



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,628	0.8%▲
Open Interest (OI)	1,82,07,150	1.6%▼
Change in OI (abs)	1,82,07,150	2,96,175▼
Premium / Discount (Abs)	43	35▼
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,540	0.7%▲
Open interest (OI)	30,27,850	3.4%▼
Change in OI (abs)	30,27,850	1,07,975▼
Premium / Discount (Abs)	29	132▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.22	0.19▲
Nifty ATM IV (%)	10.44	0.3▼
Bank Nifty ATM IV (%)	11.14	0.3▼
PCR (Nifty)	1.03	0.37▲
PCR (Bank Nifty)	0.81	0.05▲

The FII Long Ratio in Index Futures **jump** to 8.5 %, **up** from 8.3 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KALYANKJIL	2,40,74,575	8.9%	538.8	2.0%
INDIANB	74,92,000	7.2%	676.2	3.9%
NUVAMA	1,09,800	6.2%	6851	1.4%
FORTIS	1,08,96,500	5.9%	924.4	2.8%
INOXWIND	3,65,54,784	5.7%	142.32	1.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PGEL	1,64,40,200	114.1%	510.1	-13.2%
BLUESTARCO	14,71,600	27.4%	1761.3	-2.1%
AMBER	6,89,500	18.1%	6945	-5.9%
PIIND	18,84,575	11.6%	3845.9	-2.3%
KEI	11,09,850	7.7%	3824	-0.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SBIN	11,02,62,000	-4.3%	825.5	2.4%
ATGL	29,63,625	-4.2%	598.9	2.3%
KAYNES	7,93,600	-4.0%	5862.5	0.7%
IRB	7,52,68,725	-3.3%	44.42	2.1%
MCX	20,20,750	-3.1%	7966	3.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANAPPURAM	2,24,49,000	-5.2%	256.8	-1.0%
HINDPETRO	5,34,03,300	-3.8%	410.9	-0.1%
OIL	97,55,200	-2.9%	424.35	-1.8%
CESC	1,20,16,875	-2.8%	162.5	-0.4%
RBLBANK	9,62,97,750	-1.4%	259.8	-1.3%

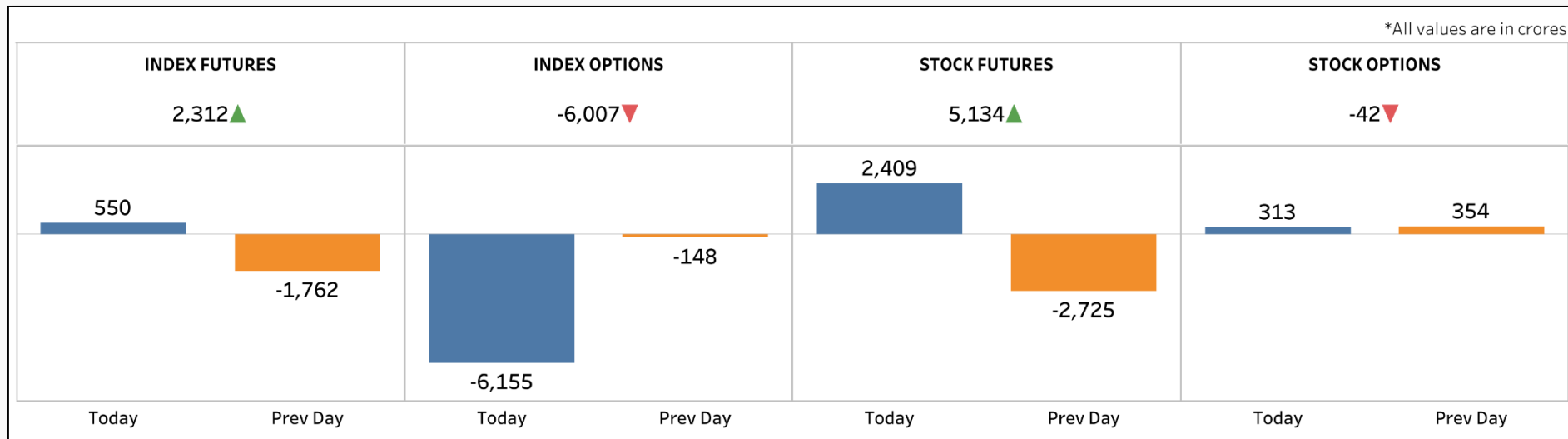
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

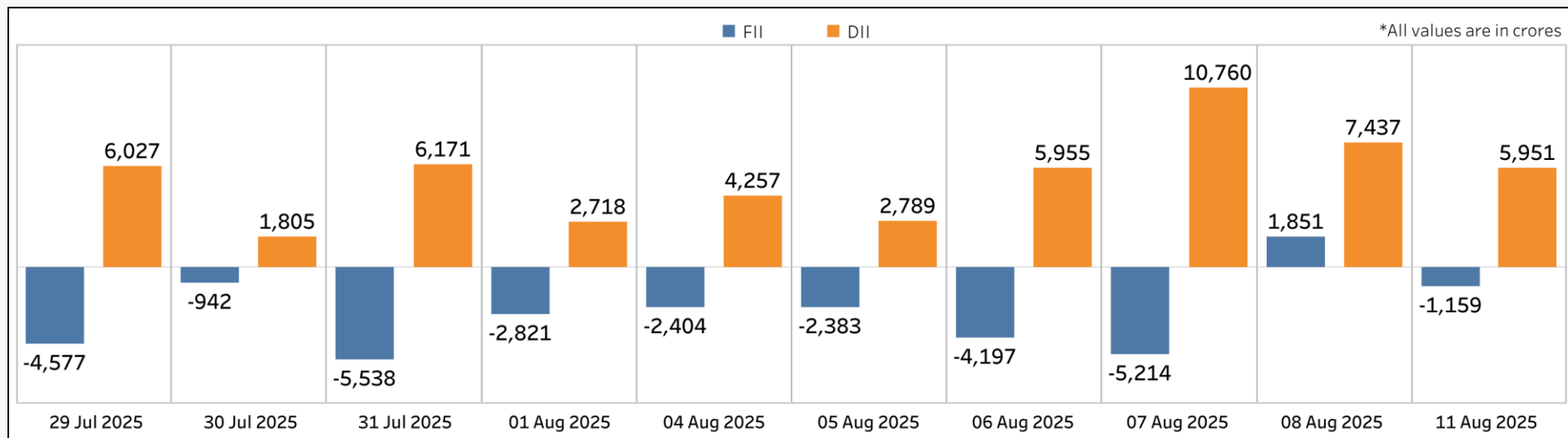
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
69,424 ▲	12,354 ▲	-95,010 ▼	75,796 ▲	-24,000 ▼	-6,791 ▼	-4,511 ▼	-11,785 ▼
24,367	2,943	41,160	36,127	12,000	4,568	2,500	7,011
-45,057	-9,411	-53,850	-39,669	-12,000	-2,223		-574
Net O/S -66,446 Today Prev Day	Net O/S -179,727 Today Prev Day	Net O/S 229,285 Today Prev Day	Net O/S 1,296,573 Today Prev Day	Net O/S 70 Today Prev Day	Net O/S 39,277 Today Prev Day	Net O/S 34,894 Today Prev Day	Net O/S -3,998,131 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-336,498 ▼	-6,152 ▼	196,770 ▲	-59,134 ▼	291,074 ▲	589 ▲	-97,249 ▼	-4,877 ▼
91,702	4,348	81,708	26,646	232,429	1,084	66,892	8,720
-244,796	-1,804	-115,062	-32,488	-58,645	495	-30,357	13,597
Net O/S -85,872 Today Prev Day	Net O/S 122,354 Today Prev Day	Net O/S -409,605 Today Prev Day	Net O/S 2,231,824 Today Prev Day	Net O/S 152,248 Today Prev Day	Net O/S 18,096 Today Prev Day	Net O/S 145,427 Today Prev Day	Net O/S 469,734 Today Prev Day

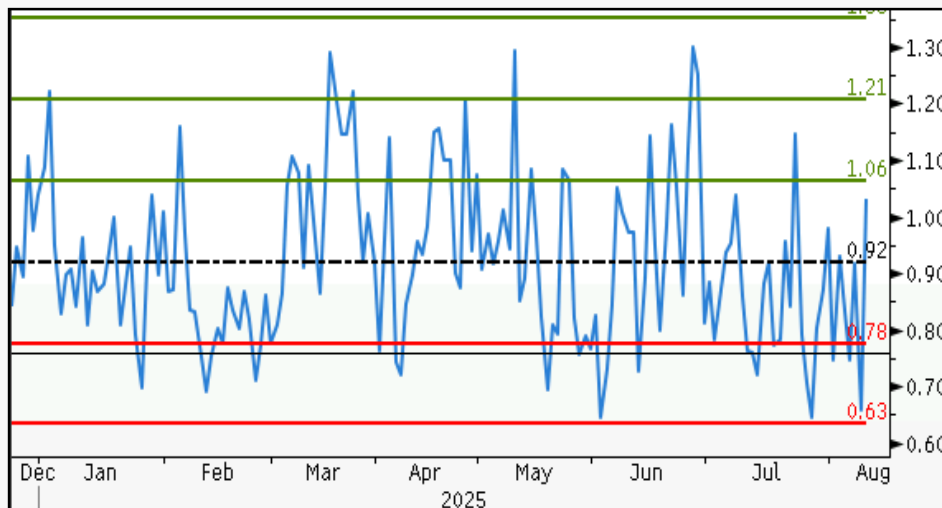
## Daily Net Open Interest Change



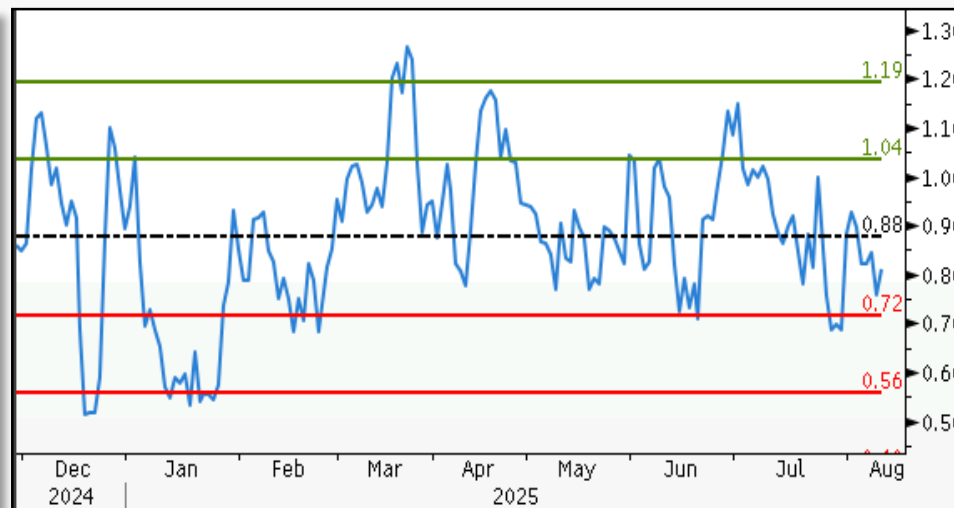
## DII and FII Daily Cash Market Flows



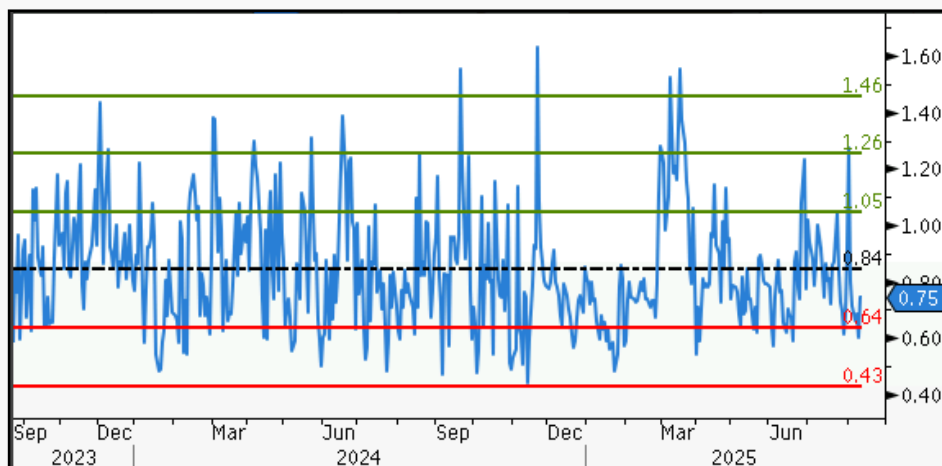
## Nifty



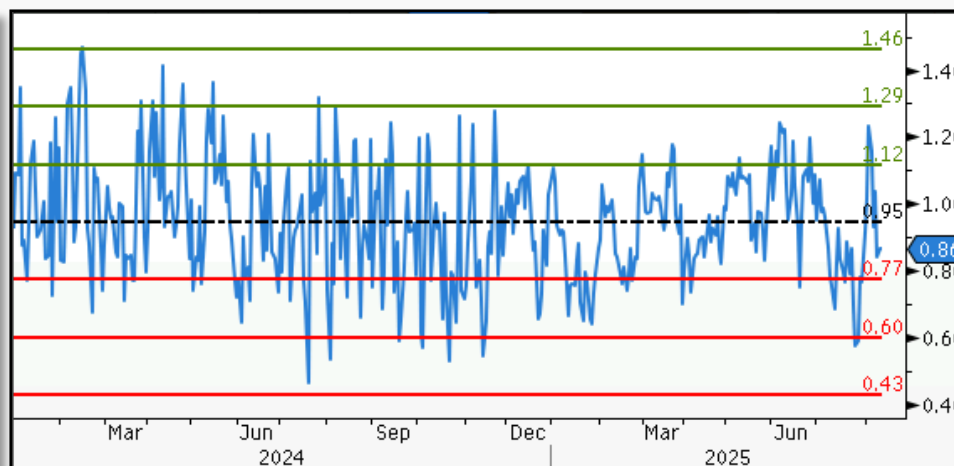
## Bank Nifty



## Fin Nifty

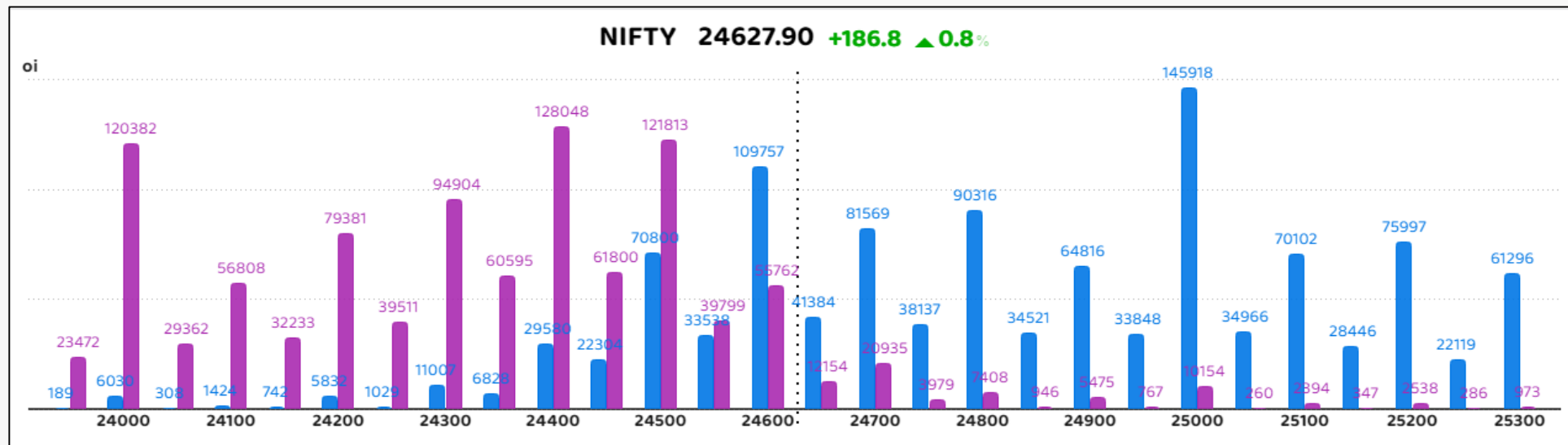


## Midcap Select Nifty



## Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 



For the Nifty, the 25,000 Call and the 24,400 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

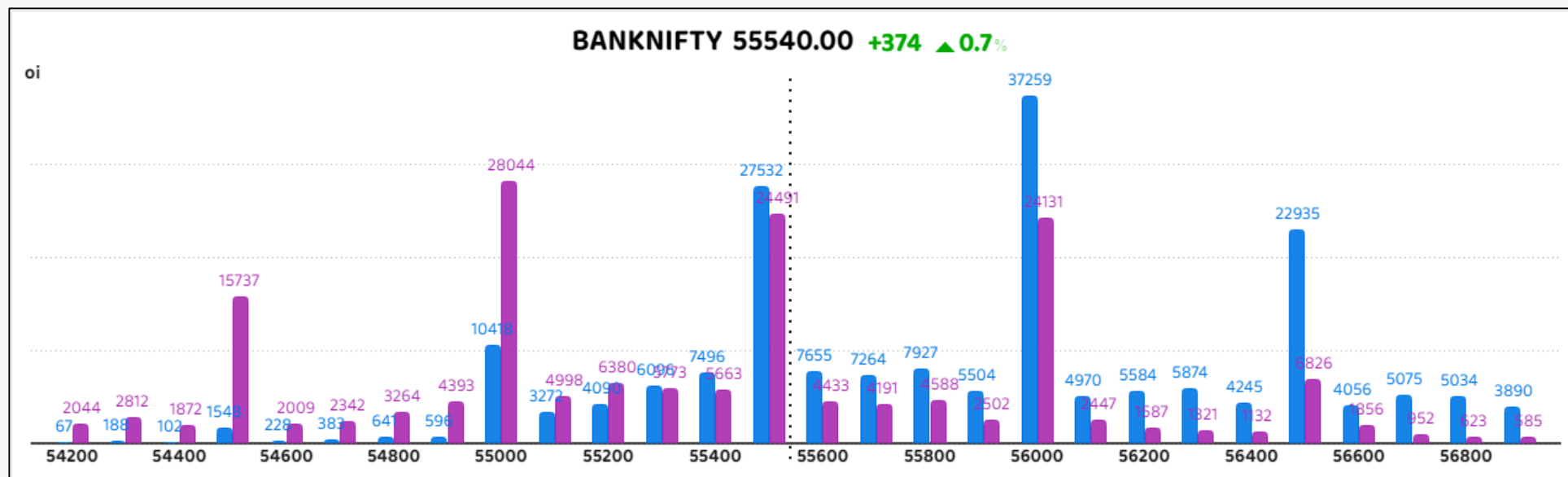
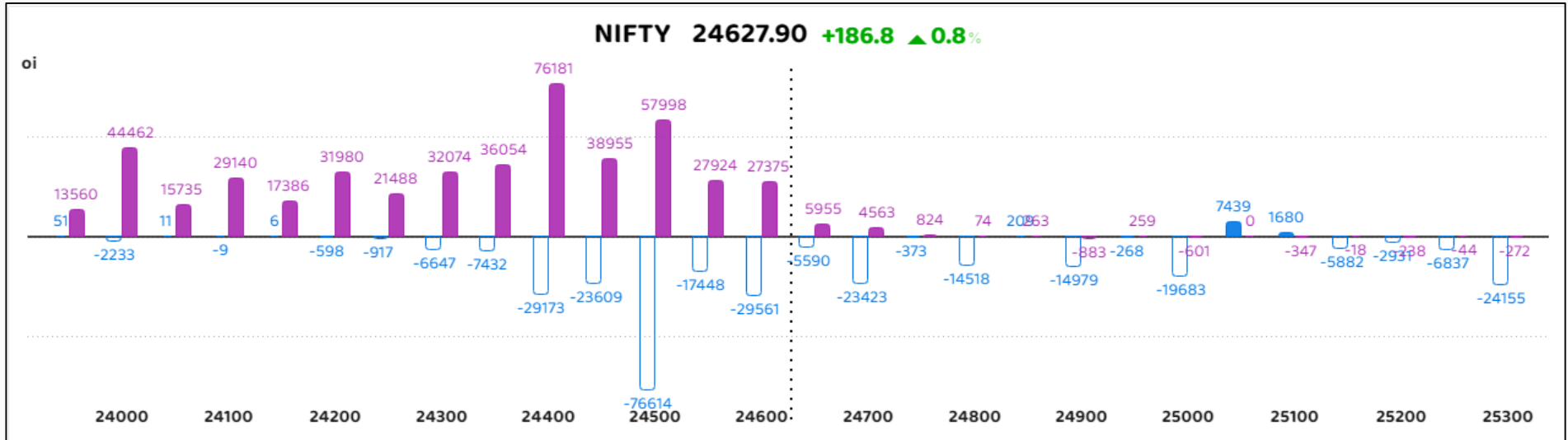


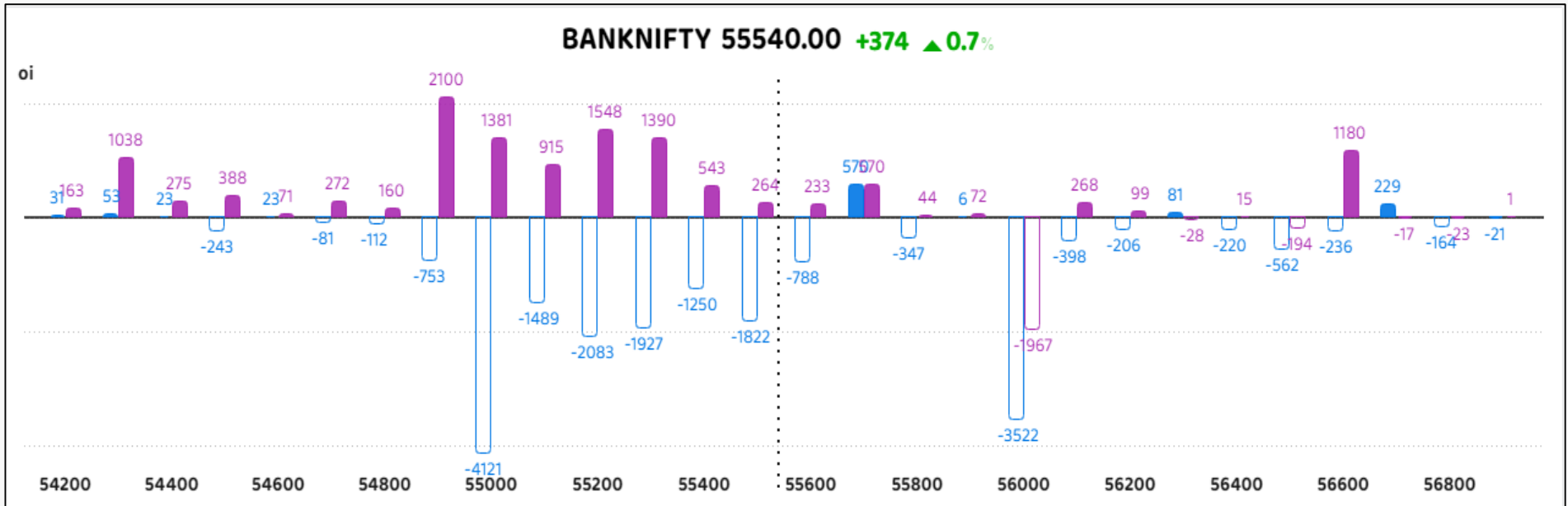
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,500 Call and the 24,400 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,000 Call & the 54,800 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
RAIL VIKAS NIGAM	342.5	1.7	50.3	50.3	32.0	100.0
GRASIM INDS LTD	2758.9	2.5	28.1	30.1	13.4	88.0
BOSCH LTD	38710	1.0	29.8	36.2	2.1	81.2
ASTRAL LTD	1381.6	0.4	32.8	40.4	2.9	79.7
PG ELECTROPLAST	506	-14.1	57.3	63.7	35.6	77.3

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ULTRATECH CEMENT	12405	2.0	16.6	31.0	16.6	0.0
NTPC LTD	336.15	0.4	17.1	116.6	16.9	0.2
FED BANK LTD	196.69	0.1	22.8	130.9	22.0	0.7
INDIAN HOTELS CO	746.75	1.5	22.8	46.4	22.6	1.0
POWER FINANCE	418.8	3.5	27.3	51.5	27.1	1.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	342.5	1.7	50.3	50.3	32.0	100.0
GRASIM INDS LTD	2758.9	2.5	28.1	30.1	13.4	99.0
PG ELECTROPLAST	506	-14.1	57.3	63.7	35.6	98.3
GRANULES INDIA	440.55	0.2	42.5	54.5	11.0	92.6
BOSCH LTD	38710	1.0	29.8	36.2	2.1	90.6

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ULTRATECH CEMENT	12405	2.0	16.6	31.0	16.6	0.0
TATA MOTORS LTD	653.75	3.1	9.1	52.6	3.9	0.6
NTPC LTD	336.15	0.4	17.1	116.6	16.9	0.7
REC LTD	387.3	1.5	26.7	57.8	8.0	0.8
ONE 97 COMMUNICA	1122	5.6	35.4	59.8	35.1	0.9

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SUZLON ENERGY	63.3	0.2	10519	1575	6.7
INDIAN BANK	674.0	0.2	16389	3903	4.2
SUPREME INDS LTD	4354.7	4.9	12835	3263	3.9
LODHA DEVELOPERS	1224.9	1.8	4639	1316	3.5
LIC HOUSING FIN	574.3	0.6	3809	1096	3.5

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
VODAFONE IDEA LT	6.6	6.6	1714	2002	1.2
HAVELLS INDIA	1474.2	-1.1	7292	8105	1.1
TITAGARH RAIL SY	776.2	-3.3	11972	13280	1.1
PI INDUSTRIES	3853.7	-1.6	5056	5401	1.1
HDFC ASSET MANAG	5501.0	-1.1	11487	11655	1

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES TECHNOLOG	5851.0	0.6	10802	10802	100
AMBER ENTERPRISE	6912.5	-6.0	8498	8498	100
NUVAMA WEALTH MA	6839.0	1.0	1452	1452	100
PG ELECTROPLAST	506.0	-14.0	24678	24678	100

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
KAYNES TECHNOLOG	5851.0	0.6	6250	6250	100
AMBER ENTERPRISE	6912.5	-6.0	3886	3886	100
PG ELECTROPLAST	506.0	-14.0	10633	10633	100

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
PG ELECTROPLAST	506.0	-14.0	151572	151572	100

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
AMBER ENTERPRISE	6912.5	-6.0	29169	29169	100.0
PG ELECTROPLAST	506.0	-14.0	90426	90426	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PG ELECTROPLAST	506.0	-14.0	24678	4210	5.9
KALYAN JEWELLERS	537.5	1.8	16849	5892	2.9
AMBER ENTERPRISE	6912.5	-6.0	8498	3634	2.3
BRITANNIA INDS	5381.5	-0.1	12975	6696	1.9
PNB HOUSING FINA	773.6	0.3	16033	9673	1.7

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PG ELECTROPLAST	506.0	-14.1	10633	2063	5.2
KALYAN JEWELLERS	537.5	1.8	6337	3338	1.9
TITAGARH RAIL SY	776.2	-3.3	4171	2254	1.9
AMBER ENTERPRISE	6912.5	-6.0	3886	2129	1.8
BRITANNIA INDS	5381.5	-0.1	6484	3813	1.7

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PG ELECTROPLAST	506.0	-14.0	151572	15827	9.6
VOLTAS LTD	1245.2	-4.5	68619	10868	6.3
SIEMENS LTD	3114.8	2.8	91617	19567	4.7
INDIAN BANK	674.0	3.6	16389	4133	4
PB FINTECH LTD	1860.6	5.1	18384	4938	3.7

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PG ELECTROPLAST	506.0	-14.0	90426	8461	10.7
VOLTAS LTD	1245.2	-4.5	64036	7646	8.4
TITAGARH RAIL SY	776.2	-3.3	13280	2120	6.3
SIEMENS LTD	3114.8	2.8	55956	8963	6.2
AMBER ENTERPRISE	6912.5	-6.0	29169	5285	5.5

## Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	2600	1685100	13.9%	2283	2700	1308300	18.2%	ITC	420	15241600	0.8%	417	410	4299200	-1.6%
ADANIPTS	1400	1937050	4.5%	1339	1400	1269200	4.5%	JIOFIN	350	10666650	6.8%	328	310	4577800	-5.4%
APOLLOHOSP	7500	234000	3.3%	7259	7000	66000	-3.6%	JSWSTEEL	1060	997650	0.7%	1053	920	571725	-12.6%
ASIANPAINT	2600	709250	4.5%	2489	2400	447500	-3.6%	KOTAKBANK	2200	1256400	11.3%	1976	2000	716400	1.2%
AXISBANK	1100	3275000	2.5%	1073	1060	1403125	-1.2%	LT	3700	922775	0.9%	3668	3600	448700	-1.9%
BAJAJ-AUTO	9000	182175	8.8%	8275	8000	131475	-3.3%	M&M	3400	1743400	6.7%	3186	3100	1420600	-2.7%
BAJAJFINSV	2000	1049500	4.0%	1923	1720	560000	-10.5%	MARUTI	13000	276300	3.2%	12597	12000	86750	-4.7%
BAJFINANCE	900	7404000	2.5%	878	900	3765750	2.5%	NESTLEIND	1150	861000	4.1%	1105	1050	344000	-5.0%
BEL	400	10108950	4.2%	384	390	4534350	1.6%	NTPC	340	16774500	1.1%	336	340	2199000	1.1%
BHARTIARTL	2000	3480325	7.7%	1857	1860	1272525	0.1%	ONGC	235	15313500	0.5%	234	235	3903750	0.5%
CIPLA	1600	845250	6.3%	1505	1340	363375	-11.0%	POWERGRID	300	6131300	5.3%	285	280	1635900	-1.7%
COALINDIA	400	6073650	4.6%	383	370	2332800	-3.3%	RELIANCE	1400	10689000	1.0%	1386	1400	5500000	1.0%
DRREDDY	1300	1759375	6.6%	1220	1200	669375	-1.6%	SBILIFE	1900	1208250	2.6%	1851	1800	166875	-2.8%
EICHERMOT	5700	218400	0.5%	5672	5800	154175	2.3%	SBIN	830	9542250	0.8%	823	820	8434500	-0.4%
ETERNAL	320	10800950	3.4%	309	300	6392300	-3.0%	SHRIRAMFIN	700	1777050	13.3%	618	600	956175	-2.8%
GRASIM	2800	277750	1.5%	2759	2700	217250	-2.1%	SUNPHARMA	1800	914200	11.9%	1608	1500	1193150	-6.7%
HCLTECH	1500	1019900	0.8%	1488	1500	511700	0.8%	TATACONSUM	1100	817850	3.9%	1059	1000	420200	-5.6%
HDFCBANK	2000	2427700	0.2%	1996	2000	2427700	0.2%	TATAMOTORS	700	6879200	7.1%	654	600	3188000	-8.2%
HDFCLIFE	800	2009700	4.6%	765	730	783200	-4.5%	TATASTEEL	180	21461000	13.6%	159	160	7139000	0.9%
HEROMOTOCO	4600	618750	0.8%	4562	4600	207450	0.8%	TCS	3200	2624125	5.2%	3041	3000	1137850	-1.3%
HINDALCO	700	2669800	4.0%	673	670	1535800	-0.4%	TECHM	1600	1010400	8.0%	1481	1300	478800	-12.2%
HINDUNILVR	2600	2313000	3.2%	2518	2400	675900	-4.7%	TITAN	3500	639800	0.9%	3468	3400	513625	-2.0%
ICICIBANK	1500	3847900	4.4%	1437	1400	1460900	-2.5%	TRENT	5500	474800	1.0%	5444	5000	286300	-8.1%
INDUSINDBK	900	2753100	14.9%	783	800	1614900	2.1%	ULTRACEMCO	12300	100300	-0.8%	12405	12000	46950	-3.3%
INFY	1600	3840000	12.0%	1428	1400	1776400	-2.0%	WIPRO	270	6957000	11.7%	242	250	3279000	3.5%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

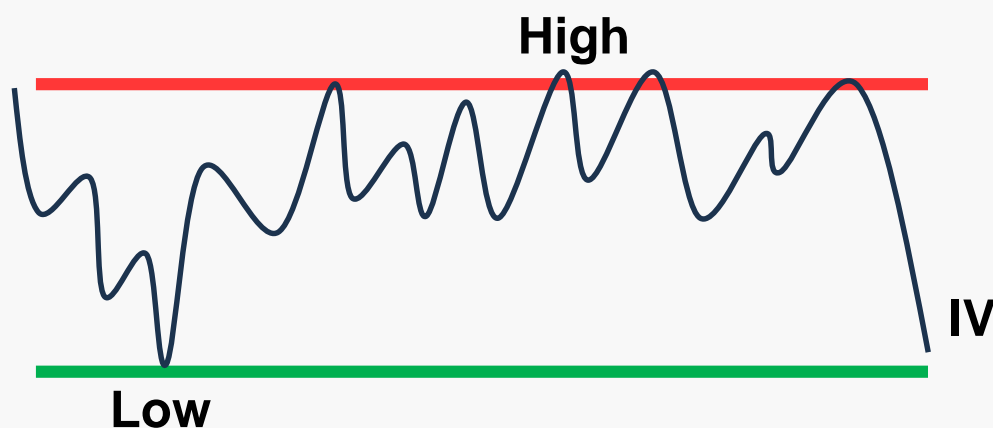


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DIIIs), proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** [www.nseindia.com](http://www.nseindia.com), Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100

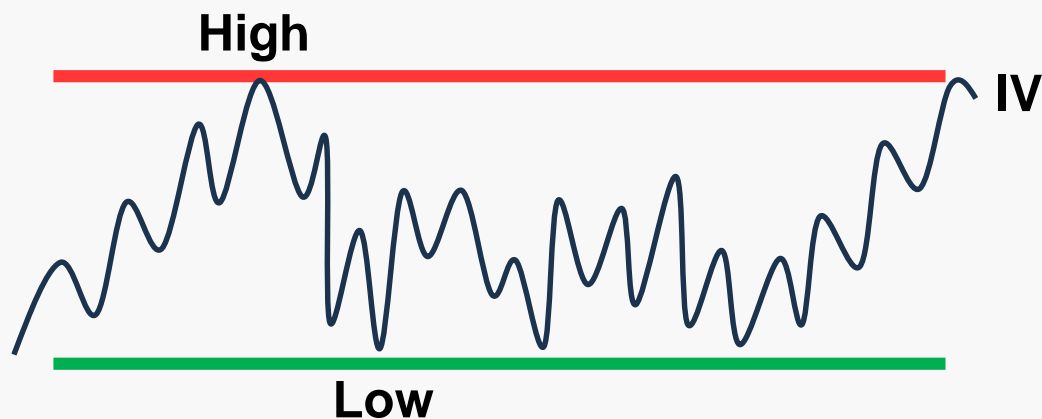


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

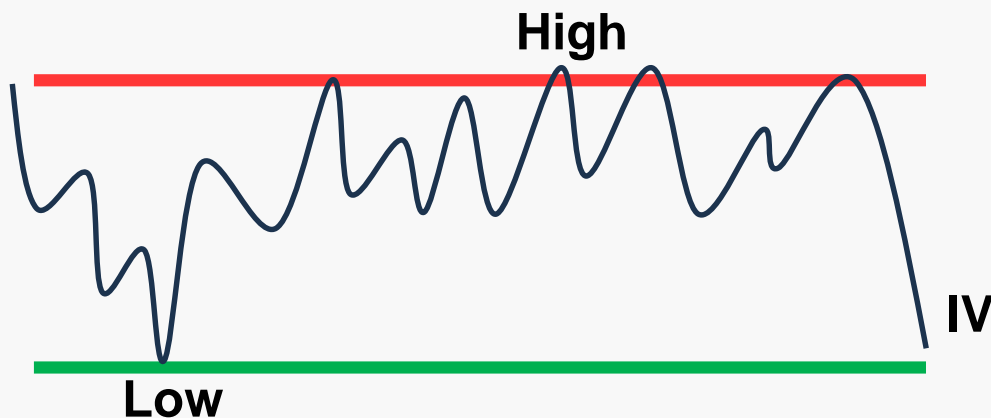


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

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