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PRESIDENTIAL ADDRESS

To sustain a vital and vibrant actuarial profession

by Howard J. Bolnick
Address at the Annual Meeting
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A year ago I began my presidency with the following commitment: "Nothing we do is more important than to build on our historical success as a vital, well-regarded profession. My commitment is to do what's necessary to extend our historical success into the next century."

During this past year, with your board's strong support, I've tried to fulfill this commitment. I've also learned a lot about who we are and why future SOA Boards need to continue working hard towards this commitment.

"Actuary" is a profession born in the 19th-century industrial revolution. We were, and are today, vital to the success of the insurance industry.

We're now on the cusp of the 21st century. Our greatest challenge is to be as relevant in this new century as in the past. However, the past is over. We need to reassess the environment in which we practice and how the actuarial profession can maintain its relevance.

I hope you followed the lively "Big Tent" discussion over the last year about how to best reach our vision for actuaries to be recognized as the leading professionals in the modeling and management of financial risk and contingent events. This is the right vision for the actuarial profession.

Big Tent focuses on a strategy and broad tactics to move us into the 21st century. Our being a "profession" is vitally important, and it's professionalism that I want to emphasize, because

SOA President Howard Bolnick applauds members at the 50th Anniversary Annual Meeting.

it's professionalism that will lead us in the future.

Today, I'd like to look back to more clearly see our future. As the 21st century fast approaches, it is clear that our future is a future that's tied to the rapidly evolving world of financial services. Actuaries and our professionalism offer a vital contribution to this financial arena. But whether we become a major part of this new world has yet to be decided.

Our professionalism is the key. It has engendered a high level of trust that has made the insurance industry possible — not just helped it or strengthened it, but actually made it possible for the industry to exist.

The same fundamental historical problem that was solved for the insurance industry to thrive exists today across all financial services companies. That problem is the need to balance adequate, yet not excessive, prices and adequate, yet not excessive, capitalization to gain public trust.

Let's look at the life insurance industry, where we actuaries have our historical roots. Our success there shows how we can succeed in the global financial services arena. However, before we can address future opportunities, we need to understand why actuaries have been so vital to the 19th- and 20th-century insurance industry.

Actuaries' intellectual roots are based in probability theory developed from the mid-1600s to mid-1700s by great mathematicians: Pascal, de Fermat, Jakob and Daniel Bernoulli, de Moive, and Bayes. These great minds developed virtually all the probability and statistical tools used today by actuaries, financial engineers, and other math-based occupations.

Actuarial science began soon after these formative mathematical discoveries. "Actuary" developed as a recognized occupation because of the unique service provided by applying probability and statistics to pricing, dividend, and solvency problems of the early life insurance industry in England.

With the formation of the Institute of Actuaries in 1848, actuaries became the leading industrial profession in England — a "learned profession" with implied standards of integrity and dignity. By the end of the 1800s, actuaries and actuarial organizations were found in Western Europe, the United States, Canada, Australia, and Japan. Today, actuarial organizations are found in more than 50 countries.

Our role is widely recognized as key to the success of insurance companies and employee benefit plans. Growing acceptance of the role of "valuation actuary" represents the highest degree of professionalism and public trust in us to balance the competing needs of solvency and competitive pricing. Our growth in numbers and breadth of responsibility occurred not by chance, but for very good reasons.

Insurance is unusual. Simply stated, insurance is an exchange of money now for money payable in the future contingent on the occurrence of certain events. Perhaps we're too close to this transaction to fully appreciate its unusual features.

Would you, as parents of a newborn child, pay me $5,000, and trust me if I give you a verbal promise to pay four years' tuition if your child is admitted to Harvard? Of course not! Why, then, would you trust a similar promise from an insurance company? It's this element of trust between insurers and their customers that must be painfully developed and carefully maintained for the insurance industry to exist.

It's difficult to build the high level of trust needed between consumers and the organizations that wish to do business with them when the contingent promise comes due at an unspecified time, sometimes in an unspecified amount, and is made by a company that you don't really know, that's managed and owned by unknown people, and has uncertain financial backing.

You must be careful. Their promises might not be delivered!

Insurance is an unusual business. It has been studied extensively by some of the 20th century's leading economists. Here's the view of two: Joseph Stiglitz and Michael Rothschild. "Economists generally prescribe competition as a solution for markets that do not work well … . Insurance markets differ from most other markets because in insurance markets, competition can destroy the market rather than make it work better."

Yes, actually destroy a market! Rothschild and Stiglitz are describing the natural tendency of competitive insurance markets to experience what economists call "market failure" — that is, the inability of insurance markets to assume all the risk that those at risk would like to shift. Economic scholars describe three causes of market failure that affect the ability of an insurance company and its customers to bargain for an optimal insurance contract.

First, market failure can stem from difficulties of long-term contracting under uncertainty. Insurers must make provisions to maintain adequate reserves and capital to fulfill their contingent promises. This could be done by charging excessive premiums or raising excessive capital. These solutions are not palatable to either customers or owners. For insurance to flourish, adequate, yet not excessive, premiums must be charged, and adequate, not excessive, capital must be infused. Prices and capital must be balanced. How can this be accomplished, particularly when factors affecting premiums and capital needs are not well known in advance?

Second, market failure also occurs because of asymmetry of information about insurance company operations. Due to uncertainty, striking a bargain between customers and insurers would be difficult even if both parties had adequate information about the nature of the insurance business. However, customers don't have the extensive information that management has. How can customers, with their lack of information, trust insurers enough to enter into an insurance contract?

Third, market failure is virtually inevitable if adverse selection takes hold. So insurers usually create upfront lock-in barriers to keep healthy customers from leaving. Customers must trust insurers enough to agree to become locked in. How can this happen?

In addition to these three issues in striking a bargain between customers and insurers, insurance markets have their own unsettling problem. Insurance market failure can occur because insurance markets are naturally unstable. Companies don't have knowledge of customers' risk characteristics, while customers do. This is characteristic of markets with asymmetric information — markets that we actuaries know as having the potential for adverse selection.

Economists demonstrate that markets with asymmetric information may fail to form, or they may have problems that undermine their continued existence. So, insurance has inherent problems. Yet, somehow, these problems have been overcome. Stable and profitable insurance markets exist.

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The annual meeting in February 1999 of one of Mexico's major actuarial organizations, CONAC, drew representatives from several organizations. Among the attendees were (L to R) Dr. Enrique de Alba, professor, Autonomous Technological Institute of Mexico; Peter Morris, president, Canadian Institute of Actuaries; Alice Gannon, president-elect, Casualty Actuarial Society; Howard Bolnick, SOA president; Rafael Posse Fregoso, director general/president, CONAC; and Ignacio Gurza Vecon, secretary of the exterior, CONAC.

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The Society welcomed 230 new Fellows into its ranks in 1999. This year's graduates of the Fellowship Admissions Course included Tim Tracy, shown receiving his Fellowship certificate from Howard Bolnick. Robin Tracy looks on as son Nathan makes an early play for an actuarial career.

Insurance companies flourish. The insurance industry has grown because it has effectively compensated for the natural tendency for market failure.

Historically, three mechanisms have allowed insurers to develop the high level of trust needed for the industry to thrive.

The first successful mechanism was mutual companies. While mutuals are waning in importance today, historically they were vital to the insurance industry's growth. Since owners and customers of mutuals are one and the same, potential conflict is eliminated. The importance of mutual insurers is attested to by the fact that all of the successful early life insurers were mutuals — and all of the early stock insurers were unsuccessful.

The second mechanism is state regulation. Regulation allowed insurers to grow by placing a trusted, independent third party in the role of overseeing potential customer-owner conflict. Historically, the introduction of insurance regulation in the 1860s created an environment in which both mutual and stock life insurers flourished.

The third mechanism to protect against market failure is insurance company risk management tools. These tools control the potential consequences of adverse selection and moral hazard. They include risk selection, risk rating, claims adjudication, managed care, policy limitations and exclusions, and deductibles and copayments. The growth of insurance could not have taken place without them. Without mutual insurers, insurance regulation, and effective risk management tools, the insurance industry would have suffered severe market failure.

By examining the history of insurance and actuaries, it's easy to demonstrate that actuaries were essential to developing all three of these mechanisms. Early mutual insurers depended on actuarial advice and often were run by actuaries. Insurance regulation arose from the crusading work of actuaries. And, effective risk management tools were usually developed by actuaries.

Actuarial expertise was the common element that made mutual insurers, insurance regulation, and risk management tools effective to overcome market failure.

Why actuaries?

Actuaries have the math and business skills to solve real-world problems caused by the natural tendency for insurance market failure. But perhaps most importantly, actuaries are trained to balance the interests of customers and owners when applying these skills. Balancing pricing and solvency requirements — while attending to the diverse, and often conflicting interests of owners, managers, and customers — demonstrates the professional judgment and ethic that are so basic to our success.

Our profession's success, in turn, leads to the much more visible success of insurance companies, regulators, and markets. Actuaries and our professionalism provide the element of trust so essential to a flourishing insurance industry. Here, we come to the point I made earlier: The fundamental problem addressed for the insurance industry exists across all financial services companies. That is the need to balance adequate, yet not excessive, charges and adequate, not excessive, capital to gain the trust of customers, industry, legislators, regulators, and the public.

Central to solving this problem for the broad financial services industry is the professionalism that allowed actuaries to solve it for the insurance industry. Our professionalism — our technical skills, our business acumen, and our ethics and integrity — made it possible to solve this complex problem. It's not so clear what constitutes a profession today. And, the idea of a profession and professional status is under attack as an historical relic.

A definition of professionalism I

The SOA president and his family pose in front of a 1940's car at the Members' Reception during the 50th Anniversary Annual Meeting. Pictured are (L to R) Lori, Lee, Kay, and Howard Bolnick.

find useful is from analyst William M. Sullivan: "Professionalism signified the formal recognition of mutual trust between the professional group and the larger public ... . It was this trust in the collective standards of the profession that led society to devolve authority onto professional associations... ." Today, actuaries are clearly professionals in their work for traditional employers — insurance companies and employee benefit plans. Actuaries have a specialized scientific knowledge and a strong social responsibility. And, by virtue of our professionalism, we have gained authority and autonomy for our professional organizations and enjoy economic success.

The vision of the Society of Actuaries is for actuaries to be recognized as the leading professionals in the modeling and management of financial risk and contingent events. This is the right vision. It takes us well beyond our 19th-century roots in life insurance and beyond our current employment in insurance and employee benefit plans. However, reaching our vision is not without problems — and opportunities.

We must recognize two important extensions of actuarial work over the past decade: the successful introduction of actuarial techniques to risk pricing and risk management in non-insurance financial institutions, and, the growth of new occupations within these institutions filled by high-quality practitioners with strong financial modeling and business skills. Their financial modeling skills are not fundamentally different from ours. Their math training actually complements today's actuarial training. In effect, we're all actuaries.

While actuarial jobs exist today throughout financial services, outside of the insurance industry they aren't recognized as such. To recognize the nature of their skills and work, I call these practitioners "new actuaries." New actuaries practicing in non-insurance financial services companies do not yet have a strong sense of professionalism, nor do they have organizations trusted and relied upon by regulators and the public. Absent these attributes, new actuaries will not become equipped to handle the fundamental problem of building trust in their balancing of pricing and capital adequacy.

An SOA delegation visited China and Southeast Asia as part of ongoing efforts to assist in the profession's development there. Shown with actuarial students in Kuala Lumpur is SOA President Howard Bolnick (second row, third from left), SOA Hong Kong office coordinator Patrick Cichy (top row, left), and SOA Southeast Asia Committee Chair Hassan Kamil (top row, third from left).

Without professionalism, it will be extremely difficult, and perhaps impossible, for "new actuaries" to become trusted to solve this fundamental problem. Meanwhile, our traditional areas — insurance and employee benefit plans — are declining in importance.

The current actuarial profession has several increasingly worrisome problems: small numbers, narrow scope, tenuous relationships with universities, and, of course, competition from "new actuaries." For these reasons, I devoted much of my presidential year to what I refer to as the Big Tent strategy and tactics. I've encouraged Society members to think of our profession in a new way, one that is consistent with our vision.

In a Big Tent profession, actuaries would be fundamentally important throughout the financial services industry. Actuaries would become more dynamic, and our membership would grow substantially. The SOA Board's Big Tent strategy is to pursue our vision by three main high-level tactics.

- The first is to embark on redefining and broadening our actuarial education and qualification system to be equally attractive and effective for both current actuaries and "new actuaries."
- The second is to expand into non-insurance financial institutions by bringing a small number of high-quality, high-visibility "new actuaries" into the actuarial profession. This tactic will probably result in formation of a new actuarial organization for financial actuaries.
- While a new actuarial organization for financial actuaries makes sense, we may need to redesign the North American profession to accommodate it. This is our third tactic.

While too few members are aware of the Big Tent concept, those that are aware recognize the need for change

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and express solid support for our Big Tent strategies. There is little support for our continuing "business as usual." It's clear to them that change is necessary if our profession is to remain vital and vibrant. The Big Tent approach is the right strategy to assure our success. It is time for action.

However, some thoughtful Society members have questions about our high-level tactics, primarily about how best to bring "new actuaries" into the profession. Developing and executing specific tactics are challenges I leave my successors.

On the occasion of the Society of Actuary's 50th anniversary, we must look to the future even as we celebrate the past. With the next millennium on the horizon, will we find effective ways to reach our vision for the actuarial profession? "Profession" is a powerful and valuable idea.

Today's "new actuaries" and their employers should see the value of professionalism in creating the trust they need to succeed. Professionalism has made actuaries what we are. Professionalism is what we actuaries offer to the rapidly evolving world of financial services.

Creating a legacy

I have been honored to serve as the Society's 50th president. I want to offer my congratulations and thanks to my predecessor presidents, fellow SOA Board members, Society of Actuaries officers, and SOA staff who have all served us so well, the thousands of volunteers who have made the Society of Actuaries such a successful professional association, and, of course, our members, who have brought us to this golden anniversary.

I come to the end of my magical year as president. I hope that I've accomplished something meaningful. I've begun some important work, but it isn't finished. For us to reach our vision, for the actuarial profession to sustain itself as a vibrant and vital resource devoted to risk management throughout the evolving global financial services industry will take care and effort from my successors.

I leave you in good hands. Your new president, Norm Crowder, and president-elect, Rob Brown, agree with me about the importance of the Big Tent strategy and tactics. With your continued support and that of the SOA Board, I expect that we will meet the challenge to evolve from our 19th-century roots into a vital and vibrant 21st-century profession.

I'd like to leave you with a thought from John Ruskin that, I believe, expresses why we must proceed much better than I can. "When we build, let it be such work as our descendents will thank us for: and let us think, as we lay on stone, that the time will come when men will say as they look upon the labor and thye substance, 'See! This our fathers did for us.'"

SOA President Howard Bolnick passes the gavel to 1999-2000 President A. Norman Crowder, III, at the Oct. 20th closing general session during the 50th Anniversary Annual Meeting.

President's Awards

Seven individuals received President's Awards at the 50th Anniversary Annual Meeting.

Howard Bolnick recognized the following recipients for their contributions to the actuarial profession and their personal support during his career and term as president:

- Michael J. Corey, executive recruiter for the profession for more than 30 years and sponsor of an annual event that has raised nearly $164,000 for The Actuarial Foundation
- Richard B. Sieben, an important mentor to Bolnick and his first boss at Continental Assurance Company
- Paul Thornton, president of the U.K. Institute of Actuaries, for his impact on international actuarial issues
- The four SOA managing directors for their outstanding contributions in managing the Society staff in the absence of an executive director for a significant portion of the year. Honored were Managing Directors Jeff Allen, practice area education and research; Linda Delgadillo, marketing and membership services; Marta Holmberg, core studies and global initiatives; and Kevin O'Brien, operations.