



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,719	0.3%▼
Open Interest (OI)	1,92,82,510	0.2%▲
Change in OI (abs)	1,92,82,510	41,210▲
Premium / Discount (Abs)	53	5▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,781	0.0%▲
Open interest (OI)	14,17,500	1.0%▲
Change in OI (abs)	14,17,500	14,280▲
Premium / Discount (Abs)	200	24▲
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	11.32	0.12▲
Nifty ATM IV (%)	10.04	0.45▲
Bank Nifty ATM IV (%)	11.43	0.73▲
PCR (Nifty)	0.81	0.05▼
PCR (Bank Nifty)	0.96	0.01▲

The FII Long Ratio in Index Futures **jump** to 7.6 %, **price** from 7.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
UNIONBANK	7,63,48,950	15.0%	179.8	7.9%
BANKINDIA	5,70,44,000	10.2%	153.34	3.6%
BAJAJHLDNG	2,34,600	10.1%	10781	0.2%
INDIANB	1,00,75,000	8.5%	848.6	3.4%
OIL	1,50,30,400	7.6%	459	2.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SWIGGY	2,67,63,100	11.1%	348.2	-0.8%
TATATECH	1,29,19,200	8.2%	646.7	-2.5%
TCS	1,98,11,925	8.0%	3142.3	-2.4%
DIXON	32,33,850	7.4%	11123	-1.4%
HINDPETRO	3,97,54,800	6.7%	441.65	-1.7%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDUSINDBK	4,02,57,000	-5.7%	943.65	3.5%
MCX	1,40,98,750	-4.8%	2424	5.6%
MAXHEALTH	2,06,65,050	-3.3%	1036.7	0.7%
ETERNAL	28,20,88,125	-2.8%	299.4	1.6%
NUVAMA	22,08,500	-2.8%	1438.4	1.0%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TECHM	1,85,21,400	-3.5%	1590	-1.7%
PERSISTENT	21,56,100	-2.5%	6296	-0.9%
FINNIFTY	48,900	-2.4%	27602.7	-0.3%
BOSCHLTD	2,04,775	-2.4%	37530	-1.0%
HCLTECH	1,73,09,950	-2.2%	1658.7	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

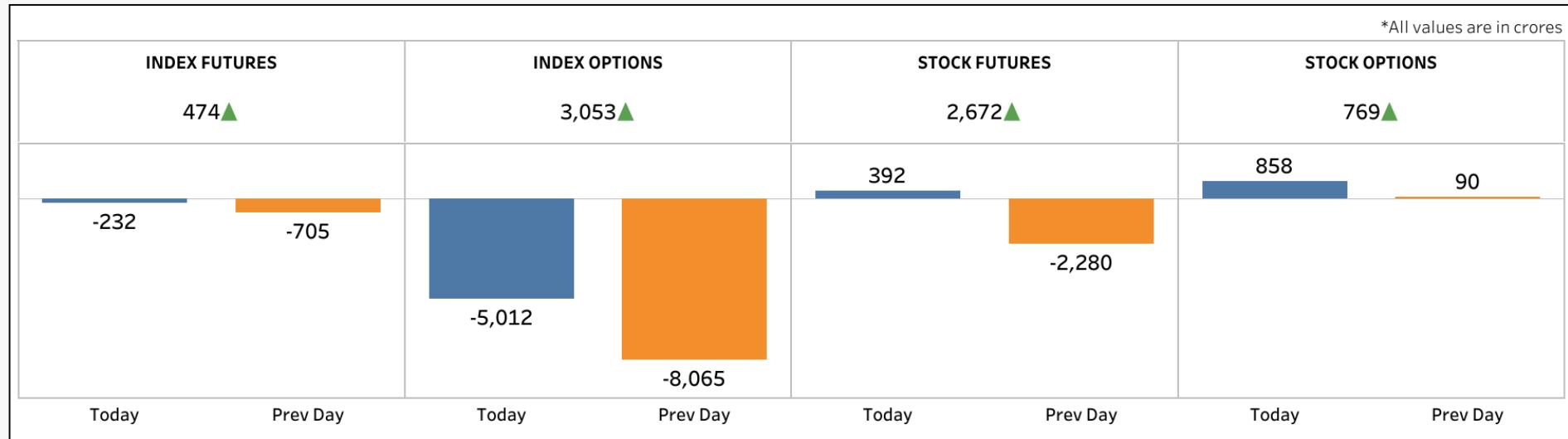
FII

INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
7,319 ▲	2,767 ▲	-26,526 ▼	41,271 ▲	10,655 ▲	1,871 ▲	20 ▲	-40,618 ▼
-20,130	-1,479	-4,246	15,718	5,636	0	2,332	24,854
-27,449			-10,808		461		
				10,655			
					-700	-720	
							-15,764
Net O/S -53,113	Net O/S -199,134	Net O/S 270,948	Net O/S 1,424,888	Net O/S 12,758	Net O/S 41,069	Net O/S 27,126	Net O/S -4,593,962
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

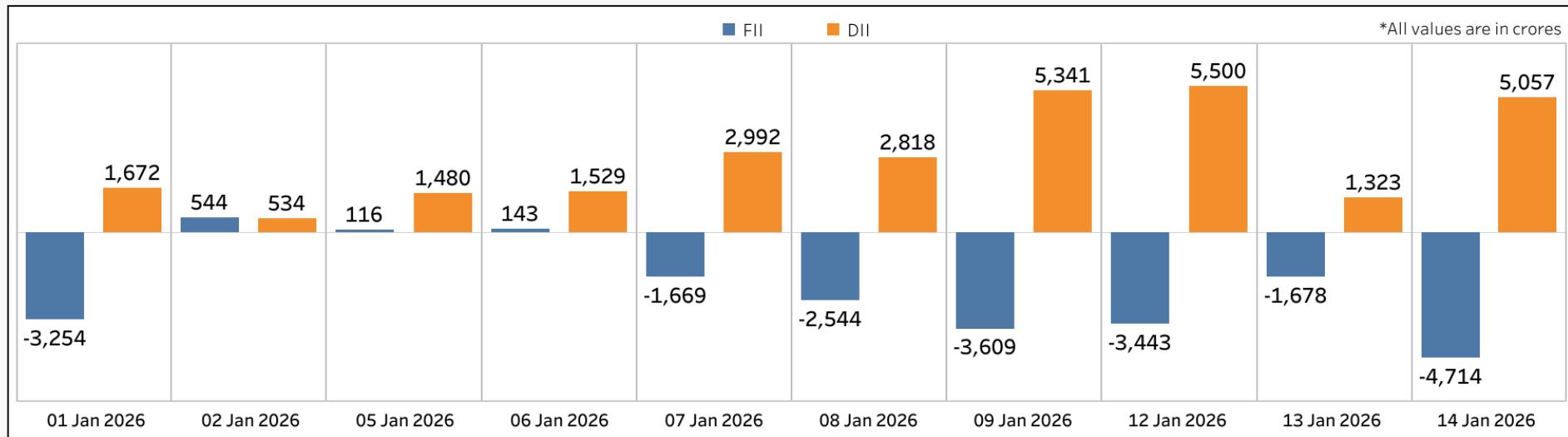
Clients

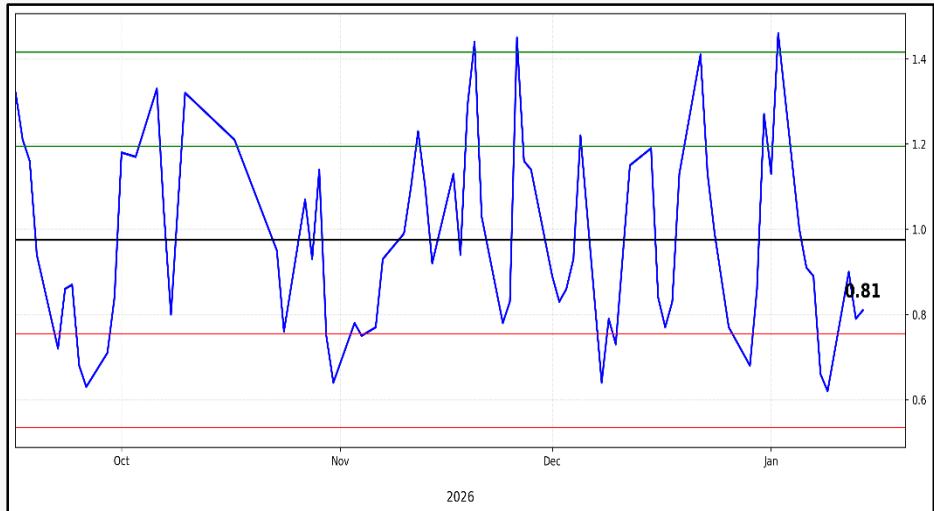
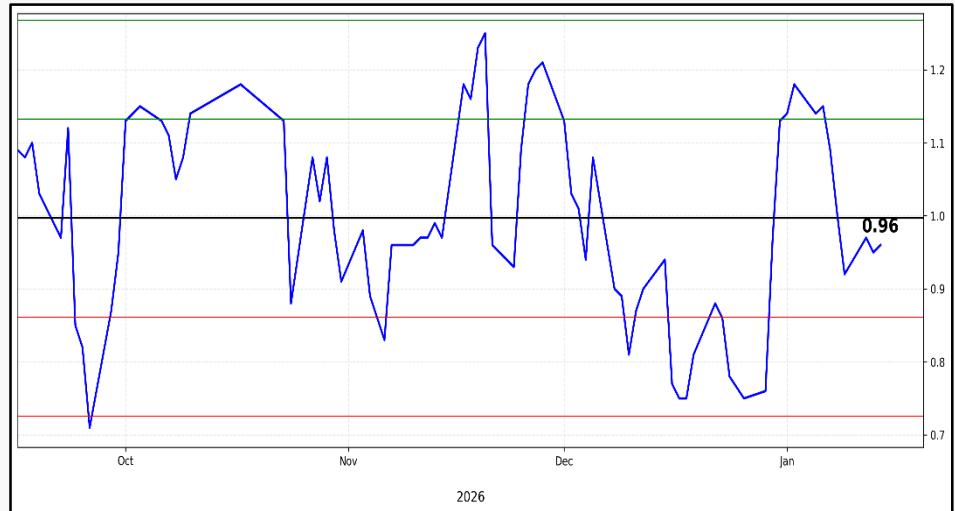
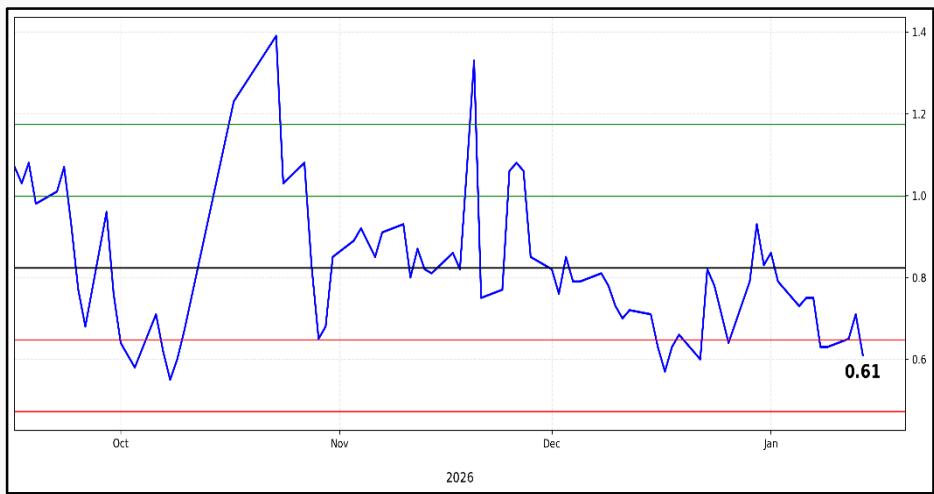
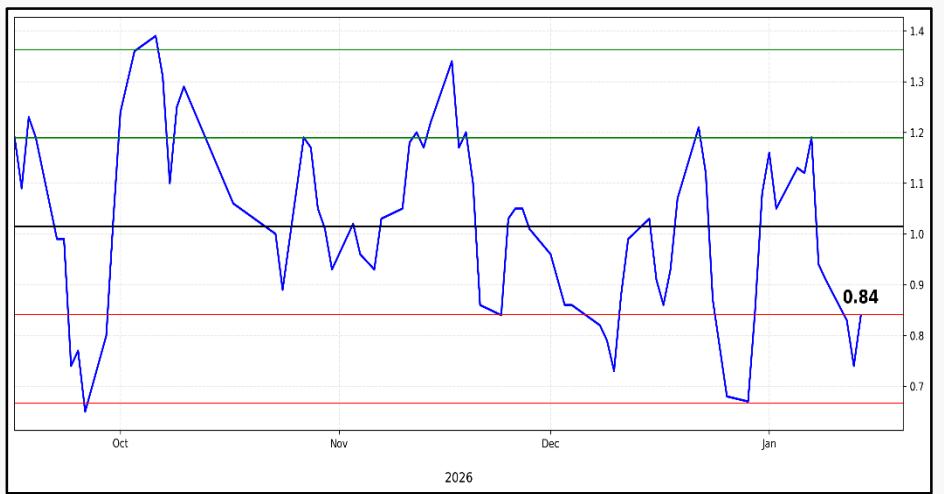
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-105,087 ▼	-3,960 ▼	-64,207 ▼	13,258 ▲	87,112 ▲	-678 ▼	90,713 ▲	-13,911 ▼
74,763				39,798			
472	4,432				18,547		
-30,324							
Net O/S 86,109	Net O/S 137,867	Net O/S -431,080	Net O/S 2,645,115	Net O/S -45,755	Net O/S 20,198	Net O/S 133,006	Net O/S 523,959
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

Daily Net Open Interest Change



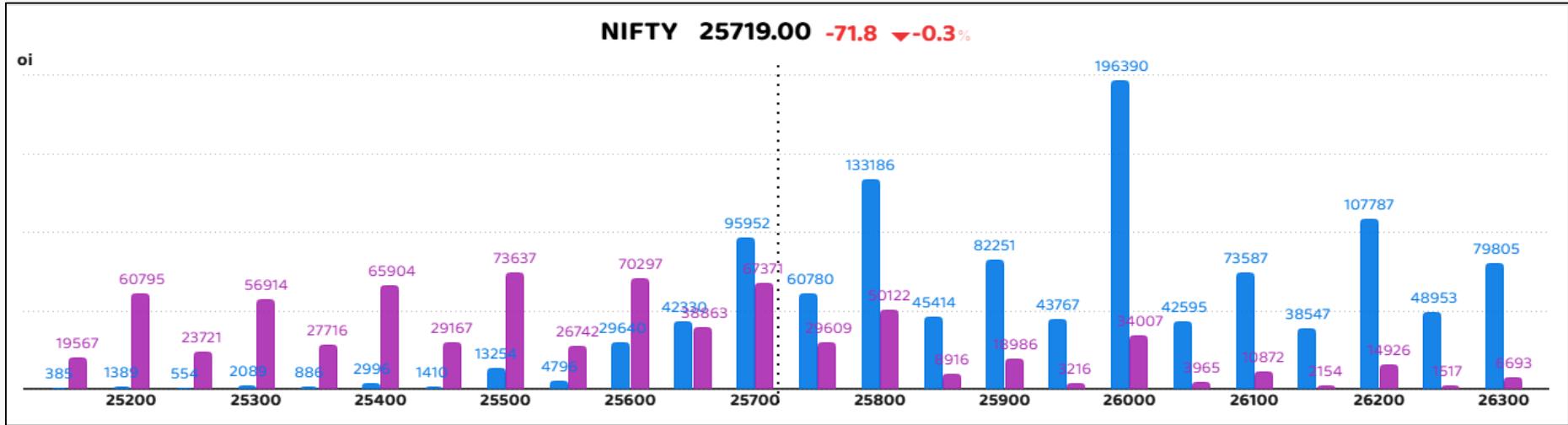
DII and FII Daily Cash Market Flows



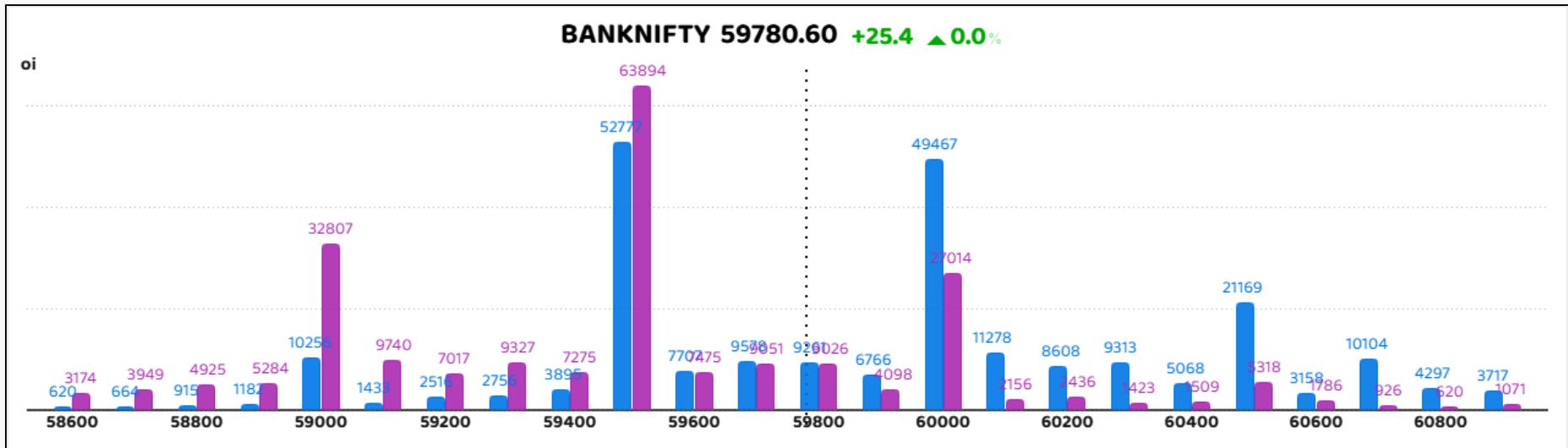
Nifty

Bank Nifty

Fin Nifty

Midcap Select Nifty


On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation

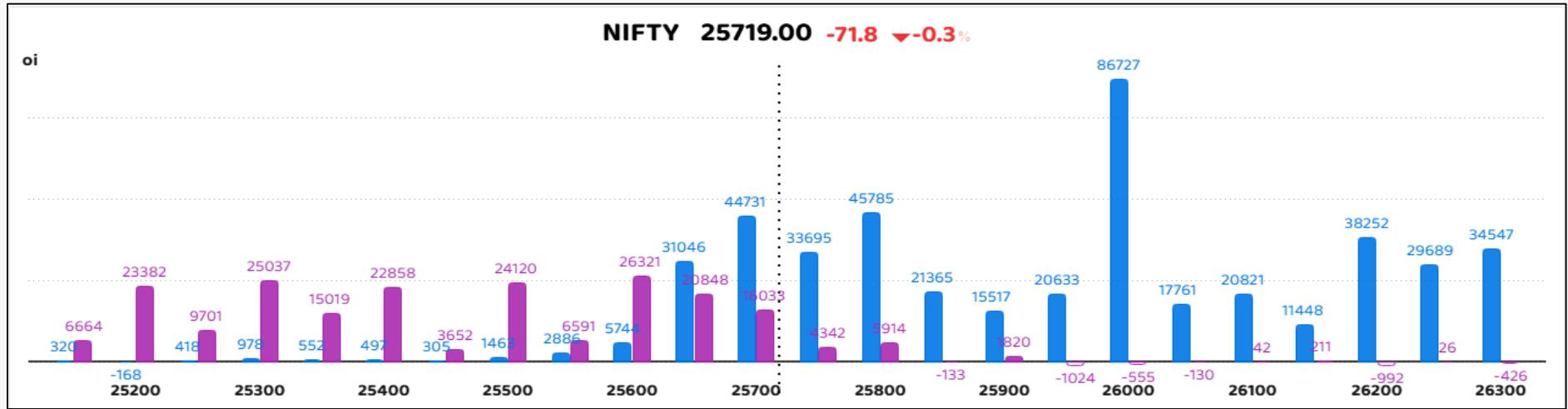
Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

 Call  Put 


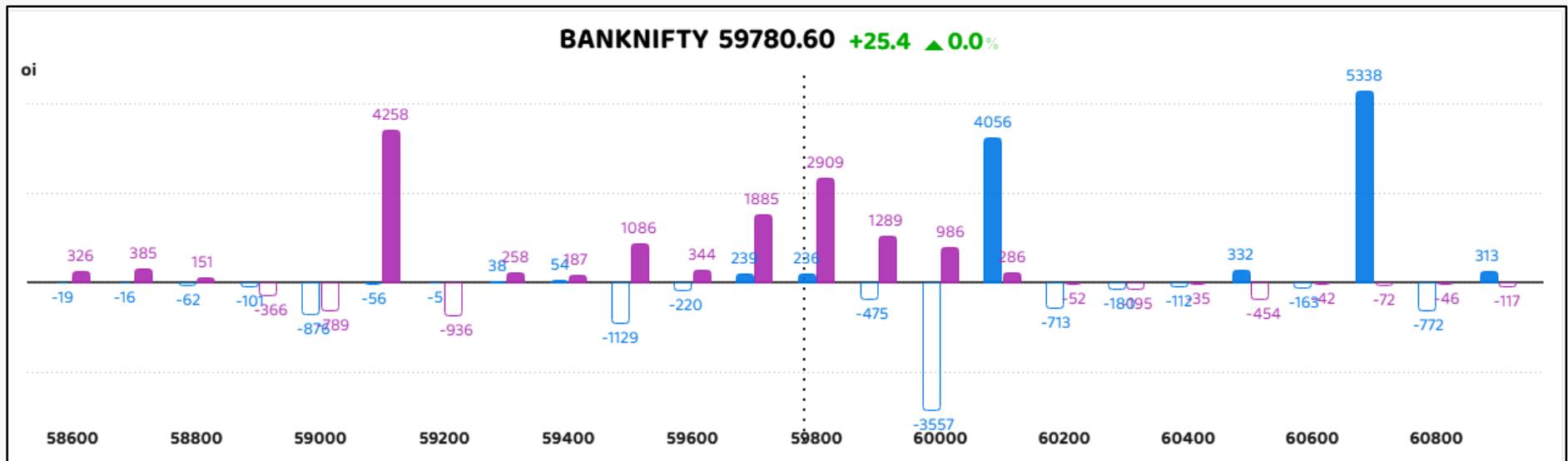
For Nifty, the 26,000 Call and 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.



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

 Call  Put 


The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 60,500 Call & the 59,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
STEEL AUTHORITY	152.4	3.2	77.5	91.3	0.6	84.8
DIXON TECHNOLOGI	11,103.0	-1.2	45.5	53.1	9.2	82.7
HDFC BANK LTD	925.5	-1.3	22.5	28.0	1.5	79.5
BHARAT HEAVY ELE	267.5	0.7	42.7	54.7	5.2	75.7
CIPLA LTD	1,434.5	-1.0	25.6	34.7	1.3	72.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
STATE BANK IND	1,028.4	0.0	2.1	39.0	2.1	0.0
NTPC LTD	349.1	3.3	20.2	116.6	14.9	5.2
ADANI PORTS AND	1,430.0	0.1	24.9	99.7	19.0	7.2
GAIL INDIA LTD	165.2	-0.1	25.4	91.4	19.4	8.4
ICICI BANK LTD	1,418.4	-1.3	4.1	35.4	0.4	10.7

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STEEL AUTHORITY	152.4	3.2	77.5	91.3	0.6	99.1
HINDUSTAN ZINC	654.2	3.9	48.5	54.2	21.8	98.2
RAIL VIKAS NIGAM	338.3	2.5	48.9	58.5	21.0	96.7
HDFC BANK LTD	925.5	-1.3	22.5	28.0	1.5	95.6
KAYNES TECHNOLOG	3,680.6	-0.4	51.4	62.9	30.3	94.9

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STATE BANK IND	1,028.4	0.0	2.1	39.0	2.1	0.0
JSW ENERGY LTD	494.7	0.1	3.1	52.1	3.1	0.0
ICICI BANK LTD	1,418.4	-1.3	4.1	35.4	0.4	1.8
TITAN CO LTD	4,221.5	-0.4	15.5	39.3	8.3	2.5
MCX INDIA LTD	2,417.0	5.4	30.0	54.9	26.3	3.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SONACOMS	461.6	1.0	6,325	1,180	5.4
KPITTECH	1,179.4	0.5	10,547	2,004	5.3
ADANIENSOL	922.6	-1.1	5,939	1,210	4.9
ITC	334.8	0.0	1,45,330	30,872	4.7
ADANIGREEN	935.3	-0.1	7,710	1,666	4.6

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PRESTIGE	1,500.2	-1.2	5,584	6,215	1.1
DRREDDY	1,186.5	-0.4	8,017	7,792	1.0
KEI	4,384.6	1.7	4,178	3,860	0.9
ASIANPAINT	2,813.9	-2.5	28,501	26,220	0.9
POLYCARB	7,323.5	-3.1	29,452	26,637	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
CGPOWER	576.9	-0.8	18,952	18,035	100.0
IRCTC	627.4	0.0	36,292	34,451	100.0
LTF	295.8	2.5	17,007	16,185	100.0
NBCC	105.2	-0.1	12,846	12,189	100.0
RVNL	338.3	2.5	38,356	36,276	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
GODREJPROP	1,871.4	-0.4	11,875	11,725	100.0
INOXWIND	114.5	-0.6	7,962	7,372	100.0
UNIONBANK	179.3	7.9	12,774	8,565	100.0
TRENT	3,932.2	0.3	37,421	37,886	98.8
IRCTC	627.4	0.0	13,657	13,935	98.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
UNIONBANK	179.3	7.9	1,16,402	47,476	100.0
VEDL	675.8	6.0	2,77,327	2,37,057	100.0
HINDZINC	654.2	3.9	2,45,671	2,84,880	86.2
NATIONALUM	373.6	4.5	67,529	1,03,232	65.4
HINDALCO	955.4	2.0	1,09,812	1,72,022	63.8

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
UNIONBANK	179.3	7.9	58,642	22,700	100.0
TATAELXSI	5,505.0	-5.0	88,821	1,17,210	75.8
VEDL	675.8	6.0	1,14,332	1,56,095	73.2
ONGC	248.2	1.8	55,610	89,436	62.2
OIL	458.0	2.3	16,164	26,440	61.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
MANAPPURAM	309.0	0.3	15,475	7,251	2.1
TATAELXSI	5,505.0	-5.0	25,995	12,657	2.1
ITC	334.8	0.0	2,30,719	1,14,647	2.0
BOSCHLTD	37,455.0	-1.2	12,666	6,410	2.0
CGPOWER	576.9	-0.8	18,952	9,856	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
UNIONBANK	179.3	7.9	12,774	5,590	2.3
ONGC	248.2	1.8	23,421	11,917	2.0
OIL	458.0	2.3	4,650	2,448	1.9
IEX	139.4	-1.4	19,564	11,421	1.7
ITC	334.8	0.0	82,698	48,821	1.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
UNIONBANK	179.3	7.9	1,16,402	8,769	13.3
ICICIGI	1,857.7	-1.5	32,090	3,985	8.1
OIL	458.0	2.3	46,662	7,227	6.5
ICICIPRULI	669.2	-1.8	34,855	7,098	4.9
ONGC	248.2	1.8	1,16,831	30,383	3.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
UNIONBANK	179.3	7.9	58,642	4,440	13.2
ICICIGI	1,857.7	-1.5	26,698	2,129	12.5
KALYANKJIL	480.4	-3.0	27,414	4,361	6.3
ICICIPRULI	669.2	-1.8	15,035	2,892	5.2
OIL	458.0	2.3	16,164	3,203	5.0

Call and put volume refers to the number of contracts that have been traded in the most recently concluded session
 Only looks at stocks with volumes more than 1000 contracts

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	2300	1970493	6.8%	2153	2200	1093242	2.2%	JIOFIN	300	12863900	4.5%	287	290	6030100	1.0%
ADANIPORTS	1500	1984550	4.9%	1430	1440	672600	0.7%	JSWSTEEL	1200	961875	1.5%	1182	1100	1297350	-6.9%
APOLLOHOSP	7400	173375	1.8%	7273	7000	128375	-3.7%	KOTAKBANK	440	9470000	4.5%	421	420	3624000	-0.2%
ASIANPAINT	2860	554250	1.6%	2814	2800	397250	-0.5%	LT	4000	974050	3.5%	3866	4000	340200	3.5%
AXISBANK	1300	8851875	0.1%	1299	1300	2111875	0.1%	M&M	3800	876200	4.1%	3650	3600	287600	-1.4%
BAJAJ-AUTO	10000	242700	4.4%	9580	9500	100275	-0.8%	MARUTI	17000	323300	5.3%	16152	16000	108600	-0.9%
BAJAJFINSV	2080	985000	4.0%	2001	2000	532250	0.0%	MAXHEALTH	1100	623700	6.4%	1034	1000	301350	-3.3%
BAJFINANCE	1000	5718000	5.7%	946	1000	2055750	5.7%	NESTLEIND	1340	624000	2.5%	1307	1300	740000	-0.5%
BEL	420	9224025	0.6%	418	400	5139975	-4.2%	NTPC	355	8422500	1.7%	349	340	3447000	-2.6%
BHARTIARTL	2100	2611075	3.8%	2023	2000	797050	-1.1%	ONGC	240	12217500	-3.3%	248	240	7569000	-3.3%
CIPLA	1500	971625	4.6%	1435	1500	804000	4.6%	POWERGRID	270	7554400	4.5%	258	250	2965900	-3.2%
COALINDIA	440	6066900	1.8%	432	440	2639250	1.8%	RELIANCE	1600	16222000	9.7%	1459	1500	3084500	2.8%
DRREDDY	1260	1463125	6.2%	1187	1100	410000	-7.3%	SBILIFE	2140	2307000	3.4%	2069	2100	483375	1.5%
EICHERMOT	7800	233800	6.0%	7358	7000	194400	-4.9%	SBIN	1050	7076250	2.1%	1028	1000	4321500	-2.8%
ETERNAL	300	9683025	0.3%	299	280	7005825	-6.4%	SHIRIRAMFIN	1000	2255550	1.9%	981	900	955350	-8.3%
GRASIM	2900	259000	3.7%	2796	2740	268000	-2.0%	SUNPHARMA	1800	1964900	5.8%	1701	1700	548100	0.0%
HCLTECH	1680	1737400	0.7%	1669	1600	822150	-4.1%	TATACONSUM	1220	1108800	4.1%	1171	1080	1039500	-7.8%
HDFCBANK	1000	12326050	8.1%	925	900	5671600	-2.8%	TMPV	370	9900800	5.8%	350	350	3647200	0.1%
HDFCLIFE	780	2332000	5.0%	743	750	1368400	0.9%	TATASTEEL	200	18221500	5.7%	189	180	14954500	-4.9%
HINDALCO	1000	2249100	4.7%	955	950	1208200	-0.6%	TCS	3300	2976225	3.4%	3193	3200	1005200	0.2%
HINDUNILVR	2440	1174200	3.7%	2354	2300	408900	-2.3%	TECHM	1620	905400	2.0%	1589	1500	429600	-5.6%
ICICIBANK	1450	6830600	2.2%	1418	1400	3528700	-1.3%	TITAN	4300	655550	1.9%	4222	4000	538125	-5.2%
INDIGO	5100	738300	7.8%	4733	4800	340950	1.4%	TRENT	4200	1194900	6.8%	3932	4100	322200	4.3%
INFY	1700	5636800	6.3%	1600	1500	2247600	-6.2%	ULTRACEMCO	12200	104400	-0.4%	12255	11500	83550	-6.2%
ITC	350	40038400	4.6%	335	350	13646400	4.6%	WIPRO	270	5205000	3.8%	260	260	3825000	-0.1%

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

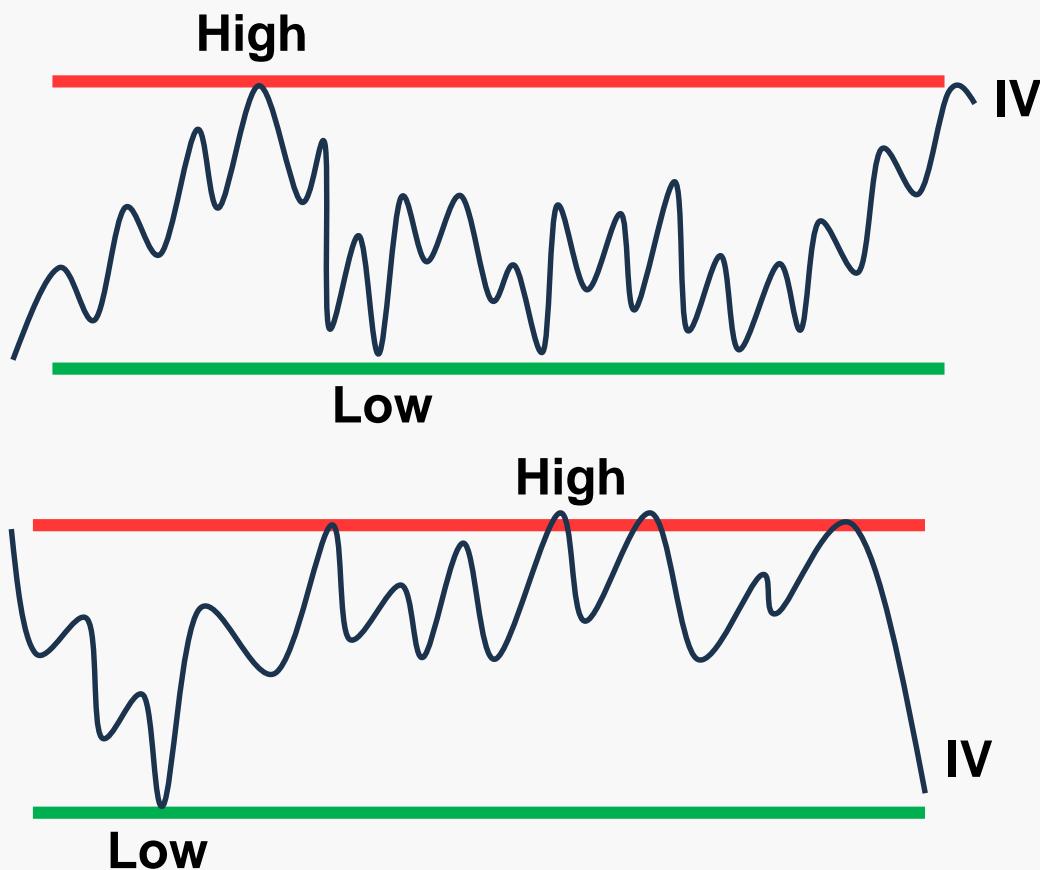
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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 (DIIs), 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, Bloomberg, MyFnO

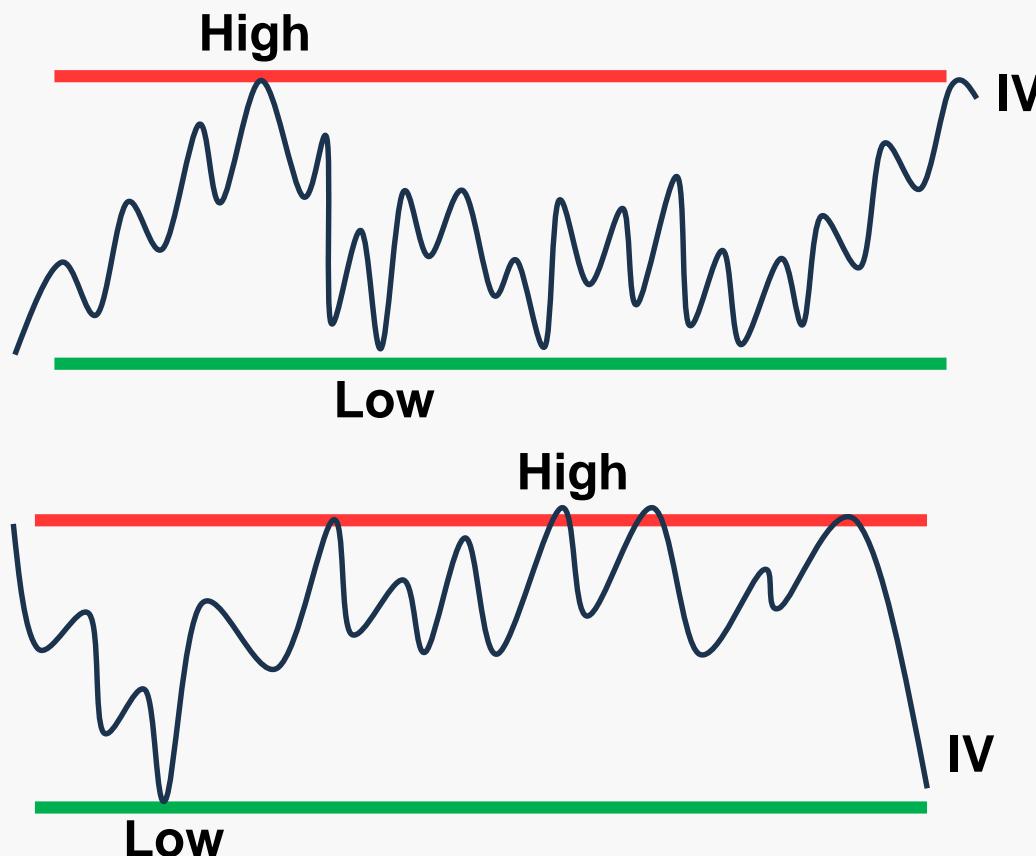
- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions 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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