

Who Should Use Equity Collars?

- **An investor who is looking to limit the downside risk of an equity at little or no cost.**
- **An investor who is willing to forego upside potential in return for obtaining this downside protection.**

Equity collars are used by investors whose primary concern is the downside risk of a stock position. They are willing to place a cap on upside potential in order to limit their down side risk at little, and sometimes no cost. Collars may be of special interest to those investors who have one equity position that accounts for a large proportion of their net worth, and who may not be able to reduce the size of this position. For these investors, low cost protection may take a precedence over maintaining upside potential.

Definition

An equity collar consists of the simultaneous purchase of a put option, and the writing of a call option. Both options are out-of-the-money, and usually have the same expiration date. Most often a collar is established against an existing equity position, with one put purchased and one call written for every 100 shares held. It is also possible to establish a collar at the same time that an equity position is purchased.

How to Use an Equity Collar

Collars are used mostly by investors who have accumulated a large position in a given stock (through an employee stock purchase plan, for example) and who are primarily concerned about the downside risk of their holdings. These investors may be reluctant to sell their stock for a variety of

reasons: the tax liability could be substantial, or selling your employer's stock may be sending the wrong kind of signal to management or other shareholders. These investors are also willing to give up some of the stock's upside potential in order to obtain the desired downside protection at little or no cost.

As an example, consider an investor who has accumulated 1,000 shares of XYX stock, now trading at \$44.75. This investor may be familiar with the purchase of protective puts but may also be reluctant to spend the amount necessary to buy put options. This could be especially true if the desired protection is for a relatively long period of time. If a 10-month 40 put option on XYX could be purchased for \$4.75, for example, the investor might be unwilling to pay such a high premium.

In order to lower the net cost of the protection, the investor could purchase 10 of the 10-month 40 puts, and, at the same time, sell 10 of the 10-month 55 calls for \$4.50. The cost of the put options is offset, for the most part, by the premium received from writing the call options. If the collar could be established for no net premium, then it would be what is commonly known as a *zero-cost collar*. Commissions are not taken into consideration in the analysis that follows, however, commissions can have a significant effect on expected returns.

Purchasing the 10-month 40-55 Collar for a Net Premium of \$0.25 per Share

I. XYX is below \$40 at expiration

If XYX is trading below \$40 at expiration, the investor will have the right to exercise the put options and sell the shares at the strike price of \$40. This represents the worst case scenario, and the investor will have to absorb a loss of \$4.75 per share (the difference between the stock price of \$44.75 when the position initiated and the selling price of \$40) and a loss of \$0.25 per share which represents the cost of the collar. The total downside risk, therefore, is \$5.00 per share.

Note: If, prior to expiration, the investor decides to keep the shares, the put could be sold. The proceeds from the sale of the put would partially offset the accrued loss on the stock.

II. XYX is above \$55 at expiration

If XYX is trading above \$55 at expiration, it is likely that the written 55 calls will be assigned. Consequently, the investor will be forced to sell the XYX shares at the strike price of \$55. Remember that when call options are written against a long stock position, an obligation to deliver those shares at the options' strike price is being assumed. If the buyer of these calls decides to exercise, then the writer must deliver the shares.

In establishing a collar, the obligation to deliver shares was assumed so that the call premium could be used to partially offset the cost of the put option. The stock being called away at \$55, in this example, represents the investor's best case scenario. A \$10.25 gain (the exercise price of \$55 minus the original price of the stock, \$44.75) will be realized less the \$0.25 cost of the collar. The upside, therefore, is limited to \$10 per share.

III. XYX is trading between \$40 and \$55 at expiration

If the price of XYX is anywhere between \$40 and \$55 at expiration, both the put and call options will be out-of-the-money and will expire worthless. The investor will keep the XYX shares, and the only cost will have been that of establishing the collar, \$0.25 per share in this example. During this period, the investor will have retained ownership of the shares, with the ability to vote and to receive dividends, if either applied.



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