



Copyright (c) 2016 CBOE. All Rights reserved

Disclosure



In order to simplify the computations, commissions have not been included in the examples used in these materials. Commission costs will impact the outcome of all stock and options transactions and must be considered prior to entering into any transactions. Multiple-leg strategies involve multiple commission charges.

Any strategies discussed, including examples using actual securities and price data, are strictly for illustrative and educational purposes only and are not to be construed as an endorsement, recommendation, or solicitation to buy or sell securities.

Options involve risks and are not suitable for all investors. Prior to buying or selling an option, an investor must receive a copy of Characteristics and Risks of Standardized Options. Copies are available from your broker, by calling 1-888-OPTIONS, or from The Options Clearing Corporation, One North Wacker Drive, Suite 500, Chicago, Illinois 60606. Investors considering options should consult their tax advisor as to how taxes may affect the outcome of contemplated options transactions.

CBOE and Chicago Board Options Exchange are registered trademarks and The Options Institute is a servicemark of CBOE. All other trademarks and servicemarks are the property of their respective owners.

This presentation should not be construed as an endorsement or an indication by CBOE of the value of any non-CBOE product or service described in this presentation.

Copyright © 2016 Chicago Board Options Exchange, Incorporated. All rights reserved.

Presentation Outline



- Quiz Pick the best option
- Buy Call vs Bull Call Spread
- Straddle vs Strangle
- Protective Put vs Collar



Pick the Best Option



Quiz – Pick the Best Option

50 days to expiration

Stock 92.80 \rightarrow 96.50

Days to Exp. $50 \rightarrow 40$

(50-day options)

91 Call $4.10 \rightarrow$

93 Call $2.90 \rightarrow$

95 Call $1.95 \rightarrow$

97 Call $1.20 \rightarrow$

Which option would you buy?



Quiz – Pick the Best Option

50 days to expiration

Stock

 $92.80 \rightarrow 96.50$

Days to Exp.

 $50 \rightarrow 40$

(50-day options)

Estimated results in \$

91 Call $4.10 \rightarrow 6.40 +2.30$

93 Call $2.90 \rightarrow 4.95 +2.05$

95 Call $1.95 \rightarrow 3.70 + 1.75$

97 Call $1.20 \rightarrow 2.70 +1.50$

CBOE OPTIONS INSTITUTE

6





Estimated results in %

50 days to expiration

Stock $92.80 \rightarrow 96.50$

Days to Exp. $50 \rightarrow 40$

(50-day options)

91 Call $4.10 \rightarrow 6.40 + 2.30 + 56\%$

93 Call $2.90 \rightarrow 4.95 + 2.05 + 70\%$

95 Call $1.95 \rightarrow 3.70 + 1.75 + 90\%$

97 Call $1.20 \rightarrow 2.70 + 1.50 + 125\%$



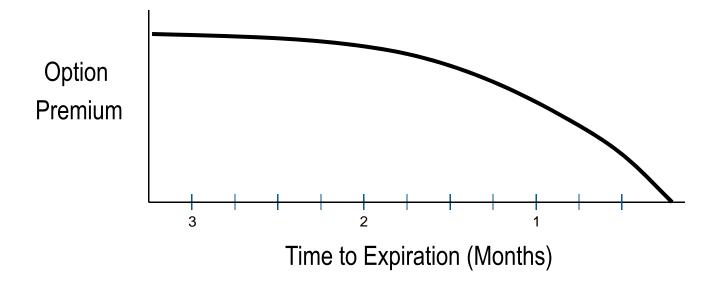
Time Decay and Volatility



ATM Call Option

Option premium erodes with the passage of time

- ° only time value affected not intrinsic value
- ° erosion accelerates as expiration approaches



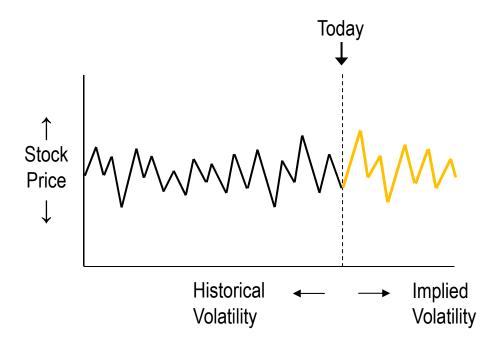


Effects of Changing Volatility

Change in Volatility (Implied or Assumed)	Call Prices	Put Prices
Volatility ↑	1	1
Volatility ↓	\	



Volatility



- Only options have implied volatility
- IV predicts a stocks future volatility



Buy Call vs Bull Call Spread



Planning a Trade

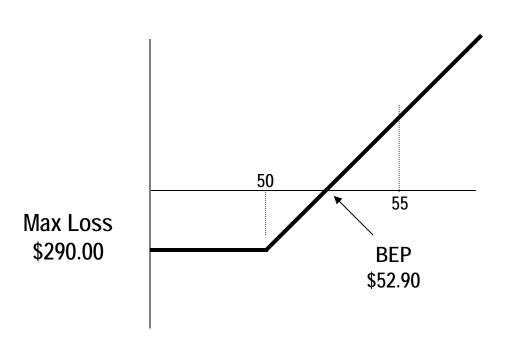
Three-Part Forecast

- 1) What will the stock do?
- 2) How long will it take?
- 3) What about volatility?

Forecasts are the foundation of all option trades



Buy Call Example



Max Profit Unlimited

Break-even point lower strike + debit paid \$50.00 + \$2.90 = \$52.90

Long 50 strike call \$2.90

Not including commissions

Two Greeks



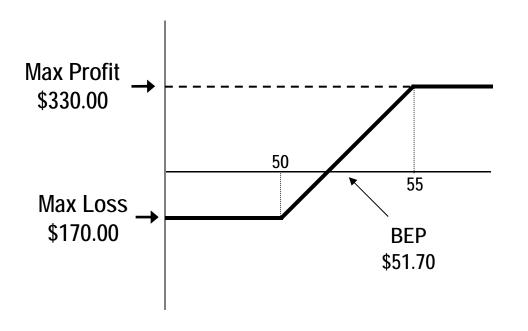
Buy Call

<u>Vega</u> **Theta**

Long 50 Call 2.90 +.10 -0.03



Bull Call Spread Example



Break-even point lower strike + debit paid \$50.00 + \$1.70 = \$51.70

Long 50 Call 2.90 Short 55 Call 1.20 Net Debit 1.70

Not including commissions



Two Greeks

Bull Call Spread

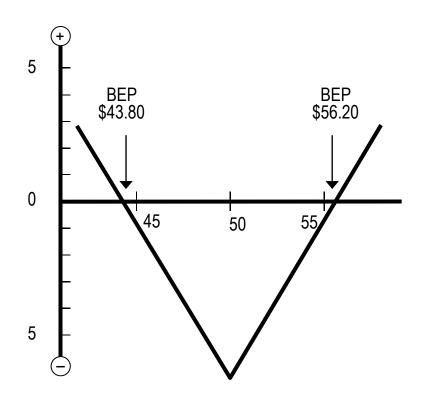
		<u>Vega</u>	<u>Theta</u>
Long 50 Call	2.90	+.10	-0.03
Short 55 Call	<u>1.20</u>	<u>08</u>	+0.02
Net Debit	1.70	+.02	01



Straddle vs Strangle



Long Straddle Example



Long 50 ATM call \$3.20 Long 50 ATM put <u>\$3.00</u> Net debit \$6.20 **Maximum Loss:**

\$6.20 Debit Paid

\$620.00 Total

Break-even at Expiration:

Upside = Strike + Debit Paid

\$50.00 + \$6.20 = \$56.20

Downside = Strike – Debit Paid

\$50.00 - \$6.20 = \$43.80

Not including commissions



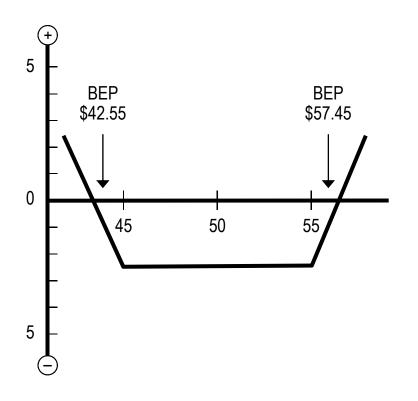
Two Greeks

Long Straddle

		<u>Vega</u>	<u>Theta</u>
Long 50 Call	3.20	+.10	- 0.03
Long 50 Put	3.00	+ <u>.10</u>	- <u>0.03</u>
Net Debit	6.20	+.20	06



Long Strangle Example



Maximum Loss:

\$2.45 Debit Paid \$245.00 Total

Break-even at Expiration:

Upside = Call Strike + Debit Paid \$55.00 + \$2.45 = \$57.45

Downside = Put Strike – Debit Paid \$45.00 – \$2.45 = \$42.55

Not including commissions

Long 55.00 call \$1.40 Long 45.00 put \$1.05 net cost: \$2.45



Two Greeks

Long Strangle

		<u>Vega</u>	<u>Theta</u>
Long 55 Call	1.40	+.06	-0.02
Long 45 Put	<u>1.05</u>	+ <u>.06</u>	<u> - 0.02</u>
Net Debit	2.45	+.12	04

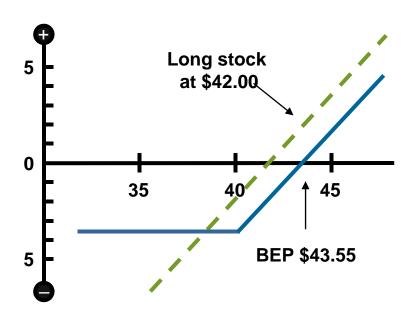


Protective Put vs Collar

Protective Put



Own 100 shares XYZ at \$42.00 Buy 1 60-day XYZ 40 put at \$1.55



Break-even at Expiration:

Stock Price Paid + Put Premium Paid \$42.00 + \$1.55 = \$43.55

Maximum Loss:

Stock Price – Break-even for Put \$42.00 – (\$40.00 – \$1.55) = \$3.55 \$355.00 Total



The Collar

Own 100 XYZ shares at \$42

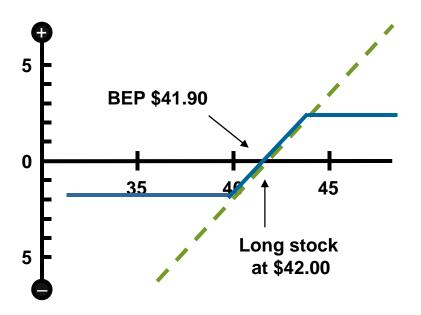
<u>60-day</u>	<u>Calls</u>	<u>Puts</u>
39	\$4.20	\$1.15
40	\$3.55	\$1.55
41	\$3.00	\$1.95
42	\$2.50	\$2.45
43	\$2.05	\$3.00
44	\$1.65	\$3.65
45	\$1.35	\$4.30

Buy 1 60-day XYZ 40 put at \$1.55 Sell 1 60-day XYZ 44 Call at <u>\$1.65</u> Net Credit \$.10

The Collar



Own 100 shares XYZ at \$42.00 Buy 1 60-day XYZ 40 put at \$1.55 Sell 1 60-day XYZ 44 Call at \$1.65 Net Credit \$.10



Break-even at Expiration:

Stock Price – Net Credit \$42.00 - \$.10 = \$41.90

Maximum Loss:

Stock Price – Put Strike – Net Credit (\$42.00 – 40.00) – \$.10) = \$1.90 \$190.00 Total

Summary



What is the plan to make money?

- Market direction?
- Time erosion?
- Change in volatility?

Set realistic expectations

Get familiar with all possible strategies

Don't overtrade



Thank you for attending!