

A PUBLIC POLICY WHITE PAPER

# Role of the Systemic Risk Regulator

*May 2010*

American Academy of Actuaries  
Financial Regulatory Reform Task Force



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Developed by the Financial Regulatory Reform Task Force  
of the American Academy of Actuaries



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The American Academy of Actuaries is a professional association with over 16,000 members, whose mission is to assist public policymakers 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.

## 2010 Financial Regulatory Reform Task Force

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## **Executive Summary**

Since the onset of the financial crisis in 2007, there have been concerted efforts to redesign the federal regulatory system to prevent another financial crisis. The Financial Regulatory Reform Task Force of the American Academy of Actuaries, through its review of the insurance industry and the broader financial sector, has concluded that new key functions are necessary for effective systemic risk regulation:

- Federal regulation of systemic risk for all sectors of the financial services industry, including the insurance industry, is needed; ,
- A federally based systemic risk regulator (SRR) should compile data and use metrics to facilitate national and global monitoring of systemic risk, establish criteria for active regulatory intervention or takeover of financial institutions, and work with functional regulators from within the United States, other countries, and international regulatory bodies to take action to mitigate any identified systemic risk;
- The effectiveness of the SRR to regulate systemically important companies requires the evaluation of company risk management processes;
- The SRR should recognize the ability of the current state-based functional regulatory system to help provide oversight and supervision of systemic risk within the insurance industry.

The actuarial profession, with its strong focus on the measurement and management of risk, is a vital element in building sound insurance systems, constructing regulatory frameworks to govern them, and ensuring compliance with those regulations. The actuarial skill set includes reporting on the financial position of insurance and financial services companies, and actuaries perform these responsibilities as insurance company professionals, insurance company regulators, and consultants.

We have brought this valuable experience to bear in support of federal systemic regulation.

## **Introduction**

The task force supports the establishment of a federally-based systemic risk regulator. The roles and responsibilities of the SRR should be consistent for all sectors of the financial services industry. Implementation of these roles and responsibilities for insurance companies should reflect the unique length and complexity of the insurance liability structure and a functional regulatory system that supports the objectives of the SRR.

Our views are summarized as follows:

- The regulation of systemic risk as it may affect the insurance industry is best accomplished on the federal level due to several factors:
  - The U.S. insurance industry is subject to risks arising from both capital markets and insurance liabilities. While the insurance industry did not generate systemic risk during the latest crisis, the task force recognizes the importance of a system

that would monitor any development of insurance-related risk on a nationwide basis.

- U.S. insurance companies may be affiliated with a range of financial services providers, including insurers, both domestically and globally. The diversity and complexity of these corporate organizations could create difficulties for the regulation of systemic risk through the current state regulatory system.
  - The rapid pace of product innovation requires monitoring evolving risks on a nationwide basis.
- Responsibilities assigned to the SRR should include;
    - Establishing and monitoring systemic risk metrics, nationally and globally;
    - Establishing systemic risk criteria for active regulatory intervention or, when required, the takeover of financial institutions;
    - Compiling data both at the federal level and globally;
    - Working together with functional regulators from within the United States, other countries, and international regulatory bodies to take action to mitigate any identified systemic risk.
  - The effectiveness of the SRR to regulate companies whose size, scope, and diversity may be systemically important to the industry requires the evaluation of company risk-management processes to determine if developing risk at the company level poses system-wide risk. It is necessary to evaluate not only the documented risk-management process but its application in the company decision-making process.
  - The SRR should recognize the ability of the current state-based functional regulatory system to provide oversight and supervision of systemic risk within the insurance industry wherever statutory law, funding, and staff levels will allow. The SRR should maximize the use of the experience and staffing resident within the state regulatory system to avoid unnecessary bureaucracy and expense from the perspective of the federal government. The role of the SRR is not intended to lessen the responsibility of the functional regulator to its publics.

The remainder of this paper discusses the various issues listed below as they relate to systemic regulation of the insurance industry:

- The role of the SRR
- Governance and structure
- Data needs of the SRR
- Relationship to other regulators
- Range of possible regulator actions
- Relationship of the regulator with the actuary

## Role of the Systemic Risk Regulator

The task force recognizes the need for the SRR at the federal level. The expertise and capabilities that currently reside within the functional state regulatory system, however, should be relied upon, not only in developing the SRR position but also to aid in the supervision of systemic risk in the insurance industry. Thus, relevant state regulatory resources should be incorporated in the supervisory protocol whenever and wherever they continue to be effective.

With this point of view in mind, the task force has outlined its position regarding the roles and responsibilities of the SRR. While the comments below focus on the insurance industry, the roles and responsibilities should apply equally to other segments of the financial services industry:

- **Clearly define systemic risk**, including the potential for one company to create unacceptable risk throughout the system and/or the accumulation of certain risks across the industry that could lead to system-wide failures;
- **Establish and monitor risk metrics** for the purpose of identifying the potential development of systemic risk in the insurance industry. These metrics should reflect both a national and global perspective on developments regarding systemic risk;
- **Establish criteria** for functional systemic risk regulation throughout the insurance industry;
- **Report to Congress and the public** on the findings of the SRR regarding the development of systemic risk throughout the industry;
- **Assume responsibility for systemic risk regulation** where existing statute does not allow effective systemic risk regulation by the functional regulator, e.g., the company consolidates across many aspects of the financial services industry or globally, or the functional regulator is unable to support this role as a result of insufficient statutory authority and/or budget and staff;
- **Act to require company action** to prevent, reduce, or eliminate the accumulation of unacceptable levels of systemic risk. It is intended that, for the insurance industry, this be accomplished through the functional regulator.

To the extent an entity offers guarantees to customers, then the risks assumed in making those guarantees should be adequately capitalized. A requirement should exist as to the quality of capital supporting this guarantee so that the capital will be there if needed. The existence of state guaranty funds or federal guarantees should not be viewed as a source of capital thereby reducing the capital requirement of the entity. In considering the list of SRR responsibilities described above, it is important that monitoring and regulation of adequate levels of capitalization of financial services companies and limitations on leverage be included.

It is generally not feasible to use generic financial metrics to identify companies whose growth (either organically or through acquisitions) would raise concerns that they might become a risk to the proper functioning of financial systems.

The SRR should have authority to approve/disapprove mergers and acquisitions that may have systemic implications. Systemic risks ultimately will arise as a result of ineffective risk management by a company and not from a generic size requirement or a specific combination of risks. The SRR should have the responsibility to determine if there are any potential risks to the financial system that are related to continued growth of individual companies or groups and to discuss these issues with management so that management will put in place appropriate risk-management processes.

## **Governance and Structure**

The roles, responsibilities, and structure of the SRR applicable to the insurance industry should be coordinated with the existing regulatory structure at the state level and should use actuarial expertise to monitor the financial strength of insurance companies. The task force nevertheless recognizes the need for a federal regulator with responsibility to monitor systemic risks across the country, globally, and across a variety of financial services providers, including the insurance industry.

### Governance (Roles and Responsibilities)

As it relates to the insurance industry, these recommendations anticipate a significant role for the functional state regulator in supporting the SRR. The roles and responsibilities of the SRR, in conjunction with the functional state regulator, should encompass the following:

- Develop procedures for ongoing identification of rapidly growing substantial risks to the insurance industry from both internal and external sources;
- Identify risk metrics, along with the appropriate and available sources of data for their development, necessary to effectively measure the level of systemic risk exposure;
- Identify appropriate tolerance levels (and resulting trigger levels) for key risk metrics that will form the basis for taking system-wide action and/or at the individual company level to mitigate the increase in risks that will have system-wide impact;
- Determine a suitable frequency for gathering and disseminating information regarding risk metrics;
- Develop guidelines to evaluate the implementation of effective risk-management procedures at the company level;
- Coordinate with state regulators on the establishment of guidelines and corrective actions when risk levels of systemic importance have risen to actionable levels;

- Establish a surveillance system for the functional regulatory system to ensure action is taken to achieve desired results;
- Establish guidelines and associated action steps for SRR intervention.

Our support for a role for the functional regulator to help the federal systemic risk regulator is based on our review of the current insurance industry regulatory framework.

- The state regulatory system focuses on the financial strength of companies and thus establishes values for the determination of statutory required capital. Statutory required capital is based on a low tolerance for risk to the financial solvency of the individual companies.
- Regulatory required capital is based on a methodology applied to specific financial values for the particular organization. The system is intended to identify companies whose capital may be weak when compared to the risk characteristics of their business and operations.
- The financial regulatory system supports updates to the above requirements that respond to product innovation. An example of the responsiveness of the regulatory system is the introduction of principle-based liability and required capital methodology for complex life insurance products not easily adaptable to a formulaic system.
- State guarantee funds have been established to preserve the guarantees to policy owners in the event of financial collapse by specific companies. Those funds have been retroactively funded, thereby giving the industry an incentive to police itself to prevent inadequate reserve or solvency requirements.

The current regulatory system, along with insurance companies, actuarial associations such as the Society of Actuaries and Casualty Actuarial Society, and some industry associations, have a wealth of knowledge and also serve as a valuable source of insurance industry data. The SRR should make every effort to maintain and utilize the framework from within which that knowledge is developed.

### Organizational Structure

The organizational structure for a federal office of the SRR should incorporate:

- A standing office of the actuary with responsibility for providing assistance to the federal SRR including:
  - The identification of potential systemic risks and the determination of risk metrics for measurement purposes;
  - The identification of data requirements;
  - The evaluation of insurance company risk-management practices;
  - The identification of potential corrective actions.

- An office to manage relationships with and supervision of functional regulators.
- A research office to identify potential systemic risk related to trends in the usage of new financial instruments and to determine the level of risk they represent as they emerge. This office should coordinate closely with the office of the actuary.
- An office of the chief economist to identify economic trends that may be of concern and work with other regulatory financial officers to maintain consistency in assumptions and viewpoint.

As described above, we believe that actuaries are uniquely qualified by their training and experience to assist the SRR in monitoring and managing the potential systemic risks to which the insurance industry is exposed. These risks relate to the unique and long-term liabilities assumed by the insurance industry as well as externally generated risks from the capital markets.

We provide a more in-depth discussion on these organizational principles in “Relationships with the Functional Regulators” and the “Role of the Actuary.”

### **Data Needs of the SRR**

As the SRR is charged with defining risks to the system that are both existing and potentially emerging, identifying the drivers that create or increase that risk, and designing metrics that quantify those drivers, specific data requirements will be defined based on identified metrics. This section provides examples of risk drivers, risk metrics, and their respective data needs. Of course, as new risks emerge, the SRR will need to identify risk drivers, metrics, and data needs to monitor them.

As we do not have examples of systemic risk generated by the insurance industry in the current crisis, the examples included here are illustrative in nature and do not necessarily reflect any particular situation or stakeholder. The metrics are not meant to be an exhaustive list of items to be required to monitor systemic risk development.

### Systemic Risk Drivers

The insurance industry is distinct among the financial services sector in that, in addition to many of the same basic financial risks as banks, it is also subject to risks related to insurable events such as mortality, morbidity, fire, theft, property damage, longevity, natural or man-made catastrophes, etc. In addition, many of these liabilities tend to be long-term in nature. Insurance companies, particularly life insurance companies, therefore require an investment portfolio that reflects the effects of these risks on investment cash flows.

As a result, it is necessary not only to consider capital market risk drivers, including concentration of risks, liquidity, leverage, quality of investments, and adequacy of capital, but

also risks related to insurable events that may generate risks to the financial system. To date, these internally generated risks have not attained levels severe enough to result in systemic failures. This has been accomplished largely by the success of state supervision and the presence of actuaries working within and with companies to measure their liabilities and risks.

However, a rapidly changing environment (from within as well as external to the insurance industry) of investment-product requirements and investment-product solutions, along with the environment of continually changing newly emerging risks, creates a potential for the development of unique risks that may not be addressed by current state regulation but have risk implications for the system. Appendix I contains three hypothetical scenarios that potentially could create systemic risk in the insurance industry.

Because events such as those described in Appendix I and other unanticipated circumstances may occur, it is important for the SRR to maintain and consolidate necessary data to:

- Detect the emergence of rapidly growing substantial adverse trends at an industry, international, and company level;
- Identify insurance companies and insurance company groups that are systemically significant;
- Have processes and regulatory protocol in place to measure the risk and the companies contributing to the risk.

### Sources of Data

Since it is anticipated that they will have a significant role in working with the federal SRR, current functional state regulators would be a natural source of data to facilitate the federal regulator's monitoring of systemic risk.

Appendix II provides examples of data currently available from functional regulators, federal regulators, and third-party providers that also might assist the SRR.

### **Relationship to Functional Regulators**

Functional regulators for the insurance industry play a significant role in the regulation of systemic risk. As noted above, they have established both an infrastructure whose charge includes the supervision of risks related to individual companies as well as a network that collects data related to the insurance industry's financial situation, which may be used to identify the accumulation of risk that may become systemically relevant.

### Background

The current insurance regulatory framework is primarily led by state regulators and ultimately the insurance commissioner in each state. In 1871, through the establishment of the National

Association of Insurance Commissioners (NAIC), a national framework was created. The NAIC is charged with developing model laws for adoption by the state legislatures, thereby facilitating consistent and cooperative regulation where applicable. This allows for a common forum for managing the capital requirements of insurance companies to ensure that the interests of insurance consumers are protected.

The insurance industry maintains conservative capital levels that, along with trigger points, allow for state regulatory involvement and, ultimately, takeover and/or wind-down authority to create security for the policyholders. This strong regulatory framework has served the financial community, as well. Throughout the recent financial crisis, there is no case in which a regulated insurance company contributed to the development of systemic risk.

Even in the case of American International Group (AIG), its insurance businesses performed well enough to maintain solvency and the ability to fulfill obligations to policyholders. It was the performance of an AIG entity providing insurance related to asset values but not regulated as an insurance company that threatened to bring down the company. In addition, there are other important precedents (e.g., Conseco) that suggest that while a holding company may collapse, an insurance company can remain solvent.

Even with this history of functional regulation by the individual states with NAIC leadership, it should be recognized that the insurance industry is not isolated from systemic risk. As noted above, parent or affiliate exposure, combined with risks, such as exposure to the capital markets, potential natural catastrophes, an epidemic or pandemic, and/or new evolving risks, can affect an insurance company or company group by systemic risk.

Insurance company involvement in federal systemic risk regulation, therefore, is appropriate.

### Building Upon the Current Framework and Functional Regulators

The current system of state regulation manages day-to-day oversight, and regulation of insurance companies. Through the regular communication of financial information from the insurance companies to the functional regulators, triennial and quinquennial state reviews of companies, and the historical knowledge that states have of their domiciled companies, there is a repository of valuable information in each state. The states have a history of working together through the NAIC to develop common standards and information requirements. As a result, there are specific areas where state regulators can support the SRR, including the following:

- Regularly collecting domestic data;
- Collecting data at the request of the SRR;
- Providing expertise on specific domiciled companies;
- Supervising individual insurance companies in relation to risk metrics established by the SRR;

- Monitoring the effectiveness of the risk management processes of individual companies;
- Reporting to the SRR on the findings of the supervisory process;
- Taking regulatory action when systemic risk appears to be developing (this action may range from a request to the company for a plan to mitigate systemic risk to the requirement of specific management actions by the company);
- Providing advice to the SRR related to the development of a supervisory approach to systemic risk;
- Identifying insurance companies in which the complexity of the parent company's consolidated structure requires supervision by the SRR, or state laws do not authorize the activities requested by the SRR, or the state does not readily have the capability or capacity to make a qualitative assessment of the risk management processes of the insurance company.

#### Role of the Federal Systemic Risk Regulator in Relation to the Insurance Industry

While the SRR would have many roles and responsibilities related to systemic risk regulation, there are also other roles that it should assume. These roles will require the active involvement of the functional regulator and should include the following:

- Designing risk metrics and risk tolerances to be monitored at the company and company-group levels for U.S. companies and foreign affiliated companies;
- Setting standards for the assessment of the effectiveness of the company risk-management processes;
- Developing a list of insurance companies and insurance company groups over which the SRR will retain supervisory responsibility for systemic risk;
- Establishing guidelines for SRR evaluation of the ability of the functional regulator to perform the necessary quantitative and qualitative supervision roles.

#### **Range of Potential Regulatory Action**

There should be a range of options for regulatory action by the SRR including:

- Communication
- Corrective action
- Supervision of the systemic risk regulatory process

## Communication

Communication by the SRR to all external stakeholders will be an essential element in restoring confidence in the effectiveness of the regulatory oversight.

This communication should include regular reports that represent the compilation of the findings of both the SRR and the functional regulator. (These reports should include similar reports from other industries.) The reports will communicate the risk metrics used by the SRR in measuring levels of systemic risk, as well as trends in these metrics.

Transparency would provide reassurance to the public as to the strength of its financial institutions. This reassurance is particularly important to the insurance industry for which the consumer relies on long-term commitments.

## Corrective Action

There should be defined risk levels that will trigger SRR regulatory action.

At the lowest threshold of regulatory action, one or more companies (insurance or otherwise) may be required to submit a management plan to reduce the accumulated systemic risk.

At the highest level of accumulated risk, one or more companies may be required to take specific actions intended to reduce the level of systemic risk.

The functional regulator would be responsible for identifying the following potential required actions by the company:

- Reduction in the amount of leverage to which the company is exposed;
- Reduction in levels of counterparty risk;
- Required management action to improve risk-management processes;
- Closure or limitation of new business creating potential systemic risk;
- Required reduction of unacceptable financial positions creating systemic risk;
- Required injection of unlevered capital to recognize the level of systemic risk;
- Required management action related to reduce concentration of risk related to assets, lines of business, reinsurance, geography, and sources of business such as distribution.

The SRR should have a range of options for regulatory action with respect to those companies deemed to be systemically important, including:

- Required management action to improve risk-management processes for the most diverse financial services corporations;
- Required divestiture of businesses where it is demonstrated that the company risk management processes are ineffective or the cessation of new business in such an area or the cessation of all new business;
- Disallowed ownership by insurance companies of non-insurance entities to create transparency of the financial strength of the insurance company;
- Required disclosure of all material systemic risks to which the insurance company is exposed.

### **Relationship of the Regulator with the Actuary**

A company chief actuary is not only an important advisor to a chief executive officer, but also the individual best qualified by training and experience to understand the current risk and financial state of the company and advise on any remedial courses of action.

The chief actuary and his/her actuarial colleagues (a large company may employ many actuaries), perform key roles within the insurer, serving both as expert analysts and advisers on risk and finance.

The roles of the individual company actuary (whether employed by the company or engaged as a consultant) are recognized under state statutes and current functional regulation. Actuaries have become a key element of company reporting regimes, required to produce their own reports and to sign off on the company's regular statutory returns.

Actuaries similarly play an important role as members of the functional regulator's team. State regulators employ actuaries directly and/or through consulting arrangements to serve as analysts, commentators, and advisers on the regulated entities and their financial reports. Some state departments of insurance dedicate resources to directly employ a full team of credentialed actuaries, with many others contracted for special tasks from the major actuarial consultancies.

A similarly thorough and effective use of actuarial expertise will be necessary for the SRR. The actuary's role in this new framework will be critical to its success working efficiently with functional regulators and insurance companies.

### **Training and Professional Accountability of Actuaries**

A qualified actuary can bridge the gap between the language of risk management, the insurance industry, and the rest of the financial services and investment community. This will prove critical in identifying, managing, and preventing systemic risk and in ensuring that it is done in a prompt and appropriate manner. In addition, the actuarial training and continuing education requirements

are lengthy processes. Actuaries functioning at a senior insurance level in fact are obliged to be a member of at least two actuarial organizations.

Under existing functional regulation, membership in the Academy (the “MAAA” qualification) is often a requirement for any formal actuarial submissions to a regulator. This is because the Academy’s members (as do the other national actuarial associations) adhere to the Actuarial Standards of Practice, Code of Conduct, and Qualifications Standard. This assures the regulator that reliance can be placed upon the qualifications of the provider and that the material submitted conforms to applicable standards. This credential would work well for a federal SRR as well.

### The Actuary within the Insurance Company

Actuaries working within insurance companies are vital to the understanding of the risk position of the insurer and to the communication of that risk to the regulator. Even a small insurer may employ several actuaries, each specializing in his or her own specific area of expertise relative to the company’s operations. It is important, therefore, that the company nominates one specific senior individual to serve as the contact with the SRR actuary.

### The Actuary within the Federal Systemic Risk Regulatory Structure

Few single insurance companies are individually large enough to cause risk of systemic proportions. But if a similar course of action is pursued by several companies of sufficient system-wide risk concentration, systemic problems could develop. Therefore the staff of the SRR should include individuals with the expertise to review the reports and risk profiles of many different insurers to determine what combinations may pose real risk. This requires an ability to understand and then aggregate the work performed by company actuaries and to be qualified to do this work within that area of expertise (actuaries specialize in particular types of insurance: life, health, pension, or property/casualty).

Actuaries also may need to perform an analysis of potential insurance risks before those risks emerge. Below are three examples of risks that could require more complex analysis:

- Determining whether the consolidation of insurance administration in the hands of too few outsourcers could lead to systemic risk;
- Determining whether particular asset classes, albeit held at only small levels in any particular insurer, pose an unacceptable risk when aggregated at the national level;
- Determining whether the insurance industry’s use of only a small number of reinsurers is trending toward the creation of systemic exposure.

This network of actuaries, creating a link between the federal regulator and the functional regulators as well as a network across the federal jurisdiction, will be able, in parallel with the NAIC, to support the federal SRR to ensure that the insurance industry continues to be appropriately regulated and avoids the systemic risk pitfalls that have befallen many other financial services companies and sectors of late.

# Appendix I

## Hypothetical Examples of Insurance Industry Systemic Risk

### *Example 1 – Consolidation of Reinsurance Industry*

Reinsurance is one of the ways that insurers mitigate their risks and thus expand the capability of insurance companies to meet the insurance needs of the public. Reinsurance provides the ceding company:

- Increased capacity to provide insurance to individuals and businesses,
- Claims stability so that insurance companies can plan for long-term growth and development, and
- Catastrophe protection.

If the reinsurance industry were to consolidate in a way that all the ceded business is with just a few reinsurers, the failure of one of them could restrict the availability of insurance protection to a range of constituencies.

One risk metric that the regulator might identify as appropriate to examine is the percentage of reinsured business held by one reinsurer. Adverse trends can be recognized over time if an increasing amount of reinsurance is being ceded to a decreasing number of reinsurers. Risks also may be identified if the financial strength of the reinsurance industry declines as measured by metrics related to statutory required capital or internal reinsurer risk-management processes.

### *Example 2 – Counterparty Risk Exposure Related to Hedging Insurance Risk*

Hedging is another key approach insurers use to manage their risk. Like other financial institutions, insurers use capital market financial products to hedge economic risks, such as interest rate risk, equity risk, or currency risk. But insurers also may use capital market financial products to hedge certain insurance risks, such as through catastrophe bonds (cat bonds). Property-casualty insurers commonly use cat bonds as an alternative to reinsurance to mitigate losses due to natural catastrophes. Payouts for these bonds are related to major natural catastrophes, therefore passing some catastrophe risk to investors.

If multiple insurers purchased a large amount of these cat bonds from a single issuer, the failure of the issuer to fulfill its obligations could lead to a significant negative impact on the property-casualty insurance industry. This would limit the ability of the insurance industry to provide coverage or require the federal government to be the reinsurer of last resort.

To manage the counterparty risk to the insurance industry, the SRR should evaluate each counterparty's aggregate risk exposures and exposures across counterparties. Counterparties are usually major players in the capital markets, so they most certainly already would be under scrutiny of the SRR. The exposure of any particular insurer and the insurance industry as a whole to any particular counterparty, and perhaps to all counterparties combined, thus should be

available. This information may be analyzed along with the issuers' credit ratings to assess the severity of the risk to the insurance industry of its exposure to counterparties.

***Example 3 – Exposure to Development of New Products with Evolving Pricing Technology***

When innovative insurance products are developed, pricing technology will develop and evolve in response to the coverage and evolving experience. To the extent the coverages expand rapidly and are systemically important, the methods of risk quantification required under the current regulatory system and internal company risk measurement must evolve quickly to avoid system-wide risk.

State guaranty funds would be adequate to cover a limited number of insurance company failures that might emerge as a result of such a failure in risk analysis. A rapid introduction of such coverage in the market, however, could lead to a range of failures that could stress the guaranty fund capacity. The SRR, through its nationwide collection of data and monitoring of metrics, should be in a position to identify trends that rapidly develop at a national level and might reveal improper or insufficient risk analysis that threatens the insurance industry.

The federal SRR's establishment of risk matrices and its comprehensive examination of company risk-management practices should identify the risks inherent in a new product before those risks can create systemic problems. Some examples of metrics that might be useful in identifying potential risks created by the introduction of new products include the following:

- Trends in the distribution of business among products – to identify products whose financial performance may significantly affect the financial strength of the insurance industry;
- Sales trends by product type across the nation – to identify rapid growth in product lines to assess current provisions for risk;
- Periodic assessment of industry practices related to the risk management of innovative products;

## Appendix II

### Data Sources for the Monitoring of Systemic Risk Development

- **Annual statements:** An insurer must file this report annually with each regulator in each state in which it does business. Quarterly reporting on a less-detailed basis is also provided. The statement shows in great detail the current status of reserves, expenses, assets, total liabilities, reinsurance, investment portfolio, and relationship of actual capital to regulatory required capital. The form used is agreed upon by the NAIC. This is a vital source of data in assessing the financial strength of a company.
  - Statutory reserves: Liabilities an insurer is legally required to maintain on its balance sheet with respect to the obligations (expected future claims) of the company based on conservative assumptions.
  - Risk-based capital (RBC): Amount of required capital an insurer must maintain based on the inherent risks in the insurer's operations intended to identify weakly capitalized companies.
  - Disclosure of off-balance sheet assets
- **Management's discussion and analysis:** The NAIC-required supplement to the annual statement. It covers:
  - Financial position: Any material changes in investment portfolio and liquidity, adequacy of reserves, trends in capital, and surplus accounts
  - Results of operations: Unusual events that materially affect operating income
  - Cash flow and liquidity: Balance sheet components that indicate liquidity position, sources of cash, and planned capital expenditures along with purpose and funding
- **Actuarial opinion on asset adequacy:** Actuaries are required to provide an opinion to state regulators as to the adequacy of assets to mature the company's liabilities, based on extensive analysis and projection, in multiple interest rate environments, and various other stresses of those assets and liabilities.
- **SEC filings:** GAAP Filings, particularly the 10K Annual Report, often include valuable insights into the company's business and risks.
- **Data from third-party providers:** Third-party organizations, such as rating agencies, consultants, or actuarial organizations such as the American Academy of Actuaries, Society of Actuaries, and Casualty Actuarial Society, also may be valuable sources of data that can supplement what is available from the functional regulators. To the extent there is information not provided by any of these sources, the federal regulator should coordinate with the functional regulators to secure the information.