#### VectorVest

Welcome To The VectorVest Basic Options Course

### Basic Options Course - Agenda

Session 1 - Introduction to Options

Session 2 - Options and the VectorVest System

Session 3 - Buying Long to Open

Session 4 - Selling Short to Open

Session 5 - Covered Calls as a Strategic Income Source

Session 6 - Putting it all Together and Q&A Session

#### VectorVest

Session One

Introduction To Options

### **Stock Options**

Stock options provide the <u>right</u>, but not the obligation, to buy or sell units of 100 shares of stock at a <u>certain price</u> by a <u>certain date</u>.

### **Types of Options**

There are only two types of options:

Calls and Puts

### Call Options

<u>Call Options</u>: Provide the right to buy units of 100 shares of stock at a certain price by a certain date.

<u>Call Options</u>: Increase in value when the price of the underlying stock rises.

### **Put Options**

Put Options: Provide the right to sell units of 100 shares of stock at a certain price by a certain date.

<u>Put Options</u>: Increase in value when the price of the underlying stock falls.

Option Characteristics
vs.
Stocks

### **Less Capital**

Options generally cost about 10% of the price of the underlying stock.

#### More Leverage

A 5 point increase in an \$80 stock would give a 6.25% gain.

A 5 point increase in an \$8 Call option would give a 62.5% gain.

#### Lower Risk\*

Options control a given number of shares of stock with substantially less investment exposure.

\* Long Positions Only.

#### Time Dependent

Every option has an expiration date, and, therefore, is a depleting asset.

### Higher Probability of Loss\*

Most options are not exercised, and, therefore, expire worthless.

\*Long Positions Only

#### Placing An Option Order

"I want to buy to open 10 Microsoft Dec 45 Calls @ 2.60 or better. Good for the day."

#### 10 Microsoft Dec 45 Calls @ 2.60

- 1. 10 Contracts equals 1000 shares.
- 2. Name of the underlying stock.
- 3. **Expiration date**, (Duration).
- 4. Strike Price of the option, and
- 5. **Type** of option.
- 6. Option Premium, per share of options.

#### 1 Contract = 100 Shares

An equity option's contract size is ordinarily 100 shares. To purchase the right to control 1,000 shares of an underlying stock, one buys 10 Option Contracts:

(10 Contracts x 100 Shares each = 1,000 Shares)

#### **Expiration Date**

The date on which the owner of the option ceases to have the right to buy or sell the underlying stock as conveyed by that option, which is the Saturday following the third Friday of each month. There are four expiration months available on each option equity.

#### Strike (Exercise) Price

The price at which the owner of a **Call** option has the right to **buy** the underlying, and the owner of a **Put** option has the right to **sell** the underlying.

#### Rule of Thumb

At-the-money option prices, six months out, typically run about 10% of a stock's price.

#### **Limit Orders**

You will always pay the higher of the Bid and Asked prices to buy and receive the lower of the Bid and Asked prices to sell, so use Limit Orders at all times.

#### **Option Premium**

The price a buyer pays for an option.

Price = Intrinsic Value + Time Value

#### Intrinsic Value of a Call

= Stock Price - Strike Price

In-The-Money: Stock Price > Strike Price.

At-The-Money: Stock Price = Strike Price.

Out-of-the-Money: Stock Price < Strike Price.

Stock Price	Strike Price	Status	Intrinsic Value
40	30.00	ITM	
35	30.00	ITM	
30	30.00	ATM	0.00
25	30.00	OTM	
20	30.00	OTM	

#### Intrinsic Value of a Put

= Strike Price - Stock Price

In-The-Money: Strike Price > Stock Price.

At-The-Money: Strike Price = Stock Price.

Out-of-the-Money: Strike Price < Stock Price.

Stock Price	Strike Price	Strike Price Status	
40	30.00	ОТМ	
35	30.00	OTM	
30	30.00	ATM	0.00
25	30.00	ITM	
20	30.00	ITM	

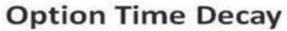
#### Time Value

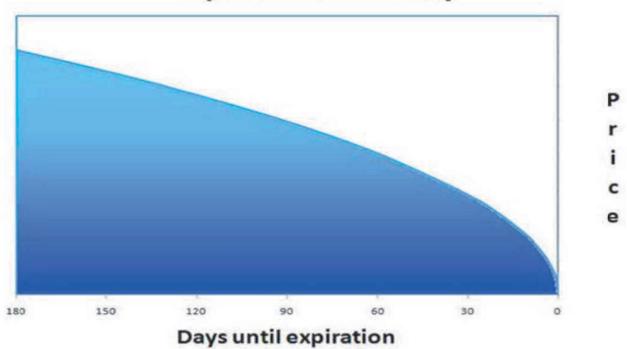
The amount a buyer is willing to pay for an option above its intrinsic value.

Time Value = Premium - Intrinsic Value

#### Time Value

The Time Value component of an options premium is greatest when the stock price and strike price are the same, i.e., at-the-money.





#### **Stock Price Behavior**

Statistical theory says that at any given moment, the odds are 50/50 as to which direction a stock's price is likely to go.

#### **Volatility**

Measures the fluctuation of a stock's price movement in a given period of time. It is expressed in terms of annualized percentage change, i.e., percent/year.

#### Which Stock is most Volatile?

Stock	52 Week High	52 Week Low	52 Week Avg.
GILD	110.64	58.81	84.72
WMT	81.37	71.51	76.44
MS	35.23	26.41	30.82

#### **Approximate Volatility**

=  $100 \times (52WkHigh - 52WkLow) / (52WkAvg)$ 

GILD = 61.17%

MS = 28.61%

WMT = 12.91%

#### **Volatility**

The probability that a stock's price will rise above or fall below a given price increases as volatility goes higher.

### **Volatility Analysis**

#### Implied Volatility

The estimated volatility of a security's price. In general, implied volatility increases when the market is bearish and decreases when the market is bullish. This is due to the common belief that bearish markets are more risky than bullish markets.

### **Volatility Analysis**

High Implied Volatility vs. Low Historical Volatility is Good for the Option Seller

Low Implied Volatility vs High Historical Volatility is Good for the Option Buyer

#### The Greeks

• <u>Delta:</u> Amount that an option's value changes per dollar of

stock price change.

Gamma: Amount that Delta changes per dollar of stock price

change.

• Theta: Amount that an option's value changes per unit

change in time.

• <u>Vega</u>: Amount that an option's value changes per unit

change in volatility.

• Rho: Amount that option value changes per 1% change in

interest rates.

### Premium vs. Strike & Expiration

#### WAG @ \$64.78/Share on 02/14/14\*

Call Strike	February	March	April	May
60	4.81/97	5.37/82	5.93/76	6.42/73
62.5	2.57/81	3.57/67	4.28/64	4.86/63
65	0.98/48	2.19/50	2.95/51	3.56/52
67.5	0.24/17	1.23/34	1.75/38	2.54/41
70	0.05/03	0.63/20	1.23/28	1.75/32

<sup>\*</sup>Premium/Delta