THE CHANGING LANDSCAPE OF REGULATORY CAPITAL OVERSIGHT

The global financial crisis caused the regulatory capital ratios of many life insurance companies to come under significant pressure and in some cases required actions by management to shore up capital levels. Regulators in many jurisdictions are currently overhauling their solvency frameworks in order to avoid the reoccurrence of such an event.

The crisis ignited considerable regulatory focus on risk measurement, governance, stress testing and capital adequacy of financial institutions, including life insurers. Nonetheless, key stakeholders, including rating agencies, analysts, company shareholders and policyholders, continue to anchor their perceptions of a company’s financial strength by the level of a regulatory capital ratio - for example, the Minimum Continuing Capital and Surplus Requirements ratio in Canada, and the Risk-Based Capital ratio in the United States. With time, however, these solvency measures may not have kept pace with the many changes the life insurance industry has undergone, such as the consolidation and globalization of the insurance industry; the evolution of product offerings that combine investment, market and insurance risk; and the growing complexities in valuing, measuring, mitigating and monitoring these risks.

This is not to say that regulators have not enhanced their regulatory oversight of the life insurance industry. There have been many developments, including stress testing, governance and risk management guidelines, which supplement the regulatory solvency ratio as the sole indicator of a company’s capital position. Many of these developments are more forward-looking in nature as they seek to highlight the capital position a company can expect through time under a variety of scenarios.

The process of redefining the solvency framework faces many challenges and uncertainties as international accounting standards are still in development, and the increased use of more advanced modeling techniques and risk mitigation methods - such as reinsurance and hedging - continue to evolve. Even with an advanced economic capital model, life insurers will always have to meet the target regulatory requirements, and the likely expectation of perceived financial soundness levels from other key stakeholders that continue to be based on the regulatory solvency measure.

So what role does the actuary have in the future regulatory capital landscape? Until economic capital models become prevalent in the life insurance industry and accepted by regulators and other key stakeholders, the regulatory capital position of a company will remain the scorecard of a company’s financial strength position. The design of products, the valuation assumptions and modeling of blocks of business, asset liability management practices, the strategic decisions on capital composition and organizational structure all ultimately get captured in this simple ratio.

Financial reporting actuaries have traditionally been well suited for capital management roles in a life insurance company. As the methods used in the development of capital become more model- and risk-driven in the emerging landscape, the capital management function will benefit from the leadership of actuaries who possess strong financial reporting knowledge combined with an ability to model, measure and forecast the solvency risk attached to the underlying risks included in the pricing, valuation and asset liability management methods. Effective capital management will require actuaries to communicate all aspects of a company’s regulatory capital position to a growing audience of both actuaries and non-actuaries, working in partnership with many functional areas of a company, including operational business units, Investor Relations, Treasury, Enterprise Risk Management and Controllers.

Equipped with a better understanding of risks, actuaries will play an important role going forward in ensuring that the life insurance industry continues to enhance capital adequacy measures and improve processes designed to mitigate impacts from future potential adversity.

Article contributed by Lisa Giancola, VP & Actuary, Capital Management, Corporate Actuarial and Kevin D. Gray, VP & Actuary, Capital Management, Corporate Actuarial

FACTUARY

FACTS AND STATS AT A GLANCE

Did you know Manulife/John Hancock have...

- 368 FSAs globally?
- 164 career ASAs globally?
- 39 schools across North America that we partner with for Campus recruitment?
- 600+ applicants to our Actuarial Summer Internship Program?
- 800+ new grad applications to our Actuarial Development Program?
- 385 ADP students in our Actuarial Development Program globally?

Check out our Global Opportunities!

Did you know in 2011 the SOA(1) had...

- 598 new FSAs?
- 1078 new ASAs?
- 173 new CERAs?
- 50,052 Exams administered?
- 19,237 E-learning modules and assessments accessed?
- 1,885 Professionalism course participants?


Sudoku

Difficulty: Hard*

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Provided by http://www.puzzles.ca/sudoku.html

* solution will appear in our next issue
INTERVIEW WITH NANCY NAN ZHANG

Actuary Connect recently interviewed Nancy Nan Zhang, FSA. Nancy joined John Hancock in August 2011 within the Long Term Care Finance department. Previously, Nancy worked for Manulife Financial in the U.S. Life Finance department in Toronto. Nancy has a B.S. in Actuarial Science and Finance from the University of Waterloo in Waterloo, ON.

What influenced your decision to join Manulife Financial?

My decision to join Manulife was influenced by three factors: reputation, past experiences, and potential career growth. There’s little doubt that Manulife Financial is the premier insurance company in Canada. Even as a freshman in college, Manulife’s reputation resonated among my friends and classmates. Whenever anyone received an offer from Manulife, my friends and I would look on with admiration and ask, “What does it take to get into Manulife?” So even from my early college years, I knew Manulife was the company to strive for.

I was hired into a co-op position at Manulife while I was still in college, and my experiences there truly blew me away. During my terms at Manulife, I felt like an integral part of my team instead of a temporary co-op like my previous work terms. My managers involved me in the decision-making process and provided me valuable career advice and support during my SOA exams. I had key responsibilities in challenging projects and was given the opportunity to present my work in front of large audiences.

After graduation, I received offers from Manulife and a few other insurance companies. The decision to join Manulife was not hard. Based on the company’s reputation, my past work experiences and my personal evaluation of career growth, I realized Manulife was by far the best place to begin my professional career.

You have had the opportunity to work in three of our office locations: Toronto, Kitchener-Waterloo and Boston. How has this helped shape you as an actuarial professional?

Working at different locations has helped me gain a better understanding of various insurance products and their associated risks by being intimately involved in different processes – Quarter-End Valuation, Model Risk Management and Product Modeling – at each location.

I also improved my communication and interpersonal skills by interacting with people with very different backgrounds. I feel very lucky to have worked with so many bright colleagues from whom I was able to learn something new and valuable to my work duties and career. I learned that people clicked in different ways and what worked well in one team may not work as well in another team. I learned how to be assimilated into a team culture and when to speak up to improve a team’s productivity.

Most importantly, I was able to learn more about myself. I learned what made me more productive and what hindered my productivity. I learned what kind of team environment and culture I worked best under. By being exposed to multiple teams, cultures and projects, I have gained a broader perspective on how an insurance company operates, more confidence in my ability to analyze problems holistically and greater capability of seeing the forest among the trees.

How have the economic climate and regulatory environment impacted your work as an actuarial professional?

When I was working in U.S. Life Valuation, there was an initiative to move from CGAAP valuation to IFRS valuation. This change was fairly significant as it required redefining the accounting treatments for various assets and liabilities. During this time, I felt significant regulatory influences as I was heavily involved in the Quarterly CGAAP valuation work and many processes needed to be adjusted to reflect the IFRS changes. Although difficult at the time, the process helped me understand the importance and effort involved in such a significant initiative.

My current work in LTC Risk Management involves reducing risks within our current product line. Since 2010, all financial critical models are required to be fully vetted and signed off before formal adoption. My job is to vet and identify possible risks within our critical LTC pricing and valuation models. During the model vetting process, I’ve noticed a significant shift in product design due to the current low interest rates. Since LTC products are long in duration, they are especially sensitive to interest rates. To stay competitive while maintaining sustainable risk levels, our models not only have to incorporate but prioritize the current economic climate. Based on these parameters, we created new products that used a risk-sharing design where the policyholders bear portions of the interest rate risks inherent in LTC products. The unfavorable economic environment helped me realize that insurance companies always need to be innovative and flexible in order to thrive under all types of market conditions.
What skills do you consider to be increasingly important to a successful actuarial career?

Traditionally, communication and technical aptitude have been the two most important skills for actuaries. Not only are they required to understand and solve difficult problems, but they must be able to effectively communicate their solutions to stakeholders and decision makers. Without having both of these essential skills, the actuary will remain largely ineffective.

However, being adept in only communication and technical aptitude is no longer sufficient. As products and methods mature, actuaries must get creative and think outside the box. Without this infusion of creativity, products will become stale and outdated. Likewise, an actuary must have strong leadership skills to not only inspire those around him/her, but also be able to push through new ideas to stakeholders and decision makers for changes to take place. Actuaries must also be able to analyze problems from a holistic point of view. As computers and tools become more powerful, many of the tedious and manual tasks have shifted away from actuaries. However, this shift also means they must now take on greater responsibilities. Not only do actuaries have to understand and master their tools, but they now have the power to study and refine the model at a level and pace not previously achievable. The successful actuary will use these tools to continuously refine existing models and explore new possibilities.

A recent article shared by one of our members on Actuary Connect LinkedIn group, listed actuary amongst a list of professions requiring minimal interaction with people. What are your thoughts?

In my experience, I have found collaborating with both actuarial and non-actuarial staff to be essential to success. Our models and products are becoming so complex that it’s virtually impossible for a single person to completely understand and maintain the whole model. Most of the work we do is in team settings where team members constantly discuss problems and share ideas. Personal interactions also stimulate new ideas and question existing assumptions. Without these two facets, our products will become stale and outdated and will eventually lose out to the competition.

What advice would you offer to an actuary or actuarial student considering an international assignment?

International assignments offer a tremendous opportunity for personal growth. It is a great opportunity to not only expand your experience and knowledge base, but to learn more about yourself and your goals. You’d be surprised at the number of false assumptions you have about yourself and at the new goals you set along the way. Approach the assignment with an open mind and be prepared to gain experience you’ve never expected. New experience is the best way for us to learn and refine ourselves. And what better way to create new experiences than an international assignment?

Manulife Financial is a dynamic and talented work place. People have very different backgrounds, specialties and experiences. No matter the international assignment you choose, you can be sure that you’ll learn plenty along the way. Remember: It is the various people, culture and backgrounds that make Manulife such an incredible company, one which we are all proud to be part of.