FUTURES & OPTIONS Made Easy

ASTA-TR-RD-43 REV : 00 Date : 01-07-2024

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BECOME A PRO
MONEY WILL FLOW

FOCUS = SUCCESS!

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FOME

Futures & Options Made Easy

by Avadhut Sathe

Minimize Risk

Optimize Reward

Uncover the Riches of Derivatives Market by Learning the Tricks of the Trade !

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Winning
is the matter of
Skill & Discipline

PLAY TO WIN
In the mesmerizing world of
Derivatives Market

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What is a Derivative?

- It's a financial product / contract which does not have it's own value.
- It derives it's value from the underlying asset.
- E.g. RELIANCE ticker traded in Futures market is a "derivative" of RIL stock from the cash (spot) market.
- There are 2 such products available for trading on NSE:
  - Stock Futures
  - Stock Options

Why Derivates?

- Less Money required to invest
  - Example:
    - ✓ 250 RIL shares @2250 in cash market = Rs. 5.62L approx.
    - ✓ 1 lot (250 shares) of RIL in futures (@20% margin) = Rs. 1,12,500 approx.
    - ✓ 1 lot of RIL - 2260 Call Option @ Rs. 50 premium = Rs. 12,500.00
- Hedging against Investments
- Speculating market or stock moves!
  - Positional Trading
  - Day Trading
- Earning Rent on Stock Investments

Lets get started with Futures

- Futures Contract
  - It's an agreement or a contract to Buy or Sell specified quantity of the underlying asset at a price agreed upon by the buyer and seller on or before a specified time.
  - Both buyer and seller of the contract are "obligated" to Buy or Sell the underlying asset.
  - Contract constitutes:
    - ✓ Size / Lot
    - ✓ Contract Month
    - ✓ Contract Expiry

Futures Terminologies

- **Contract Size**
  - Quantity of the particular stock / Market Lot

- **Contract Month**
  - Current or Near month
  - Mid Month (2nd month)
  - Far Month (3rd month)

- **Contract Expiry -** Last Thursday of every month

- **Open Interest -** Total outstanding positions in the Futures market at a given point of time

- **Volume-** No. of contracts traded during a period

- **Spot -** Price in the cash market

- **Margin-** Deposit required to pay to the broker to take a position in F&O market

- **Cost of Carry-** Premium over the spot price in Futures

Futures – Position Trading

Date	Trade	Purchase/ Bought forward Rate	Futures Closing Rate	Debit/Credit (MTM)
Example 1 : Harish goes long on Infosys @ 1130 on 16 Apr 2018				
16/04/18	BUY/LONG	1130	1140	10
17/04/18	HOLD	1140	1125	-15
18/04/18	HOLD	1125	1125	0
19/04/18	HOLD	1125	1132	7
20/04/18	**Square-off**	1132	1178	46
			Total Profit on the trade	**48**

Date	Trade	Purchase/ Bought forward Rate	Futures Closing Rate	Debit/Credit (MTM)
Example 2 : Harish goes Short on Infosys @ 1210 on 23 Apr 2018				
23/04/18	Sell/ Short	1210	1187	23
24/04/18	HOLD	1187	1154	33
25/04/18	HOLD	1154	1160	-6
26/04/18	Expired	1160	1176	-16
			Total Profit on the trade	**34**
26/04/18 Being last Thursday of the month the futures contract will be settled against the closing price in cash/Spot market, If harish doesn't square off the position.				

Futures – Risk & Reward

- Risk and Reward are unlimited for both Buyer and Seller.

- Limit your Risk by following **Stop Loss**.

- Hedging – Limited Risk & Reward
  - If you are hedging against the underlying cash position then the risk and reward are both limited.
  - Example: If you own RIL shares and Sell RIL in futures for equal quantity then your losses in spot position are off-set by gains in Futures position.
  - You can get margin up to 80 % (depending on the stock) against the pledged equity. This margin can be used for futures trading and option selling.

Futures – Trading Strategies

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- Technical Analysis basis:
  - Arrive at Price Target
  - Use Money Management Rules to decide the contract size
  - Remember 2% (single trade loss) & 10% (max monthly loss) Rule!

- Open Interest basis:
  - **Long (Bullish) : OI is UP and Price is UP**
  - **Short (Bearish) : OI is UP and Price is DOWN**
  - **Short Covering (Bullish) : OI is DOWN and Price is UP**
  - **Long Covering (Bearish) : OI is DOWN and Price is DOWN**

- Arbitrage:
  - Futures Price is LESS than the Spot Price
    - ✓ Buy Futures & Sell Cash
  - Futures Price is HIGER than the Spot Price
    - ✓ Sell Futures & Buy Cash

Trading Platform - ODIN

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Scrips Bar - FNO

Normal | NFO | OPTSTK | ACC | CE | 940.00 | 31May2018 | ACC18MAY940CE

FUTIDX
FUTIVX
FUTSTK
OPTIDX
OPTSTK

Series/...	O.	Stri...	...et Ch...	% Change	LTP	Symbol	Bid Rate	Ask Rate	Volum...	%OI	Open Int...	ATP	Open	High	Low	Prev
31May2018	CE		-0.20	-7.02	2.65	AXISBANK	2.55	2.65	1314000	4.12	849600	3.09	2.90	3.65	2.10	
31May2018	CE	560.00	-0.10	-6.45	1.45	AXISBANK	1.40	1.50	751200	-3.14	1000800	1.62	1.65	2.00	1.15	
31May2018	CE	570.00	-0.05	-5.56	0.85	AXISBANK	0.80	0.90	318000	9.34	534000	0.96	0.95	1.15	0.70	
31May2018			1.30	0.25	530.10	AXISBANK	530.00	530.15	6753600	2.12	45675600	531.52	529.10	534.90	525.35	52
31May2018	CE	140.00	0.05	2.70	1.90	BANKBARODA	1.90	1.95	2344000	9.32	2112000	1.67	1.15	2.20	1.15	
31May2018			1.70	1.31	131.90	BANKBARODA	131.85	131.95	23256000	0.24	55100000	129.97	129.70	132.60	127.05	13
31May2018			52.60	0.20	25854.55	BANKNIFTY	25853.00	25854.95	2115720	0.96	3009200	25845.26	25775.90	25958.65	25740.05	2580
31May2018	CE	300.00	-0.55	-19.30	2.30	ICICIBANK	2.30	2.40	8640500	15.89	6778750	2.72	2.90	3.70	2.05	
31May2018	CE	310.00	-0.35	-26.92	0.95	ICICIBANK	0.95	1.00	4320250	2.68	6011500	1.12	1.25	1.55	0.90	
31May2018			9.00	3.97	235.60	IRB	235.55	235.95	3785000	-0.31	19530000	230.68	225.50	235.95	225.40	22
31May2018			20.00	11.98	187.00	PCJEWELLER	186.85	187.20	3828000	-0.61	7633500	179.82	169.75	187.50	166.90	16
31May2018	CE	980.00	-0.80	-25.81	2.30	RELIANCE	2.25	2.35	1150000	2.51	3099000	2.71	3.30	3.30	2.25	

Scrips Bar - FNO

Normal | NFO | OPTSTK | ACC | CE | 940.00 | 31May2018 | ACC18MAY940CE

31May2018
28Jun2018
26Jul2018

Series/...	O.	Strike P...	Net Ch...	% Change	LTP	Symbol	Bid Rate	Ask Rate	Volum...	%OI	Open Int...	ATP	Open	High	Low	Prev
31May2018	CE	550.00	-0.35	-12.28	2.50	AXISBANK	2.45	2.55	1317600	4.71	854400	3.09	2.90	3.65	2.10	
31May2018	CE	560.00	-0.10	-6.45	1.45	AXISBANK	1.35	1.45	751200	-3.14	1000800	1.62	1.65	2.00	1.15	
31May2018	CE	570.00	-0.05	-5.56	0.85	AXISBANK	0.80	0.90	318000	9.34	534000	0.96	0.95	1.15	0.70	
31May2018			1.10	0.21	529.90	AXISBANK	529.55	529.75	6770400	2.26	45741600	531.52	529.10	534.90	525.35	52
31May2018	CE	140.00	0.05	2.70	1.90	BANKBARODA	1.85	1.95	2356000	9.32	2112000	1.67	1.15	2.20	1.15	
31May2018			1.80	1.38	132.00	BANKBARODA	131.90	132.00	23288000	0.23	55092000	129.97	129.70	132.60	127.05	13
31May2018			50.10	0.19	25852.05	BANKNIFTY	25849.95	25855.45	2116680	0.96	3009280	25845.26	25775.90	25958.65	25740.05	2580
31May2018	CE	300.00	-0.55	-19.30	2.30	ICICIBANK	2.30	2.40	8646000	15.94	6781500	2.72	2.90	3.70	2.05	
31May2018	CE	310.00	-0.35	-26.92	0.95	ICICIBANK	0.95	1.00	4325750	3.15	6039000	1.12	1.25	1.55	0.90	
31May2018			8.95	3.95	235.55	IRB	235.45	235.65	3790000	-0.33	19525000	230.69	225.50	235.95	225.40	22
31May2018			19.00	11.38	186.00	PCJEWELLER	185.75	186.05	3870000	-0.64	7630500	179.90	169.75	187.50	166.90	16
31May2018	CE	980.00	-0.85	-27.42	2.25	RELIANCE	2.25	2.35	1150000	2.45	3097000	2.71	3.30	3.30	2.25	
31May2018	CE	960.00	-1.40	-23.53	4.55	RELIANCE	4.50	4.60	2801000	22.96	2431000	5.25	6.05	6.30	4.25	

Futures – Recap

- Limited investment in terms of margin payable to broker.
  - Typically 15-25% of the total value
  - Depends on Market wide exposure / Open Interest

- Risk and Reward are unlimited.

- Position needs to be monitored on daily basis as risk involved is unlimited.

- Broker could square-off your position if margin requirements shoots above the funds deposited with the broker.

- Deposited margin starts falling short rapidly if your trade start going against you.

Are you GAME for OPTIONS?

Understanding Options

- Was developed for Hedging and Speculating!

- Option Contract is a 'Right' given by the Option Seller to the Option Buyer to buy or sell a specific asset at a specific price on or before a specific date.

- Option Buyer or Holder:
  - Has the 'Right'
  - May or may not Exercise the Right
  - Pays premium

- Option Seller or Writer:
  - Has the 'Obligation'
  - If Buyer decides to Exercise the Option, the Seller must oblige (only applicable to American options, not applicable in Indian option market)
  - Receives or Earns the Premium

Options Terminologies

- Call Option – Long position / bullish

- Put Option – Short position / bearish

- Market Lot:
  - Minimum number of units to be bought or sold
  - E.g. for Nifty the lot size is 75

- Strike Price:
  - The price at which underlying stock can be bought or sold by the contract buyer
  - E.g. for Nifty : 15000, 15050, 15100, 15150, 15200 and so on
  - Strikes which are closer to the underlying are more liquid

- Expiration Date – Last Thursday of every month for monthly Option contracts, Every Thursday for Weekly Option contracts:
  - The date when the term of an option contract terminates

- Option Holder: Buyer of an option

- Option Writer: Seller of an option

- Exercise Day :
  - The date when the buyer / holder of an option exercises the Option

Options Terminologies

- Option Value or Premium:
  - Price the Buyer pays to buy a Call or Put option
  - Intrinsic Value + Time Value

- ATM – At the Money (break-even point):
  - An option with strike price nearest to the current stock price

- ITM – In the Money (profit zone):
  - A CALL option with strike price below the stock price
  - A PUT option with strike price above the stock price

- OTM – Out of the Money (loss zone):
  - A CALL option with strike price above the stock price
  - A PUT option with strike price below the stock price

Stock Options – Contracts

3 Contracts are open at a time for stocks:

- Near or Current Month - most liquid.
- Next or Mid Month (2nd month) - mostly illiquid.
- Far Month (3rd month) - almost zero liquidity in Indian Markets.

For indices, in addition to these 3 contracts, weekly option contracts and long term monthly contracts are also available.

Commodity Options – Contracts

For commodity, 3 monthly option Contracts are open at a time:

- Near or Current Month - most liquid.
- Next or Mid Month (2nd month) - mostly illiquid.
- Far Month (3rd month) - almost zero liquidity in Indian Markets.

For Gold and Silver, more than 3 monthly option Contracts are open at a time.

Option – Types

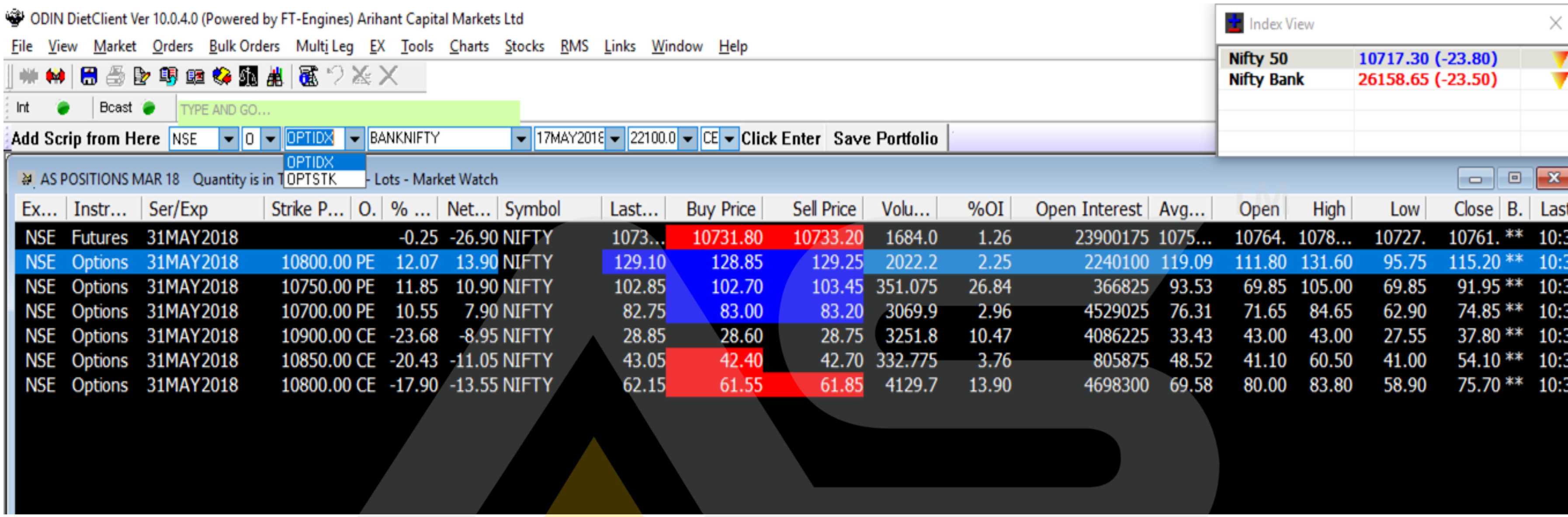
- Call Option

- Put Option

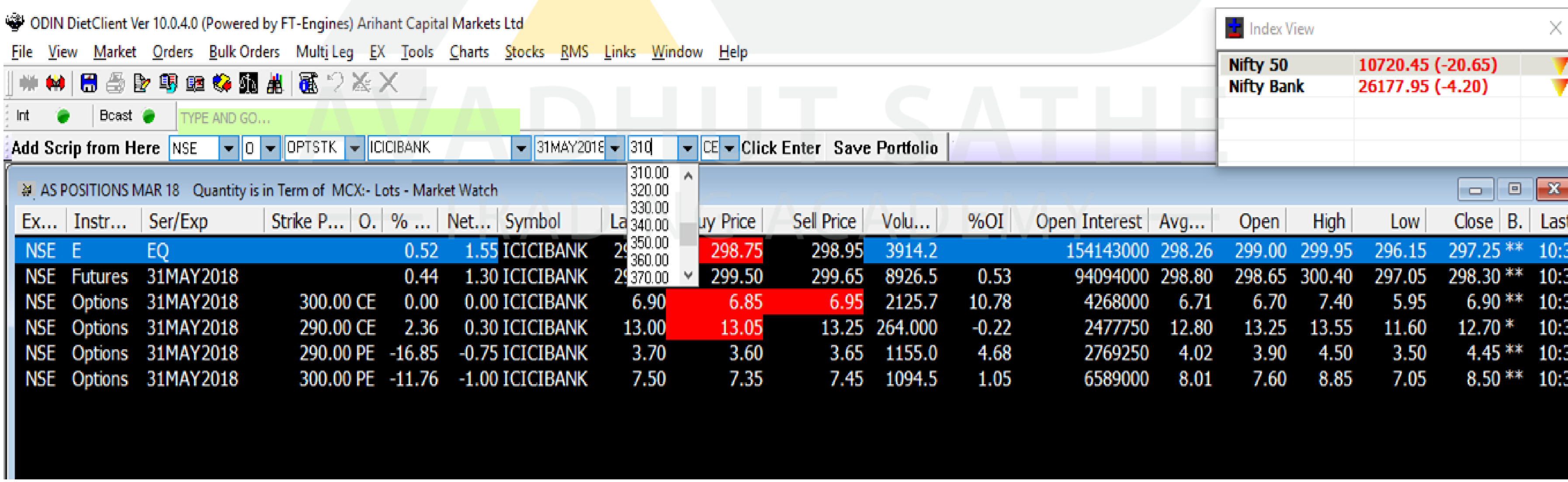
- American
  - **Currently not used in Indian Market**
  - Can be Exercised
  - CA: Call American
  - PA: Put American

- European
  - Used for Index as well as Stocks, currencies and commodities
  - Cannot be Exercised
  - CE: Call European
  - PE: Put European

Option – ODIN Screens



Ex...	Instr...	Ser/Exp	Strike P...	O.	% ...	Net...	Symbol	Last...	Buy Price	Sell Price	Volu...	%OI	Open Interest	Avg...	Open	High	Low	Close	B.	Last
NSE	Futures	31MAY2018			-0.25	-26.90	NIFTY	1073...	10731.80	10733.20	1684.0	1.26	23900175	1075...	10764.	1078...	10727.	10761.	**	10:3
NSE	Options	31MAY2018	10800.00	PE	12.07	13.90	NIFTY	129.10	128.85	129.25	2022.2	2.25	2240100	119.09	111.80	131.60	95.75	115.20	**	10:3
NSE	Options	31MAY2018	10750.00	PE	11.85	10.90	NIFTY	102.85	102.70	103.45	351.075	26.84	366825	93.53	69.85	105.00	69.85	91.95	**	10:3
NSE	Options	31MAY2018	10700.00	PE	10.55	7.90	NIFTY	82.75	83.00	83.20	3069.9	2.96	4529025	76.31	71.65	84.65	62.90	74.85	**	10:3
NSE	Options	31MAY2018	10900.00	CE	-23.68	-8.95	NIFTY	28.85	28.60	28.75	3251.8	10.47	4086225	33.43	43.00	43.00	27.55	37.80	**	10:3
NSE	Options	31MAY2018	10850.00	CE	-20.43	-11.05	NIFTY	43.05	42.40	42.70	332.775	3.76	805875	48.52	41.10	60.50	41.00	54.10	**	10:3
NSE	Options	31MAY2018	10800.00	CE	-17.90	-13.55	NIFTY	62.15	61.55	61.85	4129.7	13.90	4698300	69.58	80.00	83.80	58.90	75.70	**	10:3



Ex...	Instr...	Ser/Exp	Strike P...	O.	% ...	Net...	Symbol	La...	...uy Price	Sell Price	Volu...	%OI	Open Interest	Avg...	Open	High	Low	Close	B.	Last
NSE	E	EQ			0.52	1.55	ICICIBANK	2	298.75	298.95	3914.2		154143000	298.26	299.00	299.95	296.15	297.25	**	10:3
NSE	Futures	31MAY2018			0.44	1.30	ICICIBANK	2	299.50	299.65	8926.5	0.53	94094000	298.80	298.65	300.40	297.05	298.30	**	10:3
NSE	Options	31MAY2018	300.00	CE	0.00	0.00	ICICIBANK	6.90	6.85	6.95	2125.7	10.78	4268000	6.71	6.70	7.40	5.95	6.90	**	10:3
NSE	Options	31MAY2018	290.00	CE	2.36	0.30	ICICIBANK	13.00	13.05	13.25	264.000	-0.22	2477750	12.80	13.25	13.55	11.60	12.70	*	10:3
NSE	Options	31MAY2018	290.00	PE	-16.85	-0.75	ICICIBANK	3.70	3.60	3.65	1155.0	4.68	2769250	4.02	3.90	4.50	3.50	4.45	**	10:3
NSE	Options	31MAY2018	300.00	PE	-11.76	-1.00	ICICIBANK	7.50	7.35	7.45	1094.5	1.05	6589000	8.01	7.60	8.85	7.05	8.50	**	10:3

Option – Buying / Holding

- Buyer has to pay Premium.
- Has the Right to Exercise the Option.
- Has no obligation of buying / selling the underlying security.
  - If a stock Call (*Put*) option expires deep ITM (more than 3 strikes), then the buyer must take (*give*) the delivery under physical settlement. To avoid delivery, one can adopt counter position through future or spreads.
  - All index options are cash settled.
- Risk is limited to the extent of premium paid.
- Reward could be unlimited.

Option – Selling / Writing

- Receives the Premium.
- Has to pay the margin for selling the option.
- Margin is refundable at the end of the contract.
- Has obligation to sell / buy the underlying security.
- Reward is limited to the extent of premium received.
- Risk is potentially higher than the premium received.
- Risk could be controlled by employing various strategies.

Option Value OR Premium

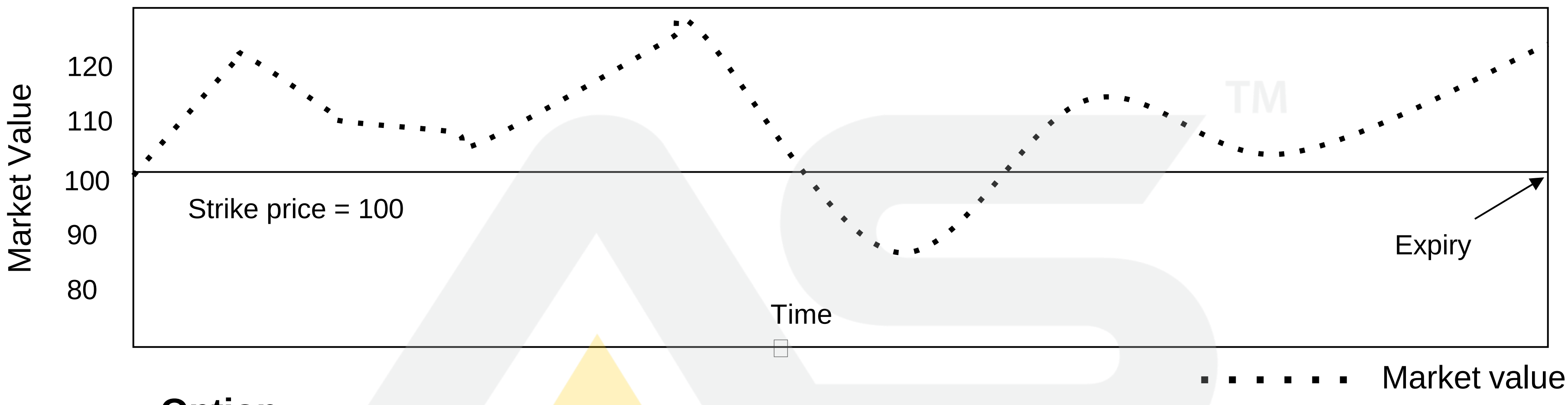
- Two Constituents:
  - Intrinsic Value -
    - ✓ The amount by which the Option is in the Money
  - Time Value -
    - ✓ The amount by which the Option is out of the money

Premium = Intrinsic Value + Time Value

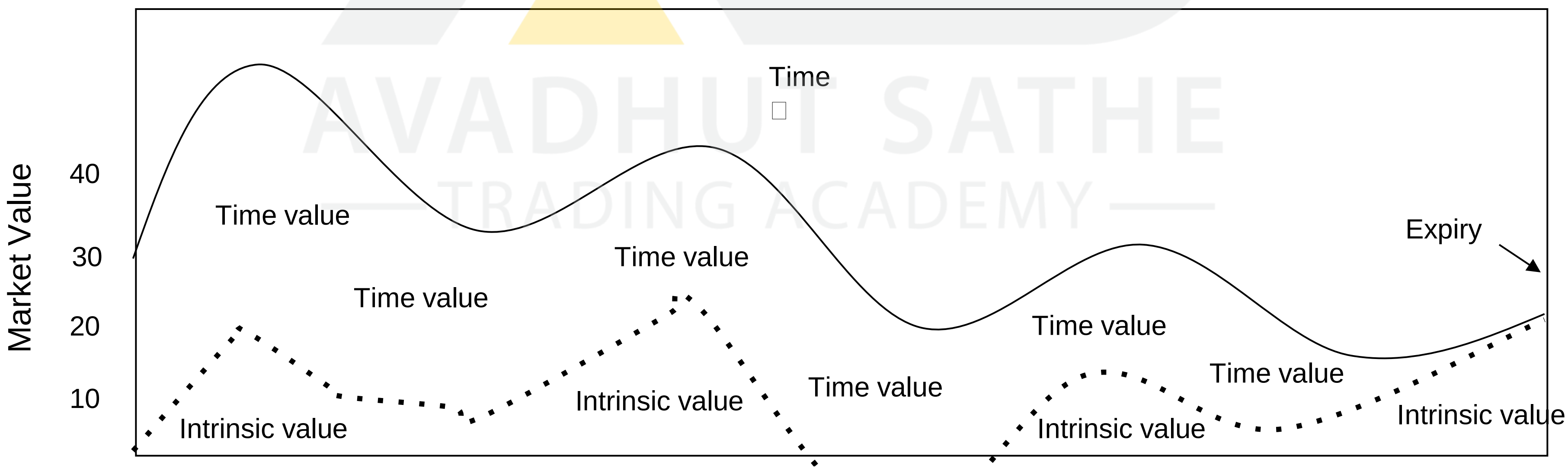
- Two Constituents:
  - If RIL spot is 2220 and RIL 2200 call (CE) is at a premium of Rs. 50 then
  - Intrinsic Value : 20
  - Time Value : 30

Intrinsic Value & Time Value

Underlying Stock



Option



Option Premium

Important Determinants:

- Price of the Underlying.

- Volatility of the Underlying:
    - It's measure of the fluctuation in a stock or index's price
    - It helps to identify underpriced and overpriced options

- Strike Price of the Option.

- Time Remaining until the Option Expires.

- Prevalent risk free interest rate:
    - Typically 6 - 7% p.a. in India

Margin

- Margin is paid by the Option Seller to cover for the unlimited risk involved.

- Varies from 15% to 60%

- In case of Covered Calls / Puts the margin requirement is less i.e. 5% to 15% because of the reduced / limited risk.

- % margin requirement varies based on:
  - Volatility of the stock in the cash market
  - Market wide exposure limit in the Derivatives market

- Market wide exposure:
  - Exchange Limit
  - Broker Limit (depending on the Open positions at the broker)

- Typical margin requirement based on % OI (open interest) of the free Float (tradable share capital of the company)

% OI	**: Margin**
50%	: 15% to 20%
70%	: 25%
80%	: 40%
90% to 100%	: 90%

Selecting Strike Price

➢ Select **closest ITM / ATM** strike or the **next best OTM** strike
- They are more liquid
- They give better ROI
- Check Example of Nifty below

Nifty at Spot	Strike Price (Oct18)	State	Spot at Expiry (assumption)	Premium	Intrinsic Value at Expiry	Time Value at Expiry	Gains	ROI
16-10-2017	A		B	C	D=B-A	E	G=(D+E)-C	G/C
10740	10650	ITM	10950	209	300	0	91	**44%**
	10700	ITM	10950	188	250	0	62	**33%**
	10750	ATM	10950	137	200	0	63	**46%**
	10800	OTM	10950	99	150	0	51	**52%**
	10850	OTM	10950	69	100	0	31	**45%**
	10900	OTM	10950	47	50	0	3	**6%**
	10950	OTM	10950	31	0	0	-31	**-100%**

Note: this table assumes the Spot Nifty to be at 10950 at the closing of 30 Oct 2017

Speculation

➢ Technical Analysis is necessary (at least partial knowledge).

➢ Find target for the stock price.

➢ Identify Stop Loss (to manage Risk).

➢ Bullish View:
- Buy Call Option
- Write (Sell) Put Option (also called shorting Put)

➢ Bearish View:
- Buy Put Option
- Write (Sell) Call Option (also called shorting Call)

Option OI Data Interpretation

CALL		
CE OI	**CE PRICE**	**INTERPRETATION**
UP	UP	BULLISH/WATCHFUL
DOWN	UP	**STRONG BULLISH**
DOWN	DOWN	BEARISH
UP	DOWN	**STRONG BEARISH**

PUT		
PE OI	**PE PRICE**	**INTERPRETATION**
UP	UP	BEARISH/WATCHFUL
DOWN	UP	**STRONG BEARISH**
DOWN	DOWN	BULLISH
UP	DOWN	**STRONG BULLISH**

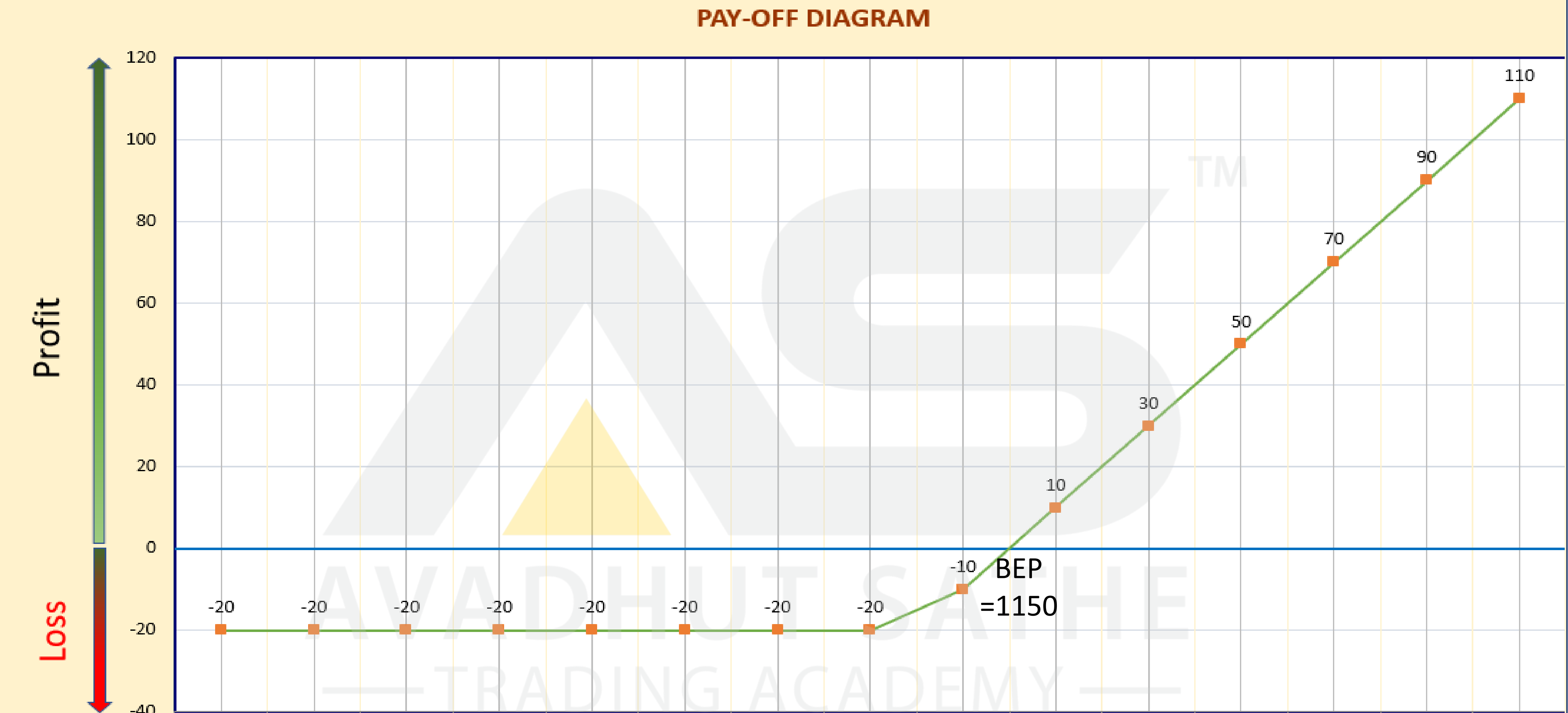
Naked Options – Buying / Selling

Sr. No.	View	Option Type	Trade	Underlying Security	Spot Price	Strike Price (OTM)	Premium	Break-even (BEP)	Risk	Reward
1	Bullish	Call	Buy	Tata Steel	1105	1130	20 (Paid)	1150	20 (Limited)	Unlimited above 1150
2	Bullish	Put	Sell	Tata Steel	1105	1080	20 (Received)	1060	Unlimited below 1060	20
3	Bearish	Put	Buy	Tata Steel	1105	1080	20 (Paid)	1060	20 (Limited)	Unlimited below 1060
4	Bearish	Call	Sell	Tata Steel	1105	1130	20 (Received)	1150	Unlimited above 1150	20

Note:

- Call Seller makes money as long as spot remains below the strike price.
- Put Seller makes money as long as spot remains above the strike price.
- Seller needs to keep margin with the broker.

Pay-off Diagram (Call Buyer)

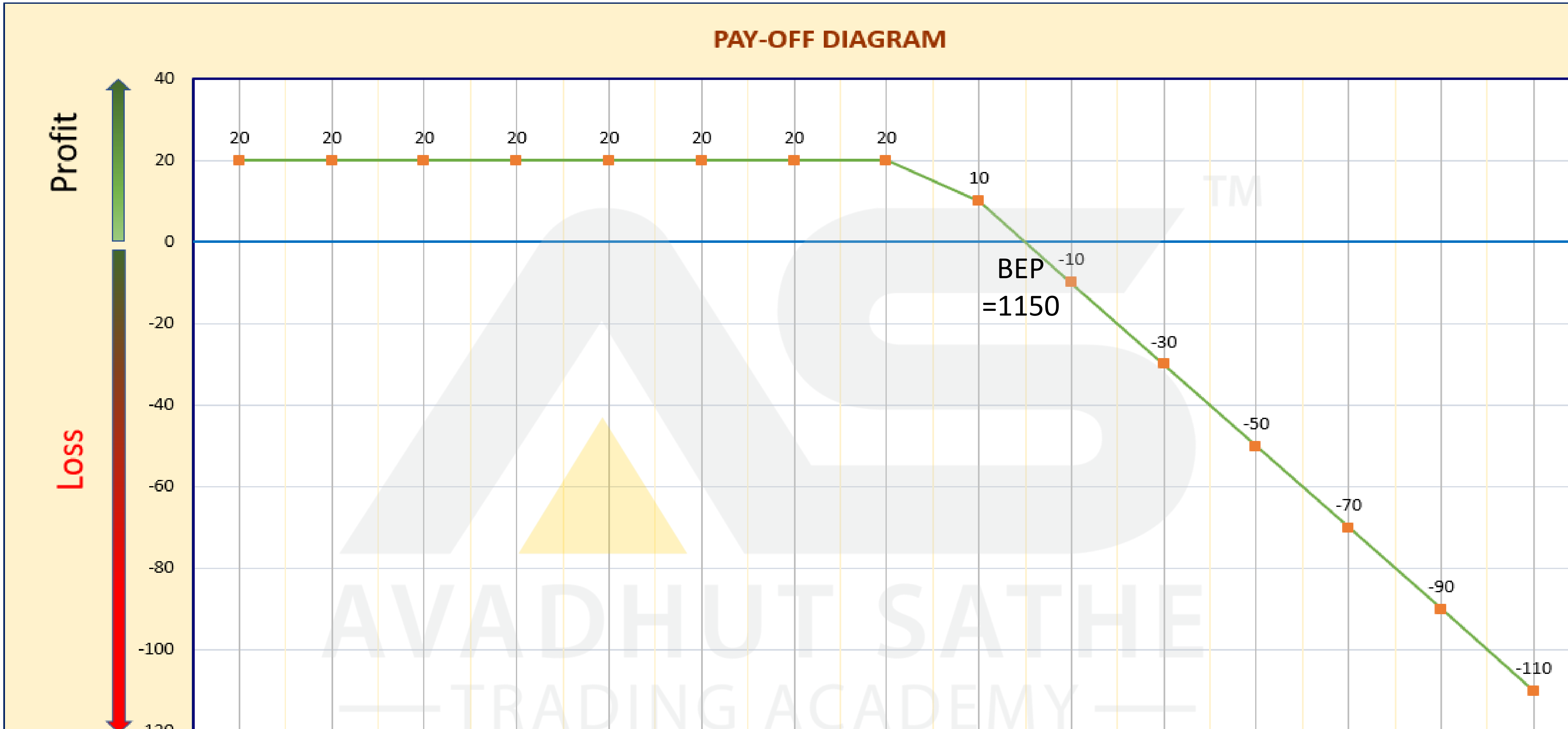


	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260
Profit / Loss Rs.	-20	-20	-20	-20	-20	-20	-20	-20	-10	10	30	50	70	90	110

Note:

The Call buyer makes loss (limited to 20) as long as spot remains below 1130

Pay-off Diagram (Call Seller)

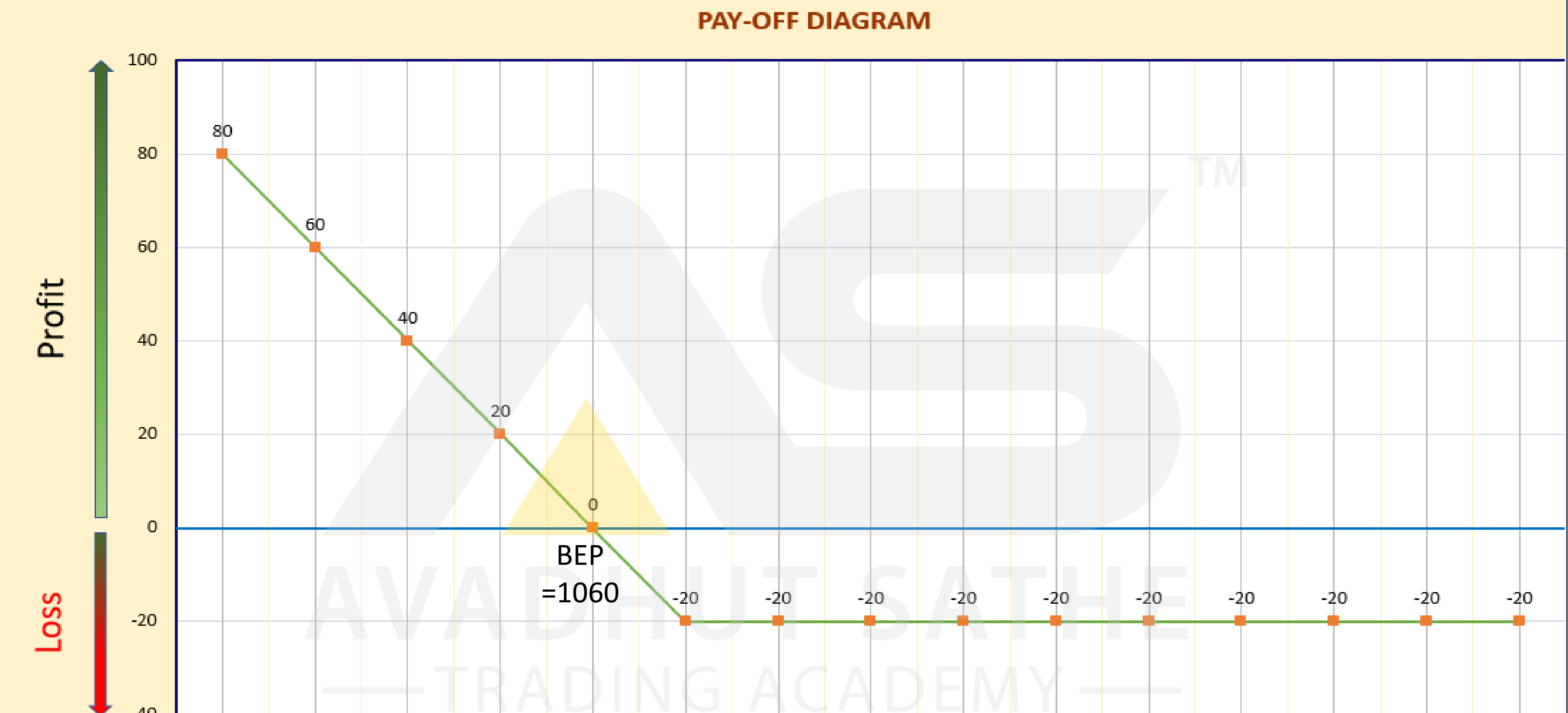


	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260
Profit / Loss Rs.	20	20	20	20	20	20	20	20	10	-10	-30	-50	-70	-90	-110

Note:

The Call Seller makes gains (limited to 20) as long as spot remains below 1130

Pay-off Diagram (Put Buyer)

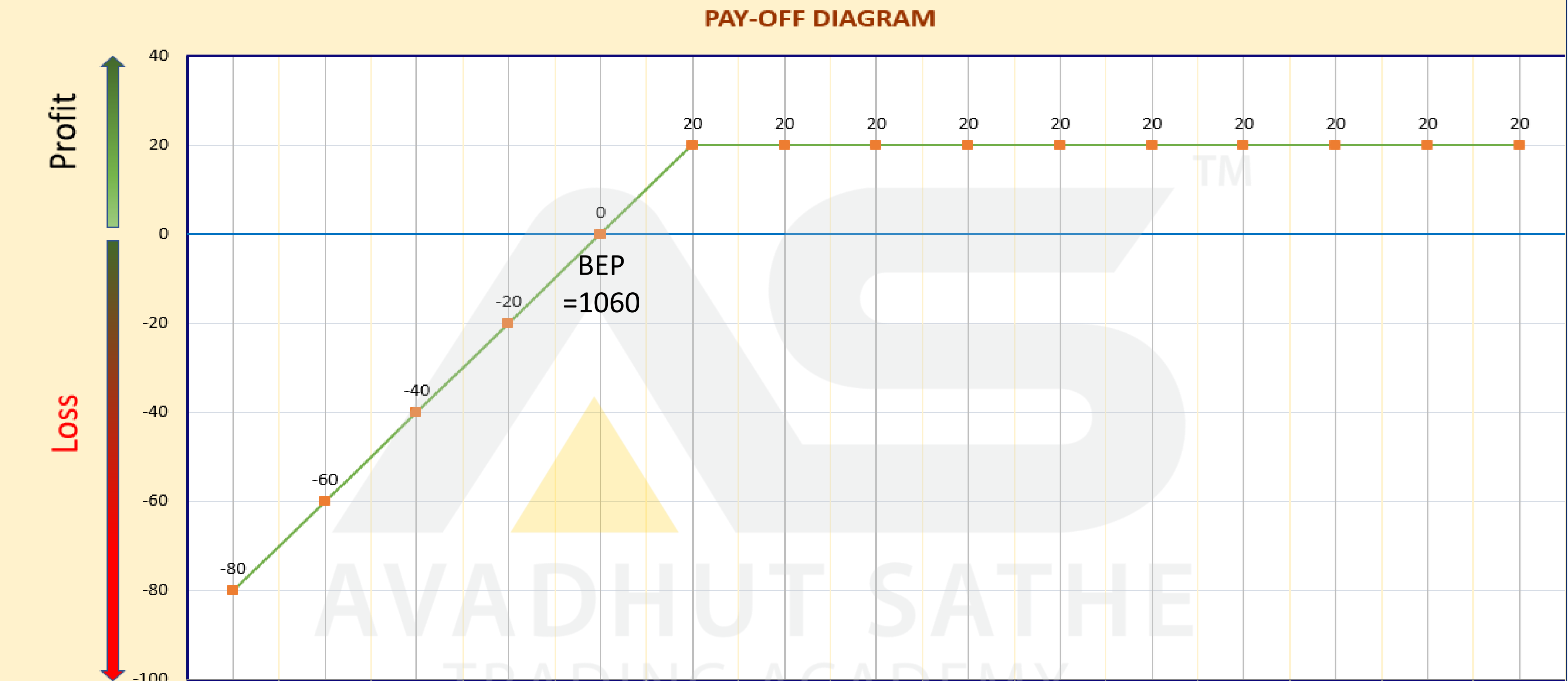


	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260
Profit / Loss Rs.	80	60	40	20	0	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20

Note:

The Put buyer makes loss (limited to 20) as long as spot remains above 1080

Pay-off Diagram (Put Seller)



	980	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260
Profit / Loss Rs.	-80	-60	-40	-20	0	20	20	20	20	20	20	20	20	20	20

Note:

The Put seller makes profit (limited to 20) as long as spot remains above 1080, Loss is unlimited below 1080

Exits

- **Settlement**
  - This is non-delivery based i.e. by payment of the difference of the buy / sell price.

- **Exit Strategies**
  - Wait till Expiry when the trade is going in your favor and market is trending.
  - Square-off as soon as your exit criteria (based on TA) is met.
  - Rolling (Sell the option and move to higher / lower strike).
  - If there’s no liquidity in the ITM Call (Put) option, one may short (go Long) the Futures to lock profits. One may also trade in Futures as its risk-free trade.

Option Strategies

- Insurance against market fall (Protective Put buying)
- Covered Call
- Vertical Spreads
- Straddle
- Strangle
- Combinations – Butterfly, Collar, Ladder
- Calendar Spread

Note: Use Simple Strategies ONLY

Covered Call

- Buying (or holding) underlying security and writing (selling) the ATM or next best OTM Call.

- Good strategy in sideways (near support levels) and bullish markets.

- It’s like earning Rent on your Property which is idle.

- Why it makes sense?
  - Only liquid calls are near-month expiry i.e. at most 22 days for expiry.
  - As volatility reduces the Seller makes the difference of volatility premium.
  - As time reduces, the Seller makes money on the reducing time value.
  - If price is exactly at or below the strike at the time of expiry, the seller earns the entire premium.
  - Risk is minimized by owning the Underlying security e.g. write RIL 2000 calls if you own RIL shares!

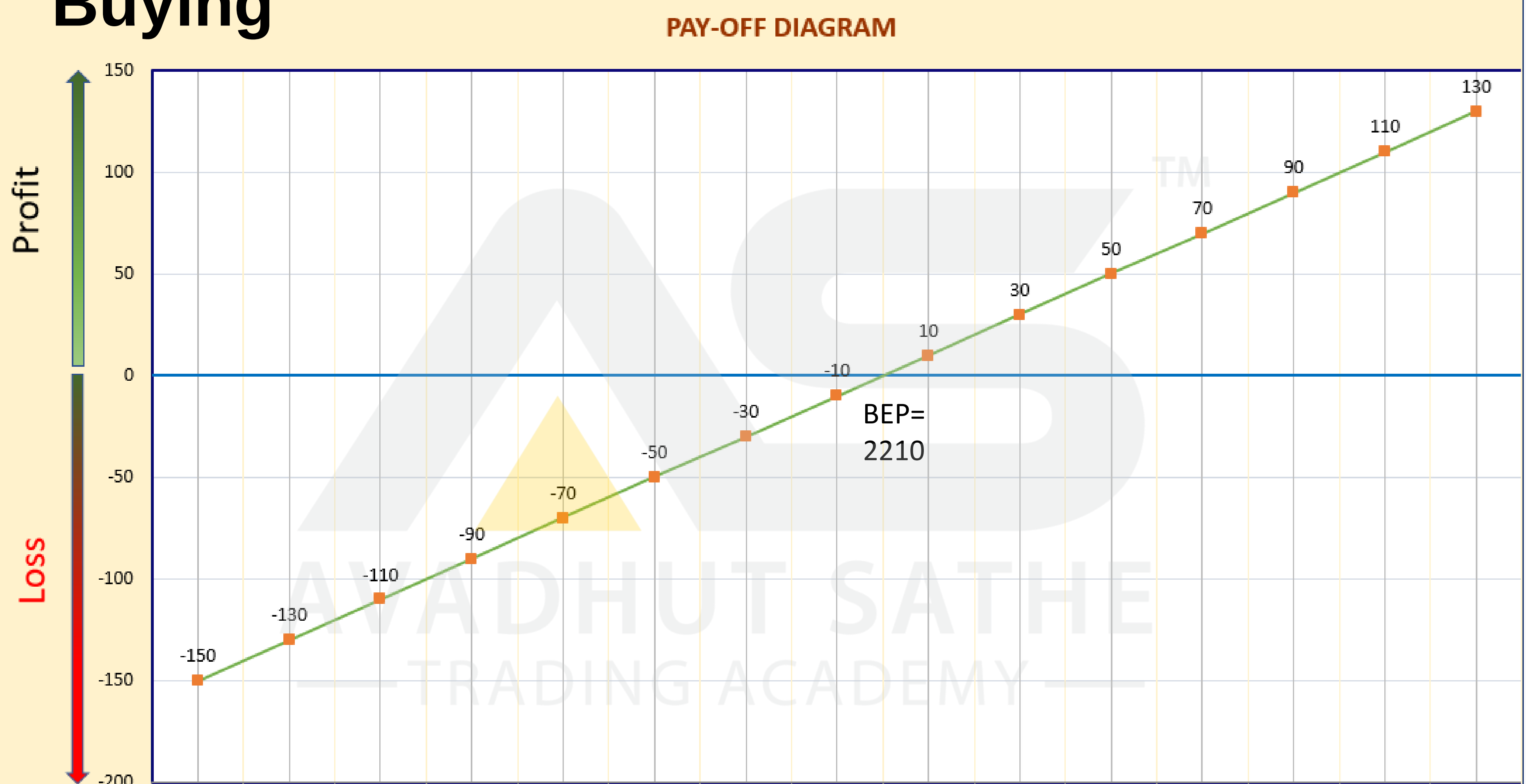
Covered Call Example

Date	16-06-2021
Series Expiry Date	24-06-2021
Scrip	Reliance
Future Price	2210
Call Strike Price	2240
Premium	40
% Premium	2%
% (p.a.)	83%
Downside Protection / Stop Loss	2170

- Buy Reliance future @ Rs. 2210
- Sell OTM Call of strike 2240 @40
- Technical View is that Reliance will not go below 2170
- Upside may be limited as major resistance is at 2240

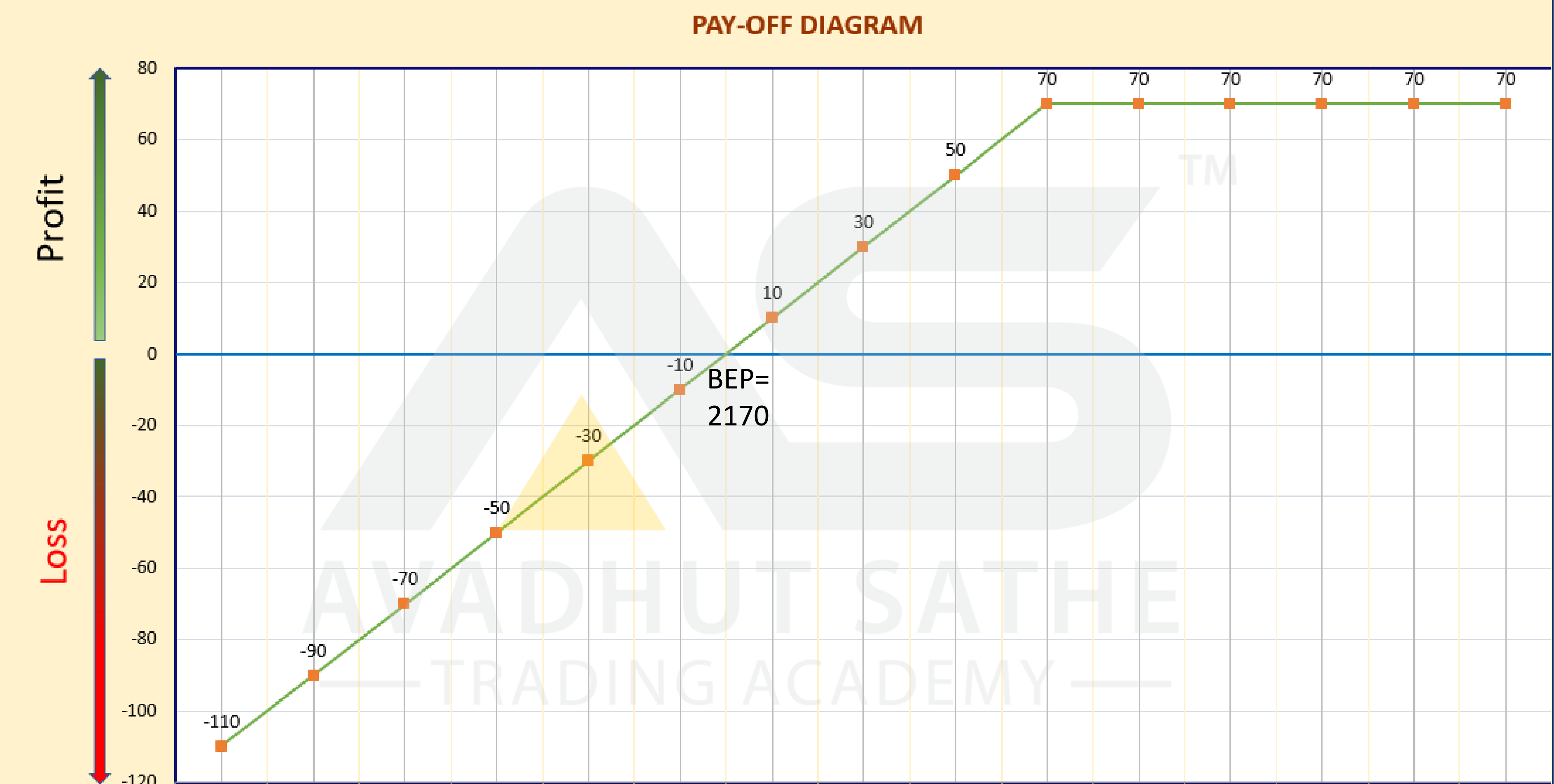
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Closing Price @ Expiry	2140	2160	2180	2200	2220	2240	2260	2280
Stock Gain	0	0	0	0	10	30	50	70
Stock Loss	-70	-50	-30	-10	0	0	0	0
Call Loss	0	0	0	0	0	0	0	0
Call Gain	40	40	40	40	40	40	20	0
Total Gain	-30	-10	10	30	50	70	70	70

Pay-off Diagram - Naked Future Buying



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	-150	-130	-110	-90	-70	-50	-30	-10	10	30	50	70	90	110	130

Pay-off Diagram - Covered Call Strategy



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	-110	-90	-70	-50	-30	-10	10	30	50	70	70	70	70	70	70

Covered Call – Stock & Strike Selection

- **Selecting Stock:**
  - Stocks which are either in up trend or sideways trend (range).
  - You have a partial technical view i.e. reasonable knowledge of support and resistances based on past price history is good enough.
  - The stock has corrected to it's support levels.

- **Avoid Stocks:**
  - with Bearish Patterns
  - overbought stocks which may turn down sharply
  - Stocks which are operator driven
  - Higher volatility

- **Selecting Strike price:**
  - If stock has rallied recently use nearest ITM strike to get better premium and have more hedge against downside
  - If stock has corrected use best possible OTM
  - If stock is long term investment and you want to protect capital gains then use 'Deep OTM' i.e. strike price further ahead from spot.

Covered Call – Follow-up / Exit

- Do nothing – (if stock rallies)

- What if Stock rallies and Call is exercised against you:
  - No worries, you have already captured the entire gain against the stock that you hold.
  - Write another ATM or OTM call **if** stock is still bullish.

- **Rolling Down:**
  - If stock falls further, you may cover the call you sold and Sell another lower ATM call.
  - This way you could maximize the premium earned.

- **Stop Loss:**
  - If the stock breaks all important supports, you are better of closing the entire position.

Covered Put

- Shorting the underlying security and writing (selling) the ATM or next best OTM Put.

- **Selling Stock:**
  - Stocks which are either in down trend or sideways trend (range).
  - You have a partial technical view i.e. reasonable knowledge of support and resistances based on past price history is good enough.
  - The stock has rallied to it's resistance level.

- **Avoid Stocks:**
  - With Bullish Patterns.
  - Oversold stocks which may turn up sharply.
  - Stocks which are operator driven.

- **Selecting Strike price:**
  - If stock has dropped recently use nearest ITM strike to get better premium and have more hedge against upside.
  - If stock has rallied use best possible OTM.
  - If market is extremely bearish and you want to maximize gains then use 'Deep OTM' i.e. strike price further ahead from spot.

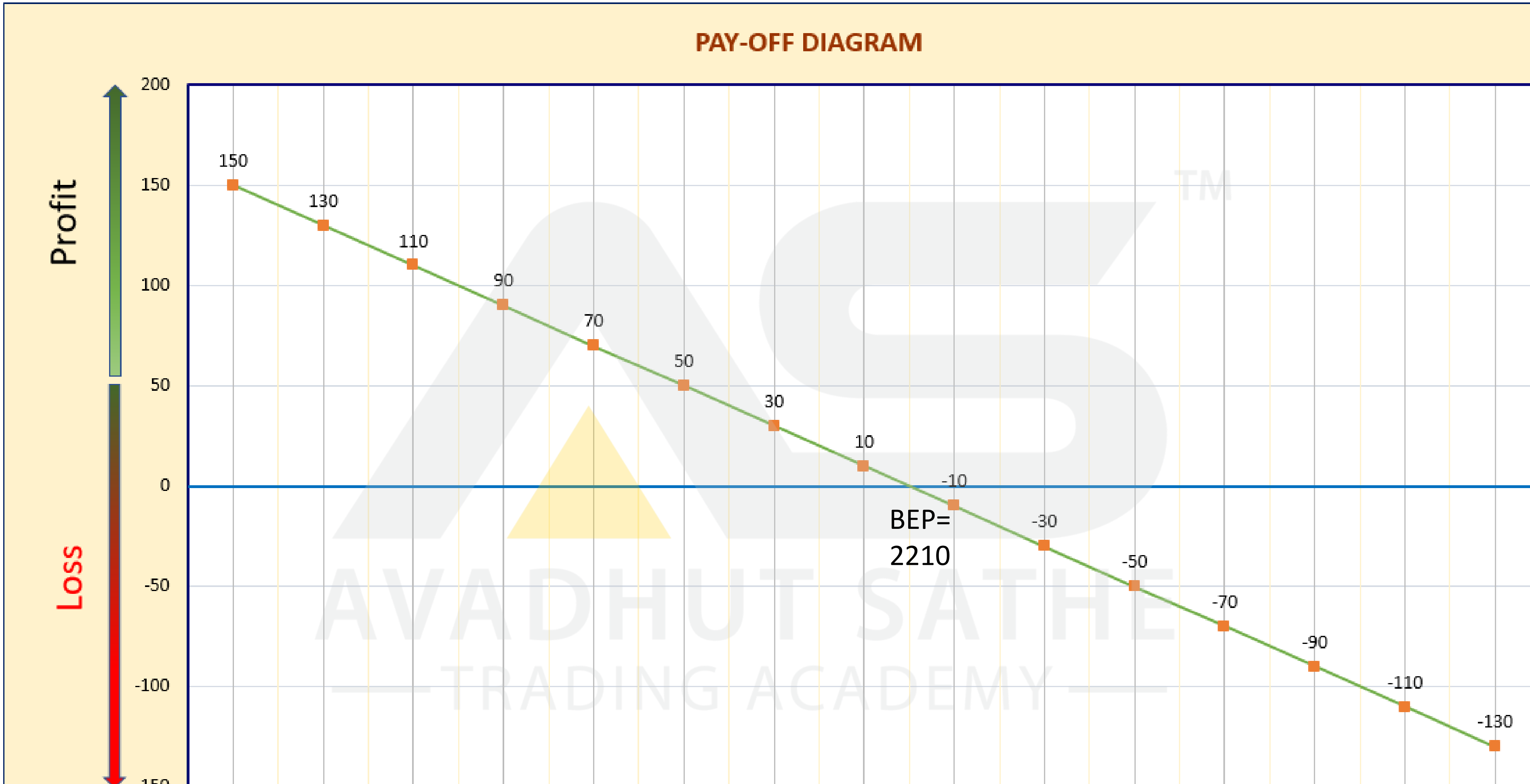
Covered Put Example

Date	16-06-2021
Series Expiry Date	24-06-2021
Scrip	Reliance
Future Price	2210
Put Strike Price	2180
Premium	40
% Premium	2%
% (p.a.)	83%
Downside Protection / Stop Loss	2170

- Sell Reliance Future @ Rs. 2210
- Sell OTM Put of strike 2180 @40
- Technical View is that Reliance will not go above 2250
- Downside may be limited as major support is at 2180

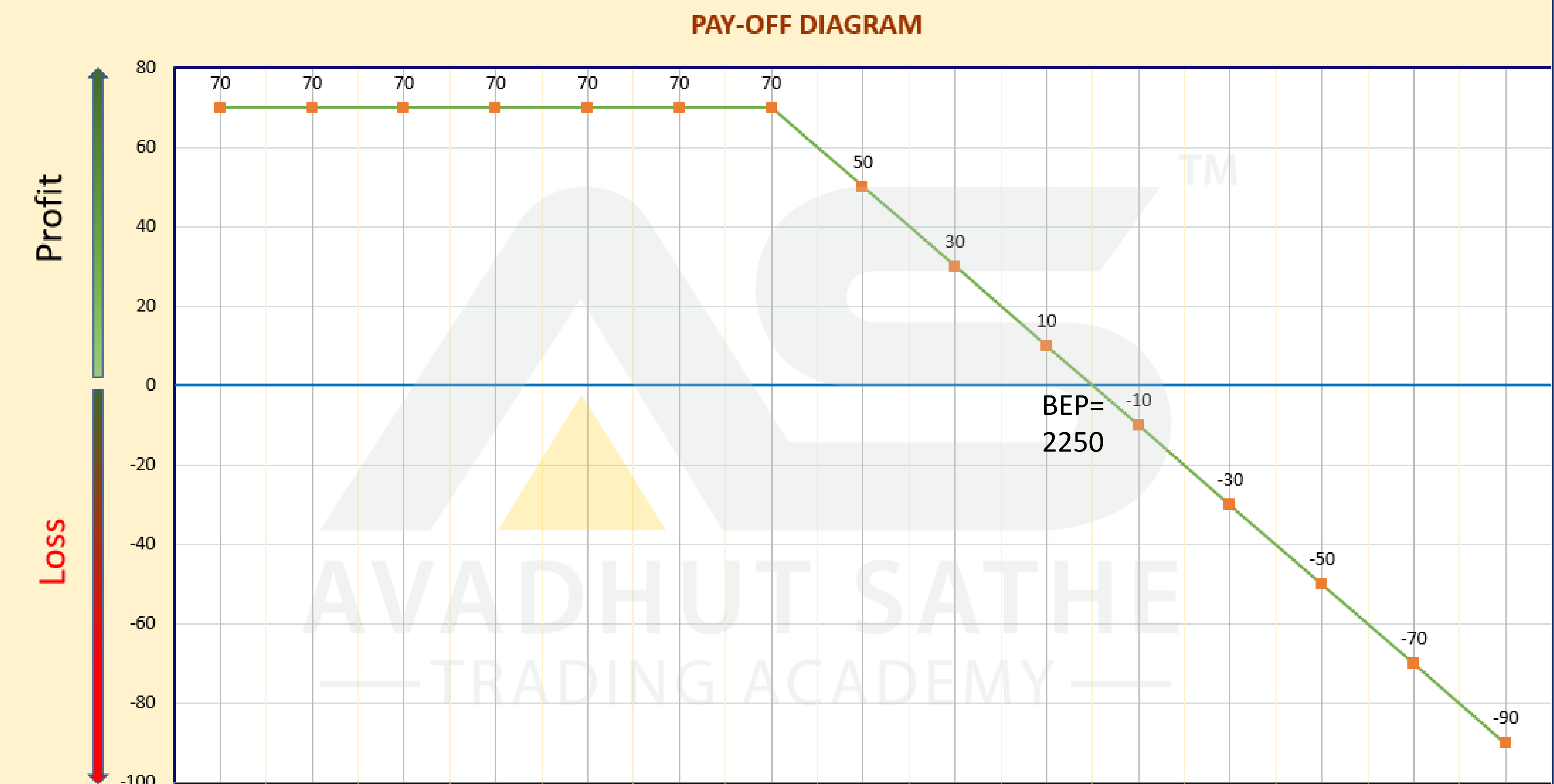
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Closing Price @ Expiry	2120	2140	2160	2180	2200	2220	2240	2260
Future Gain	90	70	50	30	10	0	0	0
Future Loss	0	0	0	0	0	-10	-30	-50
Put Loss	-20	0	0	0	0	0	0	0
Put Gain	0	0	20	40	40	40	40	40
Total Gain	70	70	70	70	50	30	10	-10

Pay-off Diagram – Naked Future Selling



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	150	130	110	90	70	50	30	10	-10	-30	-50	-70	-90	-110	-130

Pay-off Diagram - Covered Put Strategy



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	70	70	70	70	70	70	70	50	30	10	-10	-30	-50	-70	-90

Vertical Spreads

- Going long (buying) and short (selling) at the same time for the same type of option (i.e. both call or both put) with same expiry but different strike price.
  - E.g. Buy RIL call of Strike 1000 & Sell RIL call of Strike 1050

- **Bull Spread:**
  - Buy Lower strike option (pay premium)
  - Sell Higher strike option (receive premium)

- **Bear Spread:**
  - Sell Lower strike option (receive premium)
  - Buy higher strike option (pay premium)

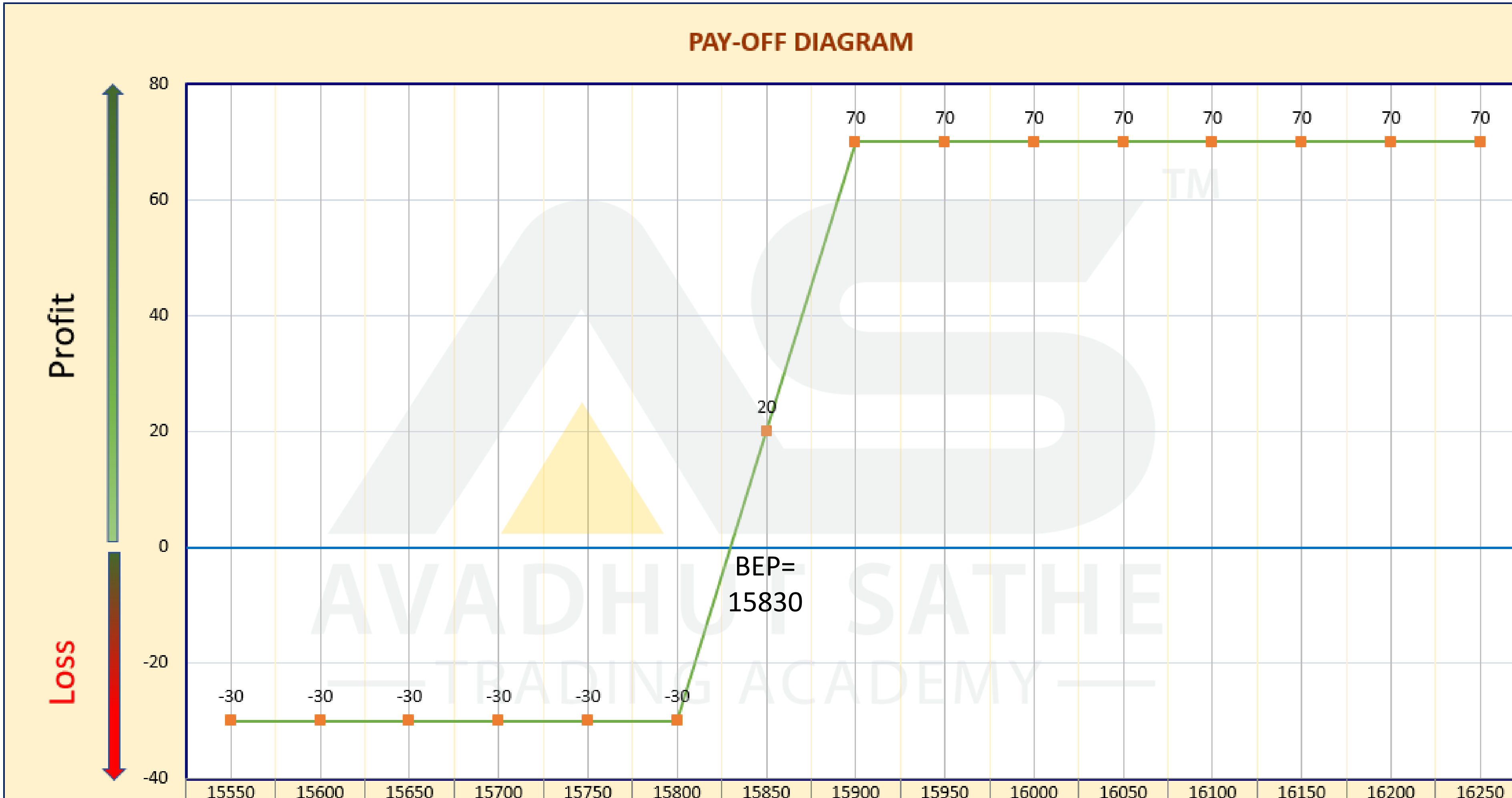
- **Debit Spread:**
  - When you pay the difference
  - Bull Call spread (you are bullish) - like covered call
  - Bear Put spread (you are bearish) – like covered put

- **Credit Spread:**
  - When you receive the difference
  - Bear Call spread (you are bearish)
  - Bull Put Spread (you are bullish)

Bull Call Spread (Like Covered Call)

- **Example** : **Nifty Call** (spot : 15700)
- **Premiums**
  - 15800 Call : Rs. 55
  - 15900 Call : Rs. 25
- **Investment**
  - Buy 15800 Call = 75 x 55 = Rs. 4125 paid
  - Sell 15900 Call = 75 x 25 = Rs. 1875 received
  - Net Investment = Rs. 2250
- **Margin** requirement for Selling the Call
  - Lower Margin because risk is covered by buying lower Strike call
  - SP x Lot x margin%
  - 15900 x 75 x 5% = Rs. 59625
- **Break-even point**
  - Difference of premium to be added to lower SP
  - i.e. net debit is 55 – 25 = 30
  - i.e. when Nifty goes above 15800 + 30 = 15830, you start making money!
- **Risk**
  - Limited to 30 per unit if spot stays below 15800
- **Returns**
  - Limited to max. 70 per unit, you start making money if spot starts moving above 15830
  - When spot goes above 15900, the call option sold starts making loss thus limiting net gains to 70

Pay-off Diagram – Bull Call Spread

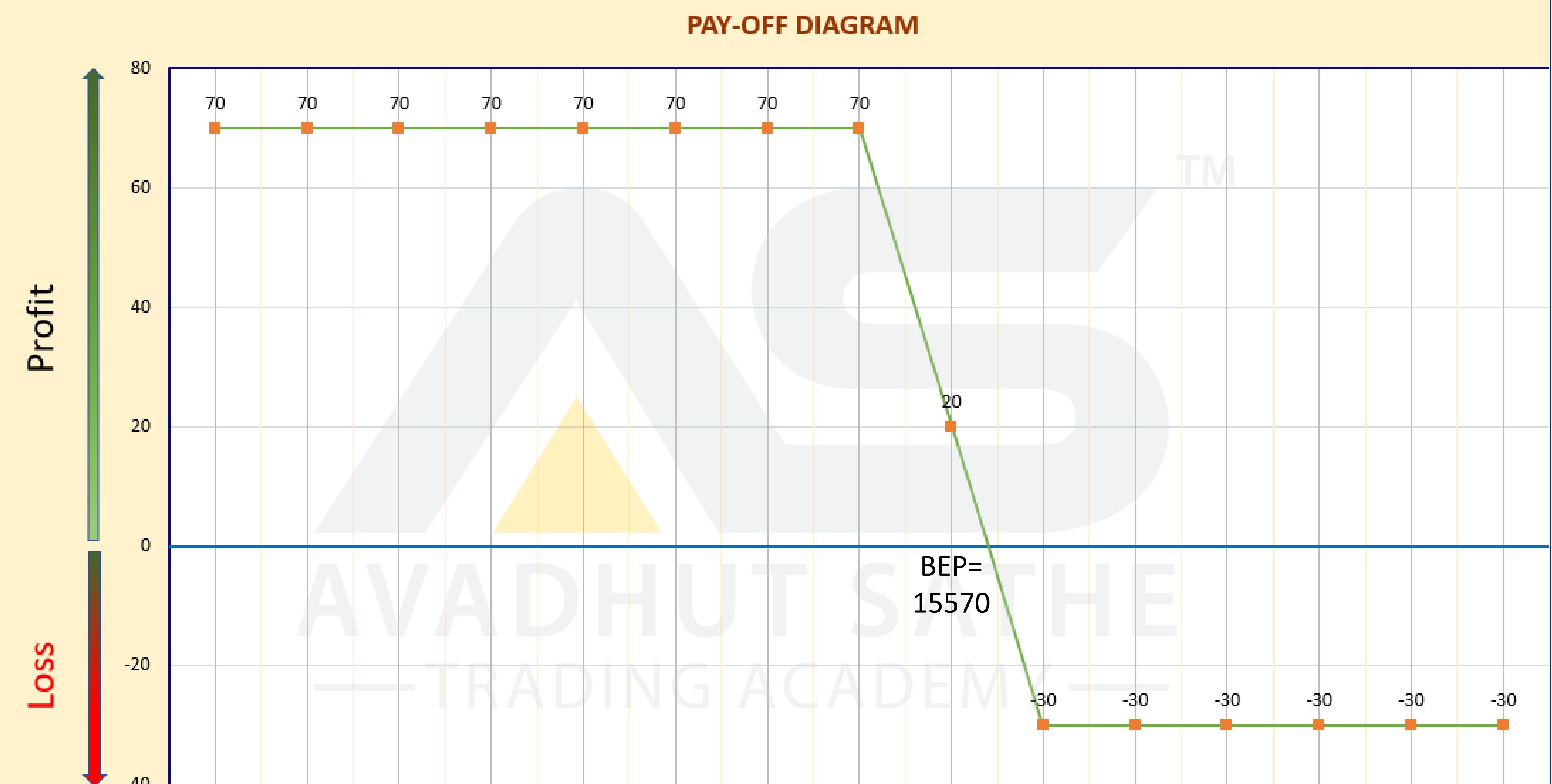


	15550	15600	15650	15700	15750	15800	15850	15900	15950	16000	16050	16100	16150	16200	16250
Profit / Loss Rs.	-30	-30	-30	-30	-30	-30	20	70	70	70	70	70	70	70	70

Bear Call Spread

- **Example** : **Nifty Call** (spot : 15700)
- **Premiums**
  - 15600 Call : Rs. 170
  - 15500 Call : Rs. 240
- **Investment**
  - Sell 15500 Call = 75 x 240 = Rs. 18000 received
  - Buy 15600 Call = 75 x 170 = Rs. 12750 paid
  - Net premium received = Rs. 5250
- **Margin** requirement for Selling the Call
  - Lower Margin because risk is covered by buying higher Strike call
  - SP x Lot x margin%
  - 15500 x 75 x 5% = Rs. 58125
- **Break-even point**
  - Difference of premium to be added to lower SP
  - i.e. net debit is 240 – 170 = 70
  - i.e. when Nifty goes below 15500 + 70 = 15570, you start making money!
- **Risk**
  - Limited to 30 per unit if spot stays above 15600
- **Returns**
  - Limited to max. 70 per unit, you start making money if spot starts moving down below 15570
  - When spot goes below 15500, the call option sold starts making loss thus limiting net gains to 70

Pay-off Diagram – Bear Call Spread

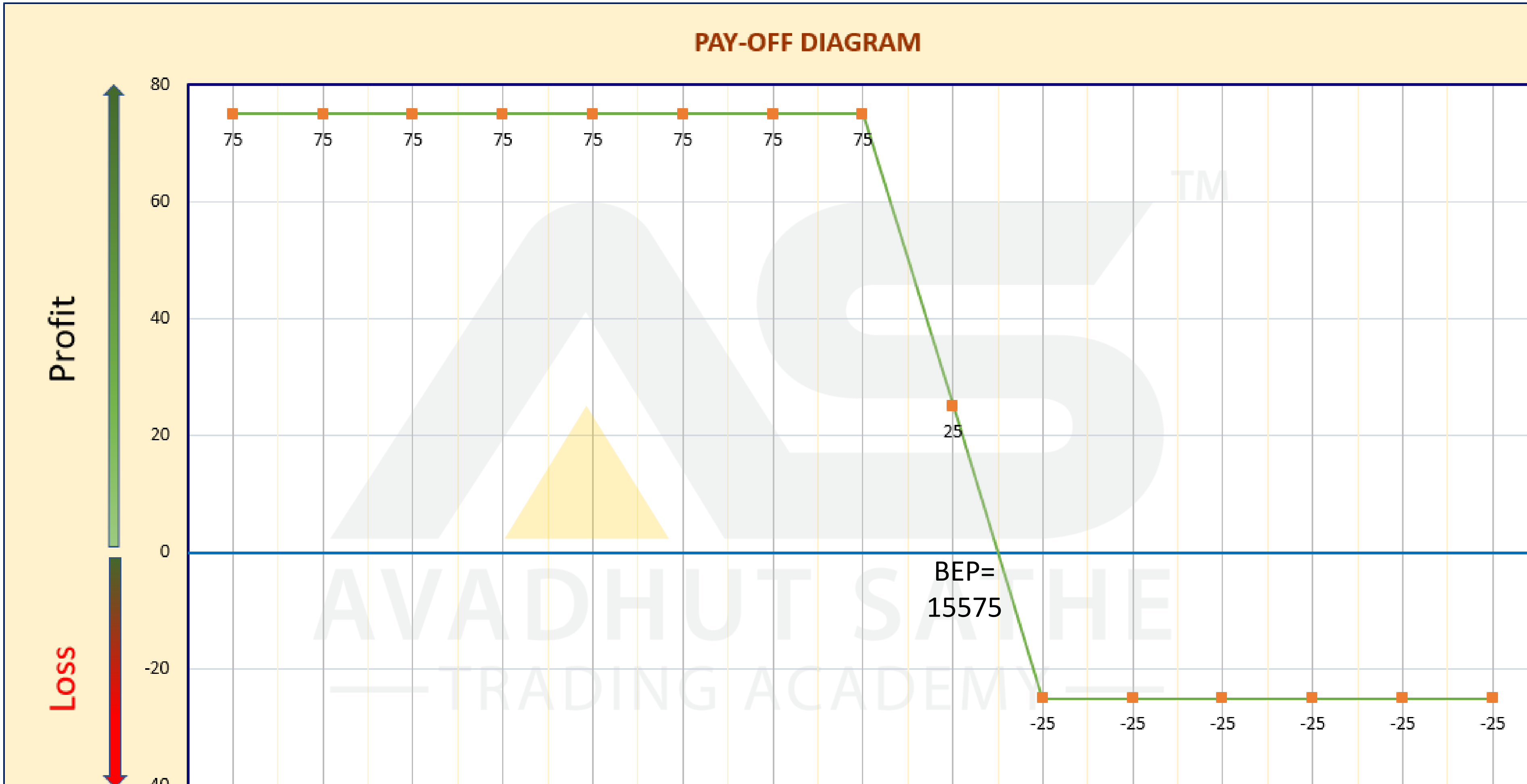


	15150	15200	15250	15300	15350	15400	15450	15500	15550	15600	15650	15700	15750	15800	15850
Profit / Loss Rs.	70	70	70	70	70	70	70	70	20	-30	-30	-30	-30	-30	-30

Bear Put Spread (Like Covered Put)

- **Example** : **Nifty Put** (spot – 15700)
- **Premiums**
  - 15600 : Rs. 80
  - 15500 : Rs. 55
- **Investment**
  - Buy 15600 Put = 75 x 80 = Rs. 6000 paid
  - Sell 15500 Put = 75 x 55 = Rs. 4125 received
  - Net Investment = Rs. 1875
- **Margin** requirement for Selling the Put
  - Lower Margin because risk is covered by buying higher Strike Put
  - SP x Lot x margin%
  - 15500 x 75 x 5% = Rs. 58125
- **Break-even point**
  - Difference of premium to be deducted from higher strike
  - i.e. 80 – 55 = 25
  - i.e. when Nifty goes below 15600 – 25 = 15575 you start making money!
- **Risk**
  - Limited to 25 per unit if spot stays above 15600
- **Returns**
  - Limited to 75 per unit, you start making money if spot starts moving down below 15575
  - When spot goes below 15500, the Put option sold starts making loss, thus limiting the net gains to 75

Pay-off Diagram – Bear Put Spread

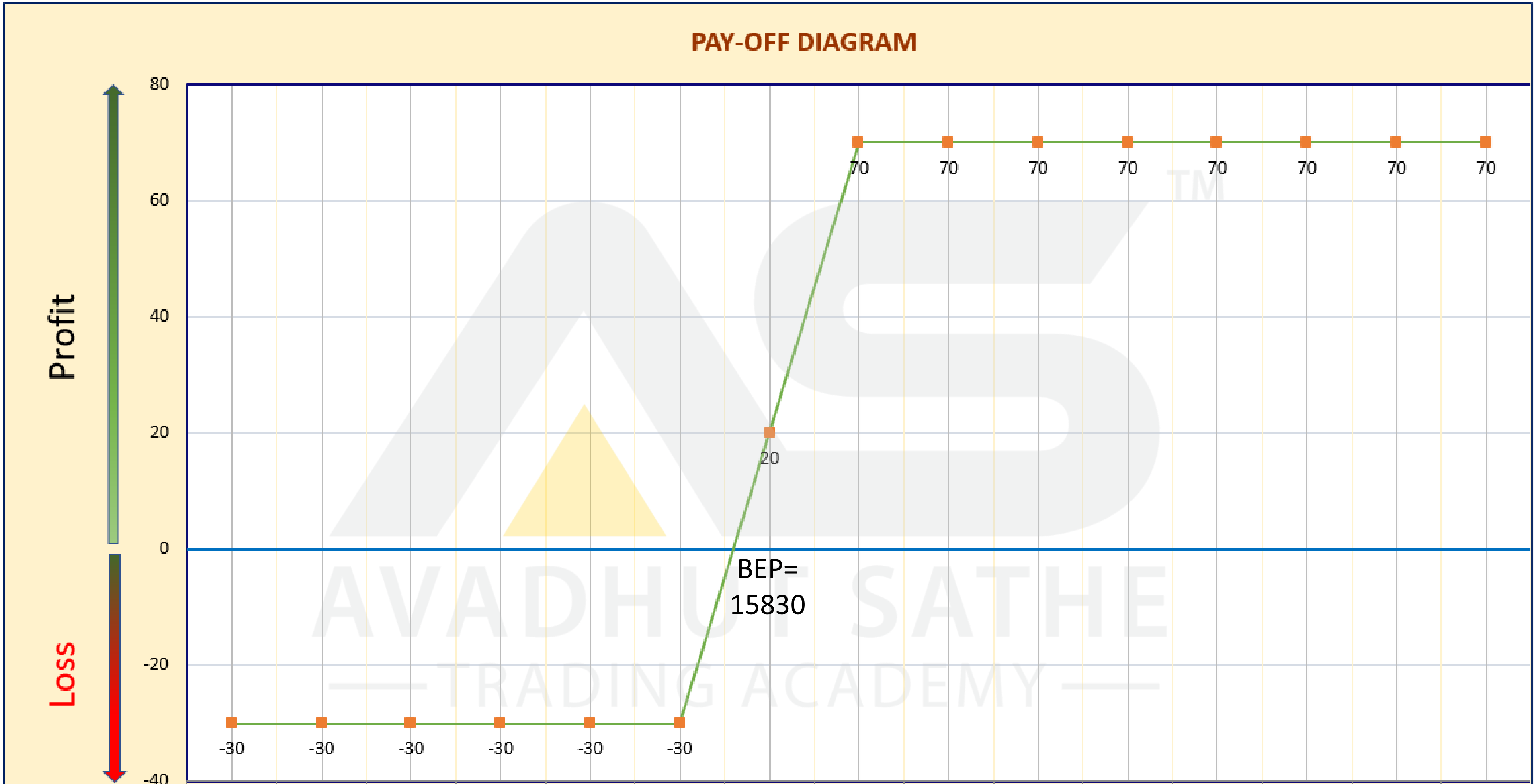


	15150	15200	15250	15300	15350	15400	15450	15500	15550	15600	15650	15700	15750	15800	15850
Profit / Loss Rs.	75	75	75	75	75	75	75	75	25	-25	-25	-25	-25	-25	-25

Bull Put Spread

- **Example** : **Nifty Put** (spot – 15700)
- **Premiums**
  - 15800 Put : Rs. 180
  - 15900 Put : Rs. 250
- **Investment**
  - Buy 15800 Put = 75 x 180 = Rs. 13500 paid
  - Sell 15900 Put = 75 x 250 = Rs. 18750 received
  - Net Investment = Rs. 5250
- **Margin** requirement for Selling the Put
  - Lower Margin because risk is covered by buying lower Strike Put
  - SP x Lot x margin%
  - 15900 x 75 x 5% = Rs. 59625
- **Break-even point**
  - Difference of premium to be deducted from higher strike
  - i.e. 250 – 180 = 70
  - i.e. when Nifty goes above 15900 - 70 = 15830 you start making money!
- **Risk**
  - Limited to 30 per unit if spot stays below 15800
- **Returns**
  - Limited to 70 per unit, if spot starts moving up above 15830, you start making money
  - When spot goes above 15900, the Put option sold starts making loss, thus limiting the net gains to 70

Pay-off Diagram – Bull Put Spread



	15550	15600	15650	15700	15750	15800	15850	15900	15950	16000	16050	16100	16150	16200	16250
Profit / Loss Rs.	-30	-30	-30	-30	-30	-30	20	70	70	70	70	70	70	70	70

Understand the Concept ☺

Let's re-cap:

- When you are Bullish you have 2 choices:
  - Buy a Call
  - Sell a Put

- When you are bearish you have 2 choices:
  - Buy a Put
  - Sell a Call

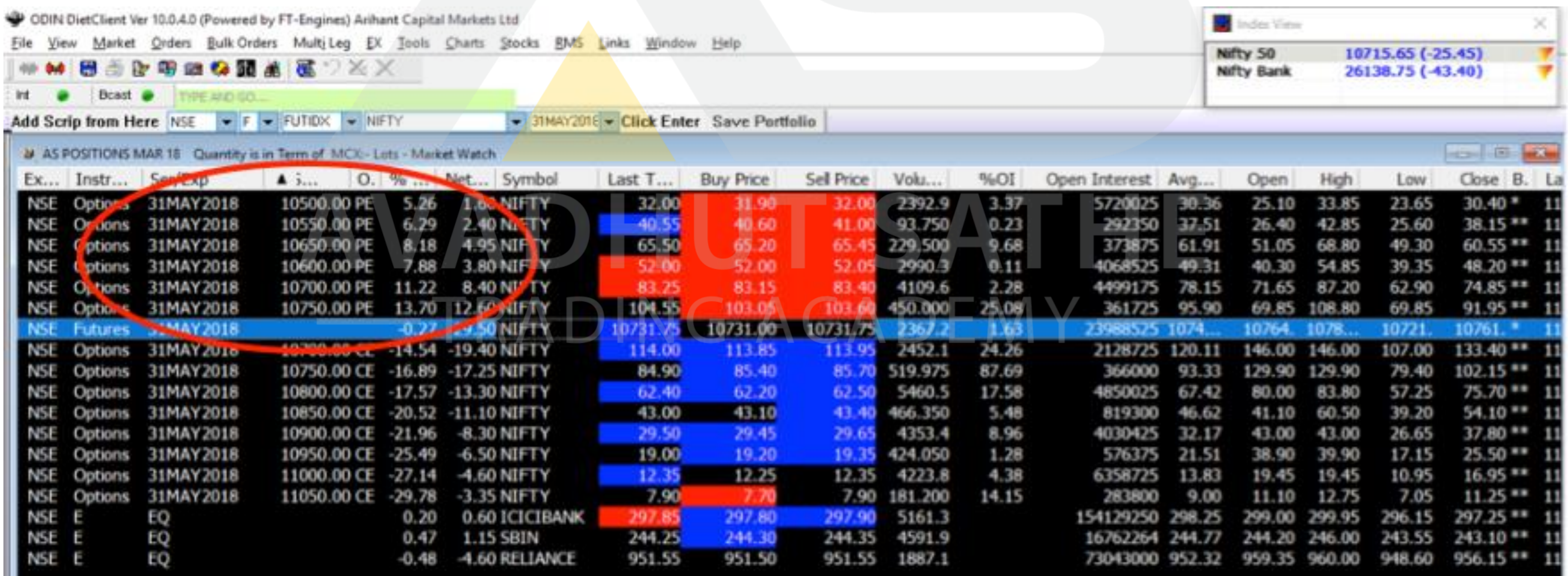
- Why use Spreads then?
  - This is to reduce the investment.
  - Limit the Risk of Selling an option : by buying another one of different strike.
  - In the process you limit the Returns (but that's ok when risk is limited).

- We learnt Debit Spreads (covered call and covered put) in last slides.

- Credit Spreads (do your own example):
  - Concept is to earn the premium and limit the risk.
  - Bull Put Spread (it's like selling a put but minimizing the risk by buying lower strike put).
  - Bear Call Spread (it's like selling a call but minimizing the risk by buying higher strike call).

Ratio Spread

- Buy and Sell calls/puts **in the ratio of 2:1 or 3:2**
- You are expecting sharp move and want uncapped reward with reduced cost.
- Very useful when the net debit is less than 25-30% of the spread.
- E.g. Nifty Put Spreads in May series on 16th May
- Buy 2 - 10600 puts : Rs. 52 x 2 = Rs. 104
- Sell 1 – 10500 put : Rs. 32 x 1 = Rs. 32
- Net Debit : Rs. 72 for 2 puts i.e. 36 per put.
- Break-even point : Rs 10600 - 36 = 10564
- Below 10564, the second put will start giving uncapped returns.



Ex...	Instr...	Ser/Exp	S...	O.	% ...	Net...	Symbol	Last T...	Buy Price	Sell Price	Volu...	%OI	Open Interest	Avg...	Open	High	Low	Close	B.	La
NSE	Options	31MAY2018	10500.00	PE	5.26	1.60	NIFTY	32.00	31.90	32.00	2392.9	3.37	5720025	30.36	25.10	33.85	23.65	30.40	*	11
NSE	Options	31MAY2018	10550.00	PE	6.29	2.40	NIFTY	40.55	40.60	41.00	93.750	0.23	292350	37.51	26.40	42.85	25.60	38.15	**	11
NSE	Options	31MAY2018	10650.00	PE	8.18	4.95	NIFTY	65.50	65.20	65.45	229.500	9.68	373875	61.91	51.05	68.80	49.30	60.55	**	11
NSE	Options	31MAY2018	10600.00	PE	7.88	3.80	NIFTY	52.00	52.00	52.05	2990.3	0.11	4068525	49.31	40.30	54.85	39.35	48.20	**	11
NSE	Options	31MAY2018	10700.00	PE	11.22	8.40	NIFTY	83.25	83.15	83.40	4109.6	2.28	4499175	78.15	71.65	87.20	62.90	74.85	**	11
NSE	Options	31MAY2018	10750.00	PE	13.70	12.60	NIFTY	104.55	103.05	103.60	450.000	25.08	361725	95.90	69.85	108.80	69.85	91.95	**	11
NSE	Futures	31MAY2018			-0.27	29.50	NIFTY	10731.75	10731.00	10731.75	2367.2	1.63	23988525	1074...	10764.	1078...	10721.	10761.	*	11
NSE	Options	31MAY2018	10700.00	CE	-14.54	-19.40	NIFTY	114.00	113.85	113.95	2452.1	24.26	2128725	120.11	146.00	146.00	107.00	133.40	**	11
NSE	Options	31MAY2018	10750.00	CE	-16.89	-17.25	NIFTY	84.90	85.40	85.70	519.975	87.69	366000	93.33	129.90	129.90	79.40	102.15	**	11
NSE	Options	31MAY2018	10800.00	CE	-17.57	-13.30	NIFTY	62.40	62.20	62.50	5460.5	17.58	4850025	67.42	80.00	83.80	57.25	75.70	**	11
NSE	Options	31MAY2018	10850.00	CE	-20.52	-11.10	NIFTY	43.00	43.10	43.40	466.350	5.48	819300	46.62	41.10	60.50	39.20	54.10	**	11
NSE	Options	31MAY2018	10900.00	CE	-21.96	-8.30	NIFTY	29.50	29.45	29.65	4353.4	8.96	4030425	32.17	43.00	43.00	26.65	37.80	**	11
NSE	Options	31MAY2018	10950.00	CE	-25.49	-6.50	NIFTY	19.00	19.20	19.35	424.050	1.28	576375	21.51	38.90	39.90	17.15	25.50	**	11
NSE	Options	31MAY2018	11000.00	CE	-27.14	-4.60	NIFTY	12.35	12.25	12.35	4223.8	4.38	6358725	13.83	19.45	19.45	10.95	16.95	**	11
NSE	Options	31MAY2018	11050.00	CE	-29.78	-3.35	NIFTY	7.90	7.70	7.90	181.200	14.15	283800	9.00	11.10	12.75	7.05	11.25	**	11
NSE	E	EQ			0.20	0.60	ICICIBANK	297.85	297.80	297.90	5161.3		154129250	298.25	299.00	299.95	296.15	297.25	**	11
NSE	E	EQ			0.47	1.15	SBIN	244.25	244.30	244.35	4591.9		16762264	244.77	244.20	246.00	243.55	243.10	**	11
NSE	E	EQ			-0.48	-4.60	RELIANCE	951.55	951.50	951.55	1887.1		730430000	952.32	959.35	960.00	948.60	956.15	**	11

Straddle

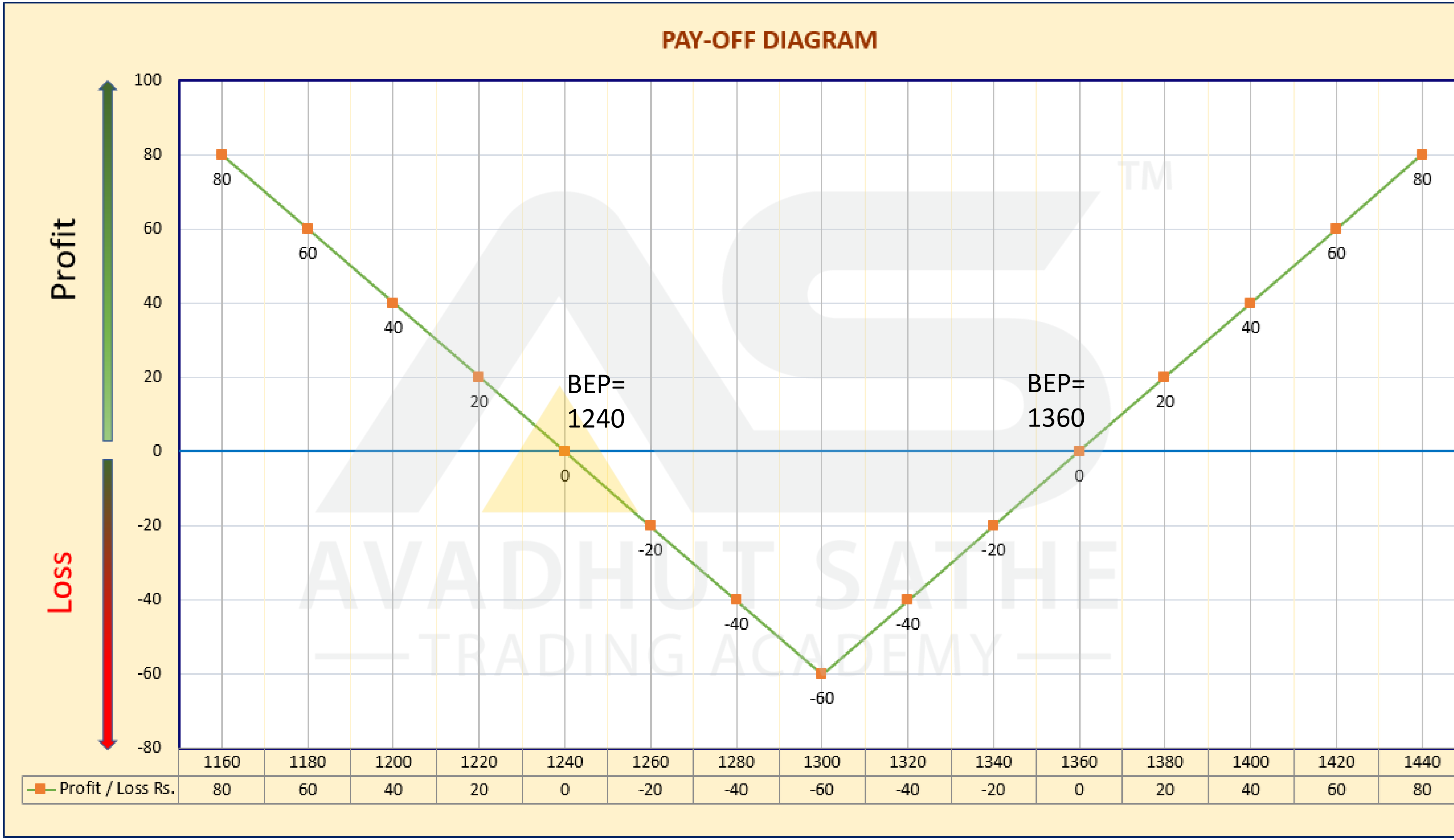
- Buy Call and Put of same strike price (ATM)

- When to use this strategy?
  - Expecting some news which will result in wild move in either direction!
  - You are at Major Turning Point in the Market and **volatility is low**.

- High Investment + Limited Risk + High Returns

- Example – Infosys 27th May 2021 series, buy Call & Put of strike 1300
- Premiums:
  - 1300 Call : Rs. 35
  - 1300 Put : Rs. 25
- Investment:
  - Call premium = 35 x 600 = 21000
  - Put premium = 25 x 600 = 15000
  - Total investment = 36000
- Risk
  - Limited to the total premium i.e. Rs. 36,000 (or 60 per share)
- Reward
  - Unlimited if spot goes beyond 1300 + 60 i.e. 1360
  - Unlimited if spot falls below 1300 – 60 i.e. 1240
- Close on Expiry of May 2021 series : Rs. 1402 (gain of 42)

Pay-off Diagram – Long Straddle



Strangle (alternative to Straddle)

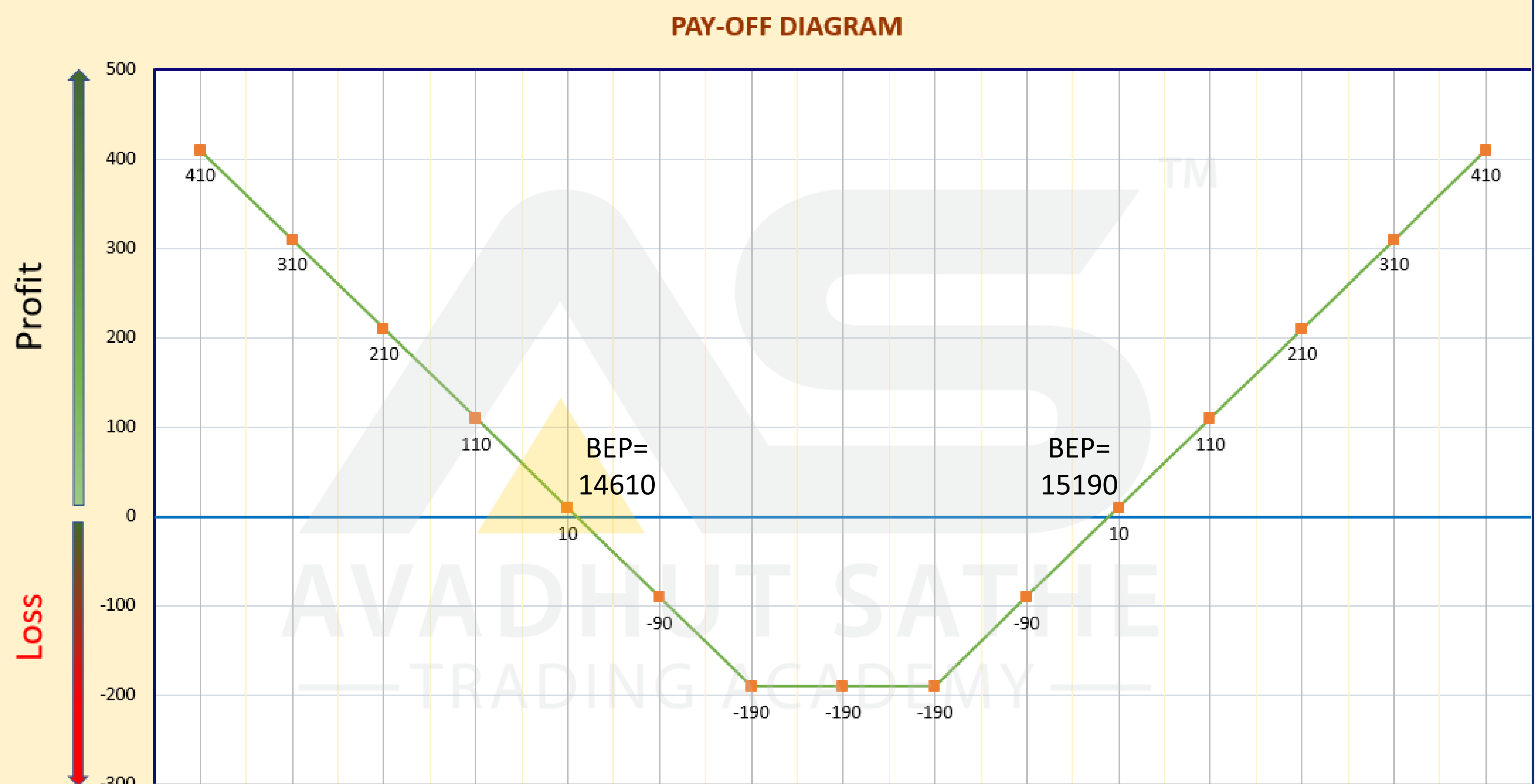
- Buy Call of higher strike and Put of lower strike (both OTM)

- When to use this strategy?
  - Expecting wild move after range bound action
  - Either in up or down direction

- Moderate Investment + Limited Risk + High Returns

- Example: Nifty 27th May 2021 series, buy 15000 Call & 14800 Put
- Premiums (14910 Nifty spot on 20th May 2021)
  - 15000 Call : Rs. 100
  - 14800 Put : Rs. 90
- Investment:
  - Call premium = 100 x 75 = 7500
  - Put premium = 90 x 75 = 6750
  - Total investment = 14250
- Risk
  - Limited to the total premium i.e. Rs. 14250 (or 190 per unit)
- Reward
  - Unlimited if spot goes beyond 15000 + 190 i.e. 15190
  - Unlimited if spot falls below 14800 – 190 i.e. 14610
- Nifty Close as on 27th May 2021 : 15338 (gain of 148)

Pay-off Diagram – Long Strangle



	14200	14300	14400	14500	14600	14700	14800	14900	15000	15100	15200	15300	15400	15500	15600
Profit / Loss Rs.	410	310	210	110	10	-90	-190	-190	-190	-90	10	110	210	310	410

Range Bound Market

- What to do if market is in a range?

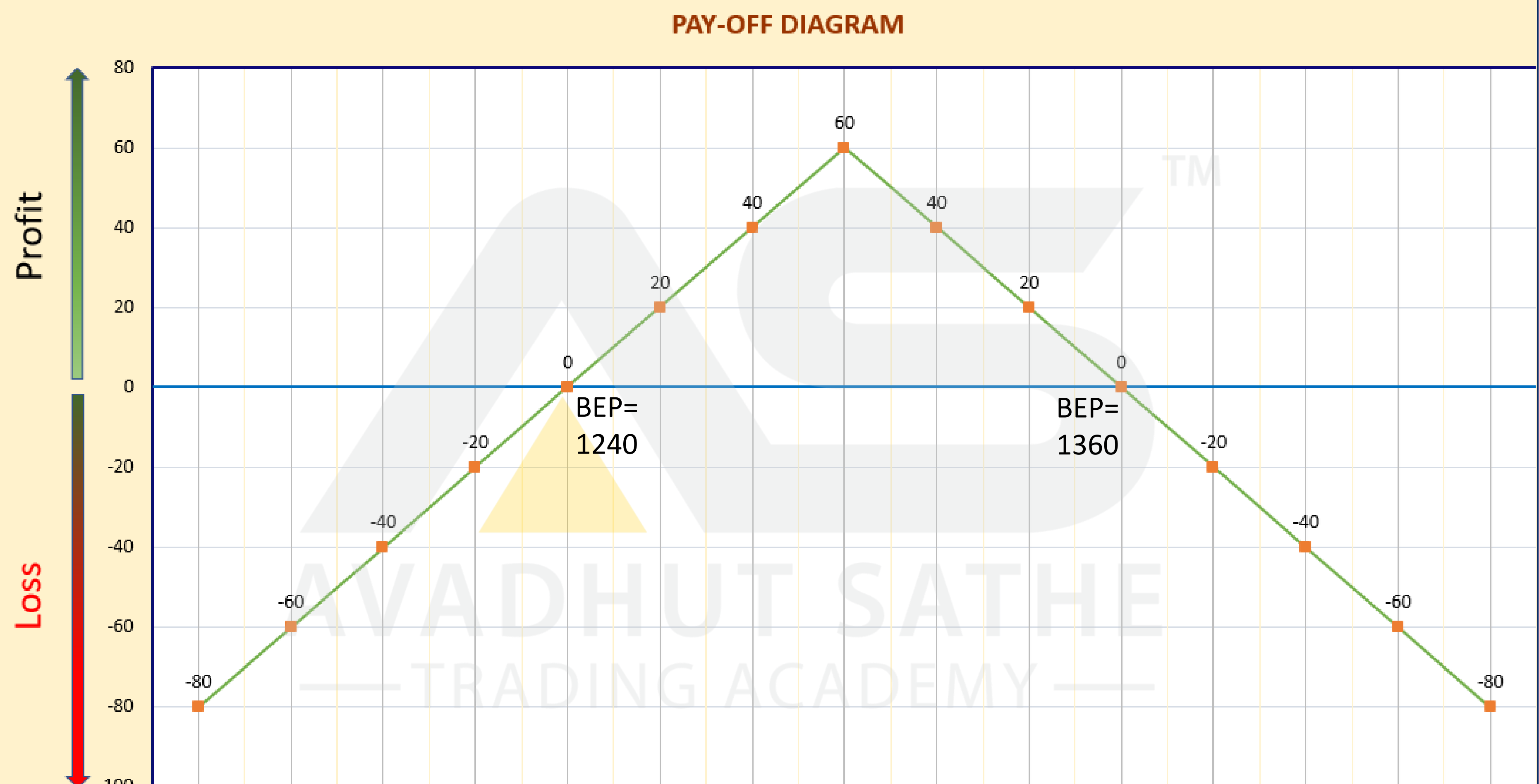
- We saw example of Strangle and Straddle in 'long' scenario i.e. you are buying both Put and Call.

- If you are sure of market or stock to be range bound then the same strategy could be reversed
  - E.g. low beta stocks like Powergrid, NTPC which usually trade in a range.

- **Short the Straddle:**
  - Sell Call and Put of same strike
  - E.g. Sell Infosys 1300 Call and Put (premium Rs. 35 and Rs. 25 respectively) and pocket premium of 60 in total

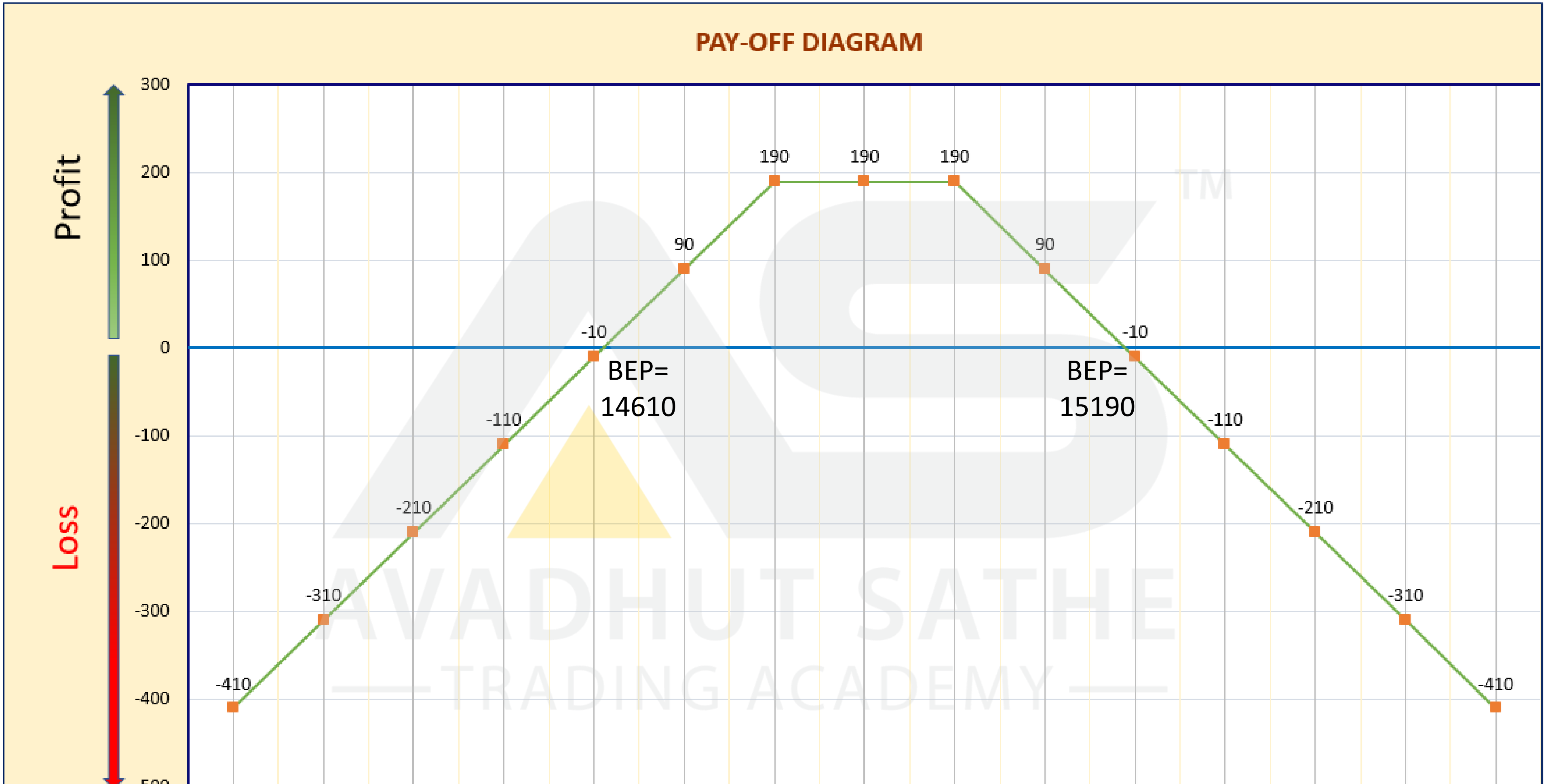
- **Short the Strangle:**
  - Sell Call of higher strike and Put of lower strike
  - E.g. when Nifty spot is near 14910: Sell 15000 Nifty Call and Sell 14800 Nifty Put (premium Rs. 100 & Rs. 90 respectively each) to pocket the premiums of 190 in total

Pay-off Diagram – Short Straddle



Strike	1160	1180	1200	1220	1240	1260	1280	1300	1320	1340	1360	1380	1400	1420	1440
Profit / Loss Rs.	-80	-60	-40	-20	0	20	40	60	40	20	0	-20	-40	-60	-80

Pay-off Diagram – Short Strangle



	14200	14300	14400	14500	14600	14700	14800	14900	15000	15100	15200	15300	15400	15500	15600
Profit / Loss Rs.	-410	-310	-210	-110	-10	90	190	190	190	90	-10	-110	-210	-310	-410

Collar

- It's a steady continuation of the Main Trend or choppy market.

- You are fed up of getting stopped out while trying to ride the trend. Hence, instead of keeping a stop loss, you buy protection and sell option to earn the premium, which takes care of the cost of protection.

- Collar – Long Position:
  - You are already long or looking to go long but wary of the stop loss as market might be choppy.
  - Sell 1 OTM Call
  - Buy 1 ATM / OTM Put as Protection on downside (put will be relatively cheap).
  - No Stop Loss!
  - Key is the Call will be expensive because of the trend and takes care of the cost of put.

- Collar – Short Position:
  - You are already Short or looking to go short but wary of the stop loss as market might be choppy.
  - Sell 1 OTM Put
  - Buy 1 ATM / OTM Call as Protection on upside.
  - No Need to keep Stop Loss as you already have a protection.

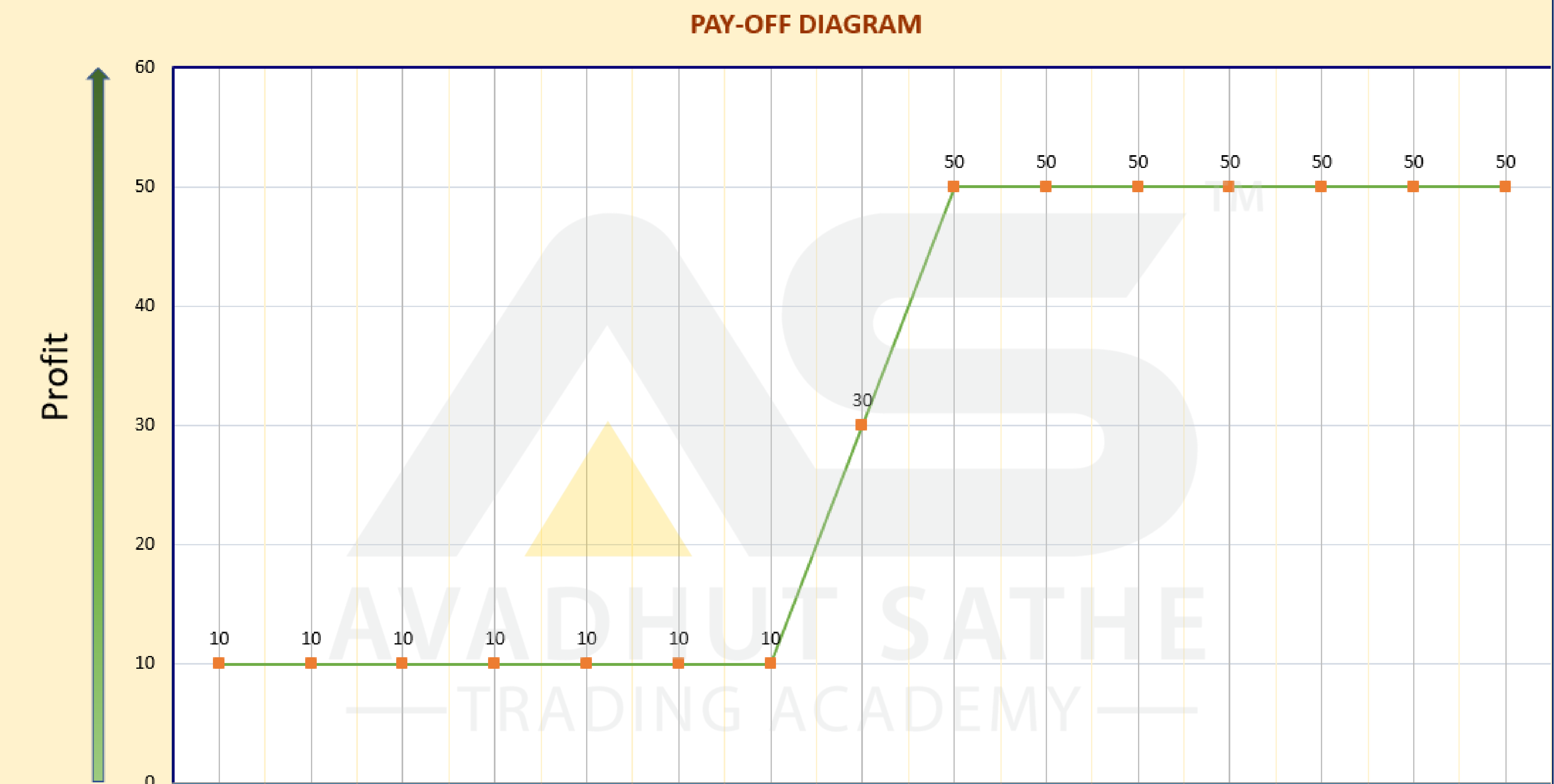
Long Collar Example

Date	16-06-2021
Series Expiry Date	24-06-2021
Scrip	Reliance
Spot Price	2190
Call Strike Price - Sell	2240
Call Premium	40
Put Strike Price - Buy	2200
Put Premium	40
Downside Protection / Stop Loss	2200

- Bought Reliance @ Rs. 2190
- When Reliance spot was in profit at 2200, converted to Long Collar by:
- Selling OTM Call of strike 2240 @ 40
- Buying Put of strike 2200 @ 40 (invested the premium received by OTM Call selling in Buying downside protection by Put buying)

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Closing Price @ Expiry	2140	2160	2180	2200	2220	2240	2260	2280
Stock Gain	0	0	0	10	30	50	70	90
Stock Loss	-50	-30	-10	0	0	0	0	0
Call Loss	0	0	0	0	0	0	-20	-40
Call Gain	0	0	0	0	0	0	0	0
Put Loss	0	0	0	0	0	0	0	0
Put Gain	60	40	20	0	0	0	0	0
Total Gain	10	10	10	10	30	50	50	50

Pay-off Diagram – Long Collar



	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360
Profit / Loss Rs.	10	10	10	10	10	10	10	30	50	50	50	50	50	50	50

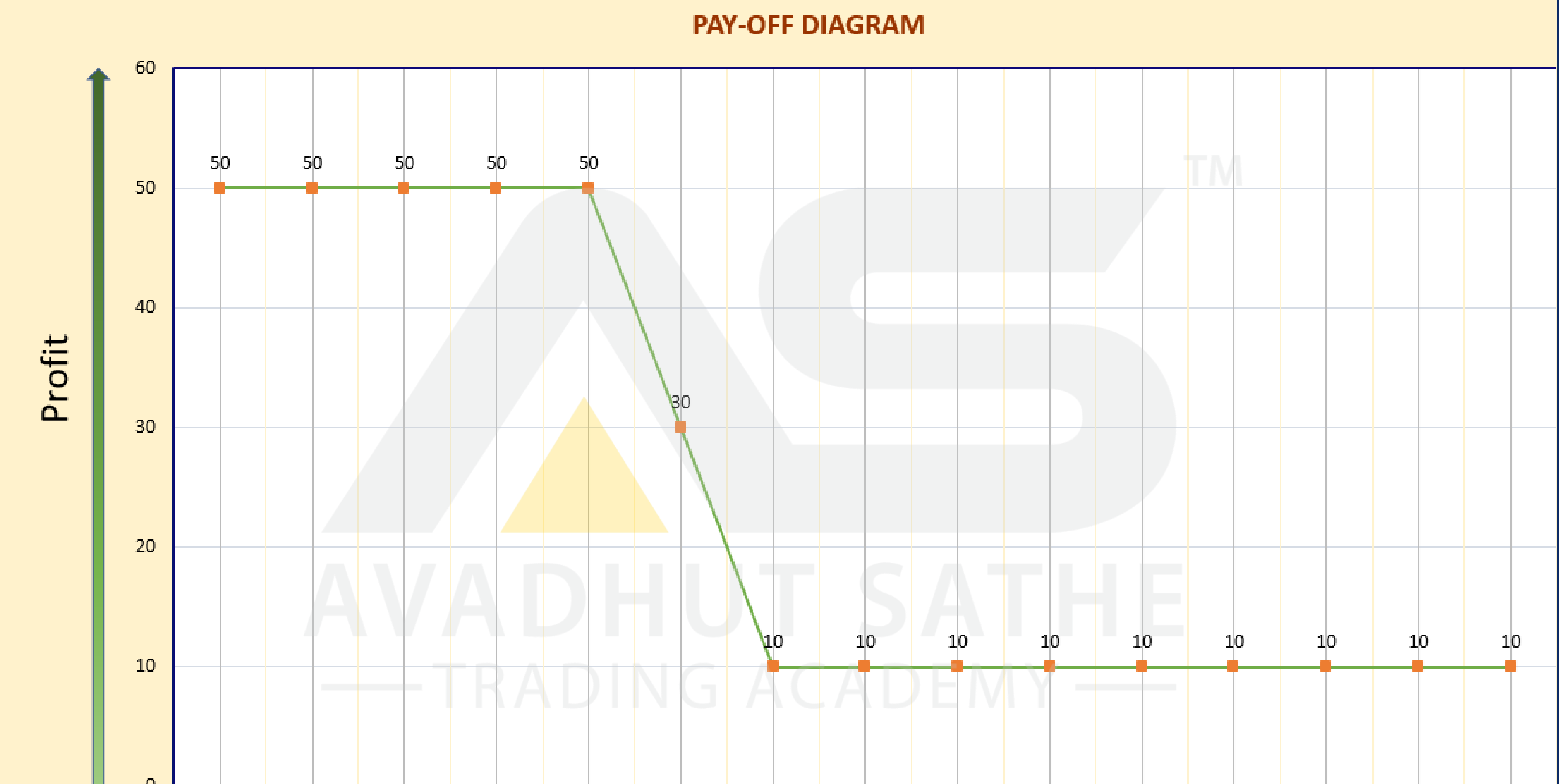
Short Collar Example

Date	16-06-2021
Series Expiry Date	24-06-2021
Scrip	Reliance
Future Price	2210
Put Strike Price - Sell	2160
Put Premium	40
Call Strike Price - Buy	2200
Call Premium	40
Upside Protection / Stop Loss	2200

- Shorted Reliance future @ Rs. 2210
- When Reliance spot was in profit at 2190, converted to Short Collar by:
- Sell OTM Put of strike 2160 @ 40
- Bought Call of strike 2200 @ 40 (invested premium received by OTM Put selling in Buying downside protection by Call buying)

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Closing Price @ Expiry	2120	2140	2160	2180	2200	2220	2240	2260
Stock Gain	90	70	50	30	10	0	0	0
Stock Loss	0	0	0	0		-10	-30	-50
Call Loss	0	0	0	0	0	0	0	0
Call Gain	0	0	0	0	0	20	40	60
Put Loss	-40	-20	0	0	0	0	0	0
Put Gain	0	0	0	0	0	0	0	0
Total Gain	50	50	50	30	10	10	10	10

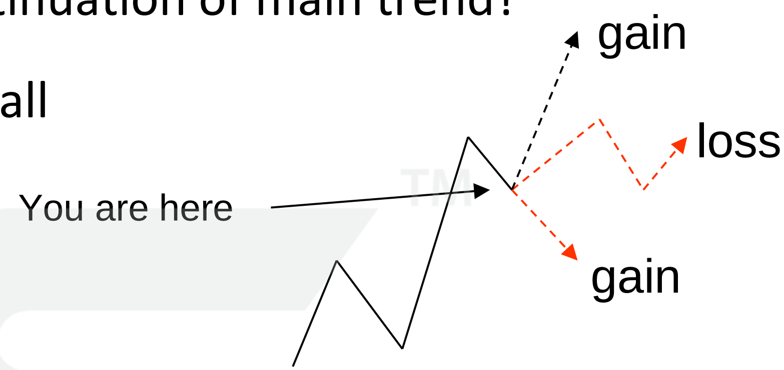
Pay-off Diagram – Short Collar



	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340	2360
Profit / Loss Rs.	50	50	50	50	50	30	10	10	10	10	10	10	10	10	10

Bull Put Ladder

- Deeper Correction? or Sideways? or Continuation of main trend?



- Bullish Market **but** possibility of a sharp fall
- Should be Net Credit:
  - Sell 1 ATM put
  - Buy 1 OTM put
  - Buy 1 Further OTM put
  - In other words : use the premium of ATM put to buy 2 more OTM puts.
- It's like Bull Put Spread + Naked Put of Lower Strike for uncapped returns on downside.
- Works well in medium to low Volatile Market, as premiums are comparatively low.
- You will loose only when it goes sideways.
- Max Risk: capped at difference first 2 strikes – net credit
- Max Reward: Unlimited
- Breakeven: Short Put strike – Net Credit
- Breakeven: Lower Long Put strike – max risk amount

Bull Put Ladder Example

- Expiry 24th Jun 2021; Shorted Nifty 15700 ATM strike Put and bought Nifty OTM strikes 15500 Put and 15400 Put

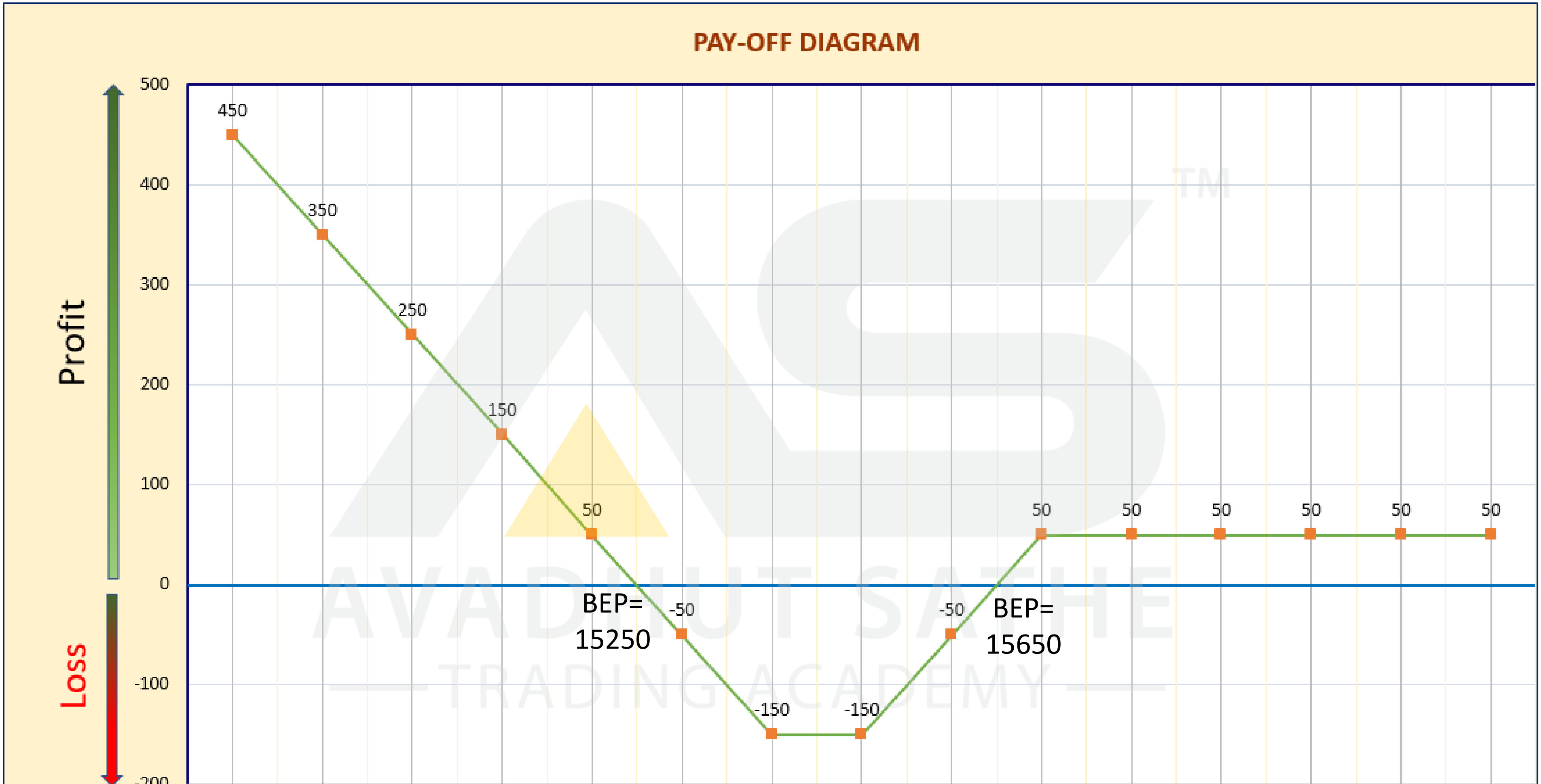
- **Premiums** (15691 Nifty spot on 17th June 2021)
  - 15700 Put : Rs. 130
  - 15500 Put : Rs. 50
  - 15400 Put : Rs. 30

- **Investment**
  - Sell 15700 Put = 75 x 130 = Rs. 9750 received
  - Buy 15400 Put = 75 x 50 = Rs. 3750 paid
  - Buy 15300 Put = 75 x 30 = Rs. 2250 paid
  - Net premium received = Rs. 3750/-

- **Margin** requirement for Selling the Put
  - Lower Margin because risk is covered by buying lower Strike Put
  - SP x Lot x margin%
  - 15700 x 75 x 5% = Rs. 58875

- **Risk**
  - Maximum risk (in case Nifty remains sideways) will be limited to difference of Put strike sold and higher put strike bought – Net premium received.
  - Maximum Risk = (15700 – 15500) – (130-50-30) = 150

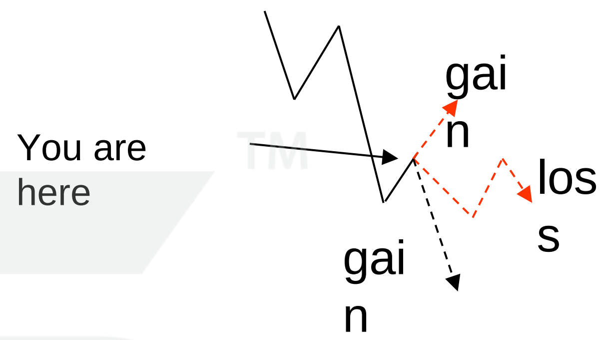
Pay-off Diagram – Bull Put Ladder



	14800	14900	15000	15100	15200	15300	15400	15500	15600	15700	15800	15900	16000	16100	16200
Profit / Loss Rs.	450	350	250	150	50	-50	-150	-150	-50	50	50	50	50	50	50

Bear Call Ladder

- Deeper Correction? or Sideways? or Continuation of main trend?
- Bearish Market **but** possibility of a sharp rally
- Try Net Credit
  - Sell 1 ATM call
  - Buy 1 OTM call
  - Buy 1 Further OTM call
  - In other words : use the premium of ATM call to buy 2 more OTM calls.



- It's like Bear Call Spread + Naked Call for uncapped returns on upside.
- Works well in medium to low Volatile Market.
- You will loose only when it goes sideways and ends between the first two strike.
- Max Risk: Capped at difference first 2 strikes – net credit
- Max Reward: Unlimited
- Breakeven: Short Call strike – Net Credit
- Breakeven: Lower Long Put strike – max risk amount

Bear Call Ladder Example

- Expiry 24th Jun 2021; Shorted Nifty 15700 ATM strike Call and bought Nifty OTM strikes 15800 Call and 15900 Call

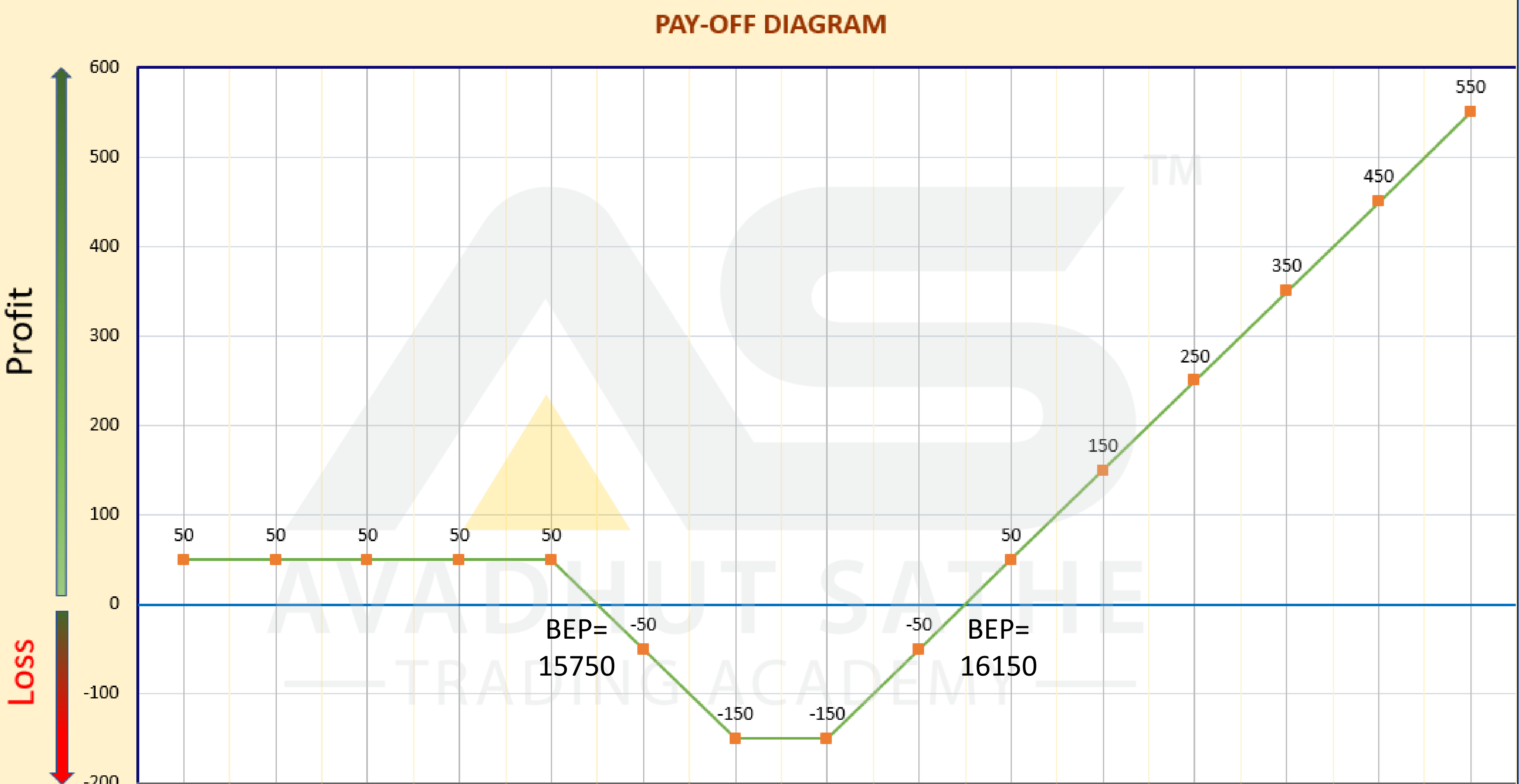
- **Premiums** (15691 Nifty spot on 17th June 2021)
  - 15700 Call : Rs. 130
  - 15900 Call : Rs. 50
  - 16000 Call : Rs. 30

- **Investment**
  - Sell 15700 Call = 75 x 130 = Rs. 9750 received
  - Buy 15900 Call = 75 x 50 = Rs. 3750 paid
  - Buy 16000 Call = 75 x 30 = Rs. 2250 paid
  - Net premium received = Rs. 3750/-

- **Margin** requirement for Selling the Call
  - Lower Margin because risk is covered by buying higher Strike Call
  - SP x Lot x margin%
  - 15700 x 75 x 5% = Rs. 58875

- **Risk**
  - Maximum risk (in case Nifty remains sideways) will be limited to difference of Call strike sold and lower Call strike bought – Net premium received.
  - Maximum Risk = (15900 – 15700) – (130-50-30) = 150

Pay-off Diagram – Bear Call Ladder

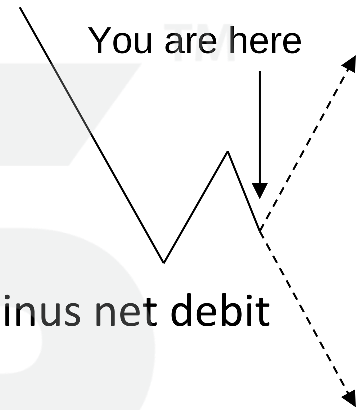


	15300	15400	15500	15600	15700	15800	15900	16000	16100	16200	16300	16400	16500	16600	16700
Profit / Loss Rs.	50	50	50	50	50	-50	-150	-150	-50	50	150	250	350	450	550

Long Iron Butterfly

- It's a Volatile Market!

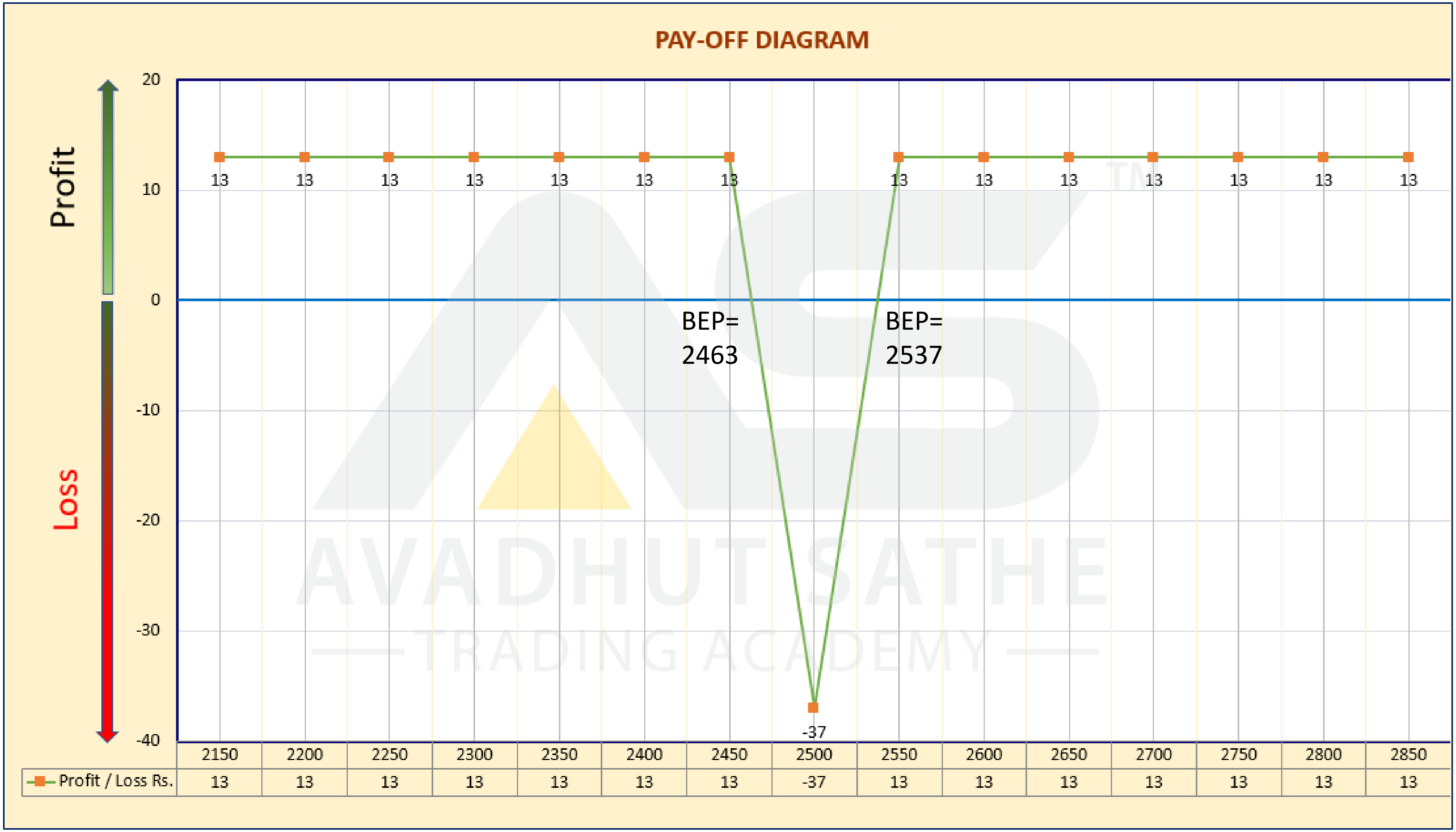
- You are looking for a **Sharp** but **Limited Moves** in either direction (up or down).
  - Sell 1 OTM call
  - Buy 1 ATM call
    Bull Call Spread
  - Buy 1 ATM put
  - Sell 1 OTM put
    Bear Put Spread
  - In other words: Long Straddle + Short Strangle



- Max Risk – Net debit
- Max Reward – capped at difference in put or call spread minus net debit
- Upper Breakeven : Long call strike + net debit
- Lower Breakeven : Long put strike – net debit
- Beauty is in maneuvering the trade!!!

- Example : HDFC in June 2021 series (24th Jun 2021 Expiry)
  - HDFC Spot on 17th Jun 2021 : 2490
  - View is that HDFC may fall below 2450 or rally above 2550 or so
  - Sell 2550 call : Rs. 18
  - Buy 2500 call : Rs. 35
  - Buy 2500 put : Rs 42
  - Sell 2450 put : Rs 22
  - Total cost / debit : Rs. 17+20 = 37

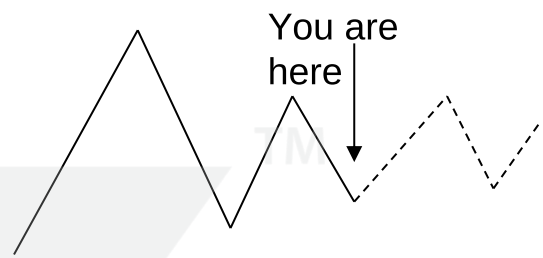
Pay-off Diagram – Long Iron Butterfly



Short Iron Butterfly

➢ It's a **Sideways market and quite frustrating -** You don't have to give up!

➢ Look to earn the time decay!!



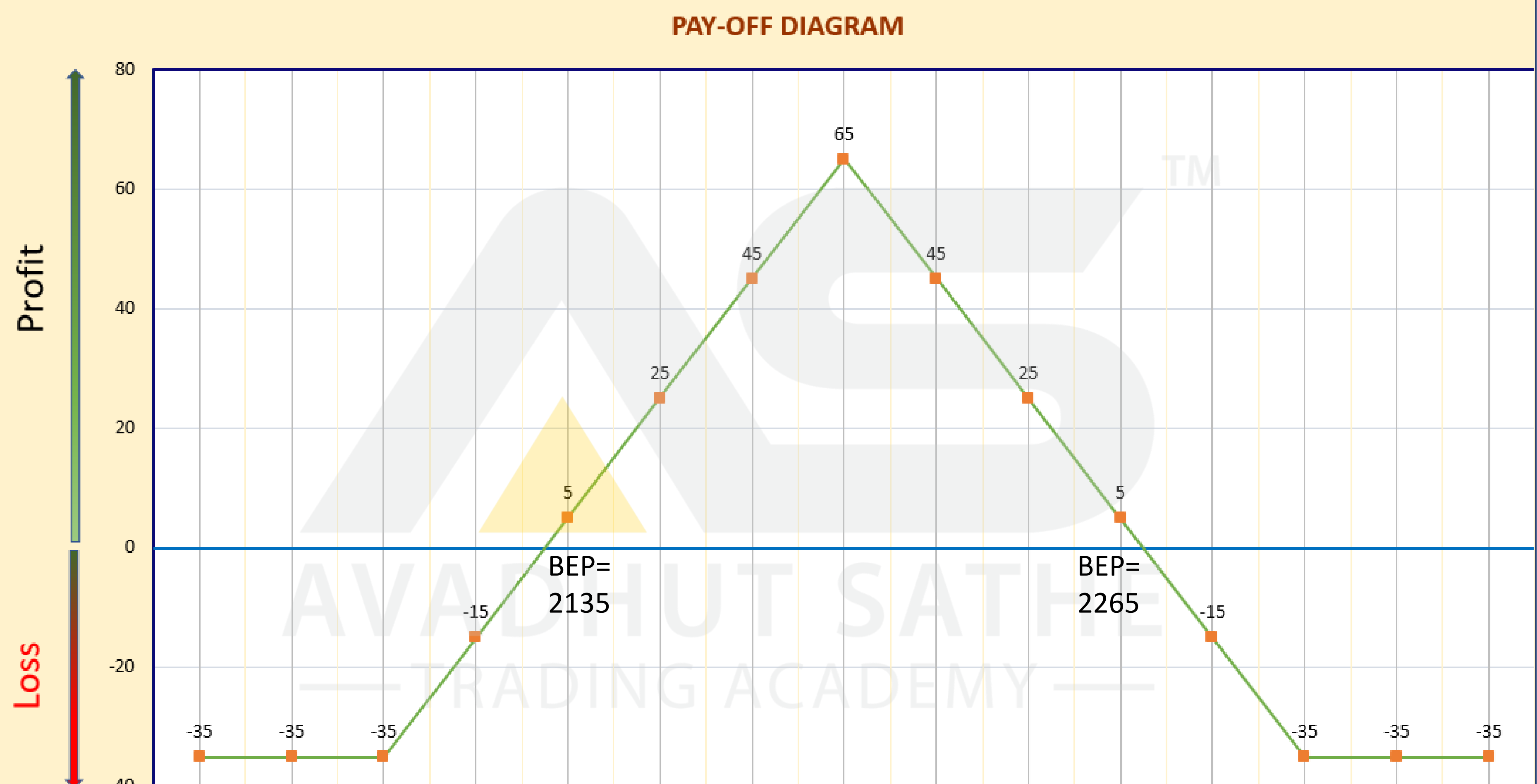
- Buy 1 OTM call
- Sell 1 ATM call
- Sell 1 ATM put
- Buy 1 OTM put
- In other words: Short Straddle + Long Strangle for protection
- NET CREDIT!!!

➢ Max Reward: Net Credit
➢ Max Risk: capped at difference in put or call spread minus net credit.
➢ Upper Breakeven : Short call strike + net credit
➢ Lower Breakeven : Short put strike – net credit

➢ **Example**: Reliance: Spot Closing is 2200 as on 17th Jun, 2021
- Range: 2100 to 2300 (likely to remain within this range)
- Buy 2300 call : Rs. 18 (paid)
- Sell 2200 Call : Rs. 48 (earned)
- Sell 2200 Put : Rs. 49 (earned)
- Buy 2100 Put : Rs. 14 (paid)

➢ Net Credit : Rs. 65/-

Pay-off Diagram – Short Iron Butterfly



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	-35	-35	-35	-15	5	25	45	65	45	25	5	-15	-35	-35	-35

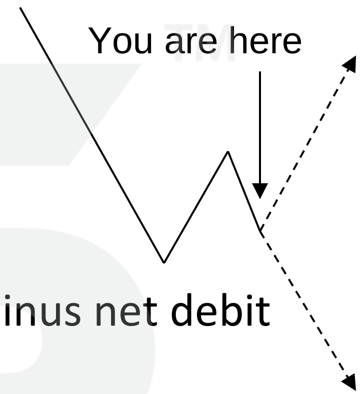
Long Iron Condor

- It's a Volatile Market!

- You are looking for a **Sharp** but **Limited Moves** in either direction (up or down).
  - Sell 1 further OTM call
  - Buy 1 OTM call
  - Buy 1 OTM put
  - Sell 1 further OTM put
  - In other words: Long Strangle + Short Strangle

Bull Call Spread

Bear Put Spread

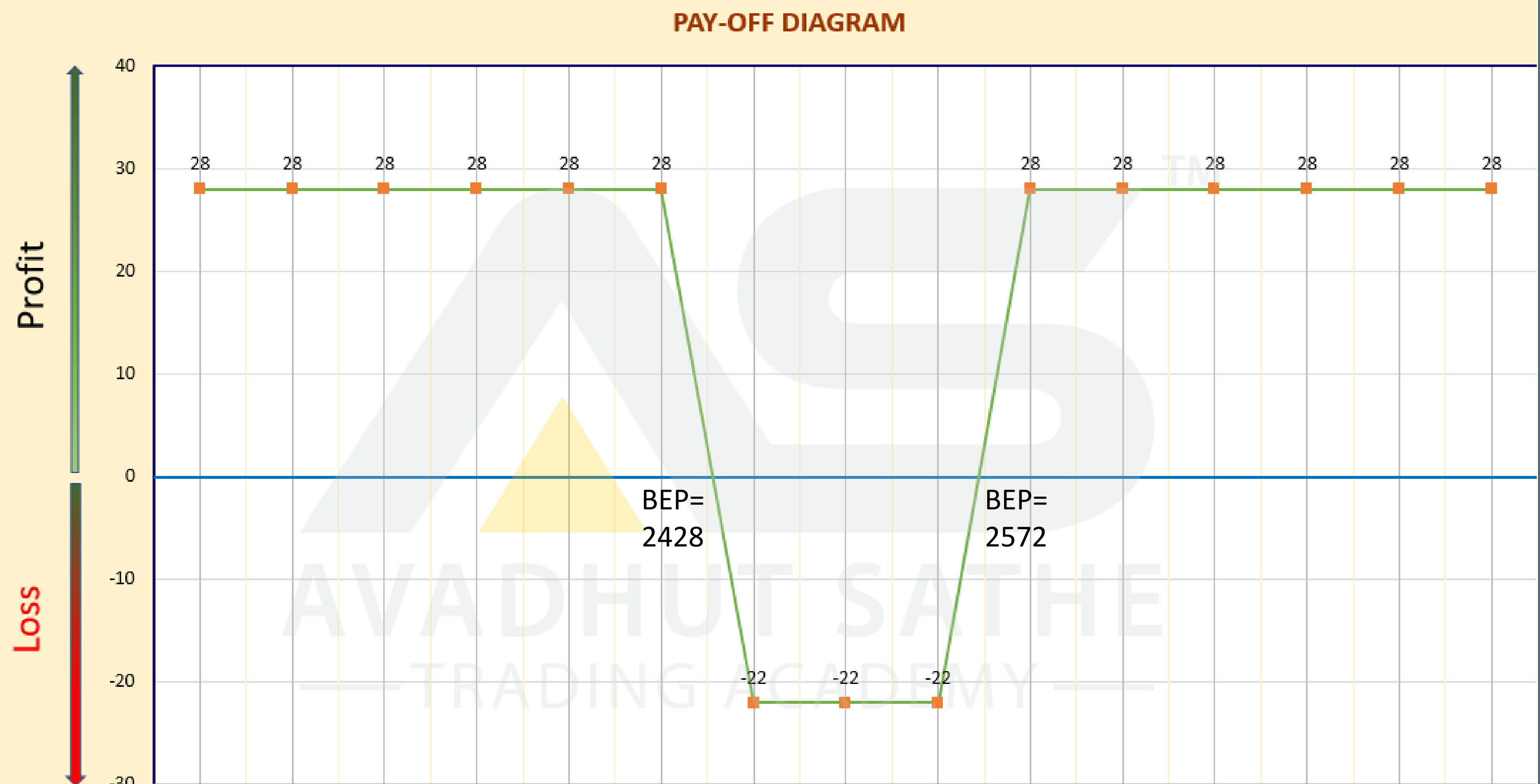


- Max Risk – Net debit
- Max Reward – capped at difference in put or call spread minus net debit
- Upper Breakeven : Long call strike + net debit
- Lower Breakeven : Long put strike – net debit
- Beauty is in maneuvering the trade!!!

- Example : HDFC in June 2021 series (24th Jun 2021 Expiry)
  - HDFC Spot on 17th Jun 2021 : 2490
  - View is that HDFC may fall below 2450 or rally above 2550 or so
  - Sell 2600 call : Rs. 8
  - Buy 2550 call : Rs. 18
  - Buy 2450 put : Rs 22
  - Sell 2400 put : Rs 10
  - Total cost / debit : Rs. 10+12 = 22

Pay-off Diagram – Long Iron Condor

AVADHUT SATHE
TRADING ACADEMY

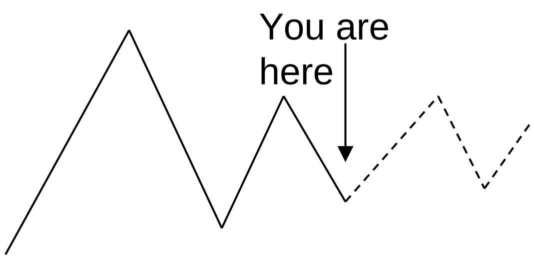


	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850
Profit / Loss Rs.	28	28	28	28	28	28	-22	-22	-22	28	28	28	28	28	28

Short Iron Condor

- It's a **Sideways market and quite frustrating -** You don't have to give up!

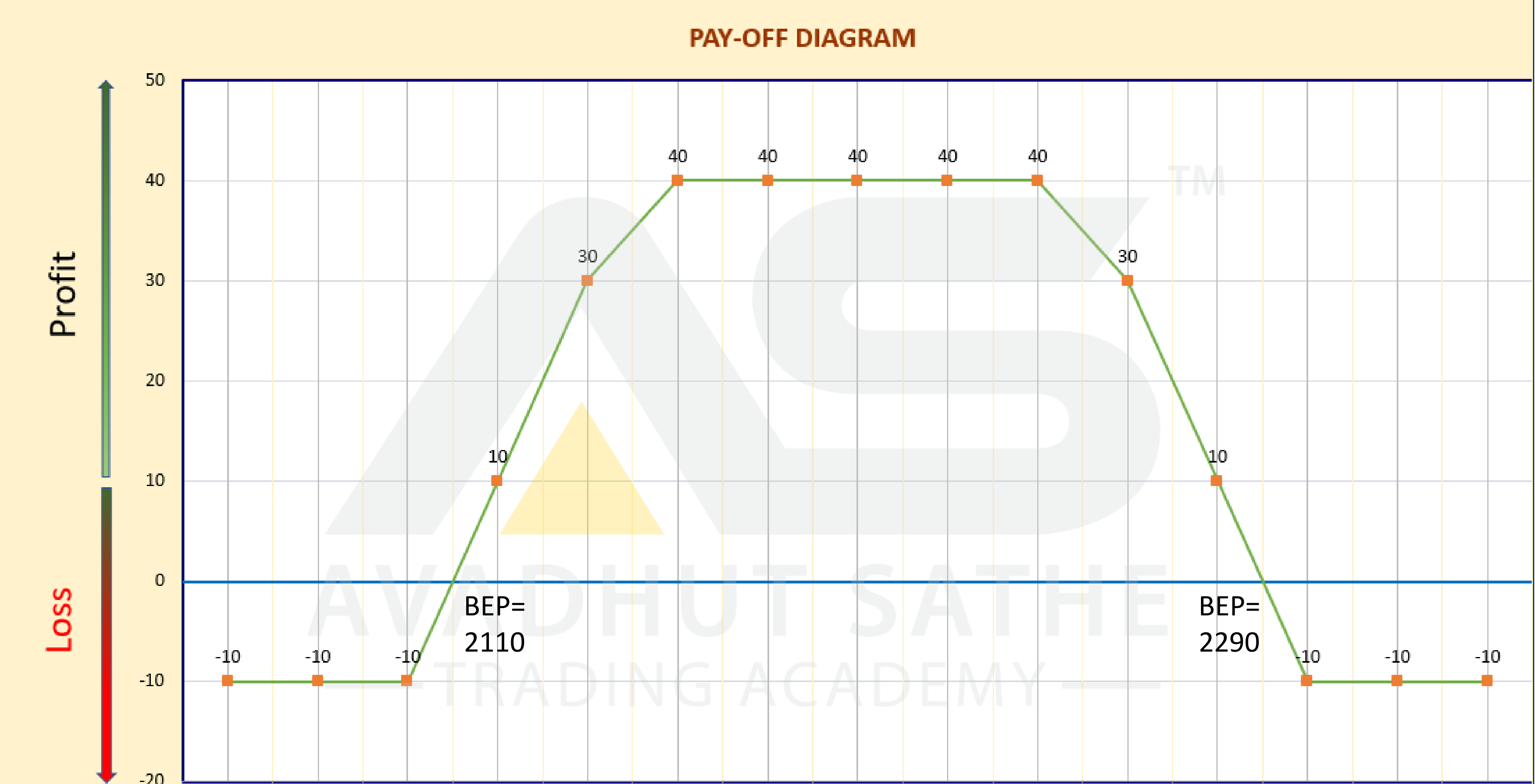
- Look to earn the time decay!!
  - Buy 1 further OTM call
  - Sell 1 OTM call
  - Sell 1 OTM put
  - Buy 1 further OTM put
  - In other words: Short Strangle + Long Strangle for protection
  - NET CREDIT!!!



- Max Reward: Net Credit
- Max Risk: capped at difference in put or call spread minus net credit.
- Upper Breakeven : Short call strike + net credit
- Lower Breakeven : Short put strike – net credit

- **Example**: Reliance: Spot Closing is 2200 as on 17th Jun, 2021
  - Range: 2100 to 2300 (likely to remain within this range)
  - Buy 2300 call : Rs. 18 (paid)
  - Sell 2250 Call : Rs. 35 (earned)
  - Sell 2150 Put : Rs. 37 (earned)
  - Buy 2100 Put : Rs. 14 (paid)
- Net Credit : Rs. 40/-

Pay-off Diagram – Short Iron Condor



	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260	2280	2300	2320	2340
Profit / Loss Rs.	-10	-10	-10	10	30	40	40	40	40	40	30	10	-10	-10	-10

Calendar Spread

- Useful when Expiry is within a week.
- Used to reduce the premium paid on the Option for the next month.
- Your technical target might not be reached in the current month / series but you expect it to be achieved in next month.
- Example : Nifty in 24th Jun 2021 Series
  - Nifty Spot on 17th Jun 2021 - 15690
  - Your view is bearish i.e. you expect Nifty to crack below 15400 (old major support).
  - It may not be achieved in this weekly expiry as days left are very few.
  - So you sell 15600 PE of 24th Jun 2021 and buy 15600 PE of 1st Jul 21 (next weekly expiry).
- Premium
  - Jun 15600 PE : Rs.90 to be received
  - Jul 15600 PE : Rs.127 to be paid
  - Net investment : Rs.37

Options Recap

- Investment is minimal:
  - Premium is less than the margin required to pay while buying or selling in Futures.
- Returns could be multi-bagger.
- Risk is limited for the Buyer.
- Excellent way to Hedge against your Cash Positions and earn Rent!
  - Covered Calls
- Use strategies as per the market situation to minimize risk.

Analysing Options Data

- Use NSE website for Option Chain.
- Key is analysing OI in ATM and Next-best OTM strikes- both Put & Call side:
  - Highest OI indicates major support (Put Strike) & resistance (Call strike).
  - If OI declines in ATM Calls with premium moving up: Healthy.
  - If OI increases in ATM Calls with premium moving up: be watchful.

Option Chain (Equity Derivatives)

Underlying Stock: **ONGC 392.90** As on Nov 14, 2014 12:25:35 IST

View Options Contracts for: Select Index OR Search for an underlying stock: GO Filter by: Expiry Date 27NOV2014 Futures contracts

CALLS												PUTS										
Chart	OI	Chng in OI	Volume	IV	LTP	Net Chng	Bid Qty	Bid Price	Ask Price	Ask Qty	Strike Price	Bid Qty	Bid Price	Ask Price	Ask Qty	Net Chng	LTP	IV	Volume	Chng in OI	OI	Chart
	-	-	-	-	-	-	-	-	-	-	280.00	-	-	0.90	500	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	290.00	-	-	0.90	500	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	300.00	-	-	0.90	500	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	310.00	-	-	1.50	500	-	-	-	-	-	-	
	-	-	-	-	-	-	2,000	69.60	74.30	2,000	320.00	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	1,000	62.00	63.40	1,000	330.00	-	-	2.05	1,000	-	-	-	-	-	-	
	-	-	-	-	-	-	4,000	50.55	53.50	1,000	340.00	4,500	0.20	0.90	10,000	-	-	-	-	-	8,000	
	-	-	-	-	-	-	4,500	41.90	43.60	1,000	350.00	10,000	0.40	0.95	10,000	-	-	-	-	-	-	
	-	-	2	-	32.90	-55.45	3,000	33.45	34.00	1,000	360.00	5,000	0.95	1.15	7,500	-0.40	0.95	35.64	73	21,500	56,500	
	2,000	-	1	-	25.30	4.30	500	23.95	25.10	1,000	370.00	8,000	1.90	2.00	14,000	-1.00	1.80	33.64	183	37,500	237,000	
	63,500	-3,000	80	23.74	17.00	4.40	500	16.90	17.25	1,000	380.00	3,000	3.95	4.15	13,500	-1.95	4.00	32.69	538	58,500	343,000	
	223,000	-44,000	797	29.45	10.75	2.85	500	10.70	11.00	500	390.00	500	7.60	7.95	10,000	-3.25	7.50	33.55	606	93,500	376,500	
	1,264,500	-36,500	945	30.48	6.60	1.80	500	6.50	6.70	4,000	400.00	500	12.75	13.55	10,000	-5.15	12.85	35.75	58	-4,000	488,500	
	858,500	-53,000	380	32.61	3.85	0.90	11,500	3.80	3.90	1,000	410.00	1,500	20.25	20.90	500	-5.15	20.00	37.42	24	-10,000	128,500	
	1,383,500	-36,500	336	34.36	2.40	0.45	14,000	2.20	2.40	4,500	420.00	2,000	28.45	29.30	500	-4.40	30.05	43.46	12	1,500	187,000	
	342,500	14,500	62	35.97	1.30	0.10	6,500	1.35	1.45	4,500	430.00	1,000	10.00	-	-	-	-	-	-	-	4,000	
	365,500	2,000	53	38.05	0.80	0.05	7,500	0.75	0.90	8,000	440.00	4,000	46.05	-	-	-	-	-	-	-	50,500	
	181,500	-	31	41.43	0.60	-	2,500	0.50	0.60	6,500	450.00	3,000	55.55	77.70	500	-	-	-	-	-	2,000	

Trading Strategies

➢ Swing Trading:

- ADX should be below 20 or Falling (ranging market).
- Short rallies near resistances : preferably Covered Put.
- Buy the dips near support levels : preferably Covered Call.
- Best employed when time value / premium is high:
  - ✓ Typically during start of the series
  - ✓ Highly volatile market

➢ Momentum Trading:

- Trade in the direction of trend.
- ADX must be rising from 15 and above.
- Stock must be in upper half of Bollinger Bands for long or lower half for short with the Band in the direction of trade.
- Ok to Buy naked options or ratio spread (to reduce cost).
- Best employed when time value is moderate:
  - ✓ Typically during the middle of the series or towards end
  - ✓ Market is less volatile and volatility is expected to rise

Factors To Keep In Mind When Buying Options

- Usually buy Deep In-the-Money Options (ITM):
  - They suffer less from time decay
  - They gain equally or higher as underlying moves in the favored direction (similar to future)

- Always be ready to change positions – the last thing you should do is to hope and pray

- Reduce your net investment by Selling Options wherever possible

- Keep Reasonable profit target (unless market is trending in one direction)

- Do not buy more naked options than is justified by your account size:
  - E.g. don't invest more than 5 to 8% of your total account value in naked option buying and use stop loss to limit the loss to 2%.

- As far as possible use Credit Strategies:
  - Sell Deep OTM Naked options or
  - Use Bull Put or Bear Call Spreads (this has minimum risk)

Things Not To Forget Ever

- In India, Options trading is almost impossible using fundamental analysis because Time is always against you.
- Options trading is a speculative game and heavily loaded “against” the Option Buyer.
- Over 80% of the Options expire worthless.
- Option Writers are usually Big players having ability to control price moves (not always though).
- Never Buy Deep OTM options because usually they expire worthless.
- Write Options when volatility is high and Trend is in your favor. Usually high volatility is followed by lower one.
- Market Trend only 30% of the time so employ strategies to capture range bound moves as well.
- Making Money using Options could be boring, but if you love your money you will enjoy it!


AVADHUT SATHE
TRADING ACADEMY
Keep it Simple
Follow Discipline
YOU WILL WIN !!!

Our Motto
at

AVADHUT SATHE
TRADING ACADEMY

ALL-FOR-ONE
ONE-FOR-ALL

DEVELOPING CHARACTER THAT DESERVES SUCCESS !