

## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,716	0.3%▲
Open Interest (OI)	1,50,15,675	3.5%▼
Change in OI (abs)	1,50,15,675	5,39,100▼
Premium / Discount (Abs)	49	13▼
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	54,910	0.3%▼
Open interest (OI)	20,95,970	1.5%▲
Change in OI (abs)	20,95,970	31,185▲
Premium / Discount (Abs)	109	39▼
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	17.23	0.97▼
Nifty ATM IV (%)	15.08	1.1▼
Bank Nifty ATM IV (%)	15.85	0.8▼
PCR (Nifty)	0.89	0.04▲
PCR (Bank Nifty)	0.82	0.01▼

The Long Ratio for FII Index Futures **jump** at 38.2%, **up** from 37.7 % in the **last session..**

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NCC	1,49,13,100	10.5%	227.03	2.8%
SHREECEM	3,05,475	8.4%	30650	1.8%
HINDCOPPER	4,46,41,900	7.4%	232.73	4.7%
M&MFIN	2,77,90,952	7.4%	260.85	1.3%
MCX	17,52,850	7.0%	6230.5	4.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RECLTD	6,99,53,525	17.3%	391.15	-2.9%
ASIANPAINT	1,42,19,550	11.0%	2282.8	-2.0%
IREDA	4,83,87,800	10.2%	166.07	-0.3%
PAGEIND	2,12,730	7.9%	46525	-0.1%
CONCOR	1,72,55,000	6.0%	690.65	-0.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
JINDALSTEL	1,46,75,625	-16.2%	943.5	3.5%
BIOCON	2,44,72,500	-8.3%	339.35	2.5%
APOLLOTYRE	79,22,000	-6.3%	475	1.4%
BOSCHLTD	2,46,500	-4.4%	31460	0.9%
INOXWIND	2,36,13,450	-4.3%	175.01	2.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MOTHERSON	13,08,59,550	-3.1%	141.55	-0.8%
KEI	13,34,025	-2.8%	3412.1	-0.5%
AUBANK	2,39,96,000	-2.1%	692.9	-1.3%
ICICIBANK	9,41,33,200	-1.3%	1428.5	-0.5%
BRITANNIA	35,13,925	-1.2%	5492	0.0%

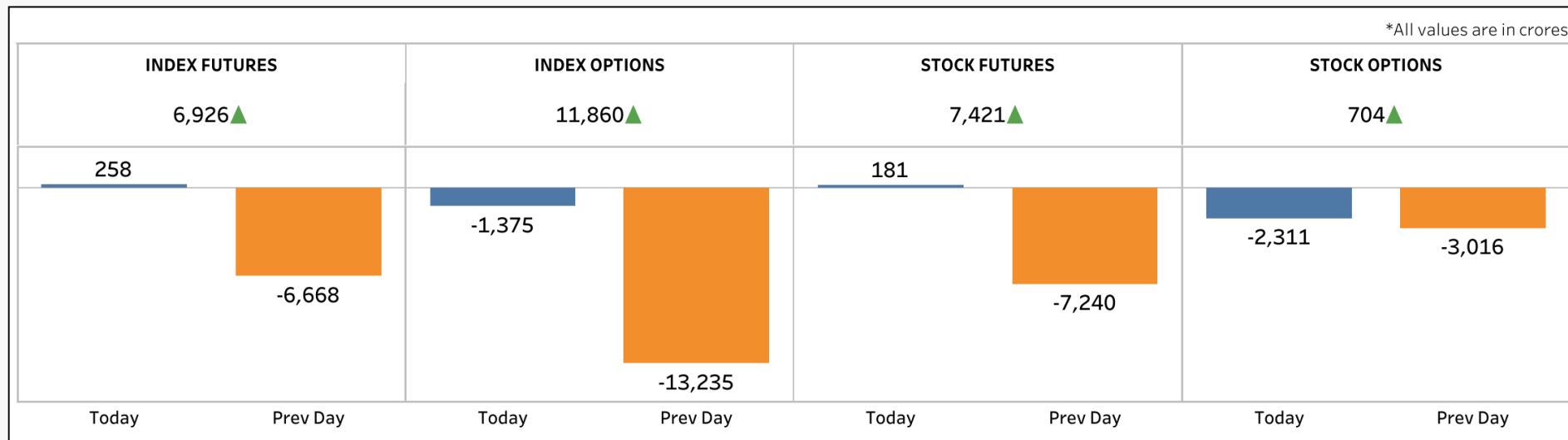
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

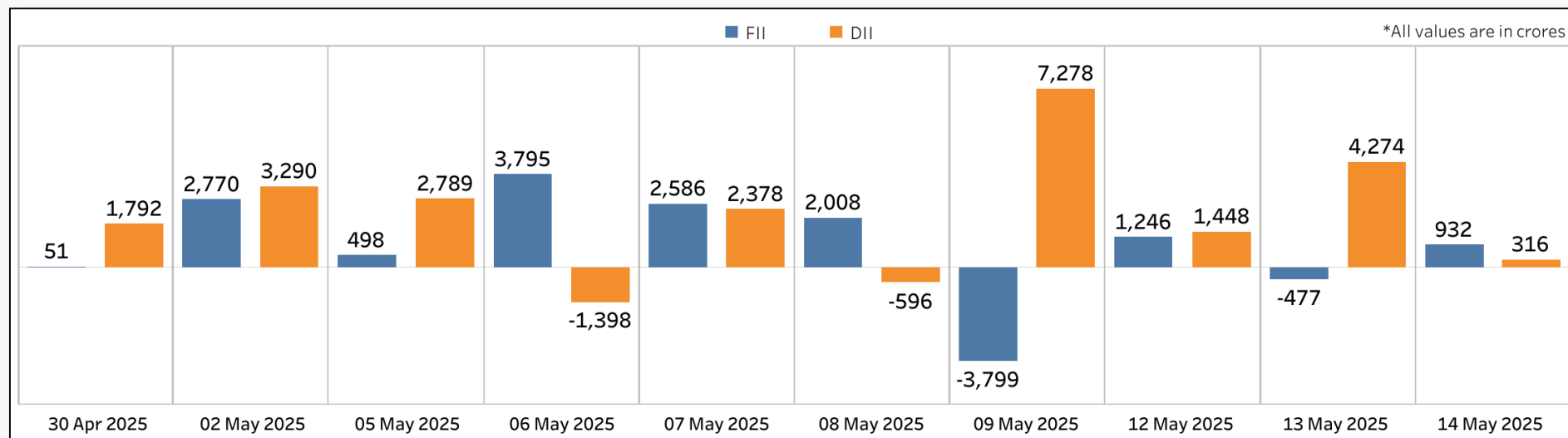
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
95,136 ▲	38,350 ▲	-10,583 ▼	106,721 ▲	0	4,021 ▲	3,930 ▲	20,386 ▲
13,277	1,697		20	0	-192	-41	
-81,859	-36,653	-22,373	-106,701		-4,213	-3,971	-33,777
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-171,516	-19,981	-57,159	1,748,845	70	48,116	52,638	-3,749,279
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-280,020 ▼	-46,496 ▼	84,756 ▲	-92,980 ▼	184,881 ▲	4,125 ▲	-78,106 ▼	-34,127 ▼
182,312				84,430			
	40,188	47,979	105,243		4,803	52,539	1,108
-97,708	-6,308	-36,777	12,263	-100,451		-25,567	35,235
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
31,672	17,019	105,802	1,728,014	139,774	-45,154	-101,284	272,420
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

## Daily Net Open Interest Change

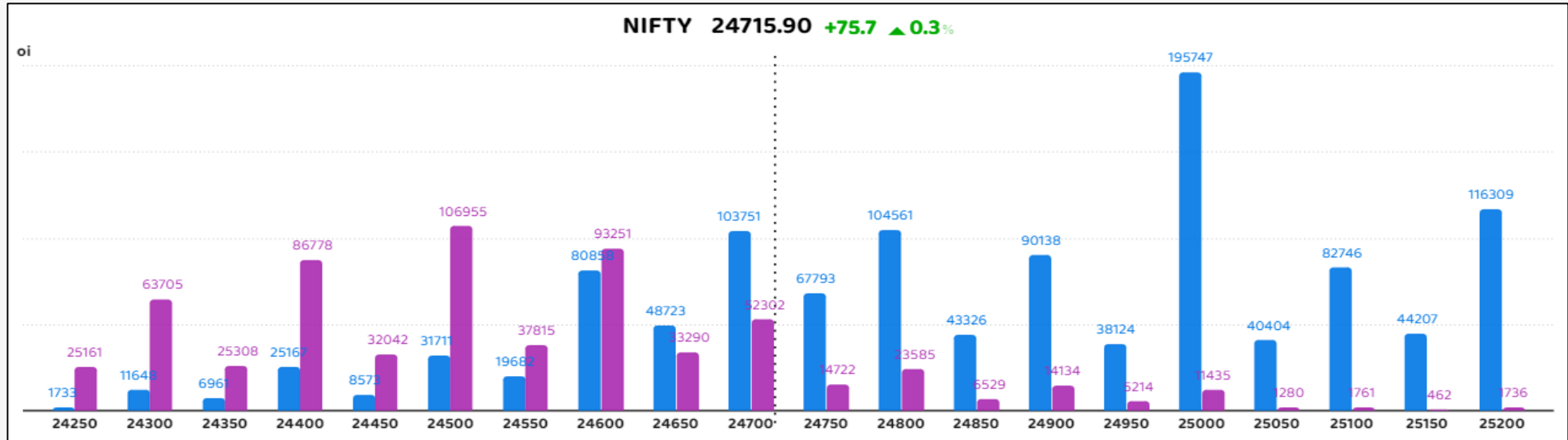


## DII and FII Daily Cash Market Flows



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,500 Call and the 55,000 Put saw the most amount of open interest.

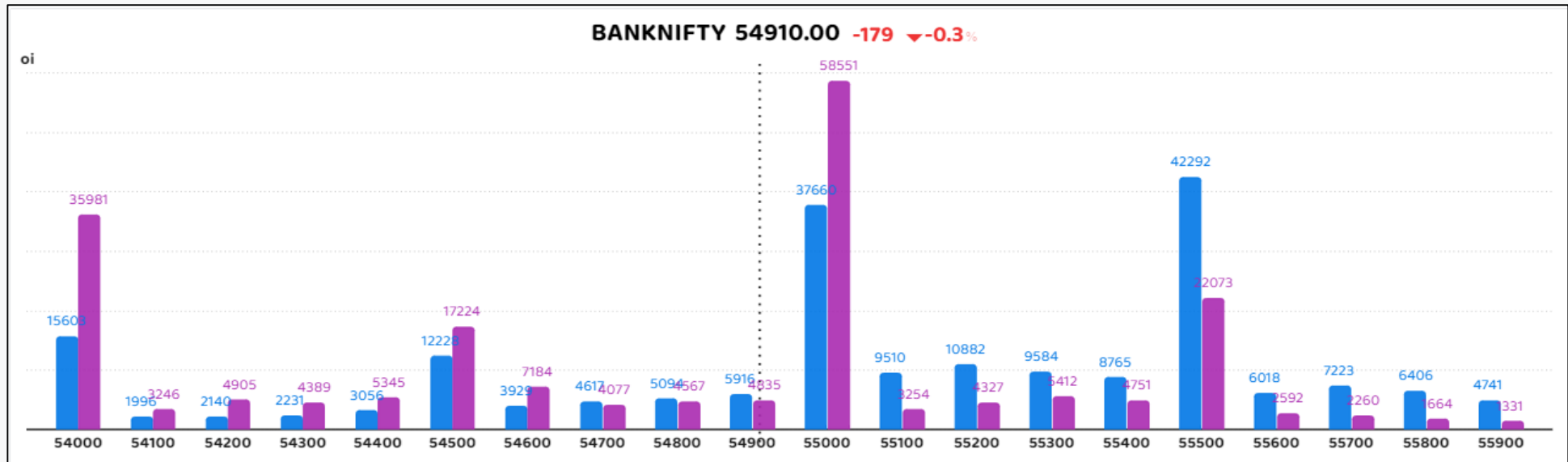
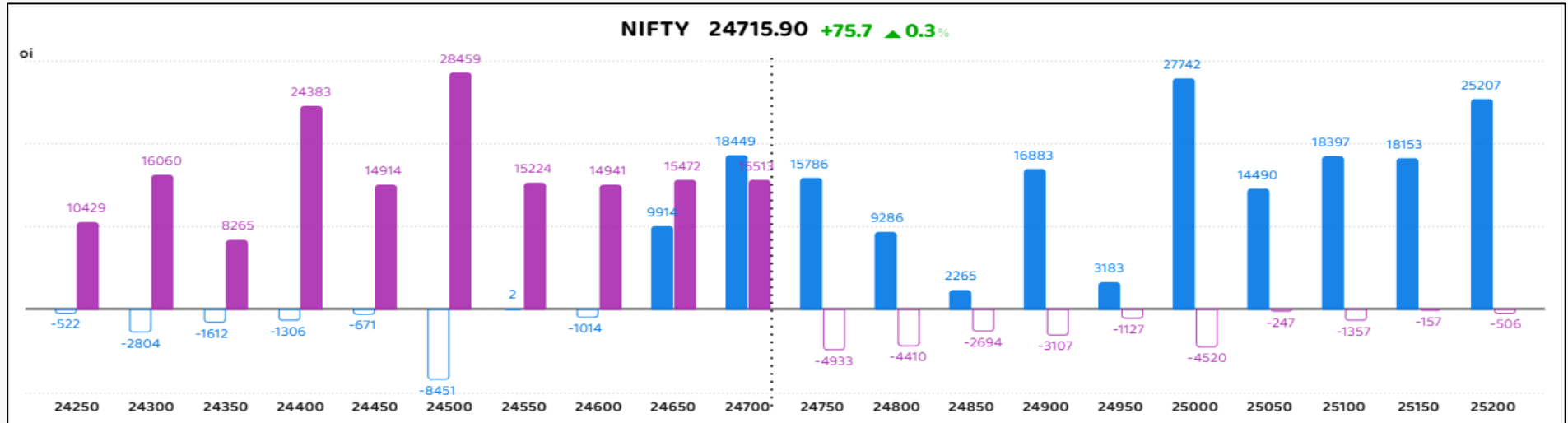


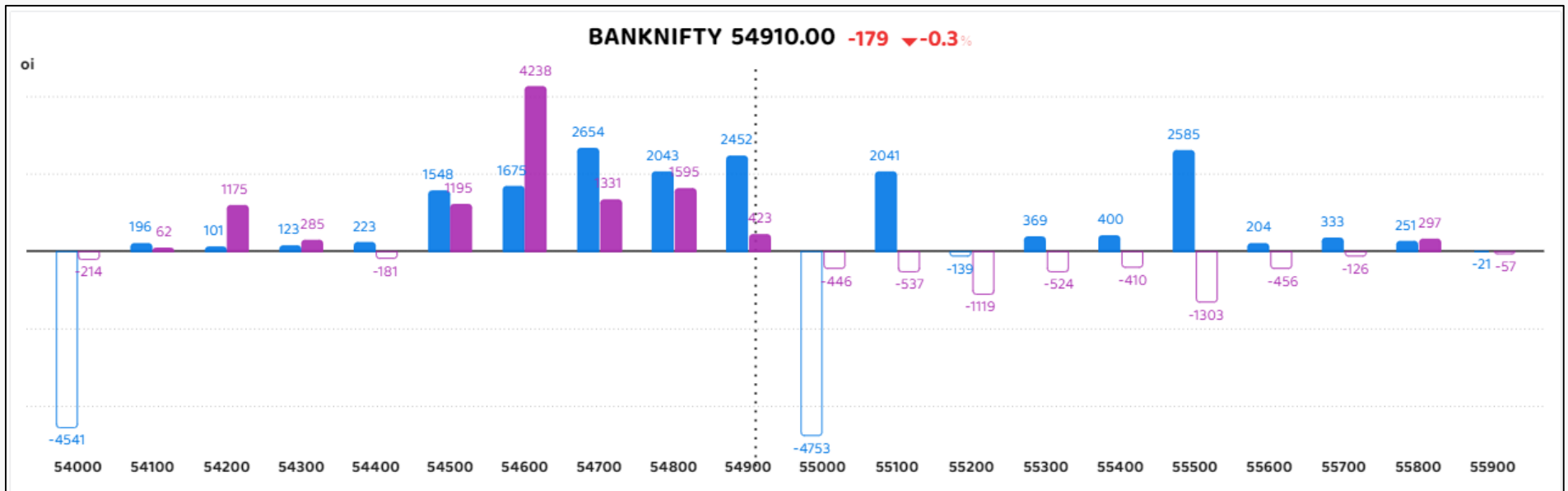
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,000 Call & the 54,600 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	16121	-0.6	45.0	53.0	1.8	86.1
RAMCO CEMENT/THE	994.3	1.9	35.8	43.6	0.5	82.9
PRESTIGE ESTATES	1395	3.6	50.9	56.2	14.7	80.2
EICHER MOTORS	5446	0.5	30.8	37.9	18.7	79.0
TATA CONSUMER PR	1120.4	0.2	18.5	34.4	5.5	77.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CENTRAL DEPOSITO	1336.4	1.0	44.3	60.7	31.2	0.0
INDIAN RENEWABLE	167.8	0.4	45.4	69.2	42.9	0.0
HDFC BANK LTD	1910.6	-0.6	17.2	32.7	11.1	0.0
ADANI GREEN ENER	967.2	1.0	47.4	74.3	45.4	0.8
HDFC LIFE INSURA	741.7	0.9	21.4	80.6	19.6	2.9

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
EICHER MOTORS	5446	0.5	30.8	37.9	18.7	89.3
DIVI LABS LTD	6215.5	2.3	38.4	45.9	18.2	97.4
DEEPAK NITRITE	1980.1	1.6	38.3	49.1	21.4	90.3
MAX FINANCIAL SE	1338.2	3.7	32.9	49.3	18.6	48.9
INTERGLOBE AVIAT	5451.5	-1.3	34.2	53.8	22.1	83.7

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
OIL & NATURAL GA	246	2.0	11.3	57.3	6.4	0.9
TATA STEEL LTD	155.31	3.9	21.3	110.0	5.6	1.4
ADITYA BIRLA FAS	277.1	3.4	19.2	66.6	9.9	2.3
TATA TECHNOLOGIE	706.5	0.3	29.9	54.4	29.6	2.7
ICICI LOMBARD GE	1850.9	-0.8	18.6	38.2	9.9	2.8



### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
INDIAN ENERGY EX	197.2	1.3	13723	2725	5.0
VODAFONE IDEA LT	6.98	0.6	7362	1520	4.8
TORRENT POWER LT	1450	1.6	8220	1734	4.7
PB FINTECH LTD	1714.3	2.4	13706	3768	3.6
TATA ELXSI LTD	6100.5	1.9	18762	5323	3.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
INTERGLOBE AVIAT	5451.5	-1.3	12482	17110	1.4
JUBILANT FOODWOR	693.8	-1.1	17390	23300	1.3
RAMCO CEMENT/THE	994.3	1.9	2830	2915	1.0
POWER FINANCE	405.5	-1.7	25122	24823	1.0
TITAN CO LTD	3587.6	0.7	21681	20476	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
VARUN BEVERAGES	510.1	0.3	20236	20236	100.0
PHOENIX MILLS	1540.5	0.1	2717	2717	100.0
SYNGENE INTERNAT	640.85	1.8	15450	15523	99.5
PATANJALI FOODS	1783.3	-2.0	5425	5512	98.4
ACC LTD	1861	0.4	20872	21413	97.5

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
IIFL FINANCE LTD	405.5	1.9	4266	4266	100.0
PHOENIX MILLS	1538.5	0.1	2075	2075	100.0
PRESTIGE ESTATES	1347.3	3.6	3907	3978	98.2
HFCL LTD	82.7	3.5	5076	5178	98.0
BSE LTD	7315.5	0.4	41609	43769	95.1

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NO STOCK OPTION MET THE CONDITION MENTIONED IN THE FOOTNOTE					

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ADITYA BIRLA CAP	218.3	6.6	19639	19639	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
UPL LTD	636.9	-0.9	22127	8951	2.5
SRF LTD	2882.6	-1.6	14592	6022	2.4
TORRENT POWER LT	1450	1.6	2547	1053	2.4
SHREE CEMENT	30620	1.6	3208	1455	2.2
ESCORTS KUBOTA L	3525	0.7	4958	2411	2.1

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
YES BANK LTD	20.96	0.4	10151	4741	2.1
ESCORTS KUBOTA L	3525	0.7	3722	1781	2.1
UPL LTD	636.9	-0.9	8267	4047	2.0
SIEMENS LTD	3006.8	3.1	11932	6117	2.0
SHREE CEMENT	30620	1.6	2215	1179	1.9

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SHREE CEMENT	30620	1.6	16954	2651	6.4
ADITYA BIRLA CAP	218.6	6.6	33445	6670	5.0
HINDUSTAN COPPER	231.8	4.5	13831	2866	4.8
MAX FINANCIAL SE	1338.2	3.7	16593	3473	4.8
HINDUSTAN AERONA	4768	3.4	390874	91657	4.3

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
JUBILANT FOODWOR	693.8	-1.1	23300	4062	5.7
SHREE CEMENT	30620	1.6	7462	1401	5.3
ADITYA BIRLA CAP	218.6	6.6	19639	4126	4.8
HINDUSTAN AERONA	4768	3.4	172469	36824	4.7
SIEMENS LTD	3006.8	3.1	52593	12314	4.3

## 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	1970400	5.6%	2462	2600	2381700	5.6%	ITC	450	7116800	4.9%	429	430	4678400	0.2%
ADANIPTS	1400	1555600	2.1%	1372	1200	958000	-12.5%	JIOFIN	300	6791400	12.1%	268	250	3753750	-6.5%
APOLLOHOSP	7000	162750	1.2%	6917	6150	89500	-11.1%	JSWSTEEL	1100	1122525	11.2%	989	950	823500	-4.0%
ASIANPAINT	2500	1255600	9.5%	2282	2300	614800	0.8%	KOTAKBANK	2200	1416800	5.1%	2092	2000	670400	-4.4%
AXISBANK	1200	3140000	0.4%	1196	1200	1388750	0.4%	LT	3500	941400	-2.0%	3573	3300	517800	-7.6%
BAJAJ-AUTO	8500	203550	4.9%	8103	7800	97200	-3.7%	M&M	3100	987350	-0.1%	3102	2900	543550	-6.5%
BAJAJFINSV	2100	2733000	3.9%	2020	1900	553500	-6.0%	MARUTI	12000	317900	-5.3%	12670	12000	238300	-5.3%
BAJFINANCE	10000	804125	10.1%	9081	9000	480250	-0.9%	NESTLEIND	2400	582200	1.2%	2370	2200	100800	-7.2%
BEL	350	7834650	1.6%	344	320	6289950	-7.1%	NTPC	370	9519000	9.3%	339	380	2094000	12.2%
BHARTIARTL	1900	4368575	3.6%	1834	1700	1170400	-7.3%	ONGC	240	10377675	-2.4%	246	240	3237850	-2.4%
CIPLA	1600	1689675	7.0%	1495	1500	446225	0.3%	POWERGRID	330	4590000	11.5%	296	320	1582200	8.1%
COALINDIA	400	6204450	-0.8%	403	450	2148300	11.6%	RELIANCE	1450	7288000	1.8%	1424	1300	5046500	-8.7%
DRREDDY	1240	1315000	1.6%	1220	1150	890625	-5.7%	SBILIFE	1780	1656000	1.4%	1755	1720	597375	-2.0%
EICHERMOT	6000	311675	10.2%	5447	5300	166250	-2.7%	SBIN	800	14059500	-0.1%	801	800	5193000	-0.1%
ETERNAL	260	8164000	9.8%	237	200	4128000	-15.6%	SHRIRAMFIN	700	2468250	7.4%	652	620	832500	-4.9%
GRASIM	3120	319250	14.0%	2737	2340	127250	-14.5%	SUNPHARMA	1900	2158450	11.2%	1708	1600	726600	-6.3%
HCLTECH	1700	1137150	3.8%	1638	1200	836150	-26.7%	TATACONSUM	1300	787512	16.0%	1120	1100	415872	-1.8%
HDFCBANK	2000	5089150	4.7%	1911	1800	2257750	-5.8%	TATAMOTORS	800	7620800	14.5%	699	650	3900050	-7.0%
HDFCLIFE	750	2451900	1.1%	742	720	1238600	-2.9%	TATASTEEL	160	26790500	3.0%	155	140	13134000	-9.9%
HEROMOTOCO	4000	381900	-1.7%	4067	4000	260250	-1.7%	TCS	3600	984900	1.4%	3549	3400	498575	-4.2%
HINDALCO	660	2213400	1.5%	651	630	1615600	-3.2%	TECHM	1600	836400	-0.2%	1603	1500	605400	-6.4%
HINDUNILVR	2500	1392600	6.4%	2351	2400	562200	2.1%	TITAN	3600	374500	0.3%	3588	3500	597100	-2.4%
ICICIBANK	1460	4176200	2.4%	1426	1400	1807400	-1.8%	TRENT	5700	526700	6.3%	5362	5200	369200	-3.0%
INDUSINDBK	850	2983000	8.8%	781	700	2294000	-10.4%	ULTRACEMCO	13000	340800	11.4%	11672	10000	89250	-14.3%
INFY	1600	2775200	0.5%	1592	1200	1291600	-24.6%	WIPRO	300	9996000	18.6%	253	230	2610000	-9.1%

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

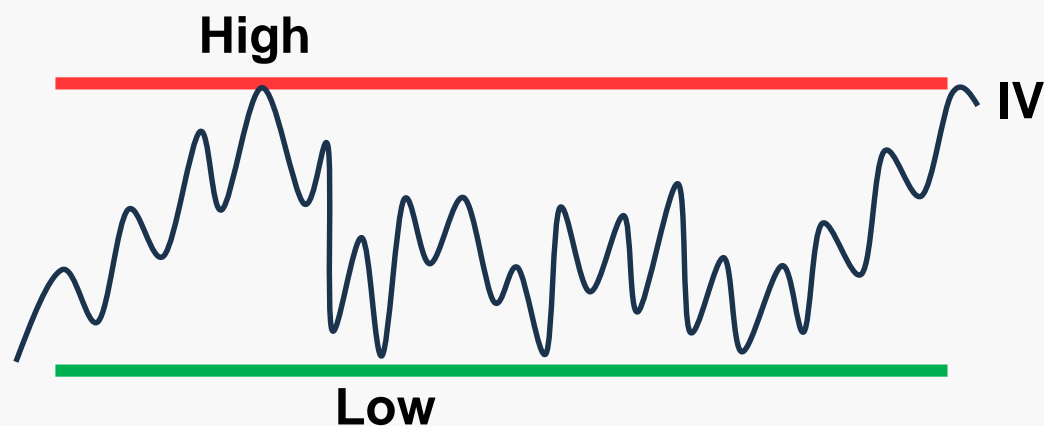
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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*

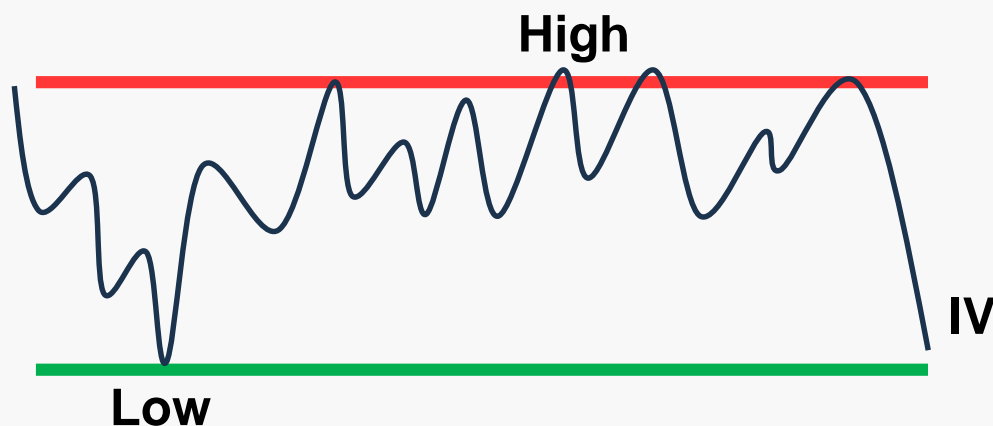
- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, 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 (DII), 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

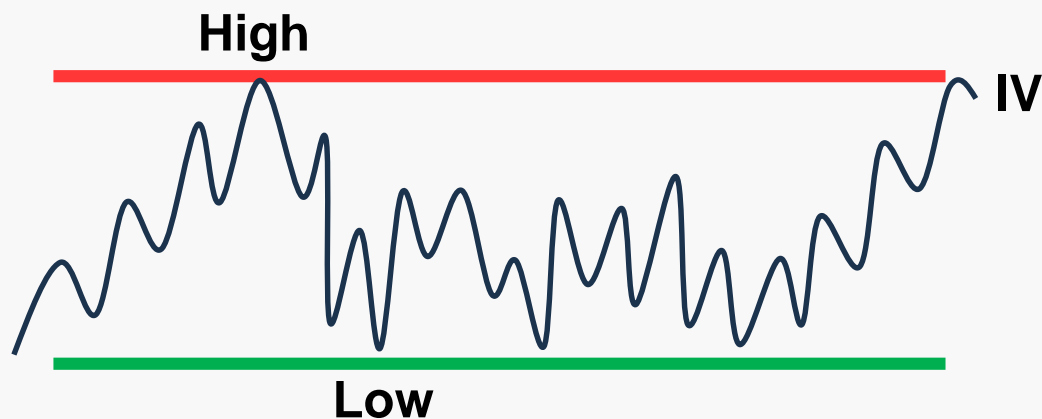


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

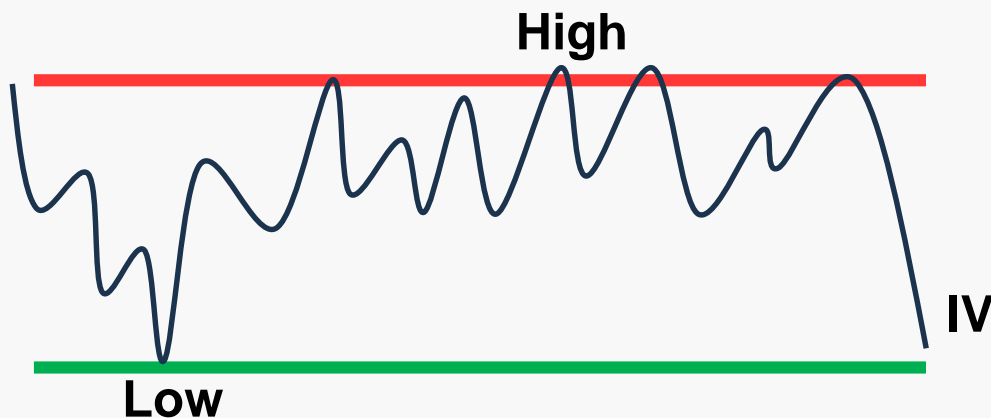


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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