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The Future of Our Industry

by Liz Mennen

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Actuaries are asked to make predictions every day. *How much is needed to keep this pension sufficiently funded? What is the present value of this company's future profits? What if interest rates drop 5 percent?* This is the nature of our work, and the implicit complexity and mystique of making such predictions is likely a large reason why we became actuaries in the first place.

What about predicting the future of *our industry*? Not exactly a simple task; especially without a way to make Excel or financial modeling software help us. I chatted with some senior actuaries, across specialties and lines of business, to hear their opinions on the matter. My expert panel included: John Fenton, a director in Towers Watson's (TW) life insurance consulting practice; Joan Barrett, a vice president and actuary in UnitedHealthcare's national accounts group; Russell Gao, an associate within Goldman Sachs' global insurance asset management group; and Frank Sabatini, president of Sabatini Advisory Services, LLC, and a member of the SOA .

These four experts possess pleasantly optimistic outlooks regarding the future of our industry. John Fenton of TW foresees plenty of work to keep us busy in the traditional actuarial fields going forward. In particular, he predicts a continued flurry of activity in individual life and annuities, as well as the group and health, markets. Additionally, he notes that financial reporting and product development are becoming more and more sophisticated, and reminds us to stay aware of the challenges inherent in adapting to these changes.

Joan Barrett of UnitedHealthcare also shares a positive view on the future of our industry. She believes that actuaries are very well-positioned for what lies ahead because we understand risk, statistics and most importantly, the *application* of these metrics to our day-to-day work.

Joan believes that our preparedness for the future is rooted in the balance between our rigorous technical training and our understanding of its *application* to the real world.

Russell Gao of Goldman Sachs agrees that this balance is a significant advantage going forward. After obtaining his FSA, Russell decided to pursue a Masters of Financial Engineering and explore opportunities within this nontraditional realm. Looking back on his experience, he remembers that recruiters within the financial engineering front "loved" candidates with an actuarial background, due to their strong statistical training which is uncommon in candidates with the more common physics or engineering degrees.

According to Russell, crossing over into nontraditional actuarial roles can open a wealth of new opportunities in the future. Russell has first-hand experience doing so, and from his perspective, there are plenty of potential roles for an actuary in an investment bank. One such role could involve the trading function of an investment bank, where an actuary would use his or her actuarial modeling skills to price mortgage backed securities using prepayment tables. Prepayment tables quantify prepayment risk, which is cumulative and needs to be modified based on experience, so they function similarly to mortality tables in pricing a life insurance policy. Another potential role concerns asset-liability management, where actuaries could use their thorough understanding of insurance companies' financials to assist in asset-liability management for the bank's insurance clients. It is important to note that this role differs from a traditional actuarial role because it is largely focused on the *assets* rather than the liabilities, although the traditional knowledge of liabilities and regulations would help in designing portfolio strategies for the insurance company's assets. Russell points out that many nontraditional actuarial opportunities involve applying/leveraging classic actuarial training to new situations, that is: same formula, different q_x.

The potential for growth in nontraditional actuarial fields is also recognized by Frank Sabatini of Sabatini Advisory Services. With particular expertise in enterprise risk management, Frank has noticed the growing role of actuaries in risk management, and believes this trend will continue, especially if we cross over into nontraditional roles. He is convinced this crossover can happen, though there is uncertainty around when and how. Frank says the challenge for the SOA is to "figure out what it takes," and adapt the curriculum and accreditation process accordingly so actuaries are even more desirable across multiple industries.

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John also acknowledges the uncertainty regarding an actuary's role in a nontraditional environment going forward. The big unknown, he asserts, is going to be fulfilling the risk management role in non-insurance companies. Over how broad a spectrum can we apply our specialized expertise? According to Joan, we can contribute much more risk analytics to other industries—manufacturing, for example—though there is also room for growth and development in tools used for advanced business analytics. As it appears from these experts, the sky is the limit for future actuaries to apply their training to non-traditional fields.

Growth and development outside of the United States was also highlighted by many of these seasoned professionals. Frank notes that we are on the verge of having 10 actuarial associations worldwide, and that the SOA has adopted a strategy to grow internationally. He believes that the pattern of crossing over into other industries will happen first *outside* the United States, as examples are already prevalent in countries like the United Kingdom. John also notes the prominent growth in the Asian and Brazilian insurance markets, and the opportunities for actuaries that arise from this growth. Many of the major industry players are focusing on international expansion, which affirms even more

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forcefully that the international markets are likely to be a key opportunity for the future.

These experts were also asked to share their perspectives on how the current FSA tracks relate to their outlooks on the future of the actuarial industry. Many point to the Group and Health track and its indubitable relevance to the economy today. There is a huge need to understand and analyze the costs of companies, as Joan points out, as well as to measure the related outcomes. The Finance/ERM track remains a popular choice for these seasoned actuaries, as they believe that a knowledge base of ERM is becoming more and more crucial. Additionally, the CERA designation merits attention, as it is gaining popularity and can be achieved along with an FSA.

As a relative newcomer to the actuarial profession, I could not help but probe these senior actuaries for any advice they felt generous enough to pass along. Their message was relatively simple, but empowering: always be open to new opportunities, and gain exposure to as many projects/fields as possible. Learn the basic principles of actuarial science and how to apply these across many lines of business, without getting too enamored of one particular subject. If you are toying with the idea of crossing over into a nontraditional position, it is still valuable to go through the arduous exam process and start out in a traditional role in order to learn the skills and to gain knowledge of the industry. Lesson learned: as long as we keep doing what we are doing—challenging ourselves to stay at the forefront of risk management methodology and actuarial applications to the industry—our future will remain bright.

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