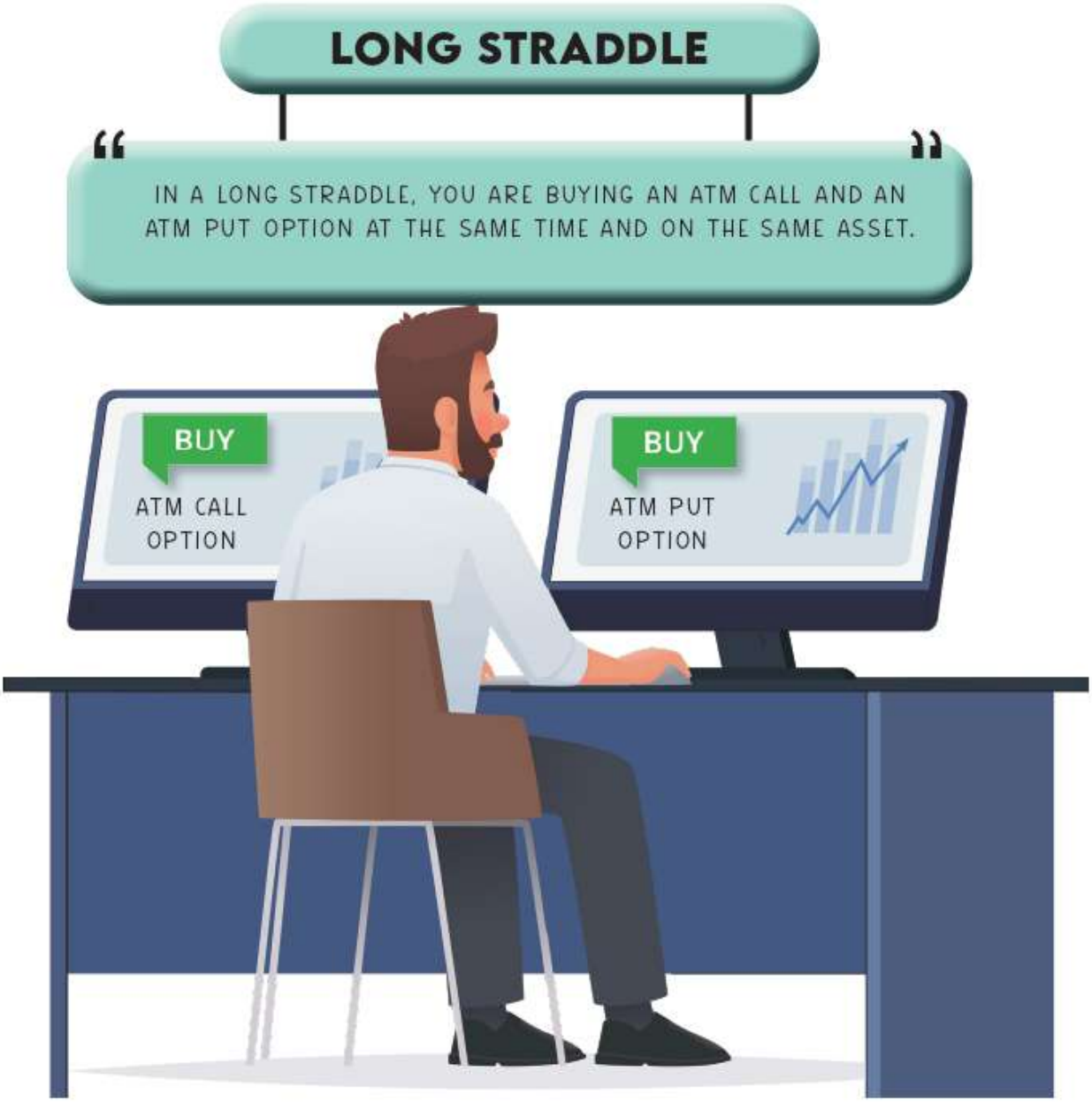
10.5 STRADDLE OPTION STRATEGY

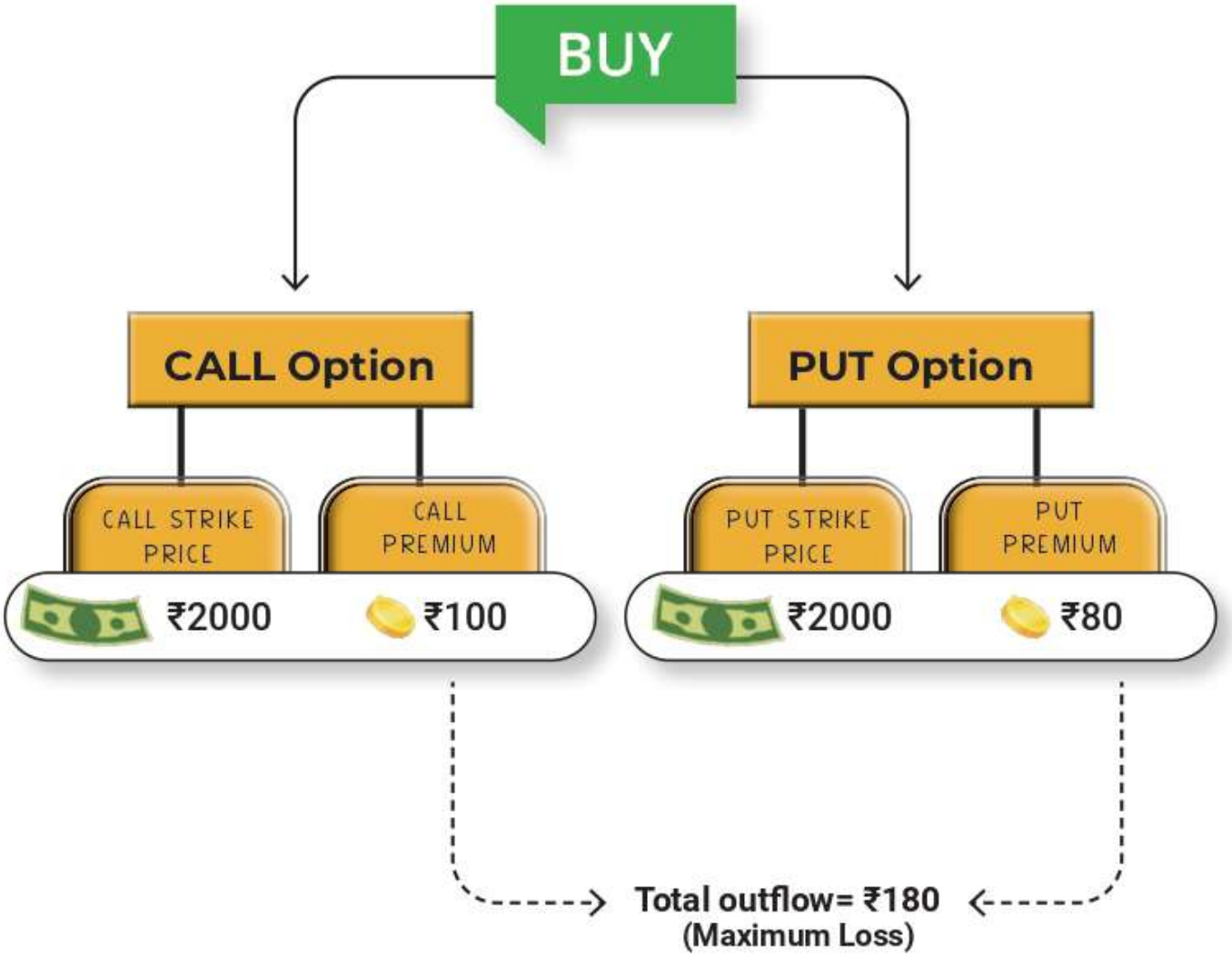
Explainer Video

Straddle is another strategy used for trading purposes and not for hedging. We may either have Long Straddle or a Short Straddle.



The Strike Price of the two is also the same or very close to each other and even the time to expiry. The Lot size of both the options is also the same. The expectation here is that the market would move either way (up or down) with some significant movements.

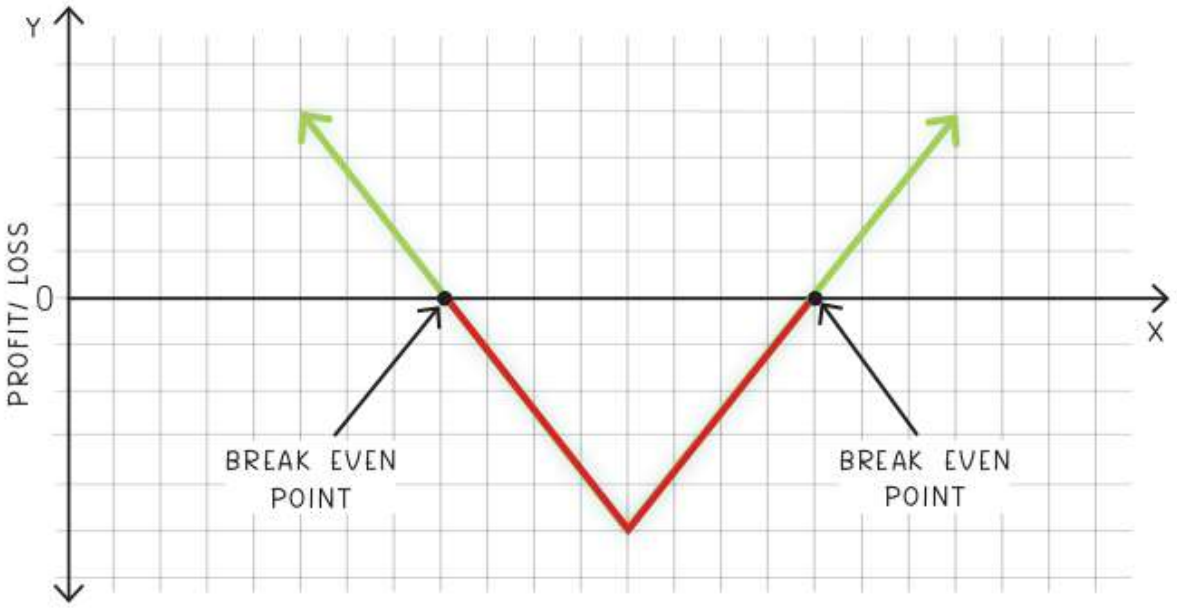
For instance, we have a stock at CMP = ₹2000.
With this, to create a straddle, we will buy a Call and a Put at a Strike Price of ₹2000.
The respective premiums for the two are,Call Premium = ₹100, Put Premium = ₹80.
The time to expiry and Lot size being the same.



Now, in this strategy, we want the price movement in the markets to be huge. The direction does not matter but high volatility does. If the price does not move more than ₹180, we would have loss. Straddle is a strtegy that is used when you expect high volatility but do not want to guess the direction. Here, if the stock moves in either direction by ₹180, the strategy will be profitable, else loss making.

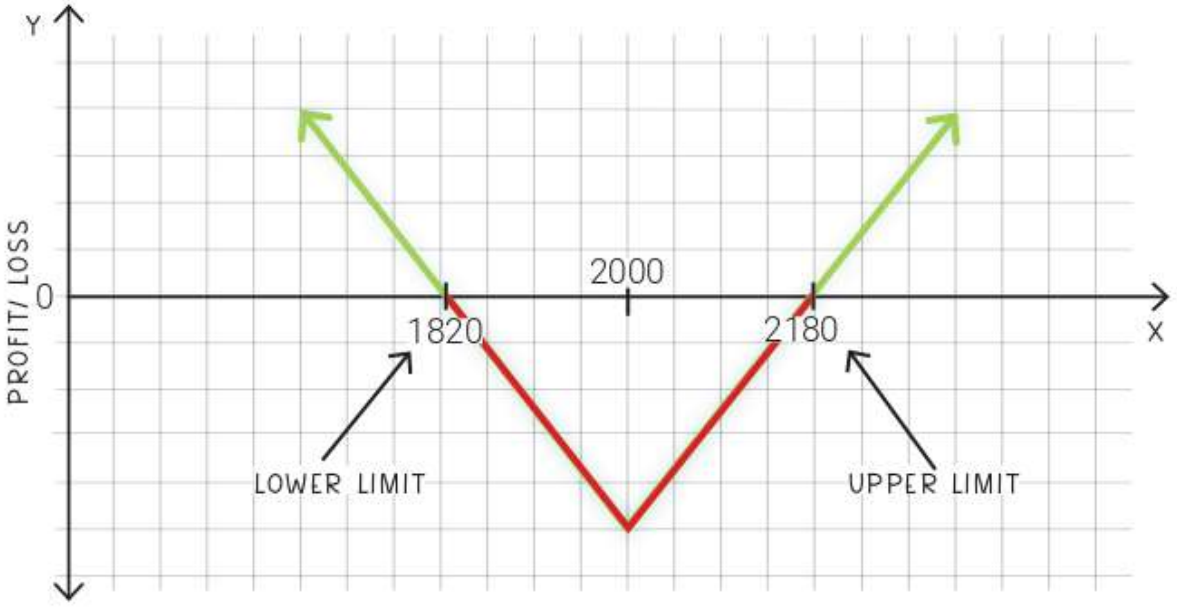
We want the price movement to be beyond a range with respect to this premium amount.

BREAK EVEN POINT = STRIKE PRICE +/ – TOTAL PREMIUM.



In this case, we want the price to move beyond the range of ₹1820 – ₹2180. The lower limit here is the ₹1820 (₹2000 – ₹180). For us to have success with this strategy, we want the price movement to be below this lower limit.

Alternatively, the upper limit is ₹2180 (₹2000 + ₹180). Again, we want the price to cross this upper limit.



In this strategy, we are not forecasting the direction of the movement. We are just trading based on our assumption of high volatility.

SHORT STRADDLE

"IN A SHORT STRADDLE, YOU ARE SELLING AN ATM CALL AND AN ATM PUT OPTION AT THE SAME TIME AND ON THE SAME ASSET. SHORT STRADDLE IS A STRATEGY TO FOLLOW WHEN YOU EXPECT LOW VOLATILITY."

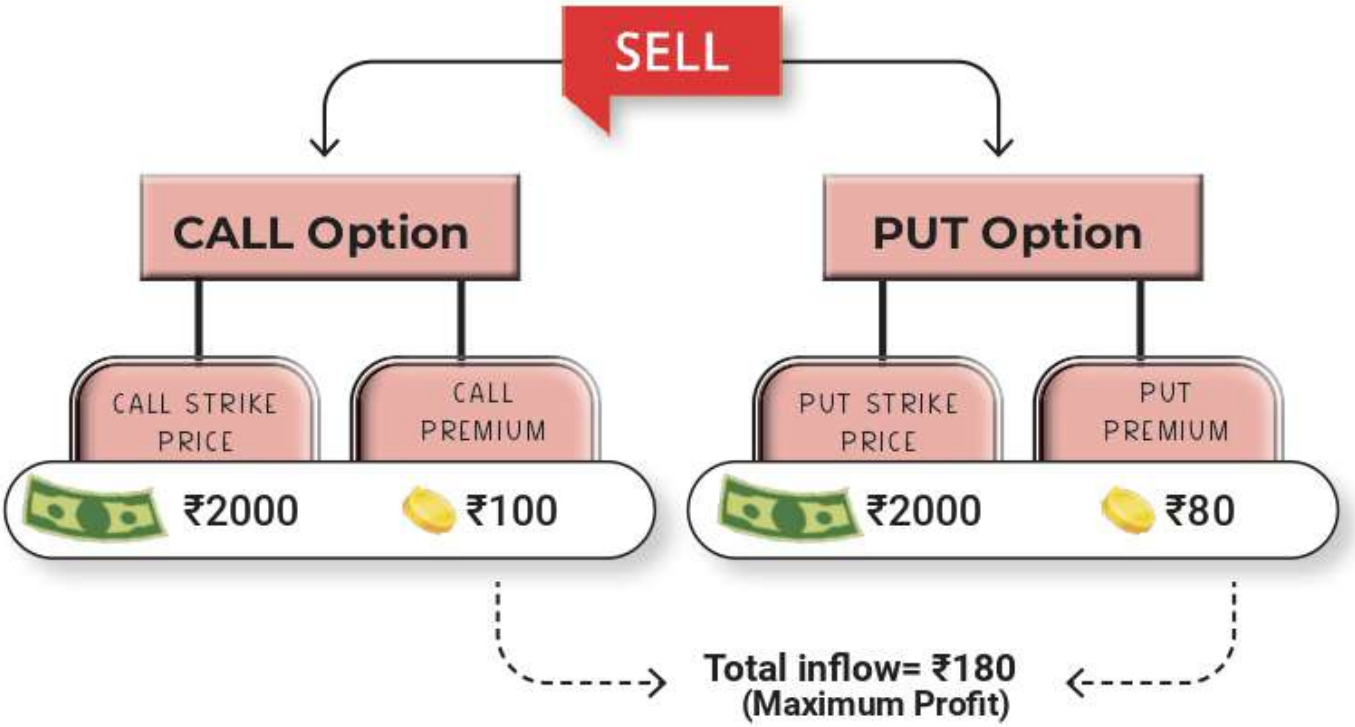
The Strike Price of the two is also the same or very close to each other and even the time to expiry.

The Lot size of both the options is also the same.

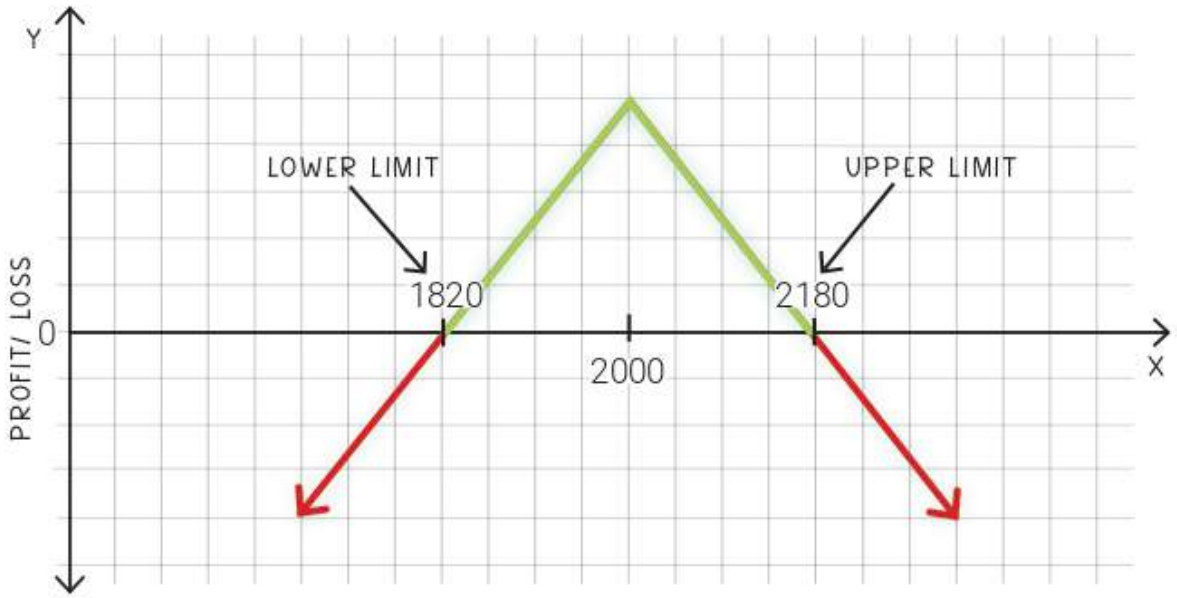
The expectation here is that the market would have low volatility. It would not move in either direction by a significant amount.

THE OBJECTIVE WITH SUCH A STRATEGY IS AGAIN TO COLLECT PREMIUM AS PROFIT AND HAVE NO PAYOFF AGAINST IT AT EXPIRY.

For instance, again, we have a stock at CMP = ₹2000. With this, to create a short straddle, we will sell a Call and a Put at a Strike Price of ₹2000. The respective premiums for the two are,Call Premium = ₹100, Put Premium = ₹80. The time to expiry and Lot size being the same.

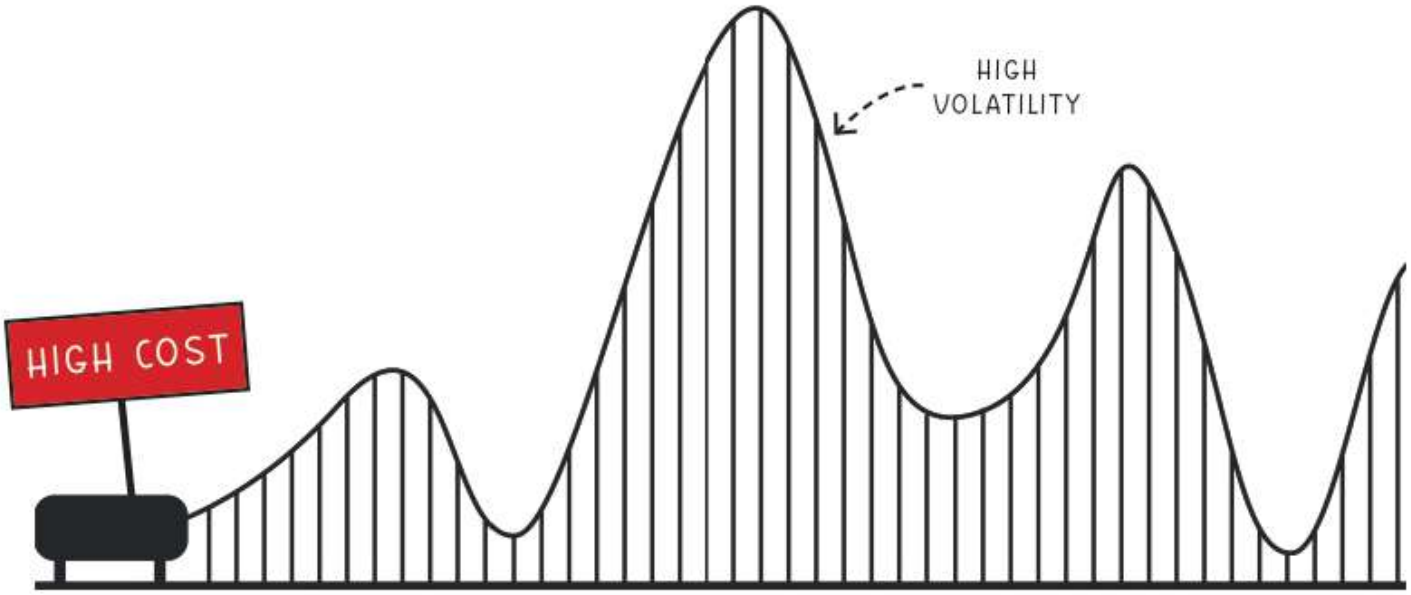


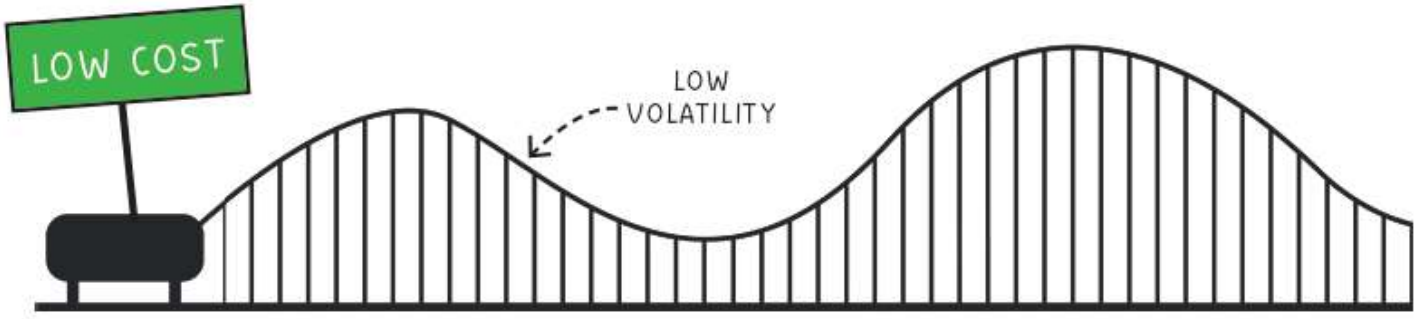
Now, in this strategy, we want the price movement in the markets to be low (limited to a range). The direction does not matter but low volatility does. If the price moves more than ₹180, we would have a loss. We want the price movement to be limited to a range with respect to this amount.
Limited Range = Strike price +/ – Total Premium.
In this case, we want the price to move within the range of ₹1820 – ₹2180.



Again as we discussed, we do not have any position on the direction of the movement. We are taking a position on the expected volatility. When we use short straddle, we want low volatility i.e. the price to be in the range of ₹1820 and ₹2180 in this case.

Now, as we studied in the option pricing chapter. One of the factors that affect option pricing is volatility. Since a straddle is based on volatility expected in the market, the cost of the straddle may change. So, if the market is highly volatile, the cost of straddle increases. The cost of straddle therefore is high when the market as a whole expects high volatility going ahead.





Similarly, as the market shows low volatility, the premium received from short straddle would be reduced.

We can even get creative with this strategy by buying different call options and put options. We can modify the strategy and experiment and evaluate payoffs, risk and reward under different circumstances.

SUMMING UP

STRADDLE OPTION STARTEGIES