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Actuarial Standards Board
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Subject: Comments on Proposed Revisions to ASOP 4

Mercer is pleased to provide our response to the exposure draft of the proposed revisions to ASOP 4. These comments were prepared by Mercer's Actuarial Resource Network, a group of senior actuaries in the retirement practice area representing all of the U.S. geographic areas in which Mercer operates.

I also contributed to (and signed) the letter submitted by the Academy's Pension, Multiemployer and Public Plans Committees and Mercer supports the points made in that letter. We would, however, like to supplement those points with additional detail regarding the suggested modifications to 3.11, which describes the Low-Default-Risk Obligation Measure (LDROM). In particular, I support providing actuaries with the flexibility to calculate an appropriate measure for plans that pay benefits that vary with investment return or similar economic factors. A literal application of the language in the current exposure draft would, in some situations, result in a measure that is demonstrably not a LDROM.

Consider, for example, a variable annuity plan with a 5% hurdle rate, and benefit adjustments that are tied to the return on a specified mutual fund. The plan is free to invest in different investments, but the only investment that will effectively match assets and liabilities is the same mutual fund used to define the benefit adjustments. The rationale is described in detail in the practice note: Variable Annuity Plans. As a result, an appropriate LDROM would be calculated by estimating benefit adjustments based on the expected return of this mutual fund and discounting the resulting payment stream using that same expected return as the discount rate. A mathematically equivalent shortcut would be to value fixed benefits using the 5% hurdle rate as the discount rate.

Selecting a discount rate based on low-default-risk fixed income yields would not produce a LDROM unless the benefit adjustments were also calculated using that same discount rate. The current language in 3.11 does not seem to provide the necessary flexibility to apply this approach (as discussed in more detail below). Rather, it seems to suggest that benefit adjustments should be projected using the expected return on the mutual fund and that the result should be discounted back at the discount rate.

The problem with this outcome can be readily demonstrated if we simplify the example further to consider a single payment expected to be made under the variable annuity plan. Assume a payment of $1,000 scheduled to be made five years from now. Under the provisions of the variable plan, the payment will be exactly $1,000 if the mutual fund specified in the plan earns a 5% annual return, but will

be adjusted up or down to the extent of any deviation. The appropriate amount to secure this payment is $784 ($1,000 x 1.05^{-5}), and the appropriate investment is the same mutual fund. If the plan purchases $784 of the mutual fund, and the fund indeed earns a 5% annual return, it will be worth $1,000 five years from now and will have the assets necessary to make the scheduled payment. If the fund instead earns a 3% return, it will be worth only $908 in five years. However, the benefit owed by the plan will also be $908 ($1,000 x $(1.03/1.05)^5$) – again, the plan will have the assets necessary to make the scheduled payment.

If the actuary expects the mutual fund to earn 6% annually, the projected benefit will be $1,049 ($1,000 x $(1.06/1.05)^5$). If the expected payment of $1,049 is discounted back using the 6% expected return as the discount rate, the value of the obligation today would be calculated as the same amount described above ($784 = 1,049 x 1.06^{-5}).

Following the approach described in 3.11 would produce a different result from the amount actually required to secure the expected payment. Assuming that the yield on low-default-risk single coupon bonds maturing in 6 years is 2%, the actuary would use that rate as the discount rate. Discounting the projected payment of $1,049 at this rate produces an obligation of $950. It is true that if the plan were to invest $950 in this bond and if the mutual fund actually returned 6%, the plan would have the $1,049 needed to make the expected payment. However, under any other economic scenario, the plan would not have the appropriate amount to match the payment. Assuming the bond issuer does not default, the bond will pay out exactly $1,049 in 5 years. However, the amount the plan actually owes at that time will vary with the return on the mutual fund. If the mutual fund earns 5%, the plan will have too much money and if the fund earns 7%, it will have too little.

I recognize that there is some language in 3.11 that deals with benefits that are affected by expected investment return, but that language is unclear, and does not appear to provide the flexibility required to achieve the appropriate result in this situation. One concern is that benefits under this plan are affected by the *actual* investment return of an outside investment, rather than by the *expected* investment return of the pension plan. Another concern is that “reflecting the impact of variations in benefits earned” is a vague instruction and does not seem to specifically address the issue described in the example above.

The language proposed in the Academy comment letter referenced above, on the other hand, would solve this problem. The intent behind the LDROM is quite clear, and the direction to discount obligations using low-default-risk fixed income yields makes perfect sense for a plan that provides fixed payments. Directing the actuary to use actuarial judgment to apply these principles to variable benefits and other similar situations is much more likely to achieve the desired outcome than would the current language. It would also be entirely consistent with the language in 3.5.3, relating to plan provisions that are difficult to measure. 3.5.3 instructs the actuary when selecting valuation procedures to measure obligations in these situations to “use professional judgment based on the purpose of the measurement and other relevant factors.”

Thank you for the opportunity to comment on the exposure draft. If you have any questions, please contact me at bruce.cadenhead@mercer.com.

Sincerely,

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