



Federal Accounting Standards Advisory Board

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May 10, 2007

TO: Members of FASAB  
FROM: Richard Fontenrose, Assistant Director  
THROUGH: Wendy Comes, Executive Director

SUBJECT: Standard re Reporting Gains and Losses from Changes in Assumptions and Selecting Discount Rates and Valuation Dates – Tab D<sup>1</sup>

The staff memorandum to the Board for the last meeting, in March, regarding the project entitled “Reporting Gains and Losses from Changes in Assumptions and Selecting Discount Rates and Valuation Dates” contained a number of questions. I have numbered these questions 1 through 5 for the purposes of this memorandum and for future reference. At the March meeting, time permitted discussion of only the first two questions, and the members were asked to communicate their views on the other questions to staff subsequent to the March meeting.

Based on the March discussion and the subsequent communication with Board members, I am presenting below a brief description of and my tentative reading of the Board’s conclusions about each of these questions.

The objective of this session is to obtain (1) feedback regarding whether staff has captured the members’ views and (2) approval to proceed to a pre-ballot draft of the exposure draft (ED) of the proposed standard.

The ED at Tab D-1, which is a “track changes” edition, reflects changes based on the staff’s view of the members’ conclusions expressed at the March meeting and/or subsequently.

**Question #1 – Does the Board agree with the display standard?**

**1.A. Should the standard permit all actuarial gains and losses to be combined on one line?**

Responding to comments from an actuary, staff had added a provision to the display standard for the March draft of the ED. The provision involved instances where it would be impractical in the preparer’s judgment (e.g., too costly vs. the

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<sup>1</sup> The staff prepares Board meeting materials to facilitate discussion of issues at Board meetings. This material is for discussion purposes only; it is not intended to reflect the authoritative views of the FASAB or its staff. Official positions of the FASAB are determined only after extensive due process and deliberations.

benefit) to distinguish between the two components of actuarial gains and losses, that is, between (1) experience vs. assumptions and (2) changes in assumptions. In such instances, the staff proposed to provide the option of combining these components (on the statement of net cost and in the footnote disclosure) in one line item.

#### Staff Conclusion

The members decided not to change the original standard. They concluded that the display should isolate gains/losses from changes in assumptions because the effect of such changes is the critical information. Members believe that preparers are able to and in fact do calculate both components of actuarial gains and losses. (See the draft ED at Tab D-1, paragraphs 19 and 22 for the standard.)

#### 1.B. ***Should the standard require disclosure of market rates?***

Responding to a suggestion from an actuary, staff added a requirement for a note disclosure to the March ED whereby the entity would disclose market rates for long-term Treasury securities. The staff recommended this disclosure as a useful benchmark against which to compare the entity's discount rate. Staff did not specify the maturities to disclose but rather left that up to the preparer's judgment. (See the ED at Tab D-1, paragraph 23.) At least one member favored specifying a maturity or maturities for the disclosure.

Mr. Werfel recommended moving forward with the requirement but also explaining why the information is important and asking respondents whether they agree.

Some members questioned the value of this information considering that Federal entities are not subject to market risks regarding their investments portfolio.

#### Staff Conclusion

A majority of members agree that the Treasury market rates as of the reporting date are useful benchmarks and should be disclosed in a note. Since the focus of the discount rate standard is on the Government's cost of borrowing rather than return on a given Federal entity's asset holdings, most members agreed that the information would be relevant to the measurement of expense and liability for long-term obligations.

The staff has added (1) a sentence to the standard specifying the maturities for which to disclose rates (see the draft ED at Tab D-1, paragraph 23); (2) a paragraph to the basis for conclusions explaining the importance of the information (see the draft ED at Tab D-1, paragraph A10); and (3) a question for respondents asking whether they agree with disclosure (see the draft ED at Tab D-1, Question 3).

## Question #2 – Does the Board agree with the discount rate standard?

### 2.A. *Should the discount rate standard require average historical market rates on Treasury securities or current market rates on Treasury securities, or should it allow both?*

The Board has discussed whether the standard should require (1) average historical market rates on Treasury securities or (2) current market rates on Treasury securities or near the reporting date. All members have favored a discount rate for Federal long-term liabilities that reflects “the rate on marketable Treasury securities<sup>2</sup> of similar maturities to the cash flows of the payments for which the estimate is made, unless otherwise provided in FASAB standards” (see ED at Tab D-1, paragraph 26).

Volatility in the amount reported for other post-employment benefits (OPEB) by the Department of Veterans Affairs’ (DVA) raised a question about the adequacy of the FASAB discount rate standard. Over the past several meetings the Board has been discussing this issue. DVA auditors are interpreting the OPEB standard to require discount rates based on current market rates on Treasury securities as of the reporting date. The current standard is general and does not foreclose this interpretation. Moreover, the Congressional Budget Office representatives have expressed a preference for the market-rate-as-of-the-reporting-date approach (see the CBO note at Tab D2).

The majority of members believe the volatility associated with current market rates is not a faithful representation of the time value of money in long-term Federal programs. Discount rates based on average historical market rates for Treasury securities would be expected to be more stable and to change gradually rather over time rather than every year, as would be the expectation regarding current market rates.

Mr. Torregrosa prefers current market rates associated with specific maturities rather than historical averages. He believes that current market rates are the best evidence of what future rates might be. In addition, he prefers not to address discount rates in this standard but rather to address the DVA’s issue individually.<sup>3</sup> (Also, see the CBO paper at Tab D 2.)

Staff believes the general discount rate standard needs clarification. As a prime particular, the current FASAB *pension standard*<sup>4</sup> calls for basing the “interest rate assumption” on “an estimated long-term investment yield for the plan” or, if the plan is not funded, other long-term assumptions, e.g., the long-term Federal borrowing rate. However, the paragraph concludes with the categorical statement

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<sup>2</sup> The phrase “Treasury interest rate on marketable Treasury securities” is used synonymously with the phrase “Treasury borrowing rate.”

<sup>3</sup> See also CBO April 2007 paper at Tab D 3.

<sup>4</sup> SFFAS 5, par. 66.

that the discount rate should be the long-term expected return on plan assets. The **standard for other retirement benefits (ORB)**<sup>5</sup> on the other hand, explicitly states that the discount rate “should be equal to the long-term expected return on plan assets if the plan is being funded or on other long-term assumptions (for example, the long-term Federal Government borrowing rate) for unfunded plans.” The **OPEB standard**<sup>6</sup> says simply that the discount rate should be “the Treasury borrowing rate for securities of similar maturity to the period over which the payments are to be made.”

### Staff Conclusion

For present valuations of long-term Federal liabilities, most members prefer a stable discount rate derived from historical average market rates on Treasury securities rather than current market rates. The proposed standard currently requires average historical market rates for Treasury securities rather than current market rates. (See ED at Tab D-1, paragraph 27.)

#### **2.B. *Should the discount rate standard require multiple rates or a single rate, or should it allow both?***

The Board also has discussed whether the discount rate (either average historical or current market rates) ought to (1) reflect the Treasury rates for the future years in which payments are to be made (“multiple rates”); or (2) whether a single average historical Treasury rate could be developed and applied to all payments regardless of the year of payment. Current FASAB standards are not specific about which method to use. The original language in the ED implied multiple rates. However, the March draft ED was changed to explicitly allow the preparer to use a single average rate, as preferred by the OPM and DoD actuaries. The staff reasoned that a single average historical market rate on Treasury securities would produce substantially similar results to multiple average historical market rates, and would accommodate Federal actuaries. In addition, the March draft of the ED proposed a weighted average rate and therefore there would be a relationship between the discount rate and the future years of payment.

Mr. Reid mentioned that he could accept either a single historical average rate or multiple historical average rates, as long as Federal actuaries do not object. Mr. Torregrosa favored consistent rates, e.g., for discounting cash outflows in year 30, and/or an explanation of why inconsistent rates would be acceptable. He believed that a single rate would produce a very different result than multiple rates. (See CBO paper at Tab D-2.)

Messrs. Patton and Torregrosa spoke in favor of multiple rates. They believe such rates are more accurate and more faithful representations of the time value

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<sup>5</sup> SFFAS 5, par. 83.

<sup>6</sup> See SFFAS 5, par. 95.

of money component of the liability. Mr. Patton suggested the allowing a single rate if the result would be substantially the same as multiple rates. The CBO paper at Tab D 2 recommends this approach as an option.

### Staff Conclusion

The staff concludes that the members prefer multiple rates but would allow a single average historical Treasury rate if the result is not materially different than for multiple rates. (See ED at Tab D-1, paragraph 26).

The staff concludes that the question of a simple average vs. weighted average is moot. Either a simple average or a weighted average would be acceptable so long as the result is not materially different than for multiple rates. Thus, the standard merely refers to a single average rate. (See ED at Tab D-1, paragraph 26.) The “Question for Respondents” #7 (from the March ED) on that issue has been removed.

Because the members have agreed that discount rates should reflect the cost of Treasury borrowing, staff believes the members favor average historical market rates on Treasury securities for the various maturities, not the average historical rate on the entity’s particular holdings of Treasury securities or, potentially, other investments, unless a specific FASAB standard would allow it. However, the standard would allow the entity to use the historical average rate on its portfolio of Treasury securities if the result were not materially different from average historical market rates on Treasury securities.

### **Question #3 – Does the Board agree with the scope of the standard?**

Regarding the Board’s decision that the display standard will be general and include examples of the known programs, the staff recommended that the standard include, at a minimum, the following programs as examples of programs to which it applies:

- a. Pensions, ORB, OPEB, including especially VA benefits;
- b. Environmental clean-up;
- c. Guarantees, excluding loan guarantees, e.g., pension guarantees;
- d. Insurance; and
- e. Contingent liabilities for which the confirming event is 5 years or more in the future.

The list of examples immediately above is included in the draft ED at Tab D-1, paragraph 14. Staff believes that these constitute the liabilities of interest to the members, at a minimum. Estimates for these liabilities involve long-term assumptions. These liabilities are included in the *Analytical Perspectives*, Chart 13-1, “The Financial Condition of the Federal Government and the Nation,” and on the FY 2006 FR balance sheet.

In addition, the staff believes that several features help to clarify the standard.

1. The standard emphasizes the distinction between short- and long-term assumptions, which are described as involving projections of five years or more (see the ED at Tab D-1, paragraph 15).
2. The standard specifies that assumptions for contingences must be at least 5 years in duration (see ED at Tab D-1, paragraph 14E).
3. Illustrations are included (see ED at Tab D-1, Appendices).

Staff notes that Mr. Schumacher has commented that defining long-term assumptions as 5-years or more may be too restrictive. He also believes that preparers might argue that they do not have to discount cash flows that are less than 5 years even though FASAB precedent is to discount cash flows that are two years or more in the future. Staff has amended paragraph 15 to address Mr. Schumacher's point.

In addition, the staff has deleted the words "recognized in accordance with the provisions of SFFAS 5" from a prior draft to make it clear that the standard is not limited to SFFAS 5 liabilities, but rather applies generally to long-range liabilities. In addition, the words "and discounted present value" were deleted to make it clear that the use of discounted present value is not a criterion for applying the standard. To add clarity on this point, the basis for conclusions explains that (1) long-range estimates on which the Board is focusing frequently employ discounted present value, but (2) the entity is required to display the effect of changes in long-range assumptions even if discounted present value is not employed (see the ED at Tab D-1, paragraph A2).

#### Staff Conclusion

The members agree with the changes to scope paragraphs and with the move of the scope paragraphs from the introductory section to the body of the standard. (See paragraphs 14-18 in the ED at Tab D-1.)

#### **Question #4 – Does the Board agree with the materiality provision in the display standard?**

The DoD office of the actuary favored the materiality paragraph in the ED because it allows the preparer to exercise judgment regarding which gains and losses from changes in assumptions to display (see the ED at Tab D-1, paragraph 21). No other preliminary comments were received on this paragraph. Staff believes that ED paragraph 21 provides useful guidance and reflects the approach in a recent FASAB standard, and recommends including it in the ED.

## Staff Conclusion

The members agree with the staff recommendation.

### **Question #5 – Does the Board agree with the following “best estimate” provisions?**

#### 5.A. *What is “best”?*

Regarding the issue of “best estimates” that the staff has been pursuing, the HHS IG reports that the issue is simply the meaning of the term “best estimate” with respect to the statement of social insurance (SOSI).

FASAB staff had looked to the Actuarial Standards of Practice (ASOP) for guidance regarding the meaning of “best estimate.” Paragraph 30 of the March ED was based on ASOP 10, *Methods and Assumptions for Use in Life Insurance Financial Statements Prepared in Accordance with GAAP*, and ASOP 27, *Selection of Economic Assumptions for Measuring Pension Obligations*. It employed “best estimate,” defined as the “most likely outcome.”<sup>7</sup> ASOP 27 instructs the actuary to select a specific economic assumption from within his or her “best estimate range” with respect to that assumption, which it defines as “the narrowest range within which the actuary reasonably anticipates that the actual results, compounded over the measurement period, are more likely than not to fall”<sup>8</sup> [emphasis added]. ASOP 27 provides, generally, that

“[b]ecause no one knows what the future holds with respect to economic and other contingencies, the best an actuary can do is to use professional judgment to estimate possible future economic outcomes based on past experience and future expectations, and to select assumptions based upon that application of professional judgment. Therefore, an actuary’s best-estimate assumption is generally represented by a *range* rather than one specific assumption. The actuary should determine the best-estimate range for each economic assumption, and select a specific point from within that range. In some instances, the actuary may present alternative results by selecting different points within the best-estimate range” [emphasis added].<sup>9</sup>

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<sup>7</sup> The International Actuarial Association’s Risk Margin Working Group’s (RMWG) recent ED, *Measurement of Liabilities for Insurance Contracts: Current Estimates and Risk Margins*, dated February 23, 2007 (comment period ending May 25, 2007), uses the term “current estimate” in place of “best estimate.” The RMWG cites the work of the International Association of Insurance Supervisors (IAIS). The IAIS uses the term “current estimate” to refer to the “unbiased estimate of future cash flows reflecting the time value of money,” defined as “the expected present value of probability weighted cash flows using current assumptions.” To the “current estimate,” the IAIS added a “margin over current estimate” reflecting the uncertainty in the current estimate. The RMWG adopted this terminology and definition. However, the “margin over current estimate” would appear to duplicate the probability weighting already incorporated in the current estimate. In any case, since it is a work in process, the RMWG’s ED does not appear at this point to be helpful regarding the FASAB project regarding Reporting Changes in Assumptions.

<sup>8</sup> ASOP 27, Section 2.1.

<sup>9</sup> ASOP 27, Section 3.1.

ASOP 10 and 27 seem to invoke a “reasonable person” standard regarding “best estimate.” However, with respect to the SOSI for Medicare, auditors apparently feel obliged to use a definition more akin to that in the dictionary where “best,” meaning “excelling all others.”

The HHS IG prefers that the standard use the adjective “reasonable” rather than “best.”

#### Staff Conclusion

Staff proposes to replace “best” with “reasonable.” ED paragraph 31 would read as follows:

The entity’s “~~best estimate~~” will reflect its judgment about the most-likely outcome of events based on past experience and expectations about the future. The estimate should reflect what is reasonable under the circumstances. The entity’s own assumptions about future cash flows may be used ~~constitute the best estimate~~ ~~assumptions~~ as long as they are not inconsistent with generally accepted assumptions as evidenced by independent sources ...

#### 5.B. ***Should the standard require the entity to compare its assumptions with those in use at Federal statistical agencies?***

The proposed ED, paragraph 31, that provides guidance regarding measurement states that the preparer should compare its assumptions with independent sources and to conform if necessary. The DoD actuarial office suggested deleting this provision because it would require the DoD Retirement Board of Actuaries to incorporate non-specified “independent sources” and impinge on the independence of that Board in setting the long-term economic assumptions for the valuation of the Military Retirement System.

The staff believes that comparing an entity’s assumptions with assumptions in use at Federal statistical agencies such as the Bureau of Economic Analysis constitutes check of reasonableness. It would highlight any assumptions that differed from those generally in use in the Federal Government. On the other hand, the staff has added the phrase “or explain why it is inappropriate to do so,” which would mitigate any negative effect on preparers (see the ED at Tab D-1, paragraph 31).

#### Staff Conclusion

Most members agree that the comparison with independent sources is a useful check on reasonableness. Mr. Torregrosa notes that the CBO routinely shows how its estimates compare with those of OMB, the Federal Reserve, and other sources.