

## MONTREAL EXCHANGE

# Protective Put (Married Put)

### Description

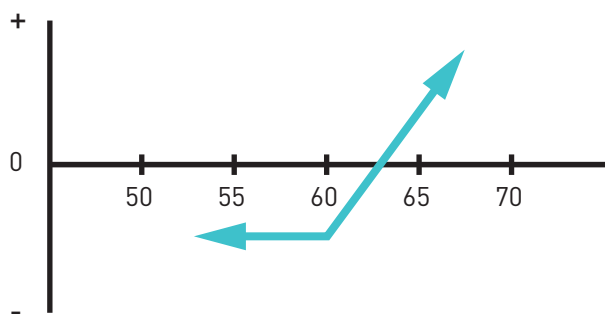
A long put option added to long stock insures the stock's value. The choice of strike prices determines where the downside protection 'kicks in'. If the stock stays strong, the investor still gets the benefit of upside gains. (In fact, if the short-term forecast brightens before the put expires, it could be sold back to recoup some of its cost.) However, if the stock falls below the strike, as originally feared, the investor has the benefit of several choices.

One option is to exercise the put, which triggers the sale of the stock. The strike price sets the minimum exit price. If the long-term outlook has turned bearish, this could be the most prudent move.

If the worst seems to be over, an alternative for still-bullish investors is to keep the stock and sell the put. The sale should recoup some of the original premium paid, and may even result in a profit. If so, it in effect lowers the stock's cost basis.

#### Protective Put

Net Position



#### Example

Long 100 shares XYZ stock  
Long 1 XYZ 60 put

#### MAXIMUM GAIN

Unlimited

#### MAXIMUM LOSS

Stock purchase price - [strike price - premium paid]

If the investor remains nervous, the put could be held into expiration to extend the protection for as long as possible. Then it either expires worthless or, if it is sufficiently in-the-money, is exercised and the stock would be sold.

The put can provide excellent protection against a downturn during the term of the option. The major drawback of the strategy is its cost, which raises the bar on netting upside profits. Investors who aren't very bullish might have better strategy alternatives.

## Outlook

This investor is bullish overall, but worries about a sharp temporary decline in the underlying stock's price.

If the investor is worried about the longer-term prospects also, other strategy choices might be a covered call or liquidating the stock and selecting another.

## Summary

This strategy consists of adding a long put position to a long stock position. The protective put establishes a 'floor' price under which investor's stock value cannot fall.

If the stock keeps rising, the investor benefits from the upside gains. Yet no matter how low the stock might fall, the investor can exercise the put to liquidate the stock at the strike price.

## Motivation

This strategy is a hedge against a temporary dip in the stock's value. The protective put buyer retains the upside potential of the stock, while limiting the downside risk.

Some examples of when investors consider protective puts:

- Before an imminent news announcement that could send a favorite stock into a slump.
- When it's vital to insure the value of a specific stock for a certain period; for instance, to cover a house down payment or tuition outlays five months from now.
- When one stock represents a large percentage of the investor's portfolio.
- When an investor is restricted from selling a particular stock for some time period.
- When a stockowner wants to protect substantial unrealized gains.

## Variations

The married put and protective put strategies are identical, except for the time when the stock is acquired. The protective put involves buying a put to hedge a stock already in the portfolio. If the put is bought at the same time as the stock, the strategy is called a married put. Synthetic call is simply a generic term for this combination.

## Max Loss

The maximum loss is limited. The worst that can happen is for the stock to drop below the strike price. It does not matter how far below; the put caps the loss at that point. The strike becomes the 'floor' exit price at which the investor can liquidate the stock, regardless of how low the market price might fall.

The amount of the total loss depends on the cost at which the stock was acquired. If the purchase price of the stock was the same as the strike price of the option, then the loss is limited to the premium paid for the put option. If the stock's purchase price was higher (lower), then the loss would be greater (smaller) by exactly that amount.

## Max Gain

In theory, the potential gains on this strategy are unlimited. The best that can happen is for the stock price to rise to infinity.

If the stock rises sharply, it does not matter that the put expires worthless. A protective put is analogous to homeowner's insurance. The asset is the primary concern, and to file a claim means there has been a loss in the asset's value. A homeowner would prefer that the insured home remain intact, even though it means the insurance premiums are forfeited. Likewise, a protected put holder would rather see the stock do well than have to resort to the put's protection.

## Profit/Loss

This strategy retains the stock's unlimited upside while capping potential losses for the life of the put option.

The profitability of the strategy should be viewed from the standpoint of a stockowner; rather than in terms of whether the put option turns a profit. The put is like insurance; it gives peace of mind, but it's preferable not to have to use it at all.

Consider a protective put versus a plain long stock position. The protective put buyer pays a premium, which lowers the net profit on the upside, compared to the unhedged stockowner. Returns will lag by the amount of the premium, no matter how high the stock might climb. But in return for the cost of the hedge, the put owner can precisely limit the downside exposure, whereas the regular stockowner risks the entire cost of the stock.

If the investor is reluctant to pay the cost of a put hedge yet can no longer accept the possibility of large losses on the stock, a different strategy might be called for.

## Breakeven

There is no single formula to determine the strategy's breakeven point. Whether this strategy results in a profit or loss is largely determined by the purchase price of the stock, which may have occurred well in the past at a much lower price.

Assume the stock was acquired at or just below its current price. If the unrealized stock gain is less than the amount of the premium, the strategy would break even at expiration at the original stock purchase price plus the put premium.

**Breakeven = starting stock price + premium**

## Volatility

An increase in implied volatility would have a neutral to slightly positive impact on this strategy, all other things being equal. On one hand, the investor might perceive a greater value to having the put protection, since the market seems to think a big move has become likely.

But even if the investor disagrees with the market and has become less worried about the downside, an increase in implied volatility could help. If the optimistic put holder decides to terminate the hedge to recoup some of its cost, greater implied volatility would tend to boost the put option's resale value.

## Time Decay

The passage of time will have a negative impact on this strategy, all other things being equal. The protection of the hedge ends at expiration. As for the put's resale value in the market, the option tends to move toward its intrinsic value as the term draws to an end. For at-the-money and out-of-the-money puts, intrinsic value is zero.

## Assignment Risk

None.

## Expiration Risk

None, providing that the investor knows the pre-established minimum value for automatic exercise. If the protective put holder carries the open position into expiration, it indicates a desire to exercise the option if it's sufficiently in-the-money. Investors with no intention of exiting their stock position may need to sell to close their put prior to expiration if it is in-the-money.

## Comments

A note to investors who are considering protective puts because they cannot liquidate the stock right away but are nervous about its prospects: it's important to make sure that a put hedge is the right solution from all standpoints, including law and taxes. For example, if employment-related stock sale restrictions apply, a protective put might be considered just as unacceptable as selling the stock outright. Also, depending on a number of factors, the CRA might treat a particular protective put as equivalent to liquidating the stock, triggering unwanted tax consequences. Just another reminder to get all the facts first.

# Related Position

Comparable Position: **Cash-Backed Call**

Opposite Position: **Covered Put**