Comment #7 – 8/24/14 – 12:26 p.m.

ASOP No. 27, Appendix 3, Section C calculations do not show the correct way to determine the interest rate used for discounting the payment of $1 at a future point in time.

The correct approach is used in the following table. This is the method used in financial economics and practitioners in the rest of the financial world.

	E	F	Formula
	Yield	PV	
10	0.3	0.591716	(1+E10)^-2
11	0	1	(1+E11)^-2
12			
13	Average	0.795858	0.5*(F10+F11)
	Discount rate	12.09%	1/F13^0.5-1

In the first above we find the present value of $1 under each of the 2 possible scenarios. Since each scenario is assigned an equal probability, we weight each present value by 50% and take the average. This gives us the expected present value of $1 two years from now. The goal of discounting is to determine the amount needed now to meet a fixed cash payment at a future time. To do this, we treat each path separately to find the present value for that path. Then we weight together the present values based on the probability associated with each path. This leads to a discount rate of 12.09%. The other two methods in ASOP 27 address what happens when you start with $1 and try to determine the future value, but that is a different problem unless you use a single scenario. When discounting, you know the future value and are solving for the present value.

Note that the weighted average of present values shown above is how zero coupon bonds are priced in practice. The concept can be extended to other instruments. The methods used in the exposure draft are at odds with discounting that occurs everywhere in the world in capital markets except for pension plans. They are also entirely at odds with basic finance taught to MBA's and undergrads. The methods would flunk a test in a finance course. I do not see a reason to deviate from the normal method for discounting pension obligations.

Sincerely,

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