



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,717	0.8%▲
Open Interest (OI)	1,77,09,185	3.1%▼
Change in OI (abs)	1,77,09,185	5,57,245▼
Premium / Discount (Abs)	34	13▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	60,969	1.1%▲
Open interest (OI)	16,53,690	13.5%▲
Change in OI (abs)	16,53,690	1,96,350▲
Premium / Discount (Abs)	20	114▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	13.33	0.04▲
Nifty ATM IV (%)	11.52	0.03▼
Bank Nifty ATM IV (%)	12.13	0.99▲
PCR (Nifty)	1.11	0.46▲
PCR (Bank Nifty)	1.20	0.27▲

The FII Long Ratio in Index Futures **jump** to 20 %, **up** from 19.3 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SWIGGY	4,92,07,600	7.5%	341.2	1.7%
ASTRAL	95,27,650	7.0%	1606.8	1.8%
SHREECEM	3,79,925	5.0%	26160	1.0%
PERSISTENT	31,54,000	4.3%	5574	2.1%
KPITTECH	55,04,600	4.2%	879.1	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	22,01,000	8.4%	1290.8	-0.8%
INOXWIND	10,84,44,050	7.3%	101.44	-4.6%
POLICYBZR	99,40,350	7.2%	1507.4	-1.1%
BSE	1,10,40,000	6.4%	2810.6	-7.3%
PIIND	38,79,400	5.3%	3053.5	-2.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANAPPURAM	4,67,01,000	-4.6%	304.55	0.5%
MCX	1,37,57,500	-3.9%	2346.5	0.2%
ADANIENSOL	2,03,45,175	-3.8%	1003.65	1.3%
INDIANB	96,68,000	-3.5%	891.55	1.8%
AUROPHARMA	2,13,73,000	-3.5%	1185.2	3.0%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IRCTC	1,59,49,500	-6.0%	612	-0.6%
FORTIS	1,22,76,000	-2.4%	916	-0.3%
EICHERMOT	31,93,700	-2.3%	8027.5	-0.3%
UNOMINDA	62,06,750	-2.3%	1221	-1.8%
TRENT	70,07,800	-2.2%	4228.1	-0.5%

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
-35,483 ▼	16,801 ▲	-167,780 ▼	43,665 ▲
8,195	2,435	125,108	5,867
43,678	-14,366	-42,672	-37,798
Net O/S 35,902	Net O/S -145,138	Net O/S 328,328	Net O/S 1,236,906
Today	Prev Day	Today	Prev Day

DII

INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
0	746 ▲	3,130 ▲	13,925 ▲
0	1,036	290	6,701
-1,370	-4,500	-7,224	
Net O/S 877	Net O/S 77,639	Net O/S 56,717	Net O/S -4,104,224
Today	Prev Day	Today	Prev Day

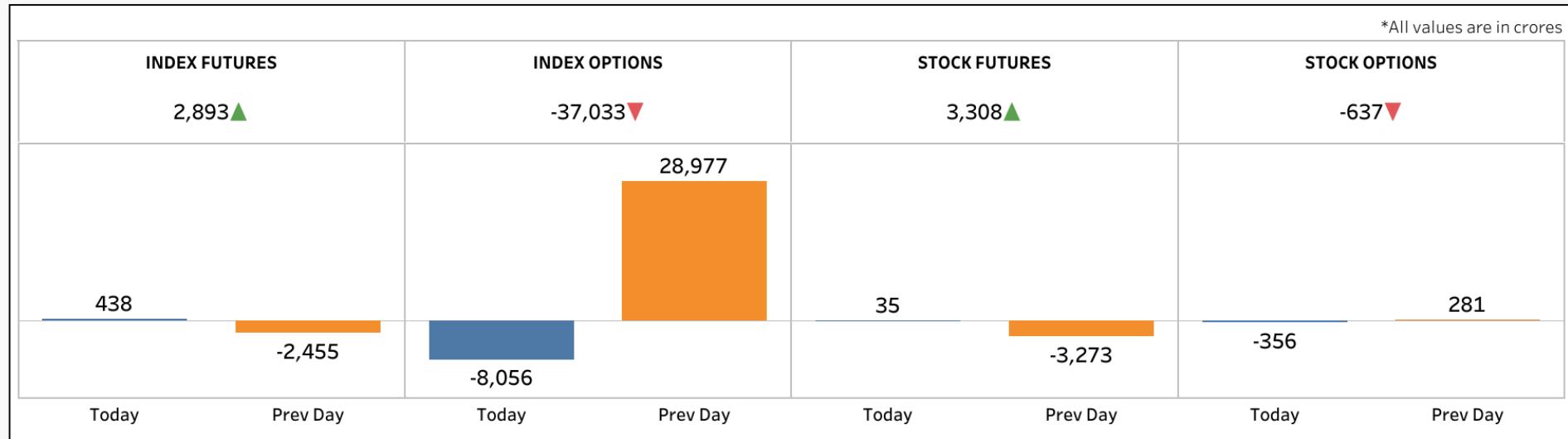
Clients

INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-93,010 ▼	-10,461 ▼	368,604 ▲	-34,475 ▼
148,593	7,306	20,109	-14,366
7,306	-3,155	20,109	-14,366
-49,251	-142,261	220,011	
Net O/S -131,624	Net O/S 80,246	Net O/S -409,708	Net O/S 2,523,515
Today	Prev Day	Today	Prev Day

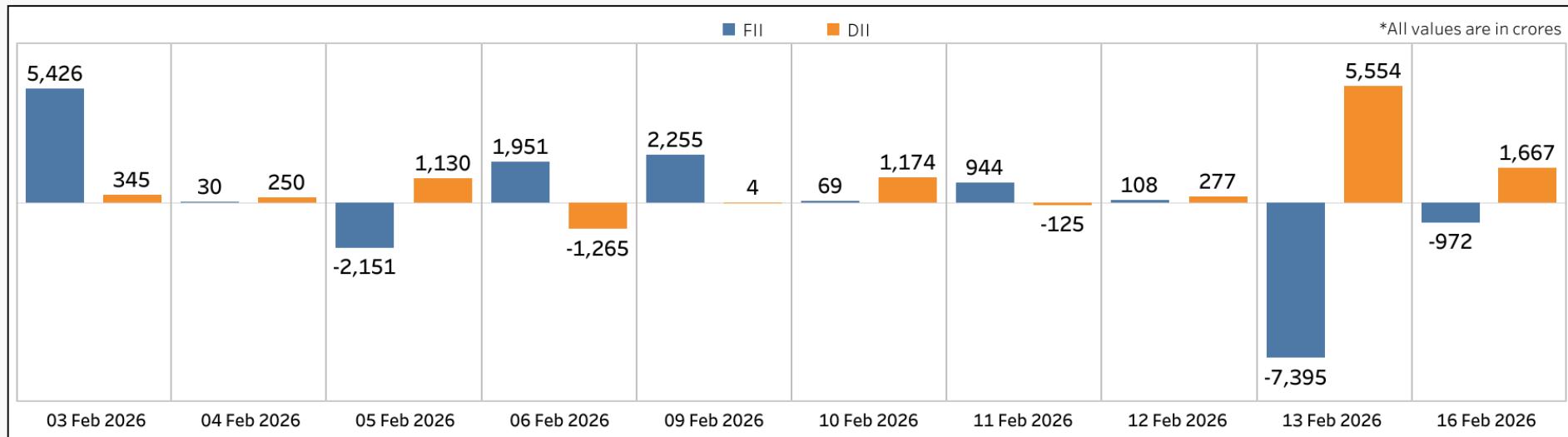
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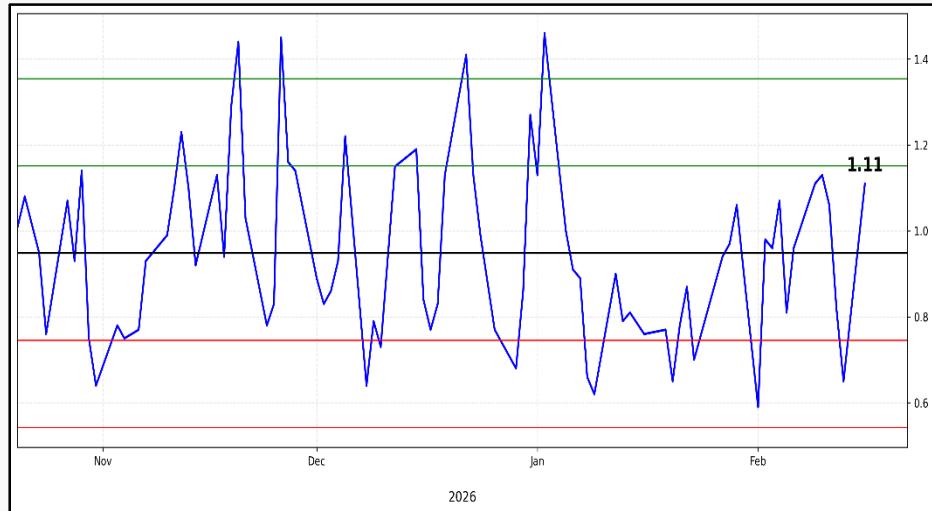
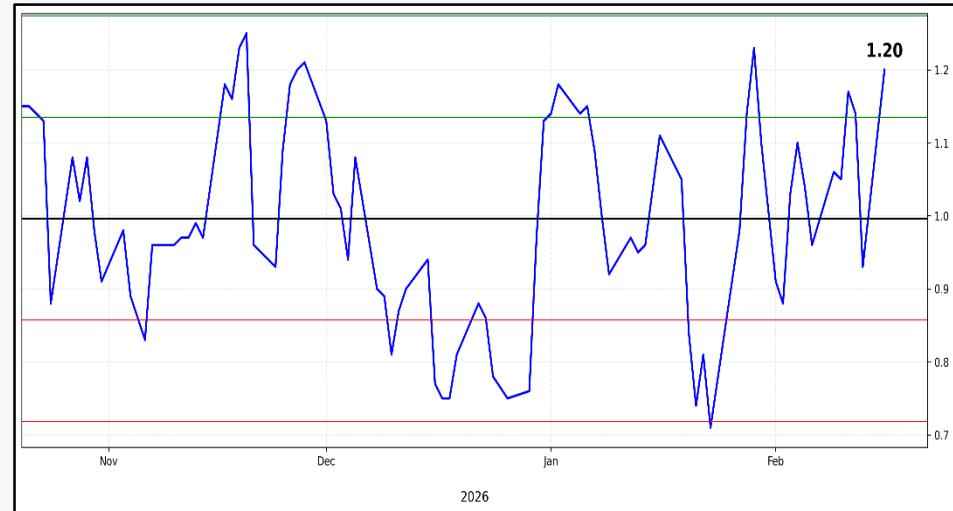
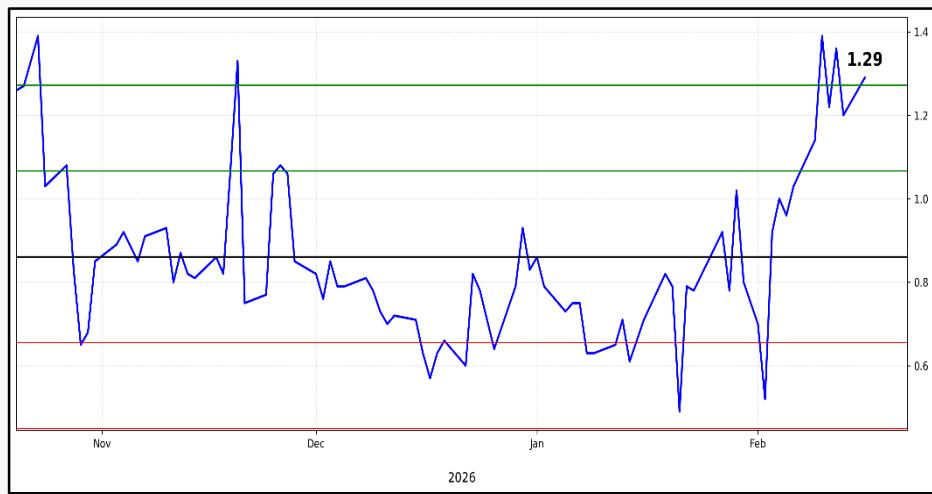
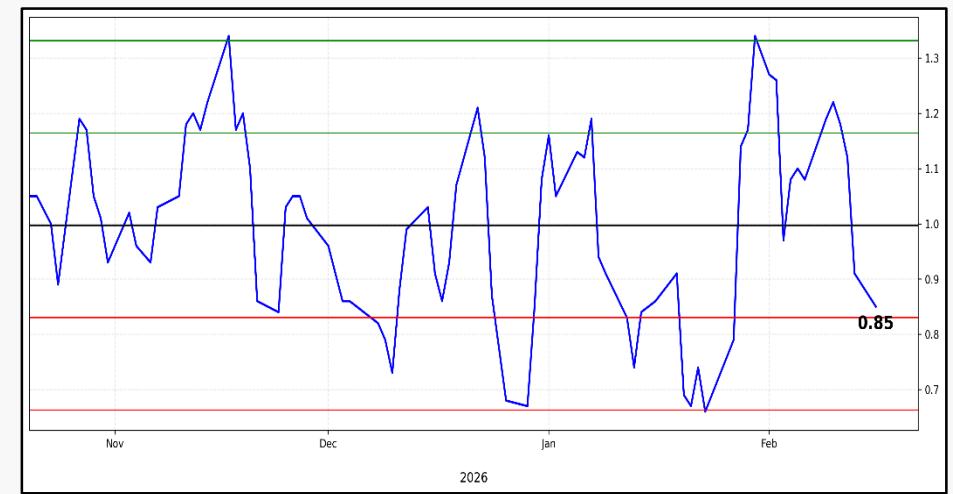
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
128,495 ▲	-7,086 ▼	-203,955 ▼	-23,115 ▼
134,067	5,572	6,770	-316
99,404	-104,551	-24,913	
94,845	Net O/S -12,747	Net O/S 24,664	Net O/S 343,803
Today	Prev Day	Today	Prev Day

Daily Net Open Interest Change



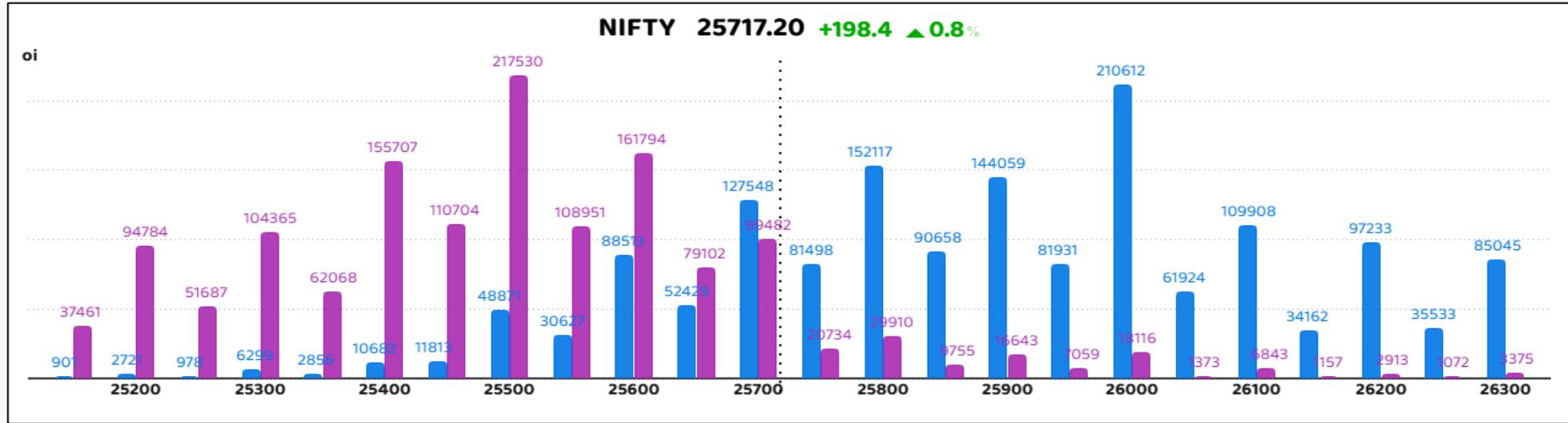
DII and FII Daily Cash Market Flows



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 60,000 Put saw the most amount of open interest.

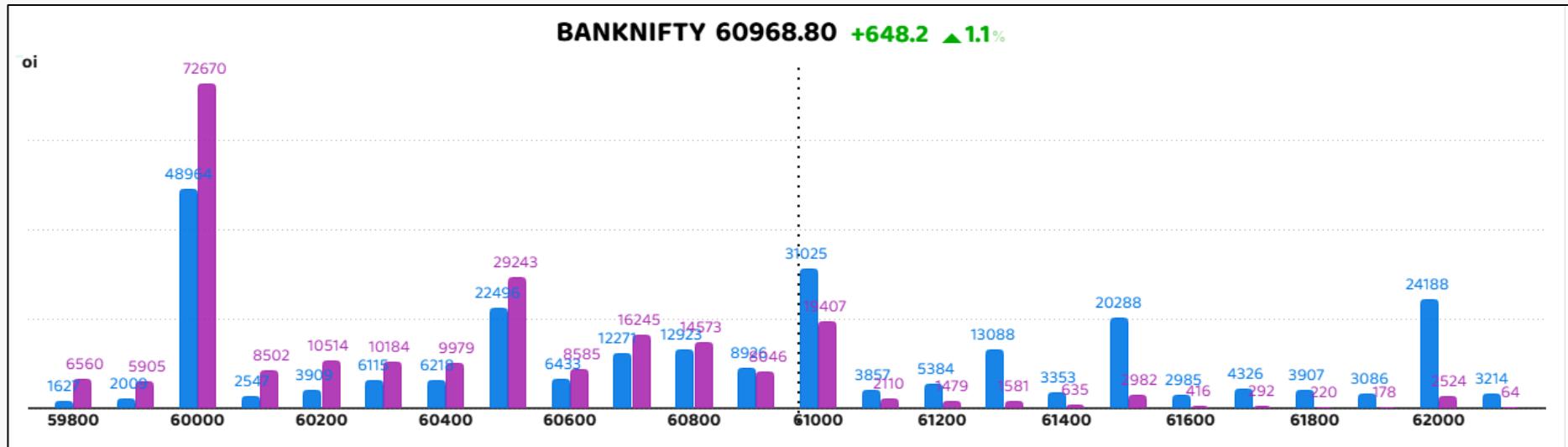
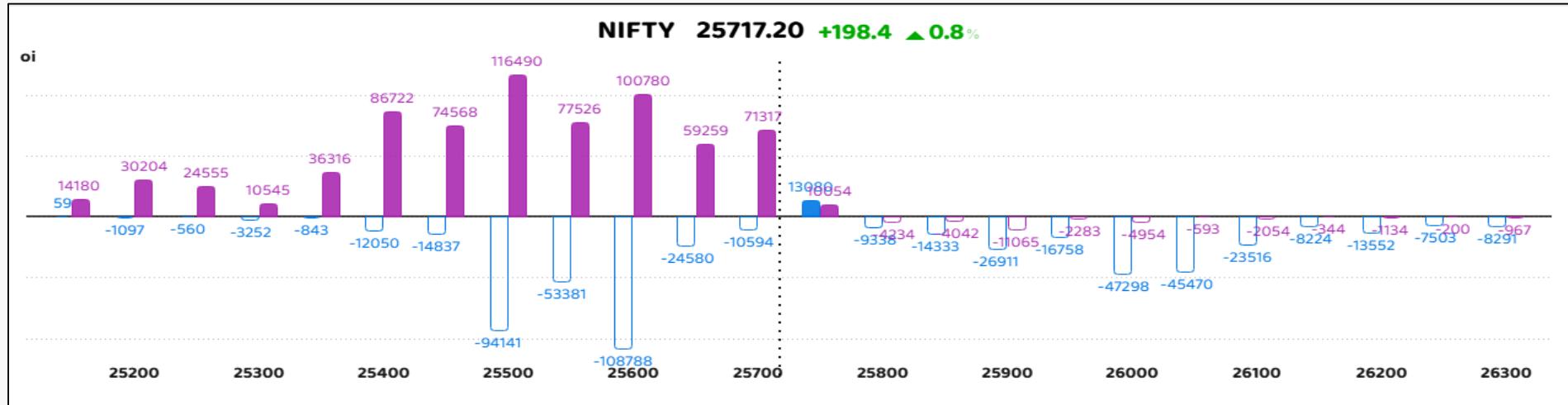
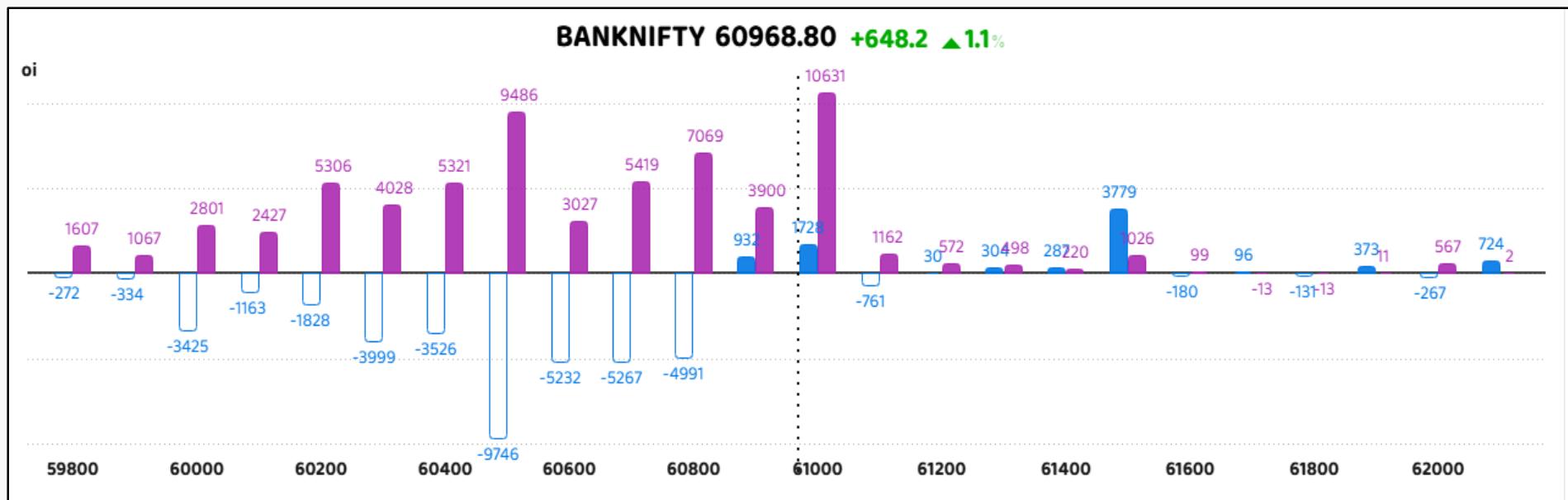


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

 Call  Put 


The largest open interest changes (contracts) were seen at the 25,600 Call and the 25,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 60,500 Call & the 61,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASTRAL LTD	1,639.8	2.7	40.0	40.4	18.9	98.0
SYNGENE INTERNAT	435.1	0.2	37.0	38.7	15.7	92.3
HINDUSTAN UNILEV	2,319.0	0.6	21.5	25.3	0.8	84.6
LTMINDTREE LTD	5,118.5	0.1	34.9	43.3	6.8	77.1
TATA CONSULTANCY	2,706.6	0.5	34.0	44.6	1.6	75.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
COAL INDIA LTD	422.5	3.3	1.9	38.8	1.9	0.0
DABUR INDIA LTD	514.3	0.4	17.4	37.5	17.4	0.0
NTPC LTD	369.1	1.7	20.5	116.6	14.9	5.5
HDFC LIFE INSURA	703.9	1.0	19.8	68.4	16.6	6.1
GAIL INDIA LTD	164.8	1.9	24.1	91.4	19.4	6.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ASTRAL LTD	1,639.8	2.7	40.0	40.4	18.9	99.9
TATA CONSULTANCY	2,706.6	0.5	34.0	44.6	1.6	98.9
STEEL AUTHORITY	159.6	0.2	64.9	91.3	0.6	97.5
SYNGENE INTERNAT	435.1	0.2	37.0	38.7	15.7	97.3
INFOSYS LTD	1,365.6	-0.3	38.2	60.8	1.7	97.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DABUR INDIA LTD	514.3	0.4	17.4	37.5	17.4	0.0
COAL INDIA LTD	422.5	3.3	1.9	38.8	1.9	0.4
PHOENIX MILLS	1,773.4	2.2	21.9	64.3	15.0	1.1
JSW ENERGY LTD	490.0	3.2	25.1	49.8	3.1	5.0
MARICO LTD	772.9	1.7	18.5	33.9	15.0	7.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGEIND	33,423.8	-0.3	7,593	1,285	5.9
BAJAJHLDNG	11,133.0	2.3	6,951	1,414	4.9
MAZDOCK	2,357.6	0.3	17,433	3,604	4.8
RVNL	309.6	0.2	36,152	7,745	4.7
EXIDEIND	340.8	1.2	9,461	2,104	4.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
POWERINDIA	22,824.0	1.8	6,654	12,636	1.9
APLAPOLLO	2,217.4	-1.3	5,511	10,212	1.9
ICICIGI	1,922.0	0.3	2,432	3,638	1.5
360ONE	1,119.6	-0.6	3,149	4,239	1.3
PIIND	3,054.5	-3.1	15,159	19,260	1.3

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ABB	5,888.0	1.9	12,128	11,220	100.0
ADANIGREEN	991.2	4.3	16,640	15,977	100.0
ANGELONE	2,572.8	-4.6	11,137	10,086	100.0
AMBUJACEM	524.7	1.0	15,758	15,343	100.0
COFORGE	1,392.5	2.3	35,003	34,796	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
360ONE	1,119.6	-0.6	3,250	2,584	100.0
ABB	5,888.0	1.9	8,106	8,006	100.0
ABCAPITAL	345.0	2.6	4,312	4,260	100.0
ADANIENT	2,184.6	2.2	26,505	25,692	100.0
ADANIGREEN	991.2	4.3	14,917	13,932	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ABB	5,888.0	1.9	19,133	11,826	100.0
ADANIENSOL	1,003.4	1.6	6,016	5,728	100.0
ADANIGREEN	991.2	4.3	52,918	26,087	100.0
ADANIENT	2,184.6	2.2	53,318	45,905	100.0
ANGELONE	2,572.8	-4.6	54,936	39,605	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
360ONE	1,119.6	-0.6	4,239	3,998	100.0
ABB	5,888.0	1.9	6,837	6,710	100.0
ABCAPITAL	345.0	2.6	6,458	6,059	100.0
APLAPOLLO	2,217.4	-1.3	10,212	7,774	100.0
ANGELONE	2,572.8	-4.6	66,391	15,528	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ALKEM	5,480.5	1.4	5,864	2,456	2.4
MUTHOOTFIN	3,498.2	-2.4	44,416	19,503	2.3
TORNTPHARM	4,261.5	4.5	6,728	3,099	2.2
BSE	2,804.6	-7.3	40,163	23,210	1.7
HINDUNILVR	2,319.0	0.6	34,973	22,542	1.6

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
TORNTPHARM	4,261.5	4.5	3,726	1,652	2.3
ALKEM	5,480.5	1.4	3,538	1,909	1.9
MUTHOOTFIN	3,498.2	-2.4	15,086	8,734	1.7
EICHERMOT	8,010.6	-0.7	33,510	21,120	1.6
360ONE	1,119.6	-0.6	3,250	2,128	1.5

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
TORNTPHARM	4,261.5	4.5	1,01,629	7,249	14.0
GMRAIRPORT	100.5	6.9	80,541	7,496	10.7
INOXWIND	101.2	-4.9	65,145	7,161	9.1
KFINTECH	1,000.9	3.4	40,904	6,510	6.3
POWERGRID	300.4	4.6	1,37,183	29,087	4.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INOXWIND	101.2	-4.9	44,639	2,900	15.4
TORNTPHARM	4,261.5	4.5	29,180	2,064	14.1
GMRAIRPORT	100.5	6.9	33,289	3,194	10.4
ANGELONE	2,572.8	-4.6	66,391	9,838	6.7
SAMMAANCAP	147.7	2.5	202	32	6.2

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	2200	1120743	0.7%	2185	2200	928545	0.7%	JIOFIN	270	6563550	2.8%	263	260	5487250	-1.0%
ADANIPORTS	1600	1106750	3.9%	1540	1500	1186550	-2.6%	JSWSTEEL	1400	808650	12.2%	1248	1200	1026000	-3.9%
APOLLOHOSP	7600	273000	-0.2%	7618	7000	128625	-8.1%	KOTAKBANK	430	4024000	1.0%	426	410	4820000	-3.7%
ASIANPAINT	2500	888250	4.3%	2397	2100	490250	-12.4%	LT	4100	1776775	-2.4%	4202	4100	968275	-2.4%
AXISBANK	1380	3383750	1.6%	1358	1320	1508750	-2.8%	M&M	3700	1786400	5.4%	3510	3500	437200	-0.3%
BAJAJ-AUTO	9800	173175	1.1%	9698	9800	72225	1.1%	MARUTI	16000	328350	6.3%	15051	15000	138650	-0.3%
BAJAJFINSV	2040	875250	-0.5%	2051	2000	675750	-2.5%	MAXHEALTH	1100	392175	2.2%	1076	1000	548625	-7.1%
BAJFINANCE	1000	2587500	-1.3%	1013	950	2188500	-6.2%	NESTLEIND	1360	607500	5.4%	1290	1200	217500	-7.0%
BEL	450	13054425	2.7%	438	420	5050200	-4.1%	NTPC	370	31593000	0.2%	369	370	4771500	0.2%
BHARTIARTL	2100	2427250	3.5%	2029	2000	891575	-1.4%	ONGC	270	16542000	-0.6%	272	270	4619250	-0.6%
CIPLA	1400	1175250	3.2%	1356	1300	488625	-4.2%	POWERGRID	300	17945500	-0.2%	301	280	4303500	-6.8%
COALINDIA	460	4943700	8.9%	423	420	2970000	-0.6%	RELIANCE	1500	7812000	4.4%	1437	1400	4149000	-2.6%
DRREDDY	1280	2147500	0.8%	1269	1280	400000	0.8%	SBILIFE	2040	1248375	-0.1%	2042	2040	338625	-0.1%
EICHERMOT	8500	205800	6.1%	8011	7500	295000	-6.4%	SBIN	1200	5329500	-0.7%	1208	1100	6927000	-8.9%
ETERNAL	300	14140175	4.7%	287	270	5596900	-5.8%	SHIRIRAMFIN	1100	1850475	1.3%	1085	1000	1104675	-7.9%
GRASIM	3000	296500	3.0%	2913	2800	291500	-3.9%	SUNPHARMA	1720	2359000	1.1%	1701	1700	1146600	0.0%
HCLTECH	1600	1827700	9.5%	1462	1380	720650	-5.6%	TATACONSUM	1200	702900	5.3%	1139	1120	499950	-1.7%
HDFCBANK	950	8400700	2.6%	926	930	3209250	0.5%	TMPV	390	4744000	3.4%	377	350	2535200	-7.2%
HDFCLIFE	740	2999700	5.1%	704	650	947100	-7.7%	TATASTEEL	210	21538000	2.0%	206	190	9229000	-7.7%
HINDALCO	1000	2135700	10.2%	907	900	1686300	-0.8%	TCS	3000	3446975	10.8%	2707	2600	1109500	-3.9%
HINDUNILVR	2500	1591800	7.8%	2319	2300	768300	-0.8%	TECHM	1600	1146600	5.8%	1513	1460	639000	-3.5%
ICICIBANK	1410	6834100	-0.1%	1412	1400	3668700	-0.8%	TITAN	4300	1138900	2.8%	4181	4000	422275	-4.3%
INDIGO	5000	420600	1.2%	4941	4700	361350	-4.9%	TRENT	4500	712000	6.4%	4230	4000	304900	-5.4%
INFY	1500	6380400	9.8%	1366	1300	2162400	-4.8%	ULTRACEMCO	13000	142650	0.1%	12981	11200	44150	-13.7%
ITC	330	18523200	3.8%	318	293.5	4600000	-7.7%	WIPRO	250	15048000	17.2%	213	220	4668000	3.2%

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

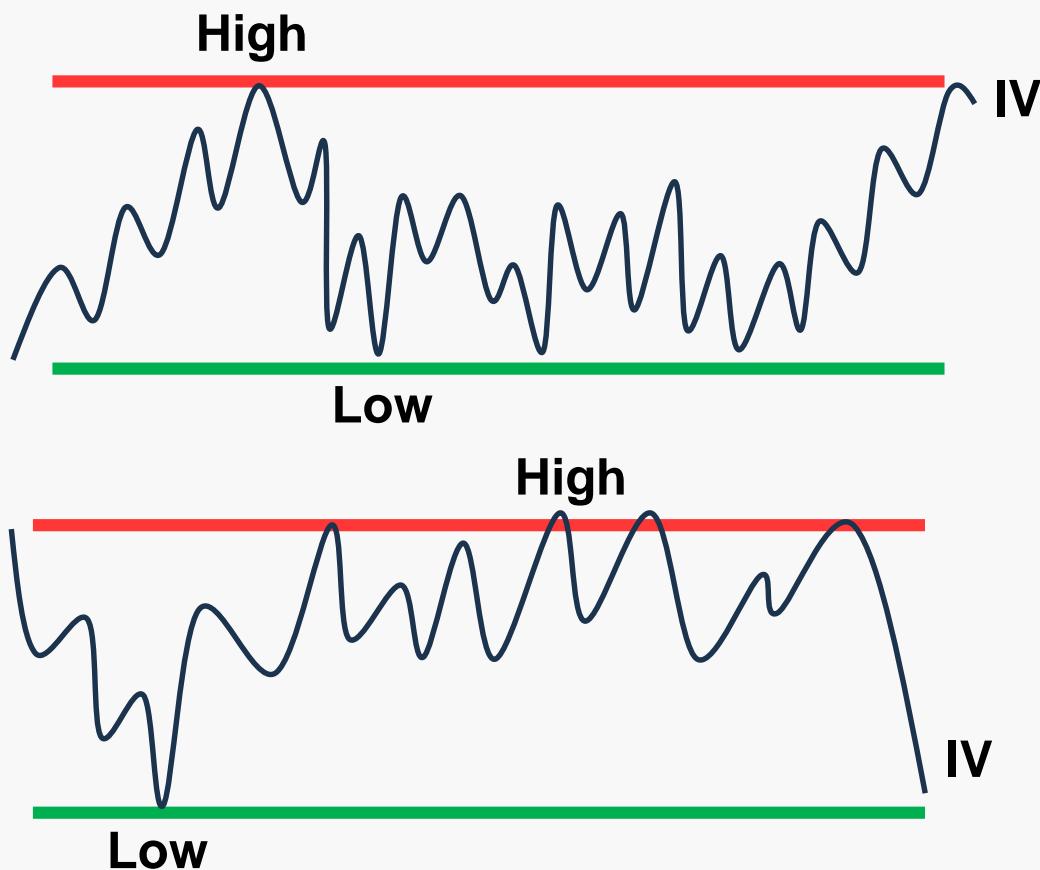
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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

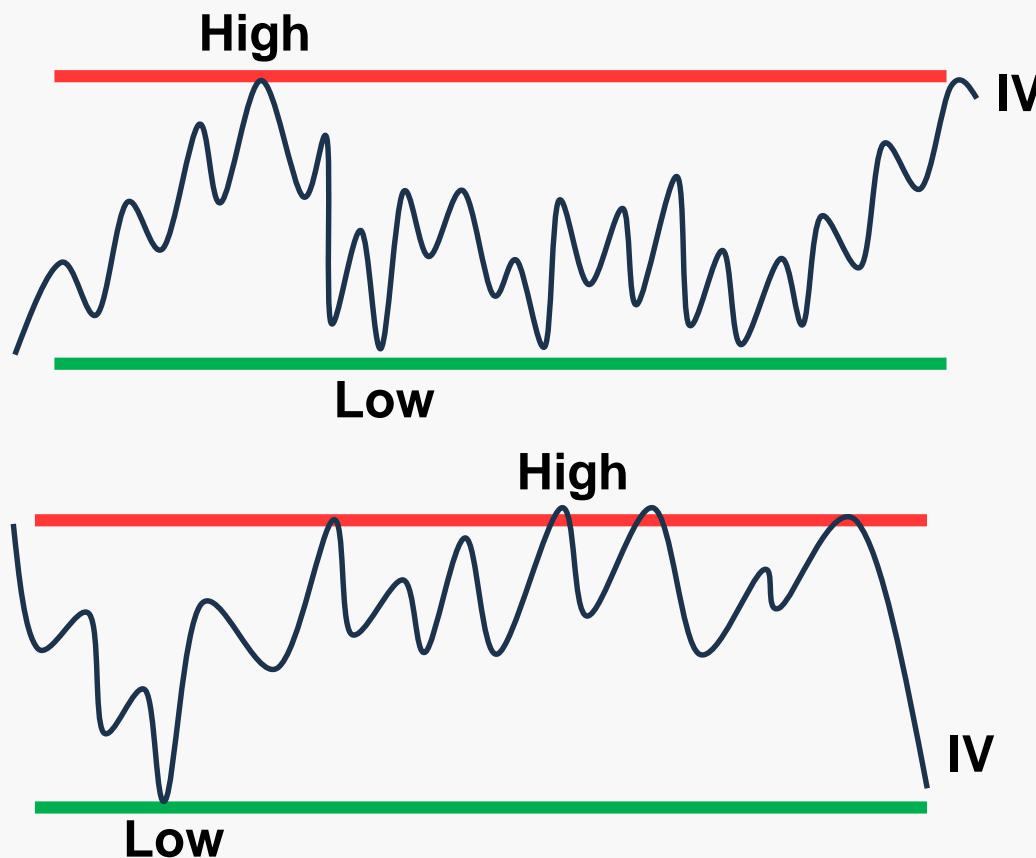
- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions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