CBOE®

Introduction to Equity Options

CBOE Disclaimer

Options involve risks and are not suitable for all investors. Prior to buying or selling options, an investor must receive a copy of *Characteristics and Risks of Standardized Options*. Copies may be obtained by contacting your broker, by calling 1-888-OPTIONS, or from The Options Clearing Corporation at www.theocc.com. In order to simplify the computations, commissions, fees, margin interest and taxes have not been included in the examples used in this presentation. These costs will impact the outcome of all transactions and must be considered prior to entering into any transactions. Investors should consult their tax advisor about any potential tax consequences. The information in this presentation, including any strategies discussed, is strictly for illustrative and educational purposes only and is not to be construed as an endorsement, recommendation, or solicitation to buy or sell securities. Supporting documentation for any claims, statistics or other technical data in this presentation is available by calling 1-888-OPTIONS, or contacting CBOE at www.cboe.com/Contact.

Outline

- Option Basics
- Long Call
- Long Put
- Exercise / Assignment
- Summary
- Contact / Q&A

Option Basics

There are two types of options –

- Call
- Put

Option Basics

An equity call *buyer*:

Has the *right to buy* 100 shares of stock

An equity call seller:

Has the *obligation to sell* 100 shares of stock

*Options typically represent 100 shares. Corporate actions such as splits or special dividends may change the deliverable.

Option Basics

An equity put *buyer*:

Has the *right to sell* 100 shares of stock

An equity put seller:

Has the *obligation to buy* 100 shares of stock

.

Option Basics

Standard Stocks and ETF Options Expire:

The 3rd Friday of the month

About 80 Stocks and ETFs now have options that expire every Friday

**Standard options expire the 3rd Saturday following the 3rd Friday of the month.*

Option Basics

Buyers and Sellers:

- An option buyer pays a premium
- An option seller receives a premium

Price quoted on a per share basis:

- Quoted price x 100 shares
- Example: $3.00 quoted x 100 = $300.00

Option Basics

CBOE®

XYZ January 50 Call at $4.20

- XYZ = underlying stock (100 shares/option)
- January = expiration month
- 50 = strike (exercise) price

  Price per share if exercised = $50.00
- Call (type – also could be Put)
- $4.20 = Premium ($420 = 4.20 x 100)

Long Call

Strategy Overview –

- Bullish strategy based on expectation of higher price in underlying stock
- Maximum loss is limited to the premium paid for the option contract
- Theoretically the maximum gain is unlimited

Long Call

Trade Example –

- Bullish on XYZ Corp (XYZ)
- Stock trading at 34.50
- Believe stock should trade to 40.00
- Should occur by March expiration in 45 days

Price Target = 40

Timing = 45 Days

Long Call

Trade Example –

XYZ @ 34.50

	Bid	Ask	Last
XYZ Mar 30 Call	4.60	4.70	4.55
XYZ Mar 35 Call	1.20	1.25	1.30
XYZ Mar 40 Call	0.10	0.20	0.15

Buy 1 XYZ Mar 35 Call @ 1.25

Long Call

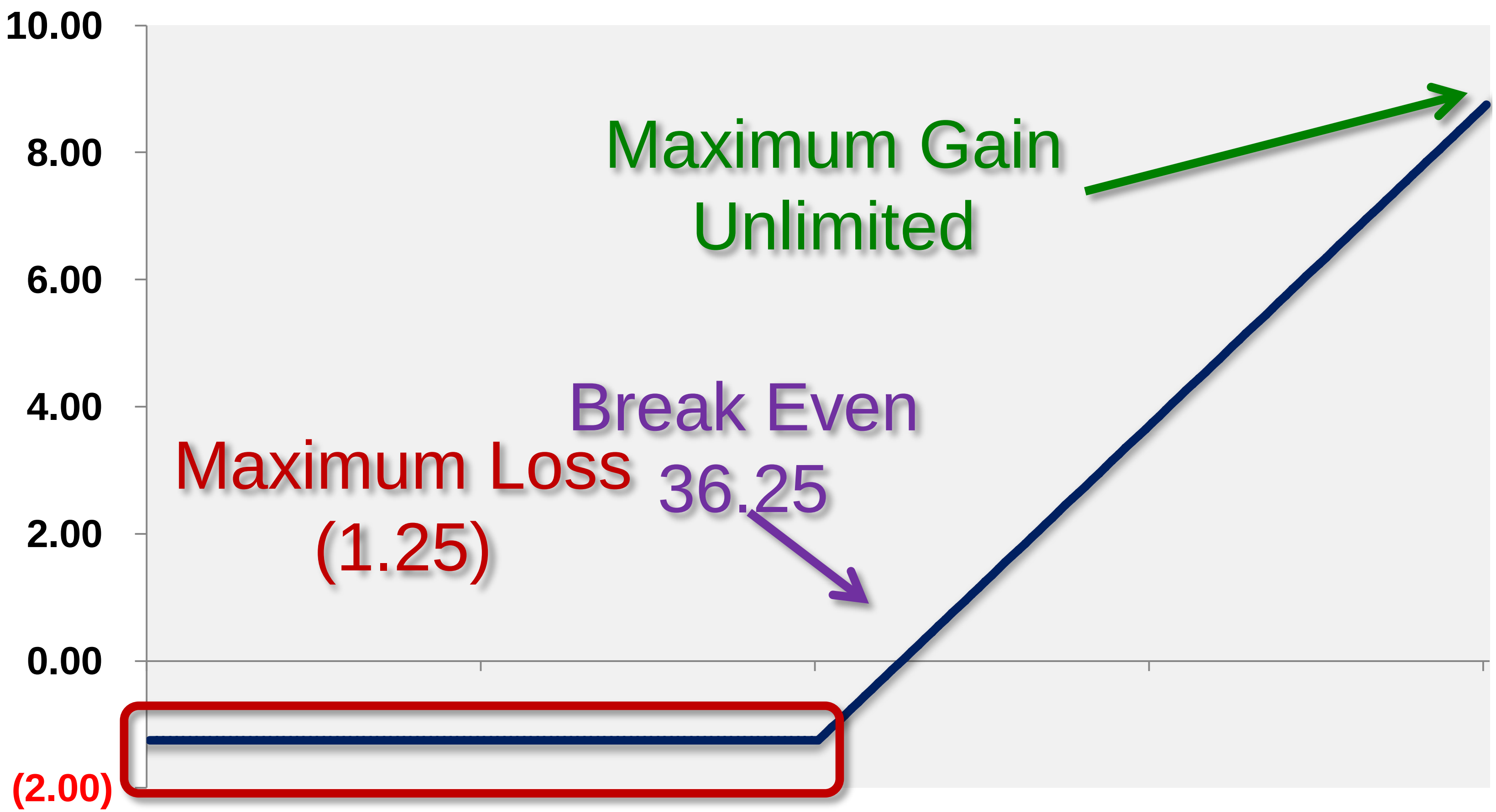
XYZ Mar 35 Call – Payoff at Expiration –

XYZ	XYZ Mar 35 Call	Premium Paid	Profit / Loss
25.00	0.00	(1.25)	(1.25)
30.00	0.00	(1.25)	(1.25)
35.00	0.00	(1.25)	(1.25)
40.00	5.00	(1.25)	3.75
45.00	10.00	(1.25)	8.75

Long Call

CBOE®

XYZ Mar 35 Call – Payoff Diagram –



Long Put

CBOE®

Strategy Overview –

- Bearish strategy based on expectation of lower prices for the underlying stock
- Maximum loss is based on the premium paid for the option contract
- Maximum gain is based on the stock going to zero at expiration

Long Put

Trade Example –

- Bearish on Vroom Corp (VRM)
- VRM trading at 50.75
- Believe stock trades down to 45.00
- Expect move over 60 days (April expiration)

Price Target = 45.00

Timing = 60 Days

Long Put

CBOE®

Trade Example –

VRM @ 50.75

	Bid	Ask	Last
VRM Mar 45 Put	0.70	0.75	0.65
VRM Mar 50 Put	2.40	2.50	2.30
VRM Mar 55 Put	5.50	5.60	5.60

Buy 1 VRM 50 Put @ 2.50

Long Put

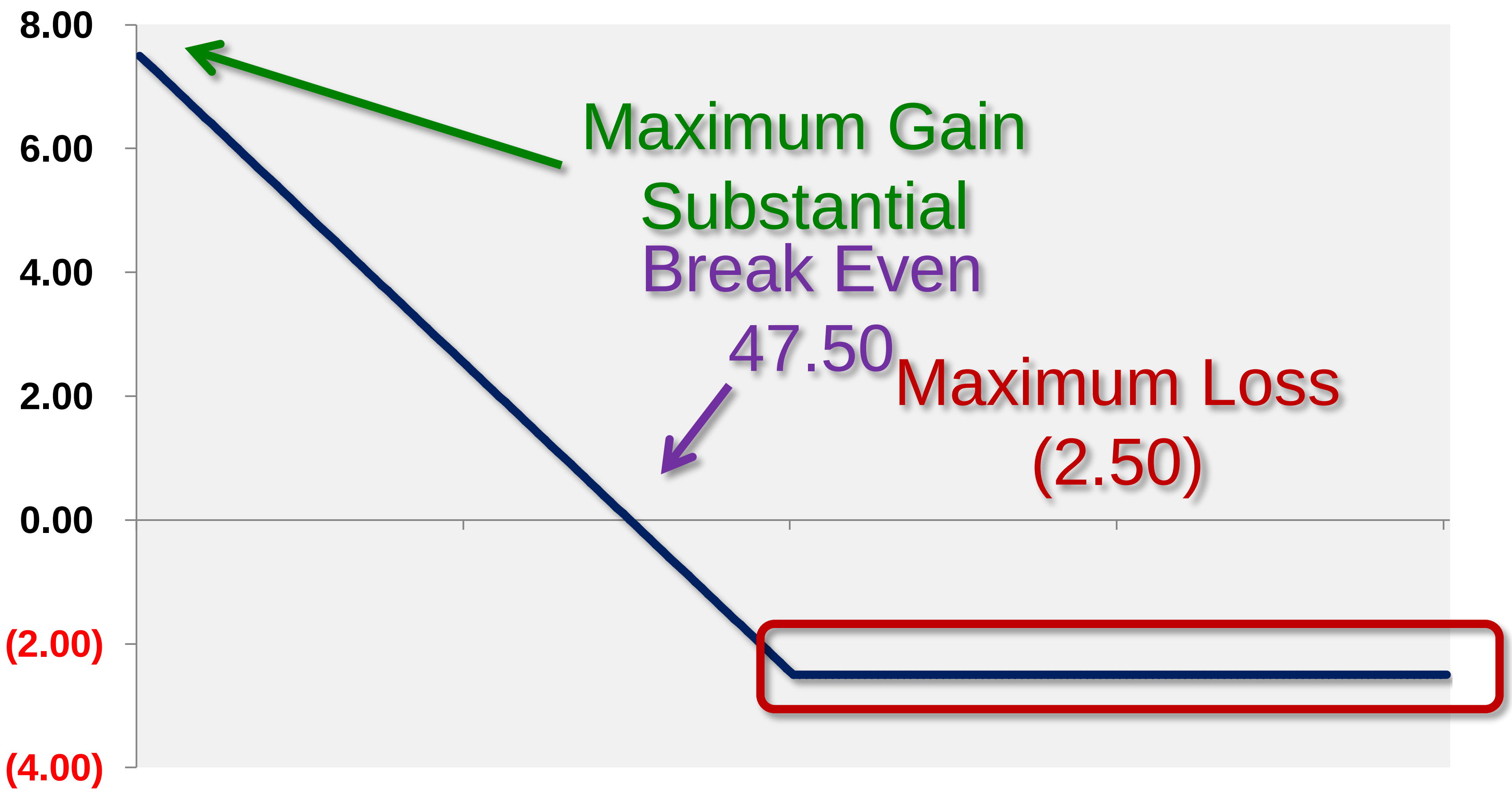
CBOE®

VRM Apr 50 Put – Payoff at Expiration –

VRM	VRM Apr 50 Put	Premium Paid	Profit / Loss
40.00	10.00	(2.50)	7.50
45.00	5.00	(2.50)	2.50
50.00	0.00	(2.50)	(2.50)
55.00	0.00	(2.50)	(2.50)
60.00	0.00	(2.50)	(2.50)

Long Put

VRM Apr 50 Put – Payoff Diagram



Exercise / Assignment

- A holder of a long equity option position has the right to exercise that option
- A holder of a short equity option position has the obligation to fulfill the terms of that option contract
- The short option holder is assigned on their obligation

Equity Options are American Style
They may be exercised any time until expiration

Exercise / Assignment

American Style –

- Option may be exercised anytime until and upon expiration
- If contract is 0.01 in-the-money at expiration it will be exercised automatically
- Long option holder may choose not to exercise their contract

Exercise / Assignment

Call Option –

IBM @ 180.00

Position – Long 1 IBM Feb 180 Call

Action – Exercise Option

Result – Buy 100 IBM at 180.00 per share

Exercise / Assignment

CBOE®

Call Option –

IBM @ 180.00

Position – Short 1 IBM Feb 180 Call

Action – Option Assigned

Result – Sell 100 IBM at 180.00 per share

Exercise / Assignment

Put Option –

IBM @ 185.00

Position – Long 1 IBM Feb 190 Put

Action – Exercise Option

Result – Sell 100 IBM at 190.00 per share

Exercise / Assignment

Put Option –

IBM @ 185.00

Position – Short 1 Feb 190 Put

Action – Option Assigned

Result – Buy 100 IBM @ 190.00 per share

Summary

- Equity options represent 100 shares
- The risk of loss in a long option position is equal to the premium paid for the contract
- Option holders own a right
- Option short positions have an obligation

Contact

Website / Email –

www.cboe.com/learncenter

www.cboe.com/seminars

rhoads@cboe.com