Comment #3 – 2/14/18 – 1:24 p.m.

Comments by Michael Wacek on 2nd Exposure Draft
February 2018

<u>Request for Comments *(Wacek Response)*</u>

The ASB appreciates comments on all areas of this proposed ASOP and would like to draw the readers' attention to the following areas in particular:

1. Given the expanded scope, is the level of guidance appropriate?

   Generally, yes. However, I do recommend a much more elaborated and broader definition of Capital to ensure, among other issues, that risk-bearing organizations without explicit capital (e.g., public entity and other pools) are addressed. I also recommend that the distinction between "organization" and "insurer" be applied consistently throughout.

   See my Comments 1-6 starting on page 2 and my annotations on the accompanying 2nd Exposure Draft Document.

2. With respect to companies that have operations in multiple jurisdictions or as part of a group, does the exposure draft provide appropriate guidance?

   Again, I recommend that the definition of Capital be elaborated to, among other things, better cater for groups and non-US insurers.

   See, in particular, my Comment #1.

3. Do the changes in the exposure draft necessitated by eliminating liquidity and fungibility provide adequate guidance?

   Yes. I am satisfied.

4. Are there situations in which the definition of capital in this standard would not be appropriate for a capital adequacy assessment?

   Yes. See my answers to questions 1 and 2 above and my Comment #1 in which 1) I explain why a more elaborate definition of Capital would be helpful, and 2) offer a revised Capital definition.

5. Are the revised definitions of risk capital target and risk capital threshold clear and appropriate?

   No. I am not happy with the existing definitions. In my Comments #3 and #4, I explain why and how I would propose to revise them.

Comments on Specific 2nd Exposure Draft Language

In the pages that follow I have provided 6 extensive commentaries on specific sections of the 2nd exposure draft. Where I have proposed language revisions I have sought to highlight in yellow the revised language (though it is possible that I have not done so exhaustively).

1. Comments on Definition of **Capital** (Paragraph 2.2)

Exposure Draft:

2.2. Capital—The excess of the value of assets over the value of liabilities, which depends on the **valuation basis** chosen.

Wacek Commentary:

I recommend a more elaborate two-stage definition of **capital** that first describes its conceptual purpose and then describes it in technical or accounting terms. The technical description should also be broader, and allow for a less restrictive capital definition that includes one based on **total capital** (in addition to one based on equity capital), and also allow for adjustments. Note that S&P uses "Total Adjusted Capital" in its capital model, a figure that starts with group equity capital, then adds long-term debt, and adjusts for equity in loss reserves, goodwill and other items. A.M. Best does something very similar in its "Universal" BCAR model. According to the definition of capital in the 2nd exposure draft, either these rating agencies do not do capital adequacy assessment or they are doing it improperly! I don't think either of those conclusions is right.

Wacek Proposed Wording:

2.2. Capital—The total financial resources available to an organization to absorb losses arising from adverse fluctuations in the value of assets and liabilities and/or operating results and still meet its policyholder obligations. For U.S. insurers this is generally is an amount based on **equity capital**, but for groups (and some non-U.S. insurers) it is often based on **total capital**. For pools, branches and other organizations that do not hold explicit capital, the financial resources of entities legally obligated to provide support may be considered implicit capital. Whether based on equity capital or total capital, it is sometimes appropriate to make adjustments for intangible assets (such as goodwill) and certain other items.

2.2.1. Equity Capital — The excess of the value of assets over the value of liabilities, which depends on the valuation basis chosen.

2.2.2. Total Capital — **Equity capital** plus the value of long-term debt, which depends on the valuation basis chosen.

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2. Comments on Definition of **Capital Adequacy Assessment** (Paragraph 2.3)

Exposure Draft:

2.3. Capital Adequacy Assessment—An assessment of **capital** of an insurer relative to its **risk capital targets** or **risk capital thresholds**.

Wacek Commentary:

This seems backward to me and seems to trivialize the exercise. It suggests that the capital adequacy assessment involves comparing two numbers, namely, Capital and the Risk Capital Target (or Risk Capital Threshold). But the heart (and hardest part) of the exercise is the *determination* of the capital targets and thresholds, and I recommend that be made clearer with the following language:

Wacek Proposed Wording:

2.3. Capital Adequacy Assessment—An assessment of an organization's risk capital requirements or risk capital targets, given its risk profile and risk tolerance, relative to its capital

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3. Comments on Definition of **Risk Capital Threshold** (Paragraph 2.7)

Exposure Draft:

2.7. Risk Capital Threshold— The minimum level of **capital** necessary for an organization to operate effectively based on specified criteria and expressed as a function of a measure of risk. There may be multiple **risk capital thresholds** based on different risk metrics at any one time. Any risk capital threshold is a function of, and aligned with, the **insurer's risk tolerance**.

Wacek Commentary:

I recommend changing the term "Risk Capital Threshold" to either "Required Risk Capital" or "Risk Capital Requirement" to make it clearer upfront that this is a minimum requirement. That also accords more closely with common usage. (E.g., A.M. Best uses the term "Net Required

Capital"; Solvency II uses "Solvency Capital Requirement".) The existing language of "to operate effectively" would be better placed in the "Risk Capital Target" definition.

I also suggest swapping the order of this item with Risk Capital Target to show Risk Capital Requirement first. It is defined as the minimum level of capital, and it seems more natural and more important to define the minimum required level before the presumably higher, preferred or target level. (Risk Capital Requirement (previously Threshold), which was previously paragraph 2.7, becomes paragraph 2.6.)

In light of the foregoing, I suggest that the reason for the minimum requirement, i.e., that it is to ensure that the organization can meet its obligations, especially to policyholders, be made clearer by amending the wording as follows:

Wacek Proposed Wording (with renumbering)

2.6. Risk Capital Requirement—The minimum level of **capital** necessary to ensure that the organization is able, with a high level of confidence, to absorb losses arising from severe adverse fluctuations in the value of its assets and liabilities and /or operating results and still meet its policyholder obligations. There may be multiple **risk capital requirements** based on different risk metrics at any one time. Any **risk capital requirement** is a function of, and aligned with, the organization's **risk tolerance**.

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4. Comments on Definition of **Risk Capital Target** (Paragraph 2.6)

Exposure Draft:

2.6. Risk Capital Target—The preferred level of **capital** based on specified criteria, which is expressed as a function of a measure of risk. This can result in a single value or a range. There may be multiple **risk capital targets** based on different risk metrics at any one time. Any **risk capital target** is a function of, and aligned with, the organization's **risk tolerance**.

Wacek Commentary:

I fear the existing wording is too vague to be helpful, and therefore recommend adding language that makes it clear that this goes beyond the minimum level of capital implied by the exposure draft describes as "Risk Capital Threshold" (and which I recommend be called "Risk Capital Requirement.") This is where I think the "to operate most effectively" language belongs.

I also recommend swapping the paragraph order of Risk Capital Requirement and Risk Capital Target. (Risk Capital Target, previously paragraph 2.6, becomes paragraph 2.7.)

Wacek Proposed Wording (with renumbering):

2.7. Risk Capital Target—The preferred or target level of **capital** which will enable the organization to operate most effectively, based on specified criteria and which is expressed as a function of a measure of risk. This can result in a single value or a range. There may be multiple **risk capital targets** based on different risk metrics at any one time. Any **risk capital target** is a function of, and aligned with, the organization's **risk tolerance**.

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5. Comments on **Section 3.1**

Exposure Draft:

3.1. In designing, performing, or reviewing a **capital adequacy assessment**, the actuary should reflect the impact of the following:

a. the insurer's **risk profile** and **capital**;

b. the business and risk drivers, including the legal, regulatory, and economic environments in which the insurer operates, as well as any past and anticipated changes or trends in those drivers;

c. the insurer's strategy and plans and the likelihood of their successful execution;

d. the timing and variability of projected liability-related and asset-related cash flows, including the marketability and availability of assets and other financial resources;

e. the timing and intensity of future calls on **capital** and the means and ability to replenish **capital** in a timely manner;

f. current or available resources, including those available from affiliated entities as well as the capabilities of the insurer and affiliated entities;

g. the effect on capital adequacy of changes, or projected changes, in the **risk profile**;

h. correlation of risks and events, diversification benefits, and the uncertainty of the interdependence between risks;

i. projections of future economic conditions; and

j. parameter uncertainty.

Wacek Commentary:

I recommend that 1) consideration of the **time horizon** of the capital adequacy assessment be added to the list, 2) "tax" be added to the list of environments enumerated in paragraph 3.1(b), and 3) paragraph 3.1(f) be moved to the end.

I don't think the "time horizon" item needs explanation.

Regarding "tax", while some might argue that "tax" is implicit in the phrase "legal, regulatory and economic environments", it is worth emphasizing, as I have seen capital modeling sometimes performed in a way that ignores the effect of taxes.

I make the suggestion that paragraph 3.1(f) be moved to the end, because that consideration seems to be of a different character than the others, and strikes me as appropriate to consider only after the quantitative analysis has been completed.

Wacek Proposed Wording (with renumbering):

3.1. General Considerations—In designing, performing, or reviewing a **capital adequacy assessment**, the actuary should reflect the impact of the following:

a. the time horizon over which capital adequacy will be assessed;

b. the insurer's **risk profile** and **capital**;

c. the business and risk drivers, including the legal, regulatory, tax and economic environments in which the organziation operates, as well as any past and anticipated changes or trends in those drivers;

d. the insurer's strategy and plans and the likelihood of their successful execution;

e. the timing and variability of projected liability-related and asset-related cash flows, including the marketability and availability of assets and other financial resources;

f. the timing and intensity of future calls on **capital** and the means and ability to replenish **capital** in a timely manner;

g. the effect on capital adequacy of changes, or projected changes, in the **risk profile**;

h. correlation of risks and events, diversification benefits, and the uncertainty of the interdependence between risks;

i. projections of future economic conditions;

j. parameter uncertainty; and

k. current or available resources, including those available from affiliated entities as well as the capabilities of the insurer and affiliated entities;

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6. Comments on **Section 4.1**

<u>Exposure Draft:</u>

4.1. <u>Actuarial Communication</u>—When issuing an actuarial communication subject to this standard, the actuary should consider the intended purpose of the capital adequacy assessment and refer to ASOP Nos. 23, 41, 46, 47, and, if applicable, 38. In addition, consistent with the intended purpose or use, the actuary should disclose the following in an appropriate actuarial communication:

a. the businesses (insurance or non-insurance) that are included or excluded (and reasons for exclusion) in the assessment;

b. material changes in the considerations listed in section 3.1 from a prior report, if any;

c. the key current and future business and risk drivers, including the legal, regulatory, and economic environments in which the insurer operates (see section 3.1[b]);

d. the key elements of business and risk management strategies included in the capital adequacy assessment (see section 3.1[c]);

e. a discussion of the timing and variability of projected liability-related and asset related cash flows, including the marketability and availability of assets and other financial resources (see section 3.1[d]);

f. a discussion of future calls on capital, and the insurer's means and ability to replenish it (see section 3.1[e]);

g. the treatment of interdependence and diversification (see section 3.1[h]);

h. the basis for projections of future conditions (see section 3.1[i]);

i. a discussion of the sensitivity of any assumption used to gauge the materiality of alternative assumptions, including any sensitivity tests of the parameters used in stochastic models (see section 3.1[j]);

j. the selected valuation bases for assets and liabilities, and why they are appropriate (see section 3.3); and

k. any limitations of the analysis.

Wacek Commentary:

I recommend that 1) the **time horizon** of the capital adequacy assessment be added to the list (in third position), 2) “tax” be added to the list of environments enumerated in paragraph 4.1(~~c~~d), 3) paragraphs 4.1(b) and 4.1(j) be swapped, and 4) paragraphs 4.1(~~b~~k) and 4.1(l) be considered for deletion.

I have previously discussed time horizon and tax in connection with Paragraph 3.1; the same thinking applies here.

I suggest swapping paragraphs 4.1(b) and 4.1(j) because I believe the new order better reflects their relative importance. Indeed, after moving the existing paragraph 4.1(b) toward the end, I suggest considering deleting it and paragraph 4.1(k) on the basis that they are already covered explicitly or implicitly in the other ASOPs referenced at the beginning of this section. (Arguably, the list could be pared down further on the same basis.)

<u>Wacek Proposed Wording (with renumbering):</u>

4.1. When issuing an actuarial communication subject to this standard, the actuary should consider the intended purpose of the capital adequacy assessment and refer to ASOP Nos. 23, 41, 46, 47, and, if applicable, 38. In addition, consistent with the intended purpose or use, the actuary should disclose the following, as appropriate::

a. the businesses (insurance or non-insurance) that are included or excluded (and reasons for exclusion) in the assessment;

b. the selected valuation bases for assets and liabilities, and why they are appropriate (see section 3.3);

c. the time horizon over which capital adequacy was assessed

d. the key current and future business and risk drivers, including the legal, regulatory, tax and economic environments in which the organization operates (see section 3.1[b]);

e. the key elements of business and risk management strategies included in the capital adequacy assessment (see section 3.1[c]);

f. a discussion of the timing and variability of projected liability-related and asset related cash flows, including the marketability and availability of assets and other financial resources (see section 3.1[d]);

g. a discussion of future calls on capital, and the organization's means and ability to replenish it (see section 3.1[e]);

h. the treatment of interdependence and diversification (see section 3.1[h]);

i. the basis for projections of future conditions (see section 3.1[i]);

j. a discussion of the sensitivity of any assumption used to gauge the materiality of alternative assumptions, including any sensitivity tests of the parameters used in stochastic models (see section 3.1[j]);

~~k. material changes in the considerations listed in section 3.1 from a prior report, if any;~~

~~l. any limitations of the analysis.~~