October 14, 2003

Mr. John Flaherty
Chairman
The Committee of Sponsoring Organizations of the Treadway Commission

Dear Mr. Flaherty:

The American Academy of Actuaries appreciates the opportunity to review and comment on the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) draft report entitled "Enterprise Risk Management (ERM) Framework." We commend COSO's initiative and recognition of the importance of developing a structured approach to risk management. By raising awareness of the science and practice of risk management and the benefits it can bring, this effort is an important step forward. If properly implemented, a risk management system should improve economic performance and financial stability, and inspire confidence among stakeholders in the viability and health of an organization.

Managing risk is clearly not the responsibility of a lone individual within an organization. The varied nature of risk types and impacts demands that many people work collaboratively to effectively identify, understand, quantify, and manage risk. Similarly, developing a framework for such an important undertaking demands the varied perspectives of all the professionals within or consulting with an organization who play a significant role in the risk management process. The actuarial profession has long been at the forefront in identifying, assessing, measuring, managing, and mitigating risks. Actuaries assess the economic impact of uncertain future events that range from earthquakes and hurricanes to changes in life expectancy and help develop sophisticated investment and risk management strategies. Actuarial work is the backbone of the financial security industries and of government programs like Social Security and Medicare.

With a history of success in managing risk in some of the most complex situations, and a solid foundation of theory and technique upon which our profession is built (see the appendix for details), we are delighted to offer an actuarial perspective to aid in developing COSO's Framework. In offering our comments on this draft, the American Academy of Actuaries is acting as the representative body for several North American actuarial organizations, including the Society of Actuaries (SOA), the Canadian Institute of Actuaries (CIA), and the Casualty Actuarial Society (CAS). The Academy represents and unites actuaries practicing in various industries.

General Comments on the COSO Framework

We believe that the three-dimensional structure of the draft Framework is a helpful and systematic approach to designing, implementing, and evaluating the adequacy and robustness of a risk management system. The multidimensional approach to risk management makes sense intuitively and helps broaden understanding and raise the appreciation of the depth and extent of the analysis and expertise required to implement a successful risk management system.

No risk management system is error-proof. A well-established risk management system will aid an organization in becoming more efficient in dealing with the myriad of constantly evolving internal and external risk factors, but it will not prevent the organization from having to face them. By creating and supporting the continuing enhancement of the risk management culture within an organization, the organization is likely to capitalize on risk opportunities, efficiently deal with risk threats, and become more effective in the pursuit of its overall mission, even if the risk management culture is not perfect.

At a high level, the draft Framework is a valuable tool to assist accountants in their capacity as auditors of financial statements and evaluators of the "going concern" assumption, to assess whether a risk management process exists at a firm and whether it is reasonably comprehensive and has not overlooked important steps in the implementation. The draft Framework is a solid step forward.

Framework Goals

Based on its stated objectives, COSO clearly intends the Framework to benefit management as well as auditors. We agree that any framework should offer guidance to both types of users, and the draft Framework attempts to address both. We are not certain, however, that the draft Framework includes some important factors that must be included to fully realize this intent. In its current format, the draft Framework seems to bring more value as a broad audit tool, and less value as a management tool. While the draft Framework identifies strategic and operational objectives as two of the four categories of an organization's overall objectives, it appears to provide greater structure and support for the reporting and compliance objectives and de-emphasizes the role of risk management in realizing strategic objectives.

Managing risk is, by nature, a dynamic process that must constantly reflect the internal and external risk environments of an organization. A static checklist approach to a risk management system may place the onus on compliance, rather than on effectiveness. A usable framework is better achieved through a continuous, comprehensive analysis of the key risk types and their possible interactions, rather than through a checklist approach. The former is more likely to encompass a wider range of unconventional risk factors and to allow an organization to find a competitive edge in realizing hidden risk opportunities and capitalizing on them.

A broader view of the draft Framework's objectives should include the concept of reputation. Establishing and maintaining a good reputation is a broad objective that goes beyond simple compliance with laws and regulations. For one organization, a reputation of taking risks, including aggressive interpretations of new laws and regulations might be desirable. For another organization, the desire might be to avoid any negative publicity, so it would likely interpret new rulings conservatively. Both organizations are in "compliance," but the risks to their reputations may be quite different and should be assessed. Furthermore, this broader approach can also address how an entire set of integrity and ethical values, once established, can be spread throughout the enterprise.

Finally, adoption of a risk management process should also allow both an organization's management and its auditors to determine if risk management has been incorporated into all general management areas.

Risk As Opportunity

The current draft Framework separates the discussions of the benefits and limitations of risk management. We believe it would be more helpful to the user of the Framework to present these sections together. We also believe that the draft Framework should acknowledge risk as a necessary component and factor in strategic opportunity.

The draft Framework, with a greater emphasis on reporting and compliance, assigns a somewhat passive and defensive role to the risk management process; i.e., the mitigation of risk. The actuarial profession views risk management as an integral part of the process of optimizing business results. This viewpoint is most evident, for example, in the insurance industry (where the business is "risk" itself), which accepts and manages risk for a consideration; i.e., the premium paid by a policyholder. This viewpoint is broadly applicable to many other industries. An organization may achieve a competitive edge if it views risks as opportunities. For example, accepting a particular risk would only make sense to an organization if there were a definite economic benefit in doing so. Identifying opportunities and evaluating their risk-return tradeoffs is an integral part of the strategic management process of an organization. Risk management should enhance profit and not be viewed as just another compliance burden or drain on resources.

The Role of the External Environment

Organizations face different types of risks that can be broadly classified as being generated by actions or events that are either internal or external to the organization. The draft Framework addresses well the internal aspects of the multifaceted risk world, describing the need for a comprehensive assessment of the internal environment of an organization. However, the external risks appear to be only tangentially addressed in the current description of the risk event identification process.

An internal focus on risk de-emphasizes the critical role of risk factors that are beyond management's control. These external factors can have a significant financial impact. Of course, the relative importance of these different risks can vary dramatically, depending on the organization's business, its business model, the geographic distribution of its operations, and other factors. For many organizations, external risks are closely tied to changes in demand for their products, competitive position in the marketplace, access to elements necessary for production, quality, reputation, and safety of their products, financial standing and viability of key business partners, including the logistical and distribution systems. By their very nature, external risks are difficult to evaluate and quantify, but they have the potential for severe impact and can be the cause of financial ruin. Thus, external risks are fundamentally strategic, whereas internal risks are often largely a matter of designing processes with proper checks and balances.

The extent of external risks' materiality is clearly seen in the insurance industry. For example, life insurance companies' results are affected by mortality and morbidity, risks that are unique to the life insurance industry in terms of their magnitude. A number of complex strategies are employed in life insurance companies to control these risks, including contract design, risk selection and classification, loss control, and others. With well-designed operating processes such as underwriting and claim management, the systematic components of these risks can be controlled to fall within a reasonable range of expected outcomes. Random fluctuations and unexpected changes in population mortality or morbidity are beyond the control of management. However, when random or unexpected changes pose a significant threat, actuaries control these risks by using contract designs that allow premium adjustments and similar strategies in order to minimize the likelihood of financial ruin for the firm. Thus, the unexpected can be studied, and made a part of the risk management process.

While the importance of risk interdependencies is addressed more explicitly in the next section of this commentary, it is relevant to note that internal factors can interact with and exacerbate, or lessen, the impact of external events. An organization's investment strategy, for example, particularly with respect to asset-liability management, could create additional risks to the organization if processes were not in place to explicitly define and monitor the type and magnitude of positions that individual traders are permitted to hold. Organizations are also affected by other external risks, such as legal and regulatory risks, and if they operate and or invest in other countries, they will also be subject to currency and political risks.

To be effective, a risk management framework needs to reflect both internal and external dimensions of the risk sources. Thus, the development of a disciplined process to incorporate the measurement and analysis of the external risks into the strategic decision-making process is paramount to the success of an organization and needs to be highlighted in the draft Framework.

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Correlation of Risks

The risk management process recognizes that risks are interdependent. Effective coordination of risk management across functional areas of an organization to recognize possible risk correlations that may increase or decrease an organization's total risk is important. Unfortunately, in practice this communication among functional areas as to potential risks arising from one area and affecting the other(s) seldom occurs. An explicit description of a process to address these cross-functional issues would enhance the Framework.

The dynamic forces of increased economic globalization and convergence of the financial services industry are two examples that illustrate the importance of having a framework to identify, measure, model, and manage these interrelationships.

Long-Term versus Short-Term Focus

A long-term focus is frequently important to risk management since many risks and their financial impact develop over time and are not easily identified by a single event. The draft Framework addresses the value of a long-term perspective, identifying a need to pay attention to risks extending beyond the short- and mid-term. We believe it is important to put additional emphasis on the critical value of the long-term perspective to risk taking. While insurance is an obvious example, the maintenance of equipment and investment in research and development are other examples of areas that involve a focus on long-term contributions to the success of an organization. Risk management is a process whose success is difficult to estimate over a short time horizon.

Through dynamic financial analysis and stress testing, actuaries have been successfully addressing the potential long-term financial effects of various scenarios to allow management to see the possible continuum of future outcomes and utilize such assessment in setting organizational strategies. For an organization to address risk effectively in the strategic environment, scenario planning involving major discontinuities and a variety of time horizons should be an integral part of a risk management system.

Roles and Transparency

We agree that risk management, to be effective, is not simply the responsibility of a single type of professional, nor is it the responsibility of a single employee of an organization – risk management is every employee's responsibility. Rather than focus on the various roles of leaders in the risk management process within an organization, we would place greater focus within the draft Framework on the coordinating function that is necessary for a risk management system to be effective. Essentially, we feel the coordinating function is critical to the success of a risk management system, whether this is an individual or a committee. The best approach to fulfilling this coordinating function for any given organization will usually depend on organizational culture and the particular talents of its management.

Transparency of the risk management system within an organization is desirable to demonstrate its importance and acceptance by senior management. The board of directors, or one of its committees, should have a role in the risk management system, at a minimum receiving periodic reports on results and changes from year to year. Transparency will benefit the organization, as external parties (markets, regulators, rating agencies) may require a higher risk premium from those organizations whose risk management systems are more opaque.

Risk Quantification

The manner in which risks are addressed within a risk management framework should identify a process to quantify various risks. Some of this must be done prior to the determination that the risk is affecting the organization. A risk management framework should address the important need to have risk mitigation processes in place for those risks determined to be significant to the organization. The draft Framework, however, is limited in addressing the processes by which this is done, either as part of the initial stages of risk management or even in later stages when dealing with an ongoing risk.

Quantifying risk is a difficult yet critical aspect of the risk management process. Many of the risks to be considered in the quantification process have not yet occurred, happen so infrequently that there is little relevant data, or are not managed in an integrated manner. In addition, traditional interactions between units of an organization are not generally designed to provide an integrated approach to risk first perceived in one unit. Actuaries have dealt with the risk quantification process for many years (for examples, see the Appendix). We would recommend that the next draft of the Framework emphasize the importance of the risk quantification process.

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We appreciate the opportunity to comment on COSO's current draft Framework. The actuarial profession would be happy to support COSO in moving the draft Framework ahead, including by aiding in development of the implementation details and guidance on sound practices, particularly in the area of risk measurement, management and mitigation, which have traditionally been areas of actuarial expertise. Groups within our organizations – The Risk Management Task Force of the Society of Actuaries, the Solvency and Risk Management Task Force of the American Academy of Actuaries, the Committee on Risk Management and Capital Requirements of the Canadian Institute of Actuaries, and the Enterprise Risk Management Committee of the Casualty Actuarial Society – have been working on various aspects of the enterprise risk management process for the last several years. These groups, in addition to other actuaries with individual expertise in this area, will be glad to contribute their knowledge and expertise to this important effort.

One of our representatives will be following up on this letter with a telephone call within the next few weeks. In the meantime, if you have any questions or if you would like additional information, please feel free to contact Ethan Sonnichsen, the Academy's policy analyst for financial reporting, at (202) 785-7866. Thank you for your consideration.

Sincerely,

Robert A. Anker
President
American Academy of Actuaries

cc:

Harry H. Panjer
President, Society of Actuaries

Gail M. Ross
President, Casualty Actuarial Society

Mike Lombardi
President, Canadian Institute of Actuaries

Appendix

The following briefly describe a few examples of actuarial expertise in dealing with various risk management issues:

- Assessment/management of risk and implementation of sophisticated investment and risk management strategies
- Risk management techniques, including risk measurement, risk exposure reports, development of risk limits, and risk control processes
- Risk analysis of new products, investments and projects; risk-adjusted product pricing; risk mitigation strategies
- Earnings volatility analysis and subsequent risk mitigation strategies
- Risk adjusted financial measurement and reporting
- Merger/acquisition due diligence risk analysis
- Economic capital measurement and management
- Enterprise-level issues, including aggregation/correlation of risks, regulatory issues, and other strategic risks

The following briefly describe a few examples of models actuaries use in dealing with various risk management issues:

- Financial simulations based upon capital management strategy, asset/liability analysis
- Neural network-based artificial intelligence systems for use in credit analysis
- Portfolio analysis systems
- Monte Carlo models and regime-switching models for interest rate scenario generation for financial reporting or strategic development of investment options
- Risk qualification
- Credit risk modeling and management - both on the solvency side and on the pricing of financial products side
- Hedging and other risk management quantification techniques

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