

# Impact of Accounting Rules on the Market for Swaps

IRA G. KAWALLER

**IRA G. KAWALLER** is founder of Kawaller & Company, LLC, a Brooklyn-based financial consulting practice that specializes in issues relating to derivative instruments.

*Interest rate swaps have been in existence only since the early 1980s, but they have become one of the most successful financial innovations of our time. The reason for the interest in these tools is simple—they work!*

**B**ecause new accounting rules just have been—or shortly will be—applied to interest rate swaps, these instruments might not be quite as attractive in the future as they have been in the past.

For companies that operate in a “mark-to-market” environment (e.g., investment companies and mutual funds), the new accounting standard, FAS 133, is a nonevent. The normal accounting practice for these firms already requires them to mark all derivatives to market and record gains or losses in current earnings. But for those with more of a corporate finance orientation, the rules will certainly change their accounting practices, and companies may choose to alter their risk management strategies in response.

Starting with all fiscal years after June 15, 2000, FAS 133 will become mandatory, so most companies are already affected; and under this standard, some of the traditional (and most successful) uses of these types of swaps may no longer be viable.

## WHAT ARE SWAPS ANYWAY?

A swap is a contractual agreement between two counterparties. Each calculates a

prospective cash flow obligation to the other, and the two obligations are typically netted and settled on a periodic basis. In the “plain vanilla” interest rate swap, the cash flows are set equal to the interest payments due on a fixed-rate debt for one party, and a variable-rate debt for the other—both assuming the same par value of exposure.

For an example, consider the following swap:

- Term (or tenor) 5 years
- Notional amount \$10 million
- Payment frequency Semiannual
- Fixed rate 10.0%
- Variable rate 6-month LIBOR

The net cash flow that would be paid and received by the respective parties is calculated as follows:

$$C = \$10 \text{ million} \times (10\% - \text{LIBOR})/2 \quad (1)$$

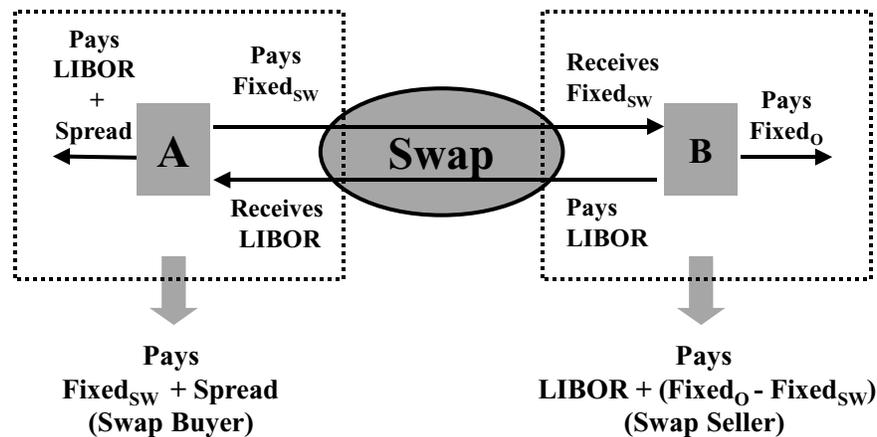
where C is the net cash flow paid or received by the parties to the transaction.

It should be clear that if the London Interbank Offered Rate (LIBOR) is smaller than 10%, the payment is made by the party that agreed to pay the fixed rate. If LIBOR is larger than 10%, the payment is made by the party that agreed to pay the variable rate (i.e., LIBOR). If LIBOR equals 10%, no cash flow transpires.

Swaps allow companies to convert all or a part of their fixed-rate debt to floating, or

**EXHIBIT**  
**Plain Vanilla Swap**

**LIABILITY SWAP**



Source: Kawaller & Company, LLC.

vice versa. For example, in the exhibit, Counterparty A starts with a variable-rate debt obligation, requiring periodic interest payments based on LIBOR plus a spread. Counterparty B, on the other hand, has borrowed on a fixed-rate basis. When the two enter into the swap agreement, they maintain their original interest expense obligations; the additional cash flows of the swap effectively transform their exposures from floating to fixed for Counterparty A and from fixed to floating for Counterparty B. Counterparty A still bears the cost of the original spread over LIBOR, and Counterparty B ends up with an exposure to LIBOR. But Counterparty B also is responsible for paying (or receiving) the difference between the original fixed rate and the swap's fixed rate.

This economic result is not preserved in an accounting sense unless the earnings impacts of the swap reflect only the swap's cash flows. Under FAS 133, this condition no longer applies, except when the "shortcut" method may be applied.

**FAS 133 ACCOUNTING RULES**

Under FAS 133, unless a derivative qualifies as a hedge, gains or losses must be recorded in earnings. But if a hedging relationship has been specified, and if all the qualifying criteria are satisfied, "special" accounting applies. Exactly what treatment depends on the nature of the

hedge. Three types of hedges are permitted: fair value, cash flow, and hedges of net investments in foreign operations.

Fair value hedges apply to risks associated with the price of an asset, liability or firm commitment. In these hedging relationships, the carrying value of the item being hedged is adjusted to reflect the change in its market value due to the risk being hedged. This change is posted to earnings. In addition, the corresponding gains or losses of the derivative used to hedge this risk also are posted to earnings, just as they are for nonhedge derivative applications.

A hedge of an upcoming, forecasted event is a cash flow hedge. For cash flow hedges, derivative results must be evaluated and a determination must be made of how much of the result is "effective" and how much is "ineffective." The ineffective component is realized in current income. The effective portion originally is posted to "other comprehensive income" and later reclassified as income in the same time frame in which the forecasted cash flow affects earnings.

The Financial Accounting Standards Board (FASB) only recognizes hedges as being ineffective for accounting purposes when the hedge gains or losses exceed the effects of the underlying forecasted cash flow, measured on a cumulative basis.

The last category qualifying for special accounting treatment is the hedge associated with the currency expo-

sure of a net investment in a foreign operation. Again, the hedge must be marked to market. This time, the treatment requires effective hedge results to be consolidated with the translation adjustment in other comprehensive income. Differences between total hedge results and the translation adjustment being hedged flow through earnings.

Critically, it is not sufficient to elect to apply hedge accounting. Under FAS 133, hedge accounting is permitted only if specific prerequisites are satisfied. At the top of the list is *ex ante* documentation supporting the expectation that the hedge will be “highly effective.”

## HEDGING WITH INTEREST RATE SWAPS

Applying these rules to interest rate risks requires an understanding that both fair value hedge accounting and cash flow hedging will be used, depending on the nature of the interest rate exposure. Specifically, if the intention is to manage the risk of uncertain interest expenses or revenues associated with a variable-rate debt security, then cash flow treatment is appropriate. If the intention is to manage the risk associated with a fixed-rate security, on the other hand, fair value hedge treatment is required.

Consider two examples. In a case where an investor holds the fixed-rate security as an asset, the fair value hedge treatment may be reasonable and intuitive. After all, the hedger’s objective is to safeguard its value. Locking in some value for this security is perfectly consistent with the fair value hedge approach.

In contrast, however, the hedger who issues fixed-rate debt and decides to swap from fixed to floating reflects a different kind of thinking. The objective of this hedge is not to offset present value effects, but to generate prospective cash flows that, when consolidated with the debt’s coupon payments, will result in a total interest expense that replicates the outcome of a variable-rate loan.

It is well known that interest rate swaps generate precisely this set of cash flows, which suggests that cash flow hedging rules should be followed. But this is not the case. When the hedged item is a fixed-rate security, the FASB has mandated that fair value accounting is the only applicable accounting treatment. Unfortunately, in many cases, this requirement will foster an accounting result that is at odds with the economics of the transactions. This seeming ineffectiveness is a consequence of the requirement to use fair value hedge accounting. It does not result from the hedge being inappropriate or badly designed.

The shortcut method will circumvent this problem. Qualifying to use shortcut treatment, however, requires

that the features of the swap (i.e., the notional amount, payment and reset dates, and rate conventions) match precisely to those of the debt being hedged. If they do, the change in the carrying amount of the hedged item is set equal to the gains or losses on the swap, net of swap accruals, rather than to the change in the value of the bond due to the risk being hedged. Thus, the resulting accounting under the shortcut method replicates the current “synthetic instrument” accounting. Without the shortcut, you get something else.

## MEASURING HEDGE INEFFECTIVENESS

To get a better idea of how serious failing to qualify for the shortcut treatment can be, consider the FASB’s own example,\* in which a hedger issues five-year, fixed-rate debt. The debt has a par value of \$100,000 and a coupon rate of 10%. The hedging instrument is a five-year swap, receiving 7% fixed and paying LIBOR. The risk being hedged is the benchmark LIBOR-based swap rate. The example assumes a flat yield curve, which simplifies the calculations.

According to the FASB’s calculations, a 50-basis point change in the LIBOR-based swap rate will foster a change in the fair value of the swap of \$1,675. If the hedger elects, and qualifies for, the shortcut method, the \$1,675 would be used for both the swap and the adjustment to the carrying amount of the debt. These two contributions to earnings would be exactly offsetting, so that the ultimate effect on earnings would distill to interest accruals of the debt and the swap, respectively. The synthetic instrument outcome would be realized, where the effective interest rate would be LIBOR plus 3%. (The 3% spread over LIBOR comes from the difference between the 10% fixed rate on the debt versus the 7% fixed rate on the swap.) Without the election of the shortcut method, the swap would generate the same income consequences as above, but the adjustment to earnings from the hedged item’s response to the change in the LIBOR-based swap rate would be different—\$1,568 instead of \$1,675. This seemingly small difference of \$107 is misleading, however. On a yield basis, this discrepancy translates to an interest rate effect of 43 basis points, i.e.

$$0.43\% = \frac{\$107}{\$100,000} \times \frac{360}{90}$$

So the question is: If a company is considering swapping from fixed- to floating-rate debt, and the result

could end up being 43 basis points—or more—away from the intended outcome, will that company still go ahead with the hedge? For the many (possibly the vast majority of) potential swappers, this magnitude of uncertainty will be unacceptable and the answer will be no. The recourse will be to take whatever steps are necessary to ensure that the prospective hedge will qualify for the shortcut method.

## GOOD NEWS

The good news is that if entities do qualify for the shortcut treatment, the requirement to document that the hedge will be highly effective becomes moot. The act of qualifying ensures effectiveness. The bad news is that the criteria for qualifying are restrictive. The underlying debt securities have to be “typical,” presumably lacking bells and whistles that may have served to reduce costs for issuers in the past.

Thus, for those firms with “atypical” debt on their balance sheet, either as assets or liabilities, for which the shortcut method is prohibited, the perfectly functioning interest rate swap will no longer work. And for those cases where the debt security qualifies but the terms of the associated swap do not match up properly, firms will likely want to trade out of their existing swap positions and enter into swaps that do qualify for shortcut treatment. In the longer run, the appetite for anything but plain vanilla swaps may all but disappear if concerns about potential income volatility come to dominate in the decision about which hedging strategy or tool to employ.

## ENDNOTES

An original version of this article, “Impacts of FAS 133: Do Swaps Still Work?” was published by Futures and Options World, June 2000. It is printed here with permission.

\*The example is presented in paragraphs 120A, Band C of FAS 138, which amends FAS 133.