IndusInd Bank

GROUP 26

# Option Trading Strategies


| | |
|---|---|
| KOMALI TUSHAR REDDY | 2020B3TS1381H |
| SHASHANK SRIKANTH | 2020A5PS2583H |
| DIYA SINGHAL | 2020A1PS2438H |
| AKSHIT ADITYA | 2020A1PS2509H |
| ANHADVIR SINGH | 2020A5PS2571H |

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# STRATEGY 1

Near month view- Moderately bullish.


On the daily time frame, the stock looks bullish as the 20 EMA (blue line) crossed over the 50 MA (yellow line), which means that the stock is performing better than what it was initially performing. Here MA refers to the moving average or simple moving average, and EMA refers to the exponential moving average. EMA considers fewer candlesticks while giving out the direction.

For moderately bullish, we can use a bull call spread:

In a bull call spread, we take a position in a long call with a lower strike price (K1) and a short call with a higher strike price (K2) but the exact date of expiry

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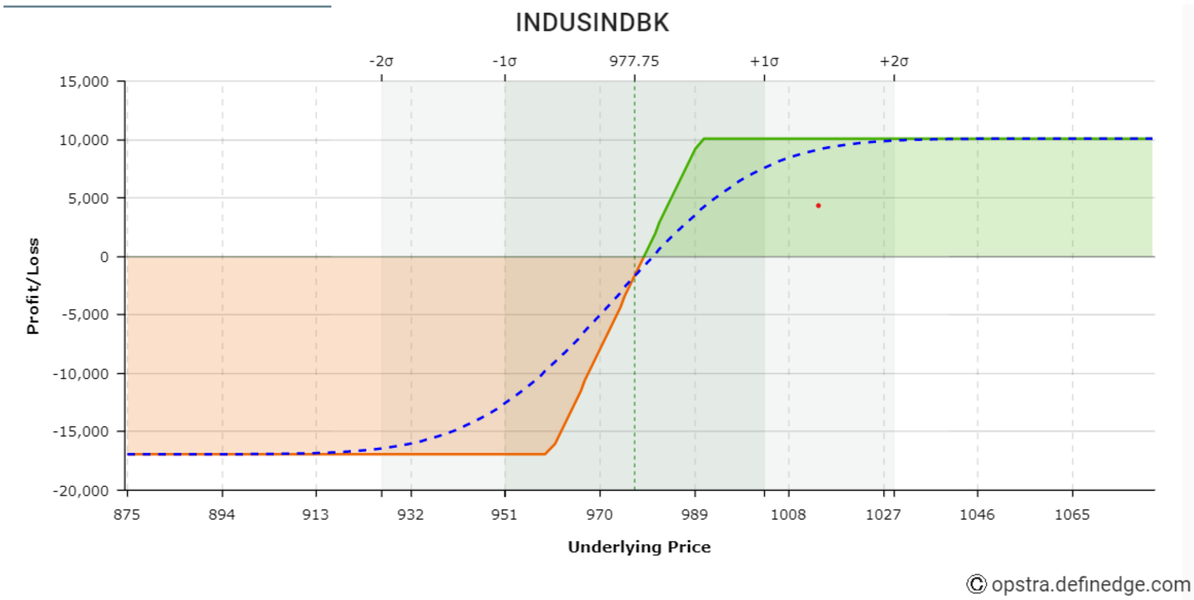



+1x 28APR2022 960CE - ₹ 22.8 (0)

-1x 28APR2022 990CE - ₹ 4 (0)

| | |
|---|---|
| Prob. of Profit | 48.07% |
| Max. Profit | ₹ +10,080 (32.73%) |
| Max. Loss | ₹ -16,920 (-54.94%) |
| Max. RR Ratio | 1:0.6 |
| Breakevens | 979.0 |
| Total PNL | ₹ 0 |
| Net Credit | ₹ 0 |
| Estimated Margin/Premium | ₹ +30,799 |

| | | St<K1 | | k1<St<k2 | | St>K2 |
|---|---|---|---|---|---|---|
| | | | | | | |
| long call | | 0 | | St-960 | | St-960 |
| short call | | 0 | | | 0 | 990-St |
| Payoff | | 0 | | St-960 | | 30 |
| profits | | 18.8 | | st-941.2 | | 48.8 |
| | | | | | | |
| | | c1=22.8 | | | | |
| | | c2=4 | | | | |

# Strategy 2

Next month's view- Neutral (Range bound)

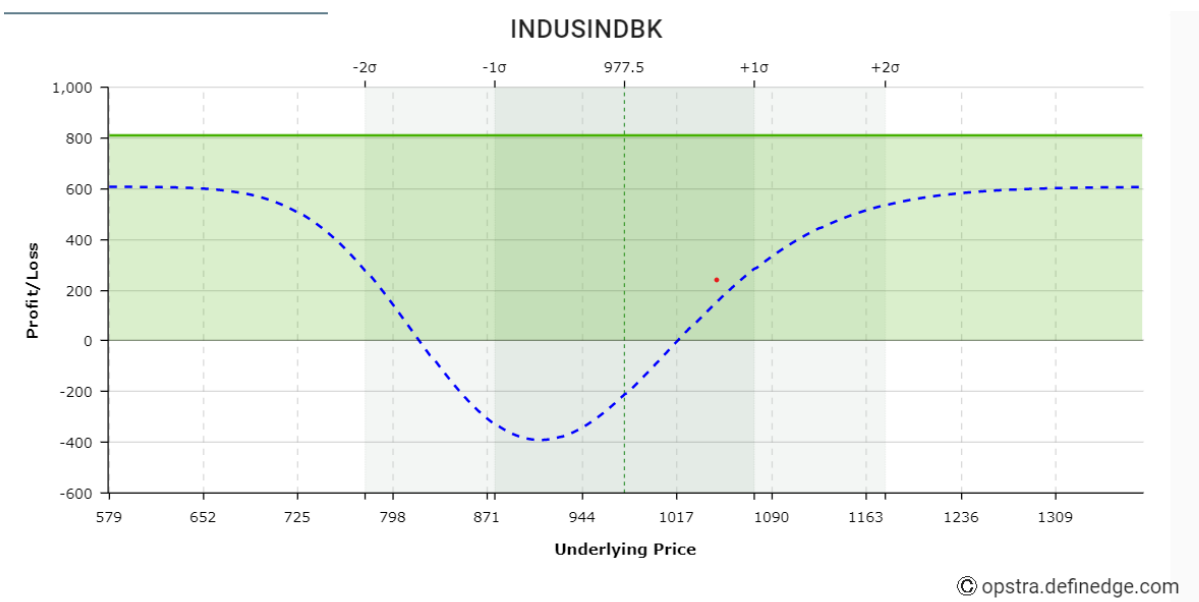

Technical analysis:

On a weekly timeframe, the stock looks direction neutral. Between the support and resistance, the stock price is in the middle, indicating that the price can go in either direction. The 50-day moving average is also flat, which shows the price to be neutral. To support the principle of neutral movement, the stochastic RSI also shows a crossover (i.e., the intersection of the red and blue line)

As the stock is direction neutral, the strategy to be used is Box spread.

Box spread:
Combining bull call spread and bear put spread. In this strategy, stock price movement at maturity does not matter. In this strategy payoff is always the difference between the strike prices.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bull Call | | St<K1 | | K1<St<K2 | | St>K2 | | K1=900 |
| | | | | | | | | K2=1000 |
| Long call | | 0 | | St-900 | | St-900 | | C1=92.6 |
| Short Call | | 0 | | 0 | | 1000-St | | C2=31.1 |
| Payoff 1 | | 0 | | St-900 | | 1000-St | | P1=49.05 |
| | | | | | | | | P2=11.45 |
| Bear Put | | St<K2 | | K1<St<K2 | | St>K2 | | |
| | | | | | | | | |
| Long Put | | 1000-St | | 1000-St | | 0 | | |
| Short Put | | St-900 | | 0 | | 0 | | |
| Payoff 2 | | 100 | | 1000-St | | 0 | | |
| | | | | | | | | |
| Box profits=K2-K1+C2-C1+P1-P2 | | | | Box payoff= K2-K1 =100 for each range | | | | |
| | | | | | | | | |
| Box Profit =76.1 | | | | | | | | |



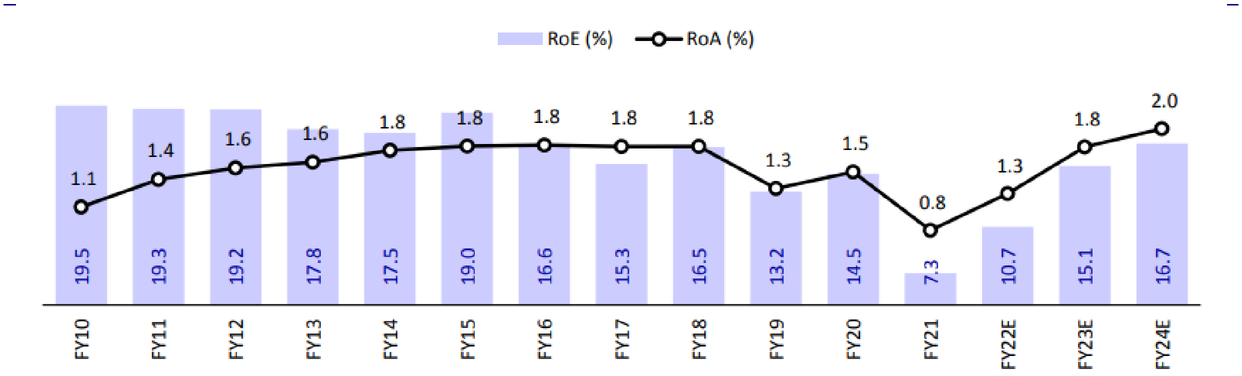
| | |
|---|---|
| +1x 26MAY2022 900CE - ₹ 92.6 (0) | |
| -1x 26MAY2022 1000CE - ₹ 31.1 (0) | |
| +1x 26MAY2022 1000PE - ₹ 49.05 (0) | |
| -1x 26MAY2022 900PE - ₹ 11.45 (0) | |

| | |
|---|---|
| Prob. of Profit | 99.5% |
| Max. Profit | ₹ +810 (1.32%) |
| Max. Loss | ₹ 0 (0.00%) |
| Max. RR Ratio | NA |
| Breakevens | 0 |
| Total PNL | ₹ 0 |
| Net Credit | ₹ 0 |
| Estimated Margin/Premium | ₹ +61,583 |

# 1 Month View: **Neutral**


The IIB stock has delivered a healthy (24%) return over the past two months. A difficult business environment and slow corporate loan growth have been the major roadblocks. However, IIB has been working on improving its liability franchise positively which will go on to reduce funding costs. The bank is witnessing a healthy recovery as it reported a QoQ growth of ~5% over 2QFY22.

**Exhibit 2: Return ratios stood healthy and consistent with a RoA of ~1.8%. In FY21, return ratios moderates sharply with a RoA/RoE of 0.8%/7.3%**




Source: Company, MOFSL

IIB has also ramped up its focus on retail deposits which has shown almost a 40% increase in segment growth over the past few quarters

Additionally, according to analyst reports, moving averages for this stock are moderately bullish while most technical indicators point toward a neutral movement.

**TECHNICAL INDICATORS**

2 3 2

| Indicator | Level | Indication |
|---|---|---|
| RSI(14) | 49.85 | Neutral |
| MACD(12,26,9) | -31.40 | Bearish |
| Stochastic(20,3) | 65.20 | Bullish |
| ROC(20) | 55.28 | Bullish |
| CCI(20) | 33.30 | Neutral |
| Williamson%R(14) | -61.13 | Bearish |
| MFI(14) | 46.93 | Neutral |

**MOVING AVERAGES**

4 2

| Period | SMA | Indication |
|---|---|---|
| 5 | 918.98 | Bullish |
| 10 | 970.34 | Bullish |
| 20 | 919.84 | Bullish |
| 50 | 1,187.96 | Bearish |
| 100 | 1,118.30 | Bearish |
| 200 | 650.02 | Bullish |

**TECHNICAL RATING** Trend — NEUTRAL

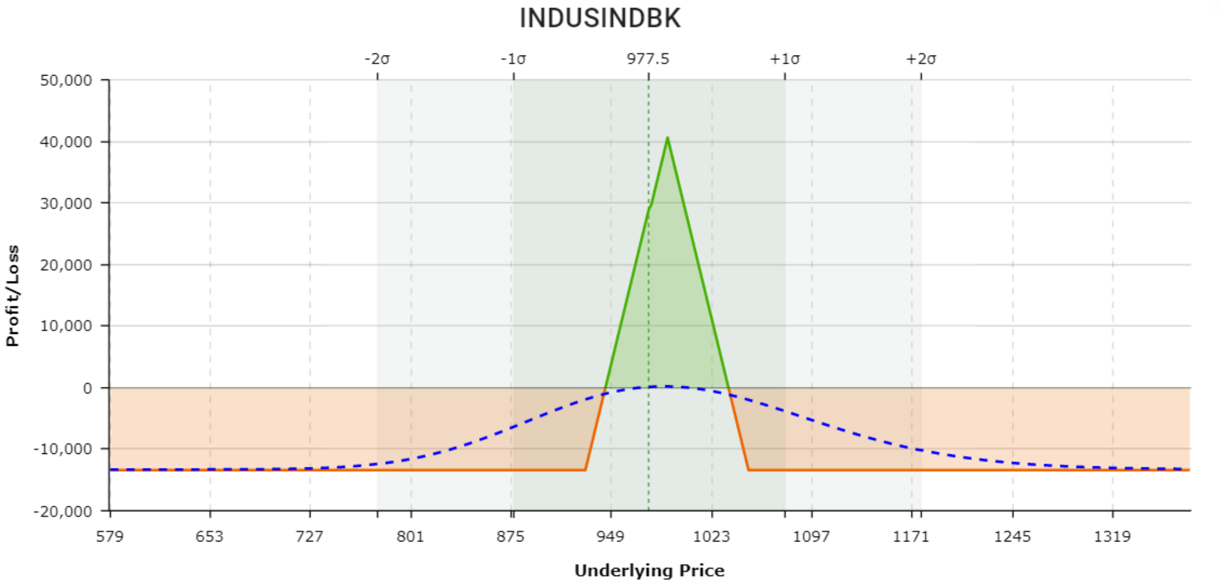
**Summary**

| | | |
|---|---|---|
| Moving Averages | Bullish | 4 2 |
| Technical Indicator | Neutral | 2 3 2 |
| Moving Averages Crossovers | Bearish | 1 2 |

# STRATEGY 3: **IRON FLY**

An iron fly is a combination of four options contracts. We buy a put option with a lower strike price and a higher strike price call option; both out of the money. We then sell a set of call and put options of the same strike price.

With these spreads, we open doors to very limited loss with an opportunity to earn limited profit. We consider this due to the uncertain volatility and neutral outlook.




Strategy Positions

RESET

-1x 26MAY2022 990PE - ₹ 43.3 (0)

+1x 26MAY2022 930PE - ₹ 18.4 (0)

-1x 26MAY2022 990CE - ₹ 35.2 (0)

+1x 26MAY2022 1050CE - ₹ 15 (0)

| | |
|---|---|
| Prob. of Profit | 34.2% |
| Max. Profit | ₹ +40,590 (32.03%) |
| Max. Loss | ₹ -13,410 (-10.58%) |
| Max. RR Ratio | 1:3.03 |
| Breakevens | 945.0-1035.0 |
| Total PNL | ₹ 0 |
| Net Credit | ₹ +40,590 |
| Estimated Margin/Premium | ₹ +126,734 |

| INSTRUMENT TYPE | EXPIRY DATE | OPTION TYPE | STRIKE PRICE | OPEN PRICE | HIGH PRICE | LOW PRICE | CLOSE PRICE | PREV. CLOSE | LAST PRICE | CHNG | %CHNG | VOLUME (Contracts) | VALUE (₹ Lakhs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stock Options | 26-May-2022 | Put | 930.00 | 14.45 | 19.20 | 12.60 | 18.40 | 16.45 | **19.20** | 2.75 | 16.72 | 257 | 35.53 |
| Stock Options | 26-May-2022 | Call | 1,050.00 | 20.05 | 26.00 | 14.20 | 15.00 | 18.90 | **14.40** | -4.50 | -23.81 | 2,858 | 563.57 |
| Stock Options | 26-May-2022 | Call | 990.00 | 44.00 | 54.00 | 33.75 | 35.20 | 41.25 | **35.40** | -5.85 | -14.18 | 1,124 | 454.01 |
| Stock Options | 26-May-2022 | Put | 990.00 | 35.05 | 44.80 | 30.60 | 43.30 | 37.90 | **44.80** | 6.90 | 18.21 | 677 | 220.93 |

**Breakeven Point 1** = middle strike + net premium received = 990 + 45.0(43.3+35.2-18.4-15) = **1035.0**
**Breakeven Point 2** = middle strike - net premium received = 990 - 45.0(43.3+35.2-18.4-15) = **945.0**
Below the lower ($45) strike, the short put's effect is hedged by the long put and total P/L is constant, equal to maximum loss.

# PAYOFFS:

**Below the lower (930) strike:** The short put's effect is mitigated by the long put, and the overall P/L remains constant, equal to the maximum loss.

**Between the lower (930) and the middle (990) strike**: Total P/L grows proportionately to underlying price between the lower (930) and middle (990) strike. The centre strike is the break-even point — the net premium received **(945.0)**

Only when the underlying price reaches the middle strike (990) at expiration will you make the most money. It's the same as net premium received, which is **45.0.**

**Between the middle (990) and upper (1050) strike:** Total P/L drops when underlying price rises between the middle (990) and upper (1050) strike. The middle strike + net premium received is the break-even point **(1035.0)**

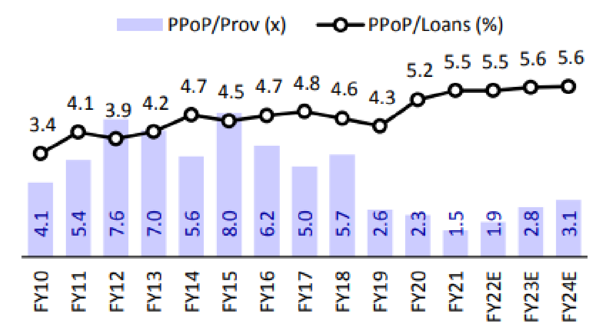
**Above the upper strike (1050)**: the long call begins to counterbalance the short call's value growth. The total P/L is fixed and equal to the maximum loss.

To summarise, With this strategy our maximum loss is -13,410(Below lower strike and above upper strike) while the maximum profit in this strategy is 40,590(at the middle strike) with breakeven at 945.0-1035.0

# 1 Month View: **Moderately Bullish (Range bound)**

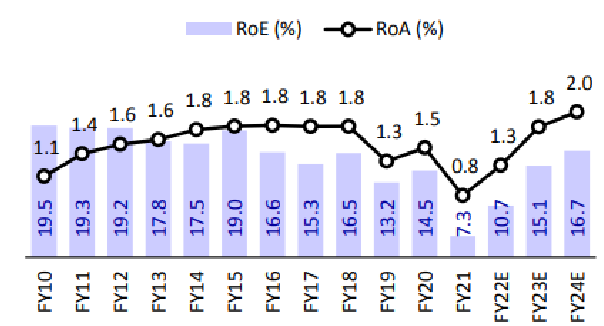
Asset quality ratio improved signalling control to the impact of COVID-19, with collection efficiency improved to 98% in Sep’21. Loan growth has also improved over the past few quarters 2QFY22 (+5%) aided by an increase in vehicle demand. The margin would most likely be supported by a reduction in deposit costs combined with a steady deployment of liquidity. The bank's loan book features a high yield and a higher share of fixed-rate loans.

**Exhibit 46: PPOP to provision/loans set to improve gradually**




Source: MOFSL, Company

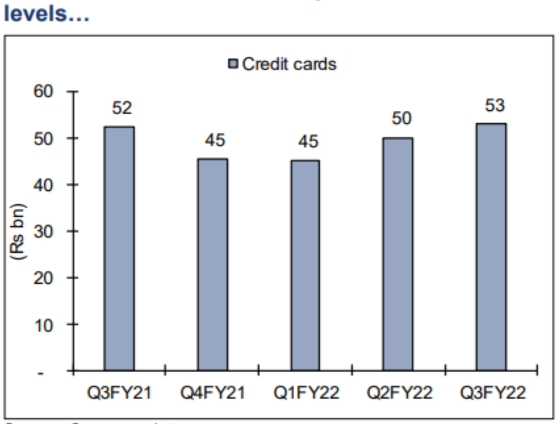
**Exhibit 47: Return ratios to revert to historical levels**




Source: MOFSL, Company

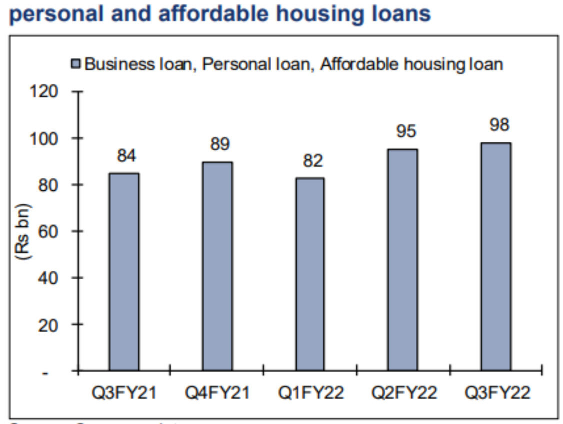
In Q3FY22, IIB was cautious about MFI payouts. It is presently recovering the distribution momentum after addressing difficulties to a considerable extent. It lays emphasis on maintaining field discipline, process improvement, and quality control. Additionally, IIB's Digital 2.0 strategy focuses on changing existing business lines, developing new digital business models, and enhancing digital offerings across the ecosystem.

**Chart 10: Credit cards saw uptick from Q1FY22 levels…**




Source: Company data

**Chart 11: … similar is the case with business, personal and affordable housing loans**

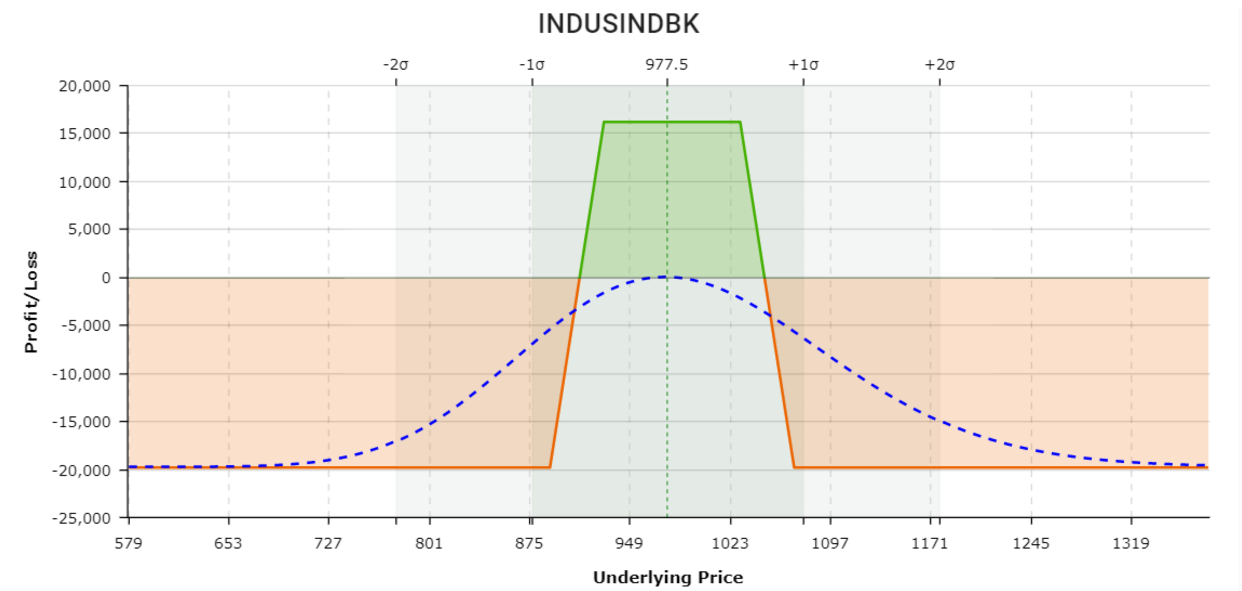



Source: Company data

# STRATEGY 4: **IRON CONDOR**

Iron Condor is a directionally neutral strategy that capitalises on a range-bound improvement in stock price, through the expiration of the options contract. It is a good way to provide tock exposure without taking a directional position. To set up this strategy, we sell an OTM Put that is close to the strike price and an OTM call above the current price. We then proceed to buy an OTM Put below the short put strike price and an OTM Call with a strike price above the short call strike price.

We are betting against the underlying moving past either spread by the expiration of our contracts since we are collecting a credit upfront and want our options to expire worthlessly.




**Strategy Positions** RESET

-1x 26MAY2022 930PE - ₹ 18.4 (0)

+1x 26MAY2022 890PE - ₹ 9.7 (0)

-1x 26MAY2022 1030CE - ₹ 20.65 (0)

+1x 26MAY2022 1070CE - ₹ 11.35 (0)

| | |
|---|---|
| Prob. of Profit | 50.4% |
| Max. Profit | ₹ +16,200 (18.56%) |
| Max. Loss | ₹ -19,800 (-22.69%) |
| Max. RR Ratio | 1:0.82 |
| Breakevens | 912.0-1048.0 |
| Total PNL | ₹ 0 |
| Net Credit | ₹ +16,200 |
| Estimated Margin/Premium | ₹ +87,269 |

| INSTRUMENT TYPE | EXPIRY DATE | OPTION TYPE | STRIKE PRICE | OPEN PRICE | HIGH PRICE | LOW PRICE | CLOSE PRICE | PREV. CLOSE | LAST PRICE | CHNG | %CHNG | VOLUME (Contracts) | VALUE (₹ Lakhs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stock Options | 26-May-2022 | Put | 930.00 | 14.45 | 19.20 | 12.60 | 18.40 | 16.45 | **19.20** | 2.75 | 16.72 | 257 | 35.53 |
| Stock Options | 26-May-2022 | Put | 890.00 | 9.25 | 10.40 | 6.35 | 9.70 | 16.00 | **10.40** | -5.60 | -35.00 | 26 | 2.02 |
| Stock Options | 26-May-2022 | Call | 1,030.00 | 28.75 | 34.00 | 19.50 | 20.65 | 24.80 | **20.25** | -4.55 | -18.35 | 933 | 236.46 |
| Stock Options | 26-May-2022 | Call | 1,070.00 | 15.60 | 19.85 | 10.85 | 11.35 | 14.15 | **11.20** | -2.95 | -20.85 | 303 | 42.49 |

**Breakeven Point 1**: short put strike – net premium received = 930 - 18(18.4+20.65-9.7-11.35) = **912.0**

**Breakeven Pont 2:** short call strike + net premium received = 1030 + 18 =**1048.0**

# PAYOFFS:

**Between the Call Strikes(1030-1070):** The short call is in the money when the underlying price rises above the strike price. This option will be assigned to us at the end of the term, and its value will be our loss. If it is less than the original cash flow, the ultimate result will still be a profit, although one that is less than the maximum profit.
P/L = net premium received – (underlying price – short call strike)=

**Above the Highest Strike(1070):** Both call options are in the money once the underlying rises above the long call strike. Further increases in the short call's (negative) value are countered by increases in the long call's value.
P/L = net premium received – difference between call strikes = 18-(1070-1030)= **-22**

**Below the Lowest Strike(890):** Like the calls above the highest strike, the effects of the two put options cancel each other out below the long put strike, and their aggregate value is constant, equal to the difference between their strikes.
P/L = net premium received – difference between put strikes = 18- (930-890)= **-22**

To summarise, With this strategy, our maximum loss is -19,800 (above the highest strike or below the lowest strike) while the maximum profit in this strategy is 16,200(between the inner (short) strikes) with breakeven at 945.0-1035.0.

# STRATEGY 5: Jade Lizard Option Strategy (for near month bullish view)

The Jade Lizard is a mildly bullish options strategy that involves the following:

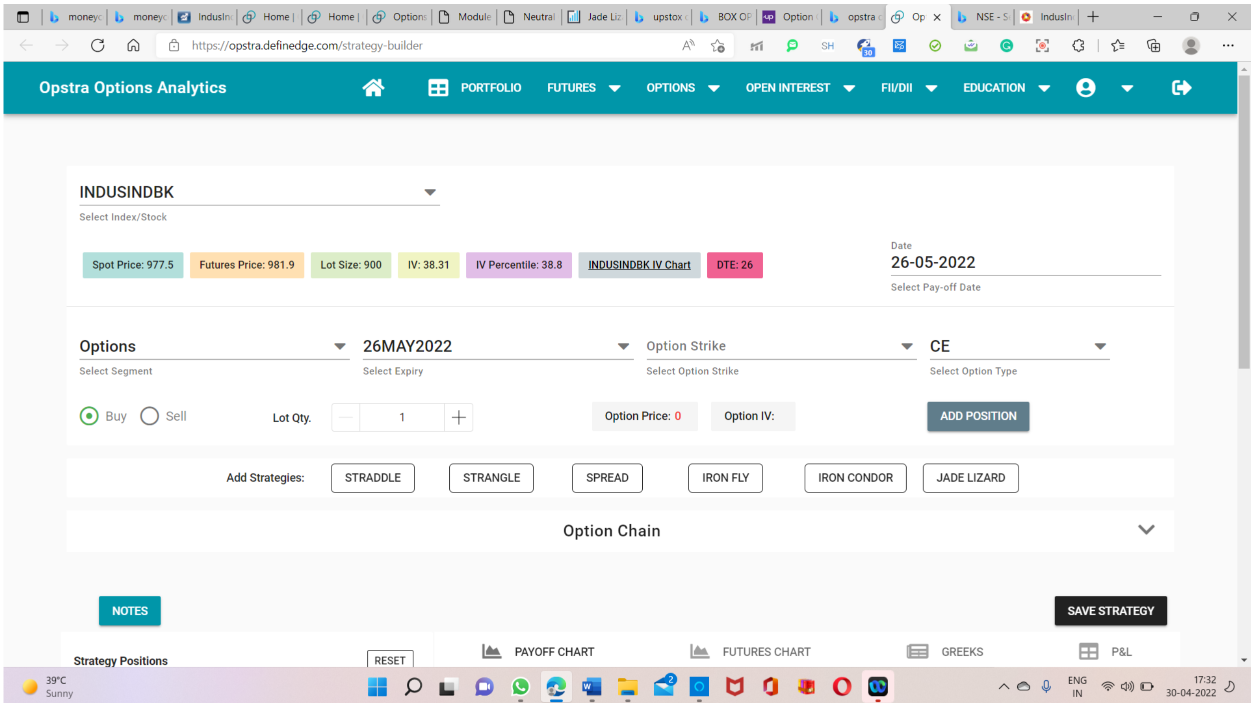
- Buying a Call (typically ITM or around ATM)
- Selling a Call (ITM)
- Selling a Put (OTM)

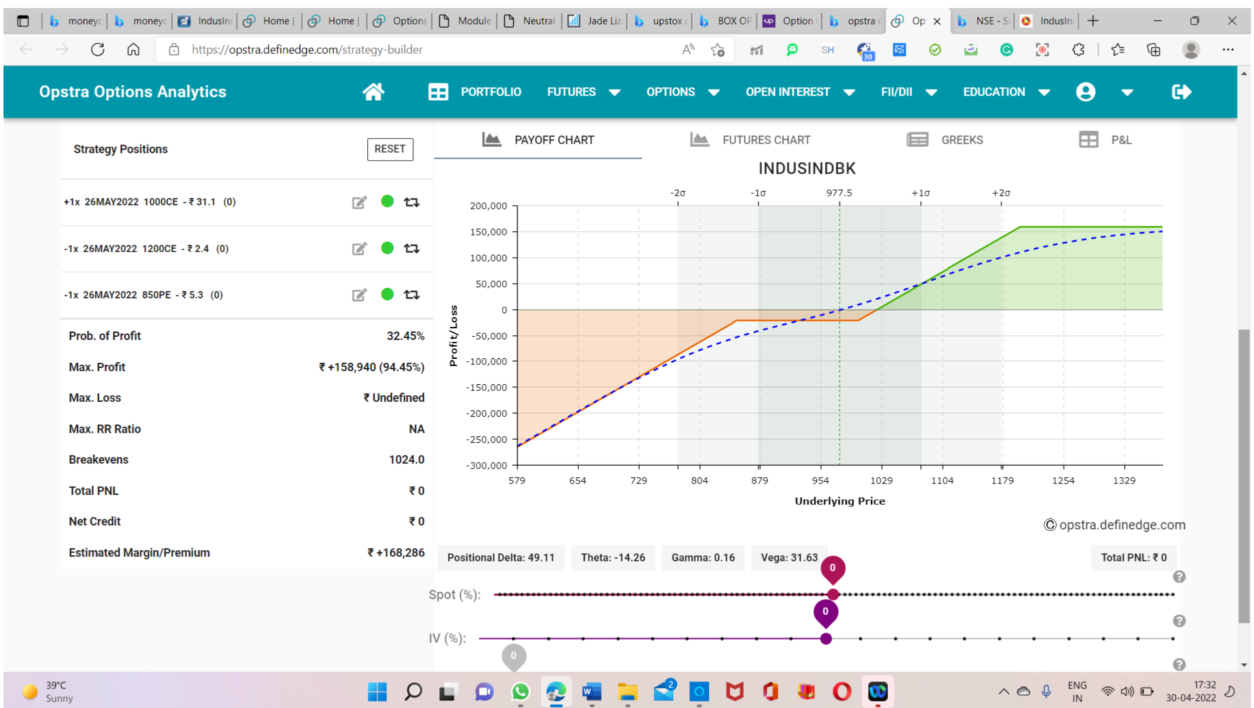
The Jade Lizard has a high probability of profit.The stock or underlying asset has to fall a lot for it to be unprofitable.And even if the stock or asset does fall, you can still make money if it stays within the profitability range.It is considered a bullish to neutral strategy.It is best used in an environment where there are high implied volatilities.This allows for more premium to be collected and no upside risk if the underlying asset trades higher.

So=977.50,k1=850,k2=1000,k3=1200

| | St < k1 | k1<=St<=k2 | k21<St<=k3 | St>k3 |
|---|---|---|---|---|
| Short Put | St-k1 | 0 | 0 | 0 |
| Long Call | 0 | 0 | St-k2 | St-k2 |
| Short Call | 0 | 0 | 0 | k3-St |
| | | | | |
| Pay Off | St-k1 | 0 | St-k2 | k3-k2 |
| Profit | St-k1+p-c1+c2 | p-c1+c2 | St-k2+p-c1+c2 | k3-k2+p-c1+c2 |
| | | | | |

(c1=31.1,c2=2.4,p=-5.3)


https://opstra.definedge.com/strategy-builder
Opstra Options Analytics
PORTFOLIO
FUTURES
OPTIONS
OPEN INTEREST
FII/DII
EDUCATION
INDUSINDBK
Select Index/Stock
Spot Price: 977.5
Futures Price: 981.9
Lot Size: 900
IV: 38.31
IV Percentile: 38.8
INDUSINDBK IV Chart
DTE: 26
Date
26-05-2022
Select Pay-off Date
Options
Select Segment
26MAY2022
Select Expiry
Option Strike
Select Option Strike
CE
Select Option Type
Buy
Sell
Lot Qty.
1
Option Price: 0
Option IV:
ADD POSITION
Add Strategies:
STRADDLE
STRANGLE
SPREAD
IRON FLY
IRON CONDOR
JADE LIZARD
Option Chain
NOTES
SAVE STRATEGY
Strategy Positions
RESET
PAYOFF CHART
FUTURES CHART
GREEKS
P&L
39°C
Sunny
ENG
IN
17:32
30-04-2022

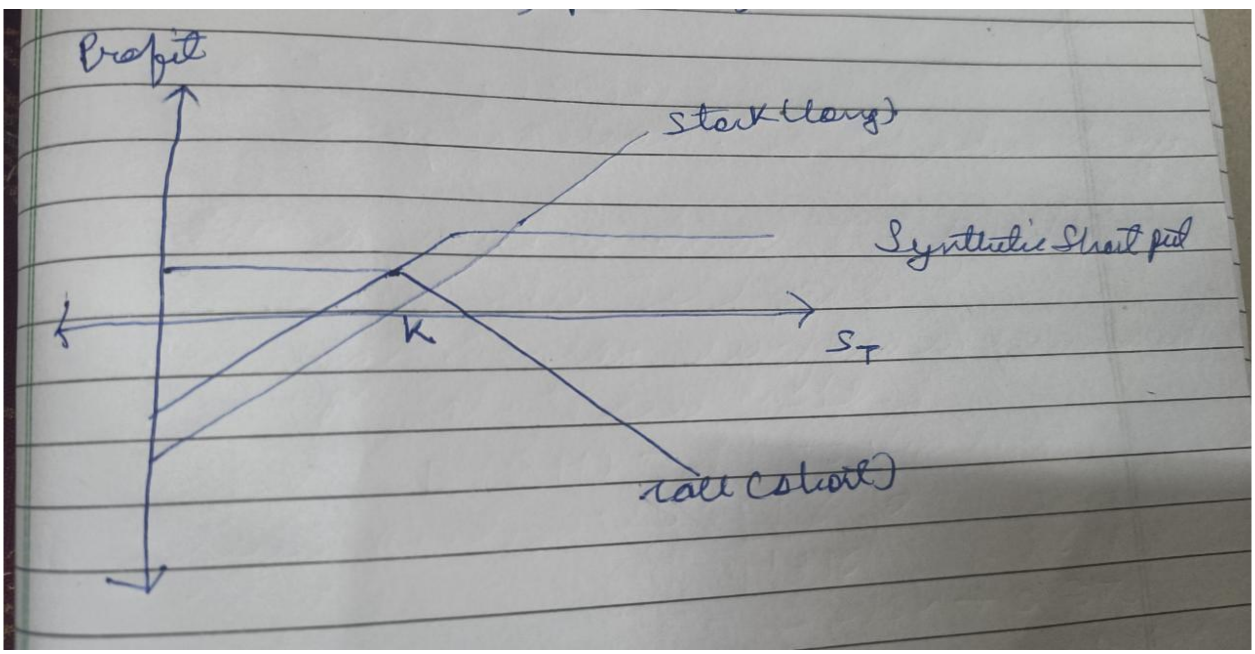

https://opstra.definedge.com/strategy-builder
Opstra Options Analytics
PORTFOLIO
FUTURES
OPTIONS
OPEN INTEREST
FII/DII
EDUCATION
Strategy Positions
RESET
+1x 26MAY2022 1000CE - ₹ 31.1 (0)
-1x 26MAY2022 1200CE - ₹ 2.4 (0)
-1x 26MAY2022 850PE - ₹ 5.3 (0)
Prob. of Profit 32.45%
Max. Profit ₹ +158,940 (94.45%)
Max. Loss ₹ Undefined
Max. RR Ratio NA
Breakevens 1024.0
Total PNL ₹ 0
Net Credit ₹ 0
Estimated Margin/Premium ₹ +168,286
PAYOFF CHART
FUTURES CHART
GREEKS
P&L
INDUSINDBK
-2σ
-1σ
977.5
+1σ
+2σ
200,000
150,000
100,000
50,000
0
-50,000
-100,000
-150,000
-200,000
-250,000
-300,000
Profit/Loss
579
654
729
804
879
954
1029
1104
1179
1254
1329
Underlying Price
© opstra.definedge.com
Positional Delta: 49.11
Theta: -14.26
Gamma: 0.16
Vega: 31.63
Total PNL: ₹ 0
Spot (%):
IV (%):
39°C
Sunny
ENG
IN
17:32
30-04-2022

# STRATEGY 6: COVERED CALL STRATEGY (near month bullishness)

In this trading strategy, we take a long position in stock and short position in european call option.In this case we take rhe assumption that the markets are range bound and we wish to reduce the cost of purchase and increase profit potential.

The term covered call refers to a financial transaction in which the investor selling call options owns an equivalent amount of the underlying security. To execute this, an investor who holds a long position in an asset then writes (sells) call options on that same asset to generate an income stream. The investor's long position in the asset is the cover because it means the seller can deliver the shares if the buyer of the call option chooses to exercise.

It is a mildly bullish strategy.



**PAY-OFF MATRIX**

So= 977.50, K=1000, c=50.25 [following data has been taken from the NSE website)

| | St<k | St>k |
|---|---|---|
| Long stock | St | St |
| Short call | 0 | k-St |
| Pay offs | St | k |
| Profits | St+c | k+c |

Max profit = k+c =1000+50.25=1050.25

# STRATEGY 7: **Bear call strategy**

The bear call distribution is a two-part option strategy that involves selling the call option and collecting the payment of the previous option, and at the same time buying a second call option with the same expiration date but a higher strike price. The spread of the bear call is one of the four basic spread options.

Because the claim for a sold-out call (i.e. short call leg) is less than a claim for a purchased call (i.e. long leg call), the amount of option pay collected in the first leg remains higher than the cost paid in the first leg. second leg.

Since the introduction of the bear call spread causes pre-payment, it is also known as the credit call spread, or alternately, as the short call spread. This strategy is often used to generate premium revenue based on the bearish view of the stock options trader, index or other financial instrument.

It will be used for far month.

Pay-off matrix:

| | St<K1 | K1<=St<=K2 | St>K2 |
|---|---|---|---|
| Long put | K1-St | K2-St | 0 |
| Short put | St-K1 | 0 | 0 |

| | | | |
|---|---|---|---|
| Pay-off | K2-K1 | K2-St | 0 |
| Profit | K2-K1+p1-p2 | K2-St+p1-p2 | p1-p2 |

# STRATEGY 8: **Bull put strategy**

A bull put spread writes or sells a put option while at the same time purchasing another put option with the same expiration date but a lower strike price (for that basic asset). Bull scattering is one of the four basic methods of direct spread, with bull call spread, bear whistle spread, and bear put spread into one.

The short-term premium of a bull put spread is always higher than the long-term premium, which means that obtaining advance payment or credit is required to start the strategy. As a result, the bull put spread is often referred to as a credit (put) spread or short put spread.

It will be used for next month.

Pay-off matrix:

| | St<K1 | K1<=St<=K2 | St>=K2 |
|---|---|---|---|
| Long put(K1) | K1-St | 0 | 0 |
| Short put(K2) | St-K2 | St-K2 | 0 |
| Pay-off | K1-K2<0 | St-K2 | 0 |
| Profits | K1-K2+p2-p1 | St-K2+p2-p1 | p2-p1>0 |

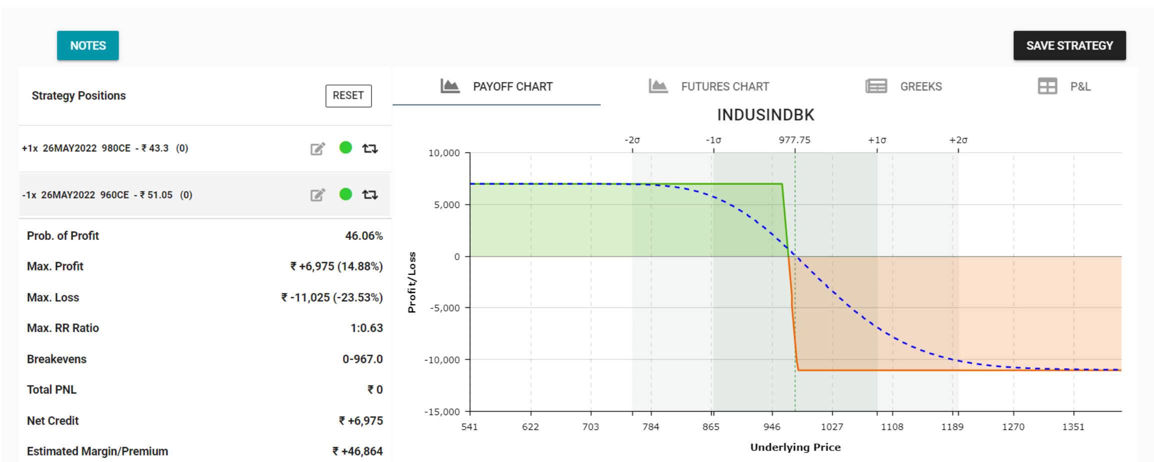
# STRATEGY 9: Bear put spread

Long put with higher strike price and short put with lower strike price

- Companies with growing costs YoY for long term projects
- Inefficient use of capital to generate profits-RoCE declining in the last 2 years
- Companies with High Debt
- Weak momentum: Price below Short, Medium and Long Term Averages
- Negative Breakdown First Support(LTP< S1)
- Decline in Quaterly Net Profit with falling Profit Margin(YoY)
- Promoter decreasing their shareholding

As we can see from above the fundamental suggest this to be a bearish stock.So we can expect it to go down.

We can use the “Bear Put Spread” Strategy for this



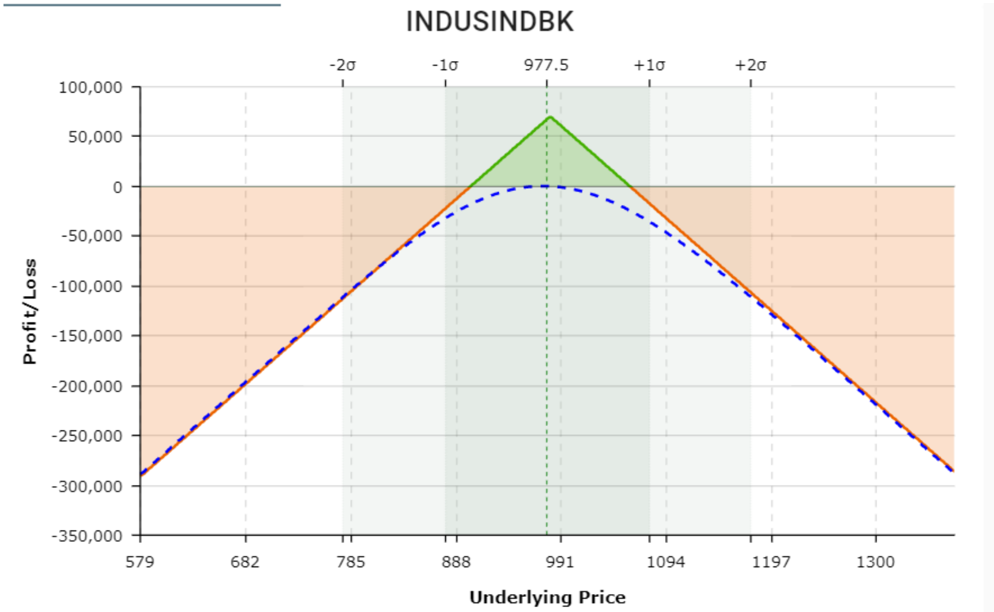

We can see that the Max. Profit is Rs. 6975 and Max. Loss is Rs. 11025. We also see that the breakeven is 0-967.0

| | | | |
|---|---|---|---|
| 11 | | | |
| 12 | k1 | 960 | |
| 13 | k2 | 980 | |
| 14 | p1 | 43.3 | |
| 15 | p2 | 51.05 | |
| 16 | | | |
| 17 | St<k1 | k1<=St<=k2 | St>k2 |
| 18 | 980-St | 980-St | 0 |
| 19 | St-960 | 0 | 0 |
| 20 | 980-960 | 980-St | 0 |
| 21 | 980-960+43.3-51.05 | 980-St+43.3-51.05 | 43.3-51.5 |
| 22 | | | |
| 23 | | | |

We can see the matrix here and the respective payoffs and profits for the respective cases.

# Strategy 10: Straddle

To benefit from this sideways moment of the stock, we can form a short straddle and collect premium from option decay from the current month's expiry.




| | |
|---|---|
| Prob. of Profit | 56.53% |
| Max. Profit | ₹ +70,335 (24.83%) |
| Max. Loss | ₹ Undefined |
| Max. RR Ratio | NA |
| Breakevens | 902.0-1058.0 |
| Total PNL | ₹ 0 |
| Net Credit | ₹ +70,335 |
| Estimated Margin/Premium | ₹ +283,316 |

We can see that Max. Profit is Rs.70,335 and Max. Loss is undefined. We also see that the breakeven is 902.0-1058.0.

This straddle is made by selling ATM call and put of 977.5 strike at the same expiry

REFERENCES:


https://opstra.definedge.com/

https://in.tradingview.com/

https://www.moneycontrol.com/technical-analysis/indusindbank/IIB/monthly

https://images.moneycontrol.com/static-mcnews/2022/03/IndusInd-Bank-11032022-icicis.pdf

https://images.moneycontrol.com/static-mcnews/2021/11/IndusInd-Bank-03-11-2021-moti.pdf

https://www.macroption.com/

https://www.tastytrade.com/

https://www.investopedia.com/

https://zerodha.com/varsity/