

Strategies For Hedging Concentrated Stock Positions (Part 3) msq+

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In Part 1 we discussed the basics of puts, calls, and collars, along with some tax rules and restrictions on these transactions. In Part 2 we looked at the importance of the acquisition date of your stock and the effects of borrowing against the hedged position.

After understanding the basic rules and restrictions, you now need to decide on the appropriate hedging tool. In this article we will discuss variable forwards and the final issues to consider in crafting your hedging strategy.

Basics Of Variable Forwards

A forward is a contract to sell a specific *quantity* of a security in the future.

Forward contracts may be structured so that they settle in cash.

A *variable* forward is a contract to sell a specific *value* of a security in the future. This means that the number of shares to be delivered at maturity will depend on the shares' stock price at maturity. Specifically, you will have to deliver more shares if the price at maturity is lower than today's price, and fewer shares if the price at maturity is higher than today's price. However, the quantity is subject to a predetermined minimum and maximum, which replicate the economics of a collar.

When a variable contract matures and you deliver your shares, the delivery of the shares will trigger a capital gains tax. The hedge stops the holding period clock, so if you hold the stock for less than one year before constructing the hedge, your gain on the stock will be treated as a short-term capital gain and taxed at 35%. If you hold the stock for more than one year before you construct the hedge, your gain will be treated as a long-term capital gain and taxed at only 15%.

You need to answer two questions: How bullish are you on the underlying stock? Do you want to borrow against the stock?

Example: Suppose you wish to hedge 10,000 shares of your fictitious CaliforniaSolar stock, which is selling for \$100 per share (with a \$1 cost basis). You want your variable forward to replicate a collar in which the put is struck at \$100 and the call at \$120. To accomplish this, you could enter the following variable forward contract: The dealer agrees to pay you \$1 million upon expiration of the contract, and you agree to deliver \$1 million worth of shares to the dealer.

Usually you do not pay for this contract directly. But dealers often embed a profit for themselves into the contract prices.

To replicate the economics of the put struck at \$100 and the call struck at \$120, the contract must include additional features that apply if CaliforniaSolar matures at a price below a lower threshold of \$100 or above an upper threshold of \$120. Specifically, if the price at maturity is below the lower threshold (\$100), you deliver a fixed number of shares to the dealer. Conversely, if the price at maturity is above the upper threshold (\$120), you deliver a share amount equal to the sum of two numbers: \$1 million divided by the maturity price, plus a quantity equal to the increase above the upper threshold. The maximum number of shares that you could keep would occur if the stock matured at \$120. In that case, you would keep 1,667 shares.

Possibility 1: At maturity, CaliforniaSolar is selling at any price between \$100 and \$120 per share.

In this situation the dealer will give you \$1 million, and you will deliver an amount of shares equal in value to \$1 million. If CaliforniaSolar is selling at \$100 per share, you will deliver 10,000 shares (\$1 million divided by \$100). If CaliforniaSolar is selling at \$110 per share, you will deliver 9,091 shares (\$1 million divided by \$110). If CaliforniaSolar is selling at \$120 per share, you will deliver 8,333 shares (\$1 million divided by \$120). As long as CaliforniaSolar is above the lower threshold and below the upper threshold, no additional value is exchanged.

Possibility 2: At maturity, CaliforniaSolar is selling for less than \$100 per share.

In this situation, you will always be required to deliver 10,000 shares to the dealer.

Possibility 3: At maturity, CaliforniaSolar is selling for more than \$120 per share.

In this situation, you will be required to deliver a quantity representing the sum of two numbers: (1) \$1 million divided by the maturity price, plus (2) a quantity equal in value to the increase above the upper threshold. For example, if CaliforniaSolar is selling for \$200 per share at maturity, you must deliver a total of 9,000 shares, which is calculated as follows:

$$\frac{\$1,000,000}{\$200} = 5,000 \text{ shares}$$

$$\frac{\$200}{\$200}$$

$$\frac{\$200 - \$120}{\$200} \times 10,000 = 4,000 \text{ shares}$$

$$\frac{\$200}{\$200}$$

$$5,000 \text{ shares} + 4,000 \text{ shares} = 9,000 \text{ shares}$$

If CaliforniaSolar is selling for \$1,000 per share at maturity, you deliver 9,800 shares, which is calculated as follows:

$$\frac{\$1,000,000}{\$1,000} = 1,000 \text{ shares}$$

$$\frac{\$1,000,000}{\$1,000} = 1,000 \text{ shares}$$

$$\frac{\$1,000,000 - \$120 \times 10,000}{\$1,000} = 8,800 \text{ shares}$$

$$\frac{\$1,000,000}{\$1,000} = 1,000 \text{ shares}$$

$$1,000 \text{ shares} + 8,800 \text{ shares} = 9,800 \text{ shares}$$

The Bottom Line

In summary, the economics of variable forwards are such that for any maturity price that is above the lower threshold, you will always deliver less than your exact number of shares. Regardless of the maturity price, you will never deliver less than a quantity equal to the current value of the stock price divided by the upper threshold (which in this example was 8,333 shares).

If you had structured this contract using an options-based collar, it would have yielded the same economic result; but the interest expense may be calculated differently. In addition, you should be aware that collars are usually contractually structured so that they settle in cash, whereas variable forwards are usually structured so that they settle in shares rather than cash. However, variable forwards can be structured so that they settle in cash instead of with the delivery of shares. You may also choose to roll your contract forward, and this approach would allow you to delay the delivery of your shares.

Prepaid Variable Forwards To Monetize

Depending on the use of the borrowed money, Federal Reserve rules may severely limit how much you can borrow. However, it is generally believed that these rules do not apply to monetization through a financial instrument known as a "prepaid variable forward." For this reason, investors who wish to borrow beyond the Federal Reserve limits sometimes rely on this technique. A prepaid variable can be an effective way to borrow more than 50% against a hedged position. Most variable forwards in the market are prepaid.

In the variable forward example we just discussed, the dealer agreed to pay you \$1 million when the contract matured. If the variable forward were prepaid, the dealer would give you less than \$1 million immediately, but you would not deliver the securities until the contract matured. There is no tax at the time of the advance payment, but there is tax at maturity. So with a prepaid variable forward the dealer is basically lending you money, though there is no separate loan document.

The dealer would give you less than \$1 million rather than the full \$1 million because when you borrow you incur carrying costs (i.e., mainly interest expense). So the amount the dealer gave you would be adjusted down to account for the interest that the dealer could be earning on the money. The up-front payment would also be adjusted to reflect the floor and ceiling prices of the contract. If the floor were higher the contract would give you more protection, and if the ceiling were higher the contract would give you more room for upside. Since the deal would be better for you, you would have to give some cash in return. Thus both higher floors and higher ceilings would translate into lower up-front payments.

Not The Best Way To Borrow

There is one major disadvantage associated with prepaid variable forwards. If you borrow money directly from another party, often you can deduct the interest expense against your "investment income." But when you engage in a prepaid variable forward the interest expense reduces the initial price that the dealer pays you. As a result, when you engage in a prepaid variable forward you pay the dealer for essentially hidden interest expense, and you will not be able to deduct it as such. This discounting in price means the cost will be applied only to the capital gain when the stock is finally sold. You might eventually achieve a lower capital gains tax, but you would not be able to deduct your current interest expense. Thus the overall tax treatment of prepaid variable forwards is harsh.

If you want to borrow and if Federal Reserve limits are not problematic, we recommend that you employ an options-based collar, a swap, or a variable forward that is not prepaid. With these approaches, you can make your borrowing a separate transaction with clear interest expenses that you could possibly deduct.

Alert: The IRS has published a troublesome Technical Advice Memorandum (TAM), issued to an investor who hedged low-basis stock with a prepaid variable forward. [TAM-120696-05](#) takes issue with the terms of the contract, not the amount of upside and downside left after hedging. The TAM holds that contract terms, such as lending your stock to the counterparty, physical delivery, and other indicia, create a sale under common law. In a memorandum from the IRS Chief Counsel ([AM-2007-004](#)), the IRS makes it clear that the combination of a securities loan and the sale of a variable prepaid forward creates a taxable disposition.

Editor's Note: In early 2008, the IRS instructed its field agents to audit executives with variable prepaid forward contracts where there is also a separate share-lending agreement. For details, see

an [article](#) in the magazine Financial Week.

Putting It All Together

Summary: Before deciding on a risk-management strategy for concentrated stock, you need to answer two questions:

1. How bullish are you on the underlying stock?
2. Do you want to borrow against the stock?

Zero-cost collars are the most bullish strategy. Income-producing collars are the most conservative. Both approaches can be constructed using options-based collars, swaps, or variable forwards and are detailed in Part 1, Part 2, and this article. Just remember that if you acquired the stock after 1983, you should use a one-instrument contract.

If you want to monetize to generate liquidity for personal needs or investment diversification, see how the Federal Reserve rules could limit your ability to borrow. If the rules are not too strict for your situation, you should borrow against an options-based collar or a variable forward that is not prepaid -- in this way you may be able to deduct the interest expense.

To provide investors with an overview of hedging alternatives, Twenty-First Securities maintains an interactive "hedging low-basis stock decision tree" at www.twenty-first.com. For a more detailed overview of these topics, readers may wish to consult Chapter 5 of *Wall Street Secrets For Tax-Efficient Investing*, by Robert [Gordon](#) with Jan Rosen. The volume is available at most book retailers and on www.amazon.com.

Next Article

In our [next article series](#), we discuss hedges for employee stock options and for the stock you receive when you exercise those options.

Nothing in this article constitutes investment or tax advice or a solicitation to engage in a particular transaction.

Editor's Note: Options involve risk and are not suitable for all investors. Before engaging in an options transaction, you must review the options disclosure document [Characteristics And Risks Of Standardized Options](#).

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