

Bank Asset/Liability Management

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Prepared by Peter Mihaltian

Hedging Benchmark Interest Rate Exposure

As it is generally understood, a *benchmark* rate is a reference interest rate that functions as a component of some contractual interest calculation, where the full interest rate used would be the benchmark rate plus or minus a differential or *basis*. For many variable-rate vehicles, including commercial bank loans, mortgages, and myriad variable-rate bonds and notes, the London Interbank Offered Rate (LIBOR) serves this purpose – at least for now.

It may be obvious that when a variable-rate instrument is paired with a derivative that references the same benchmark interest rate, hedging entities should generally be able to align the reset dates and settlement dates of the derivative to match those of the exposure, perfectly offsetting the risk of benchmark rate changes. In the world of accounting, these hedges would be categorized as *cash flow* hedges, where the intended hedge objective addresses the exposure of prospective uncertain cash flows that derive from the variable benchmark interest rate.

The other side of the coin would be interest rate exposures of fixed-rate instruments. cash flow hedge accounting cannot be applied in these instances because the cash flows for these exposures aren't uncertain; but changes in benchmark rates can still affect these exposures. The cash flows of these instruments are unaffected by benchmark rate changes, but these changes would alter the discount rates used in calculating valuations. Put another way, benchmark rate changes affect valuations on fixed-rate instruments solely because they alter instruments' discount rates.

Under the rules of fair value hedge accounting, a prerequisite condition is that the hedge should be highly effective in offsetting this specific value change – i.e., the value change of the fixed-rate instrument *specifically relating to the changes in the benchmark rates*. This requirement notwithstanding, when swaps are paired with fixed-rate instruments, the predominant economic objective for most users is to synthetically transform the exposure from that of a fixed rate instrument to that of

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a variable-rate instrument – not to offset value changes. In any case, fair value hedging would be permissible for these hedges, however, only if qualifying conditions are satisfied.

Under fair value hedging, all hedge gains or losses of the derivative are reported on a current basis in earnings, but so too are changes in the value of the hedged items (i.e., the fixed rate instrument) – but only the value changes that are attributable to changes in the benchmark rate.

This second step is called the *basis adjustment* for the hedged item. Economics and accounting are synchronized only when the basis adjustment is equal and opposite to the gain or losses on the derivative (realized and unrealized) net of the swap settlements adjusted for accruals. Under these conditions, the resulting earning effect would be comprised of the fixed interest amounts derived from the hedged item adjusted for accruals, plus the swap's settlements adjusted for accruals – precisely the intended economic objective. This outcome would be assured if the reporting entity qualifies for and applies *the shortcut hedge accounting treatment*. Under this treatment, quantitative effectiveness tests are obviated. Moreover, the hedged item's basis adjustment is a plug amount that assures the desired economic result. This treatment, however, has some restrictions that make it out of reach for certain classes of hedges.

Two important categories of hedges where the shortcut treatment is currently proscribed are (1) situations where entities apply a seasoned derivative to a newly-designated hedge, and (2) last of layer hedges. This latter category of hedges is one in which the hedged item is a portfolio of prepayable fixed-rate instruments, where some elements of the portfolio may be expected to be prepaid during the horizon of the hedge. This strategy allows for hedging a residual volume of the portfolio that would be anticipated to survive prepayments, without knowing in advance which of the portfolio elements will remain.

If the shortcut treatment is disallowed, (a) a quantitative effectiveness test would be required, and (b) the long haul method of accounting would apply. Under the long haul method, an explicit calculation of the basis adjustment is required; but the procedures for carrying out this calculation changed with the release of ASU 2017-12. Under the amended regime, when hedging benchmark rate risk in a fair value hedge, we deal only with the benchmark component of the fixed cash flows of the hedged item, and we discount those fixed cash flows by discount rates derived from the benchmark yield curve. The benchmark cash flows would thus be fixed, over time, reflecting the conditions at the start of the hedge; but the discount rates would be ever-changing.

When applying the long haul method, it's critical to understand exactly what the benchmark rate is, and where its associated discount rates come from. What may not be so well understood is that in certain fair value cases, benchmark rates will be idiosyncratic. If we're relying on a LIBOR-based swap as the hedging derivative, when hedging a fixed-rate instrument, the benchmark rate is the fixed rate on the swap of the same term. For example, if the exposure were a 5-year instrument, the benchmark rate would be the fixed rate on a five-year swap; if the exposure were a 3-year instrument, the benchmark rate would be the fixed rate on a 3-year swap; etc.

Two critical considerations: First, the maturity of the benchmark rate is not static. That is, the term to maturity of the benchmark interest rate shrinks daily, as time passes. If we start with a 5-year instrument and a five-year swap rate as the benchmark rate, after a quarter passes, we'll be dealing with a $4\frac{3}{4}$ -year instrument and a $4\frac{3}{4}$ -year benchmark interest rate. The terms of both the hedged item and the hedging derivative would be moving down the yield curve to shorter and shorter maturities, day by day. And second, the same benchmark rates won't necessarily apply for instruments having the same maturities.

With respect to this second concern, consider the case of two different entities, both with 5-year fixed rate assets seeking to swap from fixed to floating. Both go to the same swap dealer at the same time, but because of differences in the respective credit qualities of the counterparties, one entity is offered as swap with a fixed

rate of 3.75 percent, and the other is offered one with 3.85 percent fixed rate. As no cash changes hands at the inception of either trade, both of the swaps are *at-market*. The first entity would identify its benchmark rate as 3.75 percent, while the second entity would say its benchmark rate was 3.85 percent. In both cases, subsequent valuations would require either (a) building discount rates that reflected different (generally minor) credit adjustment to the LIBOR-based yield curve, or (b) valuing the swaps initially as if they were risk-free and then each making a different credit valuation adjustment to the common risk-free valuation.

At present, the procedures relating to the long haul basis adjustment are not well specified in the FASB's guidance. Thus, it seems to be an open question as to whether one should use risk-free benchmark rates or the risk-adjusted benchmark rates when calculating the basis adjustment. Unless or until we hear from FASB on this question, it's likely to be a judgement call by the auditing firms.

It may be worth noting that this issue becomes moot when swaps are fully collateralized. In that case, the firm-specific benchmark rate and the risk-free benchmark rate would (or should) be identical; and if the firm-specific benchmark rate structure is authorized for calculating the basis adjustment (i.e., if the identical discount rates apply to both the hedged item and the hedging derivative), the resulting accounting outcome would be identical to that of the shortcut method. From an economic perspective, using the same discount rates for the derivative's valuation and for the hedged item's basis adjustment would be both logical and preferred, as this procedure harmonizes the accounting result with the intended economic objective of synthesizing a variable-rate instrument.

FASB could have clearly signaled this intent by broadening the criteria for applying the shortcut treatment. Instead, the Board specifically disallowed shortcut for the two exemptions noted above – hedges with seasoned derivatives and last-of-layer hedges. In this author's judgement, these proscriptions represented a lost opportunity. As noted above, the primary economic rationale for pairing an interest rate swap with a fixed rate financial instrument is to synthetically convert fixed cash flows to variable cash flows; and that economic objective will be perfectly satisfied as

long as the horizon from the swap's start date to its end date falls within the life of the fixed rate exposure being. Sometime in the coming months, FASB has scheduled further consideration of some aspects of the last-of-layer accounting guidance. Potentially, in reconsidering this issue, the Board may come to recognize that they could affect a quick fix that would likely be universally embraced by reporting entities. That is, by allowing a more permissive attitude with respect to the shortcut treatment, FASB would unambiguously improve the alignment of financial statements with reporting entities' risk management strategies, eliminate onerous effectiveness testing requirements, and simplify the mechanics of the accounting process.

If it's not too much to hope for, it should be clear that the same benefits of liberalization of the shortcut restrictions would also apply to cases when seasoned, off-market swaps serve as the hedging derivative to newly designated hedge relationships. As I understand the process, this concern isn't currently on the agenda, but the issues are so closely aligned, FASB may very well connect the dots – or, at least, the Board should be encouraged to do so. We'll just have to wait and see.

-- Ira G. Kawaller, Ph.D.
HedgeStar

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Editor

Peter A. Mihaltian, President
Southeast Consulting, Inc.
212 S. Tryon Street, Suite 925
P.O. Box 470886
Charlotte, NC 28247-0886
(704) 338-9160
E-mail: info@southeastconsulting.com
Website:
www.southeastconsulting.com

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Editorial Inquiries
Peter A. Mihaltian

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