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Options Collars – Associated Risks and Benefits

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Education

OCC

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Understanding Option Collars

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Presentation Outline

- Protective puts
- Covered calls
- Traditional collars
- Collar variations



Protective Puts

IN WITNESS WHEREOF, I, _____, the testator/testatrix, sign and execute this Will, consisting of _____ pages this _____ day of _____, 20____, and I hereby declare to the undersigned authority that I sign and execute this Will and voluntarily sign it willingly (or willingly direct another to sign for me), that I am of legal age and sound mind, and that I am acting for the purposes expressed in it, and that I am 18 years of age or older and under no constraint or undue influence.

Testator/Testatrix _____

Rights of Put Buyers

- Options buyers (holders) have rights, not obligations
- Put buyers have the right to sell shares at their strike price
- For this right, they pay a premium to the seller
- When exercising this right, put buyers receive strike x \$100 and deliver 100 shares of stock



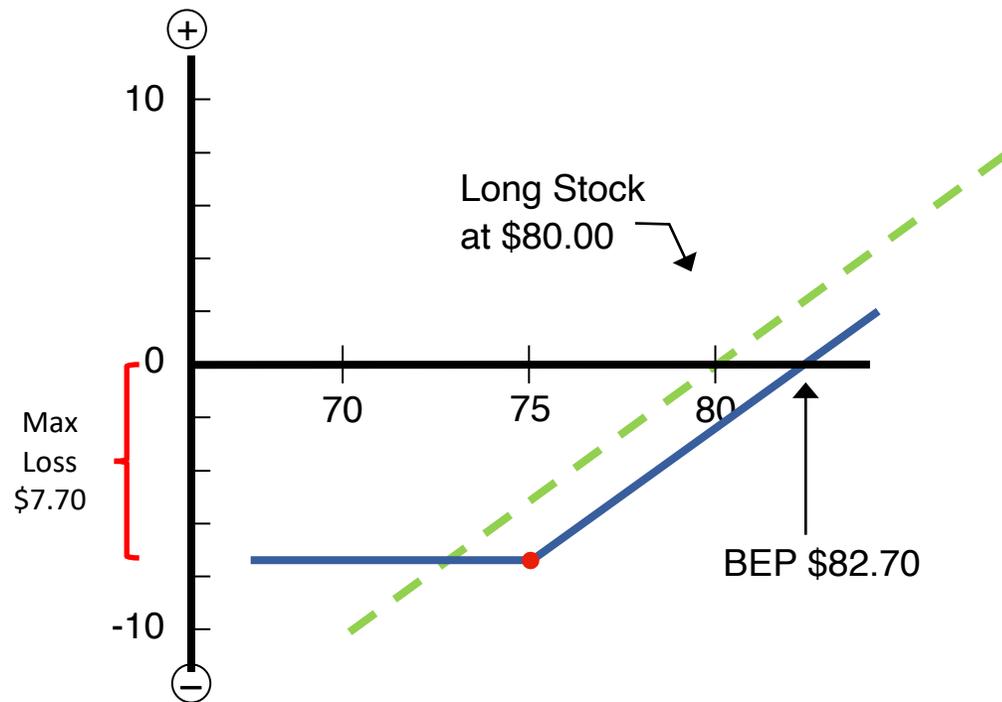
Why a Protective Put?

- Investor is bullish on a stock already owned but looking for protection against a downside move
- Establish a floor price at which investor can sell shares, if needed
- Can act like an “insurance policy” on a stock that represents a large % of portfolio



Protective Put Example

Long Stock at \$80
Buy 75.00 strike put at \$2.70



Break-even at Expiration:
Initial Share Price + Put Premium
 $\$80.00 + \$2.70 = \$82.70$

Maximum Loss:
Initial Share Price + Put Premium –
Strike Price
 $\$80.00 - \$75.00 + \$2.70 = \7.70

Covered Calls



Covered Calls

- Covered call:
 - Investor writes (sells) one or more equity call contracts for each 100 shares owned
 - Accepts obligation to deliver shares in exchange for the option premium
- Primary goal – increase returns
 - Call premium received and kept (assigned or not)
 - Generate additional income (over any dividends)
- Investor's forecast
 - Neutral to moderately bullish on the underlying stock
 - Within a small price range over strategy's lifetime

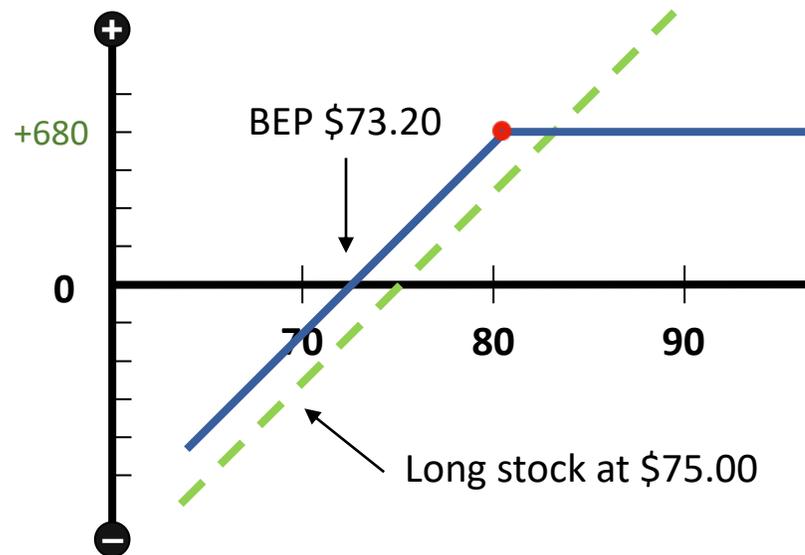
Covered Call Writer's Obligations?

- Like any call writer (short call position)
 - Has the obligation to sell underlying shares
 - At strike price
 - If assigned
- Assignment (your potential obligation)
 - Possible at any time before expiration (e.g. dividends)
 - Equity options are American-style
- In return for this obligation
 - Call writer receives and keeps option premium



Covered Call Example

Own 100 shares XYZ at \$75.00
Sell 1 XYZ 80 call at \$1.80



Break-even at Expiration:

Stock Price Paid –
Call Premium Received
 $\$75.00 - \$1.80 = \$73.20$

Maximum Profit if Assigned:

Effective Stock Sale Price –

- Stock Price Paid

$$(\$80.00 + \$1.80) - \$75.00 = \$6.80$$

- \$680.00 Total

Collars



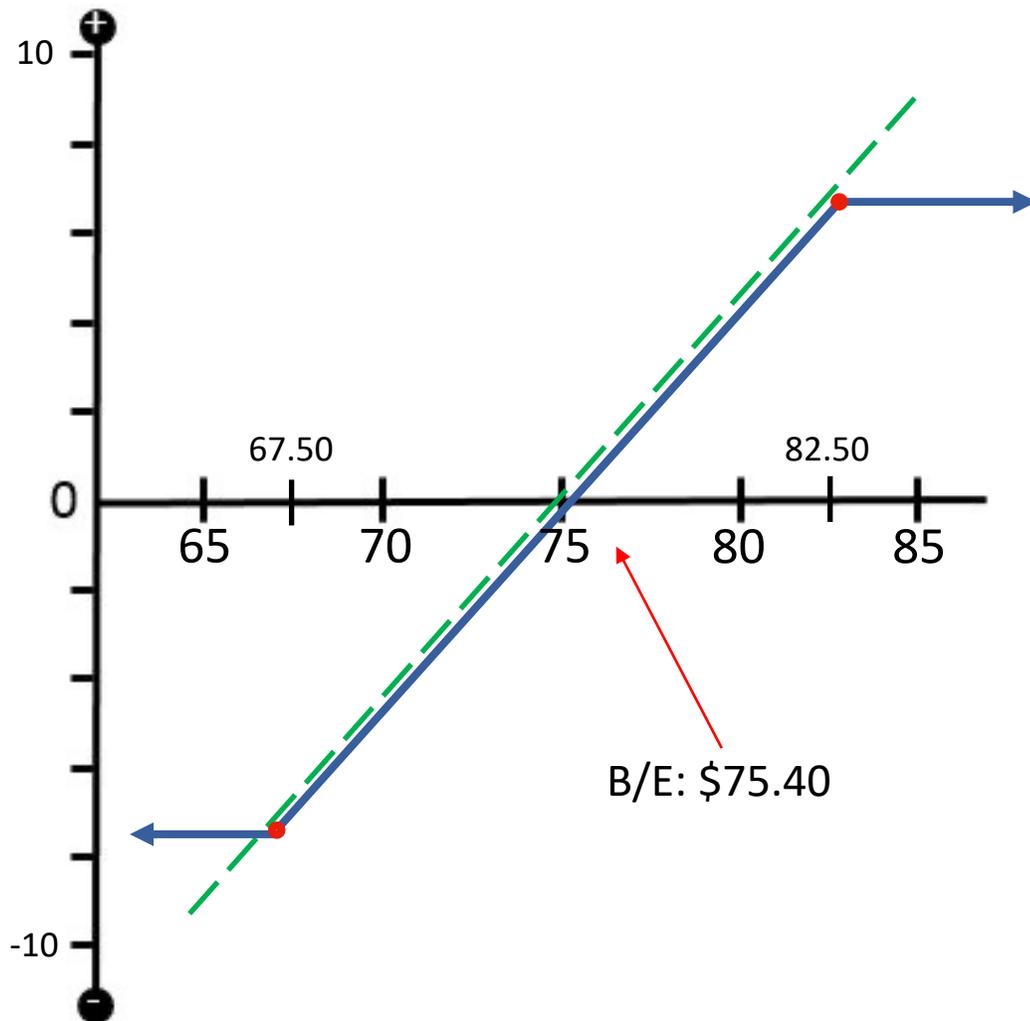
Traditional Options Collar

A Collar can be considered as two strategies in one:

On the upside it's a ***Covered Call*** and on the downside it's a ***Protective Put***:

- Risk reducing strategy with possible objective of scaling down a concentrated position while a downside hedge is in place
- Call premium received is used to offset cost of Protective Put
- Typically, an OTM call is sold and OTM put is purchased
- Call strike selected determines where stock may be called away
- Put strike selected determines downside exit price

Traditional Collar Example



Long 100 shares of stock at \$75.00

- **Buy 67.50 put for \$1.30**
- **Sell 82.50 call at \$0.90**

Net DEBIT: \$.40

Max Profit: \$82.5 (short call strike) – \$75 (share price) – \$0.40 (debit) = \$7.10

Max Loss: \$75 (share price) – \$67.50 (long put strike) + \$0.40 (debit) = \$7.90

Breakeven: \$75 (share price) + \$0.40 (debit) = \$75.40

Managing the Position

What if the stock price plummets?

- Close position and free up capital?
- Hold shares and sell back long put?

What if the stock price remains flat?

- Still cautious?
- Roll out?

What if shares rally?

- Is protection still needed?
- Roll up and out?



Collar Variations

IN WITNESS WHEREOF, I, _____, the testator/testatrix, sign and execute this Will, consisting of _____ pages this _____ day of _____, 20____, and I hereby declare to the undersigned authority that I sign and execute this Will and voluntarily sign it willingly (or willingly direct another to sign for me), that I am of legal age and sound mind, and that I am acting for the purposes expressed in it, and that I am 18 years of age or older and under no constraint or undue influence.

Testator/Testatrix _____



Cost of trade
Risk of assignment
Theta
Management

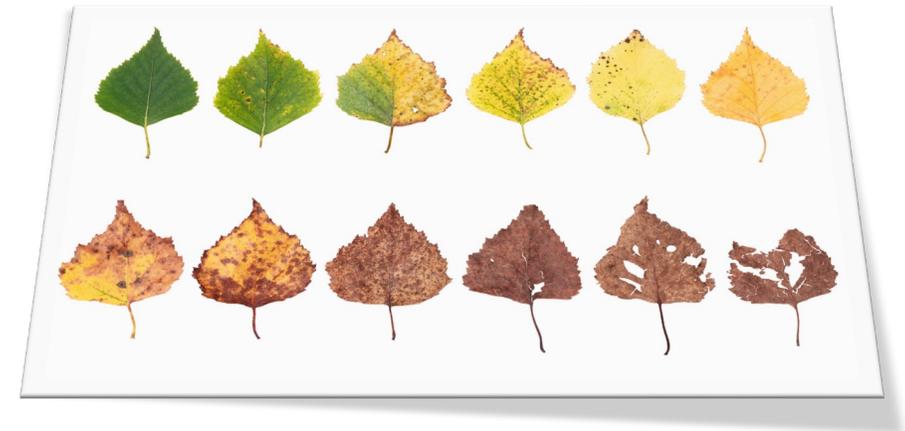
Staggered Collar

What would happen if we bought longer-term protection and sold shorter-dated calls?

Staggered Collar and Theta (Time Decay)

Advantages (A) and Disadvantages (D) of selling shorter dated calls:

- (A) Faster time decay: Theta accelerates roughly 30-40 days out
- (A) If calls are unassigned, investor might be able to continue selling short dated calls
- (D) Longer dated put = more premium
Shorter dated call = less premium
- (D) Due to initial debit incurred, a large move in either direction would favor the traditional collar



Staggered Collar Risks

- **What if the stock moves sharply lower?**
 - Exercise long put early or sell back to market?
 - Hold put and keep selling lower strike calls? (lowers potential assignment price)
- **What if the stock moves sharply higher?**
 - Assignment will result in lower profit due to higher initial debit incurred
 - Roll up and out?

Put Spread Collar

Standard options collar provides protection (long put) down to zero

What is the likelihood of the stock plummeting to zero vs. a minor downturn—but NOT to zero?

Might be possible to save money (or increase credit) by selling a further OTM put also!

Possible position: long stock, short OTM call, long OTM put (traditional collar) **& short a further OTM put**

Put Spread Collar Example

Setup: Long 100 shares from \$105 with stock currently trading \$120

Sells 1 45-day 125 call at \$3.00

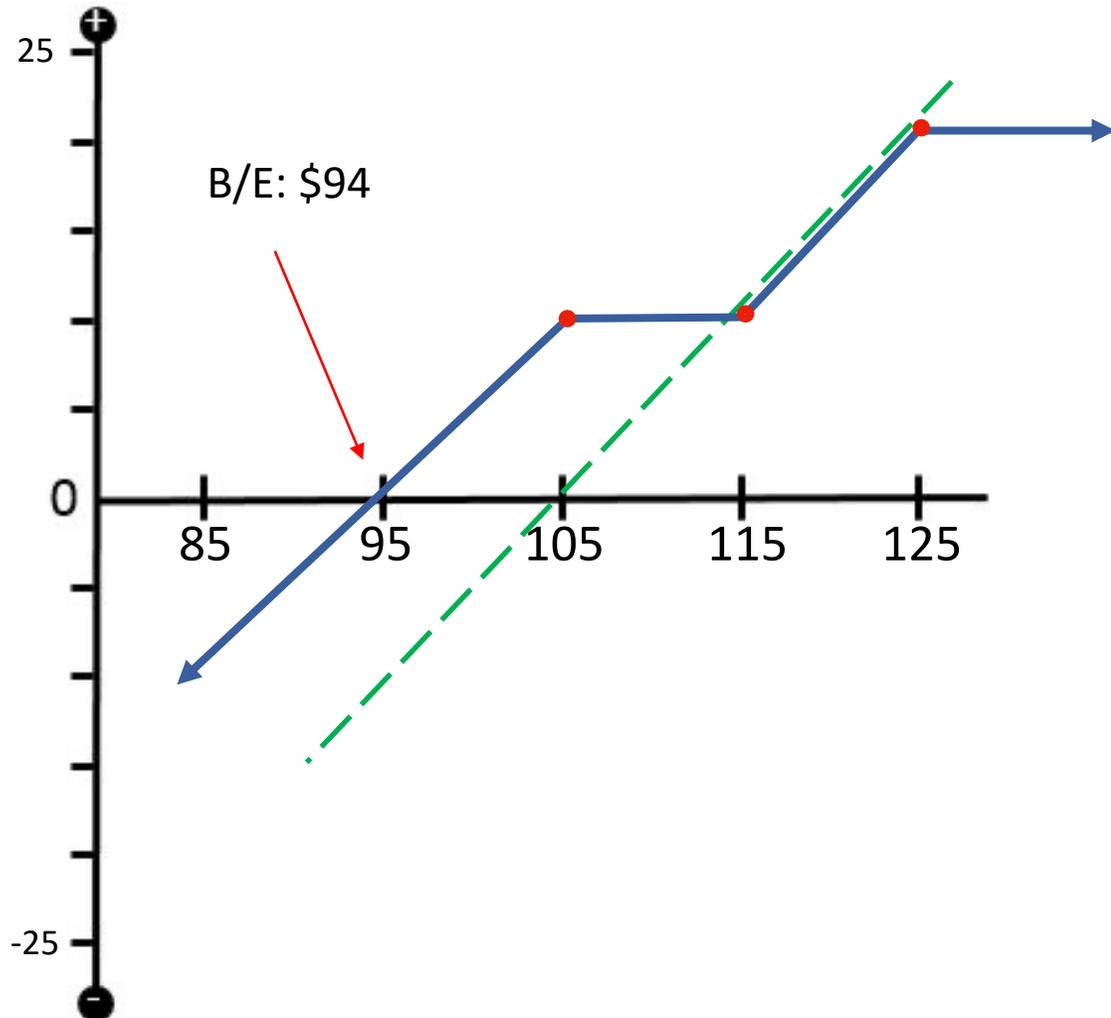
Buys 1 45-day 115 put for \$3.60, **AND**

Sells 1 45-day 105 put at \$1.60

} Traditional Collar

Stock Price at Expiry	115/105 Put Spread P/L at Expiry	Short 125 Call P/L at Expiry	Long \$105 Stock P/L at Expiry	Net P/L + \$1 Credit
\$95	\$8.00	\$3.00	(\$10.00)	\$1.00
\$105	\$8.00	\$3.00	-0-	\$11.00
\$115	(\$2.00)	\$3.00	\$10.00	\$11.00
\$125	(\$2.00)	\$3.00	\$20.00	\$21.00
\$135	(\$2.00)	(\$7.00)	\$30.00	\$21.00

Put Spread Collar Example



**Long 100 shares of stock from \$105
(stock currently at \$120)**

- **Sell 1 125 call at \$3.00**
- **Buy 1 115 put for \$3.60**
- **Sell 1 105 put at \$1.60**

Net CREDIT: \$1.00

Max profit: short call strike (125) – long stock price (105) + net premium (1) = **\$21**

Max loss: new cost basis (104) – width of put spread (10): **-\$94**

Protection exists from 115 down to 105

Laddered Collar (Strikes & Expiry's)

Buying a put (long or short-term depends on protection desired)
Sell calls at various strikes/expiry's

Example: Stock trading \$100, long 500 shares

- Buy 5 180 day 85 puts for \$4.00/each
- Sell 1 30-day 105 call at \$.75
- Sell 1 60-day 110 call at \$.80
- Sell 1 120-day 115 calls at \$1.80
- Sell 2 180-day 120 call at \$2.50

Net DEBIT of \$1,165



Laddered Collar (Strikes & Expirys)

What if's?

- Stock makes a sharp move in either direction?
 - Sharp move down: Exercise put and buy to close short calls?
 - Sharp move up: Some or all short calls may be assigned, and stock gets called away at various intervals

Regardless, less premium collected for shorter dated calls vs. longer dated puts results in less overall profit from a big move

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