

The Risk Reversal

February 24, 2024

Contents

1 The Risk Reversal	1
1.1 What	1
1.2 Recommendations	1
1.3 Risk/Reward	2
1.4 Examples	2
1.5 When	2
1.6 Pros	3
1.7 Cons	3
1.8 The Greeks of Risk Reversal	3

1 The Risk Reversal

1.1 What

- The Risk Reversal is essentially the strategy that would work for somebody that is convinced that a particular Underlying will move in a certain direction, and they want unlimited profit potential. They don't really care about the risk, but they want reduce the initial premium they pay.
- Bullish Risk Reversal
 - Buy a Call Option on a certain Underlying, with a certain expiration date.
 - Sell a Put Option on that same Underlying, with that same expiration date.
- Choose the strike prices of the Options so the sold Put finances the long Call.
 - It is a bullish strategy. you'll make money as long as the underlying moves up.
- Bearish Risk Reversal
 - Buy a Put Option on a certain Underlying, with a certain expiration date.
 - Sell a Call Option on that same Underlying, with that same expiration date.
- Chose strike prices of the Options so that the sold Call finances the long Put
 - It is a bearish strategy. You'll make money as long as the Underlying moves down.

1.2 Recommendations

- We recommend the buying of the Option be:
 - Either slight ITM, ATM, or very slightly OTM.
 - Less than .5 SD away from the current price levels, with at least 40% chance of expiring ITM.
 - An Option you would feel confident buying on its own.
- We recommend the selling of the Option be:
 - OTM
 - Around 1.5 SD away from the current price levels, with less than 20% probability of being ITM on expiration day.
 - While your goal for this sold Option is to finance the purchase of the long Option, be careful as the risk is high.

1.3 Risk/Reward

- Maximum profit: Unlimited
- Maximum risk: Unlimited
- Breakeven

Bullish Risk Reversal: Strike price plus the total premium paid (call premium spent minus put premium received).

Bearish Risk Reversal: Strike price minus the total premium paid (put premium spent minus the call premium received).

1.4 Examples

1. Bullish Risk Reversal Examples: You buy the ORTY \$40 Oct15 Call for \$5, and you sell the ORTY \$30 Oct15 Put for \$5

(a) Scenario A

- In October, ORTY trades at \$50. Since \$50 is higher than the Call's strike price, the Call you bought is \$10 ITM, so you're up \$10. While it's true that you paid \$5 to buy the call initially, since you also received \$5 from the sale of the Put, you spent nothing and you get to keep the full \$10.

(b) Scenario B

- In October, ORTY is trading for \$20. Since \$20 is lower than the call's strike price, the bought Option is worthless. The sold Put however, is \$10 ITM, so you are out \$10. Since the premium paid is compensated by the premium received, the \$10 loss remains.

2. Bearish Risk Reversal Examples: You buy the ORTY \$40 Oct15 Put for \$5, and you sell the ORTY \$50 Oct15 Call for \$5.

(a) Scenario A

In October, ORTY trades at \$30. Since \$30 is lower than the Put's strike price, the Put you bought is \$10 ITM, so you're up \$10. Meanwhile, the Call you sold has expired worthless. While it's true that you paid \$5 to buy the Put initially, since you also received \$5 from the sale of the now worthless Call, you spent nothing. So you get to keep the full \$10 profit.

(b) Scenario B

In October, ORTY trades at \$60. Since \$60 is higher than the Put's strike price, the bought Option expires worthless. The sold Call however, is \$10 ITM, and that is your loss. Since the premium paid is compensated by the premium received, the \$10 loss remains.

1.5 When

1. Bullish Risk Reversal

- This is a strategy for those who are very sure that the Underlying will rise in price before the Option expires. It is especially attractive in Underlyings which you are very bullish, and which you do not anticipate any down movement in the near future. You should avoid doing risk reversal in stocks in which you are unsure about direction, or stocks that you suspect might experience a correction from an overbought situation.
- The best setup is to find stocks in which the volatility of the Puts (and therefore their price) is higher than that of the Calls. That allows for the selling of the Put to finance the buying of the Call to be easier and less risky. Most Underlyings trade with slightly more expensive puts than Calls (call/put skew), so optimal scenarios for bullish risk reversals are easier to find than those for bearish risk reversals.

2. Bearish Risk Reversal

- This is a strategy for those who are very sure that the Underlying will fall in price before the Options expire. It is especially attractive in Underlyings in which you are very bearish, and in which you do not anticipate any up movement in the near future. You should avoid doing risk reversals in stocks where you are unsure about direction, or where you suspect a correction from an oversold situation might occur.
- The best setup is to find stocks in which the volatility of the Calls (and therefore their price) is higher than that of the Puts. That allows for selling of the Call to finance the buying of the Put to be easier and less risky. Finding these situations is rare, but they can be found in momentum-driven stocks that have gone through a speculative buying frenzy.

1.6 Pros

- If done well, you are essentially buying an Option, and its unlimited profit opportunities, for free.
- As a result, you increase your probabilities of success, and they will be significantly better than the ones you would have had had you just bought the Option.
- If the Underlying moves significantly towards your predicted direction, you stand to make massive amounts of money, with no limits. These are the trades in which +500% returns on one trade are not unheard of.

1.7 Cons

- You need the Underlying to move in your predicted direction. This means that you only make money if the Underlying moves one way.
- Since, aside from buying an Option, you are also selling one “naked”, you face unlimited risk on the direction of your sold Option. If the Underlying were to move against you, you could end up with massive losses, with no “premium received” to alleviate them.
- As it is a more complex strategy than buying naked, be prepared to pay more in commissions and don’t expect your order to get filled as fast.
- Both your maximum profit and your maximum risk are undefined, and therefore, they are unknown when you enter the trade.

1.8 The Greeks of Risk Reversal

- Δ : Depends
 - Doubly positive for bullish risk reversals
 - Doubly bearish for bearish risk reversals
- Θ : Neutral
 - The sold and the bought Options offset each other’s effect.
- Vega: Neutral
 - Again the sold and the bought Option offset each other’s effect.