

All About Puts

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Presentation Outline

Put Options

- Definition and Motivations

- Basic Strategies

 - Hedging Stock/Portfolio

 - Bearish Speculation

 - Cash-Secured Put

- Exercise and Assignment



Put Options:

- Definition
- Motivations

Put Options: Definition and Motivations

- ❑ Equity put options are **contracts** that give:
 - ❑ The **buyer** the **right** to sell shares of underlying stock
 - ❑ The **seller** the **obligation** to buy shares of underlying stock
 - ❑ The transaction price and expiration date will be defined within the options contract

- ❑ Put options make it possible to target a variety of investment objectives including:
 - ❑ **Long Puts** – Protect stock/portfolio position
 - ❑ **Long Puts** – Bearish speculation
 - ❑ **Short Puts** – Acquire stock on share price pullback



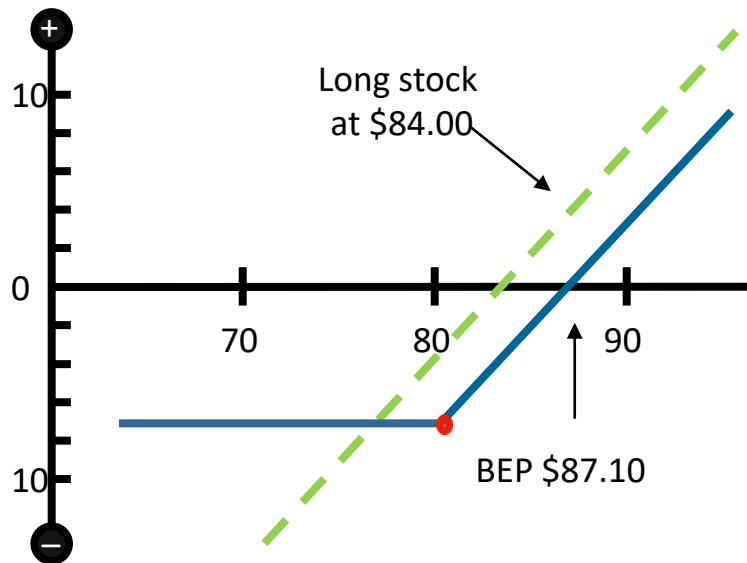
Put Options:

- Hedging

Protective Put (Hedge Stock Position)

Long 100 shares XYZ at \$84.00
Buy 1 60-day XYZ 80 put at \$3.10

Break-even at Expiration:
\$84.00 (stock entry price) + **\$3.10**
(put premium paid) =
\$87.10



Maximum Loss:
\$84.00 (stock entry price) –
\$80.00 (put strike) + **\$3.10** (put
premium paid) = **\$7.10**
\$710.00 Total

Does not include commissions, fees, margin interest or taxes.

Protective Put (Hedge Portfolio)

Calculations/Inputs:

Portfolio value:	\$1,000,000
Desired Protection:	10% downside (\$900,000)
Underlying Index/ETF:	\$400
10% Out-of-money put:	$360 (400 - 400(.10) = 360)$
Price of 90-day 360 put:	\$6.00 (\$600 per contract)

Protective Put (Hedge Portfolio)

Calculations/Inputs:

$$\frac{\text{Portfolio $$$ to hedge}}{\text{Notional Value of Strike Price}} \quad \text{or} \quad \frac{\$900,000}{360 \times 100} = 25 \text{ puts}$$

- Investor purchases 25 90-day 360 puts to hedge \$900,000 worth of risk
 - \$15,000 premium (\$6.00/contract x 25 puts x \$100) is cost of hedge
 - Can also buy fewer puts to hedge less of the position
- Assumes 1-to-1 correlation between portfolio and hedge

Put Options:

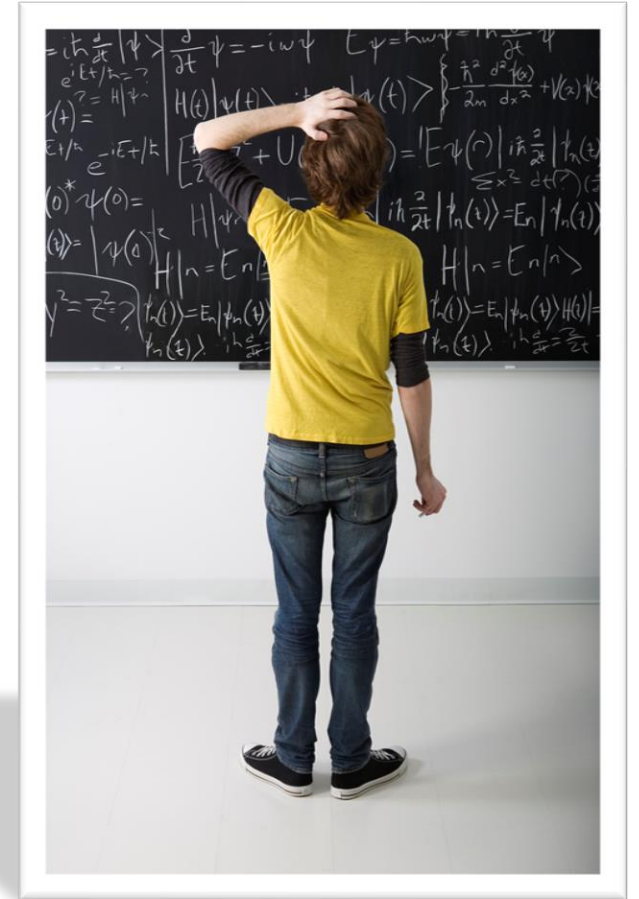
- Bearish Speculation
- Cash-Secured Put



Put Options: Bearish Speculation

Long Put

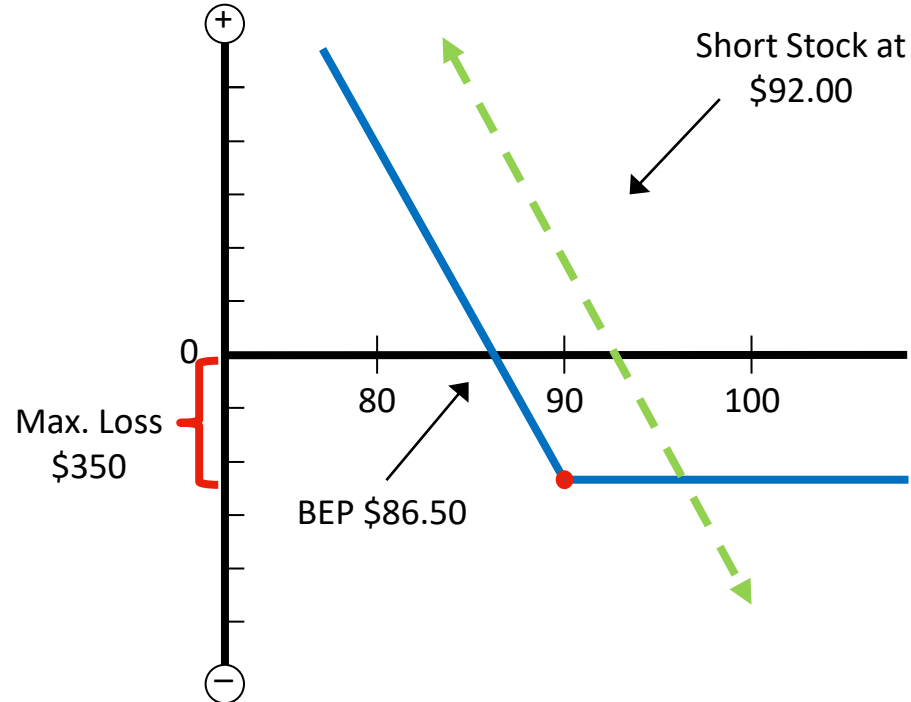
- ❑ Bearish on underlying
- ❑ Alternative to short stock
- ❑ Requires direction and timing of share price movement to be correct
- ❑ Put buyer likely does not intend to exercise



Long Put: Bearish Speculation

Stock trading at \$92.00

Buy 90.00 strike put at \$3.50



Does not include commissions, fees, margin interest or taxes.

Break-even at Expiration:
\$90.00 (put strike price) – **\$3.50**
(put premium paid) =
\$86.50

Maximum Loss:
\$3.50 (put premium paid) =
\$350.00 Total

- Options positions are frequently closed before reaching expiration

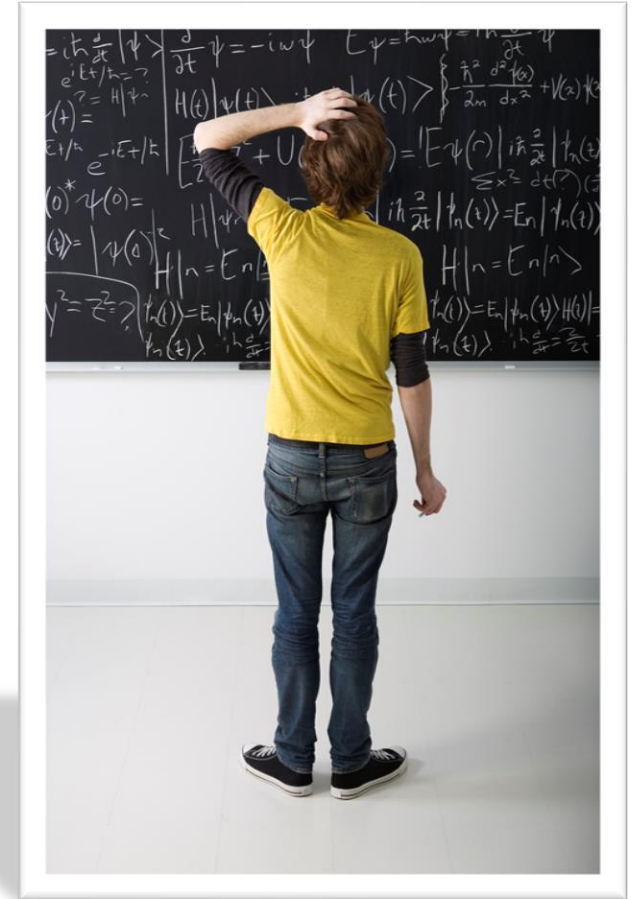
Long Put Options: Speculation

Long Put

- ❑ Bearish on underlying
- ❑ Alternative to short stock
- ❑ Requires direction and timing of share price movement to be correct
- ❑ Put buyer likely does not intend to exercise

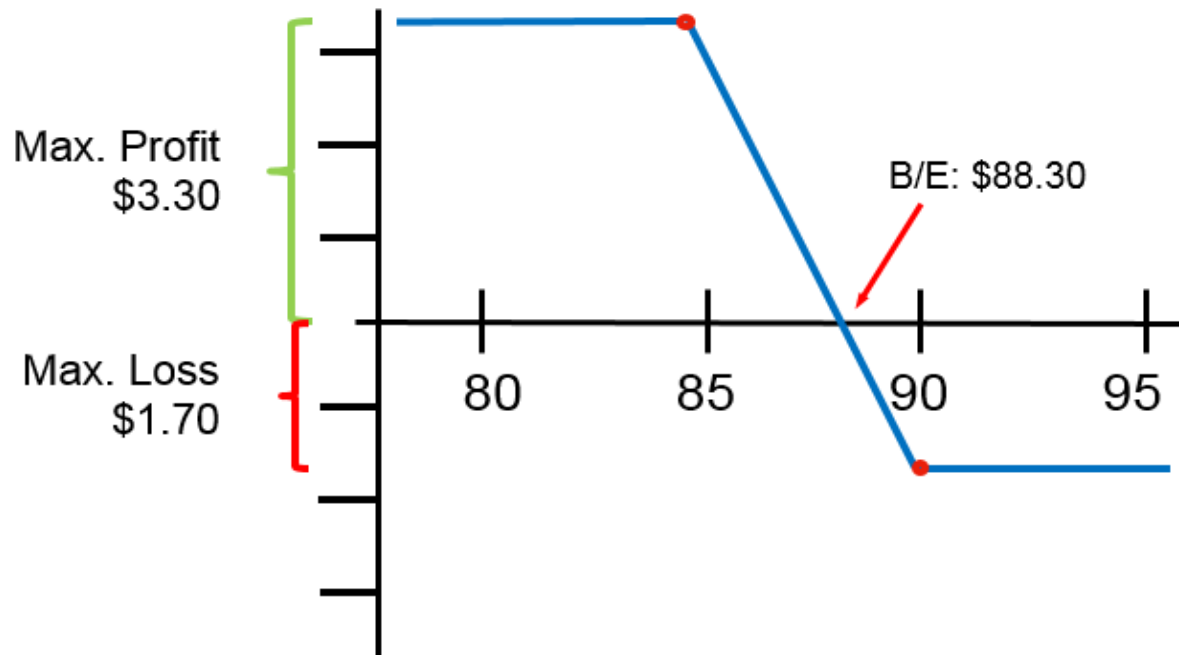
Bear Put Spread

- ❑ Same motivation as Long Put but at lower cost in exchange for capped profit potential



Bear Put Spread

- Stock trading at \$92
- Buy 90 strike put for \$3.50
- Sell 85 strike put for \$1.80



Does not include commissions, fees, margin interest or taxes.

Break-even at Expiration:
\$90.00 (put strike price) – **\$1.70** (net premium paid) =
\$88.30

Maximum Gain:
\$5.00 (difference between strikes) –
\$1.70 (net premium paid) = **\$3.30**
\$330.00 Total

Maximum Loss:
\$1.70 (net premium paid) =
\$170.00 Total

Cash Secured Put Example

Stock XYZ at \$118

Sell 115 put at \$2.00

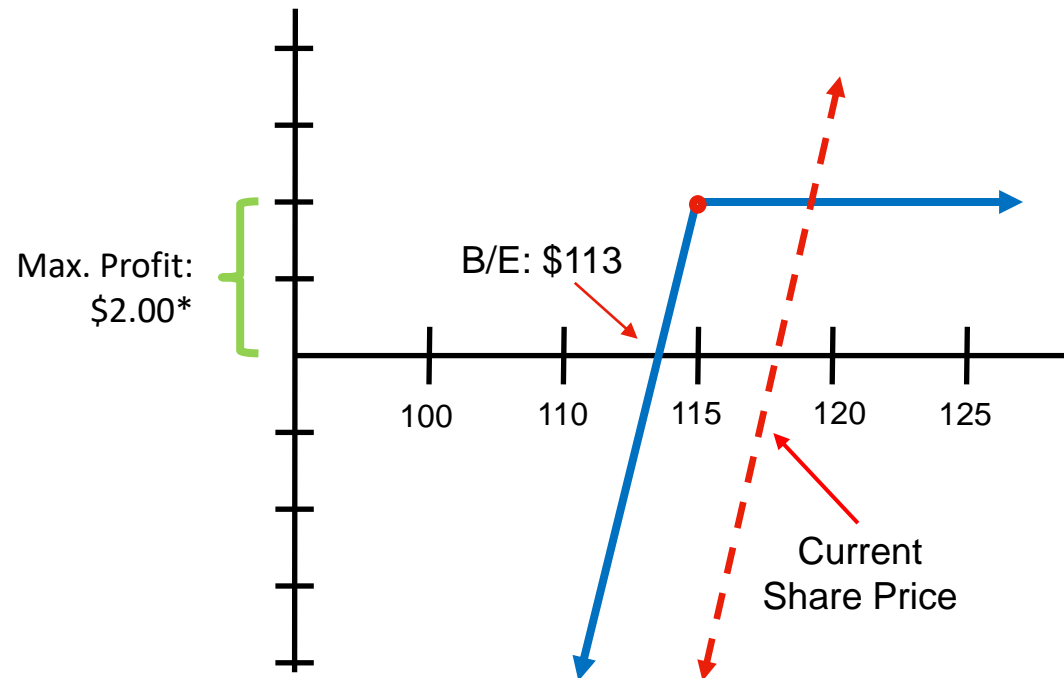
(30 Days until expiration, 25% Volatility)

Break-even at expiration

Strike price – Premium

$\$115 - \$2.00 = \$113.00$

** Max profit of \$2.00 does not take into account resulting long stock position should assignment occur*



Not including commissions



Put Options:

- Exercise and Assignment

Put Options: Exercise and Assignment

Put holder considerations:

- Sell to close prior to expiration

- Exercise at expiration

- Exercise prior to expiration (e.g. deep ITM)

- Abandon the option (allow to expire without value)

- Unless shares are already owned, exercising a put will result in a short stock position**

Put writer considerations:

- Assignment can occur on any trading day

- An option does not have to be ITM to be assigned

- The only way to avoid assignment risk is to close the open short position