#### IBKRWEBINARS.COM





January 20, 2022

### **0CC**

## **Options Basics – Core Concepts and Fundamentals**

**Mathew Cashman** 

Principal / OCC Investor Education OCC

Exchange and Industry Sponsored Webinars are presented by unaffiliated third parties. Interactive Brokers LLC is not responsible for the content of these presentations. You should review the contents of each presentation and make your own judgment as to whether the content is appropriate for you. Interactive Brokers LLC does not provide recommendations or advice. This presentation is not an advertisement or solicitation for new customers. It is intended only as an educational presentation.

#### IBKRWEBINARS.COM





#### **Disclosure**:

Options involve risk and are not suitable for all investors. For information on the uses and risks of options, you can obtain a copy of the Options Clearing Corporation risk disclosure document titled <u>Characteristics and Risks of Standardized Options</u> by calling (312) 542-6901.

Futures are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading futures, please read the <u>CFTC Risk Disclosure</u>. For a copy visit interactivebrokers.com.

Security futures involve a high degree of risk and are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading security futures, please read the <u>Security</u> <u>Futures Risk Disclosure Statement</u>. For a copy visit Interactivebrokers.com.

There is a substantial risk of loss in foreign exchange trading. The settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets.

The Order types available through Interactive Brokers LLC's Trader Workstation are designed to help you limit your loss and/or lock in a profit. Market conditions and other factors may affect execution. In general, orders guarantee a fill or guarantee a price, but not both. In extreme market conditions, an order may either be executed at a different price than anticipated or may not be filled in the marketplace.

There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

•IRS Circular 230 Notice: These statements are provided for information purposes only, are not intended to constitute tax advice which may be relied upon to avoid penalties under any federal, state, local or other tax statutes or regulations, and do not resolve any tax issues in your favor.

Interactive Brokers LLC is a member of <u>NYSE FINRA SIPC</u>



# **Options Basics - Core Concepts and Fundamentals**

Mat Cashman Principal, Investor Education OCC

www.OptionsEducation.org



**Business Sensitive** 

#### Disclaimer

**Options involve risks and are not suitable for everyone.** Individuals should not enter into options transactions until they have read and understood the risk disclosure document, *Characteristics and Risks of Standardized Options*, available by visiting theocc.com. To obtain a copy, contact your broker or The Options Industry Council at 125 S. Franklin St., Suite 1200, Chicago, IL 60606.

In order to simplify the computations used in the examples in these materials, **commissions, fees, margin, interest and taxes have not been included.** These costs will impact the outcome of any stock and options transactions and must be considered prior to entering into any transactions. Investors should consult their tax advisor about any potential tax consequences.

Any strategies discussed, including examples using actual securities and price data, are strictly for illustrative and educational purposes and should not be construed as an endorsement, recommendation, or solicitation to buy or sell securities. Past performance is not a guarantee of future results.

Copyright © 2021. The Options Industry Council. All rights reserved.



#### **Presentation Outline**

- Options Defined
- Calls and Puts
- Basic Strategies
- Contract Terms
- Exercise and Assignment





## **Options Defined**



## **Defining an Option**

- Options are **contracts** that give:
  - The **buyer** the <u>**right**</u> to buy or sell an underlying asset
  - The seller the *obligation* to buy or sell an underlying asset

at a *specified price*, on or before

- a *given date* in the future.
- Buyers have rights
- Sellers have obligations





## Why Options?

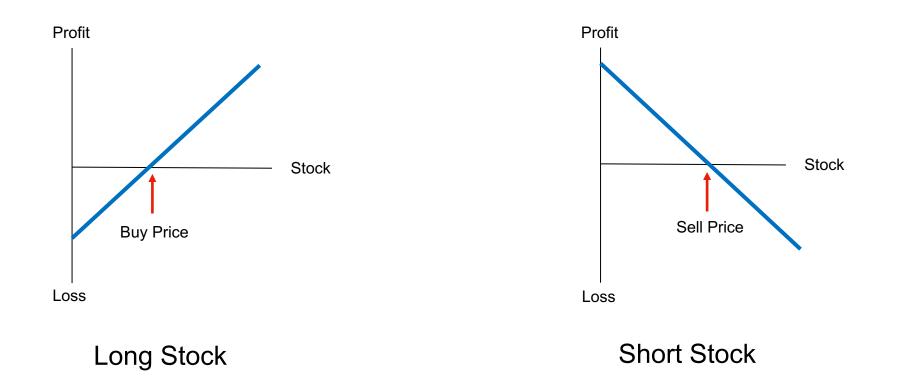
- Options give you more ways to implement your market research
- Options make it possible to target a variety of investment objectives:
  - Risk Reduction
  - Income Generation
  - Stock Acquisition
  - Speculation
- Options offer **FLEXIBILITY!**





## Long Stock vs. Short Stock

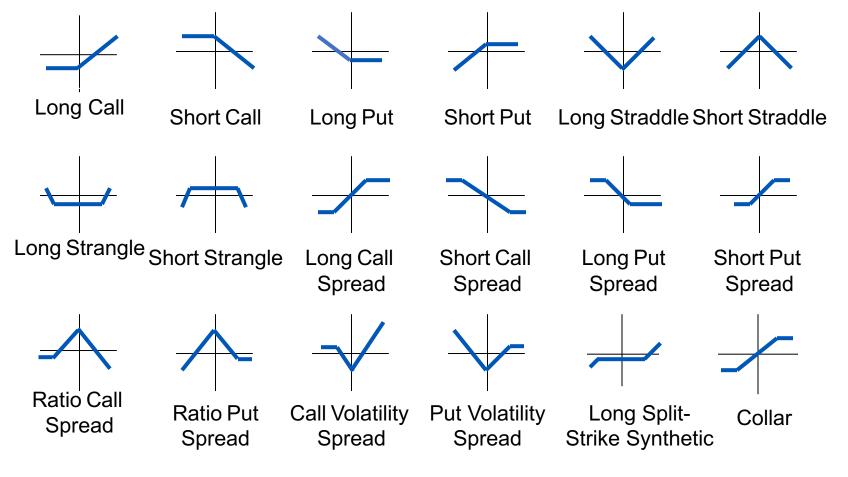
In a world without options, stock investors have limited choices.





#### **Flexibility**

With options, these are some of the available choices.





## Calls & Puts



#### **Calls and Puts**

- There are two "types" of options:
  - Calls
  - Puts
- For **equity** or **ETF** options, the underlying asset to be purchased or sold:
  - 100 shares of underlying stock or
  - 100 shares of an ETF (Exchange Traded Fund)





## **Equity Call Options**

- An equity call **buyer**:
  - Owns the **right to buy** underlying stock/ETF
  - Bullish on underlying
  - Needs stock movement > time decay



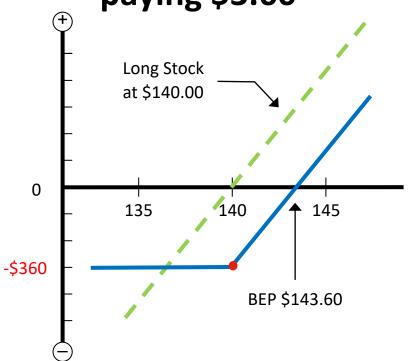
- An equity call seller:
  - Has the **obligation to sell** underlying stock/ETF
  - Likely already owns shares





### **Outright Call Buying Example (Speculative)**

Buying 140.00 strike call paying \$3.60



**Break-even at Expiration:** 

Strike Price + Call Premium Paid

\$140.00 + \$3.60 = \$143.60

**Maximum Loss:** 

\$3.60 Call Premium Paid

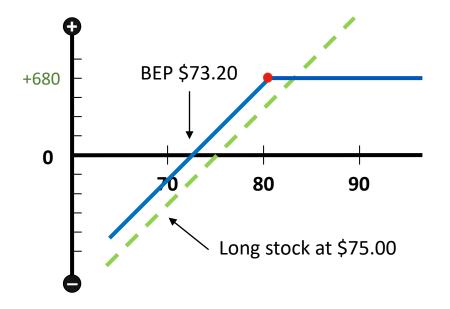
\$360.00 Total



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

#### **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



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

## **Equity Put Options**

- An equity put **<u>buyer</u>**:
  - Owns the **<u>right to sell</u>** underlying stock/ETF
  - If speculating, is bearish on underlying
  - If shares are already owned, is buying protection



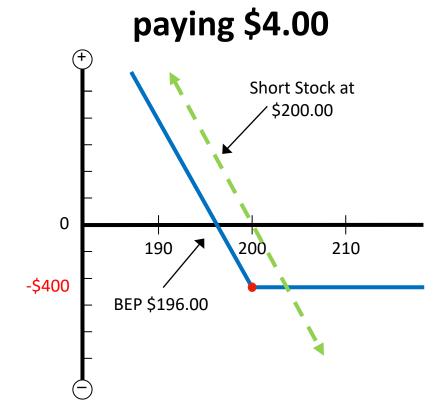
- An equity put <u>seller</u>:
  - Has the **obligation to buy** underlying stock/ ETF
  - Generate income while waiting for share price drop
  - Small profit if stock rallies





### **Outright Put Buying Example (Speculative)**

#### Buy 200.00 strike put



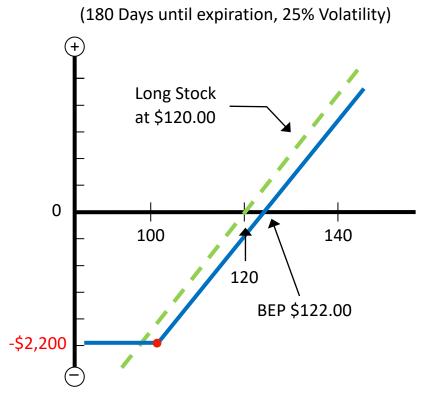
Break-even at Expiration: Strike Price – Put Premium Paid \$200.00 – \$4.00 = \$196.00

> Maximum Loss: \$4.00 Put Premium Paid \$400.00 Total



#### **Protective Put Example**

#### Long Stock at \$120 Buy 100.00 strike put paying \$2.00



#### **Break-even at Expiration:**

Initial Share Price + Put Premium Paid \$120.00 + \$2.00 = \$122.00

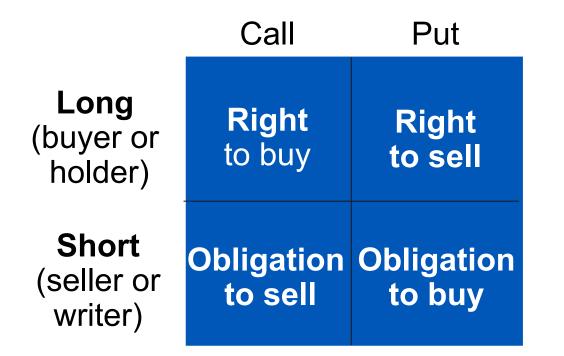
Maximum Loss: Difference between strikes + Put Premium Paid

120.00 - 100.00 + 2.00 = 2,200.00



### **Calls and Puts**

Options contracts **give...** 



- 100 shares of the underlying
- at the strike price
- any time before expiration



#### **Contract Terms**

ing max well may be advanced by calling the above-mentioned attorney who is requested

#### NESS WHEREOF. I.

, the testator/testatrix, sign a it consisting of pages this ereby declare to the undersigned authority that I sign and execute this t I sign it willingly (or willingly direct another to sign for me). that I and volte act for the purposes expressed in it, and that I an 18 years of age of and under the constraint or undue influence.

Testator/Testatrix

Will



## **Option Contract Terms**

- Equity option contracts have standardized terms:
  - Underlying stock/ETF
  - Unit of trade
  - Expiration date
  - Strike or exercise price





## **Option Components**

XYZ Mar 18, 2022 45 call at \$2.50

#### **Underlying**

- Typically, 100 shares of the stock/ETF on which the right or obligation exists
- Example: XYZ Mar 18, 2022 45 call at \$2.50
- 100 shares of XYZ is the underlying for this option

#### **Expiration Date**

- The day on which the option expires (last trading date)
- Example: XYZ Mar 18, 2022 45 call at \$2.50



## **Option Components**

XYZ Mar 18, 2022 45 call at \$2.50

#### **Strike or Exercise Price**

- Price at which the underlying may be bought or sold
- Example: XYZ Mar 18, 2022 <u>45</u> call at \$2.50

#### **Premium**

- The price of an option that is paid by the buyer and received by the seller
- Example: XYZ Mar 18, 2022 45 call at **\$2.50** 
  - \$2.50\* per share or \$250\* per option



#### **Exercise and Assignment**

to vestibulum imperdiet n-- Quisque suscipit lo comman id mdandit, s-

25 305 10

I massa, dic inque vitae, L esque faucibu, ellentesque ut c pros vitae, eges pros vitae, eges

In nec lectu

estas, eget vulputate metus sodales. Aliquaam tincidumt nunc et nulla ques ultrices, magna a facilisis efficitut, leo nibh efeifend risus ectus, posuere et metus a, eleifend imperdiet mauris, Qa; r, Fusce fringtila mauris eu est ultameorper vivers as som eu, posuere maximus ipsum. Proin ~

dibulum convalits ex non ante placerat venenatis. Cras artici nec feugiat enim ipsum vine velle. Praceent in est ingulta molestie velle at platetta. Nune nec maaris ut ipsum unne lotent velleula vel. Quisque varius inteidunt libero, mas, pusce vinae libero quis turpis aliquet tempus eu vitae ligula.



95%

68L

268/

869E

668L 6852

868L

2648

8907

4806

6408

8951

CE

NO

95\$681

869E95 9585F1 668L95 956852

+

-×

÷

MR

-W

95h

8696

958511

668795

1568C

=

9

6

WC

+W

85

18

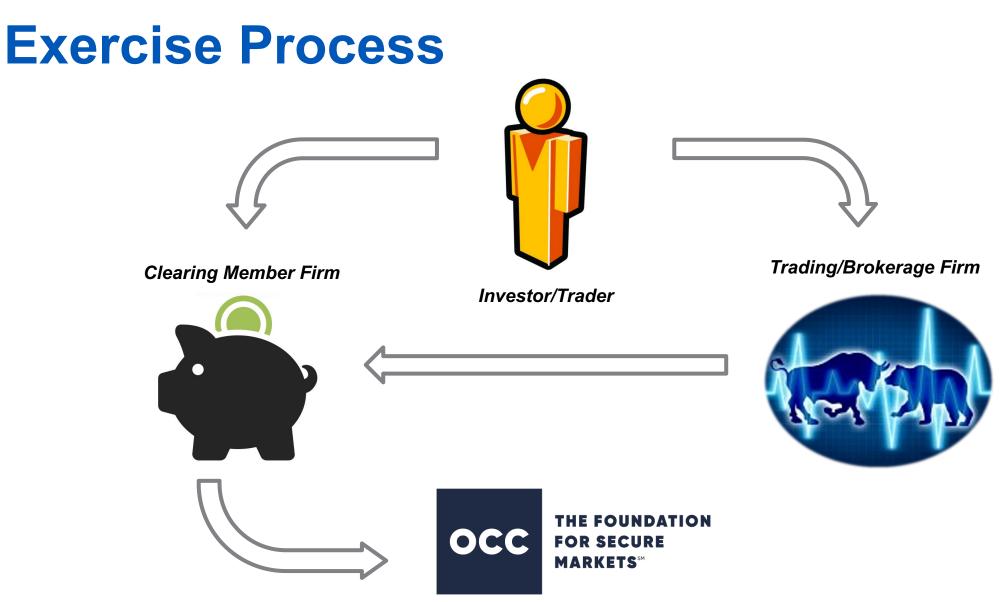
89

68

## **Exercise: Buy or Sell Underlying Stock**

- The option **<u>buyer</u>** has the <u>**right**</u>:
  - to buy (for a call) or sell (for a put)
  - 100 shares of underlying stock/ETF
  - at the strike price per share
  - if he/she exercises a long contract
- To exercise, the buyer issues an exercise notice to his/her brokerage firm (or Auto-ex)
- Only option <u>buyers</u> may <u>exercise</u> an option contract





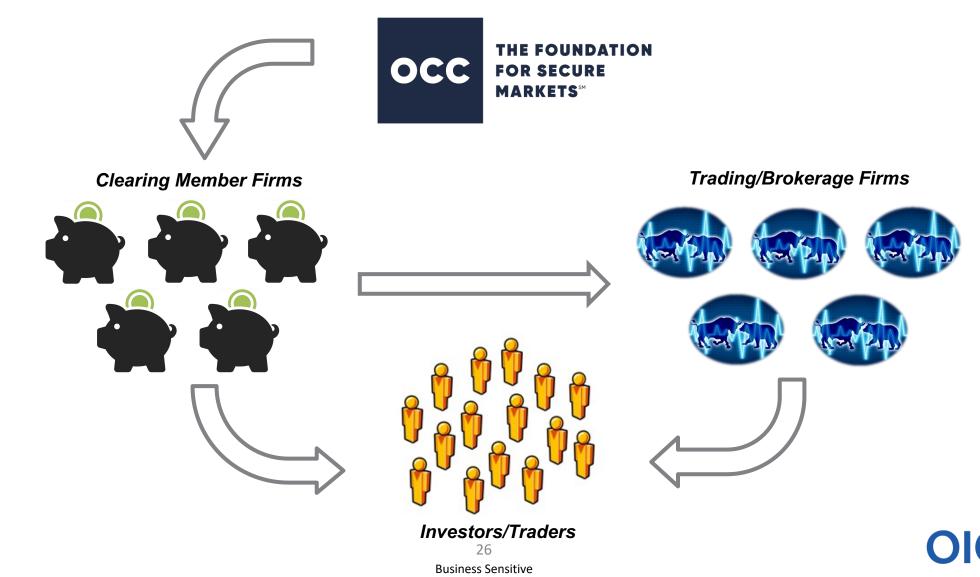


## **Assignment: Buy or Sell Underlying Stock**

- The option <u>seller</u> has the <u>obligation</u>:
  - to sell (for a call) or buy (for a put)
  - 100 shares of underlying stock/ETF
  - at the strike price per share
  - if he/she is <u>assigned</u> an exercise notice
- Assignment notice is received from seller's brokerage firm
- Only option <u>sellers</u> may be <u>assigned</u> on an option contract



#### **Assignment Process**



WEBINAR

## **Exercise Style**

#### **American**

- Long side can exercise **at any time** during the life of the option.
- Short side can be assigned **at any time** during the life of the option.



#### <u>European</u>

- Exercise and assignment can take place only at expiration —typically 3<sup>rd</sup> Friday of the month for monthly contracts.
- \*Weeklys<sup>SM</sup> expire more often



## **Settlement Style**

#### **Physical**

- Securities credited to and cash debited from investor's account (purchase transaction).
- Securities debited from and cash credited to investor's account (sale transaction).

#### <u>Cash</u>

 Investor receives or pays out the cash difference between the in-the-money strike price and the settlement value of the index (intrinsic value).







## **For More Information**

www.OptionsEducation.org

Investor Education: options@theocc.com

**OIC YouTube Channel** 

LIKE us on Facebook

Follow us on Twitter @Options\_Edu!





#### **About OIC**

- FREE unbiased and professional options education
- OptionsEducation.org
- Online courses, podcasts, videos, & webinars
- Contact Investor Education at options@theocc.com





