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Actuarial Standards Board  
1850 M Street NW, Suite 300  
Washington, DC 20036  
Via email to [discussion@actuary.org](mailto:discussion@actuary.org)

RE: Discussion Draft—Capital Adequacy Assessment for Insurers

Dear David,

On behalf of the American Academy of Actuaries' <sup>1</sup> Risk Management and Financial Reporting Council, thank you for the opportunity to provide our feedback on the Actuarial Standards Board's (ASB) *Capital Adequacy Assessment for Insurers* discussion draft.

Overall, we believe the discussion draft provides good guidance for actuaries in all practice areas performing or reviewing a capital adequacy assessment. However, there are some areas that would benefit from clarification and additional information. To that end, we have responded to the 11 questions in the discussion draft and provided general comments and specific recommendations for revising the document. All of our comments assume that this discussion draft is not written as a stand-alone standard, but is intended to function within the broader context of other standards, notably actuarial standards of practice (ASOPs) Nos. 46 and 47. Some of our comments may be repetitive or included in other ASOPs, but were left in given the importance of certain considerations in capital assessments.

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<sup>1</sup> The American Academy of Actuaries is an 18,500+ 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.

## ASB Discussion Draft Questions

### *1. Does the discussion draft provide sufficient guidance for an actuary performing or reviewing the capital adequacy assessment needed for an ORSA filing with an insurance regulator?*

We agree that the draft provides good guidance for an actuary performing or reviewing a capital adequacy assessment for an Own-Risk and Solvency Assessment (ORSA) filing. However, we believe the guidance could be improved by providing additional information on the following:

- How should group entities (more than just a single insurance company under common management) be handled/addressed? For example, is the actuary only responsible for some of the pieces or for all the pieces that could impact adequacy? In addition, how should the actuary deal with non-insurance affiliates? To the extent that a cross-functional team is developing an assessment of capital, we suggest the actuary be allowed to express reliance on other subject-matter experts, dependent on the actuary's review for reasonableness.
- If the actuary is performing a capital assessment using multiple definitions of capital and/or across different solvency regimes, we suggest that the actuary could identify how his or her capital assessment differs in these different circumstances and how this might need to be addressed. For example, see question 7 below. It also might be helpful to comment on the various jurisdictions and the actuary's responsibilities in relationship to these, in particular with regards to Solvency II and ORSA, if an international entity is being assessed.
- We suggest that the preparing actuary should review the assumptions used in a capital analysis, including the credibility and level of objectivity of those assumptions. The preparing actuary may take into consideration the extent the assumptions are based on limited company experience, or experience where no industry experience exists. For example, an actuary may be projecting the capital position for a new product type where no relevant or credible experience exists. The preparing actuary may be aware of any overly optimistic financial results due to the use of assumptions that cannot be justified by historical experience. We believe stronger language is necessary regarding the objectivity of the assumptions within Section 4.1 of the discussion draft in relation to ASOPs Nos. 46 and 47, especially the degree of conservatism for those assumptions for which there is not yet relevant, credible historical experience. We would like to suggest adding a new paragraph in Section 3, which also should be referenced after subparagraph 4.1.h of the discussion draft:

"The actuary should identify the material assumptions used in a capital adequacy analysis for which the entity whose capital is being evaluated does not have relevant, credible historical experience with respect to those assumptions. The actuary would then document and communicate the analysis underlying the selection of the specific assumptions used in the analysis. The greater the sensitivity of the results to an assumption, the greater the depth of analysis that is warranted.

1. The actuary should report the results of tests of materiality that were used and the assumptions that were excluded from this disclosure based on a conclusion that they were immaterial;
  2. The actuary should report on relevant, credible historical industry experience that pertains to the material assumptions for which the entity whose capital is being evaluated does not have relevant, credible historical experience.
    - The actuary should document the relevance and credibility of the industry experience and any adjustments made to industry experience with respect to, but not limited to, product design, distribution channel, and target customer profiles.
  3. The actuary should document the development of risk margins for these material assumptions and the degree of conservatism in the analysis.
    - The actuary should document the sensitivity testing results related to these assumptions, providing an evaluation of the degree of conservatism represented by each test and relating the degree of credibility of the underlying historical experience to the degree of variation tested. For assumptions with lower credibility of historical data, wider variations reflecting the greater uncertainty of the assumptions used should be tested.
  4. The reviewer should evaluate and document the analysis itself, its depth and quality, the objectivity of the resulting assumptions and risk margins, and whether use of the assumptions and margins produces an unbiased view of capital requirements as evaluated by an independent third party with appropriate qualifications to make such an evaluation.”
- Management actions, business plans, and strategic decisions should be considered as part of risk management and capital assessments beyond what is listed in subparagraph 3.1.5.d. We would suggest strengthening the existing language in the discussion draft as it relates to that issue.
  - In assessing the adequacy of an insurer’s capital position, the quality of capital should be considered. In this context, the “quality of capital” refers to the quality of the assets assigned to capital, together with a requirement for the actuary to review the consistency of such allocations of assets to capital for different purposes, including asset adequacy analysis and other regulatory requirements. Some solvency regimes limit the classification of capital (e.g., Tier 1 capital) particularly in relation to the insurance capital standards under development at the International Association of Insurance Supervisors. The accounting framework or valuation basis may allow for the inclusion of different forms of capital with different capabilities for mitigating risk.

***2. Is the scope of this discussion draft broad enough to cover all practice areas (e. g., life, health, and P&C)? If not, please suggest modifications.***

We believe the discussion draft is broad enough to cover all practice areas. It does a good job addressing different lines of business by using generic language focused on risk identification and assessment.

If our recommendations in response to question 6 are not reflected in the revision of the discussion draft, we would suggest adding the following statement to the considerations:

“It is generally recognized that while all P&C, life, and health insurers face a common set of risks, such as those pertaining to technology and lack of adequate management controls, each sector also faces risks that are more predominant to one compared to the others. The actuary should pay particular attention to the specific risks facing the respective sector when dealing with capital assessments for that sector.”

***3. Does this discussion draft give sufficient guidance for regulatory actuaries? If not, please suggest alternatives.***

We included regulatory actuaries in our review of the discussion draft. We have interpreted this question to ask whether the discussion draft provides enough guidance to the regulatory actuary that is reviewing the work of another actuary. As such, does this discussion draft provide a “road map” for the regulatory actuary? Because the perspective of a regulatory actuary can be different from that of a company or preparing actuary, the discussion draft should stress that regulatory actuaries clearly identify their objectives in reviewing the preparing actuary’s work, and the extent to which the regulatory objectives diverge from the objectives of the preparing actuary.

If the issues noted in these comments are addressed, then we believe the draft provides sufficient guidance for regulatory reviewing actuaries. However, special emphasis should be given to the following areas:

- Qualifications of the reviewer and of the company actuary;
- Evaluation of the objectivity of the assumption-setting process (specifically where there is not relevant, credible historical experience);
- Validation of internal models, including modeling of stakeholder behavior; and
- Review of the company’s interpretations of relevant regulatory requirements.

The regulatory reviewer has a duty to effectively communicate with the company actuary and develop a thorough understanding of the analysis, including obtaining additional information to supplement the company actuary’s written communication, as required by the relevant ASOPs. These additional communications should be preserved for the benefit of future regulatory reviewers. The regulatory reviewer should clearly document the findings with respect to these and other material issues in the review.

In a couple of places, the draft addresses consistency of assumptions in different settings. We support the inclusion of this requirement as an essential component of the assumption-setting process and the review of that process.

The issue of legal entity risk versus the risks associated with a group of companies should be more fully addressed in the document, including discussion of risk identification, risk profile, risk appetite, risk aggregation, and risk mitigation from these points of view. This is an important aspect of assessing capital adequacy and capital fungibility and should be made more prominent in the discussion draft.

***4. Does this discussion draft give sufficient guidance for users of the actuarial work product to understand and comfortably rely upon actuarial work prepared under this guidance?***

The discussion draft generally provides relevant and sufficient guidance for users of the actuarial work product. The most common areas of potential confusion mentioned within the draft include the scope and timing of the review, reliance on models and inputs from others, and reliance on management actions to achieve targets. It might be beneficial, however, to clearly outline an assessment of the likely effectiveness of those actions in achieving the outcomes outlined. This is alluded to in the draft, but more explicit language could be provided to ensure the actions are both practical and likely to result in the outcomes outlined, including a consideration of past company and industry experience. While such an assessment is mentioned as a duty of the actuary, there is no such mention in the communication section. A similar disclosure outlining the scope of the intended review within the communication section, as well as any timelines within which the review would remain relevant, would be helpful.

***5. Does this discussion draft provide enough guidance for actuaries addressing complex arrangements such as holding companies with multiple subsidiaries and jurisdictions?***

The discussion draft generally provides actuaries with enough guidance for these types of complex arrangements. However, some suggested considerations to improve the guidance in these situations include:

- Many insurance companies have non-insurance subsidiaries, particularly banks or other financial services, and many actuaries work for such companies. The paper should consider acknowledging that these concepts also are applicable to non-insurance entities, particularly banks and other related financial institutions. The scope in paragraph 1.2 may need to be expanded as a result.
- Fungibility of capital is a critical concept for these types of complex arrangements. Paragraph 3.1.5 should acknowledge fungibility as an “other consideration.” Fungibility is addressed in paragraph 3.2.2 regarding selecting the appropriate risk capital base. Dividend policies between legal entities, including any regulatory restrictions, should be considered in evaluating capital adequacy.

**6. Should the discussion draft in any way follow the form or outline of NAIC regulatory ORSA guidance? If so, why?**

The National Association of Insurance Commissioner's (NAIC) guidance on the development of an ORSA report fundamentally focuses on three sections of the envisioned ORSA report. The first section of the ORSA deals with the description of the insurer's enterprise risk management framework, the second section of the ORSA with an insurer's assessment of risk exposures, and the third section of the ORSA with an assessment of an insurer's risk capital and solvency assessment. While the discussion draft on capital assessment is most closely aligned with section three of an ORSA report, consideration of the insurer's risk framework (including such items as the risk identification process, risk appetite, and risk controls), as well as an assessment of the risks facing the insurer, are key considerations prior to undertaking an assessment of the insurer's capital adequacy.

While many of these prerequisite considerations are mentioned throughout the discussion draft, we believe the organization should be more in line with the NAIC's ORSA guidance. We suggest considerations pertaining to the insurer's risk framework and risk assessment be discussed first and highlighted more prominently in section 3 of the discussion draft, and that other references as contained in paragraphs 3.1.2 through 3.1.4 be moved elsewhere. We also suggest that paragraph 3.1.5 should be amended to read "The actuary should also consider..."

To the extent that references to ASOPs Nos. 46 and 47 may adequately convey the concepts involved in these considerations, it may not be necessary to provide all the details in this discussion draft relative to risk framework and risk assessment considerations.

We also suggest that the discussion draft more prominently include considerations relative to the aggregation of risk and diversification benefits as part of a capital assessment process, consistent with the NAIC guidance on section three of the ORSA report.

**7. Should the discussion draft be written to acknowledge, refer to, or in any way include other regulatory methods of solvency measurement (Solvency II, Basic Capital Requirement [BCR], etc.)? If so, which methods?**

We believe the draft should acknowledge other regulatory methods of solvency assessment, such as Solvency II. In the background section, the discussion draft states that the guidance applies to capital assessments performed for management or regulatory purposes. We believe the basis for comparison should be reinforced in the discussion draft, including any specific considerations arising from an assessment in different solvency regimes. For example, some solvency regimes place greater reliance on internal models and allow use of the insurer's experience assumptions. Assessing capital adequacy relative to solvency regimes using internal models would necessitate some review of modeling procedures.

Frequently, a company's risk appetite statement includes multiple capital definitions, such as regulatory, economic, and/or rating agencies. To the extent that the actuary is reviewing capital adequacy in relation to the insurer's risk appetite statement, the actuary's assessment should provide a comparison of capital adequacy from different perspectives. Depending on the time

frame of an assessment, the actuary should also consider those circumstances when one capital measure takes prominence over another.

***8. Are there items referred to in ASOPs Nos. 46, Risk Evaluation in Enterprise Risk Management, and 47, Risk Treatment in Enterprise Risk Management, for which the disclosure requirement in ASOP Nos. 46 and 47 is not sufficient with regard to an ORSA?***

We do not believe the reference to ASOP No. 46 for the selection of stress tests in the discussion draft requires revision to ASOP No. 46.

We do not believe that the reference to ASOP No. 47 related to the considerations for reviewing a risk capital target in the discussion draft requires revision to ASOP No. 47.

Both ASOPs describe required communication and disclosures and were drafted for the enterprise risk management (ERM) practices included within an assessment of capital adequacy. The disclosure requirement in ASOP Nos. 46 and 47 is sufficient with regard to an ORSA.

If the ERM Committee decided to extend the discussion draft to incorporate a discussion of legal entity, group, country, and industry in the Scope section, we believe that paragraph 3.4.3 of ASOP No. 46 adequately references the actuaries' regulatory and legislative reactions for this discussion in order to cover additional capital requirements.

***9. Are there areas where the discussion draft is too restrictive or too prescriptive?***

The discussion draft generally appears to give adequate flexibility for an actuary to meet the requirements of actuarial analysis for ORSA.

However, Section 3.5, Special Management Reactions, notes that sometimes these reactions may be extreme. Planned management reactions may be impossible to execute or may be unexpectedly ineffective, relative to the outcomes of previous actions or the expected results. While the list of items that an actuary may consider can be useful, it may create an undue liability if the results are not as expected, even if that was not the intent of the list. It might be easy in retrospect to say the actuary should have anticipated specific problems within an extreme context. Therefore, we would suggest referring to Special Management Reactions as a specific type of Risk Mitigation, which is covered in ASOP No. 47.

***10. Are there areas in the discussion draft where more specifics would make the discussion draft more useful to users, without violating the fact that ORSA is by definition an "Own" risk assessment?***

We have identified a few areas that could make the discussion draft more useful to users:

- It would be helpful to include an appendix with suggested readings on capital assessment.
- A number of places in the document could be enhanced by examples, including subparagraphs 3.1.5.d, 3.2.1.d, 3.3.1 (most of the subparagraphs), and 3.8.1.b.

***11. Are there areas in the discussion draft that should be reworded so as to be specifically appropriate for P&C, life, or health insurers?***

There are no rewording considerations we would suggest at this time.

**General Comments**

Given the importance of reviewing the adequacy of an insurer's capital level, we would suggest that the ASB give some consideration to including a list of the requisite skills and/or qualifications the actuary should possess in order to perform a comprehensive analysis or review the analysis. For example, the actuary should have knowledge of risk management, internal models, and solvency calculations in different regimes. The actuary could benefit from knowledge of solvency requirements in different regimes and industries (e.g., banking). It is important that the actuary understand the inherent biases in any capital calculations, the degree to which risks are included in the calculation, and any limitations in assessing the effectiveness of capital in mitigating certain risks.

The discussion draft implies that an actuary may be working alone on a capital assessment, rather than as part of a cross-functional team of professionals. As a result, the draft does not address issues related to communication with other team members; the nature and documentation of joint analyses; reliance on other professionals, etc. We suggest including consideration of cross-functional teams in the discussion draft.

In addition, access to decision-makers is important for the actuary or cross-functional team to properly assess potential management actions, such as setting investment and interest-crediting strategies. Beyond that, one of the biggest risks to any organization is the competency of its management team and the quality of their decision-making, including the development and execution of the organization's business plan. Rating agencies attempt to evaluate such important but subjective issues. For the actuary to participate in such an evaluation, he or she would need to have a more general business background than is cultivated through the actuarial exams and technical actuarial work alone. Nevertheless, the actuary may be working as part of a cross-functional team and can rely on other experts.

Furthermore, the discussion draft presumes the existence of an actuarial report and other documentation. While this documentation is discussed near the end of the draft, it would be useful to discuss such documentation and actuarial reports near the beginning of the draft in order to improve an actuary's understanding of references to the reports later in the draft.

There are also numerous references to other ASOPs in the draft. In some cases, attention is drawn to specific sections of those ASOPs, but in other cases the references are only notes. The draft would benefit from a more detailed explanation of the applicable provisions of those ASOPs.

Finally, when assessing capital adequacy, an actuary should consider future commitments of capital due to management decisions. Management decisions can have an effect on capital levels for several years (e.g., capital expenditure, business strategies, etc.).

### *Specific Comments on Section 4.1*

Section 4.1 contains a list of key issues that should be addressed in the actuarial communications, if applicable. Cross references to other sections of the draft should be provided to emphasize that this is not a new list of important considerations not mentioned elsewhere.

We note there are other important considerations that should be addressed in Section 4.1 and other areas of the discussion draft. These include:

- Evaluating company interpretations of regulatory, tax, and other requirements— the methods and assumptions regarding reserve calculations, accounting rules and requirements, tax reporting including the calculation of tax reserves, illustration and other market conduct issues. With respect to reviewing the processes supporting tax reporting for the company and for the company’s contract holders, adequate work needs to be done to establish an accurate view of the risks associated with proper reporting of both company and contract holder tax liabilities.
- Evaluating and documenting the analysis regarding risks associated with the behaviors of distribution channels, contract holders, management, counterparties, competitors, and other stakeholders, including the evaluation of the dynamic functions of such behavior included in modeling or other analyses.
- Discussing whether projections of new business were included in the analysis, together with the associated issues of product mix, production levels, and surplus strain. An evaluation of the entity’s capacity to write new business should be included here. Industry practice can be diverse regarding expense allocations between new and inforce business. The discussion draft could recommend that the actuary perform or review a reconciliation of unit expenses to total expenses to ensure that all company expenses are accounted for and to note any unusual findings, including expense allocations, that could be material to an assessment of capital adequacy.
- Evaluating the objectivity of the company when setting assumptions in pricing and modeling, especially reviewing any criticisms of those assumptions where there may not be credible historical experience to use in the assumption-setting process.
- Validating the model, including sensitivity testing of key assumptions related to the credibility of the historical experience in relation to those assumptions.
- Describing the sources of assumptions. In the case of a company using the services of a consulting firm, documentation of the consulting firm’s analysis should be included.

### **Additional Wording Recommendations**

We would like to recommend the following changes to the wording in the discussion draft:

<b>Reference</b>	<b>Recommendation</b>
Section 1.2	Expand the scope to include bank and other financial institutions, as it would help give guidance to actuaries working with these types of institutions.
Section 2	Include a definition for “capital.”

Paragraph 3.1.2	There are also some areas where “opinion” is utilized. We are concerned the term could be confusing, as “opinion” could also apply to an actuarial opinion.
Paragraph 3.1.5	Add a section regarding fungibility of capital as an “other consideration.”
Subparagraph 3.1.5.d	Add “and liquidity” after “current resources.”
Subparagraph 3.1.5.i	The actuary’s analysis could be more informative if capital is defined according to its availability for future deployment: required capital, committed capital, free capital. An assessment of capital is influenced by the time horizon for an assessment. That time horizon could be the same as the horizon identified in the insurer’s risk appetite statement, or could be responsive to a specific request. Further, the time horizon could influence how the insurer would allocate or deploy future capital.
Section 3.2	It may be appropriate to consider multiple bases of capital in this section.
Subparagraph 3.2.1.a	Add “including performance measurement and compensation structure” to the end of the section.
Subparagraphs 3.2.1.g to i	This section implies performing calculations. Was this what was intended? We would suggest clarifying.
Paragraph 3.2.2	Add a section on “sources of capital” to the list of things actuaries should consider, which explains what the drivers are for capital creation within the organization.
Subparagraph 3.2.2.d	Does “capital adequacy or redundancy” relate to “risk capital target” and “risk capital base”? We would strongly suggest clarifying this language.
Subparagraph 3.2.2.g	Combine this subparagraph with subparagraph 3.2.2.c as a more general “uses for capital” section.
Paragraph 3.3.1	We suggest clarifying the differences between the “combination of stress tests” and the “combination of events.”  We would recommend that the actuary should include comments on why the metrics were used, discussing their characteristics, strengths, and weaknesses.  We question how the frequency of the analysis affects the sensitivity of capital adequacy testing. We believe the discussion draft should specify that frequency is not an issue if the adequacy is reviewed every year and issues of concern emerge slowly. However, we would have concerns about the frequency of the analysis if issues are changing quickly or there is a significant lag in the information available.
Section 4.3	Add “and risk capital target” after the references to “risk capital base.”
Section 4.4	Add “(Refer to section 3.5)” at the end.

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Thank you for the opportunity to comment on the *Capital Adequacy Assessment for Insurers* discussion draft. If you have any questions or would like to discuss our comments in more detail, please contact Lauren Sarper, the Academy's senior policy analyst for risk management and financial reporting, at 202.223.8196 or [sarper@actuary.org](mailto:sarper@actuary.org).

Sincerely,

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