



SOCIETY OF ACTUARIES

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## Editorial

# ACTUARIES TO THE RESCUE?

BY JEFF SCHUMAN

**IN THIS ISSUE OF *THE ACTUARY*,** our authors and panelists provide some perspectives on how the insurance industry has changed since the financial crisis of 2008. There are reasons to be optimistic: Higher capital levels, better liquidity management, more integration of risk management into strategic decisions, etc. But there is always more work to be done and new risks to anticipate and manage. As we look to the future, what role will we, as actuaries, play in affecting the outcome of future downturns and crises?

In the midst of the 2008 crisis, former SOA President Jim MacGinnitie published an excellent essay, “Actuaries Would Have Made a Difference.” He offered 10 reasons why he believed the crisis would have been less severe if more actuaries had been involved in financial markets:

1. Actuaries understand that the distribution function for most risks is not the bell curve or normal distribution, but rather one of several distribution functions that have longer, fatter tails.
2. Actuaries understand that while choosing the right model is very important, it's even more important to calibrate it appropriately.
3. Actuaries understand “model drift.”
4. Actuaries understand spirals, and seek to avoid them.
5. Actuaries are accustomed to developing values for liabilities where no deep liquid market exists.
6. Actuaries are used to taking a long-term view.
7. The Actuarial Control Cycle is a well-developed concept that would be helpful in the capital markets.
8. Actuaries are accustomed to transparency.
9. Actuaries have professional standards.
10. Actuaries accept a quasi-fiduciary obligation.

Please read MacGinnitie's essay for an explanation and an elaboration of these points: [soa.org/Library/Essays/rm-essay-2008-toc.aspx](http://soa.org/Library/Essays/rm-essay-2008-toc.aspx).

MacGinnitie's reasons can be simply summarized as follows: Actuaries have a strong fundamental understanding



of risk, are skilled risk modelers, are accountable for their work, and have a deep professional commitment to the long-term well-being of the financial systems they address. This is an impressive set of characteristics, and I agree that these attributes mean that actuaries *can* play an important role in reducing the severity of future financial crises. But “can” is one thing; “will” is another. To what extent *will* we make a difference and what must be done to increase our impact? I believe there are several areas we can address.

**EXPAND OUR SPHERES OF INFLUENCE**

Let’s face it, if actuaries are going to have a much bigger impact on future crises, we’ll need to expand our presence in financial sectors outside of our traditional domains in insurance, pensions and health care. The U.S. banking industry is about double the size of the insurance industry by assets and has a proportionately larger impact on the economy and markets. Investment banks also have a significant economic and market impact. However, the number of actuaries working in these industries is still relatively small. Furthermore, many of the actuaries who work in commercial and investment banks are there to provide products and services to the insurance industry, rather than to function in financial and risk management roles.

Establishing a more significant actuarial presence in these other industries will require effort at both the organizational level and at the personal level. In my opinion, it’s important that the Society of Actuaries (SOA) and other actuarial organizations look at ways to better market the capabilities of actuaries, and

the exam curriculum must continue to expand and evolve to become more relevant in more situations. These must be sustained, long-term initiatives. I know there have been some important strides made in these areas. For example, the SOA’s Cultivate Opportunities team has a number of initiatives in place to identify new and different career paths for actuaries including predictive modeling, business analytics, risk management, financial services, and more. In addition, the SOA Board’s Learning Strategy Task Force is working

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to address many education-related issues. Recommendations will be finalized at the June Board meeting.

While marketing the profession is helpful, actuaries who want new opportunities in new industries will also have to work hard to market themselves individually. Doors can be broken down, jobs can be won, but it often takes a creative and determined effort. Showing up and flashing an actuarial credential doesn’t cut it when approaching a nontraditional opportunity, but creatively demonstrating the relevance of your skills sometimes does. I broke into my first job in the investment banking industry partly by campaigning aggressively for an opportunity to present formally to an audience of the

key decision-makers. Persistence, aggressive tactics and a good presentation got me the job.



**Jeff Schuman**

Another opportunity for greater actuarial impact is on the federal regulatory front. Given the important role of the U.S. Federal Reserve in guiding monetary policy and its large and expanding role in regulating financial institutions, the complexion of future financial crises will be partly a reflection on the Fed. However,

despite the Fed’s significantly increasing role in the insurance industry, the actuarial directory lists just six SOA and Casualty Actuarial Society (CAS) members among the Fed’s approximately 20,000 employees. Surely, there is room for actuaries to contribute more significantly.

**ADD MORE VALUE IN TRADITIONAL ROLES**

I believe another avenue for actuaries to impact future crises is through enhanced execution of traditional roles. Actuaries have long provided essential technical expertise to insurance and health care organizations. Over time, many traditional actuarial roles have become even more important and more technically demanding. It’s natural that actuaries can

develop an intense, specialized focus as they execute many of these roles.

However, we can contribute to better risk management outcomes if we can reach outside specific areas of specialization and achieve more outward perspective and engagement. One of the biggest weaknesses of risk management coming

highly responsive models and operating them with great sensitivity to changing circumstances. As MacGinnitie pointed out, actuaries normally operate from a long-term view, and this is generally a great virtue when building sound financial systems and managing risk. However, things can move quickly in extreme tail events. In the 2008 crisis, companies had

they're denied leadership opportunities? I'm not wise enough to answer that, but I do believe there are opportunities for well-rounded actuaries who gain broader management experience.

I hope we continue to address many of these opportunities as a profession and as individuals. Let's realize the potential that MacGinnitie identified and make an even bigger difference in the future. **A**

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into the last crisis was its often "siloed" nature. Risks and business lines were too often analyzed and managed in isolation. I think there are things we can do to help break down silos and help our organizations manage risk more holistically and effectively:

- From wherever we sit, we have an opportunity to think more deliberately about how the risks and activities we address might interact and correlate with other exposures in our organizations.
- We can enhance our contribution by proactively engaging actuaries in other business lines and areas to compare risk perspectives, tools and techniques.
- Lastly, we can further develop our communication skills. Generating important risk insights will only have value to the extent we can effectively communicate them.

We can also add more value and change outcomes by creating more

difficulty marking some of their risk and capital positions to market in real time. This created an enormous perception problem that became a real problem, as markets assumed the worst.

### **PRODUCE MORE BUSINESS LEADERS**

Another opportunity to be more impactful is to have more actuaries in executive leadership positions. I've just asserted that actuaries throughout the organization have the potential to increase their impact, but, of course, the biggest decisions will always be made at the top of the house.

Among the 15 largest U.S.-based life insurers and the three largest Canadian-based, there are 44 individuals holding the title of chairman, CEO or CFO. (There are 44, rather than 54, because 10 individuals serve as both CEO and chairman.) There are eight actuaries among the 44, which suggests upside potential. There seems to be a chicken-and-egg question here—are actuaries sometimes denied leadership roles because they lack certain skills, or do they sometimes lack certain skills because

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