All values are in USD Report Date: August, 21, 2023 Ticker: JPM231020P000155000

Married Put (Also Called a Protective Put) Option Strategy Writeup

Option Price: 9.6800 DELTA: -0.607 | GAMMA: 0.024 | THETA: -0.054 | VEGA: 0.242 | RHO: -0.179 Stock Price: 150.19

What is the Strategy: A Married Put is a pair trade using an option and a stock (Long Stock and Long Put).

When to Use Strategy: Use if you are long a stock and you are worried that the stock might decline in the near future and you don't want to sell the stock. Why would you not want to sell the stock? Perhaps you have owned the stock for a long time and you don't want to sell it or you will have to pay high taxes. Or maybe you are going on your honeymoon for a month and you own a stock that you don't want to sell....so you marry the stock with a put in order to protect you from the stock crashing. With this strategy worst case, the stock tanks and your downside is limited to what you paid for the put. The best way to fully understand this strategy is to please look at the chart below.

Profit and Loss Analysis

Strike -->

If IPM < 155.00 Put ITM.

If IPM = 155.00 Put ATM.

If IPM > 155.00 Put OTM.

*MAX PROFIT = the amount collected from selling or buying the maximum profit from the stock and the option at expiration, which all in (the Option Price and the Option at Expiration and Stock profit) equals 15,613.00 (including the 100 multiplier).

*MAX LOSS = the amount the Option, which is: -9.68 PLUS the Option, which is: -9.68 PLUS the maximum loss from the stock and the option at expiration. which all in (the Option Price and the Option at Expiration and Stock profit) equals -487.00 (including the 100 multiplier).



Greeks & Stats. Analysis

DELTA: -0.607 | GAMMA: 0.024 | THETA: -0.054 | VEGA: 0.242 | RHO: -0.179

The DELTA of -0.6073 means for every \$1 that JPM goes up or down in price, the value of the option price (which is 9.6800) goes up or down between 0 and 1 dollar if it's a Call Option and up or down between 0 and -1 if it's a Put Option. In this case for every dollar the stock goes up, the option changes by -0.6073. If you multiply this by the 100 multiplier, this means the option contract value change is -60.73.

The GAMMA is the rate of change of the DELTA for every \$1 change in the stock price. Currently JPM's stock price is 150.19 and the DELTA is -0.61 and the GAMMA is 0.02. If you incrased the stock price by \$1 to 151.19, then you will see that the new DELTA becomes the current DELTA of -0.61 plus the current GAMMA of 0.02, which equals -0.58.

THETA means Time Decay. THETA of -0.0538 means for every day that we get closer to the options Expiration Date for JPM, then we can expect the Option Price to change by -0.0538 daily. This change in value accelerates as we get closer to the Expiration Date. THETA is ALWAYS negative as the value of the Option Price decreases as we approach the Expiration Date. If you increase the Expiration Date by 1 week day (trading day), you will see that the Option Price decreased from the current price of 9.6800 by the THETA of -0.0538 to a lower price of approximately 9.6262.

VEGA means how much the Option Price changes as Volatility changes. If we take Vega times the change in the Volatility, this = the new Option Price. Since VEGA is 0.2424, this means that if we increase or decrease the current Volatility, then the change in the Option Price will be Vega times the change in the Volatility. If we increase the current volatility from 25.567% to an increase of 1%, which is 26.567% and you will see that the current options price of 9.6800 increases in price by the VEGA of 0.2424 to approximately 9.9224. If you decrease the volatility, you will see that the option price falls. Vega is highest when the option is At The Money. The farther away the underlying stock or ETF is from the Strike Price, the lower the Vega (regardless of whether the underlying stock or ETF price is In The Money or Out of The Money). Also, the more time there in until the Expiration Date, the higher the Vega. Also, when GAMMA is high, so is VEGA.

RHO only matters a lot if interest rates are high. Rising interest rates increases the value of a Call Option and decreases the value of a Put Option. The RHO of -.1793 means that for every 1% change in the interest rate, the price of the option changes by -.1793.

Option Thesis/Strategy

This is a defensive position to long a PUT while holding the equity still.

I plan to sell the option prior to the end of the Expiration Date of October/20/23.

I already own shares in JPM and this is a defensive position in case the stock of JPM goes down by the Expiration Date of October/20/23.

The amount of risk I am taking on by putting on the Option Position, which is at least 968.00 is Between 5% and 10% of my portfolio.