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Letter From The President

THE NATURE OF RISK

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I'VE BEEN THINKING A LOT LATELY ABOUT RISK. After all, "Risk is Opportunity," according to the tagline of the SOA. It is the changing nature of the risk that has me thinking. When I began my actuarial career in the late 1970s, actuaries focused primarily on reducing risk of a random event that would have catastrophic economic consequences for an individual or his heirs. The risk of premature death, disability, accident or sickness, or outliving one's financial resources, was pooled among individuals with similar exposure to similar risks through some sort of insurance mechanism. Those choosing to partake of this mechanism substituted a certain financial loss (i.e., an insurance premium) to offset an uncertain, potentially catastrophic loss. Thus, risk, the uncertainty of loss, was reduced for those individuals. Actuaries played (and continue to play) a large role in developing and managing such insurance mechanisms.

The risks facing those we serve today are different. Volatile capital markets, terrorism, and profligate spending by municipalities, states and countries have all added to this volatility. The failure of governments to fund their long-term obligations has cast doubt upon whether they will be able to meet their obligations as they come due. Credit default swaps (insurance against the risk that a debtor will not be able to repay the debt when it comes due) are now being sold on U.S. government debt. Equity markets in the United States have suffered two separate drops of approximately 50 percent in the last 11 years. Interest rates are at historic lows that few, if any of us, could have imagined 10 years ago. Actuaries have responded to this volatility by developing products with income guarantees that insulate the consumer from severe drops in interest rates and equity markets. Hedging of these guarantees creates comfort that the guarantor will be able to meet its obligations should/when the equity markets drop again. However, hedging these risks introduces another risk—specifically, counterparty risk. Counterparty risk and the contagion associated with it was the primary reason that the U.S. government bailed out AIG during the financial crisis of 2008. It was concerned that if AIG failed to meet its obligations as a substantial issuer of credit default swaps on subprime mortgages, buyers of these credit default swaps would be unable to meet their obligations to others and the entire financial system would collapse. Yet, having "survived" the financial crisis, little has been done to address the counterparty risk that still exists within the financial system. Perhaps there is no solution. Yet credit default swaps on U.S. government debt are being sold. Presumably, the buyers of these instruments are feeling more comfortable that their exposure to the default of U.S. government debt has been lessened. However, stepping back, what makes us think that any bank issuing credit default swaps on U.S. government debt will be able to meet its obligations in the severe circumstance in which the United States defaults?

As a partial result of the events surrounding/causing the financial crisis of 2008, risk management and enterprise risk management have become the focus of some regulators and rating agencies. This has led to significant additional regulatory-related work for actuaries. The underlying premise seems to be that if we just do a few more stochastic analyses, our estimate of the financial obligation will be that much more accurate. Of course, we as actuaries understand the limits of actuarial science. Unfortunately, the users of our work product often do not. We, as a profession, need to do a better job of educating the users of our work on the limits of actuarial science.

As an additional consequence of the financial crisis of 2008, regulators of financial institutions have focused on the amount of capital that is necessary to meet their obligations. Stress tests have been implemented, begging the question as to how much capital is enough. Does a financial institution have to hold enough capital to withstand one catastrophic event?

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What would happen if another catastrophic event followed shortly thereafter? Perhaps sufficient capital should be held to withstand two events in short succession. Maybe three events, just to be safe? Unfortunately, we are losing sight of what the ultimate safety net for financial institutions really is. It is not the federal government, although that is one lesson you could draw based upon the events of the 2008 financial crisis. Rather, it is access to capital markets. Access to capital markets depends upon an institution's ability to return a profit to investors ***commensurate to the risk undertaken***. Requiring excessive amounts of capital has one of two consequences. It either forces the institution to increase the price to the consumer of its goods and services or it limits an institution's ability to access capital markets. Neither is appealing. We must be conscious of this when we determine the amount of capital we require our financial institutions to hold.

In September of 2011 a group of chief risk officers (CROs) formed the North American CRO Council representing 11 of the 15 largest life insurers and 12 of the 15 largest property and casualty insurers in North America. An examination of those 26 CROs reveals that only eight hold actuarial credentials. In some ways this is not surprising. Historically, the failure of large life insurance companies has been driven by overexposure to a certain class of assets (junk bonds, real estate, mortgage-based securities) during a period when the market for these particular assets falls or becomes illiquid, rather than problems associated with the liability side of the balance sheet. There have been a few recent exceptions; the underpricing of long-term care insurance comes to mind. So perhaps, notwithstanding the expanded focus of actuaries on the asset side of the balance sheet, the propensity of insurance companies to hire those with investment expertise as their CROs should not come as a total surprise.

What was the SOA's reaction to this changing nature of risk? In 2007 it introduced a new credential, Chartered Enterprise Risk Analyst or CERA. The purpose for doing so was twofold. First, to educate actuaries interested in specializing in enterprise risk management. The second was to appeal to other professionals who were not necessarily interested in performing a traditional actuarial role, but who were interested in being experts in enterprise risk management. At this juncture, it appears to me that we have succeeded in the former but have work to do on the latter. From June 2007 (when the first list of new CERAs was produced) through October 2011, there have been 562 CERAs awarded through examination. All but two of those passed exam MLC (life contingencies), thus taking a traditional route to becoming an ASA. Of the two who didn't pass exam MLC, one took it and failed. The other individual appears to be the only incremental professional enticed by the existence of the CERA credential. Over that same period of time, 5,291 new ASAs were awarded without a CERA credential.

These two developments suggest to me that we should focus more on penetrating the markets we currently serve and carefully determine into which new markets we attempt to expand. Do we really think that actuaries and the specialized knowledge we possess can be as incrementally valuable (with respect to enterprise risk management) to a candy bar manufacturer as we are to insurance companies? Maybe we can, but the numbers above suggest to me the need for a reexamination of that underlying premise.

In 2010, the SOA's Employers Council undertook a study to assess the risk landscape in two fields—energy and broader financial services—to determine whether there are opportunities there for actuaries in risk management roles. The research found that there are significant barriers to entry for actuaries because of a perception that our education is not relevant to those fields and a general lack of familiarity with actuaries. The SOA's branding campaign is designed to raise awareness of actuaries. Additionally, the SOA is undertaking a strategic initiative to identify the specific barriers in some broader financial services markets and make recommendations on bridging gaps that prevent expansion of the profession. Additionally, we are making significant enhancements for the pathway to the CERA credential and expanding enterprise risk management learning opportunities in all tracks for candidates pursuing fellowship. (See "FSA Education Restructuring Is Coming Soon!" on page 30 for more information on these curriculum changes.)

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The changing nature of the risks our stakeholders face creates an opportunity for the actuarial profession, ***if*** our reaction meets their needs. If it does not, it more likely represents a lost opportunity. A

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