



North American CRO Council

The Components of a Sound Emerging Risk Management Framework

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chairperson@cro council.org

North American CRO Council - Emerging Risk Sub-Committee:

Aaron Ammar, XL Group
Bev Barney, Prudential Financial, Inc.
Glenn Campellone, The Hartford Financial Services Group
Shari Breiten, Principal Financial Group
Chris Trost, Northwestern Mutual
Owen Stein, Towers Watson
Joe Matthey, USAA

Overview:

The CRO Council was formed to promote sound practices in risk management and the advancement of risk-based solvency and liquidity assessment throughout the insurance industry. To advance these causes, Council members have formed working groups on External Affairs and on Sound Practices, including a subgroup on practices related to Emerging Risks. Content generated by Sound Practices initiatives is made available to the groups working on External Affairs for potential use in the Council's dialogue with regulators who share the Council's interest in promoting sound risk management practices. This paper is the result of the work of the subgroup on practices related to Emerging Risks.

What is an Emerging Risk?

An **emerging risk** is a new or evolving risk where the extent and nature of any potential losses are particularly uncertain due to insufficiency of information or time to have fully analyzed the emerging situation.

What is an Emerging Risk Management Process?

Sound risk management practice includes the development and implementation of a process to identify and complete timely initial assessments of emerging risks in terms of their potential likelihood of occurrence, potential magnitude of losses, and potential direction and speed of change in these dimensions.

Based on a qualitative assessment, emerging risks with the potential for the highest ultimate impact to a firm may warrant more comprehensive and immediate evaluation and risk mitigation. Other emerging risks may simply warrant ongoing monitoring.

CRO Council ERM Framework



An Emerging Risk Management Framework:

Emerging risks are more important than ever, given the constantly changing risk landscape, the rapid growth of new technologies, and the changing business environment across the globe.

Many insurance companies base their approach to risk management on historical loss experience and prior knowledge. In today's increasingly complex and interconnected world, a proactive approach that includes emerging risk identification and management is often not only helpful, but necessary.

Embedding an emerging risk framework within an organization can reduce uncertainty about emerging risks. Also, an emerging risk framework can attempt to diminish the volatility of business earnings while increasing stakeholder confidence.

The components of an emerging risk framework are very similar to the core elements of an overall enterprise risk management (ERM) framework.

The following sections describe suggested leading practices that can assist a company in successfully embedding an emerging risk framework in their organization's ERM framework.

Risk Culture and Governance:

“Whatever the drivers are for your organization, achieving effective risk management requires a sound foundation of risk governance – the structures, culture, and processes that support good decision making.”

- PwC: Risk Governance a Foundation for Effective Risk Management

A well defined governance framework for emerging risks is an essential part of a company's overall risk management strategy.

A formal emerging risk committee can provide the foundation of the governance framework, or oversight can be provided through adding this process to the scope of other governance bodies (i.e. ensuring evaluation of emerging risks is routinely part of risk identification discussions).

If a distinct **emerging risk committee** is used, it could be comprised of cross functional leadership (e.g., CROs, Actuaries, General Counsel, Business Leaders, etc.) reporting to senior leadership of the company.

The committee should ensure emerging risks are effectively identified, prioritized, analyzed, estimated (if possible), monitored and managed.

More specific responsibilities and authorities of the committee might include:

- (1) Proactively identify potential emerging risks.
- (2) Assign accountability for reacting to and responding to an identified risk.
- (3) Review analysis and quantifications of the exposures to emerging risks.
- (4) Report significant emerging risks to senior management and/or the executive team.

The emerging risk committee should consider adopting a formal charter to document roles and responsibilities.

The committee should meet periodically during the year, and those meetings should be supported with formal agendas and the publication of minutes.

It will be increasingly important to document governance processes and outcomes for use in Own Risk and Solvency Assessments (ORSAs), as well as for sharing with interested parties that evaluate a firm's risk management (e.g., rating agencies).

Since many emerging risks may be best identified within the business, it is also critical that awareness of all types of risk becomes embedded into the day-to-day operation of the business and that open lines

of communication exist between the business and ERM.

A company can strengthen its own risk culture by increasing awareness of emerging risks across the enterprise and integrating emerging risk into the fabric of day-to-day operations.

Enterprise-wide risk focused training and the distribution of risk reports to areas such as underwriting, sales, service, and claims are just some ways to help raise the overall awareness of potential risks faced by the company and to improve the chances of identifying emerging risks on a timely basis.

Risk Appetite, Tolerances and Limits:

Risk is part and parcel to all aspects of business. The overarching question all companies must ask themselves is whether the risk is worth the reward.

To effectively outline a company's vision and strategic goals, a company's risk appetite must be clearly defined and clearly communicated to the organization via executive and senior management to ensure key levels of the organization are aware of the company's risk appetite.

Risk appetite is often defined as the amount and type of risk a company is willing to accept for a desired return on capital.

Setting a risk appetite should be done in tandem with reviewing a company's overall capacity, capital structure and risk mitigating policies.

It should encompass risks the company is currently aware of, but also be cognizant that new and emerging risks could surface at any time and the company's risk framework must be flexible enough to react. Once a risk appetite for particular risks and scenarios has been established, a logical next step is to set a risk tolerance for those specific scenarios.

A **risk tolerance** is the maximum amount of exposure an organization is willing to accept.

While risk appetite can contain both quantitative and qualitative factors including definitions, accepted practices, etc., risk tolerances are generally expressed as a numerical figure to allow the company to adequately measure both current and emerging risks.

Ideally, management should review the emerging scenarios and risks being measured to understand the potential implications they could have on the company. They should then assess the company's tangible shareholders' equity or capital structure and deploy available capacity to the organization in line with the overall risk appetite to which the company will manage.

Risk limits may be used to keep risk exposures in a desired range. They can prompt a discussion with management to consider how the risk should be managed going forward in the event the limit is exceeded, or they could allow for additional risk in the event actual exposure is below a desired level.

Identify and Assess Risks:

The active **identification** and prioritization of emerging risks is vital to successfully implementing and enhancing the proper risk management techniques to:

- (1) Mitigate an organization's exposure to various emerging risks, and
- (2) Strategically explore potential opportunities for innovative new products and risk management solutions.

The identification of emerging risks can come from a variety of sources both internal and external in either a centralized (e.g., an enterprise level emerging risk committee with a unified view) or decentralized (e.g., multiple business units with potentially differing viewpoints) fashion.

Other key identification processes can include, but are not limited to, the following:

- (1) Involvement with external organization's emerging risks groups.
- (2) Monitoring key publications and websites.
- (3) Brainstorming sessions.

Upon accurately identifying potential emerging risks that could affect the organization, companies should seek to **assess** the potential impact these risks could have.

Insurance companies should seek to both identify and understand potential emerging risks by designating specific individuals (emerging risk owners) or teams to assess the need to:

- (1) Actively "manage" the identified risks, and/or
- (2) Determine the frequency of how often those risks should be monitored and reviewed.

Furthermore, it is suggested that organizations actively assess emerging risks by developing an emerging risk "watch list" and review the list at least annually to ensure all relevant risks are captured and assessed.

Risk Measurement:

The consistent measurement of emerging risks allows companies to:

- (1) Compare and prioritize risks, and
- (2) Recognize an increase or decrease in the overall perception of an emerging risk.

For actively managed risks, the emerging risk owner or team should establish a method to value or measure risks and in many cases, such a valuation process should assess a risk's likelihood, impact and velocity within broad parameters.

- (1) By measuring the **likelihood** of an emerging risk, one can convey the probability of the

event occurring (as distinct from its impact on the company).

- (2) By measuring the **impact** of an emerging risk, one can capture the potential dollar amount of a loss if the identified risk ultimately emerges.
- (3) By measuring the **velocity**, one can convey how quickly the emerging risk could impact the company once the risk is realized.

In addition to the measurements above, emerging risks can be quantified in a variety of ways. For example, they might be estimated by scenario analyses that estimate a measure of a company's potential maximum exposure.

The ability to measure emerging risks is imperative and allows a company to truly understand the potential implications and whether or not action should be taken.

Monitoring, Mitigating and Reporting:

Emerging risk owners should regularly perform industry-wide scans and analysis for potential risks that may surface, even if the likelihood is low.

Once identified, the emerging risk should be assessed for significance and potential impact relative to the company's overall business strategy and objectives.

For those emerging risks that have been identified as having a potential impact, the appropriate resources should be assigned to monitor and potentially manage the risk.

Monitoring of risks may involve the creation of leading indicators, both quantitative and qualitative (e.g., tracking the infection rate and spread of new influenza strain). The leading indicators may evolve over time as more information develops on the emerging risk.

Other tools used to monitor and assess emerging risks include risk dashboards, on-going experience reporting, scenario analysis, and stress testing.

Companies should also develop and disseminate reports on a regular basis (e.g., quarterly) to internal audiences. The reports should capture the most current and relevant information and convey how risks might impact the organization.

Companies can also take a more comprehensive approach by choosing a key emerging risk and conducting an in-depth analysis to determine the impact it could have on operations and/or product offerings.

Emerging risks can be managed in various ways, depending on the nature of the risk (e.g., lobbying proposed laws or regulations or otherwise influencing public opinion, preparing for possible changes to business strategy or tactics, etc.).

If the risk is only passively monitored, it should be evaluated for discussion at predetermined intervals until any threat has passed, or the threat has escalated and is more actively managed.

Stress and Scenario Testing:

As the likelihood of an actively managed emerging risk becomes clearer, it may be useful to complete various stress testing or scenario testing to get a better measure of the potential impact of the risk.

Stress testing is a part of a set of risk management quantification/measurement approaches that attempt to simulate what a potential tail scenario could be. Stress tests should incorporate real world events, as well as all product lines in order to accurately depict a potential loss scenario in an extreme event.

For risks that are not completely understood, often the first step is to pull together expertise from various disciplines to agree to a high level stress test

definition. From there, it is necessary to work with the businesses to identify the potential exposure to the scenario and ultimately quantify the potential impact.

Capital Management:

Emerging risks are defined as such because there is a great deal of uncertainty and unpredictability associated with them.

High level information regarding the risk may be known, but much about the potential likelihood, magnitude, and complexity is unknown. The data required to create reasonable estimates is likely unavailable or incomplete.

Therefore, the ability to underwrite, establish reserves, allocate capital or implement specific capital charges for these risks is very challenging.

An insurer should assess the adequacy of current reserve levels and/or capital at the point when an emerging risk makes the transition from unknown to known and becomes more quantifiable.

The Link to Business Strategy:

“While much of the focus on emerging issues has centered on identifying the next “asbestos” before it occurs, emerging risk teams should approach their job with a broader perspective, looking not only for risk but also reward.”

- Verisk Analytics: Integrating Emerging Risk Evaluation into Corporate Strategy

An embedded emerging risk framework and well defined risk appetite allows companies to adequately assess the potential impacts an emerging risk could have on its overall business strategy and goals.

An embedded framework and/or emerging risk committee could produce and disseminate periodic reports to senior management, and should highlight potential implications of those risks.

Recommendations to either mitigate or strategically explore an emerging risk should also be conveyed to senior and executive management.

An emerging risk framework allows companies to take a proactive approach to identifying emerging risks and mitigate harmful effects. It also has the ability to strategically notify the rest of the organization about a potential risk and get everyone thinking about potential new opportunities.

Ultimately, companies may choose to manage emerging risks in a multitude of ways, depending on the potential impact to the company's business strategy. Nonetheless, a structured emerging risk management framework can allow management to quickly and effectively assess a company's exposure and take appropriate mitigation or management action.

References to External Literature:

As the prevalence for identifying and understanding emerging risks continues to grow, there are a number of different resources companies can monitor including, but not limited to, the following.

- (1) World Economic Forum
- (2) ISO Emerging Risks Panel
- (3) Lloyd's Emerging Risks Special Interest Group
- (4) Swiss Re Emerging Risks
- (5) Munich Re Emerging Exposures