Reducing Risk With An ETF Options Overlay

By Kim Arthur

Recent market volatility has many advisers scrambling for a way to reduce downside risk in their clients' portfolios. Even the most diversified and theoretically insulated portfolios have suffered shocking losses in the past few years. Traditional safe-haven assets like gold and Treasurys now show substantial risks and volatility, and cannot be counted on completely to buffer a portfolio from whatever crisis hides around the next corner.

Historically, investors have turned to income-producing investments—like high-yielding equities—to help mitigate risk. The reasoning is simple, and twofold: During bear markets, the dividend acts as a downside buffer (e.g., during the 1930s, dividends contributed 106 percent of the market's total return), and during bull markets, they offer additional returns (during the 1990s, dividends contributed 14 percent of the total return).

Put another way, dividends help because they offer relatively steady income streams that do not fluctuate with the same volatility as market returns.

But not every security pays regular dividends, and those dividends can be difficult to predict and manipulate as part of a comprehensive portfolio strategy. Luckily, there is another way to create a stream of income from your existing investments: option overlay strategies.

You can use options to provide income in two ways: "covered call" strategies and "put-write" strategies. A covered call option strategy involves buying or holding a long position in a single stock (or ETF) while selling an option in the same security. When you sell (or "write") an option, you are obligated to sell shares of the security at a specified time in the future for a specified price. The buyer pays you a premium for the right to buy the security at that price. Call options can be written out of the money, at the money or in the money; the deeper in-the-money the option is, the more expensive it will be and the more income that can be generated from writing those calls.

The advantage of a covered call strategy is that it buffers downside volatility, although it also forfeits some upside participation in the market. The return profile shown in Figure 1 illustrates this clearly: In a declining market, the income generated from selling the call provides some protection from downside risk. In a rising market, participation is capped, but again, the income from writing the call provides a boost to returns.

The Chicago Board Options Exchange (CBOE) BuyWrite Index is a benchmark index designed to track the performance of monthly covered call options on the S&P 500. CBOE writes its options at the money, which caps the gains from rising markets much sooner than out-of-money options. That makes the strategy under- 6▶

Figure 1

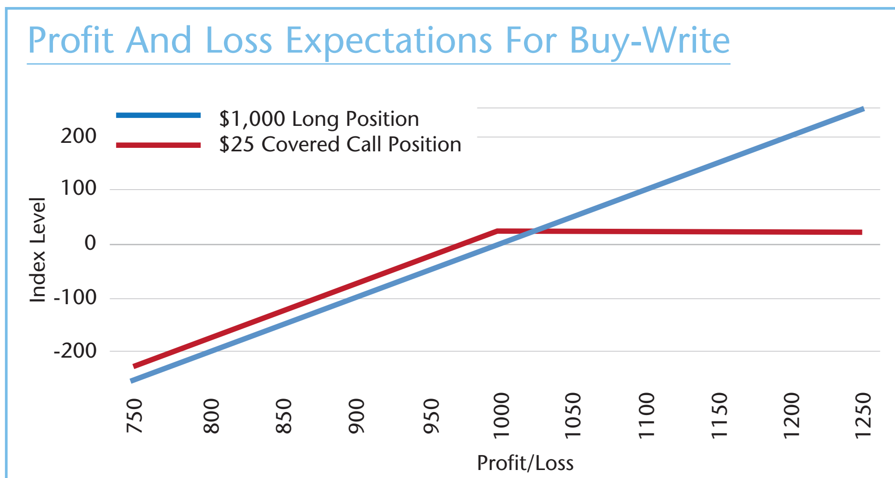
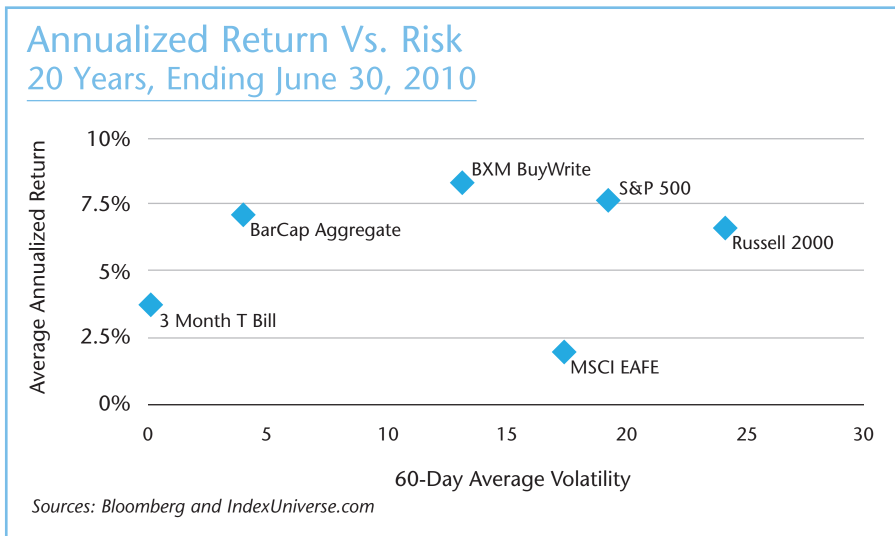


Figure 2



Sources: Bloomberg and IndexUniverse.com

perform in strong equity markets, but consistently outperform in flat or falling markets. In fact, the BMX index has generated superior risk-adjusted returns compared to the S&P 500 over the past 20 years. Figure 2 shows the annualized return and standard deviations for all major asset classes over the 20 years ending June 2010, and clearly shows how the CBOE BXM generated returns comparable and even superior to the S&P 500 at lower risk, and has indeed been the best-performing asset class over this turbulent period.

A close corollary of this covered-call or "buy-write" strategy is the "put-write" strategy. Puts are normally purchased by investors as insurance for a portfolio or for a single stock position. The put seller is the one selling that insurance.

The pattern of returns for the put seller is effectively identical to that of the covered-call writer; however, how you get that pattern of returns is slightly different. In a rising market, the seller of the put's return is limited to the amount of premium income. In a down market, the seller of the put has the full downside risk of the underlying security, but outperforms due to the amount of the premium income. This is a similar pattern of returns to that from a stock with a high dividend component. As Figure 3 shows, when the stock market rises quickly, a cash-secured put index underperforms, but during periods of falling prices, the premium income buffers the market losses.[1] Similar to buy-write strategies, put-writes have historically generated similar returns to the S&P 500 with less risk.[1]

In fact, cash-secured put writing has an even better risk-managed profile than buy-write strategies, since the premiums from selling puts are generally higher than equivalent calls. Why? Because most people are more aggressive buyers of put protection and subsequently bid up the put prices vs. call prices.

Figure 3

Monthly Return Profile
June 30, 1986 to October 31, 2008

	% of Months	PUT Index Return	Monthly Standard Deviation	S&P 500 Index Return	Correlation
State 1: Large Positive Return	48.7	2.11%	0.86%	4.14%	0.49
State 2: Flat Market	29.2	1.67%	0.85%	-0.08%	0.52
State 3: Large Negative Return	22.1	-2.93%	4.51%	-5.38%	0.98

Sources: Bloomberg and CBOE

Using Options Strategies In Your Portfolio

None of the above suggests that investors or advisers should simply invest directly in the CBOE BuyWrite or PutWrite indexes. While such an investment might be appropriate for some situations, there are more sophisticated ways to use these principles for investment clients, on a case-by-case basis.

These strategies, while unfamiliar to many, are nothing new. Investors and advisers have used "option-overlay" strategies for years. Historically, these strategies were done on single stocks. The potential problem was that you would sell a call for 50 cents on a $25 piece of paper (2 percent premium) and the next week, the company would pre-announce a disappointing quarterly earnings number and the stock would fall 20 percent, or $5. The 50-cent premium gathered by writing the call put you ahead of the straight equity holders, but that was cold comfort for the $5 loss.

The advent of ETFs provides investors with a less volatile broad market to sell covered calls against. As described above, a systematic covered call strategy on the S&P 500 reduces your volatility by a third and increases your return. Given that options exist on the majority of the most liquid ETFs, this same strategy can be applied across a complete asset allocation portfolio of ETFs. By pairing up core ETF positions with related options, investors can control portfolio downside while still capturing significant return.

To further enhance risk-adjusted returns, investors can dial in their time horizons (one week, one month, quarter-end) and strike prices (in the money, at the money or out of the money) to fit their exact needs. These strategies are all a mix of art and science.

The advantages of option strategies include the following:

1. Risk management
2. Multiple income streams: dividends from underlying stock on ETFs and option premiums
3. Outperformance in range-bound markets
4. Premiums act as a downside buffer

The disadvantages of option strategies include:

1. Option premiums are taxed as current income
2. Directional upturn covered-call writing will lag
3. Directional downturn put writing will lag
4. A lot of moving parts: duration, strike price, strategic asset allocation, tactical sector changes, dividend capture.

As with any strategy, "option overlays" are best implemented as part of a total return strategy. They can augment existing risk management, increase cash flow for income strategies (dividend and premium income) and provide a "premium cash payment" for limit orders when used in a cash-secured put writing strategy.

In uncertain times, that could be an advantage. ✦

Kim Arthur is the president and CEO of Main Management LLC. Main Management is a registered investment adviser and money manager based in San Francisco with $420 million in assets under management. The firm focuses on ETF & ETF options investing.

Endnotes

[1] Ennis, Knupp