



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,876	0.3%▲
Open Interest (OI)	1,89,87,410	0.2%▲
Change in OI (abs)	1,89,87,410	30,680▲
Premium / Discount (Abs)	186	19▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,730	0.3%▲
Open interest (OI)	14,56,890	6.5%▲
Change in OI (abs)	14,56,890	89,490▲
Premium / Discount (Abs)	199	10▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.37	0.44▲
Nifty ATM IV (%)	10.03	0.45▲
Bank Nifty ATM IV (%)	11.16	0.73▲
PCR (Nifty)	0.90	0.28▲
PCR (Bank Nifty)	0.97	0.05▲

The FII Long Ratio in Index Futures **Jump** to 7.9 %, **up** from 7.5 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PREMIERENE	57,87,950	17.7%	749.15	4.1%
SUPREMEIND	21,13,475	10.3%	3514.4	0.2%
AUBANK	2,05,51,000	4.0%	1012.6	0.9%
PIIND	25,10,725	3.9%	3247.3	1.4%
GMRAIRPORT	17,95,43,475	3.6%	100.33	0.0%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SWIGGY	2,37,47,100	10.4%	351	-0.2%
HAVELLS	94,80,500	8.9%	1453.3	-1.0%
BAJAJHLDNG	1,73,250	8.8%	10793	-2.6%
AMBER	10,49,400	7.6%	6149	-3.2%
POWERINDIA	3,47,100	6.9%	17509	-2.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LODHA	1,14,46,650	-7.9%	1079.1	1.6%
DMART	52,91,550	-7.0%	3847.2	1.0%
SYNGENE	83,59,000	-3.6%	635.15	1.3%
ASIANPAINT	1,27,25,250	-3.5%	2907.3	2.5%
COALINDIA	5,17,02,300	-3.0%	433.4	3.3%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	99,87,450	-2.5%	645.25	-0.7%
ICICIPRULI	1,53,98,475	-2.4%	681.7	-0.9%
DIVISLAB	32,64,000	-2.2%	6497.5	-2.0%
TIINDIA	36,94,600	-1.9%	2413.3	-1.7%
BHEL	8,23,54,125	-1.8%	268.85	-2.4%

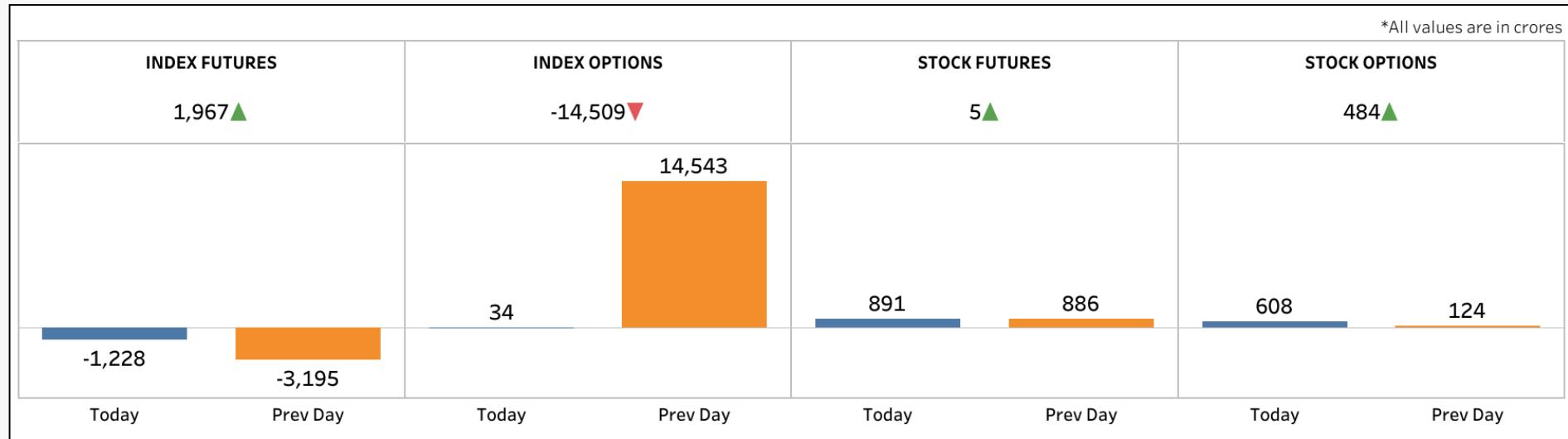
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

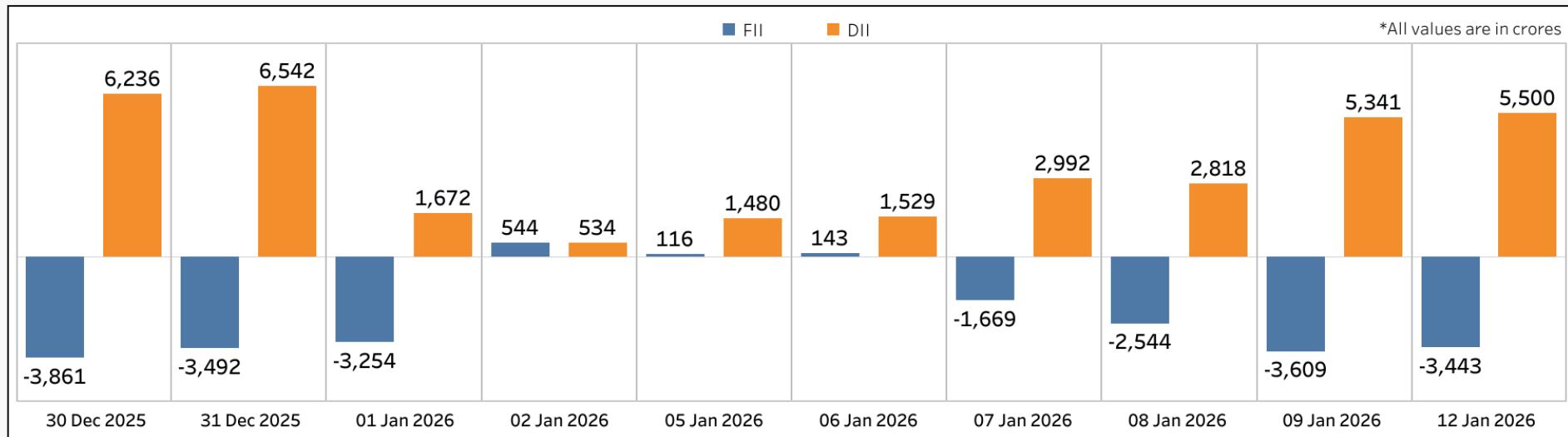
▲ and ▼ indicate positive and negative absolute changes, respectively

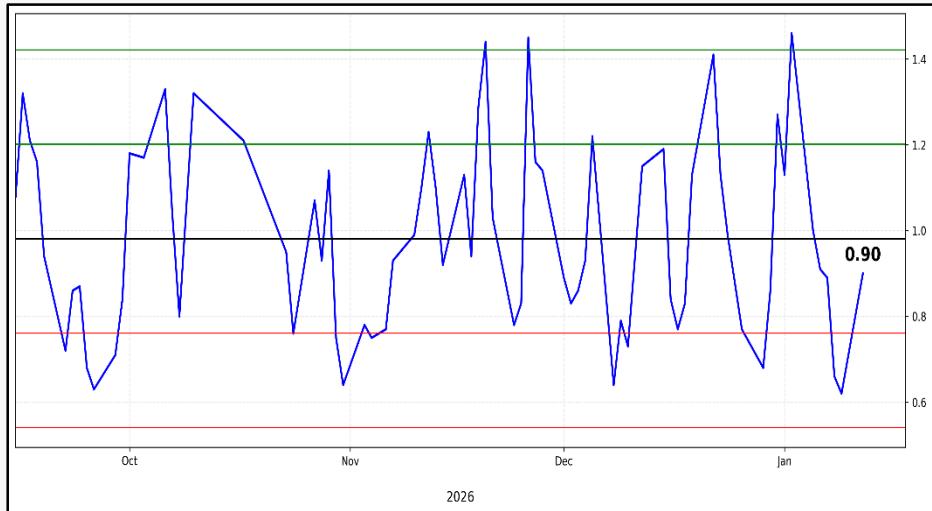
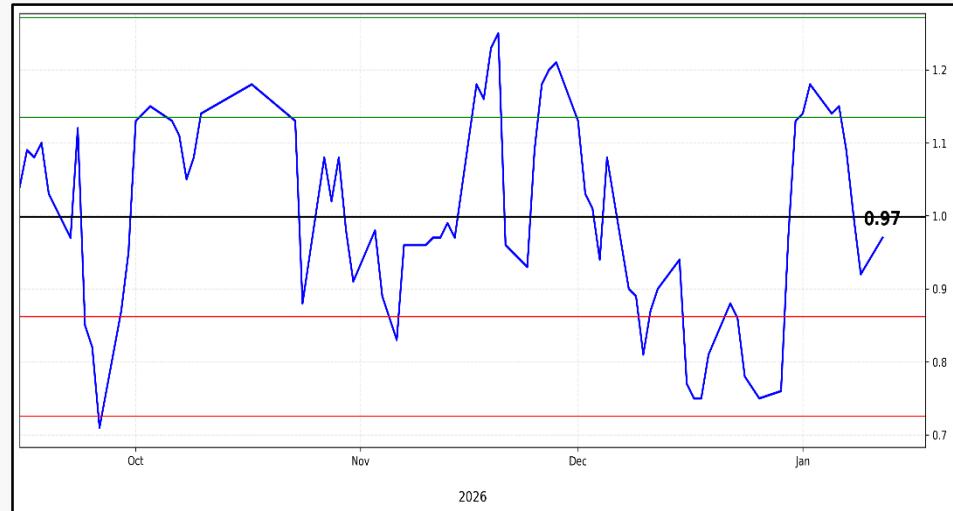
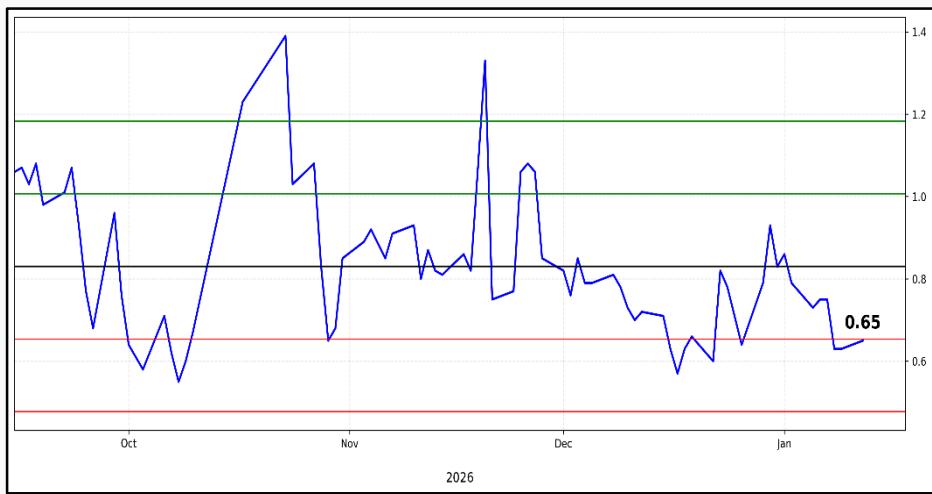
FII								DII							
INDEX CALL		INDEX FUT		INDEX PUT		STK FUT		INDEX CALL		INDEX FUT		INDEX PUT		STK FUT	
-29,577	▼	11,370	▲	-49,423	▼	-1,642	▼	-12,103	▼	-447	▼	3,892	▲	-15,624	▼
23,513		53,090						7,103		577		5,653		1,761	
-7,346		-18,716		-19,383		9,235		-5,000		130					
Net O/S -5,534	Today	Net O/S -193,409	Today	Net O/S 266,038	Today	Net O/S 1,454,887	Today	Net O/S 2,103	Today	Net O/S 38,276	Today	Net O/S 28,546	Today	Net O/S -4,603,052	Today
	Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day
Clients								Pro							
INDEX CALL		INDEX FUT		INDEX PUT		STK FUT		INDEX CALL		INDEX FUT		INDEX PUT		STK FUT	
-43,569	▼	-3,261	▼	74,626	▲	42,086	▲	85,247	▲	-7,662	▼	-29,096	▼	-24,820	▼
4,718		7,979		25,472		17,651		78,441		10,160		17,354		12,301	
-53,386				-49,154		-24,435									
-96,955								-6,806		2,498		-11,742			
Net O/S 41,670	Today	Net O/S 132,963	Today	Net O/S -481,209	Today	Net O/S 2,634,881	Today	Net O/S -38,239	Today	Net O/S 22,170	Today	Net O/S 186,625	Today	Net O/S 513,284	Today
	Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day		Prev Day

Daily Net Open Interest Change



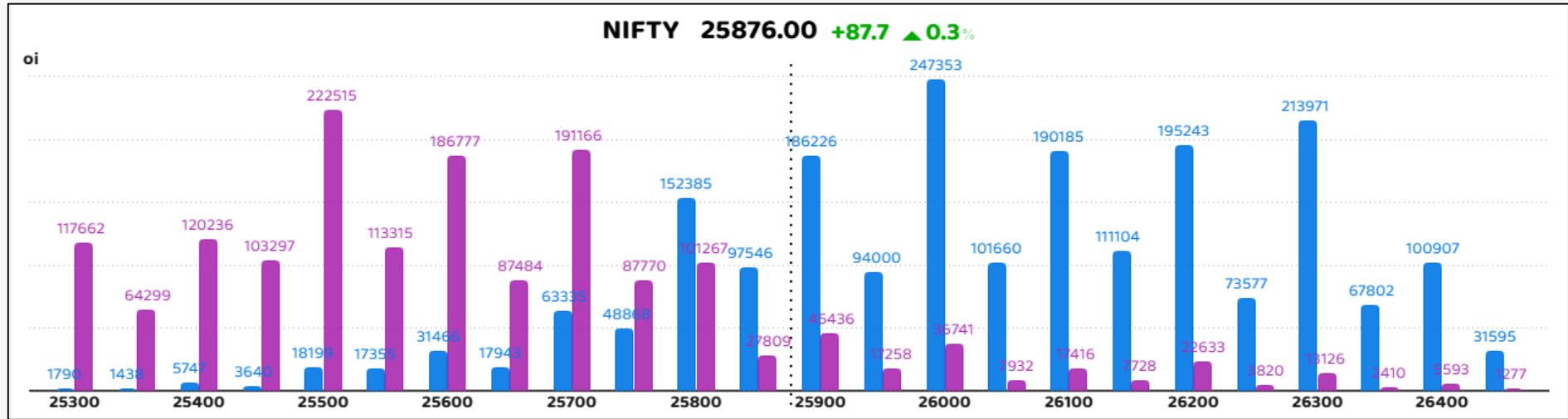
DII and FII Daily Cash Market Flows



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.

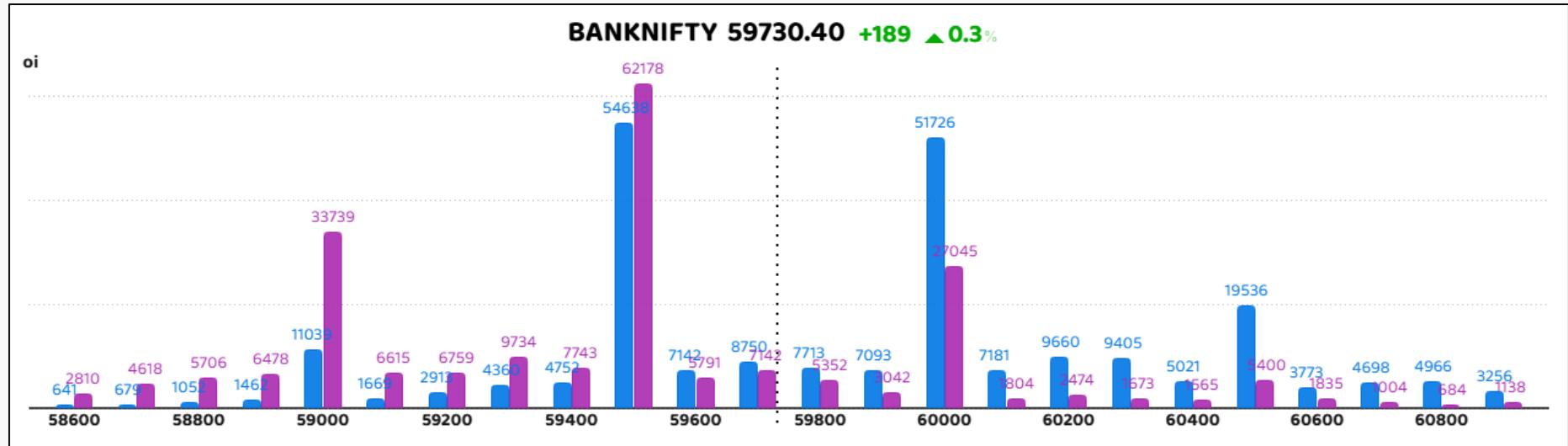


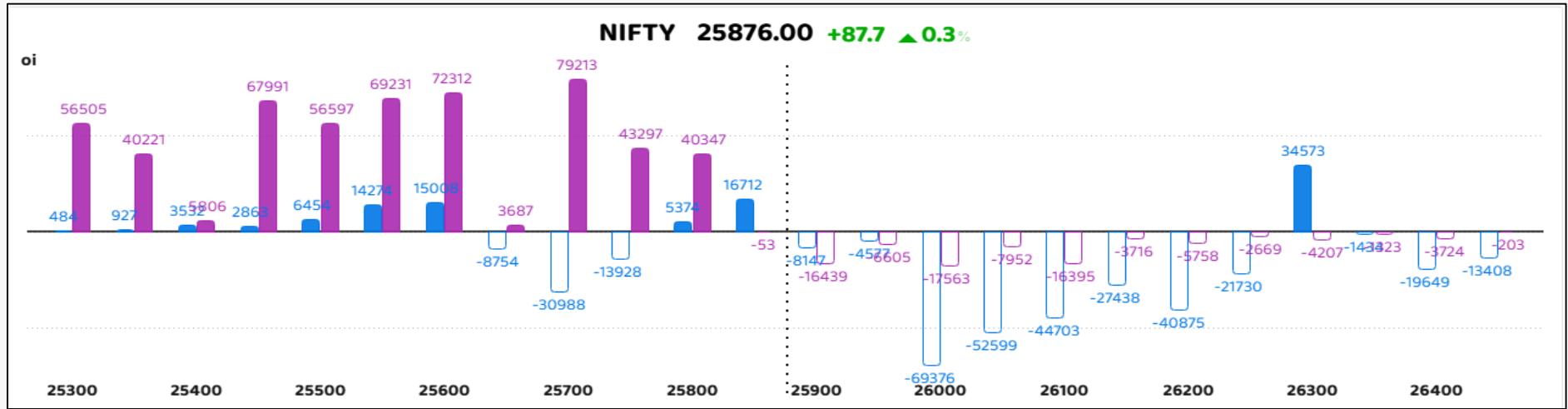
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

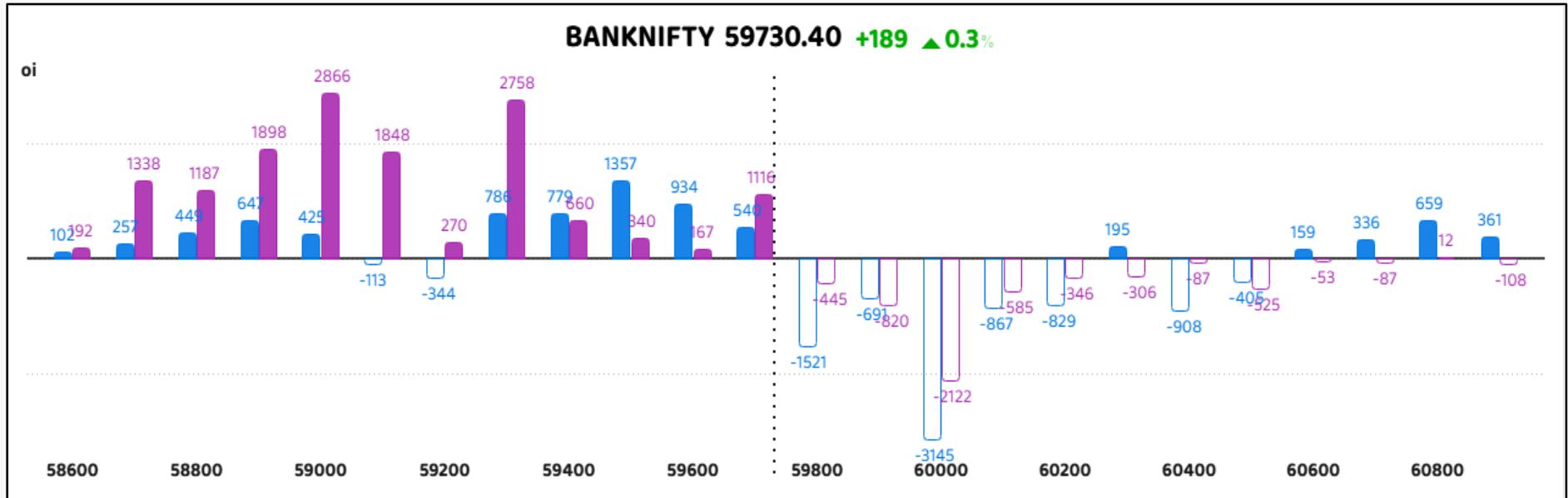
Call



Put



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 60,000 Call & the 59,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BHARAT HEAVY ELE	267.9	-2.3	42.4	54.7	5.2	75.1
DIXON TECHNOLOGI	11,842.0	-0.5	40.3	53.1	9.2	70.9
HDFC BANK LTD	937.0	-0.2	20.2	28.0	1.5	70.8
KOTAK MAHINDRA	2,133.3	0.3	22.6	32.4	1.1	68.7
SYNGENE INTERNAT	633.8	1.1	31.5	38.7	15.7	68.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NTPC LTD	337.5	0.4	19.9	116.6	14.9	4.9
ADANI PORTS AND	1,443.5	0.5	23.6	99.7	19.0	5.7
GAIL INDIA LTD	166.6	1.3	25.2	91.4	19.4	8.1
HDFC LIFE INSURA	754.7	0.6	22.8	68.4	16.6	12.0
WIPRO LTD	263.1	0.4	28.9	93.6	19.1	13.1

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	331.7	-0.2	54.0	54.0	21.0	100.0
KAYNES TECHNOLOG	3,695.4	1.0	52.6	62.9	30.3	95.9
HINDUSTAN ZINC	628.3	3.6	41.4	54.2	21.8	93.9
INDIAN ENERGY EX	142.0	2.6	43.2	76.3	8.0	93.4
ITC LTD	338.4	0.4	23.0	34.0	2.2	88.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
YES BANK LTD	23.0	0.5	16.7	55.3	8.1	0.8
STEEL AUTHORITY	149.2	2.4	14.3	91.3	0.6	3.1
IIFL FINANCE LTD	641.8	-1.2	31.3	73.1	6.4	11.0
FSN E-COMMERCE V	252.8	-0.5	28.7	51.1	22.8	14.9
MAHINDRA & MAHIN	3,682.0	0.1	23.2	43.5	10.6	15.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
CROMPTON	251.2	-0.5	9,662	1,981	4.9
KPITTECH	1,172.6	-0.8	5,144	1,349	3.8
BIOCON	371.8	-2.1	18,392	5,138	3.6
TRENT	4,056.4	2.1	1,04,078	29,309	3.6
IRCTC	634.8	-0.4	24,075	6,882	3.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DIVISLAB	6,485.5	-2.0	38,133	58,668	1.5
CUMMINSIND	3,974.7	-3.4	24,734	30,332	1.2
CAMS	710.5	-2.3	6,488	7,827	1.2
DELHIVERY	395.4	-2.6	9,121	10,702	1.2
EICHERMOT	7,436.0	-0.9	21,987	25,005	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
CGPOWER	585.8	-1.5	17,562	16,981	100.0
IRCTC	634.8	-0.4	33,831	32,583	100.0
LTF	296.2	-1.2	13,679	11,892	100.0
NBCC	107.6	-1.5	11,017	9,724	100.0
NMDC	81.8	1.6	23,471	23,408	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	1,930.8	-3.0	10,492	10,549	99.5
ITC	338.4	0.4	83,993	85,419	98.3
TRENT	4,056.4	2.1	35,016	37,886	92.4
IRCTC	634.8	-0.4	12,782	13,935	91.7
IREDA	141.5	3.6	8,395	9,237	90.9

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
DMART	3,832.5	0.8	1,91,817	2,85,273	67.2
BHEL	267.9	-2.3	82,047	1,42,186	57.7
COALINDIA	432.3	3.3	1,14,899	2,06,216	55.7
IREDA	141.5	3.6	67,110	1,28,960	52.0
POWERINDIA	17,429.0	-2.5	25,444	60,733	41.9

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
DMART	3,832.5	0.8	93,073	85,573	100.0
BHEL	267.9	-2.3	54,629	84,898	64.3
CUMMINSIND	3,974.7	-3.4	30,332	49,372	61.4
POWERINDIA	17,429.0	-2.5	22,318	36,948	60.4
GODREJPROP	1,930.8	-3.0	31,258	57,824	54.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ITC	338.4	0.4	2,27,312	95,406	2.4
MANAPPURAM	294.2	2.9	14,648	6,471	2.3
BOSCHLTD	37,660.0	-0.9	11,782	5,563	2.1
CUMMINSIND	3,974.7	-3.4	11,791	5,608	2.1
IEX	142.0	2.6	29,157	14,591	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
IEX	142.0	2.6	20,156	10,326	2.0
ITC	338.4	0.4	83,993	43,123	1.9
CGPOWER	585.8	-1.5	8,325	4,705	1.8
MANAPPURAM	294.2	2.9	7,704	4,459	1.7
BHEL	267.9	-2.3	16,020	9,616	1.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
DMART	3,832.5	0.8	1,91,817	21,930	8.7
IREDA	141.5	3.6	67,110	11,809	5.7
PIIND	3,256.4	1.7	17,083	5,867	2.9
HCLTECH	1,667.6	0.4	79,516	27,906	2.8
COALINDIA	432.3	3.3	1,14,899	48,726	2.4

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
DMART	3,832.5	0.8	93,073	8,938	10.4
DIVISLAB	6,485.5	-2.0	58,668	8,756	6.7
IREDA	141.5	3.6	19,314	3,753	5.1
CUMMINSIND	3,974.7	-3.4	30,332	7,277	4.2
DELHIVERY	395.4	-2.6	10,702	2,640	4.1

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	1818774	5.9%	2172	2200	1132485	1.3%	JIOFIN	300	10473950	4.1%	288	290	6504800	0.6%
ADANIPORTS	1500	1866750	3.9%	1444	1440	741000	-0.2%	JSWSTEEL	1200	1291275	1.5%	1183	1100	2277450	-7.0%
APOLLOHOSP	7500	189250	3.2%	7269	7300	121375	0.4%	KOTAKBANK	2200	1926000	3.1%	2133	2100	747200	-1.6%
ASIANPAINT	3000	690000	3.6%	2896	2800	484000	-3.3%	LT	4200	819700	4.5%	4019	4100	355775	2.0%
AXISBANK	1300	8836250	2.0%	1274	1300	1977500	2.0%	M&M	3800	783400	3.2%	3682	3700	291200	0.5%
BAJAJ-AUTO	10000	236550	5.4%	9491	9000	92550	-5.2%	MARUTI	17000	233700	2.5%	16582	16000	117500	-3.5%
BAJAJFINSV	2080	1155750	4.1%	1999	2000	378500	0.1%	MAXHEALTH	1100	746550	8.5%	1014	1040	288750	2.6%
BAJFINANCE	1000	5472750	5.1%	952	1000	2095500	5.1%	NESTLEIND	1340	623500	2.1%	1312	1300	730000	-0.9%
BEL	420	9322350	0.6%	418	400	5273925	-4.2%	NTPC	360	7975500	6.7%	337	380	2478000	12.6%
BHARTIARTL	2100	2251025	2.7%	2044	2000	826500	-2.2%	ONGC	240	13326750	1.8%	236	235	3294000	-0.3%
CIPLA	1500	783375	2.4%	1465	1500	737250	2.4%	POWERGRID	280	8289700	8.3%	259	250	3112200	-3.3%
COALINDIA	450	5409450	4.1%	432	400	2577150	-7.5%	RELIANCE	1600	16938500	7.9%	1483	1500	3300000	1.1%
DRREDDY	1260	1281875	3.7%	1216	1200	450625	-1.3%	SBILIFE	2140	2322750	2.0%	2098	2100	680625	0.1%
EICHERMOT	7800	169100	4.9%	7436	7000	197200	-5.9%	SBIN	1050	6585000	3.4%	1015	1000	3310500	-1.5%
ETERNAL	300	10192275	5.2%	285	280	6855475	-1.8%	SHIRIRAMFIN	1000	2238225	2.8%	973	900	1042800	-7.5%
GRASIM	2900	245500	3.3%	2807	2800	339000	-0.2%	SUNPHARMA	1800	1881600	3.7%	1736	1760	436450	1.4%
HCLTECH	1700	1764350	1.9%	1668	1600	690550	-4.1%	TATACONSUM	1220	904750	2.3%	1192	1080	1042250	-9.4%
HDFCBANK	1000	12257850	6.7%	937	900	5250300	-3.9%	TMPV	400	8124000	14.1%	351	350	3319200	-0.2%
HDFCLIFE	780	2126300	3.4%	755	750	1449800	-0.6%	TATASTEEL	190	15389000	3.7%	183	170	11181500	-7.2%
HINDALCO	1000	2266600	8.7%	920	900	1203300	-2.2%	TCS	3300	2968525	1.9%	3240	3200	1220625	-1.2%
HINDUNILVR	2440	909300	1.4%	2406	2300	427500	-4.4%	TECHM	1800	670200	13.5%	1586	1500	400800	-5.4%
ICICIBANK	1500	5232500	6.1%	1413	1400	3768100	-0.9%	TITAN	4300	668500	1.6%	4232	4000	546875	-5.5%
INDIGO	5100	741300	5.2%	4850	5000	346950	3.1%	TRENT	4200	815100	3.5%	4056	4000	412800	-1.4%
INFY	1700	4878000	6.5%	1596	1620	1688800	1.5%	ULTRACEMCO	12200	95700	0.8%	12098	11500	56150	-4.9%
ITC	400	37555200	18.2%	338	340	14552000	0.5%	WIPRO	270	4986000	2.6%	263	260	3936000	-1.2%

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

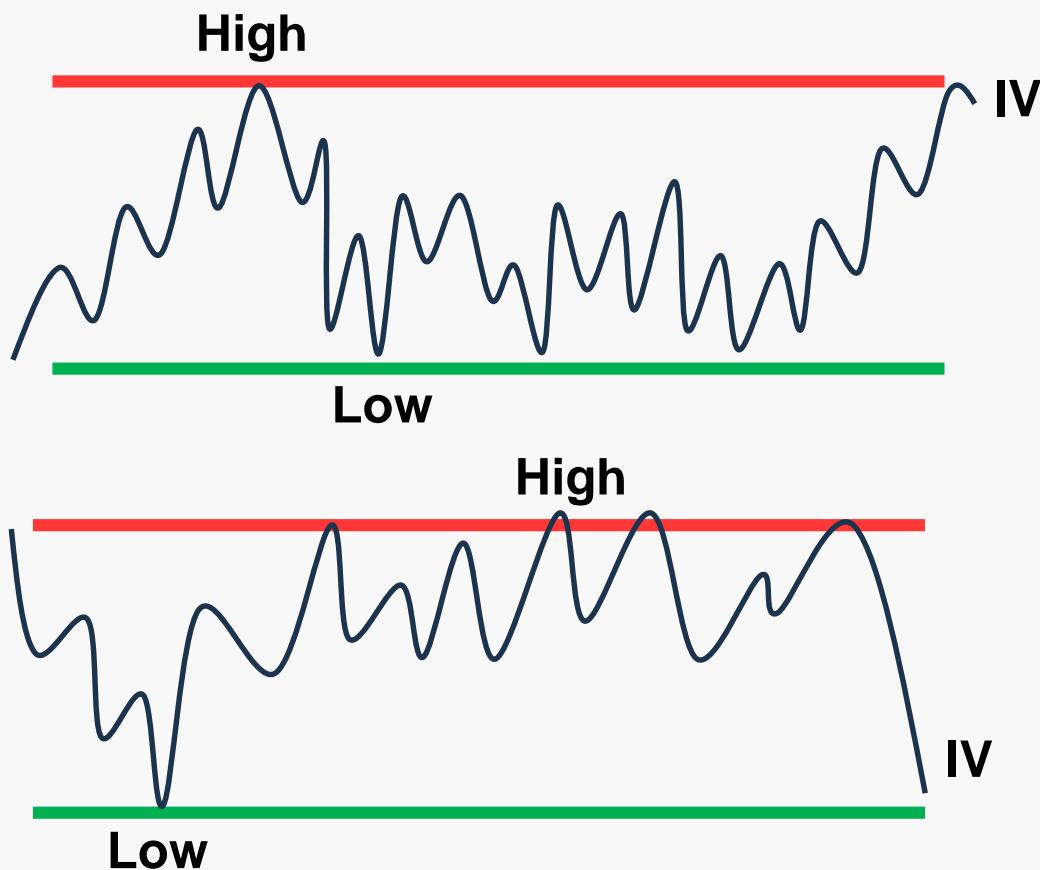
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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

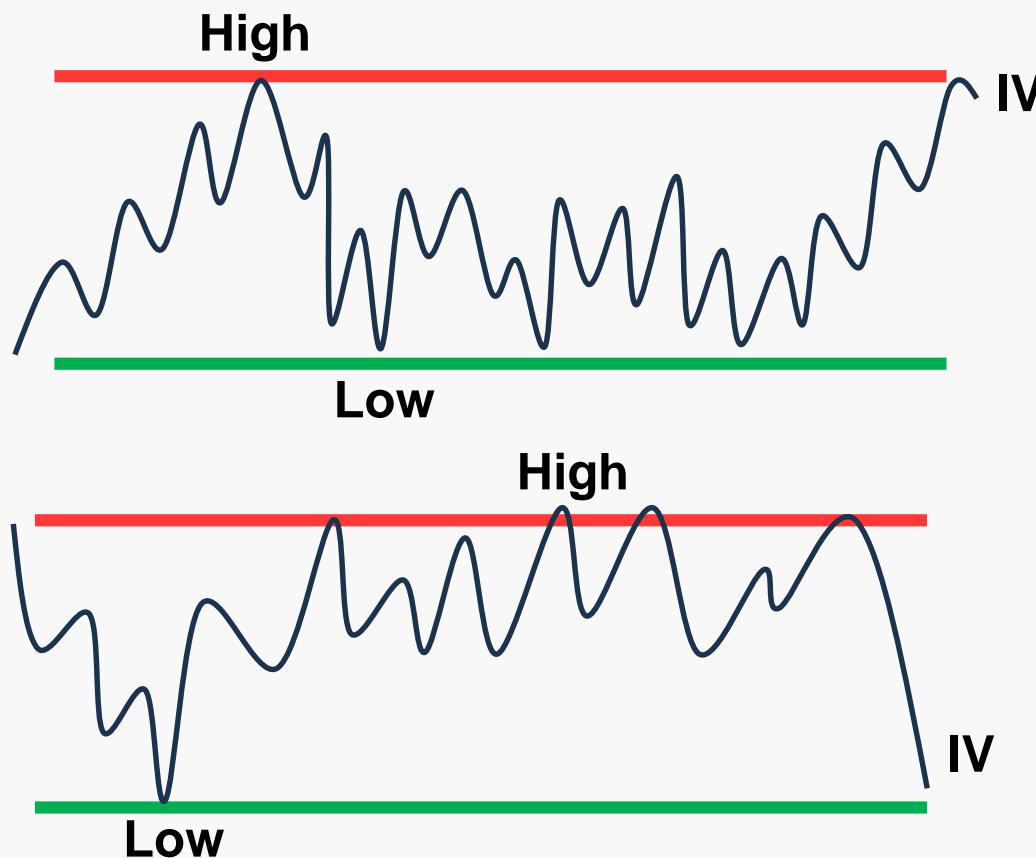
- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions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