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## 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 $\quad 4.10 \rightarrow$<br>93 Call $2.90 \rightarrow$<br>97 Call $\quad 1.20 \rightarrow$

Which option would you buy?

## Quiz - Pick the Best Option

50 days to expiration

Stock
Days to Exp.
(50-day options)

> | > 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 > |

$92.80 \rightarrow 96.50$
$50 \rightarrow 40$
Estimated results in \$

## Quiz - Pick the Best Option

50 days to expiration
Stock
Days to Exp.
(50-day options)
91 Call
93 Call
95 Call
97 Call
$4.10 \rightarrow 6.40$
$2.90 \rightarrow 4.95$
$1.95 \rightarrow 3.70$
$1.20 \rightarrow 2.70$
$+2.30$
$+56 \%$
$+2.05$
$+70 \%$
Estimated results in \%

$$
\begin{aligned}
92.80 & \rightarrow 96.50 \\
50 & \rightarrow 40
\end{aligned}
$$

## Time Decay and Volatility

## ATM Call Option

Option premium erodes with the passage of time

- only time value affected - not intrinsic value
${ }^{\circ}$ erosion accelerates as expiration approaches



## Effects of Changing Volatility

| Change in Volatility <br> (Implied or Assumed) | Call <br> Prices | Put <br> Prices |
| :---: | :---: | :---: |
| Volatility $\uparrow$ | $\uparrow$ | $\uparrow$ |
| Volatility $\downarrow$ | $\downarrow$ | $\downarrow$ |

## 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



## Long 50 strike call $\$ 2.90$

## Two Greeks

Buy Call

Vega Theta<br>+. $10-0.03$

## Bull Call Spread Example



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

## Two Greeks

Bull Call Spread

Vega Theta<br>Long 50 Call $2.90 \quad+.10-0.03$<br>Short 55 Call $\underline{1.20}-\underline{-08}+0.02$<br>$\begin{array}{llll}\text { Net Debit } & 1.70 & +.02 & -.01\end{array}$

## Straddle vs Strangle

## Long Straddle Example



Long 50 ATM call $\$ 3.20$ Long 50 ATM put $\$ 3.00$ Net debit

## 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

Long 50 Call $3.20 \quad+.10-0.03$
Long 50 Put $\quad \underline{3.00} \quad+\underline{10}-\underline{0.03}$ Net Debit $6.20+.20-.06$

## Long Strangle Example



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

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

## Two Greeks

Long Strangle

Vega Theta<br>Long 55 Call $1.40 \quad+.06-0.02$<br>Long 45 Put $\quad \underline{1.05} \quad+\underline{06} \quad-\underline{0.02}$ 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

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\$ 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 $\$ 42$

| $\frac{\text { 60-day }}{39}$ |  | Calls |  |
| :---: | :---: | :---: | :---: |
| 40 | $\$ 4.20$ | $\$ 1.15$ |  |
| 41 | $\$ 3.55$ | $\$ 1.55$ |  |
| 42 | $\$ 3.00$ | $\$ 1.95$ |  |
| 43 | $\$ 2.50$ | $\$ 2.45$ |  |
| 44 | $\$ 2.05$ | $\$ 3.00$ |  |
| 45 | $\$ 1.65$ | $\$ 3.65$ |  |
| 45 | $\$ 1.35$ | $\$ 4.30$ |  |

Buy 160 -day XYZ 40 put at $\$ 1.55$
Sell 1 60-day XYZ 44 Call at $\$ 1.65$ 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 <br> \$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!

