January 30, 2014

Alan Seeley
Chair, SMI RBC Subgroup
National Association of Insurance Commissioners
2301 McGee Street, Suite 800
Kansas City, MO 64108-2662

Dear Mr. Seeley:

The American Academy of Actuaries\(^1\) appreciates the opportunity to comment on the Capital Adequacy Task Force’s Operational Risk Proposal (December 9, 2013). Each of the Academy’s Risk-Based Capital (RBC) groups—the Health Solvency Work Group, Life Capital Adequacy Subcommittee, and Property/Casualty (P/C) RBC Committee—have provided comments specific to their respective RBC formulas. The Academy’s RBC groups have been monitoring the SMI RBC Subgroup’s efforts to explore the feasibility of refining the current RBC formulas to explicitly quantify, and, in turn, improve the manner in which operational risk is captured in the minimum capital requirements for insurers.

While the proposal would impact each RBC formula differently, the following observations are applicable to all three formulas:

- Operational risk has many dimensions. In order to better quantify “operational risk,” the term, as envisioned for use in the RBC formulas, needs to be clearly defined.
- Operational risk is already included, to some degree, in all three RBC formulas. Introducing an entirely new component to the formulas to address operational risk without recognition of the degree to which operational risk is already included will result in excessive capital requirements corresponding to this risk.
- Even with a clear definition of operational risk, gathering credible industry data to form the basis for factors will be a time-consuming and arduous task.
- Risk-focused exams and the own risk and solvency assessment (ORSA) requirement will provide regulators with additional information about an insurer’s exposure to operational risks and, more importantly, how that insurer is managing its risks.

---

\(^1\) The American Academy of Actuaries is a 17,500-member professional association whose mission is to serve the public and 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.
Health Proposed Operational Risk Charge Methodology

The Health Solvency Work Group appreciates the direction to incorporate an operational risk charge for U.S. RBC in conjunction with the EU/US Way Forward. The work group also understands the difficulty in defining operational risk as an unknown/unforeseen low frequency, high severity event.

- The work group is not aware of any data that suggest the current health risk-based capital (HRBC) formula translates in practice to inadequate levels of capital for domestic health insurance company financial solvency. In fact, the work group believes that operational risk is included in other RBC factors. Therefore, the work group suggests that to the extent the revised RBC calculation increases after accounting for the addition of the operational risk charge (H5), the NAIC consider further modifications to the formula to offset that increase by removing redundant factors in other RBC elements and recalibrating.

- Any factor used to define “excessive growth” should consider the inflationary nature of lines of business. Trends in medical coverage are not “growth” as anticipated in the application of “growth” as a proxy for operational risk. Historically, medical trends have ranged from the mid-single digits to double digits depending on the environment. “Trend risk” is already incorporated in HRBC.

- Any factor used for “excessive growth” should vary by line of business. The NAIC example of a 20 percent year-over-year premium increase is about two and a half times comprehensive medical trend but only about one times medical stop loss trend.

If the NAIC decides that it is appropriate to increase RBC, the increase should be phased in over time. A large increase in the required HRBC may be difficult for insurance companies to fund under the current federal medical loss ratio (MLR) rebate requirements as required by the Affordable Care Act.

Life Proposed Operational Risk Charge Methodology

Background

The NAIC RBC formula was developed to identify weakly capitalized companies. Regulators use this tool, along with others (e.g., risk-focused examinations) to determine the actions, if any, that should be taken to protect policyholders. Recently, the NAIC has made significant progress in developing an Own Risk and Solvency Assessment (ORSA) for U.S. insurers. Most of the life industry will be submitting ORSA reports to their regulators in the near future. We believe the combination of risk-focused exams and ORSA will give regulators a significant amount of additional insight into a company’s practices for managing operational risk.  

The current Life RBC formula considers asset, insurance, interest rate and other business risks. The Life RBC formula currently contains a “C-4” component—“business risk”—to cover

---

2 Risk of loss resulting from failed or inadequate internal processes, people and systems or external events.
general business risk (e.g., litigation). The term “business risk” comes from Society of Actuaries risk taxonomy from the 1970’s. In contemporary risk management taxonomies, this business risk would also be described as “operational risk.” The current C-4 charge is developed by applying a factor to direct life premiums and annuity considerations from Annual Statement Schedule T. The current C-4 formula also applies separate factors to direct accident and health premiums, separate account liabilities and administrative expenses for certain A&H coverages.

**Review**

After reviewing the information available to us from the original 1991 RBC Report of the Industry Advisory Committee to the NAIC’s Life Risk-Based Capital Working Group, subsequent reviews of the life RBC formula by the Academy’s Life Capital Adequacy Subcommittee, and the current life RBC formula and instructions, we believe the current C-4 charge covers much of the operational risk for life insurers. We acknowledge that the current C-4 component is simplistic and not based on a sophisticated analysis of insurance failures due to operational risk. That said, we question whether the current operational risk component of the Life RBC formula has led to weakly capitalized companies escaping identification. We also question whether higher capital standards would improve identification of those companies or merely increase RBC.

In reviewing the reasons behind life insurer insolvencies or impairments, we note that the most prevalent reason for life insurer impairment or insolvency relates to the mismanagement of the investment risk. While operational risk may contribute to the decline of a life insurer, failures in operational risk controls are not the leading cause of most life insurance company impairments. Further, as life insurers have developed more sophisticated economic capital models, we note that the quantification of operational risk remains one of the most challenging aspects of determining economic capital. The data to support a credible measure is difficult to obtain and can vary from year-to-year for an individual company. In addition, operational risk is subjective and difficult to define, and an individual company’s exposure is very dependent on its particular business model.

**Conclusion**

While there might be some areas where the C-4 component could be improved, we do not support the task force’s recommendation to add a new risk component to the Life RBC formula. However, we understand and agree that regulators need an understanding of a company’s exposure to operational risk and how a company manages and mitigates its operational risk. We believe the information obtained from risk-focused examinations and ORSA will be more predictive in identifying companies with above-average operational risk than an additional charge in the RBC formula. We also believe that the introduction of a separate C-5 charge, explicitly for operational risk, without any adjustment to or coordination with the existing C-4 charge, would have the effect of merely increasing the operational risk component of RBC. The addition of an explicit RBC charge for operational risk at this time will give the illusion of perceived accuracy and may, in fact, produce unintended consequences.

---

Additional information describing why the task force believes incorporating an additional charge into the Life RBC formula for operational risk would enhance RBC’s goal of “identifying weakly capitalized companies” would be helpful. The Life Capital Adequacy Subcommittee looks forward to continuing a dialogue regarding your concerns about operational risk and the most appropriate way to address them within the regulatory processes.

**P/C Proposed Operational Risk Charge Methodology**

**Importance of operational risk in P/C insurance solvency regulation**

Operational risk is pervasive and is present in most business activities. It includes the potential for losses ranging from those resulting from the failure of internal controls to those resulting from certain external events. We fully support the analysis of operational risk that is being done by the SMI RBC Subgroup (SG).

Many operational risks are relevant to the solvency regulation of P/C insurance companies. Some examples, like unauthorized underwriting or investment activities made possible by the failure of internal controls, have been discussed in detail by the Capital Adequacy Task Force and the SMI RBC SG. Below are four examples that illustrate the importance and difficulty of quantifying operational risk. There are many examples of operational risk that are important in the context of solvency regulation of P/C insurance; these are just a few:

- **Reliance on Managing General Agents (MGAs).** Without proper oversight and strict controls, outsourcing the vital function of insurance underwriting has led to sizable losses in some P/C insurance lines. This potential for inadequate controls and oversight represents a significant threat to company solvency.

- **Excessive Use of Ceded Reinsurance.** The current RBC formula contemplates risk associated with third party reinsurance in addition to the potential default of a reinsurer. Some may consider this risk to be operational risk. Should the NAIC decide to make any changes to the current reinsurance risk charge, the potential operational risk effects should also be considered.

- **Execution of Merger and Acquisition (M&A) transactions.** Poor execution of an M&A transaction could result in large-scale losses, potentially leading to insolvency events.

- **Securing critical data.** Insurance company databases contain sensitive customer and other critical information. A large-scale cyber-security breach could result in significant costs to an insurer.

**Difficulty of quantifying operational risk**

We appreciate the challenges faced by the SMI RBC SG in its effort to quantify operational risk and develop a proposal to include a capital charge in the NAIC’s P/C RBC formula based on this quantification.

Many of these challenges have already been recognized by the SMI RBC SG. There is a wide variety of operational risks and limited credible data on the frequency and size of such risks. There is overlap between operational risks and some of the risks reflected in the $R_0$ - $R_7$ capital charges currently included or proposed for inclusion in the NAIC P/C RBC formula. Potential
dependencies exist between operational risks and other risks reflected in the current P/C RBC formula. Those potential dependencies need to be considered when incorporating operational risks into the existing P/C RBC framework. The frequency and severity of operational risks individually or in total are difficult or impossible to assess using the largely public financial data that goes into the NAIC P/C RBC formula.

It is easier to analyze this risk as part of the Own Risk and Solvency Assessment (ORSA) and Enterprise Risk Management (ERM) processes that allow insurance companies to take into account their risk profiles more precisely. Also, treatment of operational risk in the context of ORSA and ERM is beneficial because it can lead to mitigation strategies that reduce operational risk.

Need for capital charge corresponding to operational risk
Even though operational risk exposure is easier to analyze and partially mitigate within the NAIC’s ORSA and company ERM, it requires a capital charge in the NAIC P/C RBC formula to provide appropriate capital cushion. To the degree that operational risk is not already addressed in the NAIC P/C RBC formula, an additional capital charge addressing operational risk is appropriate.

Definition of operational risk
The proposal does not include a definition of operational risk. While the concept of operational risk is intuitively clear, several definitions of operational risk exist. We believe that providing a clear definition of operational risk is necessary for the analysis of its magnitude and the determination of a corresponding capital charge.

Explanation of the rationale behind details of the proposal
An explanation of the reasons for choosing the specific factors used in the proposal and the method of calculating the operational risk capital charge will make it easier for regulators and interested parties to provide constructive comments on the proposal.

Extent to which operational risk is already reflected in P/C RBC
In the analysis of the operational risk capital charge proposed for inclusion in the P/C RBC calculation, it is important to assess the degree to which operational risk is already reflected in the current regulatory capital requirements.

Some elements of the NAIC P/C RBC formula already directly reflect certain operational risks
Some types of operational risk are already reflected in the capital charges of the current formula. To the extent that these elements of operational risk are present in the formula, including additional capital charges could lead to unnecessarily high levels of capital requirements. Examples of the operational risk components already reflected in the P/C RBC formula include but are not limited to the following:

---

4 We understand that while the percentage factors used in the proposal are based on regulator discussions, the specific factors are provided for illustrative purposes and are not being recommended for calculation of the operational risk charge.
• The reinsurance risk reflected in the $R_3$ capital charge and usually in the $R_4$ capital charge includes some elements of operational risk. One of the components of the reinsurance risk capital charge is intended to address the risk of reinsurance disputes, which falls primarily in the operational risk category. Some of the other components of this capital charge also include elements of operational risk.\(^5\)

• The $R_4$ capital charge includes an excessive growth charge for reserve risk for groups and stand-alone companies that grow at a rate greater than 10 percent a year.\(^6\) This excessive growth charge is intended to reflect the reserve-related operational risk associated with rapid growth.

• The $R_5$ capital charge includes an excessive growth charge for premium risk for groups and stand-alone companies that grow at a rate in excess of 10 percent a year. This excessive growth charge is intended to reflect the premium-related operational risk associated with rapid growth. (The proposal includes a one percent operational risk charge applied to gross premiums in addition to, but calculated differently than, the existing excessive growth charge for premium risk. The rationale behind including this charge is not explained. We note that no such additional charge is proposed to supplement the excessive growth charge for reserve risk in $R_4$.)

The calibration of some elements of the NAIC P/C RBC formula already reflects operational risk

In many cases, events leading to the insolvency of a P/C insurance company can be traced back to operational failures that, in turn, led to other failures. These other failures, often corresponding to risks already reflected in the NAIC P/C RBC formula, may then be viewed as the direct cause of the insolvency. For example, $R_4$ and $R_5$ underwriting risks are calibrated by considering the variation in loss ratios and reserve runoff ratios over time and across companies. That variation includes the effect of operational risk on underwriting.

Effect of introduction of operational risk charge on P/C insurance capital requirements

The intent of a new operational risk charge is to address a possible gap in the current formula. However, the introduction of an additional capital charge may require adjustments to the overall NAIC P/C RBC formula and some of its components.

The effect of adding a new capital charge to the NAIC P/C RBC formula without making any other changes would be an overall increase in regulatory capital requirements for the industry. If the total current regulatory (RBC) capital requirements for the P/C insurance industry are sufficient, then such an increase would make the overall regulatory capital requirements unnecessarily high; unnecessarily high capital requirements could have a detrimental effect on both the industry and consumers.


\(^6\) See the most recent publication of the NAIC Property and Casualty Risk-Based Capital Report Including Overview and Instructions for Companies for details of the calculations (available at www.naic.org).
The Academy’s RBC groups are pleased to provide you with these comments. If you have any questions or comments, please contact Bill Rapp, assistant director of public policy (rapp@actuary.org; 202-223-8196).

Sincerely,

Jeffrey Johnson, ASA, MAAA
Chairperson, Life Capital Adequacy Subcommittee
American Academy of Actuaries

Alex Krutov, FCAS, MAAA, ASA, CERA
Chairperson, P/C Risk-Based Capital Committee
American Academy of Actuaries

Donna Novak, MAAA, FCA
Chairperson, Health Solvency Work Group
American Academy of Actuaries