



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,205	0.4%▲
Open Interest (OI)	1,84,28,175	1.7%▼
Change in OI (abs)	1,84,28,175	3,12,600▼
Premium / Discount (Abs)	91	8▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,013	0.3%▲
Open interest (OI)	27,58,595	4.1%▼
Change in OI (abs)	27,58,595	1,18,335▼
Premium / Discount (Abs)	204	1▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	10.12	0.24▼
Nifty ATM IV (%)	8.87	0.2▼
Bank Nifty ATM IV (%)	9.69	0.4▼
PCR (Nifty)	1.29	0.12▲
PCR (Bank Nifty)	1.05	0.01▲

The FII Long Ratio in Index Futures **jump** to 11.8 %, **up** from 10.8 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HFCL	13,14,96,150	9.5%	73.21	3.6%
GMRAIRPORT	21,53,88,000	5.8%	88.53	0.8%
VEDL	7,86,63,450	5.4%	452.95	3.1%
ABCAPITAL	5,52,26,500	4.9%	292.9	0.5%
NUVAMA	2,69,475	4.0%	6468.5	4.7%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NBCC	6,81,00,500	11.0%	106.64	-1.6%
LODHA	98,17,650	10.8%	1173.7	-0.8%
GODREJCP	97,66,000	7.2%	1241.3	-1.3%
KPITTECH	32,82,400	6.3%	1257.6	-0.7%
BOSCHLTD	2,81,375	5.8%	40020	-1.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MAZDOCK	31,08,350	-7.1%	2934.5	4.9%
SHRIRAMFIN	4,19,41,350	-6.5%	633.65	1.9%
MCX	22,22,125	-6.4%	7760.5	2.3%
NHPC	5,72,99,200	-4.8%	83.63	1.3%
CDSL	89,44,250	-3.3%	1550	1.2%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
OFSS	12,36,450	-8.0%	8989.5	-2.0%
UNOMINDA	36,75,650	-3.5%	1284.2	0.0%
JINDALSTEL	1,24,61,250	-2.5%	1037.95	-0.7%
HCLTECH	1,99,93,750	-2.4%	1469.9	-0.1%
CGPOWER	1,59,98,700	-2.3%	786.4	-0.2%

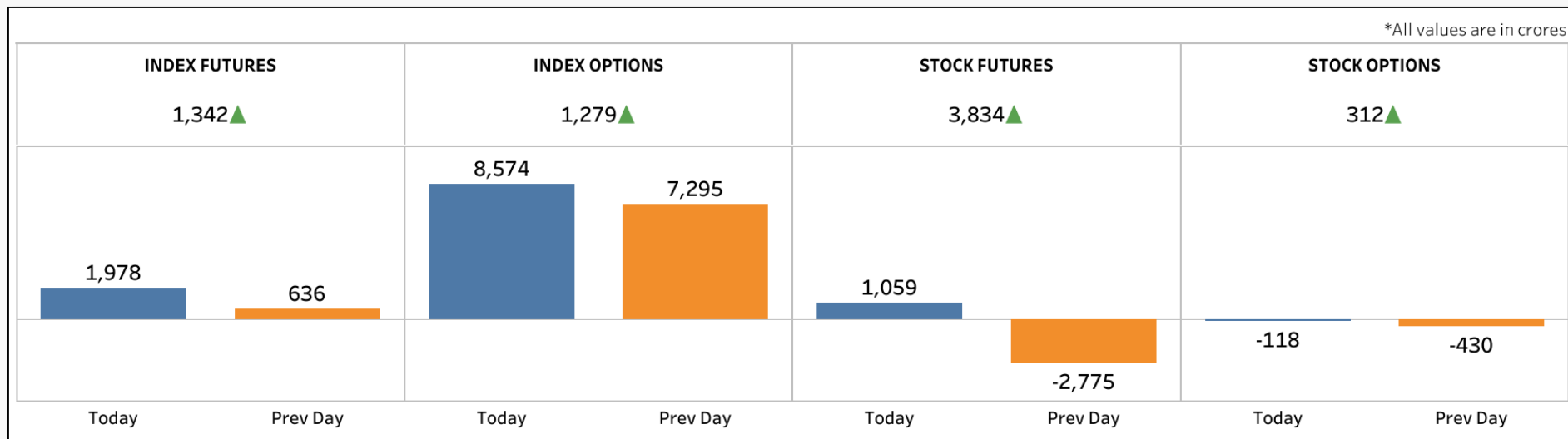
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

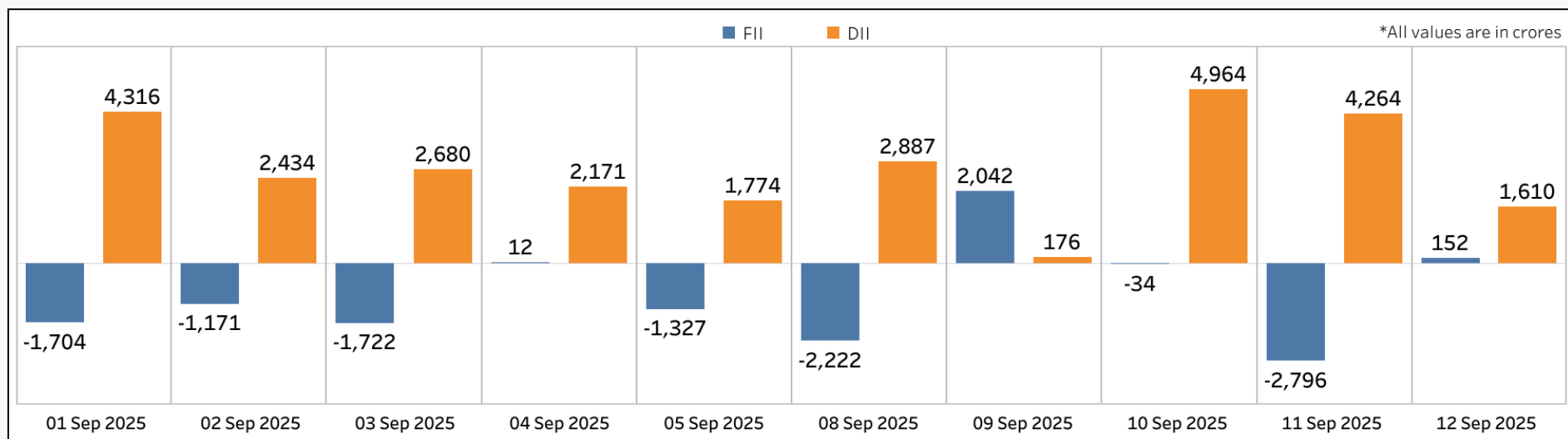
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
7,146 ▲	7,111 ▲	-1,547 ▼	48,807 ▲	0	11 ▲	0	1,608 ▲
29,719	22,573	10,451	9,755				3,229
							1,621
			-39,052	0	11	0	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-772	-172,349	276,276	1,346,570	970	38,551	27,445	-4,048,379
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
19,984 ▲	-3,690 ▼	-22,235 ▼	-31,973 ▼	-27,132 ▼	-3,432 ▼	23,784 ▲	-18,442 ▼
		32,184	20,718	33,727			16,713
		54,419		60,859			
			-11,255		-6,450	-49,372	-1,729
	-4,012				-3,018	-73,156	
	-322						
-63,447							
-83,431							
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-135,814	122,297	-295,553	2,286,025	135,616	11,501	-8,168	415,784
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

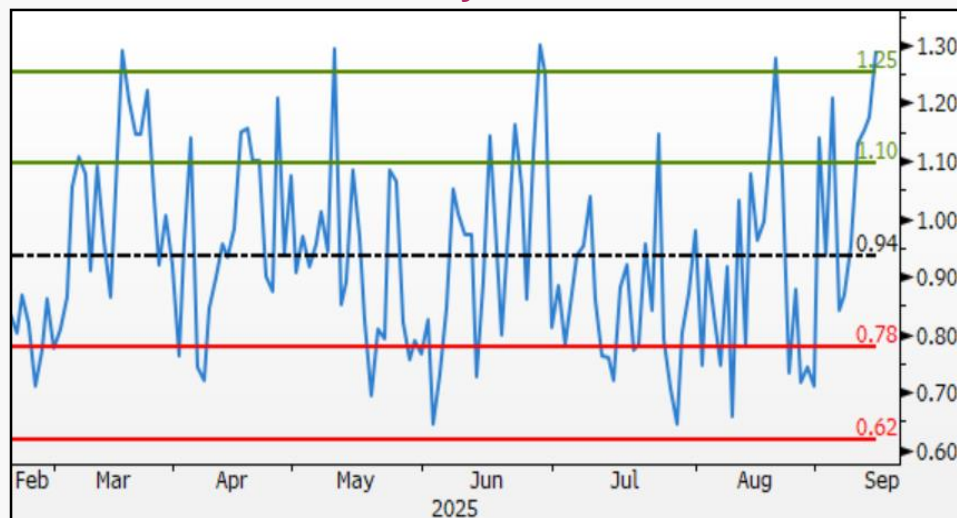
Daily Net Open Interest Change



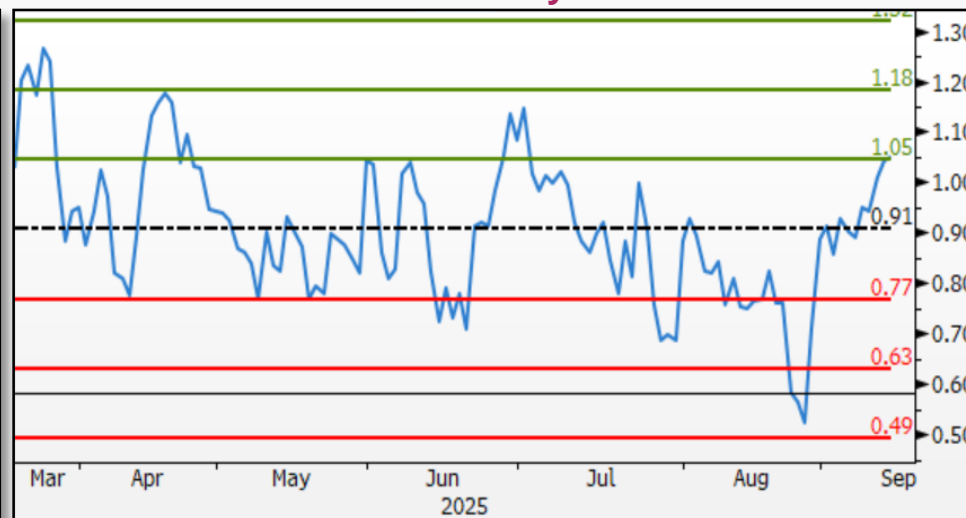
DII and FII Daily Cash Market Flows



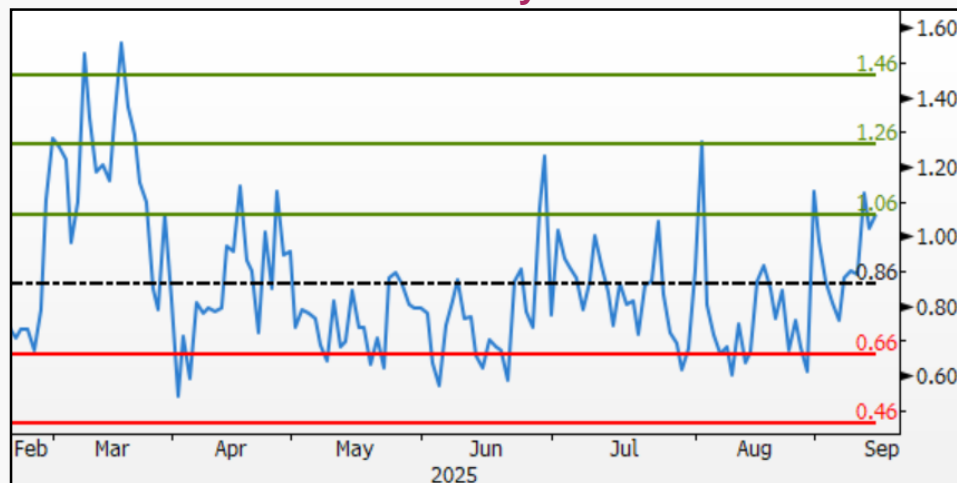
Nifty



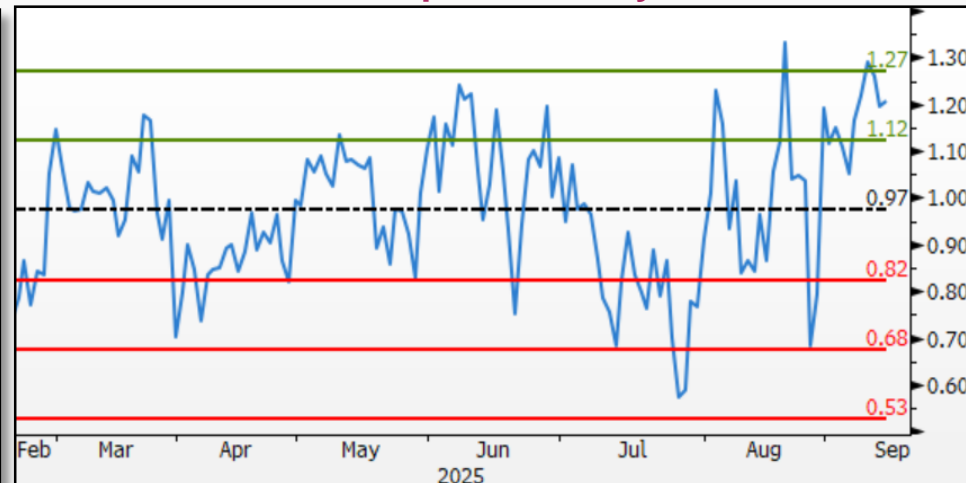
Bank Nifty



Fin Nifty

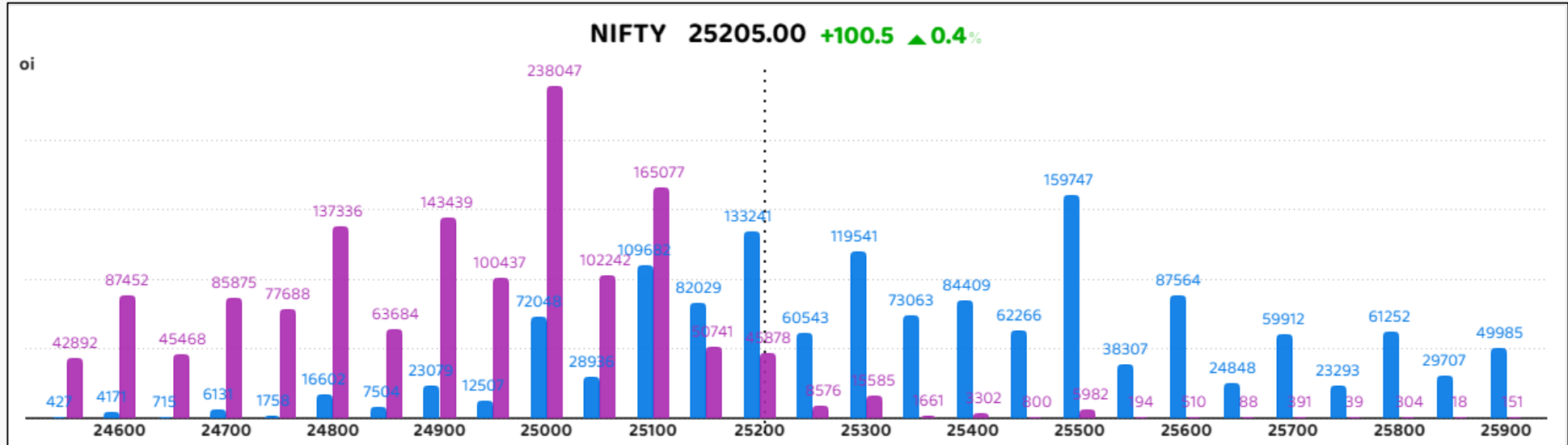


Midcap Select Nifty



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

Call ■ Put ■



For the Nifty, the 25,500 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.

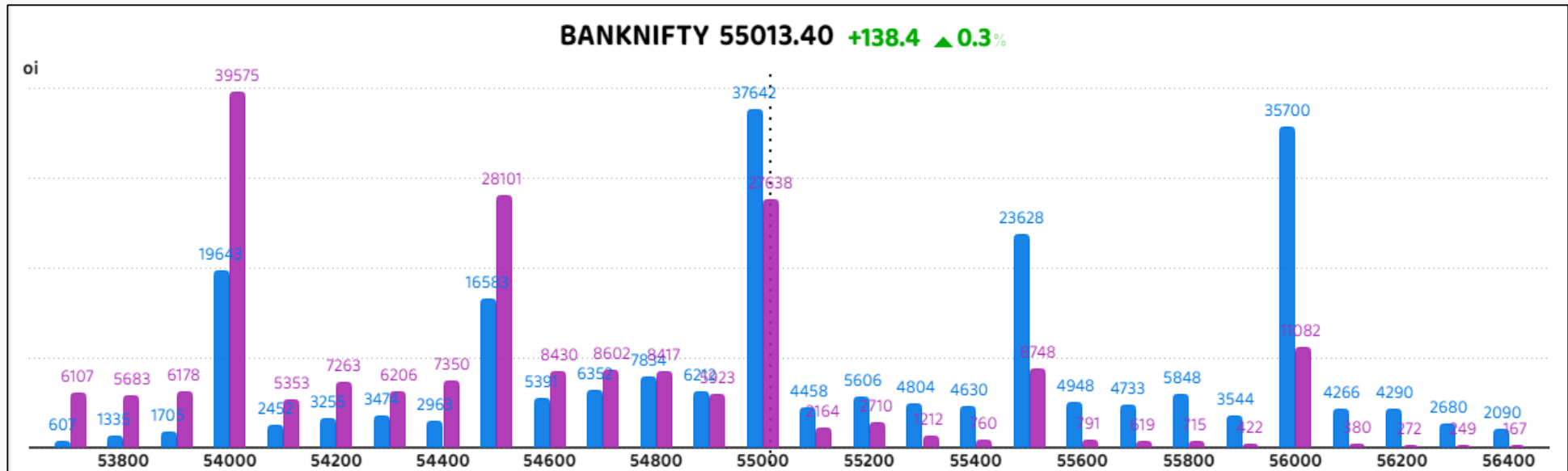
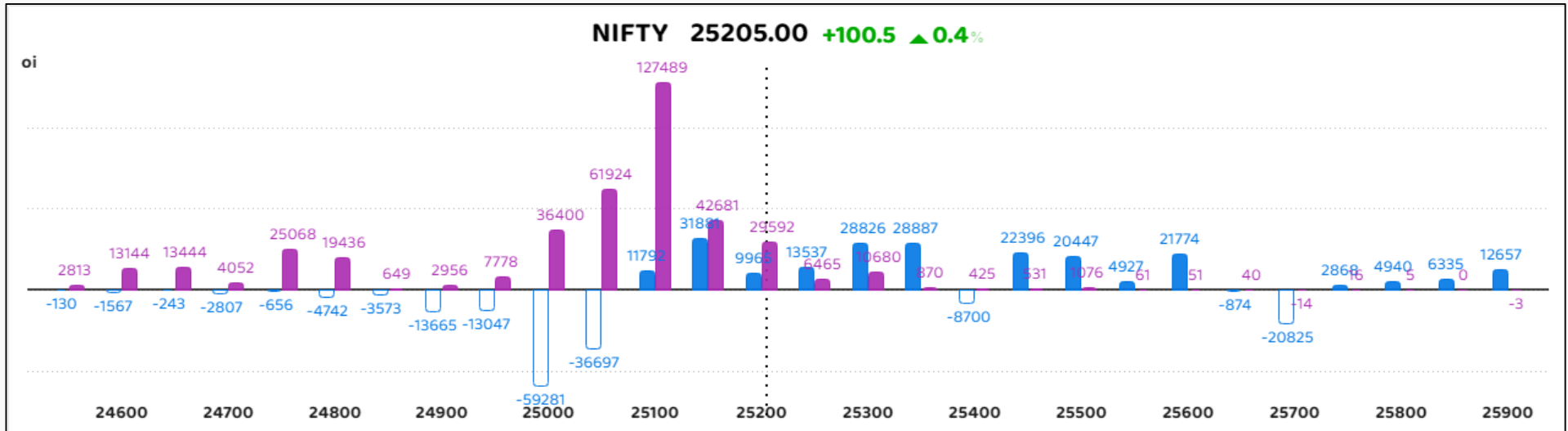


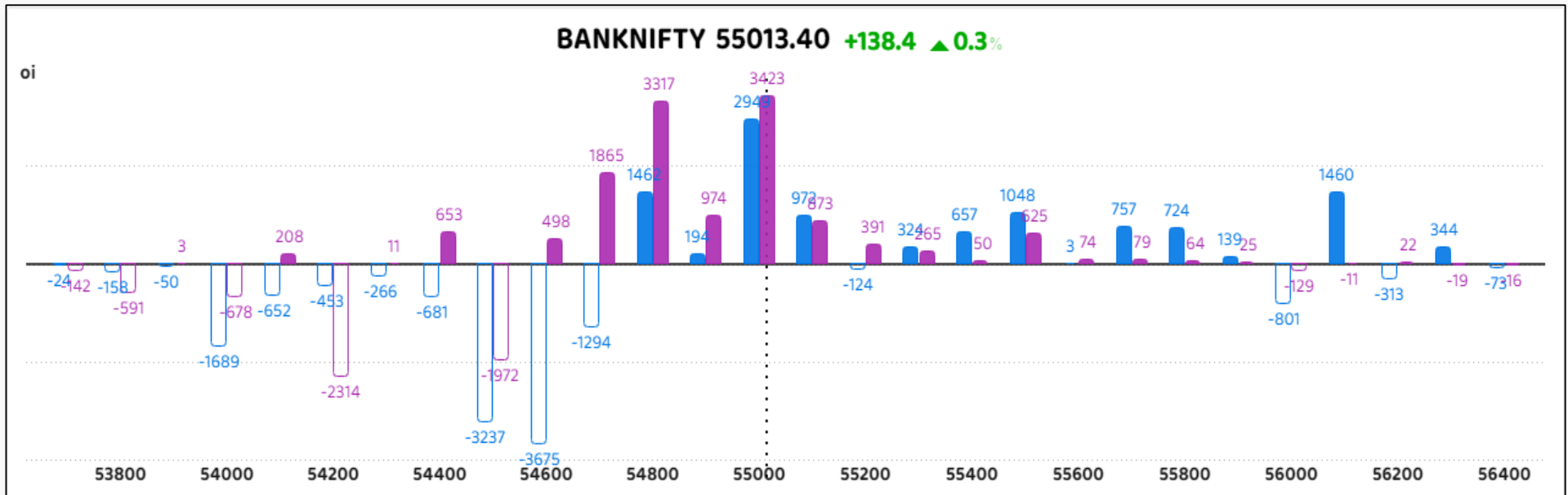
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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 25,100 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	39885	-1.9	24.0	36.2	2.1	64.2
BAJAJ AUTO LTD	8999.5	-1.3	24.0	36.4	2.1	63.7
UPL LTD	693.1	-1.2	28.0	42.7	2.9	63.0
UNO MINDA LTD	1281	-0.1	31.3	43.6	10.9	62.3
ASTRAL LTD	1461.1	1.4	25.8	40.4	2.9	60.9

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
VODAFONE IDEA LTD	7.66	3.4	41.3	88.7	40.4	1.8
NTPC LTD	331.7	0.2	18.8	116.6	16.7	2.1
PUNJAB NATL BANK	107.31	-0.4	23.4	108.3	21.3	2.4
IRCTC	722.2	0.3	19.5	42.3	18.7	3.2
CIPLA LTD	1574.6	0.9	19.6	61.3	18.2	3.2

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INFOSYS LTD	1525.6	1.1	29.3	60.8	3.3	89.7
BSE LTD	2201.2	1.8	48.4	66.7	37.1	71.4
PAGE INDUSTRIES	44130	-0.3	24.9	39.9	13.0	58.2
VOLTAS LTD	1403.6	0.6	30.9	46.9	16.9	55.7
ABB INDIA LTD	5248.6	0.6	32.5	47.7	22.5	54.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ORACLE FINANCIAL	8979	-1.7	16.4	54.7	12.1	0.6
VODAFONE IDEA LTD	7.66	3.4	41.3	88.7	40.4	0.7
REC LTD	373.3	-0.4	23.8	57.8	8.0	1.4
TATA MOTORS LTD	715.25	1.3	22.0	52.6	3.9	2.0
IRCTC	722.2	0.3	19.5	42.3	18.7	2.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
RAIL VIKAS NIGAM	338.1	0.9	19049	3349	5.7
CIPLA LTD	1574.6	0.9	13734	2584	5.3
SUPREME INDS LTD	4532.7	4.1	24198	5080	4.8
VODAFONE IDEA LTD	7.66	3.4	23003	5182	4.4
HINDUSTAN ZINC	462.95	3.7	59631	13839	4.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
GODREJ CONSUMER	1266.5	-1.3	8907	9116	1.0
UNO MINDA LTD	1282.2	-0.1	3019	2816	0.9
COMPUTER AGE	3850.5	0.2	3286	2840	0.9
JUBILANT FOODWORKS	651.65	-2.5	9089	7843	0.9
BSE LTD	2162.8	1.8	88603	75685	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
PIRAMAL PHARMA	200.16	0.3	3927	4042	97.2
LODHA DEVELOPERS	1179.6	-1.0	9747	10381	93.9
KAYNES TECHNOLOGY	7120.5	0.7	9457	11157	84.8
NUVAMA WEALTH	6169.5	4.4	4604	5512	83.5
HINDUSTAN UNILEVER	2622	-1.6	36646	45551	80.5

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	2924.7	4.7	9881	9881	100.0
RAIL VIKAS NIGAM	338.1	0.9	5047	5047	100.0
PIRAMAL PHARMA	200.67	0.3	2172	2172	100.0
NUVAMA WEALTH	6443.5	4.4	3101	3101	100.0
KAYNES TECHNOLOGY	7171.5	0.7	7403	7482	98.9

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BHARAT DYNAMICS	1566.5	5.7	92774	92774	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BHARAT DYNAMICS	1566.5	5.7	24208	30098	80.4

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ORACLE FINANCIAL	8979	-1.7	29362	7409	4.0
LODHA DEVELOPERS	1168.3	-1.0	9747	4021	2.4
TRENT LTD	5130	-0.8	58302	29289	2.0
CROMPTON GREAVES	314.45	-0.2	4749	2590	1.8
BAJAJ AUTO LTD	8999.5	-1.3	32564	18073	1.8

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ORACLE FINANCIAL	8979	-1.7	14139	4312	3.3
CG POWER	785.4	0.0	9236	4831	1.9
NUVAMA WEALTH	6443.5	4.4	3101	1743	1.8
AMBUJA CEMENTS	560.55	0.0	10319	5809	1.8
LODHA DEVELOPERS	1168.3	-1.0	3897	2220	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
HFCL LTD	73.02	3.9	28513	4277	6.7
BHARAT DYNAMICS	1566.5	5.7	92774	14350	6.5
HINDUSTAN ZINC	462.95	3.7	59631	11058	5.4
MAZAGON DOCK	2924.7	4.7	128749	28140	4.6
SUPREME INDS LTD	4532.7	4.1	24198	5949	4.1

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
HFCL LTD	73.02	3.9	7045	1432	4.9
BHARAT DYNAMICS	1566.5	5.7	24208	5456	4.4
MAZAGON DOCK	2924.7	4.7	43184	10004	4.3
HINDUSTAN ZINC	462.95	3.7	13839	3487	4.0
LODHA DEVELOPERS	1168.3	-1.0	8947	2440	3.7

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	1122900	0.3%	2392	2600	920100	8.7%	ITC	420	7292800	1.5%	414	410	4008000	-0.9%
ADANIPTS	1400	1537575	0.5%	1393	1400	1318125	0.5%	JIOFIN	320	8850100	2.8%	311	310	4688250	-0.4%
APOLLOHOSP	7900	171625	0.3%	7875	7900	67375	0.3%	JSWSTEEL	1200	1101600	9.2%	1099	1000	571050	-9.0%
ASIANPAINT	2600	1361500	2.1%	2546	2500	330500	-1.8%	KOTAKBANK	2000	2996800	1.4%	1972	1960	866400	-0.6%
AXISBANK	1100	2865000	-0.5%	1105	1100	1555625	-0.5%	LT	3600	1658475	0.6%	3580	3600	612675	0.6%
BAJAJ-AUTO	9500	376500	5.6%	9000	9000	136200	0.0%	M&M	3600	1212200	0.3%	3590	3500	743000	-2.5%
BAJAJFINSV	2060	981000	-1.0%	2082	2000	853500	-3.9%	MARUTI	15000	392050	-2.1%	15325	15000	541800	-2.1%
BAJFINANCE	1000	2253750	-0.3%	1003	1000	1905000	-0.3%	NESTLEIND	1200	786500	-1.4%	1218	1200	483000	-1.4%
BEL	400	9188400	0.2%	399	370	5956500	-7.3%	NTPC	340	6958500	2.5%	332	330	2454000	-0.5%
BHARTIARTL	1920	1802150	0.9%	1903	1900	912475	-0.1%	ONGC	240	14591250	2.9%	233	235	3546000	0.8%
CIPLA	1600	1453125	1.6%	1575	1600	272250	1.6%	POWERGRID	290	4105900	0.8%	288	280	1624500	-2.7%
COALINDIA	400	4868100	1.4%	394	450	2147850	14.1%	RELIANCE	1400	12067500	0.4%	1395	1400	5035000	0.4%
DRREDDY	1300	3066250	-1.3%	1317	1300	844375	-1.3%	SBILIFE	1900	431250	3.8%	1830	1800	270375	-1.7%
EICHERMOT	6900	392175	0.4%	6875	6500	343700	-5.5%	SBIN	820	5923500	-0.4%	824	800	4454250	-2.9%
ETERNAL	320	18071100	-0.4%	321	320	9707275	-0.4%	SHRIRAMFIN	700	1124475	10.6%	633	600	1220175	-5.2%
GRASIM	2800	378250	-0.1%	2802	2800	190750	-0.1%	SUNPHARMA	1620	1418550	0.2%	1617	1400	613550	-13.4%
HCLTECH	1500	1256850	2.2%	1467	1400	464800	-4.6%	TATACONSUM	1200	863500	8.7%	1104	970	420200	-12.1%
HDFCBANK	1000	9000200	3.4%	967	960	3498000	-0.8%	TATAMOTORS	720	6710400	0.7%	715	700	4132000	-2.1%
HDFCLIFE	800	2897400	2.6%	780	760	832700	-2.5%	TATASTEEL	170	15955500	0.1%	170	160	21323500	-5.8%
HEROMOTOCO	5500	555900	3.7%	5302	5000	259800	-5.7%	TCS	3200	2075150	2.1%	3133	3100	1019725	-1.1%
HINDALCO	750	2025800	-1.1%	758	700	1600200	-7.7%	TECHM	1580	1560600	3.6%	1526	1480	1551000	-3.0%
HINDUNILVR	2800	2315100	8.5%	2581	2600	503700	0.8%	TITAN	3700	551075	3.6%	3572	3600	289800	0.8%
ICICIBANK	1420	2491300	0.2%	1418	1400	2235800	-1.2%	TRENT	5600	907600	9.2%	5130	5200	274600	1.4%
INDUSINDBK	800	2006200	8.0%	741	750	1156400	1.3%	ULTRACEMCO	13000	179800	5.1%	12370	12000	49900	-3.0%
INFY	1540	5504800	0.9%	1526	1500	2716400	-1.7%	WIPRO	260	6096000	3.2%	252	250	4785000	-0.8%

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

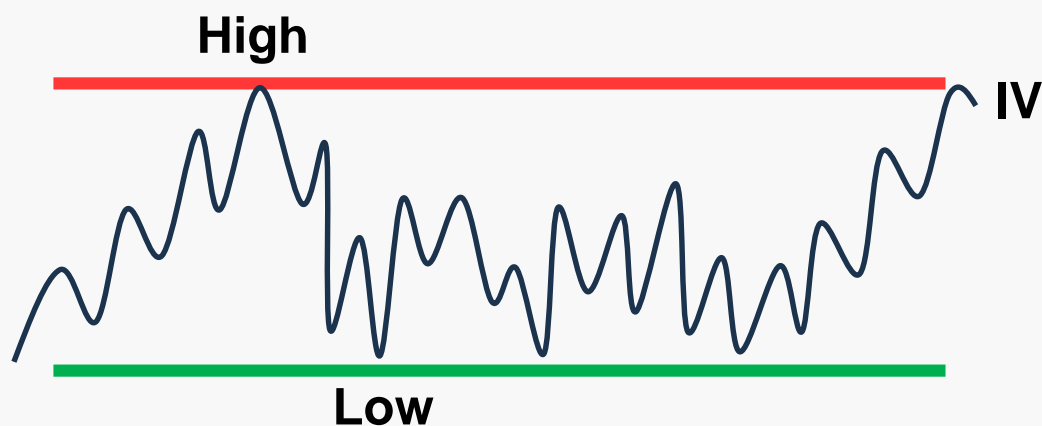
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

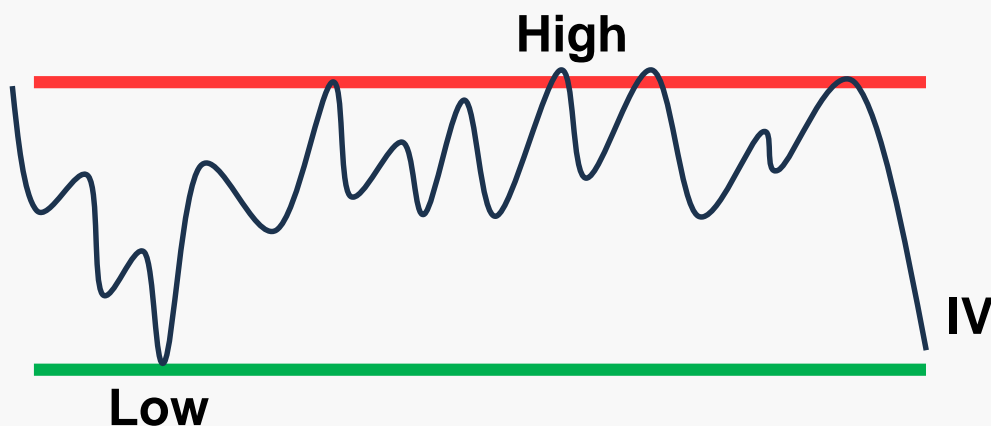
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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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