



Discount rate policies and development methods for long duration targeted improvements

The US Financial Accounting Standards Board's (FASB) Accounting Standards Update 2018-12, Targeted Improvements to the Accounting for Long-Duration Contracts, (ASU 2018-12) issued in August 2018 amends several key accounting areas for long-duration contracts. One of the key changes defined in the new guidance focuses on discount rates.

The use of upper-medium grade low credit risk fixed-income instrument yields is required by the long duration targeted improvements (LDTI) standard. This change is intended to maximize the use of market observable inputs.

The discount rate must be updated each reporting period with changes impacting accumulated other comprehensive income (AOCI), a line item on the balance sheet as part of equity.

Within this article, we will first discuss several key technical considerations for insurance companies when electing a discount rate policy and development method. Then, we will discuss the impact of implementing the new guidance on processes, systems, and data from a practical perspective.

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Key considerations for rate election

When companies select the discount rate under LDTI, there are several technical aspects to consider. Below is a rapid fire list of considerations that are worthy of noting when developing an accounting policy or an actuarial method to establish the discount rate.

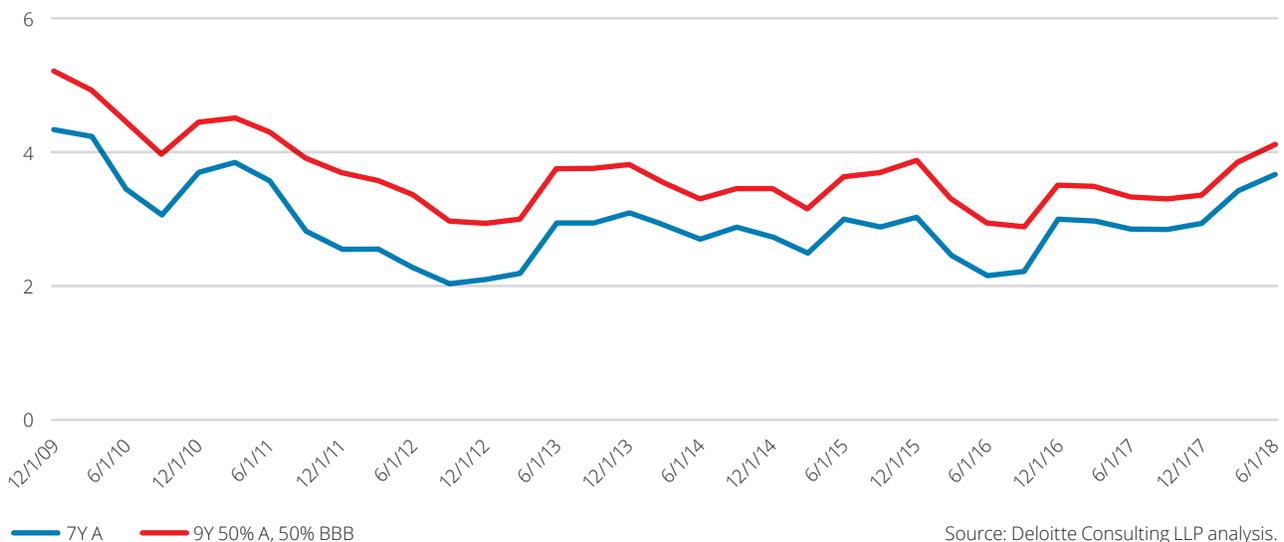


Match the product duration

With the targeted improvements, companies are required to maximize the use of observable market information tied to the duration of the product in determining the discount rate. One common idea upon reading this guidance is to inspect the market yield of single A-rated public corporate bonds with a tenor that reflects the product duration. Comparing this to the existing GAAP guidance, which is based on the company's investment portfolio, shows that new rates will be much lower, resulting in a higher liability for future policy benefits.

To illustrate, consider an example (figure 1) where an insurance company decides to invest in a nine-year duration across the supporting portfolio where the base product has a duration of seven to sustain a pricing spread. The following graph shows how the historical rates of seven-year "single A" bonds compared with an example portfolio yield approximated with 50% A-rated and 50% BBB-rated bonds with nine-year tenor. This example draws attention to two aspects that will change: 1) the duration mismatch companies are willing to accept in their portfolio and 2) the portfolio investment quality.

Figure 1. Historical seven-year single A rates vs. nine-year example portfolio yields with 50% A-rated and 50% BBB-rated bonds



In this example, the LDTI discount rate implementation will result in higher liabilities as interest rates decrease through the elimination of the lower quality investments' contribution to the yield and the duration mismatch. At any given time, the yield curve structure (normal, inverted, etc.) is only one factor that drives company investment strategies.



Choose a yield curve or a single equivalent rate

The current historical practice for setting discount rates allows for either a yield curve or a single rate. Both approaches are in use with the single portfolio rate being slightly more common. Since assumptions are no longer locked in and historical experience is being included in the determination of the net premium ratio, companies have been reevaluating the methodology options.

The yield curve uses different rates and reflects the expected timing of future cash flows at each point on the yield curve. On the other hand, the weighted-average locked-in single equivalent rate reflects the duration specific at issue (and based solely on assumptions). If actual experience differs materially from companies' assumptions, the single equivalent rate becomes disjointed with the products' duration, whereas the use of a yield curve will continue to fit the changing duration. This misalignment can be rectified by recalculating the single equivalent yield if there is a significant shift in the cash flow experience. Ultimately, this speaks to the locked-in yield curve versus a locked-in single rate. Otherwise, either approach should produce similar results.



Measure the market data

Judgment may be applied in determining how to integrate the market data with the discount rate election. For example, the company may elect the market data yield curve at a single point in time, such as the beginning of the year or quarter, as the discount rate. One might expect that products are sold based on a pricing target earned rate linked to the existing interest environment. An alternative approach is to use a market yield curve that represents the interest rates during the period of the sales.

A company may utilize an approach that takes an average of market rates at every tenor for each cohort. Some of the averaging approaches appear reminiscent of the investment portfolio development practices. Alternatively, solving for a single yield curve at the beginning of the unit of account or over the period of sales would also be consistent with guidance. The key is to develop a yield curve that is representative of the time period over which the measurement of the liability is occurring. This suggests many possible representative methods.



Assess the impact on unit of account

Companies may not have an aggregated unit of account greater than the policy issue year on direct business. There is a dynamic interplay between discount rates and the unit of account that requires careful recognition. It would not be unheard of to define a less aggregated level for the unit of account to accommodate volatility in the world of upper-medium grade fixed-income instruments with low credit risk. Perhaps a trigger related to interest rate changes would determine how the cohorts in any issue year are developed (quarterly or annually). This, in turn, adds an additional factor on which to focus when establishing the discount rates. This trigger establishes a cut-off for measuring the discount rate as well as establishing cohorts.



Evaluate the impact on other comprehensive income

With the targeted improvements, companies will lock in their initial discount rate and remeasure their liability with the most up-to-date discount rate at each reporting date. This recalculated liability is a measurement of the impact of the updated discount rate and is reported in AOCI. The impact of AOCI will differ by the elected discount rate method. For example, a company that locks in a monthly-average curve for current issue year cohorts will experience a different AOCI volatility than the company that locks in a beginning of the year curve. Finance and actuarial teams are expected to evaluate the increased volatility of AOCI driven by the rate changes and be prepared to explain the result to both internal and external stakeholders.

Impacts on the processes, systems, and data

In addition to the technical accounting and actuarial aspects above, companies should contemplate the practical impacts on processes, systems, and data as they consider implementing the new rates.



Processes

In order to accommodate the implementation of new guidance, companies are expected to evaluate and understand their current processes and LDTI requirements to be able to make changes. Such changes may include but are not limited to the increased numbers of valuation system and administrative system updates, administrative system extracts, valuation system processing runs and their order, and new assumption updates.

Additional operational risks arise with the changes to existing processes, and new controls should be put in place to mitigate such risks. Because many of the locked-in assumptions or system updates for assumptions have gone unchanged since inception, governance over the updates and validation of system functionality is crucial to success. New reporting requirements need to be developed as well. For instance, additional vectors shall be identified and reported for both locked-in and unlocked rates at each reporting period. The calculation changes may even make some analysis and controls obsolete.

Companies might want to consider if there are existing processes that can be leveraged for LDTI purposes. For instance, if companies have reported on International Financial Reporting Standard 17, Solvency II, or embedded values, an efficiency gain may be exploited by leveraging the existing process to develop the discount rate based on market observable data, collect best estimate cash flows, or even leverage the existing waterfall analysis.



Systems

Companies are expected to gauge how their valuation systems handle the new requirements. If using an actuarial valuation vendor system developed method, companies must own the vendor solution. Most vendors can easily support the dual discounting requirements, including the use of a yield curve. If using an in-house model, a rigorous set of testing procedures and requirements is important to ensure appropriate assumption updates are made to the system.

Another factor to consider is whether changes should be made to ledger entries. Companies require ledger accounts and disclosure information generated by the locked-in and unlocked rates at each reporting period. Historically this type of information would be managed by various workbooks, but an optimal solution would look to have automated reporting, data warehouses, or subledgers to help organize the data.

Data

The first consideration for companies is to decide how to obtain market observable rates. It is common that the discount rates are distributed by the investment department or asset liability management team. Alternatively, such rates can be pulled directly from market sources, such as Moody's or Bloomberg terminal, by the valuation actuaries. Ideally, the valuation actuary will be able to establish data requirements and have the yield curve delivered along with the rest of the data required.

The second consideration is the backup and storage of the data, such as the historic yield curves. Companies are expected to evaluate if more system backup and storage is necessary under the new guidance. Note too that all the transitioning data will have historical single discount rates—so both single points and vectors will need to be stored.

Third, limited or missing market data exists for certain points of the yield curve. Data beyond 30 years is a common area of concern. Current accounting policies related to discount rates are not all obsolete. Examples include the development of rates between the defined tenors, the use of spot rates or forward rates, and the need to develop a yield-curve beyond the maximum tenor would still apply to the LDTI world. The financial markets are always changing. Companies should be prepared to consider how the recent announcement from US Treasury related to the issue of a 50-year bond next year might impact existing policies and the discount rate yield curve.

Last but not least, the observable curves for upper-medium low credit risk bonds are lacking in certain foreign markets. This adds even more complexity to the determination method for discount rate curves. Companies shall use fair value measurement guidance to estimate a discount rate method when operating in these types of foreign markets.



Conclusion

The development and implementation of the discount rate is an important part of the LDTI accounting policy and actuarial methodology. Even though we have discussed many crucial considerations under the new guidance, there are still many moving pieces from a practical perspective. Integrated efforts across investments, finance, and actuarial valuation are needed to further define and develop the approach on discount rates.

Deloitte has extensive experience assisting clients on reporting bases that require frequent discount rate updates. We are qualified to provide clients with efficient and effective solutions on LDTI discount rates or to help examine and challenge your current thinking.



Contacts

Thomas Q. Chamberlain, ASA, MAAA

Managing Director
Actuarial and Insurance Solutions
Deloitte Consulting LLP
tchamberlain@deloitte.com
+1 312 486 3828

Matthew Clark, FSA, CFA, CERA, MAAA

Principal
Actuarial and Insurance Solutions
Deloitte Consulting LLP
matthewclark@deloitte.com
+1 312 486 0185

Wallace Nuttycombe

Principal
Risk and Financial Advisory
Deloitte & Touche LLP
wnuttycombe@deloitte.com
+1 973 602 6769

Rick Sojkowski

Partner
Audit and Assurance
Deloitte & Touche LLP
rsojkowski@deloitte.com
+1 860 725 3094



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