, from October 1 to September 30. There is still time to join the program for 2010-2011, however, and take advantage of everything the program has to offer.

Enhance your company's visibility among the actuarial profession, communicate your leadership in the marketplace, and show your support for the CAS by joining the Society Partners Program.

To learn more, review the Catalog of 2010-2011 Casualty Actuarial Society Sponsor and Exhibitor Opportunities on the CAS Web Site, or contact Mike Boa, Director of Communications and Marketing, at [mboa@casact.org](mailto:mboa@casact.org) or (703) 562-1724. **AR**

25 Years Ago in the *Actuarial Review*

## Professional Responsibility

By Walter Wright

**P***Adger Williams, who died earlier this year, is remembered for his warm, folksy manner. Here is what he had to say in the November 1985 "Random Sampler."*

I was just reading some of the recent pronouncements of my old singing-golfing buddy, Bob Hunter.

Seems that Bob and some of his consumerist friends think that those clever, price-fixing devils in the insurance industry got together and conspired to lose three or four billion dollars in surplus—just so they could get some rate increases.

Now I'm not ready to do battle with Bob about the relative sanity of vendors who sell their products for fifty to sixty percent of costs. But I am bothered by the implication that a five percent increase can return the industry to its normal obscene profit; that's downright unactuarial, and that's what bothers me.

Everyone, even an actuary, has the right to espouse any cause or take any position he wishes. But when the matter becomes technical, a special responsibility attaches, and we have to advance our opinions with care and factual support, as professionals.

Before we get too eager to point an accusing finger at some particular individual with whom we disagree, we should look at some of the bandwagons other actuaries have jumped on, with little thought and less substance.

Remember the small-car discounts? If the car was smaller, then the costs had to be less, and not a dissenting voice was raised. Now the statistics bear out clearly that in small cars, not only are the injuries greater but the property damage exceeds that of larger automobiles.

It's true that competition was the breeding ground for giving auto insurance discounts to the owners of small cars. But actuaries should have been quicker to analyze the relative costs. Instead, we found ourselves stamping "approved" on a faulty theory...

I am suggesting that we should be actuarial in our analysis and proceed with professional caution before making statements about areas in which we are expected to have a special proficiency.

Other bandwagons will be coming along with various causes to

**25 Years Ago**, page 25

# Summarizing Insurance Scores with the Gini Index

**A**s we go about building our predictive models for ratemaking, many have found that the usual goodness-of-fit diagnostics (i.e.,  $F$ -statistics,  $t$ -statistics, etc.) are uninformative, since their scale does not correspond to what most feel is the economic value of the model. David Cummings and I have attempted to deal with this in previous “Brainstorms” columns by introducing a statistic we call the “Value of Lift” or VoL.<sup>1</sup> We have been comfortable with using this statistic on large samples, but we get progressively uncomfortable with using it as the sample size decreases. Another problem we have encountered with the VoL is that many object to the fact that it depends upon an arbitrary cutoff point where we select the unprofitable risks.

To address these problems, Dave and I enlisted the help of Edward T. (Jed) Frees. Jed is a professor at the business school of the University of Wisconsin, a Fellow of the Society of Actuaries, and has a Ph.D. in Statistics. We have jointly submitted a paper for publication that addresses these problems.<sup>2</sup> This column summarizes that paper.

Let  $P_i$  be the measure of the current exposure for the  $i^{\text{th}}$  risk. It could represent the current premium or it could represent an exposure base such as car years. Let  $\mathbf{a}_i$  and  $\mathbf{b}_i$  represent two different sets of independent variables related to the loss,  $L_i$ , for the  $i^{\text{th}}$  risk. Let  $P_{a,i} = E[L_i | P_i, \mathbf{a}_i]$  and  $P_{ab,i} = E[L_i | P_i, \mathbf{a}_i, \mathbf{b}_i]$  where the expectation,  $E$ , is determined by a predictive model. Define the relativity  $R_{a,i} = P_{a,i} / P_i$ . For a given relativity,  $r$ , let's now define the coordinates  $(x(r), y(r))$  of what we call an ordered Lorenz curve by as follows:

$$x(r) = 100 \frac{\sum_{R_{a,i} \leq r} P_{a,i}}{\sum_i P_{a,i}} \quad y(r) = 100 \frac{\sum_{R_{a,i} \leq r} L_{a,i}}{\sum_i L_{a,i}}.$$

In words, the coordinates of the ordered Lorenz curve plots the percentage of the predicted losses on the x-axis against the percentage of the actual losses on the y-axis, as ordered by the relativity,  $R_{a,i}$ . Similarly, define the relativity  $R_{ab,i}$  and its corresponding ordered Lorenz curve.

Let's consider an example. Consider a portfolio of 250,000 personal lines risks  $P_i = 1$ ,  $P_{a,i} = a_i$ , and  $P_{ab,i} = 0.5a_i + 0.5b_i$ . The losses,  $L_i$ , have a Tweedie distribution with mean  $P_{a,i}$ .  $P_{a,i}$  represents our best estimate of the expected loss given that we

only observe the factor  $a_i$ . The exact algorithm that produced this example is in the R code accompanying the Web version of this article.

The Lorenz curves ordered by  $R_{a,i}$  and  $R_{ab,i}$  are on Figures 1 and 2. The dotted lines in Figure 1 below highlight the point (60.0, 39.7) on the Lorenz curve ordered by  $R_{a,i}$ . The dotted lines in Figure 2 also highlight the points (60.0, 44.8) on the Lorenz curve ordered by  $R_{a,i}$ . The Lorenz curve has significant meaning in an insurance context. It shows that including both the factors  $a_i$  and  $b_i$  in the risk selection criteria allows an insurer to select a portfolio consisting of 60% of the risks, yet having 5.1% fewer losses than a risk selection criteria based only on the factor  $a_i$ . Of course, the 60% cutoff is arbitrary, but the Lorenz curve includes all possible cutoffs.

The Gini index is a single number that summarizes the information in the Lorenz curve. It should be easy to see that if the losses were random relative to the factors  $a_i$  and  $b_i$ , the Lorenz curve would be a straight 45° line. The Gini index is equal to twice the area bounded by the 45° line and the Lorenz curve. In the example, the Gini indices for  $R_{a,i}$  and  $R_{ab,i}$  are 19.1% and 29.2%, respectively.

Here are some theoretical properties of the Gini index and the corresponding ordered Lorenz curves:

- The Lorenz curves,  $R_{a,i}$  and  $R_{ab,i}$  are concave up and lie at or beneath the 45° line.
- The Gini index for  $R_{a,i}$  is nonnegative, and the Gini index for  $R_{ab,i}$  is no smaller than that of  $R_{a,i}$ .

The proof of these properties assumes that  $P_{a,i}$  and  $P_{ab,i}$  are equal to the conditional expected values as specified above. In practice, the conditional expected value and the Gini index must be estimated from data and hence are subject to estimation error. In the paper we derive estimators for the standard error of the Gini index and for the difference between two Gini indices. These estimators depend on the first two moments (including covariances) of the underlying  $P_i$ ,  $P_{a,i}$ , and  $P_{ab,i}$  and thus are sensitive to the underlying frequency and severity distributions. Table 1 provides estimates of the Gini indices and their standard errors for our simulated example, with varying portfolio sizes.

<sup>1</sup> See the “Brainstorms” columns of the May 2008 and the February 2009 issues of the *Actuarial Review*.

<sup>2</sup> A working version of this paper, titled “Summarizing Insurance Scores with the Gini Index,” can be downloaded from the CAS Web Site <http://research3.bus.wisc.edu/course/view.php?id=129>.



**Table 1**

# Risks	Gini <sub>a</sub>	Std Error Gini <sub>a</sub>	Gini <sub>ab</sub>	Std Error Gini <sub>ab</sub>	Std Error Diff	t-Statistic Diff
25,000	17.4	7.3	20.4	9.1	6.0	0.5
50,000	18.0	5.1	29.6	5.3	5.5	2.1
100,000	20.6	3.5	27.8	3.9	2.9	2.5
250,000	19.1	2.5	29.2	2.3	1.8	5.5
500,000	23.0	1.8	30.7	1.7	1.4	5.7
1,000,000	22.1	1.2	29.6	1.2	1.1	6.8

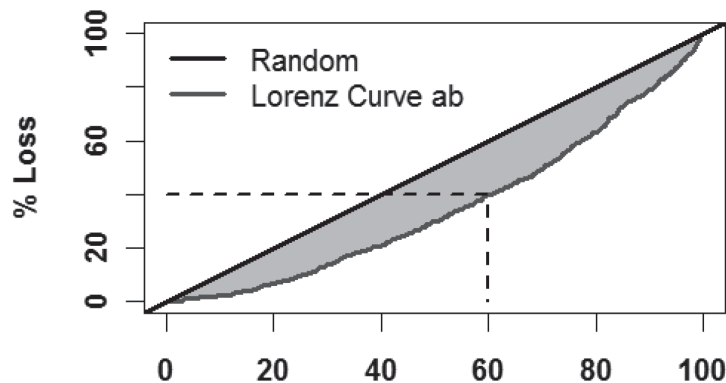
This table illustrates what we have seen with real data—in general, one needs a fairly large sample to reliably conclude that adding new information improves the Gini index.

In principle, the Gini index could be applied to situations less structured than the example above. For example,  $P_i$  could be the current premium that was influenced by competitive and regulatory pressures. In the example above, the information used in calculating  $P_{a,i}$  was contained within the information used in calculating  $P_{ab,i}$ . While the economic interpretation of the Lorenz curve and the Gini index makes sense in less structured settings, the nice theoretical properties listed above may not hold. Using real data we have seen that when

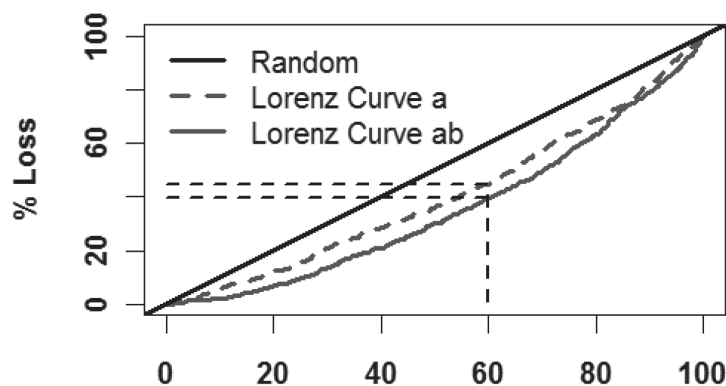
comparing two different estimators of the expected loss, based on nonoverlapping information, the Lorenz curves may cross. This indicates that there are pockets of risks within the portfolio where one estimator outperforms the other, and vice versa. The lesson to be learned here is that if your goal is to improve risk segmentation, make sure that your “improved” model contains all the information used in your existing model.

To summarize, this article proposes a new measure of the effectiveness of predictive models that is specifically tailored to the problems of insurance underwriting and ratemaking. The article also explores some of the statistical properties of this measure. [AR](#)

**Figure 1**



**Figure 2**



## 2011 ERM Symposium: Meeting the Challenges

**R**eturning to Chicago, March 13-16, 2011, the 2011 ERM Symposium will explore how risk professionals use ERM to meet their organizations' challenges, especially those presented by the financial events of the past few years.


The ERM Symposium Planning Committee is designing a scientific program featuring:

- Case studies of successful and unsuccessful attempts to use ERM to meet today's challenges, including best practices for embedding ERM into an organization's culture;
- Technical and quantitative presentations of a practical nature that will outline approaches to specific ERM implementation challenges, with ideas that can be applied immediately; and
- Presentations of a more theoretical nature, either of general interest to ERM practitioners or regarding specific ERM issues.

ERM Symposium sessions will address issues, applications, and insights across a broad spectrum of industries and foster cross-pollination and collaboration of ERM professionals without regard to industry, sector, or geography.

The ERM Symposium will also offer ample networking opportunities to renew and expand your list of ERM contacts, and an exhibit hall with service providers demonstrating their ERM capabilities and knowledge.

Registration for the 2011 ERM Symposium opens in December. Visit [www.ermssymposium.org/2011](http://www.ermssymposium.org/2011) for the latest details.

*The ERM Symposium is sponsored by the Society of Actuaries, Casualty Actuarial Society, Joint Risk Management Section, and Professional Risk Managers' International Association, in collaboration with the Canadian Institute of Actuaries, Asociacion Mexicana De Actuarios, Enterprise Risk Management Institute International, and Colegio Nacional de Actuarios.* 

## Visit ICA2014.org for the New ICA 2014 Puzzle

**D**o you like learning about history? Do you like puzzles, especially anagrams? Then visit ICA2014.org for the new ICA 2014 puzzle—an ICA history lesson in the form of an anagram!

A sonnet was sent to the ICA 2014 organizers by the IAA representative who scouts locations for the Congress. He has been scouting locations since 1895, and boy, is he tired. He's a little loopy, too. Each line of his sonnet contains the encoded name of a city where the Congress has been held, including, appropriately enough, the city that will host the next one in 2014. To read the sonnet, go to ICA2014.org, and try to identify the fourteen cities.


Hint #1: "Encoded" means anagrammed. Each city's letters, in English, is scrambled into one or two consecutive words in each line of the sonnet. For example, not root = Toronto.

Hint #2: A list of the cities that have hosted the International Congress of Actuaries can be found on the ICA 2014 Web Site.

However, the list is not directly linked from the puzzle; you will have to explore the site to find the list.

Hint #3: ICA 2014 is scheduled for 30 March to 4 April 2014 in Washington, D.C. at the Washington Marriott Wardman Park Hotel.

Submit the puzzle solution to enter a drawing to win a prize! Send the list of cities in the order they appear in the sonnet to [info@ica2014.org](mailto:info@ica2014.org) by November 30, 2010. Of the correct entries, one will be selected at random to receive a \$250 American Express gift card. The correct answers for the puzzle and an announcement of the winner will be posted on ICA2014.org in early December.

While you are visiting the ICA 2014 Web Site to find the sonnet, look for the first ICA 2014 puzzle, a Sudoku. Also, sign up for RSS feeds and the e-mail newsletter to receive ICA 2014 updates as soon as they are posted. Registration for ICA 2014 is expected to open in late 2012 or early 2013. 

# RPM Seminar Headed for New Orleans!

Register now for the 2011 Ratemaking and Product Management (RPM) Seminar, scheduled for March 20-22 in The Big Easy, New Orleans, LA.

This year's RPM Seminar was well-received, with 630 in attendance—more than 84% of whom characterized the overall educational value of the seminar as “good” or “excellent” in the post-seminar survey. The Seminar's keynote speaker and concurrent sessions also rated highly.


Currently, the RPM Seminar Planning Committee is reviewing the 2010 seminar feedback to make improvements for next year's event. In 2011, the Seminar will offer a one-day predictive modeling workshop, bring back popular sessions from 2010, and replace about half of the 2010 sessions with new material.

The RPM Seminar offers a wide range of continuing education opportunities for actuaries, underwriters, and other insurance professionals, including practical hands-on sessions for attendees of all experience levels.

Over 50 different concurrent sessions will be offered during the seminar with multiple sessions will offered within the following tracks:

Regulatory	Data Management
Personal Lines	Underwriting
Predictive Modeling	Commercial Lines
Implementation Issues	Professionalism
Workers Compensation	Rate of Return
Product Management	

Sessions have been designed for both the novice and the experienced. Attendees can also opt to come early for a full day of workshops on March 20. Select from one of three workshops offered: predictive modeling, product development, or basic ratemaking. These three workshops are designed to provide a more in-depth, focused, creative, and interactive learning environment. A separate registration fee is required, which includes a continental breakfast, luncheon, and refreshments.

Look for more information on the 2011 RPM Seminar at [www.casact.org](http://www.casact.org). 

**EXHIBITORS—Don't miss the chance to showcase your products and services at the RPM Seminar. Space is limited, so act today! Contact Mike Boa at [mboa@casact.org](mailto:mboa@casact.org) for more information.**


## Annual Report of CAS Discipline Committee to the Board of Directors

By Janet Fagan, Chairperson of the 2010 Discipline Committee

1. **Background.** The CAS Rules of Procedure for Disciplinary Actions (as amended November 14, 1998, by the Board of Directors) requires an annual report by the Discipline Committee to the Board of Directors and to the membership. This report shall include a description of its activities, including commentary on the types of cases pending, resolved, and dismissed. The annual report is subject to the confidentiality requirements.

2. **2010 Activity.** The Discipline Committee Panel processed two cases during the year. There is one case to report.

The Discipline Committee Panel found that Michael W. Cash

violated Precepts 1 and 8 of the CAS Code of Professional Conduct. The Discipline Committee Panel voted to suspend Mr. Cash from CAS membership for a period ending November 1, 2012. The Committee Panel also voted to require successful completion of a Professionalism Course as a condition for reinstatement to the CAS. Copies of this Report were provided to the CAS President and the CAS Executive Director. The decision remains subject to further notice and confidentiality procedures under the Rules of Procedure. As the suspension is public discipline, notice will be included in the November 2010 issue of the *Actuarial Review*. 

# Board Approves Recommendations of the Task Force on Associate Rights

**TORONTO, On.**—At its September 13-14, 2010 meeting, the Board received the report of the Task Force on Associate Rights. The Task Force was established in response to issues identified through the 2008 Quinquennial Membership Survey and charged with evaluating how best to ensure fair representation of Associates within the CAS, with consideration to voting rights and opportunities for involvement.

Two of the recommendations made by the Task Force and approved by the Board will require changes to the CAS Constitution and Bylaws. In order to be adopted, these proposed changes require an affirmative vote of 10% of the Fellows or two-thirds of the Fellows voting, whichever is greater.

Specifically, the Board charged the Executive Council with preparing proposed changes to the CAS Constitution and Bylaws that would:

- Give Associates the right to vote either upon attainment of Fellowship or five years after they are recognized as Associates, whichever occurs first.
- Allow all voting members to be eligible to be elected members of the Board.

In addition, the Board took action on recommendations related to membership on committees and the right to hold officer positions. In particular:

- The Board approved the motion to expand the Nominating Committee from seven to nine members, allowing either Associates or Fellows to fill the positions currently filled by at-large Fellows. At least one of the six at-large members must be an Associate. This change is effective immediately.
- The Board approved the recommendation of the Executive Council that only Fellows and the Executive Director may be officers of the CAS, thereby expressing that Associates should not be eligible to serve on the Executive Council.

In making its recommendations, the Task Force on Associate Rights and the Executive Council considered a number of issues that guided their decision that the rights of Associates should be expanded. These include:

- Current and historical sizes of the Associate population, including the number of Associates who have stopped taking exams and are not expected to achieve Fellowship (i.e., Career Associates);
- History of significant contributions by Associates to the CAS and the actuarial profession;
- Lack of representation within the CAS for Associates, while they pay full dues; and
- Need to assure that participation in CAS governance does not jeopardize the highest professional standards in the eyes of the external public.

The changes requiring revisions to the CAS Constitution and Bylaws were presented to the Fellows for approval in 2006, however, the changes were not approved as they failed to achieve the required majority. The Task Force on Associates Rights believes that this vote was clouded at the time by concerns by the membership over the possible elimination of the ACAS designation, which was being contemplated by the Board as it considered moving to one class of membership. The CAS Board has since confirmed its commitment to the ACAS designation. Given the time since the last vote and the elimination of the uncertainty about the continued existence of the ACAS designation, the Task Force recommended, and the Board of Directors agreed, that it is appropriate for the CAS to revisit this issue.

The complete report of the Task Force on Associate Rights is available for member review on the CAS Web Site. 



# Four Points, Two Distances

**H**ow many ways are there to arrange four points in a plane so that there are exactly two possible distances between pairs of points? Arrangements that are rotations, expansions, or contractions of each other are considered the same. Here's one example: the four corners of a square define two distances—the side lengths are one distance and the diagonals are another. Four points on a straight line, with a uniform distance between adjacent points, does not work—that arrangement defines three distances.

I am told that most people who try to solve this puzzle miss at least one arrangement, so be careful!



## Martin Gardner

The puzzle was as follows:

My wife and I recently attended a party at which there were four other married couples. Various handshakes took place. No one shook hands with himself (or herself) or with his (or her) spouse, and no one shook hands with the same person more than once. After all the handshakes were over, I asked each person, including my wife, how many hands he (or she) had shaken. To my surprise each gave a different answer. How many hands did my wife shake?

Robert Thomas' solution is as follows:

You have 9 people with 9 answers, all different. So the outcomes are  $\{0, 1, 2, 3, 4, 5, 6, 7, 8\}$  since 8 is the maximum number of handshakes.

First Couple: Someone has 8 shakes, their spouse must have zero because everyone else has 1 already.

Second Couple: Both start with 1. Someone has to have 7, so they shake every remaining hand but their spouse's, giving everyone but their spouse 2 and thus their spouse is 1 and done.

Next couple: Both start with 2. Someone has to have 6. One of them shakes the next two couples' hands with 2 in the bank, their spouse has 2 already and is done since the remaining people have 3.


Next Couple: Both start with 3. Someone has to have 5. One shakes the next couples' hands, the spouse has 3 already. For the last couple each has 4.

Last couple: Each has 4.

Since everyone gave a different answer, the "last couple" must be the speaker and his wife and each have 4.

Orin Linden reminded me that he had suggested this problem when I first ran it in August 1987.

David Uhland generalized the problem to  $n$  couples and showed that the spouse shook hands with  $n - 1$  people.

Amy Angell, Charles Bernatchez, John Captain, Bob Conger, Sol Feinberg, Walter Fransen, John Jansen, Rob Kahn, Frank Karlinski, Stuart Klugman, Vant Lammers, John Nauss, Dat Tien Nguyen, David Oakden, Rachel Tritz Rutledge, Zac Rutledge, Eric Savage, Matt Schutz, Joan Skurnick, Bryan Starke, Rob Thomas, Kimberley Ward, Chad Wilson, Ian Winograd, and Walter Wright also solved the puzzle. 

# Baseball Biographer

**J**ohn Tierney has been a serious baseball fan since he was about eight years old, when his father took him to Yankee Stadium. As a boy, he read every baseball biography contained in the local branch of the Brooklyn Public Library. This continuing interest led him to join the Society for American Baseball Research (SABR) in 1989. He had become aware of SABR through the publications of Bill James, the man who first popularized statistical analysis of baseball data. Despite his actuarial background, John has been interested primarily in the social context of baseball in American society, rather than the statistical side of the game. Nevertheless, he can do quite well in most baseball trivia contests.

After joining SABR he began collecting books on baseball—fanatically, according to his wife. His baseball library now numbers more than a thousand volumes. His children have questioned the actuarial odds of his living long enough to read them all. After a while, he began feeling guilty about being a consumer of other people's research while not making any contributions to the supply of baseball literature. He considered writing a biography of Mel Ott, who had been his father's childhood hero. But while he was contemplating the project, two brief but interesting biographies of Ott were released, and he decided to look for another subject.

His eldest son matriculated at Colby College in the fall of 2002. While reading about the history of the school, he came across the name of John Wesley “Colby Jack” Coombs, undoubtedly the college's most famous athlete. He recognized the name, as Coombs' book on baseball strategy was in his collection. Further research taught him that Coombs had been a quality major league pitcher in the early twentieth century, particularly while leading the Philadelphia Athletics to the pennant in 1910 and 1911, with 59 victories. He contributed to their World Series championships both years, winning four games. Unfortunately, in the spring of 1913 Coombs contracted typhoid fever, for which there was no cure at the time, and nearly died. He missed almost two full years of his career, and was not the same dominant pitcher when he returned to action in 1915 for the Brooklyn Robins, although he won a World Series game

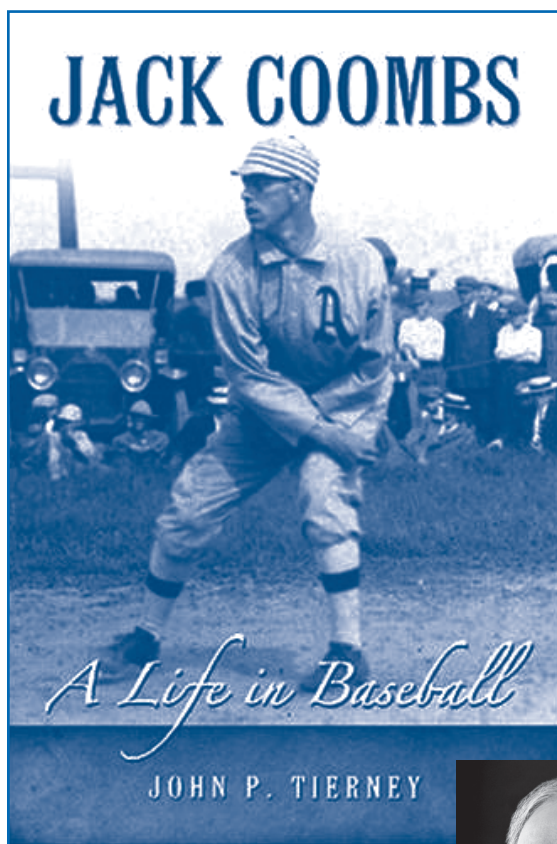
for them in 1916. (From 1914 to 1931, the Dodgers were often referred to as the Robins, in honor of their manager, Wilbert Robinson.) Connie Mack, who managed the Athletics (and many eventual Hall-of-Famers) for fifty years from its inception in 1901, believed that Colby Jack was also worthy of inclusion at Cooperstown.

A few years after coming across Coombs' name, John got down to serious research. A chance Internet search in 2005 uncovered the fact that Coombs had a great nephew living in Kennebunk, Maine. Nelson Wentworth, the great-nephew, had written to Colby College's Alumni magazine to inform them of an error the magazine had made regarding Coombs' family history. In short order, John was having breakfast in Kennebunk with Nelson and his brother Donald. Within a week John was fully committed to writing the book.

The Wentworth brothers shared many personal anecdotes regarding their “Uncle John,” and Donald had inherited much of Coombs' personal baseball and family memorabilia. They provided texture and context to the story. Through their stories, Jack Coombs became more than just a successful ballplayer. Jack Coombs the person was intelligent, articulate, generous, loyal, and dedicated—a real hero in the traditional sense. Subsequent research confirmed this view; Coombs was respected and admired by all who knew him, friend and opponent alike.

John spent a number of brief vacations doing onsite research at Colby College, Duke University, and the National Baseball Hall of Fame. The research in Cooperstown was particularly enjoyable. He was there in November, when Cooperstown is truly a sleepy little village. Whenever he needed a break from his work in the Hall of Fame library, John wandered





around the Hall of Fame exhibits, which he had pretty much to himself. It was an inspiring experience to view the plaques of the Hall of Fame members when the place was quiet.

John learned that there was much more to Coombs' life than his major league career. After graduation from Colby College, Coombs had planned to get a graduate degree in chemistry from MIT. However, Connie Mack was a native of central Massachusetts, and Mack's brother came across Coombs when Coombs was pitching in semi-professional leagues during the summers to help pay for his college education. Mack enticed Coombs to forego further education with an offer of \$2,400 (big money for an untested rookie in those days) and the fatherly advice that, "Chemistry is a hard and tiresome road to independence." Coombs spent the rest of his life in baseball,




*John Tierney*

and never looked back on his decision.

After leaving major league baseball Coombs became baseball coach at Duke University in 1928. Coombs was seamlessly able to function in the company of both professional athletes, who were generally considered uneducated ruffians, and university professors. At Duke he was frequently a guest lecturer in courses in economics and law, and represented the university at many major functions. He frequently recruited Duke University's president to umpire practice games! Among his circle of friends were the Walkers of Kennebunkport, forebears of two future U.S. presidents. However, some of his personal correspondence with friends indicated that he could speak and write in the coarse language that his fellow ballplayers would understand.

Coombs' position at Duke led him to write an instructional manual titled, *Baseball: Individual Play and Team Strategy*. It expressed his philosophy for teaching his players the "right way" to play the game. The first edition was published in 1937, and subsequent editions, including a Spanish language version, were published through 1951. It was a popular textbook (including problem sets!) on how the game should be played, targeted to coaches and players alike. Coombs also taught a course at Duke on baseball for nonathletes, and high grades were hard to come by. His book is no longer in print, although copies are fairly easy to find on the Internet.

Although John has spent most of his career in a consulting environment, he did not keep track of his hours on the project. It was a fun hobby on which he spent much of his free time. The process of researching and writing took about a year and a half. Getting the book published took another six months. The book is titled *Jack Coombs: A Life in Baseball*, published in paperback in 2008 by McFarland & Company. A synopsis of the book is available at the publisher's Web site and can be accessed at <http://www.mcfarlandpub.com/book-2.php?id=978-0-7864-3959-1>.

John Tierney is senior vice president and chief actuary at Quincy Mutual Fire Insurance Company. John has been a volunteer on various CAS committees since attaining his Fellowship in 1979; he is currently a member of the CAS Board of Directors. 



# In Celebration of Volunteers: The CAS 2010 Volunteer Honor Roll

We are an association of people, professionals, and friends.

Since the founding of the CAS in 1914 volunteers have been the main life force sustaining the society through its various dimensions of growth—in the examination process and in the variety of continuing education activities as well as in supporting the sheer growth in membership. As a result members of the CAS through their numerous volunteer activities essentially direct all phases of CAS operations.

In one particular year, 902 CAS members volunteered to fill 1,359 positions. An effort of this scale, which is quite typical, generates a continuous

need for volunteers. Each year about a third of these positions become available through normal rotation. These positions include the entire range of CAS activities: the examination committees, research and development activities, liaison representatives, and various program committees and speakers, who serve as faculty for these programs. We'd also like to thank AAA volunteers, meeting and seminar speakers, and Regional Affiliate program participants not listed here. We recognize that none of these activities can take place without the active participation of the many CAS volunteers and for this we thank you.

Roselyn M. Abbiw-Jackson  
Christina Dione Abbott  
Jennifer Lynn Abel  
Yazeed F. Abu-Sa'a  
Shawna S. Ackerman  
Jeffrey H. Adams  
Jeffrey R. Adcock  
Barbara J. Addie  
Avraham Adler  
Martin Adler  
Marcus R. Aikin  
Justin L. Albert  
Neil C. Aldin  
Robert Aldoriso  
Terry J. Alfuth  
Jasmin Alibalic  
Mark S. Allaben  
Craig A. Allen  
Ethan D. Allen  
Sheen X. Allen  
Melanie Allred  
Fernando Alberto Alvarado  
Brian Alvers  
Athula Alwis  
Timothy Paul Aman  
Denise M. Ambrogio  
Vagif Amstislavskiy  
Gwendolyn L. Anderson  
Kevin L. Anderson  
Kimberly Borgelt Anderson  
Mark B. Anderson  
Paul D. Anderson  
Scott C. Anderson  
Bradley J. Andrekus  
Michael E. Angelina  
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John G. Aquino  
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Nancy L. Arico  
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Steven D. Armstrong  
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Lawrence J. Artes  
Nolan E. Asch  
Mohammed Q. Ashab  
Carl X. Ashenbrenner  
Martha E. Ashman  
Megan Laurissa Astudillo  
Joel E. Atkins  
David Steen Atkinson  
Yanfei Z. Atwell  
Timothy Atwill  
Craig Victor Avitabile  
Waswate Ayana  
Robert Joseph Azari  
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Nathan J. Babcock  
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Gregory S. Babushkin  
Silvia Bach  
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John L. Baldan  
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Emmanuel Theodore Bardis  
Emily Christine Barker  
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Irene K. Bass  
David B. Bassi  
Angelo E. Bastianpillai  
Todd R. Bault  
Edward Baum  
Thomas R. Bayley  
Rick D. Beam  
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Nicolas Beaudoin  
Amelie Beauregard-Beausoleil  
Allan R. Becker  
Esther Becker  
John A. Beckman  
Albert J. Beer  
Nathalie Begin  
Aaron J. Beharelle  
Saeeda Behbahany  
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Scott C. Belden  
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Michael J. Belfatti  
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Erin Page Bellott  
David M. Bellusci  
Guillaume Benoit  
Abbe Sohne Bensimon  
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Jason E. Berkey  
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Chris M. Bilski  
Kevin Bingham  
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Kirk D. Bitu  
Linda Jean Bjork  
Suzanne E. Black  
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Gavin C. Blair  
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Jonathan Everett Blake  
Ralph S. Blanchard  
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Michael J. Blasko  
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Carol Blomstrom  
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Peter George Blouin  
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Neil M. Bodoff  
Christopher David Bohn  
Raju Bohra  
LeRoy A. Boison  
Nebojsa Bojer  
Ann M. Bok  
James M. Bolland  
Rachel Marie Boles  
Tapio N. Boles  
Stephanie Jo Odell Bolstridge  
Caleb M. Bonds  
James Parker Boone  
Joseph A. Boor  
David R. Border  
Peter T. Bothwell  
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Roger W. Bovard  
Kimberly Anne Bowen  
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David R. Bradley  
J. Scott Bradley  
Lori Michelle Bradley  
Nancy A. Braithwaite  
Paul Braithwaite  
Betsy A. Branagan  
Erich A. Brandt  
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Donna D. Brasley  
 Rebecca Schafer Bredehoeft  
 Paul J. Brehm  
 Justin J. Brenden  
 John R. Broadrick  
 Linda K. Brobeck  
 Dale L. Brooks  
 Tracy L. Brooks-Szegda  
 Craig R. Brophy  
 Brian Z. Brown  
 Lisa A. Brown  
 Robert L. Brown  
 Lisa J. Brubaker  
 Stephen J. Bruce  
 David C. Brueckman  
 Elaine K. Brunner  
 Charles A. Bryan  
 Matthew D. Buchalter  
 John W. Buchanan  
 Russell J. Buckley  
 Suejeudi Buehler  
 Morgan Haire Bugbee  
 Claude B. Bunick  
 George Burger  
 Angela D. Burgess  
 Mark Burgess  
 Anthony J. Burke  
 Kevin Scot Burke  
 John C. Burkett  
 Christopher J. Burkhalter  
 Elliot R. Burn  
 William E. Burns  
 Hayden Heschel Burrus  
 Michelle L. Busch  
 Douglas James Busta  
 Anthony R. Bustillo  
 Jarrett Durand Cabell  
 Arthur R. Cadorine  
 Heather Rae Caffoe  
 DuoDuo Cai  
 Laura N. Cali  
 James E. Calton  
 Jeanne H. Camp  
 Robert Neil Campbell  
 Alp Can  
 Chuan Cao  
 Jessica Yiqing Cao  
 Anthony E. Cappelletti  
 Ruy A. Cardoso  
 Christopher S. Carlson  
 Jeffrey R. Carlson  
 Kenneth E. Carlton  
 Louis-Philippe Caron  
 William M. Carpenter  
 Kristi Carpine-Taber  
 Daniel Carr  
 William Brent Carr  
 Benoit Carrier

Matthew R. Carrier  
 Sharon C. Carroll  
 Laura M. Carstensen  
 Jeffrey H. Carter  
 Jeffrey M. Casaday  
 Simon Castonguay  
 Jennifer L. Caulder  
 Patrick J. Causgrove  
 Lauren Jill Cavanaugh  
 Maureen A. Cavanaugh  
 Thomas L. Cawley  
 Paul A. Ceaser  
 R. Scott Cederburg  
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 Christina Lee Centofanti  
 Luyuan Chai  
 Keith J. Champagne  
 Bernard Lee Chan  
 Michael Tsz-Kin Chan  
 Tak Wai Chan  
 Andrew Martin Chandler  
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 Frank H. Chang  
 Hsiu-Mei Chang  
 Hungchi Andy Chang  
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 Hong Chen  
 Michael Keryu Chen  
 Yung-Chih Chen  
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 Houston Hau-Shing Cheng  
 Joseph S. Cheng  
 Yvonne W.Y. Cheng  
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 Jennifer L. Cheslawski  
 Denise L. Cheung  
 Leong Yeong Chew  
 Jeanne D. Chiang  
 Brian Chiarella  
 Kin Lun (Victor) Choi  
 Wanchin W. Chou  
 Martin P. Chouinard  
 Wai Yip Chow  
 Wasim Chowdhury  
 Gregory R. Chrin  
 Shawn T. Chrisman  
 Stephan L. Christiansen  
 James K. Christie  
 Kevin J. Christy  
 Kuei-Hsia Ruth Chu  
 Wei Chuang  
 Kasing Leonard Chung  
 Gary T. Ciardiello  
 Rita E. Ciccariello  
 Gregory J. Ciezadlo  
 Edward D. Cimini

Raul Cisneros  
 Brian A. Clancy  
 Stephen Daniel Clapp  
 Dave R. Clark  
 David Alan Clark  
 Eric R. Clark  
 Jennifer Elizabeth Clark  
 Jason Arthur Clay  
 Kay A. Cleary  
 Kevin M. Cleary  
 Susan M. Cleaver  
 Donald L. Closter  
 Annie Chang Cloud  
 Guy Cloutier  
 Michael A. Coca  
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 Joseph F. Cofield  
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 Arthur I. Cohen  
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 Larry Kevin Conlee  
 Eugene C. Connell  
 Kirk Allen Conrad  
 Ann M. Conway  
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 Cody W. Cook  
 Richard Jason Cook  
 Christopher L. Cooksey  
 Christopher William Cooney  
 Kevin A. Cormier  
 Charles Cossette  
 J. Edward Costner  
 Jeffrey Alan Courchene  
 Martin L. Couture  
 Chad J. Covelli  
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 Ryan J. Crawford  
 Catherine Cresswell  
 Daniel A. Crifo  
 Susan L. Cross  
 Patrick J. Crowe  
 Jeanne E. Crowell  
 Shaun P. Cullinane  
 David A. Cummings  
 Jonathan Scott Curlee  
 Robert J. Curry  
 Aaron T. Cushing  
 Kelly K. Cusick  
 Randi M. Dahl

David W. Dahlen  
 Wayne Alfred Daigneault  
 Terri J. Dalenta  
 Thomas V. Daley  
 John Edward Daniel  
 Stephen P. D'Arcy  
 Melisa L. Darnieder  
 Todd H. Dashoff  
 Edgar W. Davenport  
 Chad Alan Davis  
 George E. Davis  
 Robin Davis  
 Willie L. Davis  
 George Lawrence De Graaf  
 John D. Deacon  
 Curtis Gary Dean  
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 Michael A. DeConti  
 Stephen P. Decoteau  
 Thomas J. DeFalco  
 Kris D. DeFrain  
 Jeffrey F. Deigl  
 Robert V. DeLiberato  
 Michael Brad Delvaux  
 Michael L. DeMattei  
 Paige M. DeMeter  
 Germain Denoncourt  
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Sheri Lee Scott	Sharon L. Sowka	Yuan-Yuan Tang	Eric L. Vaagen
Suzanne Mills Scott	Joanne S. Spalla	Varsha A. Tantri	Tony A. Van Berkel
Steven George Searle	Michael P. Speedling	Marcus A. Tarrant	Daniel M. Van der Zee
Terry Michael Seckel	David Spiegler	Catherine Harwood Taylor	John V. Van de Water
Ernest C. Segal	Catherine E. Staats	Jane C. Taylor	William D. Van Dyke
Stephen Ray Segroves	Elisabeth Stadler	Megan Elizabeth Taylor	Jeffrey A. VanKley
Mandy Mun Yee Seto	Barbara A. Stahley	Rae M. Taylor	Chris John Van Kooten
Richard H. Seward	David Chan Stanek	David M. Terne	Justin M. VanOpdorp
Ahmad Shadman	Thomas N. Stanford	Karen F. Terry	Kevin John Van Prooyen
Theodore R. Shalack	Michael William Starke	Patricia A. Teufel	Oakley E. Van Slyke
Vladimir Shander	Andrew Jon Staudt	Dan Omer Tevet	Kanika Vats
Jin Shao	Maureen Brennan Stazinski	Neeza Thandi	Richard L. Vaughan
Mark R. Shapland	Tracey Ellen Steger	Jonas F. Thisner	Trent R. Vaughn
Matthew D. Sharp	Christopher M. Steinbach	Daria Lynn Thomas	Gaetan R. Veilleux
Bonnie C. Shek	Samantha Elizabeth Steiner	Edward Daniel Thomas	Paul A. Vendetti
Clista E. Sheker	Julia Causbie Stenberg	John Frank Thomas	Gary G. Venter
Melissa Lillian Shelley	John A. Stenmark	Robert M. Thomas	Steven J. Vercellini
Quan Shen	Ian P. Sterling	Shantelle Adrienne Thomas	Mark Alan Verheyen
Zilan Shen	Erik J. Steuernagel	Gordon C. Thompson	Jennifer S. Vincent
Xiaoyu Sheng	Laura A. Stevens	Kevin B. Thompson	Brian A. Viscusi
Michelle L. Sheppard	Charles Walter Stewart	Robert W. Thompson	Gerald R. Visintine
Brett M. Shereck	Michael Bryant Stienstra	Robby E. Thoms	Steven M. Visner
Harvey A. Sherman	Liana St-Laurent	Patrick Thorpe	William E. Vogan
Richard E. Sherman	Brian M. Stoll	Chris S. Throckmorton	Ryan Nolan Voge
Margaret Tiller Sherwood	Christopher James Stoll	Jennifer L. Throm	Jerome F. Vogel
Meyer Shields	Emily Ruth Stoll	John P. Tierney	Cameron J. Vogt
Jeremy D. Shoemaker	Deborah L. Stone	Malgorzata Timberg	David M. Vogt
Bret Charles Shroyer	Edward C. Stone	Phoebe A. Tinney	Allan S. Voltz
Raymond Bond Shum	Frederick M. Strauss	Dovid C. Tkatch	James C. Votta
Elizabeth Bomboy Shumaker	James P. Streff	Thomas C. Toce	Sebastian Vu
Peixi Si	Mark Stephen Struck	Levente Thomas Tolnai	Mary Elizabeth Waak
Paul Silberbush	Thomas Struppeck	Peter Tomopoulos	Michael G. Wacek
Martin M. Simons	Paul J. Struzzieri	Charles F. Toney	John E. Wade
Summer Lynn Sipes	Christopher J. Styrsky	Michael L. Toothman	Roger Wade
Jeffrey S. Sirkin	John Qiang Su	Jennifer M. Tornquist	Linda M. Waite
Lisa A. Slotznick	Yuchen Su	Christopher J. Townsend	Amy R. Waldhauer

Josephine M. Waldman  
Benjamin J. Walker  
Christopher P. Walker  
David G. Walker  
Glenn M. Walker  
Kathryn Ann Walker  
Kristie L. Walker  
Rhonda Port Walker  
Tice R. Walker  
Robert J. Walling  
Lisa Walsh  
Matthew J. Walter  
Mavis A. Walters  
Xuelian Wan  
Anping Wang  
Gary C. Wang  
HongTao Wang  
Jingtao (Ethel) Wang  
Min Wang  
Shaun S. Wang  
Xiaomin Wang  
Yang Wang  
Kimberley A. Ward  
Gabriel Matthew Ware  
Kelly A. Wargo  
David W. Warren  
Wade Thomas Warriner  
Monty James Washburn  
Nancy P. Watkins  
David J. Watson  
Lynne K. Wehmueller  
Chang-Hsien Wei  
Minwei Wei  
Thomas A. Weidman  
Scott P. Weinstein  
Robert S. Weishaar  
Thomas E. Weist  
Alfred O. Weller  
Elizabeth A. Wellington  
Joseph C. Wenc  
Mark S. Wenger

Scott Werfel  
Geoffrey Todd Werner  
Jean Patti West  
Jo Dee Westbrook  
Christopher John Westermeyer  
Dean A. Westpfahl  
Timothy G. Wheeler  
Amanda Jane White  
Charles Scott White  
Hugh G. White  
Jeffrey D. White  
Jonathan White  
Lawrence White  
Patricia Cheryl White  
Steven B. White  
Peter G. Wick  
Rosemary Gabriel Wickham  
John Spencer Wideman  
William B. Wilder  
Peter W. Wildman  
Ronald Harris Wilkins  
William Robert Wilkins  
Kendall P. Williams  
Michael Williams  
Rebecca R. Williams  
Robin M. Williams  
Shauna S. Williams  
Catherine M. Wilson  
Ernest I. Wilson  
Steven M. Wilson  
Cari Bergen Winebrenner  
John J. Winkleman  
Martha A. Winslow  
Brant Wipperman  
Chad C. Wischmeyer  
Timothy Wisecarver  
Kirby W. Wisian  
Trevar K. Withers  
Benjamin T. Witkowski  
Susan K. Woerner

Robert F. Wolf  
Kah-Leng Wong  
Simon Kai-Yip Wong  
Toby Wong  
Windrie Wong  
Arlene F. Woodruff  
Dorothy A. Woodrum  
Mark L. Woods  
Patrick B. Woods  
Micah G. Woolstenhulme  
Joshua C. Worsham  
Jimmy L. Wright  
Cheng-Sheng Peter Wu  
Jennifer X. Wu  
Xueming Grace Wu  
Jie Xiao  
Jianlu Xu  
Tong Xu  
Xinxin Xu  
Run Yan  
Linda Yang  
Ping Yang  
Yi-Chuang (Sylvia) Yang  
Yulai Yang  
Yuanhe (Edward) Yao  
Andrew F. Yashar  
Chung-Ye Scott Yen  
Kimberly Yeomans  
Andrew Yershov  
Gerald T. Yeung  
Ka Chun Yeung  
Shuk Han Lisa Yeung  
Vincent F. Yezzi  
Sung G. Yim  
Jeanne Lee Ying  
Richard P. Yocius  
Edward J. Yorty  
Guanrong You  
Joshua A. Youdovin  
Bryan G. Young  
Nora J. Young

Jiwei Yu  
Jonathan Kam Yu  
Yuan-Hung (David) Yu  
Bin Yuan  
Arvel D. Zacharias  
Ronald Joseph Zaleski  
Anton Zalesky  
Arthur J. Zaremba  
Michael R. Zarembner  
Navid Zarinejad  
Raisa Zarkhin  
Ruth Zea  
Doug A. Zearfoss  
Xiangfei Zeng  
Jin Zhang  
Juemin Zhang  
Junya Zhang  
Kun Zhang  
Li Zhang  
Qinnan Zhang  
Yan Zhang  
Yanwei Zhang  
Yi Zhang  
Yingjie Zhang  
Haixia Zhao  
Qin Zhao  
Wei Zhao  
Yue Zhao  
Jun Zheng  
Hongbo Zhou  
Yu Zhou  
Alexander Guangjian Zhu  
Li Zhu  
Xi Zhu  
John D. Zicarelli  
Steven Bradley Zielke  
Joshua A. Zirin  
Rita M. Zona  
Max Zormelo  
Barry C. Zurbuchen



# CAS 2010 Employer Honor Roll

The CAS is grateful for the support of employers who encourage their actuaries to volunteer their time and effort to the CAS. Here are two “snapshots” of these employers

## Top Ten Employers with the Largest Number of Fellows Volunteering

The Travelers Companies, Inc.  
Milliman, Inc.  
Towers Watson  
Liberty Mutual Group  
CNA Insurance Companies  
Allstate Insurance Company  
The Hartford  
ISO  
PricewaterhouseCoopers LLP  
Deloitte Consulting LLP

## Large Employers with at Least 50% of Fellows Volunteering

ACE Tempest Re  
Allstate Insurance Company  
Aon Global Risk Consulting  
Aon Risk Consultants, Inc.  
CNA Insurance Companies  
Deloitte Consulting LLP  
Ernst & Young LLP  
Farmers Insurance Group  
Guy Carpenter & Co. LLC  
ISO  
KPMG LLP  
Milliman, Inc.  
Munich Re America, Inc.  
Nationwide Insurance Company  
Oliver Wyman

Pinnacle Actuarial Resources, Inc.  
PricewaterhouseCoopers LLP  
QBE the Americas  
State Farm Insurance Companies  
Swiss Re  
The Hanover Insurance Group  
The Travelers Companies, Inc.  
Towers Watson  
United Services Automobile Association  
Willis Re, Inc.  
XL Insurance Company Ltd.  
Zurich North America





# Results of 2010 CAS Election

## Blanchard to Become CAS President; Teufel Voted President-Elect

**ARLINGTON, Va.**—Ralph Blanchard, who was voted in as president-elect in 2009, will become CAS president at the close of the 2010 CAS Annual Meeting. Patricia A. Teufel has been elected CAS president-elect.

Balloting for the 2010 CAS election closed on August 30 2010, and the CAS Tellers verified the election results. CAS Fellows elected C. K. “Stan” Khury, Ronald Kozlowski, Andrew E. Kudera, and Jeanne (Swanson) Crowell to the CAS Board of Directors. Immediate Past President Roger M. Hayne will chair the CAS Board. The following members were elected or re-elected by the board to serve as vice presidents:

- Leslie R. Marlo, Vice President-Administration
- David L. Menning, Vice President-Admissions
- Barry A. Franklin, Vice President-ERM
- Kris D. DeFrain, Vice President-International
- Nancy A. Braithwaite, Vice President-Marketing and Communications
- Chester John Szczepanski, Vice President-Professional Education
- Louise A. Francis, Vice President-Research and Development

These Fellows will assume their positions at the close of the 2010 Annual Meeting in Washington, DC.

A total of 1,166 Fellows voted in this year’s election, or 32% of the Fellows. This compares to 1,208 Fellows or 35% for last year.

According to the election procedures approved by the Board, all vote counts are released to the membership. These follow at left. [AR](#)



*Ralph Blanchard*



*Patricia A. Teufel*

President-Elect	
Patricia Teufel	908
Director	
C. K. “Stan” Khury	537
Andrew E. Kudera	494
Jeanne (Swanson) Crowell	457
Ron Kozlowski	403
James Merz	373
Jim Rowland	346
Kevin Burke	328
Jon Evans	312
Steven Kelner	266
Charles Gruber	261

### 25 Years Ago, From page 7

be championed, everything from air bags to air pollution. Our insight doesn’t have to be perfect; it’s just that we have to exercise greater care because we are the professionals.

People still speak of actuaries with a certain amount of

respect, even awe, because they view them as a breed apart.

As Kermit the Frog said, “It isn’t easy being green.” But we are, and we shouldn’t forget it. [AR](#)

# Riding the Waves of the Cycle

By Alice Underwood and Dave Ingram

In our last article, “We’re Going to Need a Bigger Boat” (*AR*, August 2010), we introduced four different perspectives on risk and argued that enterprise risk management must make room for each of the four. In part that’s because a restrictive definition of ERM—limited to only one of the four perspectives—would alienate the other three types of firms.

But there’s another reason to consider as well: the waves of economic cycles refuse to stand still.

## Changing Risk Environments

Those holding the pragmatist risk perspective see the waves of the risk environment as choppy and chaotic, while the risk reward managers believe that patterns can be discerned. Both groups are able to observe the same data—why do they form such different interpretations?

One reason is that, over time, the risk environment changes. A simplistic model of changes in the risk environment might posit

that either things are “normal” or they are “broken.” But an observer who holds the conservation perspective on risk might say that extreme hazard and danger are the “normal” state of affairs, while a profit maximizer would be more likely to argue that profitability is “normal” and hazardous conditions prevail only when the market is “broken.” The pragmatist considers chaos the normal state, interrupted by brief periods of apparent order; the risk reward manager expects results to be reasonably predictable most of the time.

Expanding the model to allow more than two states allows for the possibility that all four views can make sense. Consider a model with four risk regimes:

**Boom Times.** Risk is low and profits are going up.

**Recession.** Risk is high and profits are going down.

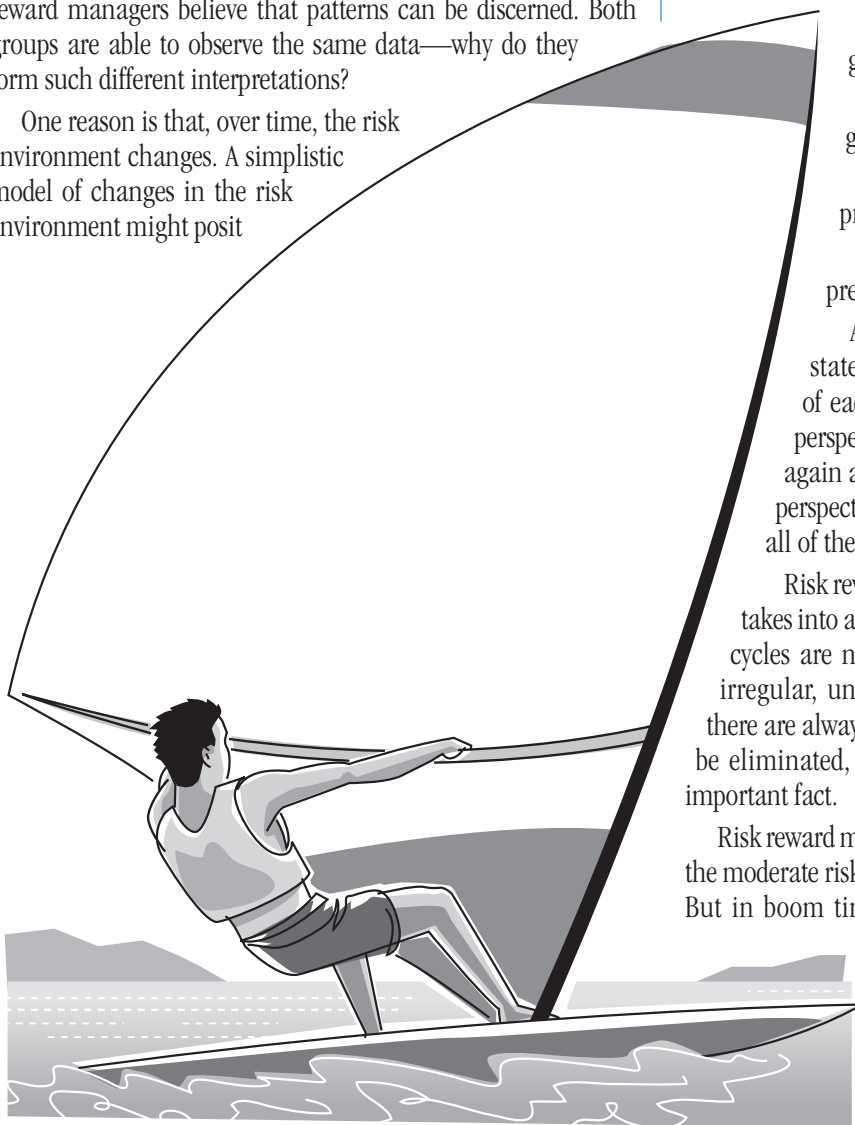
**Uncertain.** Risk is very unpredictable; profits might go up or down.

**Moderate.** Both risk and profit fall within a predictable range.

As the cycle moves through these four different states, external conditions match the worldview of each of the four different risk perspectives. Each perspective has been right part of the time and will be again at some point in the future. But none of the risk perspectives are perfectly adapted to external conditions all of the time.

Risk reward manager purists may object that their view takes into account the full range of the cycle. But economic cycles are not sine curves; the period and amplitude are irregular, unexpected “black swan” events do occur, and there are always “unknown unknowns.” Model risk can never be eliminated, and narrowly restricting ERM obscures this important fact.

Risk reward management-based ERM works especially well in the moderate risk environment when risks are fairly predictable. But in boom times, firms following such an ERM program will unduly restrict their business—not as much as conservation firms, but certainly more than profit maximization firms—and more aggressive competitors will be much more successful. In the recession environment, risk reward management



ERM again advocates a middle path; this may mean the firm sustains too much damage to take full advantage of the market when it turns. When times are uncertain, a firm following ERM based solely on risk reward management will be frustrated by frequent surprises and a world that does not quite fit the model. Competitors not tied to a particular view of risk will fare better, making decisions in the moment with maximum flexibility.

*Table 1—Best Strategy-Environment Match*

Risk Environment	Boom	Recession	Uncertain	Moderate
Risk Attitude	Profit Maximizer	Conservator	Pragmatist	Risk Reward Manager
Risk Management Strategy	Risk Trading	Loss Controlling	Diversification	Risk Steering

In any given risk environment, companies holding a risk perspective and following an ERM program aligned with external circumstances will fare best.

Some companies following strategies that are poorly aligned with the environment muddle along with indifferent results and survive until their preferred environment returns. Others sustain enough damage that they do not survive. A few change their risk perspective and ERM program to suit the new environment. Meanwhile, new firms enter the market with risk perspectives and ERM programs that are aligned with the current environment.

Since many of the poorly aligned firms shrink, die out, or change perspective—and since new firms tend to be well-aligned with the current risk regime—the market as a whole adjusts to greater alignment with the risk environment via a process of “natural selection.”

### Rational Adaptability

To thrive under all risk regimes, a firm ideally would follow a strategy of rational adaptability and be able and willing to do the following:

1. Identify changes in the risk regime
2. Shift its risk perspective
3. Modify its ERM program

The difference between rational adaptability and the process of “natural selection” described above is conscious recognition

of the validity of differing risk perspectives and proactive implementation of changes in strategy.


A company practicing rational adaptability recognizes that during boom times, risk really does present significant opportunities, and it is appropriate to empower the profit maximizers, focusing ERM efforts on risk trading to ensure that risks are correctly priced using a consistent firm-wide metric.

When the environment is moderate, the firm gives additional authority to its risk reward managers, using modeling results to reevaluate long-term strategies. In times of recession, the focus shifts to conservation: tightening underwriting standards and placing special emphasis on firm-wide risk identification and risk control. And in uncertain times, there is particular emphasis on diversification, keeping various options open.

### Crewing the Ship

Although rational adaptability may be an ideal solution, it requires the accomplishment of difficult tasks with precise timing, like a champion surfer judging the exact moment to catch the wave.

An alternative strategy is to build harmony from the discordant risk voices within the firm—and all four voices do exist within most firms. This means risk committees must include not just the risk reward managers, who believe in the risk models and the risk-steering programs that are based upon those models, but also those who distrust such models. All four perspectives should be represented and encouraged to speak out.

Every harmonious firm will create its own unique compromises among the four views. Different firms will choose different times and ways to honor the inherent caution of the conservators, to heed the pragmatists’ call for diversification, to follow the models of the risk reward managers, or to give the profit maximizers greater scope to grow. The resulting strategy will never seem perfectly “right” to any of the four groups. But as the waves of the cycle rise and fall, a harmonious crew—incorporating the strengths and insights of each of the four perspectives—will be able to prevent their boat from capsizing and keep it on course to continued success. 

# The Current Market for Actuarial Talent

## Part 2: Having the Competitive Edge and in Today's Economy

By Arthur J. Schwartz

**W**e continue our roundtable discussion of the actuarial job market with our roundtable of prominent actuarial recruiters. Our panel includes:

**Angie Wachholz**, from D.W. Simpson Global Actuarial Recruitment in Chicago. DW Simpson works on a global basis and is the largest firm specializing in actuarial recruitment. Angie is a senior recruiter. Her firm specializes in actuarial recruitment within all lines of business including property and casualty, life, health and pension, as well as all levels from entry to Fellowship. She can be reached at [Angie.wachholz@dwsimpson.com](mailto:Angie.wachholz@dwsimpson.com).

**Margaret Resce Milkint**, from The Jacobson Group in Chicago. Margaret is managing partner of The Jacobson Group, the nation's leading insurance search and staffing firm. Margaret handles executive management and actuarial searches on a national and international basis across all aspects of the insurance industry. She can be reached at [mmilkint@jacobsononline.com](mailto:mmilkint@jacobsononline.com).

**Jim Coleman**, from Nationwide Actuarial Search (NAS) in Las Vegas. His firm specializes exclusively in the placement of casualty actuaries anywhere in the country as well as some off-shore opportunities. NAS is well recognized in the casualty insurance industry and has been placing P&C actuaries for more than 25 years from students through Fellows of the CAS. He can be reached at [jim@actuary-recruiter.com](mailto:jim@actuary-recruiter.com).

**Pauline Reimer**, ASA, MAAA, from Pryor Associates in New York. Named a top recruiting firm by Dun & Bradstreet, Pryor has 40 years of insurance (P&C, Life, Health, Pensions, and Investments) experience. Pauline has headed the actuarial placement division since 1986, after working as an actuary in insurance and consulting firms. She is also a CAS Platinum Partner, on the SOA Entrepreneurial Actuaries Section Council, on the Executive Board of ASNY, and on the Advisory Board of Columbia University's Masters in Actuarial Science program. She can be reached at [paulinereimer@aol.com](mailto:paulinereimer@aol.com).

**Schwartz:** *How is the current economy affecting the students currently in college and recent college graduates? Should they try to pass one or more exams before graduation? Should they try to obtain an actuarial internship in the summer before graduating?*

**Wachholz:** Jobs are plentiful for entry-level candidates, but

the field is more competitive than it has ever been. More people are taking and passing the actuarial exams. Consequently more employers have raised the bar. Employers want at least one exam but more commonly two exams or even three exams. Employers are looking at the number of attempts too, and a GPA of at least 3.0, yet preferably 3.5. Some proficiency in computer software such as SAS or Visual Basic, and communication skills are imperative. Also, companies are looking more at local candidates. Our advice to entry-level candidates is to adopt a philosophy of continual improvement: keep taking your exams, honing your computer skills, and learning more about the industry. Have the mindset that it is not enough to be a strong candidate—be the best candidate. Take a look at your resume, identify some of the weaknesses, and improve those areas, so you can present a whole package—a well-rounded person, to prospective employers.

**Reimer:** There are literally thousands of applicants for each entry-level opening. If a candidate says, "I'll only look for a job in New York City," I'll respond, "Please, take concentric circles around that area" and keep expanding the geographical regions you are willing to consider. Actuarial internships are more important than ever before and give a candidate a distinct advantage in getting hired for an entry-level position. Also, we see companies less willing to offer immigration sponsorship at the trainee level. Presentation skills are so important. Many students are not aware of how to dress appropriately for an interview, unfortunately.

**Milkint:** There's more interest from employers in hiring a student who presents a "full package." Because there are more candidates, the bar has been raised. Candidates can have a couple exams plus an actuarial internship, but ultimately the person who is hired is the person who can communicate and can be seen as a future leader. Also because banking and investment banks are not hiring right now, I am encouraging my clients to over-hire on the entry-level positions right now. There will not be an over-abundance of candidates when banks start hiring again and can pay more for an entry-level position than an insurer can.

**Wachholz:** The "full package" concept is important in becoming hired not only at the student level, but even for a Fellow with 25 years' experience. Companies are looking at several dozen candidates at a time so you have got to really stand out. Yes, you have to be able to do the daily actuarial work, but you also have



to be able to give a presentation and communicate concepts to nontechnical audiences. This is especially true for actuaries who hold nontraditional positions in risk management, for example.

**Reimer:** Not only are there fewer entry-level openings in the banking and investment sectors right now, but jobs in computer companies and dot-coms are not as common as in the past. Those are additional reasons that so many more people are looking to be actuaries right now. In addition, we are the number one-ranked occupation in the United States, and priceless publicity is generated due to this fact.

**Coleman:** College students should strive to have credit for one to three exams before they graduate. This provides a clear advantage over those college students who have no exams. Advanced degrees, such as masters and doctorates, offer advantages to candidates in the more specialized areas of statistical modeling and research. Anything an entry-level person can do to distinguish them from other candidates at the same level will be exponentially advantageous to the candidate. They will be the ones hired first. This must be framed with the assumption that effective communications skills are part of the profile of the individual.

**Schwartz:** *What is appropriate dress today, especially considering the trend toward casual dress in the workplace?*

**Coleman:** For any interview the candidate must dress to impress. Dress well and dress professionally: suit and tie, shined shoes, clean shaven, clean hair, and clean hands. It's not business casual; it's not dressy casual. Some candidates just do not do this. Some business environments always dress casually but it should not be assumed it's acceptable for the candidate to present themselves in that dress. If there are any questions, clear it with your recruiter or even human resources at the company. Don't assume it will be okay—better to err on the conservative side.

**Reimer:** There are two interview situations when "business casual" dressing is acceptable: if the hiring company advised the candidate in advance that "dressing down" is okay (often because the candidate is coming in on a Friday, which is commonly a casual dress day), or if a candidate is "popping in" for a short interview, say just during a lunch hour. But for a half-day or full-day interview, it's important to put your best foot forward and dress in full business attire.

**Wachholz:** Unless you are specifically told NOT to dress business professional, then you should always err on the side of dressier. It's important to put your best foot forward—really look

sharp and impressive. This is perhaps one way to be remembered and have an advantage over other candidates.

**Milkint:** It's all about attention to detail and getting the edge over other candidates. If another candidate has the edge, such as a suit and tie, take it to the next level: your shirt needs to be pressed and your shoes need to be polished. The details are so important!

**Schwartz:** *What do you mean by "communication skills?"*

**Wachholz:** That covers a range of things. For example, when you are in an interview, you are making eye contact, you are giving a firm solid handshake. Communication skills are paramount in a phone interview, which are sometimes more complex to navigate than an in-person interview. In a phone interview, you can't see the person so you really have to go above and beyond in stressing your communication skills. For example, if English is

not your first language, do what you can to improve your language skills. Given the competition in the current market, you want to make sure that you fine-tune each piece of your candidacy in order to really set yourself apart.

**Reimer:** Strong communication skills include voice projection, especially during a phone interview. If candidates acknowledge that they have an accent that could be a hindrance to obtaining or being successful in a new job, I have recommended that they attend an accent reduction course, to make sure that they have excellent vocal clarity. I've even recommended

that native English speakers may want to enroll in a communications course to present themselves in a more professional and articulate manner.

**Wachholz:** If they speak a language other than English in their home, I'll often recommend to candidates to spend at least two hours a day speaking only English at home. Talking about simple subjects around people you're comfortable with is a suggestion I'll often pass along to non-native English speakers. Another idea is to rehearse in front of the mirror or to write out your answers to possible interview questions in order to have a clear idea of what you'd like to convey.

**Coleman:** For candidates whose first language is not English, it's important to practice adequately. It's hard to change speech patterns in a matter of hours or even days. When some candidates get under pressure to expand explanations, they may default to more comfortable speech expressions and that's when they may

**The "full package" concept is important in becoming hired not only at the student level, but even for a Fellow with 25 years' experience. Companies are looking at several dozen candidates at a time so you have got to really stand out.**  
—Angie Wachholz

# Global CERA Web Site Launched

A new Web site has been launched to support the global Chartered Enterprise Risk Analyst (CERA) credential: <http://www.ceraglobal.org/>.

The CERA Web Site will be a valuable resource to many across the world, including:


- Employers who want to understand the benefits of employing CERA-qualified actuaries, the skills and knowledge that these actuaries possess, and the work they are able to perform in risk management;
- Actuaries who already hold the CERA credential;
- Actuaries and actuarial students with an interest in studying for the CERA credential;
- Actuarial associations who are not currently members of the CERA Treaty and want to learn how they can submit an application to join the Treaty.

As recognition of the opportunities presented by the CERA credential grows, the Web site will be key in promoting the work of CERA actuaries across the world, highlighting their place at the forefront of enterprise risk management.

Among the many site resources, the “Meet a CERA” feature profiles individual CERAs, including their backgrounds and the work that they do. Companies seeking to hire a CERA will be able to use the site to verify individuals’ CERA credentials. Web site users

can access articles and papers on current CERA developments, an interactive map of participating CERA associations, and links to the individual associations. Those considering a CERA qualification can find routes to CERA qualification, a detailed syllabus with chief learning objectives, and links to further reading. The site also includes the actuarial associations in the CERA Treaty, those offering the credential, and those expected to do so in future.

The CAS has recently submitted an application to become an Award Signatory and no official timeline for completion of the review has been announced. Once the review is completed and the international Board has approved the application, the CAS may begin awarding the CERA designation.

The CERA concept was first developed in the U.S. by the Society of Actuaries, which joined with the national associations of other leading countries to create the CERA Treaty Board in November 2009. The 13 associations currently involved are: Institute of Actuaries of Australia; Canadian Institute of Actuaries; Institute of Actuaries of France; German Actuarial Society; Israel Association of Actuaries; Institute of Actuaries of Japan; Mexican Association of Actuaries; Actuarial Society of the Netherlands; Actuarial Society of South Africa; Swedish Society of Actuaries; Institute and Faculty of Actuaries, U.K.; Casualty Actuary Society, U.S.; Society of Actuaries, U.S. 

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## Roundtable Discussion, From page 29

lose the listener.

**Milkint:** Written communication is critical. For example, e-mails are not texts. Any written communication with employers should always be professional and formal. That does not mean your message cannot be warm and approachable. Your grammar and your spelling should be impeccable, and “you” is not “u.”

**Wachholz:** There’s a level of business etiquette that should always be present in all communication—be this verbal or written. More and more we are seeing companies requesting writing samples from candidates so that companies can assess their writing abilities before bringing them on board.

**Milkint:** Communication skills are holistic. It’s how you speak, how you present, and how you respect your audience. For

example, is your interview one-on-one, or is there a small group around a table interviewing you? Are you making eye contact with people all around the table? We could have a single discussion on communication skills!

**Wachholz:** Yet another aspect of communication skills is being well prepared for the interview. This means looking at the company Web site, understanding the role they are hiring for and having questions prepared for the interviewers—this shows a sincere interest in both the company and the position. If you do this, you are going to impress the decision makers involved in hiring and you are going to gain a distinct advantage.

**Schwartz:** *So do some homework on the company before*

**Roundtable Discussion, page 31**

*you go on the interview.*

**Reimer:** Not just “some” homework, but a lot of homework. When I first became a recruiter 24 years ago, there was no such thing as the Internet. I remember providing an invaluable service by educating candidates about the intricacies, history, and financial statistics of the prospective company before the interview. If they are asked on the interview, “What do you know about our company?” they should be able to outline at least five facts about the hiring organization.

**Wachholz:** There’s that competitive edge issue again, you are going up against two dozen or three dozen other candidates and you have to stand out. This means that you’ve got to prepare for the interview and really portray yourself as “this is the position you want!”

**Coleman:** They must have well-considered questions. If they are asked during the interview if they have questions, they must always answer in the affirmative: yes! Saying “no” reflects poorly and may indicate the candidate is not fully engaged or is not interested. Even if the candidate just reiterates something just spoken about, they must have questions to demonstrate that they have the ability to communicate and to express themselves clearly.

**Reimer:** Asking questions shows intellectual curiosity. It is definitely a deal killer if you have no questions to ask. Even if you interview with six hiring authorities on the same day, you still have to have questions prepared for that sixth interviewer because to him or her, you are his or her only interview that day.

**Wachholz:** It’s also important that you are as engaging with the sixth person that you interview with that day as you are with the first person. While a day of interviewing can be exhausting, keeping up your own momentum and enthusiasm is a significant piece of the interview process.

**Reimer:** Schools do not emphasize grammar as much today. Many people do not know where to place a comma or apostrophe! To be successful professionals, I have recommended that some actuaries enroll in business writing classes.

**Schwartz:** *Is there any significant unemployment in the profession? If so, are there any underlying areas of practice that are more affected? What is the employment outlook going forward?*

**Coleman:** Consulting is an area that we have seen a lot of people released from. Now, those firms are hiring back but oftentimes at lower salaries. Quite a few of those released people are still in the job market. Frequently they are more senior people with fewer years to retirement, and some companies see them as less cost-effective than more junior people who don’t necessarily have the same level of skills but would earn less money.

Companies make hiring decisions based on many factors and pay, age, productivity, and position effectiveness are just some of them. A candidate must strive to be a “total package.”

**Milkint:** In P&C, unemployment is not significant. An unemployed P&C actuary with experience will land a job pretty quickly.

**Wachholz:** There are definitely actuaries who are unemployed for several reasons—layoffs, being let go for poor performance, etc. What’s important is that you position yourself as a well-rounded actuary who has the business acumen and the communication skills to wow not only their current, but also their future employers.

**Reimer:** I agree that because of the recession, companies are more prone to lay off employees who are not pulling their weight—either not performing up to par or students not passing exams in accordance with their company’s actuarial student guidelines—and they are calling it “layoffs.” Companies are doing it as a group, bunching it up so any one person does not feel as if they are singled out.

**Schwartz:** *What are some strategies for networking today that can possibly lead to friendships as well as employment referrals down the road?*

**Milkint:** Social networking is having an impact. People can build networks and friendships.

**Wachholz:** It’s important if you are a candidate to align yourself with a recruiter. This will not only assist in your search, but it’s also important to be kept aware of what’s out there with regard to positions—you are a better candidate if you know what types of positions are available. This means that you’re aware of the market and trends.

**Reimer:** Candidates submitting resumes to a company portal may not realize that they are comingling with hundreds of other resumes of candidates who may be totally unsuited for the position. A good recruiter can help a candidate bypass the portals and land an in-person interview. Also, unfortunately, we as recruiters cannot present candidates to companies if their resumes are already in the system. I would advise candidates to not submit their resume to company portals purely in the hope that one day there will be an opening. Instead, candidates should be selective about distributing their resume so a recruiter can present them for the right opportunity at the right time.

**Milkint:** There’s a value to the high-touch service that we provide as recruiters. The actuarial community is small and requires people who know how to navigate it, and that is what we are all very good at.

**Schwartz:** *Thanks to all for sharing your expertise!* 

# Proposed Foundational Statements

## Comments Due December 1

**C**AS members are being asked to consider an update to the CAS Statements of Principles. On September 20, a new exposure draft was provided for comment to CAS members. The exposure draft, approved for consideration by the CAS Board of Directors, addresses the CAS Statements of Principles. Titled, “Foundational Statements,” these statements address the work performed by casualty actuaries, the important aspects and characteristics of that work product and the environment in which those work products exist.

### What are the Foundational Statements?

Currently, the CAS has Statements of Principles addressing Ratemaking, Loss Reserving, and Valuations. These Statements were put into place about 25 years ago to characterize and guide actuarial work products, focusing on the prevailing areas of practice at that time. They consisted of elements of conduct, standards of practice, and statements describing actuarial work. While there have been infrequent modifications to them over that time period, the circumstances that existed at their inception no longer exist and have, in fact, changed dramatically. Among those changes are:

- Establishment of standards of actuarial practice in the U.S. and other countries where CAS members practice.
- Adoption of Codes of Professional Conduct for CAS members.
- Progress in the development, geographic spread, and scope of actuarial practice, including establishment of the Standards of Practice by other actuarial organizations.
- Establishment of regulatory rules and regimes impacting actuarial work products.

The CAS Board recognized that, in light of those changes, the Statements of Principles should be reviewed, recommendations made and, as appropriate, a revised set of Statements be drafted for exposure to the membership.

### What was done?

A task force of experienced actuaries addressed in considerable detail the substance of the existing statements, the existing Standards of Practice, and the change in scope of actuarial practice. A set of characteristics were formulated as a foundation for decisions and restatements and is part of the report in the exposure draft. The proposed statements were shaped through

the fact gathering, detailed reviews, discussion, and feedback on preliminary drafts from members, actuaries outside of North America, and nonactuaries.

### How are the Statements changing?

The name of the statements clearly changed to avoid confusion over both the definitions and usage of the term “principles” that exist in professional practices. The proposed Foundational Statements:

- will more aptly describe the essential features and underlying factors in which CAS members practice and provide work products.
- will explicitly express the essential characteristics of “risk” that appear in all of our practice areas.
- will no longer have Standards of Practice in their wording to avoid conflict with other sources of governing standards.
- will not refer to a specific work product (such as reserving or ratemaking), which recognizes that there are overriding similarities across work products; in addition, they should be robust with respect to future changes to the scope of actuarial work.
- avoid duplicating statements made in other areas that govern both the underlying sciences on which actuarial work is built and regulatory requirements that govern practice and content.
- Preserve the essential concepts in the existing statements.
- The exposure draft report includes a table to highlight the disposition of those concepts.

### What is the impact?

The essential concepts affecting members’ work products are maintained and still govern. These concepts may exist in the Foundational Statements themselves or in other venues, such as the ASOPs of the Actuarial Standards Board, as identified in the mapping in the report. The format has changed; however, members will still recognize the continuation of concepts contained within the existing statements.

It is important to note that upon adoption, the existing Statements of Principles will be replaced by these Foundational Statements.

These Statements were prepared for consideration by not only CAS members, but also to our publics, including those who both

**Foundational Statements**, page 33



# Jing, Lebens, and Lowe Awarded 2010 *Variance* Prize

**T**he *Variance* Editorial Board has selected the winning paper published in *Variance* in 2009. The *Variance* Prize has been awarded to Yi Jing, Joseph R. Lebens, and Stephen P. Lowe for “Claim Reserving: Performance Testing and the Control Cycle.” The paper describes how to construct sound performance tests within the reserving control cycle. Performance testing is an integral part of the actuarial control cycle associated with the loss reserving process. Performance testing of an actuarial projection method can provide empirical evidence as to the inherent level of estimation error associated with its forecasts. Testing of alternative methods provides formal assurance that the actuary is using the best methods for the given circumstance, and also provides insight into the appropriate weight to give to the indications produced by each method.

Yi Jing, FCAS, MAAA, is an actuarial consultant with Towers Perrin in the firm’s Hartford office. Since joining the firm in 2001, Ms. Jing has been focusing on reviewing reserves for primary and reinsurance business, performing economic capital evaluation, assisting clients in evaluating and optimizing reinsurance purchases. Ms. Jing holds a B.S. in management science from

University of Science & Technology in China and a M.S. in statistics from University of Illinois at Urbana-Champaign.

Joseph R. Lebens, FCAS, MAAA, is a principal with the Tillinghast Business of Towers Perrin in Hartford, CT. He leads the company’s ERM initiative for P&C insurers in North America as well as global ERM product development. His works includes assisting companies in determining capital requirements, allocating capital to business segment, addressing rating agency issues, conducting asset allocation projects, and evaluating reinsurance programs.

Stephen P. Lowe, FCAS, is the Managing Director of Towers Perrin’s global property/casualty consulting practice. With over 25 years of consulting experience, Steve has participated in a wide range of assignments, advising both insurance company and corporate clients on a variety of financial, product, and strategic issues. Steve is a former member of the Casualty Actuarial Society’s Board of Directors, and past Vice President of the American Academy of Actuaries.

The winning paper is published in *Variance* volume 3, no. 2, 2009. 



*Yi Jing*



*Joseph R. Lebens*



*Stephen P. Lowe*

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## Foundational Statements, From page 32

grant us the acceptance and credibility to practice our craft and who are the direct beneficiaries of our work.

The CAS Board is asking you to review the revised statements and is encouraging you to provide feedback. This exposure draft

is on the CAS Web Site (<http://www.casact.org/members/index.cfm?fa=viewArticle&articleID=1281&CFID=19401122&CFTOKEN=27365047>) and will be open for comment until December 1, 2010. Please send your comments [mboa@casact.org](mailto:mboa@casact.org). 


# CAS Trust Scholarship Awarded

The CAS congratulates Jason Rolfs, of Illinois State University, who was awarded a \$2,000 scholarship as part of the 2010 CAS Trust Scholarship Program.

The CAS Trust Scholarship objective is to further students' interests in the property/casualty actuarial profession and to encourage the pursuit of CAS designations. Each candidate must be a full-time student at a college or university, demonstrate high scholastic achievement, and have taken at least one exam.

A selection committee of CAS members assesses the candidates' academic records, two letters of recommendation, and four-page essay.

## Do you know a deserving scholarship candidate?

Scholarship applications for the 2011-2012 school year will be posted on [www.BeAnActuary.org](http://www.BeAnActuary.org) in early November. An announcement will be made when the scholarship application is available. 

## Job Announcement: Assistant Professor in Actuarial Science


**Job Summary:** The Department of Mathematics at the University of Connecticut invites applicants for a tenure-track position at the Assistant Professor level in Actuarial Science starting in Fall 2011. Highly qualified candidates in actuarial science, mathematics, statistics or related quantitative disciplines are encouraged to apply, but a clear commitment toward actuarial science is the focus of the search.

### Qualifications

**Minimum Qualifications:** A completed Ph.D. by August 23, 2011; demonstrated evidence of excellent teaching ability and outstanding research potential; and progress toward Fellowship in a recognized actuarial professional society. **Preferred Qualifications:** Industry experience; and the ability to contribute through research, teaching, professional involvement, and/or public engagement to the diversity and excellence of the learning experience.

**Appointment Terms:** Position is at the Storrs campus. Candidates may have the opportunity to work at the campuses located at Avery Point, Hartford, Stamford, Torrington, Waterbury, and/or any other University location.

**To Apply:** Applications and at least three letters of reference should be submitted online at <http://www.mathjobs.org/jobs>. Questions or requests for further information should be sent to the Hiring Committee at [actuarialhiring@uconn.edu](mailto:actuarialhiring@uconn.edu). Review of applications will begin on November 15, 2010, and continue until the position is filled.

The University of Connecticut is an Equal Opportunity and Affirmative Action Employer. We enthusiastically encourage applications from underrepresented groups, including minorities, women, and people with disabilities. 



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# SAGE Advice

Over the past few months, I have been reading some books and doing some thinking about how companies succeed, how they fail, and why they do either. I enjoy reading such books and have read many over the years.

Some years back, I came up with my own sequence of priorities for an organization. It can also apply to an individual, and has evolved over the years. I would like to introduce it to you in its current form.

The concept can be summarized by the acronym “SAGE.” SAGE stands for “Survive, Achieve, Grow, and Expand.” The order is important, not just to make the acronym work, but because that is the order in which organizations should consider the priority of importance.

## Survive

Survival of the organization should be its first priority. If it does not survive, it has no chance of fulfilling the purpose for which it was created. If it does not survive, growth and expansion are moot. I am reminded of the safety speech that the airline flight attendant gives concerning the air mask:

In the event of a cabin depressurization, a mask will fall from a panel above you. Place it on your face (etc.). If you are traveling with people who need assistance, such as children, *make certain you put your own mask on before assisting others.*

This last part of the talk reminds me that if I don’t survive, I can’t help others.

## Achieve

The next step is to achieve the goals and purposes of the organization. Remembering why the organization was established in the first place and achieving those goals is secondary only to the survival of the organization. For a stock company, it should be making a profit and returning value to the shareholder. For a mutual insurance company, it might be to provide an open insurance market for its owner and customers. A political party’s purpose is to get candidates elected that have a given political philosophy or meet a certain criteria.

## Grow

Growing the organization may or may not be important. Growth in this context means organic growth: increasing the activities you currently are performing, adding members or adding policyholders, and similar increases in what the organization is already doing or the customers it is already

dealing with. When the CAS adds Associate members who have met the entrance requirements, we are experiencing organic growth. An insurance company adding policyholders in existing markets is experiencing growth. Growth only makes sense if the organization is already attaining its purpose, meeting its goals, and is reasonably assured of survival.

## Expand

Expansion occurs when the organization takes on new territories, lines or types of business, or other activities outside its current scope of activities. Our entering into agreements with other national actuarial organizations, permitting cross recognition of actuaries, is such a venture. So is our expansion into enterprise risk management (ERM). A good argument could be made that ERM is growth, not expansion, which points to the “fuzziness” of the boundaries between these categories. The boundary between “growth” and “expansion” is not as important as the fact that neither should occur until the organization is fully meeting its objectives, and is assured of survival.

I have used this scheme for years in the workplace, and have watched certain companies that moved attention away from “survive” and “achieve” in favor of “growth and expansion,” only to falter and even fail.

This sort of categorization, along with its priorities, can be used in other places. It even applies to your personal work. Survive entails keeping your job and your credentials, realizing there may come a time where you have to choose between which you want to retain. Achieve your goals must be a personal statement like “be a respected and sought-after advisor within my company.” Growth would involve increasing the recognition and requests for actuarial work in the workplace, and expansion might be to add other functional areas to your scope of management, such as state filings or ERM.

My purpose here is to remind us that, in our activities as an organization, we should:

- Expand only if we are adequately handling growth, attainment of purpose, and survival.
- Grow only if we are attaining our stated purpose and insuring the survival of the organization.

Survival deals with the viability and credibility of the organization and its members. Are we seen as the experts in property and casualty actuarial pursuits? Are we becoming globally recognized as the preeminent resource in educating



## **“Quench the Thirst” Campaign Progresses; Scholarships Awarded**

*Nation’s High School Teachers Move “Building Your Future” to the Head of the Class*

Thanks to the generous support of actuaries and corporate sponsors through The Actuarial Foundation’s successful “Quench The Thirst” campaign, the “Building Your Future” high school financial literacy curriculum has reached more than 3,700 high school teachers across the country. This translates to a minimum of 90,000 students receiving a personal financial literacy education. Engaging and informative, “Building Your Future” gives teens a lifetime of sound personal financial and money management skills, covering topics such as credit cards, loans, investment risk and diversification, and bank accounts.

Teachers have definitely shown interest in the curriculum, but the question stood: Do they find the material interesting and engaging once they receive it? We wanted answers, so we surveyed nearly 2,000 teachers who received our materials and asked them to grade our work. Not surprisingly, they gave “Building Your Future” high marks. You can read a snapshot of their review in the latest issue of the Actuarial Foundation Newsletter (<http://www.actuarialfoundation.org/publications/newsletters.shtml>).

## **The “Thirst” Remains**

Thanks to the generosity of actuaries nationwide, we have made an impact with “Building Your Future,” but as word continues to spread about this valuable curriculum, more and more teachers are adding their names to the waiting list for materials. You can do your part by sponsoring a school on our list (<http://www.actuarialfoundation.org/programs/youth/BYFteachersurvey.shtml>).

## **Foundation Awards 39 Scholarships**

In the spirit of raising awareness for the actuarial profession and attracting the most talented young people to it, the Foundation is proud to announce it has awarded scholarships to 39 students for this school year. The Foundation awarded 23 Actuarial Diversity Scholarships, two Caribbean Actuarial Scholarships, 13 John Culver Woody Scholarships, and one Actuary of Tomorrow-Stuart A. Robertson Memorial Scholarship.

For a listing of this year’s scholarship winners, visit [http://www.actuarialfoundation.org/programs/actuarial/documents/TAF\\_Scholars\\_2010\\_web.pdf](http://www.actuarialfoundation.org/programs/actuarial/documents/TAF_Scholars_2010_web.pdf).

## **Stay Up to Date With the Foundation**

Get caught up on the Foundation’s recent activities in our latest newsletter and 2009 Annual Report and stay tuned to [www.ActuarialFoundation.org](http://www.ActuarialFoundation.org) for regular updates. 

## **ACTUARIAL FOUNDATION LINKS**

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### **Actuarial Foundation 2009 Annual Report**

[http://www.actuarialfoundation.org/  
publications/annual\\_reports.shtml](http://www.actuarialfoundation.org/publications/annual_reports.shtml)

### **Actuarial Foundation Web Site**

[www.ActuarialFoundation.org](http://www.ActuarialFoundation.org)



# CAS Working Party Releases New Open Source Loss Simulation Model

By Robert Bear, Chair, CAS Dynamic Risk Modeling Committee

In 2005 the Dynamic Risk Modeling Committee charged the Loss Simulation Model Working Party (LSMWP) with creating a simulation model of the processes of loss emergence and settlement (commonly known as loss development) that underlie the loss “triangles” and other statistics used to estimate loss reserves. The goal was to create a tool that researchers could use to generate claims that can be summarized into loss development triangles and complete rectangles, which would then be used to test loss reserving methods and models.

Soon after the 2010 Casualty Loss Reserve Seminar, the LSMWP completed its work with the release of the new open source Loss Simulation Model (LSM). A draft of the working party paper was presented at the CLRS, where the model was demonstrated, preliminary testing results were presented, and future testing and enhancements were discussed. The models, working party paper, model documentation are available on the CAS Loss Simulation Model Working Party Web Site at [www.casact.org/research/lsmwp](http://www.casact.org/research/lsmwp). (Model documentation includes help files providing an explanation of all model features and parameters, instructions for both running the model and customizing this open source software, and related seminars and papers.)


In October 2010, the Dynamic Risk Modeling Committee and the Committee on Reserves announced details of a 2011 Call for Papers on “Testing Loss Reserving Methods, Models and Data Using the Loss Simulation Model.” Proposals should describe the issue to be addressed (e.g., which of several loss reserving methods or models works best in a given loss reserving situation), the author’s approach to using the Loss Simulation Model, and any model enhancements or testing to be performed on the model.

This call for papers is intended to foster the use of the Loss Simulation Model and to generate publicly available improvements to the model. Authors of accepted papers or model enhancements may be invited to present their work at the 2011 Casualty Loss Reserve Seminar. This call will be unique in that there are specific areas that the Dynamic Risk Modeling Committee and the Committee on Reserves are looking to have addressed, in addition to seeing applications of the model to test alternative loss reserving methods and models.

It should be noted that if the user runs at least 100 iterations of the LSM, one can generate reserve percentile tables and customary statistics from the simulation results (e.g., mean, standard deviation, minimum, and maximum). These tables are distributions of payments made subsequent to the assumed valuation date, both by accident year and by calendar year and for all years combined. This key model feature enables users to test their models for estimating reserve variability. An important potential application of this feature would be in estimating capital needed to support reserves.

The LSMWP has developed a model that we hope will become a valuable tool in researching loss reserving methods and models. We anticipate that actuaries will use the LSM to:

- (1) better understand the underlying loss development process.
- (2) determine which methods and models work best in different reserving situations.
- (3) reflect this knowledge in evolving loss reserving practices.

*Robert Bear is a consultant whose firm RAB Actuarial Solutions LLC offers actuarial, reinsurance, and statistical modeling services. He may be reached at [rabsolutions@gmail.com](mailto:rabsolutions@gmail.com). *

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## In My Opinion, From page 35

casualty actuaries and conducting research in casualty actuarial science? Are our members recognized as the leading experts in the evaluation of hazard risk and the integration of hazard risk with strategic, financial, and operational risk? Are we valued

advisors?

In other words, are we meeting our organization’s goals and are we positioned to survive? 

# The Future of Insurance Regulation

By Henry Siegel, American Academy of Actuaries Vice President, Risk Management and Financial Reporting

**When it comes to the future, there are three kinds of people:**

- 1. those who let it happen,**
- 2. those who make it happen, and**
- 3. those who wonder what happened.**

—John M. Richardson Jr., Professor of International Development, American University

**R**ecent developments in insurance regulation have shown again the importance of actuaries being counted in the second of those categories. Insurance regulation is undergoing a transformation unprecedented since the first reserves were required. That transformation will impact nearly every aspect of our work and the business of our employers and customers. Without actuarial involvement and input those changes would have the potential to wreak havoc on our lives, our careers, and our profession.

## The Transformation

The coming transformation can be summarized as a move from national regulation to international regulation. The chart below illustrates this:

Regulation	Current	Future
Accounting	FASB	IASB
Solvency and Governance	NAIC/States	IAIS
Actuarial	ASB/AAA	IAA?

## Accounting

By now, most people know that the International Accounting Standards Board (IASB) has published an exposure draft of a revised accounting standard for insurance contracts and for financial instruments. Together, these standards, if adopted, would provide new accounting guidance for almost the entire balance sheet and income statement of publicly traded and many private insurance companies. Furthermore, in 2011 the Securities and Exchange Commission (SEC) will take another serious look at

adopting (or permitting use of) International Financial Reporting Standards (IFRS) for all U.S. companies. While the Financial Accounting Standards Board (FASB) is considering whether to agree with the IASB on how to handle certain accounting standards (most importantly for short-term P&C contracts and claims), the reality is that the IASB, which only came into existence in 2001, is now the predominant accounting standard setter for nearly everywhere in the world.

Actuaries interact with the IASB in several ways. The most important is through the International Actuarial Association (IAA). The Insurance Accounting Committee of the IAA, made up of actuaries representing countries worldwide, comments on exposure documents published by the IASB. The United States has representative on this committee from each of the five U.S.-based actuarial organizations and additional U.S. actuaries attend meetings and contribute as observers. The committee meets twice a year at different venues around the world and has additional meetings by phone or in person as required.

## Solvency and Governance

Until very recently, the U.S. paid little attention to the International Association of Insurance Supervisors (IAIS). Lacking any regulatory authority, the IAIS primarily produced papers of use by countries that lacked a robust existing regulatory authority.

This changed, however, when the G20 declared that the insurance regulation of all countries would be measured against the International Core

Principles (ICPs) of the IAIS. In 2009 the NAIC was indeed the subject of a review by the International Monetary Fund to determine if U.S. regulation was in accord with the ICPs. The verdict was largely positive with shortfalls in only three of 28 areas, none of them very material. Unfortunately, the IAIS is in the process of revising all its ICPs plus the standards and guidance that go with each of them; it's not clear the U.S. will do as well the next time without changes to the U.S. system.

What this means, therefore, is that suddenly the ICPs are

important and the NAIC needs to be careful that the IAIS doesn't include provisions in the revision that would be difficult for the U.S. to follow. For instance, a requirement that regulatory accounting adopt some features of IFRS could cause significant issues for U.S. regulators and companies.

Again, the IAA has committees that monitor developments at the IAIS and comment on draft ICPs, standards, and guidance. Like the accounting committee, the solvency and related committees meet twice a year in person and schedule additional meetings as needed.

### Actuarial

By now, it's obvious that the IAA is a primary interface between actuaries and the international regulatory authorities. The IAA, like the IAIS in some ways, was not originally established for that purpose. It has taken on that role because of the growth in importance of the IASB and IAIS. The IAIS and IASB are unlikely to contact the actuarial organizations of each separate country for input; instead they prefer to approach the IAA as representative of the entire profession. While the Academy and its counterparts in other countries have contributed comments to both the IAIS and IASB on their exposure documents, and the Academy has provided comments and advice to the NAIC representatives at the IAIS, it is still the IAA to whom the international organizations look.

In addition to the advice and comment the IAA provides, there is also a movement underway to create international actuarial standards of practice. The IAA has for some time had in place a process for creating standards of practice but until now it has produced nothing more than the equivalent of practice notes. With the creation of an IFRS for insurance contracts, however, it is possible that the IAA will produce standards of practice that could have an impact on actuaries worldwide. While the IAA has no authority to impose its standards, it could require members to adopt them. At the least, actuaries being examined in court may find their work being measured against those standards unless contrary standards exist in the countries they are practicing in. Again, no such standards have been produced but work is beginning on them in anticipation of a final IFRS for insurance contracts. The Accounting Committee of the IAA will largely be

responsible for producing whatever standards are produced on IFRS. There is not, as yet, any international equivalent of the Actuarial Standards Board.

At the same time, a small IAA task force is beginning to discuss the possibility of converging actuarial standards worldwide. This is likely to take a very long time and, since many people oppose the concept, may never actually happen. The fact that it is being considered, however, means that there is still more for U.S. actuaries to keep an eye on.


### Implications for U.S. Actuaries

The American Academy of Actuaries is responsible for coordinating the U.S. response to IAA proposals, drafts, and actions. Normally, those comments are prepared by the Solvency Committee, its ERM Subcommittee, or the Financial Reporting Committee of the Academy's Risk Management and Financial Reporting Council with the help of their counterparts in other practice areas. It is significant that the IASB and IAIS rarely deal with life insurance separately from P&C insurance (and rarely considers health insurance at all!). Instead they require a consolidated response dealing with insurance as a single industry.

If U.S. actuaries want to have a strong voice in international developments that affect us in the U.S., if we want to be those who make the future happen rather than those who wonder what happened, it is essential that we volunteer to help on the Academy committees that work internationally. As Academy Vice President for Risk Management and Financial Reporting, I particularly suggest that P&C actuaries need to become more involved in the work of the Risk Management and Financial Reporting Council. Right now, this work is being done only by a relatively small group of P&C actuaries. We need more. If you are interested, contact Tina Getachew at [Getachew@actuary.org](mailto:Getachew@actuary.org).

**"My interest is in the future because I am going to spend the rest of my life there."**

—Charles F. Kettering (*American engineer, inventor of the electric starter, 1876-1958*)

Henry Siegel, FSA, MAAA, is Vice President and Actuary for New York Life. 



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**May TBD, 2011**  
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**May 15-18, 2011**  
**CAS Spring Meeting**  
The Breakers  
Palm Beach, FL, USA

**September TBD, 2011**  
**Casualty Loss Reserve Seminar**  
Las Vegas, NV, USA

**November TBD, 2011**  
**CAS Annual Meeting**  
Minneapolis, MN, USA

## IN MEMORIAM

Rafel J. Balcarek  
(FCAS 1962) 1924-2010

Robert F. Bartik  
(FCAS 1972) 1927-2010

Joseph Hebert  
(FCAS 2006) 1971-2010

David Walker  
(ACAS 1986) 1947-2010

Hugh G. White  
(FCAS 1970) 1946-2010

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