



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,423	0.4%▲
Open Interest (OI)	1,79,02,650	1.0%▼
Change in OI (abs)	1,79,02,650	1,79,025▼
Premium / Discount (Abs)	93	1▲
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,700	0.7%▲
Open interest (OI)	25,43,765	4.9%▼
Change in OI (abs)	25,43,765	1,30,375▼
Premium / Discount (Abs)	207	15▲
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	10.25	0.02▼
Nifty ATM IV (%)	8.89	0.3▼
Bank Nifty ATM IV (%)	9.89	0.1▼
PCR (Nifty)	1.21	0.08▼
PCR (Bank Nifty)	1.08	0.01▼

The FII Long Ratio in Index Futures **jump** to 13.2 %, **up** from 12.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IEX	4,65,67,500	18.8%	148.87	0.8%
HUDCO	3,59,41,800	7.9%	225.36	0.2%
PERSISTENT	26,49,400	7.8%	5563	1.1%
BANKINDIA	6,14,74,400	7.1%	120.2	1.9%
BLUESTARCO	19,10,350	6.5%	1940.6	1.0%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	3,32,850	15.0%	6399.5	-0.2%
MARICO	2,78,14,800	8.5%	715.5	-1.4%
LAURUSLABS	1,66,75,300	5.6%	896.15	-0.3%
ITC	9,85,53,600	5.2%	411.2	-0.9%
TATAELXSI	27,61,800	5.1%	5676	-0.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BDL	52,56,875	-6.0%	1627.7	1.2%
KPITTECH	30,92,000	-4.9%	1297	3.4%
KOTAKBANK	3,77,69,200	-4.7%	2054.2	1.4%
APOLLOHOSP	26,91,875	-3.4%	7903	0.5%
UPL	4,31,97,400	-3.0%	707.95	0.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HFCL	10,53,86,550	-7.2%	75.2	-1.9%
BRITANNIA	39,13,875	-4.6%	6110.5	-1.9%
FORTIS	86,98,600	-4.3%	965.6	-0.6%
AMBER	6,79,400	-3.8%	8301.5	-0.2%
POLYCAB	17,74,875	-3.5%	7372.5	-0.7%

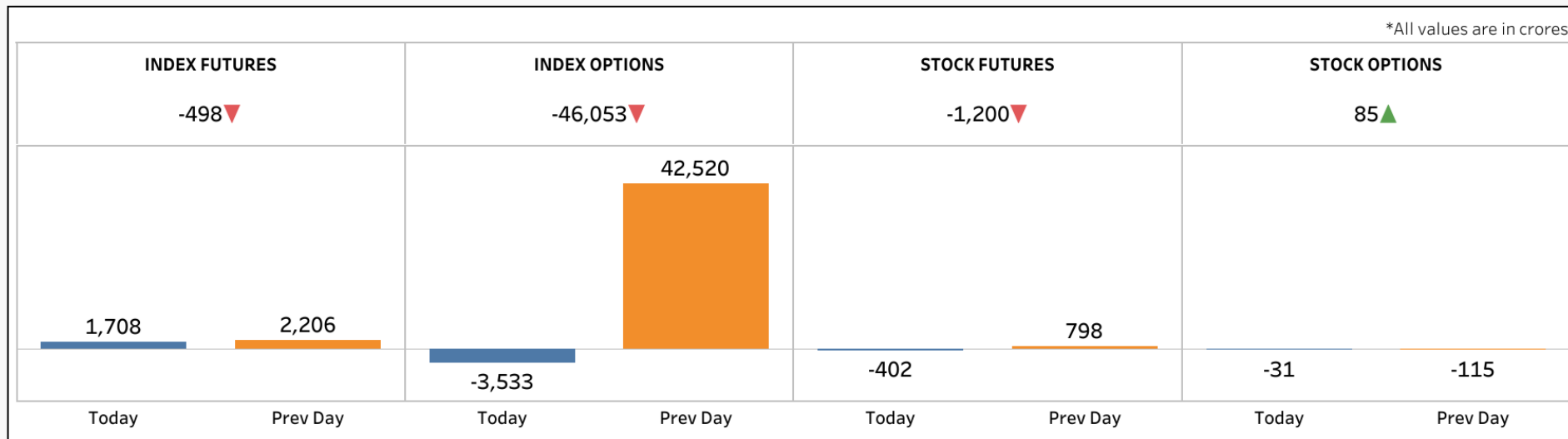
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

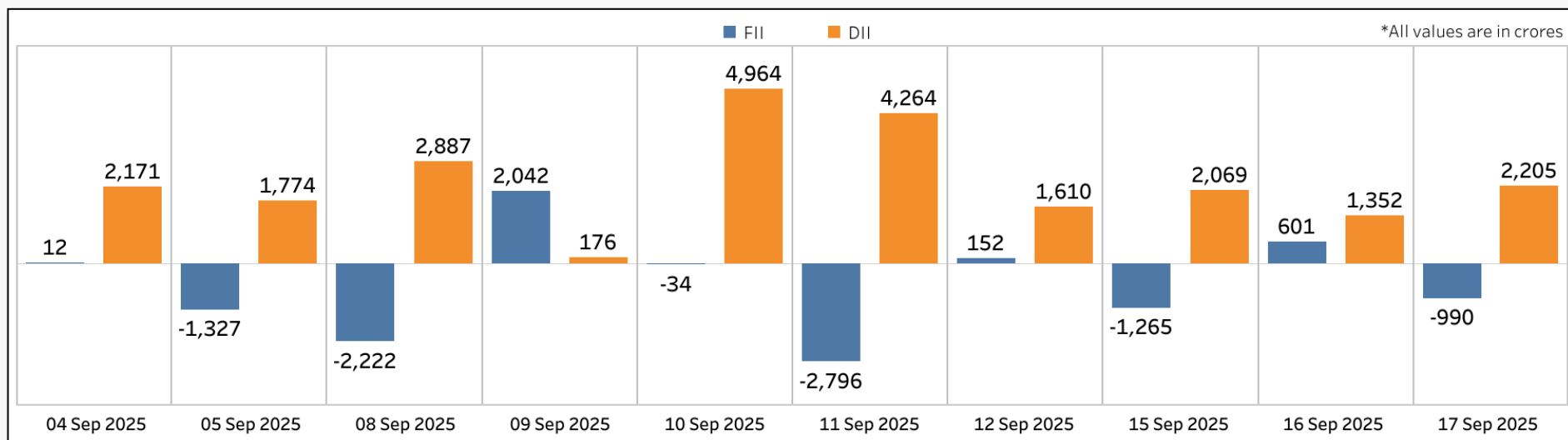
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-26,809 ▼	-2,694 ▼	7,850 ▲	-13,150 ▼	0	-487 ▼	10,400 ▲	11,446 ▲
26,202	8,901	11,595	9,986			10,400	14,472
-607		-18,474	-3,164	0	1,894	0	3,026
		-26,324		0	2,381		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-10,844	-150,660	242,628	1,328,478	970	41,126	37,845	-4,049,182
Today	Today	Today	Today	Today	Today	Today	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
4,084 ▲	1,687 ▲	-140,256 ▼	-2,035 ▼	22,723 ▲	1,494 ▲	122,004 ▲	3,739 ▲
		115,856		58,700		32,472	
				35,977	-5,873		-458
					-7,367		-4,197
-58,095	-4,922	-24,400	-10,850			-89,532	
-62,179	-6,609		-8,815				
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-102,782	112,818	-324,242	2,286,373	112,655	-3,284	43,768	434,331
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

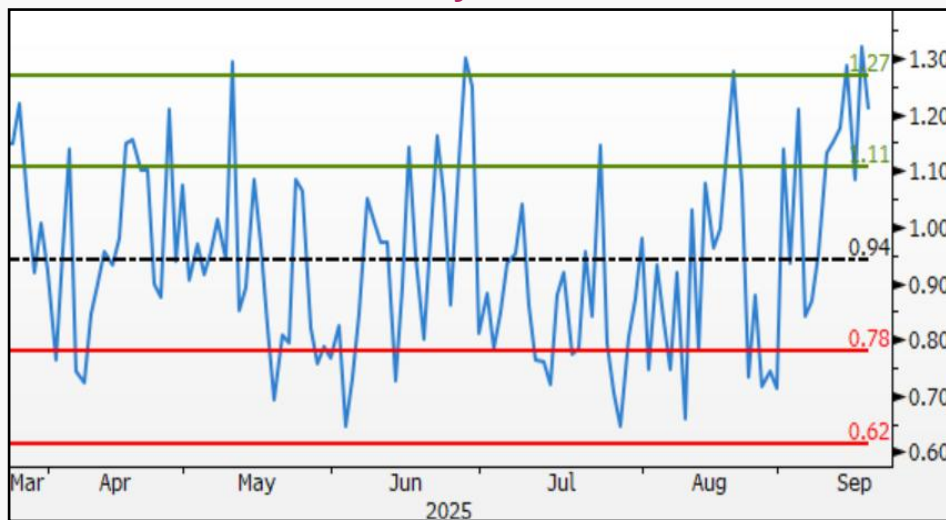
Daily Net Open Interest Change



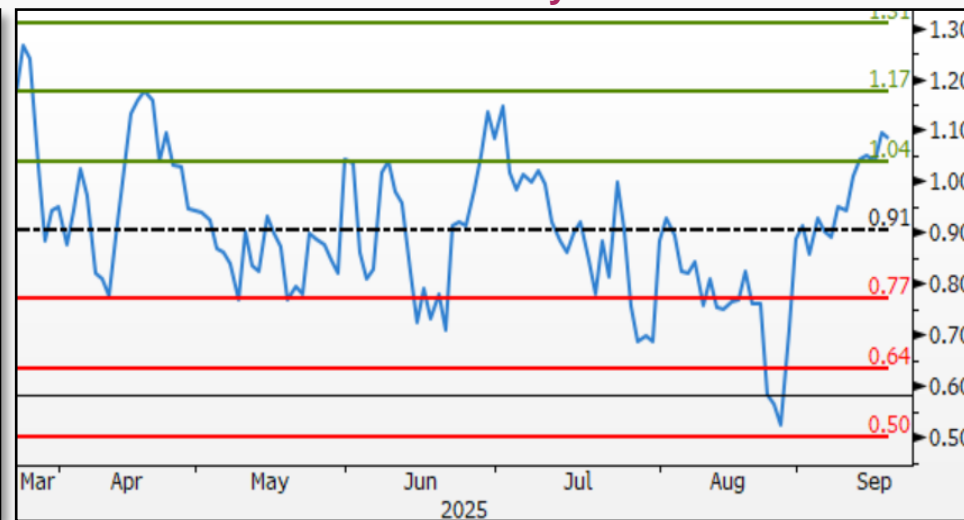
DII and FII Daily Cash Market Flows



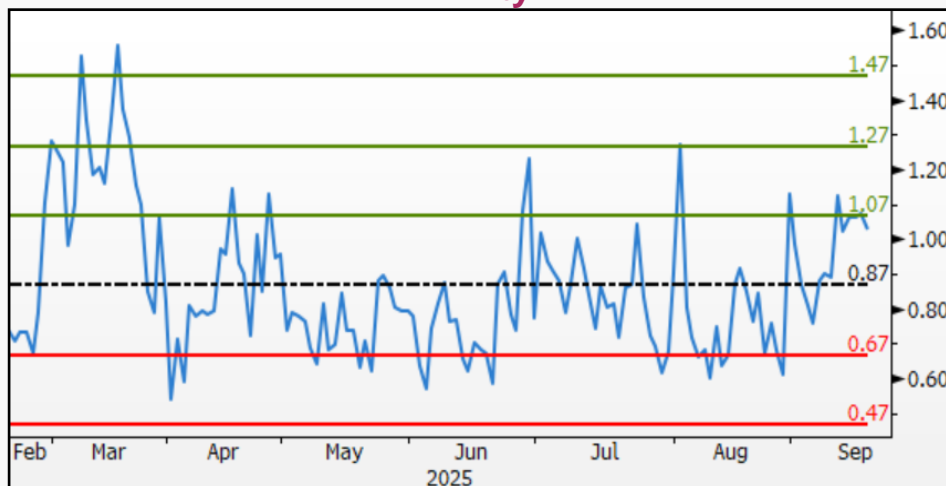
Nifty



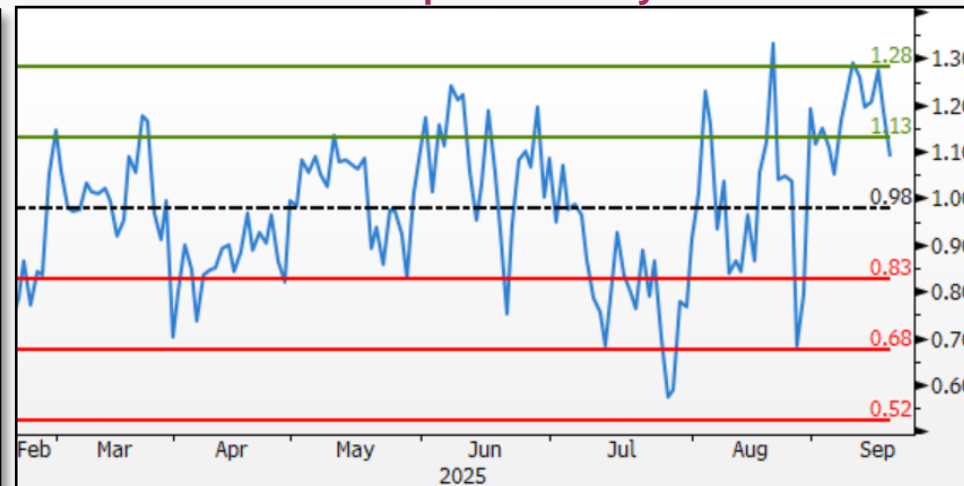
Bank Nifty



Fin Nifty

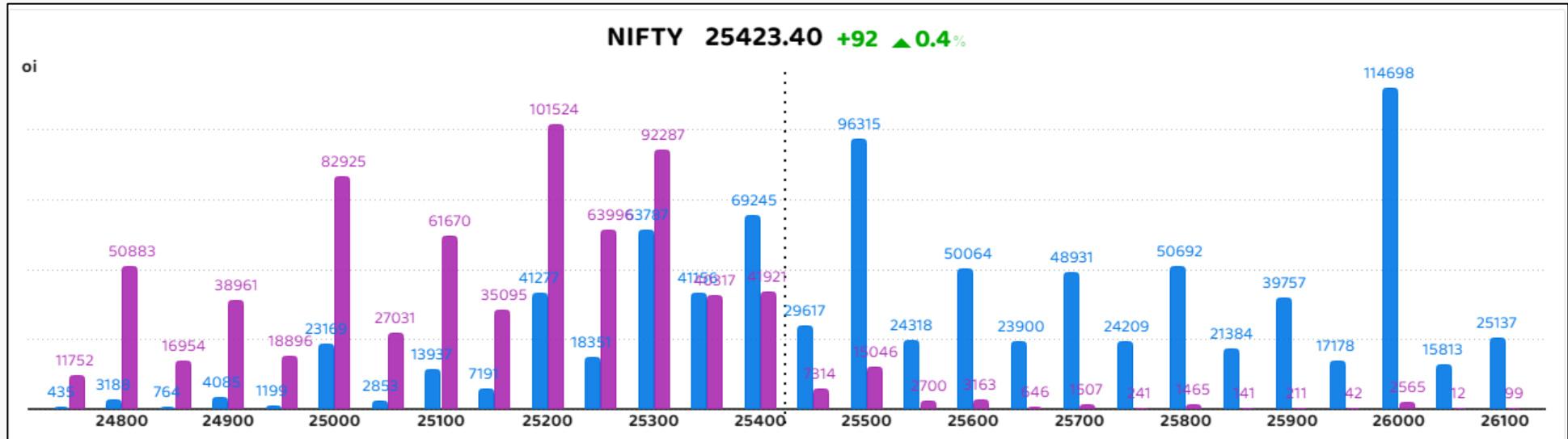


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,200 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.

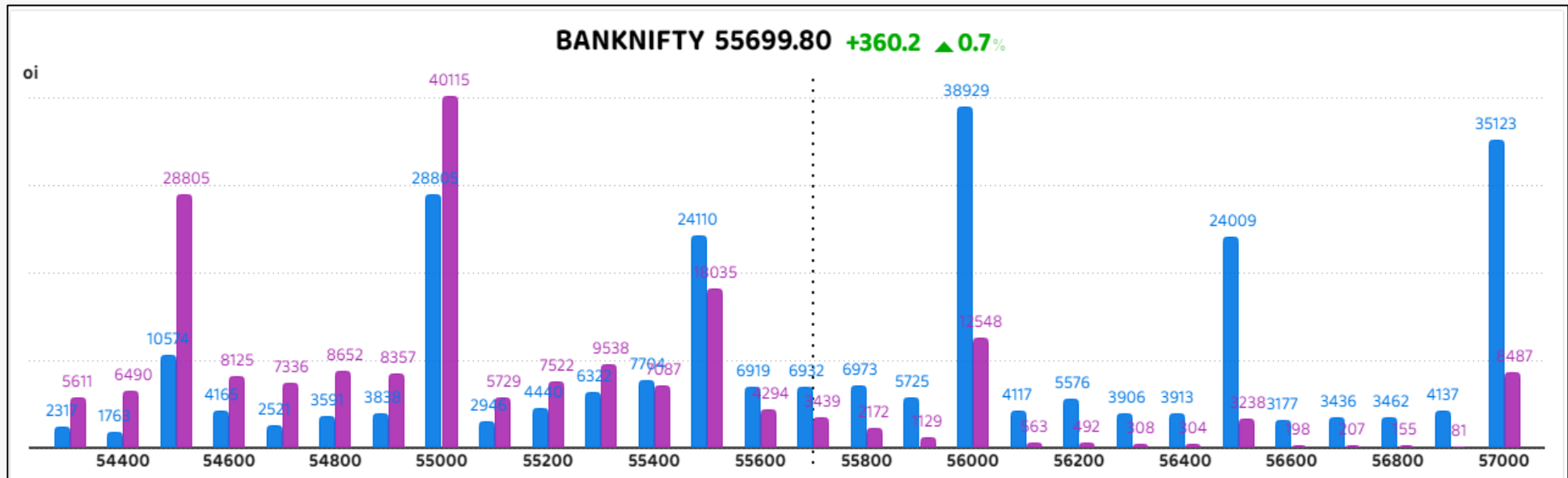
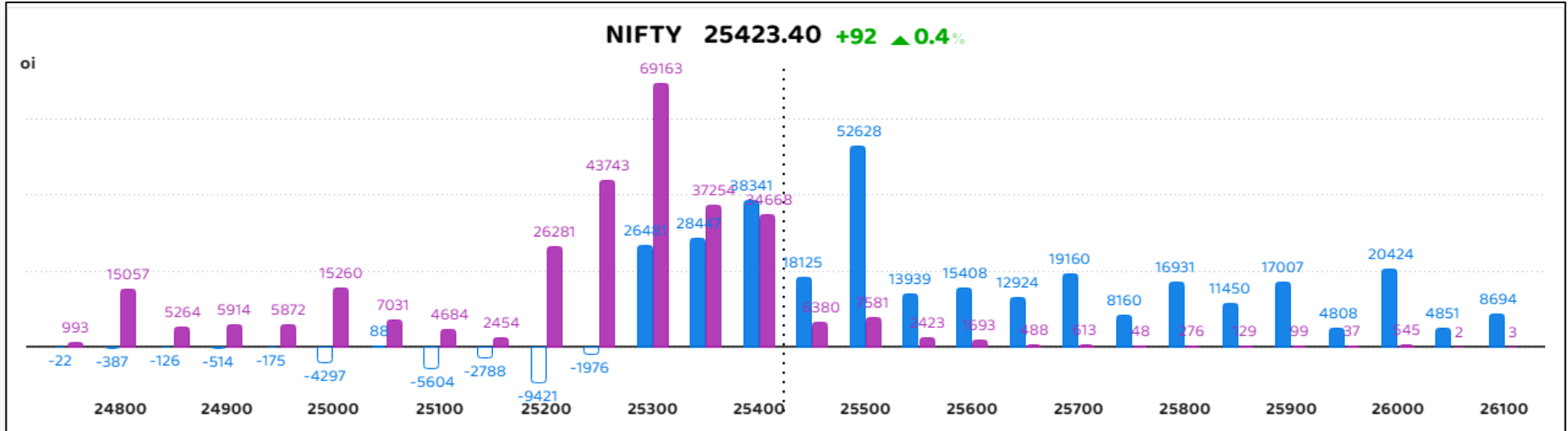


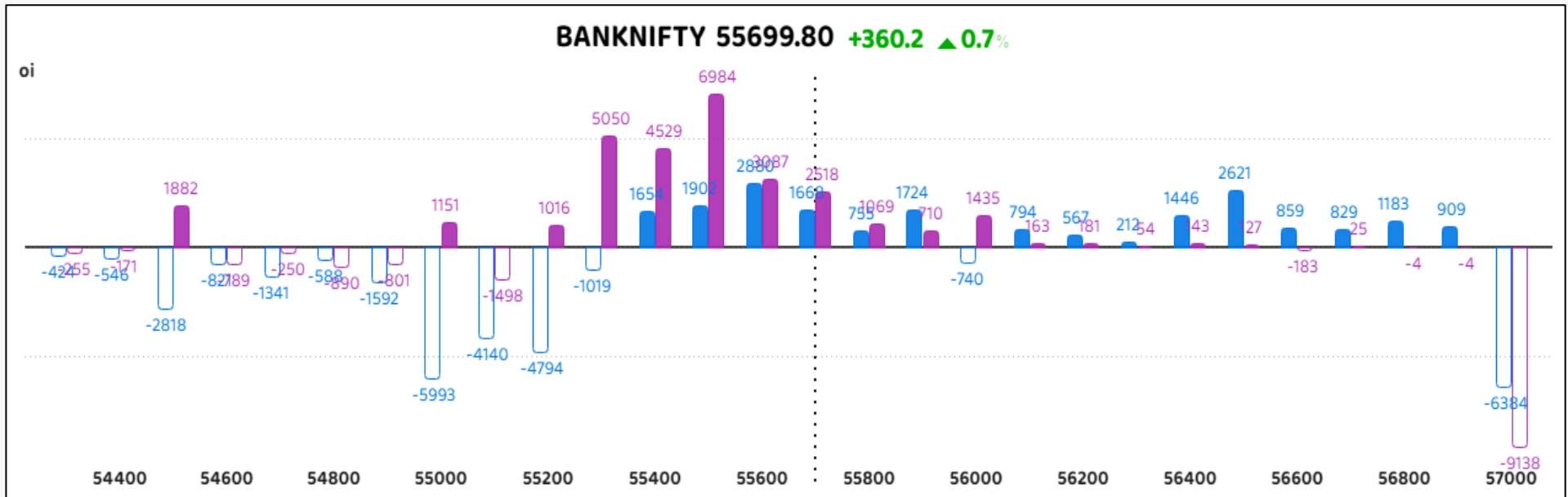
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,500 Call and the 25,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 55,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HFCL LTD	75.12	-1.8	69.7	69.7	33.2	100.0
RAIL VIKAS NIGAM	360.8	1.7	46.0	50.3	25.1	82.8
SHREE CEMENT	29685	0.4	25.6	31.9	7.9	73.9
MARUTI SUZUKI	15801	1.5	21.5	29.9	0.4	71.5
LTIMINDTREE LTD	5423	0.9	36.3	43.3	20.0	70.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI BANK LTD	1419.2	-0.2	0.4	46.1	0.4	0.0
EICHER MOTORS	6890.5	-0.5	9.3	36.9	9.3	0.0
CIPLA LTD	1559.6	0.0	5.1	61.3	5.1	0.0
INDIAN HOTELS	780.25	0.2	10.4	46.4	10.4	0.0
NTPC LTD	336.4	0.4	18.1	116.6	16.7	1.4

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HFCL LTD	75.12	-1.8	69.7	69.7	33.2	100.0
RAIL VIKAS NIGAM	360.8	1.7	46.0	50.3	25.1	96.5
LTIMINDTREE LTD	5423	0.9	36.3	43.3	20.0	93.2
GODREJ CONSUMER	1243.4	1.1	29.0	38.0	18.7	87.7
SHREE CEMENT	29685	0.4	25.6	31.9	7.9	78.3

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI BANK LTD	1419.2	-0.2	0.4	46.1	0.4	0.0
EICHER MOTORS	6890.5	-0.5	9.3	36.9	9.3	0.0
CIPLA LTD	1559.6	0.0	5.1	61.3	5.1	0.0
INDIAN HOTELS CO	780.25	0.2	10.4	46.4	10.4	0.0
TATA MOTORS LTD	719.15	0.8	8.8	52.6	3.9	0.8

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
TATA ELXSI LTD	5683	-0.4	21361	3213	6.7
PAGE INDUSTRIES	45355	0.0	7346	1145	6.4
YES BANK LTD	21.15	0.7	8817	1490	5.9
KPIT TECHNOLOGIES	1296.9	3.9	31996	5494	5.8
DALMIA BHARAT	2476.2	2.0	28323	5373	5.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MARICO LTD	711.9	-1.7	13952	19831	1.4
TUBE INVESTMENTS	3387	-0.5	4071	3355	0.8
FSN E-COMMERCE	242.64	-0.5	2168	1771	0.8
VEDANTA LTD	456.15	-1.1	149505	119645	0.8
TORRENT PHARMA	3548.3	0.4	2191	1710	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
MAX HEALTHCARE	1153.8	-0.4	9214	9214	100.0
NUVAMA WEALTH	6365	-0.2	6311	6311	100.0
CG POWER	791.95	0.0	11526	11565	99.7
PIRAMAL PHARMA	203.13	-1.2	4007	4042	99.1
RAIL VIKAS NIGAM	360.8	1.7	12089	13524	89.4

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	2997	1.7	11303	11303	100.0
RAIL VIKAS NIGAM	360.8	1.7	8144	8144	100.0
SONA BLW PRECISION	434.6	0.5	5457	5457	100.0
AMBER ENTERPRISES	8287.5	-0.1	6632	6632	100.0
NUVAMA WEALTH	6365	-0.2	3785	3785	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
UNION BANK INDIA	137.03	2.0	27421	31672	86.6
RAIL VIKAS NIGAM	360.8	1.7	63582	74012	85.9

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
RAIL VIKAS NIGAM	360.8	1.7	18384	18384	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
TATA CHEMICALS	1005.15	2.3	13634	5970	2.3
ORACLE FINANCIAL	9125	-0.2	24746	10932	2.3
NUVAMA WEALTH	6365	-0.2	6311	2853	2.2
DALMIA BHARAT	2476.2	2.0	4390	2048	2.1
HAVELLS INDIA	1593.5	-1.3	9964	4738	2.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ORACLE FINANCIAL	9125	-0.2	12672	6097	2.1
NUVAMA WEALTH	6365	-0.2	3785	1885	2.0
SAMVARDHANA	109.34	-0.5	10165	5143	2.0
TATA CHEMICALS	1005.15	2.3	6489	3392	1.9
RAIL VIKAS NIGAM	360.8	1.7	8144	4386	1.9

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
DALMIA BHARAT	2476.2	2.0	28323	3535	8.0
TATA CONSUMER	1136.3	4.0	80522	14104	5.7
IEX	148.44	0.7	48466	8838	5.5
STATE BANK OF INDIA	857.15	3.1	470097	86193	5.5
TATA CHEMICALS	1005.15	2.3	51947	9932	5.2

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TATA CHEMICALS	1005.15	2.3	15737	2914	5.4
MARICO LTD	711.9	-1.7	19831	3692	5.4
TATA CONSUMER	1136.3	4.0	28958	5663	5.1
KALYAN JEWELLERS	522.8	2.8	29678	6008	4.9
VEDANTA LTD	456.15	-1.1	119645	25643	4.7

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	2400	1216500	-0.1%	2402	2600	915600	8.2%	ITC	420	9697600	2.6%	409	410	6848000	0.2%
ADANIPTS	1420	1308150	1.0%	1406	1400	1347100	-0.4%	JIOFIN	320	11517350	1.3%	316	310	4958500	-1.9%
APOLLOHOSP	8000	166000	1.4%	7888	7900	67625	0.2%	JSWSTEEL	1200	1136025	8.0%	1111	1000	602100	-10.0%
ASIANPAINT	2600	1549750	4.3%	2494	2500	512250	0.3%	KOTAKBANK	2000	1362000	-2.5%	2050	2000	1350400	-2.5%
AXISBANK	1120	2624375	-0.5%	1126	1100	2166250	-2.3%	LT	3600	1303400	-2.3%	3686	3600	797300	-2.3%
BAJAJ-AUTO	9500	375150	4.6%	9084	9000	126975	-0.9%	M&M	3700	966600	1.8%	3633	3500	700800	-3.7%
BAJAJFINSV	2100	1477500	2.1%	2057	2000	780000	-2.8%	MARUTI	16000	485200	1.3%	15801	15000	595300	-5.1%
BAJFINANCE	1020	2145000	1.2%	1008	1000	1917000	-0.7%	NESTLEIND	1220	844500	1.3%	1204	1200	404000	-0.4%
BEL	420	8949000	1.9%	412	400	6597750	-3.0%	NTPC	340	8647500	1.1%	336	320	2907000	-4.9%
BHARTIARTL	1920	1573200	-1.1%	1941	1900	1182275	-2.1%	ONGC	240	14103000	1.3%	237	235	2814750	-0.8%
CIPLA	1600	1721250	2.6%	1560	1600	281250	2.6%	POWERGRID	290	4831700	1.0%	287	280	2074800	-2.5%
COALINDIA	400	7302150	0.1%	400	390	2234250	-2.4%	RELIANCE	1500	8146500	6.1%	1414	1400	4077000	-1.0%
DRREDDY	1300	4132500	-0.9%	1311	1300	1098750	-0.9%	SBILIFE	1840	688500	2.0%	1804	1800	224625	-0.2%
EICHERMOT	7000	361375	1.6%	6891	6500	358225	-5.7%	SBIN	860	5006250	0.3%	857	800	5058750	-6.7%
ETERNAL	330	13284150	0.5%	328	320	7774550	-2.5%	SHRIRAMFIN	700	1253175	12.3%	623	600	1004025	-3.7%
GRASIM	2900	421000	1.2%	2865	2800	198750	-2.3%	SUNPHARMA	1620	1414000	0.0%	1620	1600	624050	-1.2%
HCLTECH	1500	1269100	1.2%	1482	1400	420000	-5.5%	TATACONSUM	1200	855250	5.6%	1136	1100	484000	-3.2%
HDFCBANK	1000	10297100	3.5%	967	970	5108400	0.4%	TATAMOTORS	750	7738400	4.3%	719	700	4000800	-2.7%
HDFCLIFE	800	3290100	4.2%	768	760	850300	-1.0%	TATASTEEL	172.5	20999000	0.7%	171	160	21345500	-6.6%
HEROMOTOCO	5500	473250	2.8%	5350	5000	279900	-6.5%	TCS	3200	1764875	0.9%	3173	3000	896175	-5.4%
HINDALCO	760	2311400	1.3%	750	700	1425200	-6.7%	TECHM	1580	1561200	2.1%	1547	1480	1465800	-4.3%
HINDUNILVR	2800	2334900	9.0%	2570	2600	495900	1.2%	TITAN	3600	830550	2.2%	3523	3600	362600	2.2%
ICICIBANK	1420	3188500	0.1%	1419	1400	2002700	-1.4%	TRENT	5600	922800	7.7%	5198	5200	388700	0.0%
INDUSINDBK	750	2165100	1.5%	739	750	1212400	1.5%	ULTRACEMCO	13000	145700	2.2%	12721	12500	46950	-1.7%
INFY	1540	5274400	1.2%	1522	1500	3106400	-1.5%	WIPRO	260	10275000	2.3%	254	250	5787000	-1.6%

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

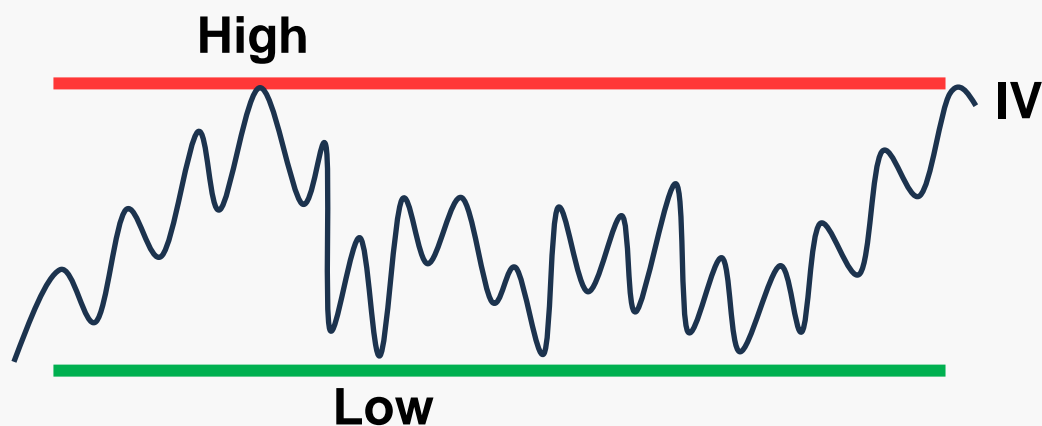
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

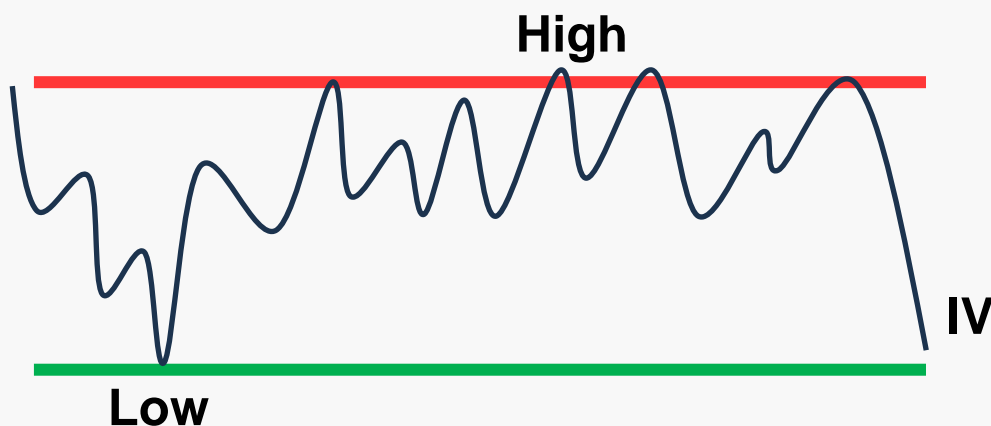
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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, 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

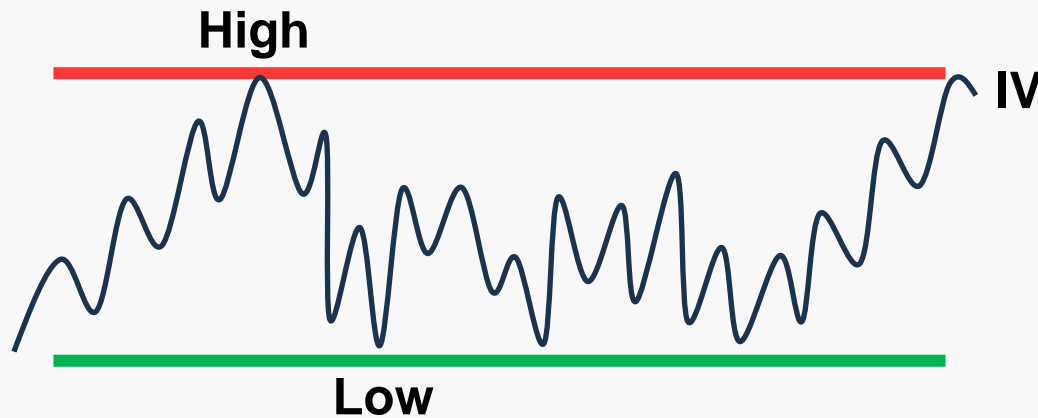


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

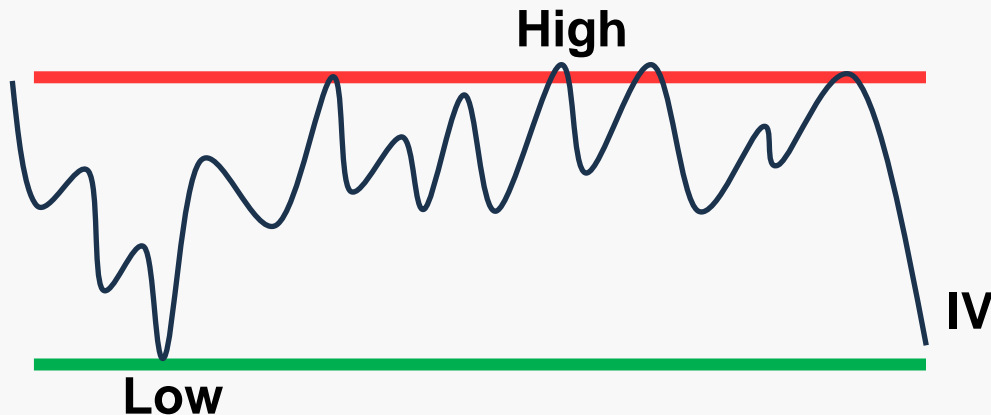


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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