Option Winged Spreads
Lesson 6

Beginner Options Teaching Lessons

Butterfly Trades

SHADOW TRADER

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Topics for this Lesson:

Winged Trades:

The Butterfly Spreads

- The Long Butterfly
- The Iron Butterfly
- Broken Winged Variants

Winged Spreads Structure

Butterflies optimize a stagnant trend – “delta neutral”

BUT – have a “target price” that determines option strikes

Two types of winged trades: ‘long’ winged and ‘iron’ winged

Long butterfly	Debit	Calls **or** puts	3 Strikes - Long, 2X short, long
Iron butterfly	Credit	Call **and** puts	3 Strikes - Long, short, short, long

- All options are in the same month of expiration
- We choose the strike prices based on a number of factors for each strategy
- Commissions paid are a concern in these trades

Butterfly Comparisons

3 strikes

Generally:

- Less risk
- High reward
- Low probability

Long

- Either puts or calls
- Debit
- In the money - generally

"Iron"

- Both puts and calls
- Credit
- Out of the money

Long butterfly spread or simply butterfly spread

Expectation:

- Stock will remain stagnant
- Stock will ‘pin’ around a particular strike price at option expiration

Structure: Can be either calls or puts:

- Long option (WING)
- 2 x short options (BODY)
- Long option (WING)

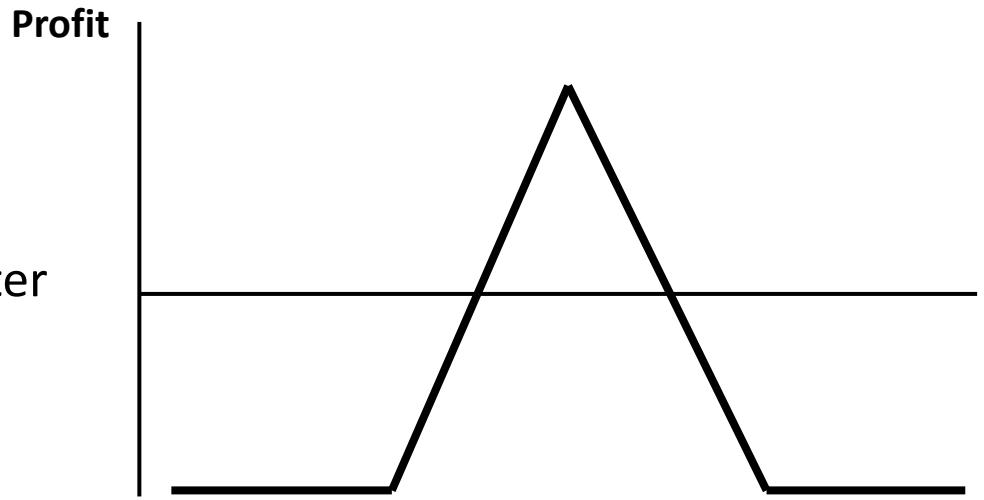
Call butterfly: **Bull call + bear call** with same short call strike

- Long all, 2X short call, long call

Put butterfly: **Bull put + bear put** with same short put strike

- Long put, 2X short put, long put

Butterfly is a debit trade



Maximum risk = Debit

Maximum reward = Spread with the greater difference between strikes (if they are not the same on both sides) – debit

Break even Points:

- Lower break even: Lowest strike + risk
- Upper break even: Highest strike – risk

- If the stock is between break even points at options expiration, the trade is profitable
- Maximum profit is achieved if the stock is at the short option strike at expiration
- What is the probability that stock will finish at this price?
- Wider strikes = More debit = Higher probability = Less profits
- Longer expiration = Lower cost = Less probability = More profits

General setup:

- Our expectation is a “pin” price
- Avoid news or earnings announcements for the duration of the trade
- Avoid equities with very high implied volatility (higher than about 50%)

Selecting strike prices:

- Select the short option strike where you expect it to expire, usually at the money
- Typically - long option strikes one or two strikes above and below

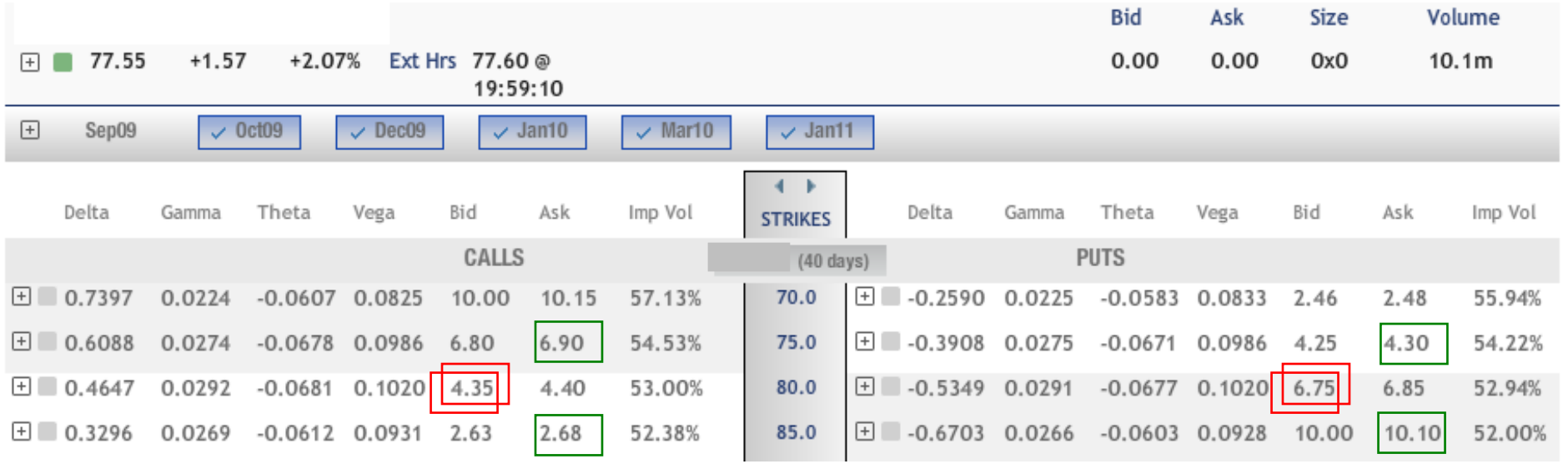
Select near term month options

Primary exit:

- Equity ‘pins’ at short option strike
- Close at % return, try to close a few days before expiration

Secondary exits:

- Close at theoretical break even
- Close the trade at a % net loss
- Bearish trend:
  - Add a long option to create a ratio back spread
  - Take possession of stock and collar it (put butterfly)
  - Roll the trade out of the money and further out in time
- Bullish trend:
  - Add a long option to create a ratio back spread
  - Roll the trade out of the money and further out in time



					Bid	Ask	Size	Volume
77.55	+1.57	+2.07%	Ext Hrs	77.60 @ 19:59:10	0.00	0.00	0x0	10.1m

Sep09 | Oct09 | Dec09 | Jan10 | Mar10 | Jan11

CALLS Delta	Gamma	Theta	Vega	Bid	Ask	Imp Vol	STRIKES (40 days)	PUTS Delta	Gamma	Theta	Vega	Bid	Ask	Imp Vol
0.7397	0.0224	-0.0607	0.0825	10.00	10.15	57.13%	70.0	-0.2590	0.0225	-0.0583	0.0833	2.46	2.48	55.94%
0.6088	0.0274	-0.0678	0.0986	6.80	6.90	54.53%	75.0	-0.3908	0.0275	-0.0671	0.0986	4.25	4.30	54.22%
0.4647	0.0292	-0.0681	0.1020	4.35	4.40	53.00%	80.0	-0.5349	0.0291	-0.0677	0.1020	6.75	6.85	52.94%
0.3296	0.0269	-0.0612	0.0931	2.63	2.68	52.38%	85.0	-0.6703	0.0266	-0.0603	0.0928	10.00	10.10	52.00%

75/80/85 Call butterfly:
$6.90 - 2 x ($4.35) + $2.68 = $0.88
Maximum Risk:
Net debit $0.88
Maximum return:
“Pegs” (or “Pins”) the short strike
Spread – debit
$5.00 – 0.88 = $4.12
Break even:
Lower strike + net debit
Higher strike – net debit

75/80/85 Put butterfly:
$4.30 - 2 x ($6.75) + $10.10 = $0.90
Maximum Risk:
Net debit $0.90
Maximum return:
“Pegs” (or “pins”) the short strike
Spread – debit
$5.00 – 0.90 = $4.10
Break even:
Lower strike + net debit
Higher strike – net debit

Iron butterfly spread

Expectation:

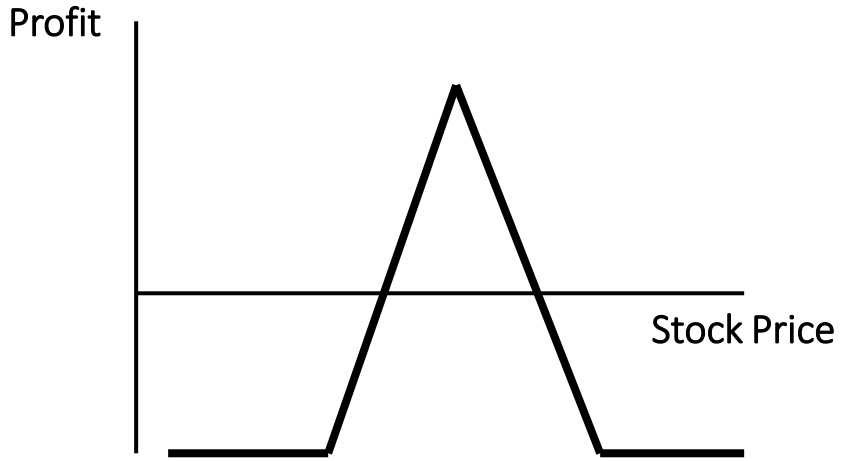
- Stock will remain stagnant
- Stock will remain within a range at option expiration

Structure:

- Long put
- Short put (the bull put)
- Short call
- Long call (the bear call)

Iron butterfly: **Bull put + bear call** with **same** short option strike

Iron butterfly is a credit trade



Maximum reward = Credit

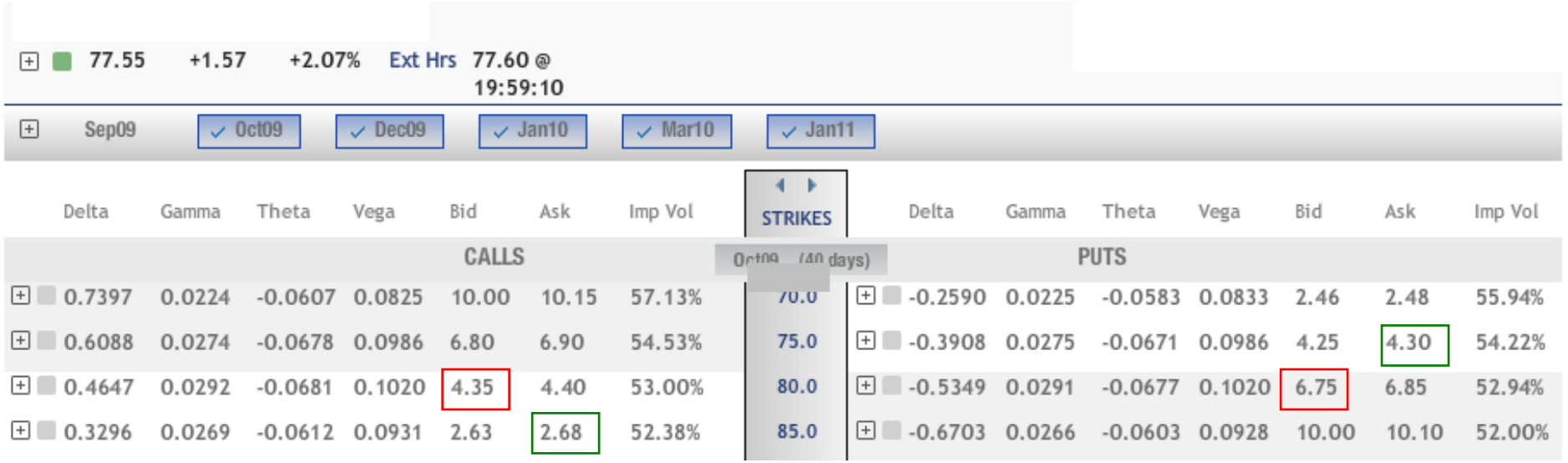
- Maximum risk= Spread with the greater
- amount of risk (if they are not the same
- on both sides) – credit

Break even Points:

- Lower break even: Short put strike – credit
- Upper break even: Short call strike + credit

- If the stock is between break even points at options expiration, the trade is profitable
- Maximum profit is achieved if the stock is at the short option strike at expiration

Comparing the Long Butterfly to the Iron Butterfly



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75/80/85 call butterfly:
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Maximum risk:
Net debit $0.88
Maximum return:
"Pegs" (or "pins") the short strike
Spread – debit
$5.00 – 0.88 = $4.12
Break even:
Lower strike + net debit
Higher strike – net debit

75/80/85 iron butterfly:
$4.30 - $6.75 - $4.35 +$2.68 = -$4.12
Maximum risk:
Spread - net credit:
$5.00 - $4.12 = $0.88
Maximum return:
Credit = $4.12
Break even:
Lower strike + risk
Higher strike – risk

75/80/85 put butterfly:
$4.30 - 2 x ($6.75) + $10.10 = -$0.90
Maximum risk:
Net debit $0.90
Maximum return:
"Pegs" (or "pins") the short strike
Spread – debit
$5.00 – 0.90 = $4.10
Break even:
Lower strike + net debit
Higher strike – net debit

Defining Exit Points - debit butterfly