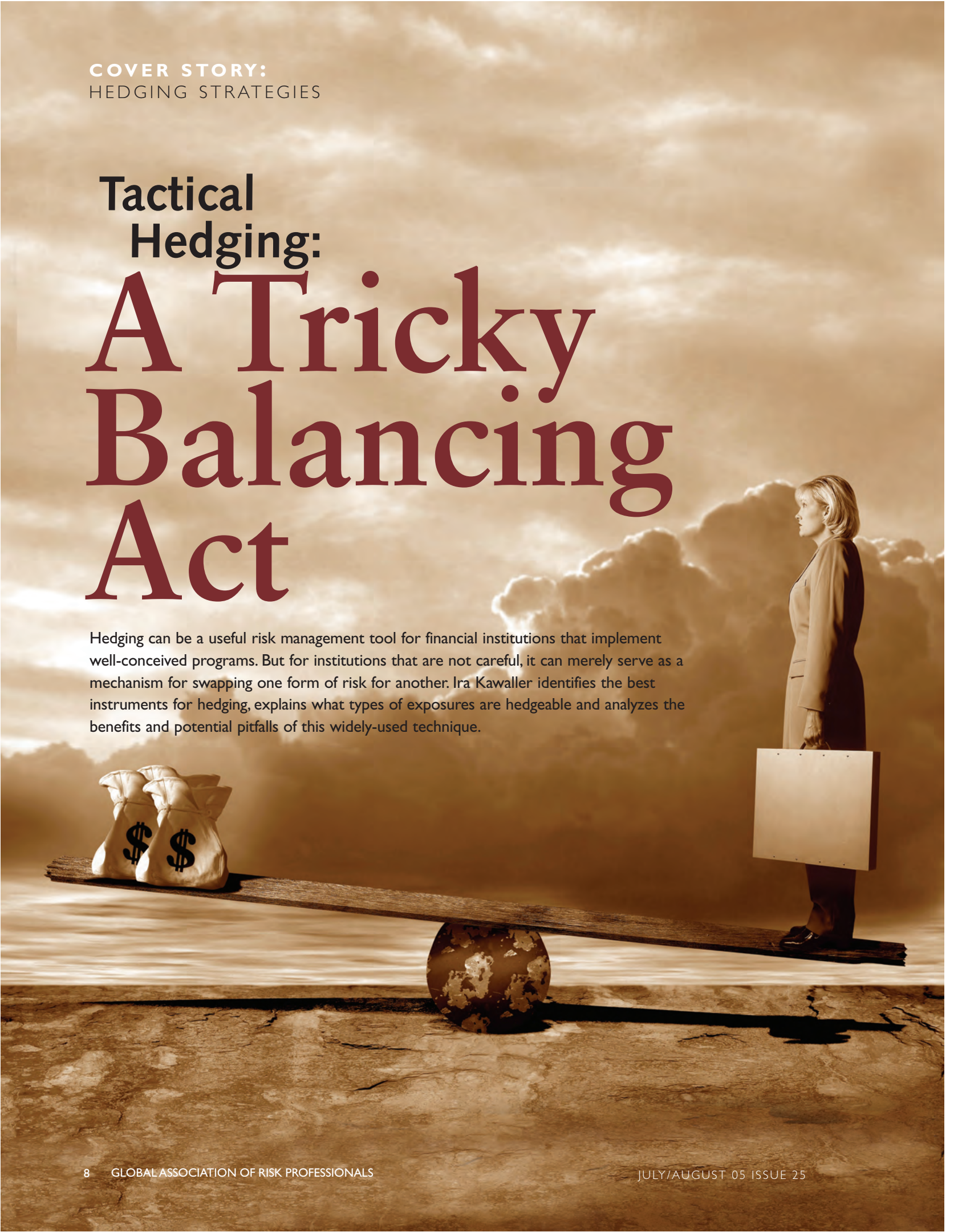
Tactical Hedging: A Tricky Balancing Act

Hedging can be a useful risk management tool for financial institutions that implement well-conceived programs. But for institutions that are not careful, it can merely serve as a mechanism for swapping one form of risk for another. Ira Kawaller identifies the best instruments for hedging, explains what types of exposures are hedgeable and analyzes the benefits and potential pitfalls of this widely-used technique.



For companies that are relatively new to the idea of hedging or risk management, the first foray into this activity can be daunting. At the beginning of this process, so many questions arise, including: Should we hedge, or are we better off not? What instrument(s) should be used? What's the right hedging coverage — i.e., what portion of an exposure should be hedged and/or how far out should the hedge extend? And how long should hedges be maintained?

Many managers, unfortunately, want hard and fast answers to these questions. The fact is, there are no "right" answers. However, at the same time, there are intelligent ways of addressing the aforementioned queries, and this article will offer some potential solutions.

When we ask whether or not we should hedge, we must remember that some exposures are readily hedgeable and some are not; this is a function of the less-than-total coverage of deep and liquid derivatives markets. Still, hedgeable markets do exist for a wide range of basic commodities (such as those relating to energy markets, agricultural products and metals), currencies and interest rates. If exposures to these prices/rates have a material impact on a company's performance, not hedging, in this author's judgment, would seem to be an abandonment of fiduciary responsibility.

One of the problems with hedging is that you can't know beforehand (i.e., when the hedge position is implemented) whether the hedging derivative will end up being profitable or unprofitable. This fact, however, shouldn't be an overriding concern. Rather, the determining factor should be an assessment of whether or not the company wants to bear the risk of the exposure in question. For instance, if a company is in the widget business and not the foreign exchange business, it would seem odd for that company to maintain an aversion to foreign exchange rate changes — given that tools are readily available to eliminate this risk.

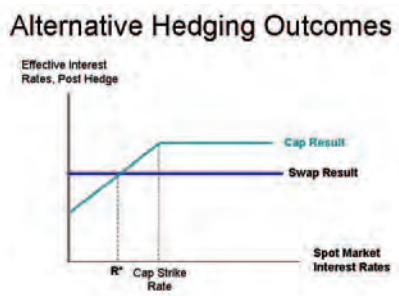
Choosing Instruments

After one weighs the factors cited above, whether to hedge or not is then reduced to a decision about whether to seek realizations of the prospective outcomes that could be reliably predicted with the use of a derivative instrument. To illustrate this point, let's consider a company that is exposed to the risk of rising interest rates in connection with variable-rate funding. The two most basic alternative tools for managing this risk are interest rate swaps and interest rate caps. Swaps allow the company to exchange its variable-rate payments for known, fixed cash flows, effectively converting the variable-rate funding mechanism to fixed-rate debt.

The cap, on the other hand, assures realizing no more than a maximum interest expense, with the prospect of allowing for lower interest costs if interest rates stay below a critical level defined by the cap's strike rate. Importantly, swaps are generally entered into without any initial payment for the derivative, while caps require the payment of a premium to the cap seller.

Choosing between a swap and a cap should reflect the fact that the hedger is confronted with trade-off considerations. The accompanying chart (below), which compares the potential outcomes of these two respective hedge tools, helps to clarify these issues.

It should be clear that if the variable interest rate moves to R* (or averages, over time, to R*), the hedger should be indifferent to these two alternative hedging instruments, as both end up with the same effective cost of funds. At higher interest rates (i.e., above R*), however, the better outcome would be realized by the swap; while at lower rates, the cap would



foster a lower cost of funds. Unfortunately, no one knows, with certainty, where rates will be going, so the choice depends on making a forecast, balanced by a consideration of your firm's post-hedge market exposures/opportunities relative to those of your competitors.

When reading the *Alternative Hedging Outcomes* chart (above), one should appreciate that the cap's worst-case outcome reflects the cost of buying the cap, as well as the cap's strike rate. For example, if you had to pay 1% to buy a cap with a strike yield of 5%, the effective worst-case cost of funds would be 6%.

It may be relevant to point out, however, that the cost of using a cap may not show up in the same accounting period as that of the actual borrowing costs. Rather, depending on the specific accounting elections that may be made, the cost of the cap may be recognized earlier. In any case, when these costs are considered, readers should realize that the comparison of the two strategies will never show one to be universally preferred to the other. That is, one strategy will outperform under one set of conditions, and the other will outperform under a different set of conditions.

In addition to comparing and contrasting each of these alternative instruments, a firm should also consider the unhedged outcome. For example, assuming the current variable rate is, say, 2.5%, a firm might be quite willing to initiate

a swap position that would lock in a rate of 3.5% for a three-year term, particularly if the user expected that variable interest to rise sufficiently over the horizon of the hedge; in this scenario, without hedging, the cost of funds would likely be greater than 3.5%.

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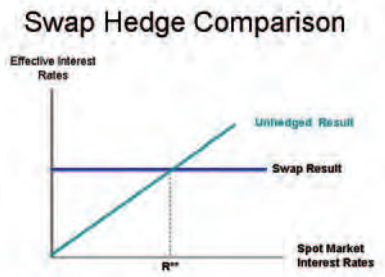
In other words, besides the idea of fixing an interest rate, it's critically important to assess the rate that will be realized. For example, a company might be comfortable locking in a 3.5% rate with the swap, but they might pass on the prospect of locking in, say, at 5.0%. The point is, the swap's fixed rate will vary with market conditions, and at times these market conditions will be more attractive than at others. Presumably, the decision to hedge would likely be more attractive if the hedged result seemed to promise a lower funding cost than that which would result in the unhedged case. But, of course, these judgments made at the onset of the hedging decision may not pan out.



As you can see in the chart above, the hedger would likely be predisposed to entering into the swap if interest rates were expected to remain above R**, although some hedgers might still elect to use the swap — even believing that rates might not move to this range. Their justification would be that they favor the certainty of the swap's outcome, and, to secure this certainty, they would be willing to bear somewhat higher costs with a swap hedge.

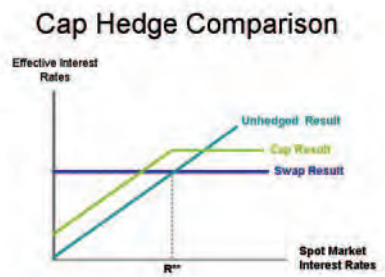
A similar comparison of the cap hedge to the unhedged outcome would give a sense of whether the price of the cap is "reasonable" — i.e., the idea of a cap might be attractive, but the cost might turn out to be prohibitive.

The depth and liquidity of the more common derivative markets are such that users can reliably expect these products to be fairly priced by reputable dealers; in this context, "fairly priced" means that swap fixed rates and the cap premiums will reflect consensus forecasts for underlying prices or interest rate variables.

In practical terms, prospective hedgers should realize that when the whole world is convinced that interest rates are poised to rise, swap rates will likely be sharply higher than current variable interest rates, and when prospective market volatility becomes more exaggerated — for whatever reason — caps prices will become more expensive. And vice versa.

Selecting the Right Coverage

Too many businesses think about hedging as an all or none decision, but that's really the wrong way to look at it. These two choices (all or none) are extremes. One could argue that the fully-hedged company reflects a view that an adverse price (interest rate) change will occur, while the completely unhedged firm reflects a view that an adverse price change won't occur. A logical posture for a firm that truly has no forecasting bias would be one where, as a rule, half of the exposure is hedged; but deviations from this rule would and should be permitted with sufficient cause — such as if derivative prices become excessively cheap or expensive, or if risk tolerances change.



Yet another way to get to this same point is to realize that by hedging 100% of an exposure, a company may simply be exchanging one type of risk for another. For instance, when

swapping a variable-rate interest payment for a fixed interest rate, a company would be subject to the risk of lost opportunities associated with lower interest rates — rather than being exposed to the risk of rising variable interest rates. If both of these risks were deemed to be of equal relevance, the same 50% coverage would be the ideal solution.

The question of how far in time hedges should extend is a tricky one. Once again, there is no clear-cut, correct answer. As before, the determination will reflect some trade-off considerations. "Too short" a horizon means that you won't be protected for a prospective exposure, and you'll be stuck with the consequences; on the other hand, "too long" a horizon would leave you with the risk that the exposure being hedged never really arises, such that you can end up with losses on a hedge that have no offsetting benefit because the event being hedged doesn't occur.

To be more concrete, suppose the current variable-rate funding mechanism has a five-year term. Does this mean that the hedge horizon should match these five years? Not necessarily. Often the determination of what and how much to hedge will be made with reference not only to the exposure, but also with respect to how this exposure fits in with the rest of the firm's risks and opportunities. Hedge coverage could be shortened or lengthened, depending on expectations relating to the balance sheet and to anticipated business activity over the coming five-year horizon and beyond. And, critically, these expectations are never static.

This decision of whether or how much to hedge is frequently affected by the firm's capacity to qualify for and apply hedge accounting treatment. Failure to qualify for this kind of accounting treatment may cause firms to reduce the hedge coverage in an effort to diminish the prospect of excessive income volatility. This decision, however, could prove to be short-sighted and costly if the risk remains uncovered and an adverse price change occurs — particularly if competitors had protected themselves from this contingency while your company did not.

Maintenance Plan

Many firms identify an exposure, and, once they decide to hedge it, they keep the hedge in place for as long as the exposure remains a source of risk. This method is not necessarily wrong, but an alternative maintenance approach views hedging as a process that should be reviewed and adjusted periodically as conditions and/or risk tolerances change.

A determination to hedge that might have made a lot of sense a month ago, when prices seemed poised to move in one direction, may no longer make sense today. If the justifications for implementing the hedge in the first place are no longer valid, it may be reasonable to eliminate — or at least scale back — the hedge coverage. In other words, the decision as to whether to keep a hedge or terminate it should always be forward-looking.

Just as the decision to maintain the hedge deserves to be revisited periodically, the decision about the choice of the preferred hedging instrument should also be reevaluated from time to time. If, for example, caps were deemed to be too expensive at the start of the hedge, they might be considerably cheaper now. Thus, it may make sense to change from hedging with swaps to hedging with caps, or vice versa, as the relative prices of these respective derivatives vary over time.

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The thrust of this article has been to suggest that there's a lot to consider before implementing a hedging program. Companies need to make a host of business judgments and decisions, all of which have an inherent probability that they may end up seeming to have been wrong, in retrospect.

The prospect of losing money on a derivative position, however, should not be over-riding. Rather, prospective hedgers need to be able to assess alternative hedging strategies and then choose the one that best meets their objectives. Companies must become facile enough with derivative instruments to be able to know what these tools are capable of delivering, and having the capacity to assess relative value would certainly be helpful, if not essential.

Additionally, for companies whose financial statements will be materially affected by the price effects of hedgeable exposures, recognition of risk management strategies should reach to the highest managerial levels, up to and including representatives of a company's board. ■

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