

Employers' Accounting for Defined Benefit Plans — Alternatives for Applying Discount Rates to Measure Benefit Cost

The "Change in Approach to Determining Discount Rates" section of this *Financial Reporting Alert* has been revised to reflect comments made by the SEC staff at the 2015 AICPA Conference on Current SEC and PCAOB Developments.

In September 2015, the SEC staff met with representatives of the Big Four accounting firms and expressed its views on applying an alternative approach for using discount rates to measure the components of net periodic benefit cost for a defined benefit retirement plan obligation (e.g., a pension or other postretirement obligation) under ASC 715.¹ Specifically, the alternative approach focuses on measuring the service cost and interest cost components of net periodic benefit cost by using individual spot rates derived from an acceptable high-quality corporate bond yield curve and matched with separate cash flows for each future year. The SEC staff responded to inquiries from the Big Four firms by stating that it would not object to registrants' use of such an approach instead of the single weighted-average discount rate approach that is usually employed. The change in approach would not alter the measurement of the related benefit obligation as of the reporting date. The SEC staff also stated that it would not object if a registrant treats the change in approach as a change in accounting estimate. This alert provides further background on this topic and describes in greater detail some of the relevant considerations in connection with such a change.

Background

Traditional Aggregated Approach

In accounting for a defined benefit plan under U.S. GAAP, an entity measures the benefit obligation (i.e., the projected benefit obligation for pension plans or the accumulated postretirement benefit obligation for other postretirement plans) at the end of each annual period, or more often if a significant event requires a plan remeasurement as of an interim date. The benefit obligation represents the present value of the benefits that employees are entitled to in the future for services already rendered as of the measurement date. Conceptually, entities measure the present value of these future benefits by projecting benefit payment cash flows for each future period and discounting these cash flows back to the measurement date. Traditionally, entities have used an aggregated single discount rate — the single rate that, when applied to the benefit obligation cash flows, reproduces the present value of those same payments.² The resulting single rate can be viewed as a weighted average of the yield curve spot rates that are used to measure that present value. This rate is aligned with the payment timing and associated participant demographics related to already-earned benefits as of the measurement date. Under this approach, the single weighted-average discount rate is used for all net periodic benefit cost calculations — including the measurement of the service cost and interest cost components. While the service cost is similar to the benefit obligation in that it is determined as of the measurement date, the interest cost is intended to accrete the benefit obligation and service cost amounts from the beginning to the end of the year.

The single weighted-average discount rate approach, also referred to in this alert as the aggregated approach, is a common and generally accepted approach used under ASC 715 to measure the service cost and interest cost components of net periodic benefit cost for defined benefit plans.

¹ For titles of *FASB Accounting Standards Codification* (ASC or "Codification") references, see Deloitte's "Titles of Topics and Subtopics in the *FASB Accounting Standards Codification*."

² Accordingly, the benefit obligation is the same whether the single equivalent discount rate is referenced or the spot rates of the entire yield curve.

Alternative Spot Rate Approach

Recently, entities and their actuaries have developed alternative approaches under which the yield curve spot rates are applied in a more granular way. (For more information about such alternative approaches, see the August 2015 *Issue Brief* newsletter released by the American Academy of Actuaries.) The critical difference is that the single weighted-average discount rate is used to measure service cost and interest cost components under the aggregated approach, while duration-specific rates from the yield curve are applied to measure service cost and interest cost components under the disaggregated approach. Except in the uncommon economic environment of an inverted or downward-sloping yield curve, the aggregated approach generally produces a higher value for interest cost associated with the benefit obligation than would be developed when spot rates from the yield curve are “more precisely” applied to disaggregated cash flows. Although there are a number of possible alternative approaches that entities might consider using to apply discount rates to measure service cost and interest cost components on a more granular or disaggregated basis, the SEC staff gave its views on one specific alternative approach to measuring interest cost (referred to in this alert as the spot rate approach). Under the spot rate approach, an entity measures interest cost by applying duration-specific spot rates to the year-by-year projected benefit payments.

The amounts of service cost, interest cost, and actuarial gains and losses recognized under the spot rate approach would generally differ from those recognized under the aggregated approach. For example, in an upward-sloping yield curve environment, the spot rate approach would generally result in lower interest cost and higher actuarial loss (or lower actuarial gain) than the aggregated approach. Because the measurement of the benefit obligation as of each measurement date under the aggregated approach is the same as that under the spot rate approach, any change in the service cost or interest cost component would result in a different expected benefit obligation, which — compared with the remeasured benefit obligation (as of the next measurement date) — would give rise to an additional actuarial gain or loss so that the beginning-of-the-year benefit obligation is reconciled to the end-of-the-year benefit obligation. This actuarial gain or loss would be included with the other gains or losses and would then be recognized in net income in accordance with the entity’s accounting policy for recognizing actuarial gains and losses in earnings (i.e., either immediate recognition or some other acceptable method of amortization under ASC 715). Accordingly, a change to the spot rate approach for measuring service cost and interest cost and the resulting differences in service cost, interest cost and actuarial gains and losses could materially affect an entity’s financial statements as well as a registrant’s non-GAAP financial performance disclosures.

Accounting Considerations

The SEC staff discussed two issues related to the spot rate approach with the Big Four accounting firms.

The first issue is whether it is acceptable to use the alternative spot rate approach to measure interest cost. The SEC staff limited the scope of its views on this topic to situations in which a registrant uses a yield curve approach (rather than bond-matching or another method) to determine its benefit obligation discount rates but has historically used the aggregated approach to determine interest cost and wants to change to the spot rate approach. The staff confirmed that it would not object to the use of the spot rate approach in such cases.

The second issue is whether a change to the spot rate approach should be accounted for as a change in accounting principle, a change in estimate, or a change in accounting estimate that is inseparable from the effect of a related change in accounting principle. The SEC staff indicated that it would not object to accounting for such a change as a change in estimate on the basis of the situation described in the first issue above. The staff acknowledged that registrants that adopt the spot rate approach are likely to justify the change in estimate as a better estimate than an estimate under the historical aggregated approach on the basis of their belief that the spot rate calculation of interest cost is a more precise measurement of interest cost because it is performed on a disaggregated basis. The staff stated that because the spot rate approach is believed to result in a better estimate than the aggregated approach, the staff would generally not expect a registrant to change back to the aggregated approach in future periods once it has switched to the spot rate approach. As with a change in estimate under ASC 250, a registrant that changes to the spot rate approach will be required to recognize the effects of the change prospectively. Although the spot rate approach is considered more precise, the staff will not require a registrant to adopt this new approach. Under ASC 715-30-35-45, it will continue to be acceptable to apply the traditional approach of using a single weighted-average discount rate to measure interest cost.

Disclosures

The SEC staff stressed that it is important for registrants that change to the spot rate approach to provide appropriate disclosures. Specifically, registrants must comply with the disclosure requirements in the following Codification paragraphs:

- ASC 250-10-50-4, under which a registrant must disclose the material effect of changes in accounting estimates on income statement and earnings-per-share measurements.
- ASC 715-20-50-1(k) and ASC 715-20-50-1(r), as supplemented by ASC 715-30-35-45, under which a registrant must disclose the discount rates used for the benefit obligation and net periodic benefit cost.

In addition, the staff highlighted the required MD&A disclosures under Regulation S-K, Item 303,³ regarding changes in results of operations as well as trends or events that will materially affect income from continuing operations.

Finally, the staff discussed the transparency of required non-GAAP disclosures under Regulation G. The staff highlighted that it expects registrants to disclose any significant impact of a change in the approach used to measure net periodic benefit cost on any non-GAAP measures. Specifically, registrants should explain how the change in approach affected components of net periodic benefit cost and actuarial gains and losses in the current period and on a prospective basis to the extent that those items are reflected in non-GAAP measures.

In accordance with these guidelines from the SEC staff, entities should consider quantifying and disclosing the impact of a change to the spot rate approach in the year the change in estimate is recognized. Specifically, an entity should consider disclosing the difference between service cost, interest cost, and actuarial gains and losses under the current approach (e.g., spot rate approach) and those under the prior approach (i.e., aggregated approach). Because ASC 715 requires disclosure of weighted-average discount rates used to determine the benefit obligation and net periodic benefit cost, an entity should consider that the weighted-average rate used to determine the benefit obligation is likely to be different from the weighted-average rates associated with service cost and interest cost components under the spot rate approach. In thinking about the financial statement disclosure requirements related to assumptions under ASC 715 as well as disclosures by registrants regarding critical accounting policies under Section II.J of the SEC's *Current Accounting and Disclosure Issues in the Division of Corporation Finance* (updated November 30, 2006), entities should consider disclosing a narrative description of how discount rates were determined along with the approach for how such discount rates have been applied to measure service cost and interest cost components.

Other Related Considerations

Below are additional considerations that entities should be aware of even though the SEC staff did not specifically address these topics in our recent conversations with them.

Single Equivalent Weighted-Average Discount Rate by Population Subset

Some additional alternative approaches discussed by entities and actuaries involve variations in the nature of or level of disaggregation related to measuring service cost and interest cost components. The following are two examples of such variation:

- Separately develop a single weighted-average discount rate for (1) service cost for the incremental benefits to be earned in the next annual period and (2) interest cost for the benefit obligation measured as of the beginning of the year.
- Separately determine a weighted-average discount rate for interest cost for the respective portions of the benefit obligation related to active participants, terminated and vested participants, and retirees, in addition to a separate single weighted-average rate for service cost.

Although the SEC staff did not provide views on these other alternatives, we believe that ASC 715-30-55-24 supports the use of different discount rates for measuring the benefit obligations of different parts of the plan participant population to reflect differences in the maturity and duration of the related future benefit payments. Further, we believe that a similar view can be applied by analogy to using different discount rates to measure the service cost component of net periodic benefit cost to reflect differences between the maturity and duration of the service cost portion of the obligation and the rest of the overall benefit obligation.

³ SEC Regulation S-K, Item 303, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Application to a Bond-Matching Model

The dialogue with the SEC only addressed the spot rate approach in connection with the use of a yield curve approach to determine discount rates. We understand that there may be significant challenges associated with applying a similar approach when an entity uses a bond-matching approach to support discount rates. Specifically, unlike a yield curve, the bond portfolio may not include sufficient information about yield rates across the entire maturity spectrum. Because such challenges have not been fully evaluated, we would caution entities applying a bond-matching approach to consult further with their actuaries and independent accountants regarding their ability to apply alternative approaches to determine service cost and interest cost components.

Application to Multiple Defined Benefit Plans

For entities that have multiple defined benefit plans, questions may arise regarding whether a change to the spot rate approach must be applied to all plans. First, entities must consider whether the plans in question use a yield curve or bond-matching approach to determine discount rates. Depending on the facts and circumstances as well as the considerations described above related to bond-matching models, it may only be acceptable for plans using the yield curve method to apply the new approach. Further, ASC 715 does not prescribe using a single approach or consistent computational means for multiple plans. The computational approaches used by an entity should be selected and applied on a plan-by-plan basis; the objective is to develop a best estimate for measuring and recognizing the benefit obligation and related net periodic benefit cost. However, entities should consider whether they are using similar approaches for similar types of benefit plans sponsored by the entity. ASC 715 allows entities to use averages and other computational shortcuts provided that the results are a reasonable approximation.

When to Adopt a Change to the Spot Rate Approach

Under ASC 715, defined benefit plans must be remeasured annually as of the employer's fiscal year-end (the annual measurement date). For interim and annual financial statements, the measurements of plan assets and obligations used in determining net periodic benefit cost must be based on the assumptions used for the previous year-end measurements (i.e., the end-of-prior-year measurements) unless a "significant event" occurs, such as a plan amendment, curtailment, or settlement that would ordinarily call for an interim remeasurement. Generally, we would expect a change in approach to measuring service cost and interest cost components (as described above) to be part of a full remeasurement of the benefit plan that would occur in connection with the annual remeasurement or interim remeasurement associated with a significant plan event.

Change in Approach to Determining Discount Rates

Entities that use a bond-matching approach to select discount rates and are interested in adopting the type of change described in this alert may be considering the use of a yield curve approach so that they can apply a disaggregated spot rate method to measuring the service cost and interest cost components of net periodic benefit cost. At the 2015 AICPA Conference on Current SEC and PCAOB Developments, the SEC staff expressed some observations regarding an entity's change from a bond-matching approach to a yield curve approach when measuring its benefit obligation and simultaneously adopting the spot rate approach to measure the service cost and interest cost. While the staff does not have a formal view on this topic, we understand that it would consider the acceptability of such a switch on the basis of an individual registrant's specific facts and circumstances. The staff provided the following considerations for registrants contemplating a change from a bond-matching approach to a yield curve approach:

- Although using discount rates to measure the present value of the benefit obligation and interest cost are integrated concepts under ASC 715, the measurement of the benefit obligation is the starting point.
- An entity should evaluate its current approach to selecting discount rates for measuring the benefit obligation and should change its method only if the alternative approach results in better information for measuring the benefit obligation. The decision to select or change an approach to selecting discount rates should be consistent with the objective described in ASC 715 of making a best estimate of the rate at which the benefit obligation could be effectively settled.
- The rationale for a change in the approach to selecting discount rates should not be based on materiality.
- A change in method for selecting discount rates should occur only when facts and circumstances change.

- An entity should consider its prior rationale for choosing or changing to a bond-matching approach and why that was deemed a best estimate.
- A change in the approach to selecting discount rates for measuring interest cost (i.e., from the single weighted-average approach to the spot rate approach) would not be considered a sufficient change in facts and circumstances on its own to justify a change in the approach to selecting discount rates for measuring the benefit obligation.

In light of the above considerations and in the absence of other entity-specific changes in facts and circumstances, we believe that it could be challenging to justify or support a change from the bond-matching approach to the yield curve approach. We also believe that the above considerations would apply to a nonpublic entity. Historically, entities have generally only made the switch from a yield curve approach to a bond-matching approach, suggesting that of the two methods, the bond-matching approach results in the best estimate. This historical practice, along with the SEC staff's position that the acceptability of the spot rate approach would not by itself be a change in facts and circumstances that justifies a change in approach to selecting discount rates, reduces the likelihood that switching from a bond-matching approach to a yield curve approach would be considered a better estimate in accordance with the best-estimate objective of ASC 715. However, if a U.S. SEC registrant believes that its facts and circumstances would support a switch from the bond-matching approach to the yield curve approach, it should consider submitting a preclearance request to the SEC staff to confirm that the staff will not object.

Next Steps

Entities considering changes to their determination of discount rates and measurement of service cost and interest cost components should consult with their actuaries and independent accountants regarding the application of the views discussed in this alert to their specific facts and circumstances.