



Portfolio Margining

Recent Developments and Innovations in Single Stock Concentration Risk Management

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Editors Note: This is the first article in a two-part series.

This is the first of two articles focusing on recent developments and innovations within the discipline of single stock concentration risk management. The articles will assess the inconsistent position the Internal Revenue Service (IRS) has taken with respect to prepaid variable forwards (PVFs) and suggest several alternatives to a PVF that deliver the same attractive features as a PVF—hedging, monetization, and tax deferral—but through structures that eliminate or lessen the tax risk and audit risk associated with PVFs. Several of these alternatives have been made possible by the ground-breaking application of the new “portfolio margining” rules, which will be introduced.

History and Background

Since the enactment of the constructive sale rules in 1997,¹ the PVF has emerged as the tool most commonly used by taxable investors to hedge, monetize, and defer the capital gains tax on highly appreciated publicly traded securities they own.

A PVF is simply an agreement to sell a security at a fixed time in the future, with the number of shares to be delivered at maturity varying with the underlying share price. A PVF combines the economics of a collar and a borrowing against the underlying stock within a single instrument. The optionality of the collar is achieved by requiring the investor to deliver a variable number of shares (or cash in

TABLE 1: COMPARISON OF COLLAR AND LOAN VIA PORTFOLIO MARGINING VERSUS PREPAID VARIABLE FORWARD

Factor Being Compared	Collar and Loan via Portfolio Margining	Prepaid Variable Forward
Tax risk	Lower	Higher
IRS audit risk	Lower	Higher
Tax result	Same or better than PVF	Same or worse than collar and loan
Monetization %	Higher	Lower
Reg T-Traditional 50% cap on borrowing if buy stocks	Not applicable	Not applicable
Counterparty risk	Same or less	Same or greater
Price transparency	Higher	Lower
Can loan be drawn down & paid back like revolver?	Yes	No
Are marks to market from 3 rd party possible?	Yes, OCC will mark to market based on its theoretical pricing	No
Is early unwind easier?	Yes, simply acquire offsetting positions	No, must negotiate with the dealer M

lieu thereof) to the dealer counterparty upon expiration of the PVF.²

The PVF is popular with investors because it is not subject to the margin rules under Regulation T (Reg T) of the Federal Reserve.³ More specifically, a PVF is treated as a “sale” and not a borrowing for regulatory purposes. As a result, there are no limitations on the use of the cash that is released to the investor. For instance, if an investor owns appreciated stock currently worth \$100 per share and enters into a three-year PVF containing an embedded put strike price of \$100 and an embedded call strike price of \$115, the dealer counterparty might release \$88 per share in cash to the investor. The investor can do anything he or she wishes with the cash, including investing it in publicly traded equity securities, which is what most

investors and their advisors wish to do in order to diversify their portfolios.

The same investor could hedge his or her stock position with listed or over-the-counter (OTC) options, buying puts with a strike price of \$100 and selling calls with a strike price of \$115, and then borrow against the hedged position to monetize the position. In this case Reg T governs the extension of credit. If the investor wishes to invest the loan proceeds in publicly traded equity securities, the most the investor could borrow against the hedged position is \$50, even though the put fully protects the investor should the stock price drop below \$100.⁴ This is referred to in the parlance of Wall Street as a “purpose” loan, the purpose being to invest in publicly traded equity securities. It is this 50-percent margin requirement under





Reg T that is the primary reason most investors and their advisors have favored the PVF over options-based collars combined with margin loans.

IRS Scrutiny Surrounds Prepaid Variable Forwards

The IRS has taken an inconsistent position with respect to PVFs over the years. In each of 2006, 2007, and 2008, the IRS issued memorandums concluding that appreciated stock hedged and monetized through a PVF triggered a taxable event immediately upon the investor entering into the PVF.

In each case the IRS based its analysis on the common law “benefits and burdens” test and concluded that the investors who entered into the PVF contracts were left with insufficient “incidents of ownership” in their shares and therefore triggered an immediate taxable event.

The IRS memorandums do not focus on just one particular concern but rather discuss a number of factors that collectively lead to their conclusion that a taxable event has occurred, including the following:

- The investor lent its shares to the dealer counterparty or, alternatively, made its shares available for the dealer to borrow.⁵
- The investor passed through to the dealer some or all of the dividends received on the stock, plus any dividend increases.
- The investor forfeited its voting rights.
- The investor was obligated to settle its obligations under the PVF by delivering shares of stock (the investor did not have the right to cash settle its obligations under the PVF).
- The amount of cash released to the investor was tied to the short-sale price the dealer was able to achieve when establishing its hedge and this was explicitly stated in the PVF contract.

One tax professional who practices extensively in this area, and also has a good sense of humor, refers to the

rulings and memorandums the IRS has issued on PVFs in recent years as “The Good, the Bad, and the Ugly.”

The good. In 2003 the IRS issued Revenue Ruling 2003-7, which held that the utilization of a PVF did not constitute a constructive sale under either Code Section 1259 or common law principles. Most tax practitioners thought the issue was settled.

The bad. However, shortly after the issuance of Rev. Rul. 2003-7, an IRS official commented that this ruling required a very specific set of facts and circumstances. At a January 24, 2003, American Bar Association committee meeting IRS special counsel Matthew Stevens, commenting on Rev. Rul. 2003-7, suggested that if the investor’s shares had not been pledged to a third-party custodian the transaction might have triggered a capital gain. The basis for Stevens’ observations remains unclear and most tax practitioners feel it is unlikely the absence of a third-party custodian alone could turn a PVF into a statutory or common law constructive sale. However, Stevens’ comments proved an omen of future IRS scrutiny of PVFs.

On October 20, 2005, the IRS released TAM 2006-04033 (the 2006 Memorandum). The 2006 Memorandum, after citing the numerous “connections” that existed between the investor and the dealer counterparty (see the bulleted list above), held that the investor triggered a taxable event when entering into the PVF. It appears the IRS rationale was that the contractual terms, when combined, caused the transaction to be a sale under common law principles because it appeared to be “one whole, continuous transaction.”

And the ugly. On January 24, 2007, the IRS issued GLAM AM-2007-004 (the 2007 Memorandum), which confirmed the IRS thinking in the 2006 Memorandum. However, the 2007 Memorandum went further and actually encouraged IRS agents to audit investors who used PVFs. Therefore, no

matter how carefully an investor and his or her advisors structure a PVF, an investor who executes a PVF is clearly subject to a heightened risk of audit by the IRS.

Then on February 6, 2008, the IRS issued LMSB-04-1207-077 (the 2008 Memorandum), which is even more unsettling. In the 2008 Memorandum the IRS upped the ante against PVF contracts by instructing IRS agents that a PVF might constitute a “tax shelter” that should have been previously registered with the IRS. The 2008 Memorandum also identified numerous penalties associated with tax shelters that might be applicable to investors who use PVF contracts.

In addition to the technical arguments the IRS has made against PVFs, many tax practitioners are simply uncomfortable with the legal form of a PVF. As mentioned previously, a PVF is an agreement to sell a security at a fixed time in the future, with the number of shares to be delivered at maturity varying with the underlying share price. A basic tenet of our tax system is that legal form generally governs over economic substance. Therefore, if a PVF is deemed a “sale” for purposes of Reg T, the question that is often asked is, “Why shouldn’t a PVF be treated as a sale for tax purposes as well?”

Search for an Alternative to the PVF

As a result of the inconsistency of the IRS position regarding PVFs and the recent repetitive and escalating attacks by the IRS on PVFs, as well as an increasing unease with the legal form of a PVF (e.g., sale), cautious investors, especially those with fiduciary responsibilities, have become reluctant to enter into even the most conservatively structured PVFs because of the perceived tax and audit risk.

Thus, the search began for an alternative strategy that delivers the same attractive features as a PVF—hedging, monetization, and tax deferral—but



through a structure that eliminates or lessens the tax risk and audit risk associated with PVFs.

A PVF can be “reverse engineered” or disaggregated into a collar and a loan. Let’s refer back to our previous example. An investor holding shares of a stock currently trading at \$100 per share might enter into a PVF with an embedded put strike price of \$100 and an embedded call strike price of \$115, with the dealer releasing \$88 per share in cash to the investor.

Alternatively, the investor could enter into a collar using options (listed or OTC) by buying puts with a strike price of \$100 and selling calls with a strike price of \$115. However, under Reg T, if the investor wishes to use the loan proceeds to invest in publicly traded equity securities, the maximum amount that he or she could borrow against the hedged position is \$50 per share—not a very attractive result.

Portfolio Margining Offers an Attractive Solution

However, in the United States the regulatory authorities (Federal Reserve, SEC, and exchanges) now are allowing two alternative regulatory frameworks to regulate the extension of credit by broker–dealers to their customers.

The traditional approach under Reg T, which has been mentioned and that most investors and their advisors are familiar with, uses a rules-based system. The second approach under Reg T uses a risk-based system called portfolio margining, with which most investors and their advisors are not familiar.

The portfolio margining rules are still relatively new, having begun their life in the United States pursuant to a pilot project involving one broker–dealer in 2005. Since then, the portfolio margining rules have become permanent and as of the date of this writing, about 15 broker–dealers have been approved to offer portfolio margining to their clients.

The portfolio margining rules allow a broker–dealer to offer port-

folio margining to its clients only if the broker–dealer can meet certain stringent requirements that its regulators impose with respect to internal controls and risk management systems and capabilities.

The scope and operation of the portfolio margining rules are well beyond

- the stock position is hedged
- a borrowing with a very high loan to value ratio, up to 95 percent of the value of the hedged position, is possible
- there are absolutely no limitations on the use of the loan proceeds because Reg T does not apply

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the scope of this article. However, the key point is this: The portfolio margining rules allow an investor who hedges a stock position with an options-based collar to borrow much more against the hedged position than would be possible under Reg T.

In addition, under the portfolio margining rules there are no limitations on the use of the loan proceeds. Therefore, the investor can use the proceeds to buy publicly traded stocks. That is, the 50-percent margin requirement of Reg T does not apply.

Going back to our example, how much could the investor theoretically borrow using portfolio margining? The answer is approximately 95 percent, versus about 88 percent for a PVF. And again there are absolutely no limitations on the use of proceeds (e.g., same treatment in this regard as a PVF).

New Hedging Structure Economically Equivalent to a PVF

Thus, an options-based collar constructed using either exchange-traded or OTC options and then combined with a loan against the hedged position extended under the portfolio margining rules is economically equivalent to a PVF in that:

Reduced Tax and IRS Audit Risk

This strategy should significantly reduce the tax risk currently associated with PVFs. First, the investor no longer is using a strategy that has the legal form of a “sale” as is the case with a PVF. Rather, the investor has entered into two separate and distinct transactions, a hedging transaction implemented with options and a subsequent borrowing against the hedged position.

Second, if exchange-traded options are used, all the concerns the IRS has expressed with respect to PVFs simply do not exist. Specifically:

- If exchange-traded options are used, the Options Clearing Corporation (OCC) technically becomes the investor’s counterparty and the investor cannot make any special arrangement to lend its shares or make its shares available for the OCC to borrow.
- Under the rules of the exchanges, an investor who collars a stock position with options gets to keep all the dividends received on the stock and any normal increases to the dividend.
- Because the investor cannot lend its shares to the counterparty (the OCC), the investor retains full voting rights.⁶



“ The use of the collar and loan strategy could actually result in greater tax-efficiency than a PVF, depending on the characteristics of the shares of stock being hedged. ”

- Because exchange-traded options, including those comprising a collar, can be closed out at any time prior to their expiration, the investor is not required to deliver its shares to satisfy its obligations under the collar.
- The amount of cash the investor receives pursuant to the loan depends solely on the portfolio margining rules. There is no relationship between the amount of the loan and whatever price the market-makers taking the other side of the collar get in hedging their positions.
- The hedging and monetization of a concentrated stock position under portfolio margining is available to all U.S. investors and involves no special agreements between the investor and broker unlike a PVE.

Moreover, although in the 2007 and 2008 Memorandums the IRS has encouraged its field agents to audit investors who have used PVFs, the agency did not mention any other equity monetization strategies. Therefore, the use of an options-based collar combined with a loan extended under the portfolio margining rules, instead of a PVE, should significantly reduce the risk of the transaction being audited by the IRS.

Superior tax results are possible. The use of the collar and loan strategy could actually result in greater tax-efficiency than a PVF, depending on the characteristics of the shares of stock being hedged.

If the straddle rules do not apply. The tax “straddle rules” do not apply to all hedging transactions. If the shares being hedged were acquired before

March 1, 1984, the straddle rules should not apply.⁷

Therefore, the interest expense incurred on the borrowing should be investment interest expense that is currently deductible without limitation against investment income. In contrast, the cost of carry of a PVF is, by the very nature of that financial instrument, deferred and capitalized. That is, the collar and loan strategy will generate interest expense that should be currently deductible with a 35-percent benefit, while a PVF effectively generates a capital loss (or a lesser amount realized) that might be deductible in the future with a 15-percent benefit.

In addition, if the collar and loan strategy is used, and the investor closes out the calls at a loss (because the stock price is above the call strike) a currently deductible short-term capital loss with a 35-percent benefit should be generated. In contrast, if a PVF is used, a currently deductible long-term capital loss should be generated.

Therefore, if the shares being hedged are not subject to the straddle rules, the collar and loan strategy should actually deliver tax result that is superior to a PVE.

If the straddle rules do apply. If the shares being hedged were acquired by the investor on or after March 1, 1984, the straddle rules will apply. In that case, the use of the collar and loan strategy using exchange-traded options could result in the investor getting whipsawed under the straddle rules. That is, the proceeds from selling the calls could be taxed as short-term capital gain while the premium paid to

acquire the put could be treated as a deferred, long-term capital loss.⁸

However, the investor could use an over-the-counter (OTC) options-based collar that is documented as a single contract. If such a single-contract collar is used, the premiums should “net” for tax purposes and the investor should not be whipsawed by the straddle rules. If this is done, the collar and loan strategy should achieve virtually identical tax treatment to a PVE.

It should be noted that the portfolio margining rules do allow for the use of both exchange-traded and OTC options.

Other Possible Benefits


Other possible benefits of the collar and loan strategy using exchange-traded options include the following:

- If exchange-traded options are used there is less counterparty risk because the OCC is the counterparty, is backed by each member of the OCC, and is rated AAA by the credit-rating agencies.
- The loan is like a revolving line of credit that can be drawn down as investment opportunities or the need for liquidity arises.
- There is inherent price discovery and transparency not present in the OTC market.
- There is possibility of unwinding the position early without having to negotiate a costly exit.
- There is daily mark to market by the OCC.

Conclusion

The collar and margin loan strategy is economically equivalent to PVFs. This strategy can put more cash in the investor’s pocket and, as with the PVE, does not limit the use of the proceeds in any way. This strategy should have significantly less tax risk and IRS audit risk than that associated with PVFs. In addition, several potentially significant nontax advantages are associated with the collar and loan strategy versus a



PVF, including a reduction in credit risk, inherent price discovery and transparency, and the ability to unwind the hedge at any time. This and other trends and innovations in stock concentration risk management are covered in IMCA's Certified Private Wealth AdvisorSM (CPWA[®]) program. 

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Endnotes

- ¹ The constructive sale rules were promulgated pursuant to the Taxpayer Relief Act of 1997. See Code Section 1259: Constructive Sale Treatment for Appreciated Financial Positions. These rules were designed to eliminate the use of the "short against the box" strategy. However, it remains possible to hedge, monetize, and defer the capital gains tax on an appreciated stock position by using a collar combined with some form of loan. The consensus view among tax professionals is that the band between the put and call strike prices should be no narrower than 15 percent. For example, if a stock is trading at \$100, a collar comprised of a long put with a strike price of \$100 and a short call with a strike price of \$115 should not trigger a constructive sale.
- ² For example, an investor holding ABC Corp. shares currently trading at \$100 might enter into a PVF requiring the dealer to pay the

investor \$88 up-front in exchange for the right to receive a variable number of shares from the investor in three years pursuant to a preset formula that embodies the economics of a collar (e.g., a long put with a \$95 strike and a short call with a \$110 strike).

The formula building the optionality of a collar requires the investor to deliver all its ABC Corp. shares if the price of ABC in three years is less than \$95. If the price of ABC is greater than \$95 but less than \$110, the investor must deliver \$95 worth of shares. If the price of ABC is above \$110, the investor must deliver \$95 worth of shares plus the value of the shares above \$110.

Alternatively, a PVF can be cash-settled. If the price of ABC is less than \$95 three years from now, the investor will pay the dealer the then-current value of ABC in cash. If the price of ABC is between \$95 and \$110, the investor would pay the dealer \$95 in cash. If the price of ABC was above \$110, the investor would pay the dealer \$95 plus the difference between the then-current price of ABC and \$110.

- ³ The Securities Exchange Act of 1934 granted the power to regulate credit in the purchase of securities to the Federal Reserve Board. The Securities Exchange Commission is charged with the responsibility of enforcing the rules that the Federal Reserve Board establishes. Regulation T, commonly referred to as "Reg T," governs the extension of credit by broker-dealers. Regulation U governs the extension of credit by lenders other than broker-dealers.
- ⁴ This is the case even if the put is American-style, meaning that the holder of the put can exercise the put on any day the options market is open.
- ⁵ The dealer executing a PVF typically will establish a short position in the stock in order to hedge the synthetic long exposure it acquires through the PVF. By the investor making its shares available for the dealer to borrow, this potentially reduces both the dealer's cost and risk in managing the PVF position.
- ⁶ This would be the case if the clearing broker does not lend out the investor's shares under the terms of the margin agreement.
- ⁷ Whether or not the "straddle rules" of Internal Revenue Code Section 1092 apply

is critical in the selection of the most appropriate hedging tool. The straddle rules do not apply to every stock position that is hedged by a derivative. More specifically, the straddle rules apply if the shares being hedged were acquired on or after March 1, 1984. However, if the shares being hedged were acquired before March 1, 1984, the straddle rules should not apply. This leads to various tax planning opportunities.

A tax straddle exists when holding one position substantially reduces the risk of holding another. Because a hedge such as a put, collar, or PVF substantially reduces the risk of owning the stock, the stock and hedge together should be treated as a straddle for tax purposes. Investors face two negative ramifications from their stock and hedge being deemed a straddle. First, investors can get whipsawed, meaning any loss realized from closing one leg of a straddle (e.g., the hedge) must be deferred to the extent there is any unrealized gain on the open leg (e.g., the appreciated stock). Therefore, as a put, collar, or prepaid variable forward expires or is closed out, any losses on the hedge must be deferred as long-term capital losses while any gain with respect to the hedge must be currently recognized as short-term capital gains. Second, interest expense incurred on a borrowing against the hedged position must be capitalized.

- ⁸ When exchange-traded (listed) options are used to establish a collar, there are necessarily two contracts involved, one for the put and one for the call, and a premium is associated with each. Single-contract, exchange-traded collars are not yet offered on the exchanges.



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