Testimony Concerning OTC Derivatives Reform and Addressing Systemic Risk

Submitted for the Record
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Chairman Lincoln, Ranking Member Chambliss, and distinguished Members of the Committee:

The Risk Management & Financial Reporting Council of the American Academy of Actuaries[1] appreciates the opportunity to provide its perspective on addressing systemic risk in the financial sector. The time has come for a financial regulator focused on systemic risk. We support the establishment of a governmental systemic risk regulator that can effectively provide oversight of financial risks and protection to the public providing that it incorporates the following principles and concepts.

The insurance industry is exposed to systemic risk. Some of the systemic risks to which insurance systems are exposed are regulated by limitations on leverage. Regulatory controls include a combination of external structures (government-sponsored guarantee funds and catastrophe pools) and internal requirements (regulatory audits, actuarial opinions subject to standards of practice, solvency metrics, asset allocation, loss reserve and minimum capital requirements). We think there are valuable "lessons learned" from insurance regulation that can inform the debate over creation of a systemic risk regulator.

The viability of the insurance sector rests on the perception that insurers can and will meet their promises. While there are many complexities of insurance and financial risk, there is a straightforward process for regulating those risks. It begins with understanding and defining risks, measuring or quantifying those risks over time, and linking the possible outcomes to effective actions. Actuaries are key players in this process, because of the extensive experience the profession has in dealing with risk management and solvency issues involving public and private insurance systems within the financial services industry.

To illustrate an example relevant to today's financial crisis, we note that in 1990 Congress amended The National Housing Act of 1934 to require the Secretary of Housing & Urban Development to conduct an annual independent actuarial study and analysis of the Mutual Mortgage Insurance fund and to report annually to Congress on the financial status of the fund.

[1] The American Academy of Actuaries is a 16,000-member professional association whose mission is to serve the public on behalf of the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

This fund had assets of over $25 billion at the end of Fiscal Year 2007 and currently insures over $400 billion in FHA residential mortgage loans. The recent Fiscal Year 2008 actuarial report indicates that the Mutual Mortgage Insurance Fund will continue to exceed the mandated minimum capital ratio and is not forecasting the kind of bailout needed to support other guarantees of residential mortgages.

We have witnessed unparalleled new threats to our financial security as is highlighted by American International Group (AIG) and its unregulated and uncontrolled venture into Credit Default Swaps (CDS). Since these financial guarantees were made outside of AIG's insurance subsidiaries, they reportedly escaped insurance regulatory oversight. Below, we detail the effective solvency requirements and risk management oversight needed for regulating the CDS market and outline the challenge of appropriating adequate risk oversight and regulation to CDS and the risk requirements for a sound market.

Actuaries recognize that there are acute public policy issues around the financial security provided by the CDS market and there is a need for oversight of the accumulation of risk by the individual counterparties who are providing financial protection. It is our experience that these issues are similar to the risk protection provided by insurance in terms of specific capital requirements needed to support the contract's promise to pay when the covered event, default, occurs.

We do not see how a future CDS market can be expected to avoid collapse in a credit crisis without some form of effective solvency requirements and risk management oversight. The example provided by insurance regulation, with its liability and capital requirements, solvency regulation and legislated authority in the event of insolvency is certainly one that has much to recommend as a sound basis for any financial security system that is designed to protect the public.

**Challenge of Establishing the Appropriate Oversight & Regulation for CDS**

The failure of entities in the CDS market to provide sufficient backing for their guarantees demonstrates that increased awareness is needed from market participants and regulators when the market provides price guarantees for which specific financial backing, in terms of capital and risk management, is needed to minimize failures from systemic risk issues.

We think a start at a solution to this can be found by recognizing the many characteristics and similarities that are shared by the CDS and insurance markets:

a. CDSs exhibit certain risk characteristics that are similar, with respect to counterparty solvency risk, to what we observe in insurance and financial guarantee products, namely they are:
    - Over-the-counter, not exchange transactions
    - Heterogeneous, not homogeneous in their contract terms
    - Illiquid rather than liquid markets

b. A typical dictionary definition for insurance states a definition as "coverage by contract whereby one party undertakes to indemnify or guarantee another against loss by a specified contingency or peril." This definition seems to fit a CDS very closely.

c. Pricing for loan defaults and credit downgrades often uses similar approaches to those used for pricing of insurance products. The "actuarial method" is a common methodology for evaluating credit risk, based on a frequency/severity method, i.e., the probability of default multiplied by the loss given default. Actuaries have commonly used such methods to evaluate pricing and reserving for private mortgage insurance, financial guarantees, warranties and long duration contracts.

There is, indeed, a long history of actuarial and risk management expertise in the development of methodologies to address the solvency needs for a market of contracts with significant systemic risk characteristics. Some examples of such methodologies include:

a. Actuarial methodologies that identify and quantify the amount needed to mature an obligation plus a risk charge for the guarantee.
b. The application of a Conditional Tail Expectation (CTE) calculation combined with scenario testing to estimate the impact of potential unknown and uncertain risks. This approach enables an understanding as to what could happen, how it will impact the organization and how the organization may need to limit risk given a better understanding of those risks. These approaches may provide a better understanding of the CDS risks by providing greater detailed quantification affecting solvency requirements.
c. Stress/sensitivity testing of the assumptions affecting capital adequacy as part of appropriate actuarial, risk management and insurance regulatory practices.
d. Including in product design a risk management approach. Just as options have moved to established exchanges to minimize counterparty risk, CDS may also require future product design changes.
e. The Asset Valuation Reserve (AVR) concept, developed almost 30 years ago, is an insurance regulatory requirement that establishes provisions for the credit risk associated with an insurer's invested assets in order to cushion the impact of volatile market movements.

Public confidence in the insurance industry has been achieved through the interaction among legislators, regulators, insurer management, underwriters, accountants, actuaries, etc. in developing appropriate approaches to limiting systemic risk. Similar approaches could be developed to advance the financial soundness of CDS intermediaries.

In summary, the counterparties that take on the risk of backing a credit default via a CDS should apply solvency and risk management principles derived from insurance practice since there is a similar need to provide a measure of security to those who depend on such a market to perform adequately. Actuaries have been involved for many years in recommending and developing sound solvency requirements, particularly for insurance markets, to ensure that adequate capital is required and that counterparties implement sound underwriting, system design and risk management practices. Actuarial solvency and risk concepts could therefore be useful in approaching how to structure the role of the Systemic Risk Regulator.

We would welcome the opportunity to discuss with the Committee the key concepts and elements that we believe are needed for the effective oversight and monitoring of systemic risk.

Sincerely,

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