



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,509	0.2% ▼
Open Interest (OI)	1,58,39,175	1.1% ▼
Change in OI (abs)	1,58,39,175	1,81,200 ▼
Premium / Discount (Abs)	103	11 ▲
<b>Inference</b>	<b>Long Unwinding</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,120	0.3% ▼
Open interest (OI)	23,55,815	1.7% ▼
Change in OI (abs)	23,55,815	40,250 ▼
Premium / Discount (Abs)	328	10 ▲
<b>Inference</b>	<b>Long Unwinding</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.38	0.07 ▼
Nifty ATM IV (%)	11.59	0.1 ▼
Bank Nifty ATM IV (%)	12.68	0.1 ▼
PCR (Nifty)	0.99	0.21 ▲
PCR (Bank Nifty)	0.98	0.04 ▼

The FII Long Ratio in Index Futures **drop** to 29.3%, **down** from 33.4% in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	12,75,500	27.4%	1233.7	4.2%
<b>BLUESTARCO</b>	18,68,750	25.8%	1815.9	4.5%
KFINTECH	7,72,650	17.4%	1337.6	0.7%
AMBER	2,28,000	9.5%	7384	1.9%
PGEL	32,29,100	7.9%	767.25	2.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	6,55,65,625	21.5%	201.24	-3.9%
DMART	53,30,400	11.7%	4333.8	-1.4%
BHARATFORG	1,13,25,500	3.4%	1300.4	-0.9%
BANKINDIA	6,69,76,000	3.3%	118.86	-1.0%
ABFRL	5,04,97,200	3.0%	76.86	-1.8%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HEROMOTOCO	54,81,300	-6.6%	4267.2	1.6%
NMDC	26,37,49,500	-5.0%	69.24	1.2%
DABUR	2,28,67,500	-4.0%	488	0.8%
CDSL	89,66,575	-3.9%	1812.6	1.7%
GAIL	10,24,72,650	-3.8%	192.74	0.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KAYNES	5,70,500	-6.6%	6190.5	-1.9%
FEDERALBNK	8,31,20,000	-3.7%	217.22	-0.8%
JINDALSTEL	1,44,63,750	-3.7%	959.75	-1.5%
BSOFT	1,07,73,100	-3.3%	438.8	-0.3%
AUBANK	1,61,90,000	-2.8%	815.1	-0.8%

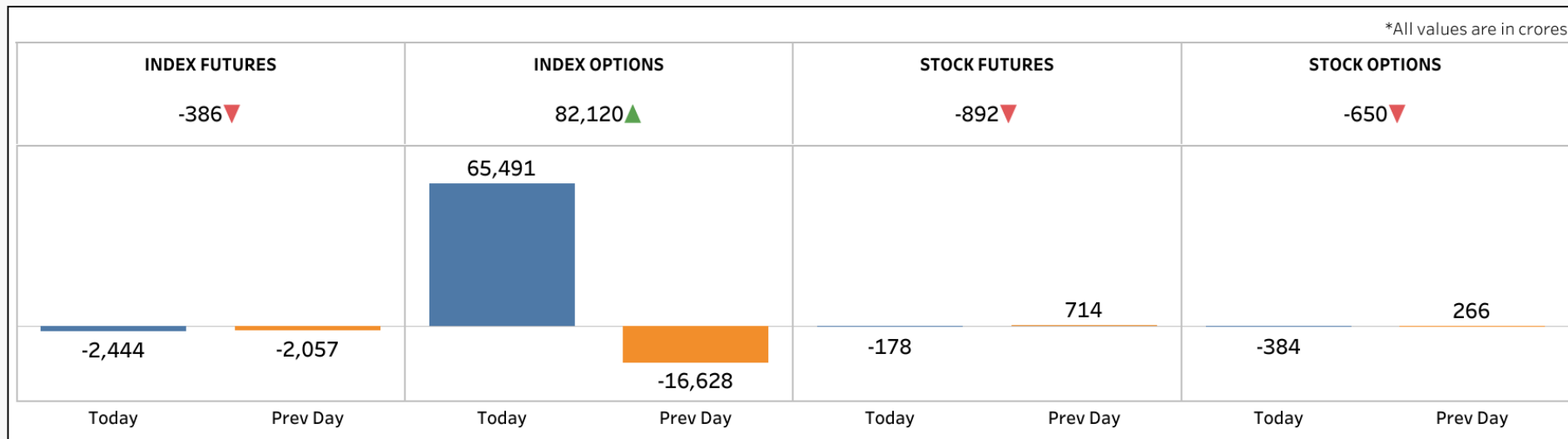
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

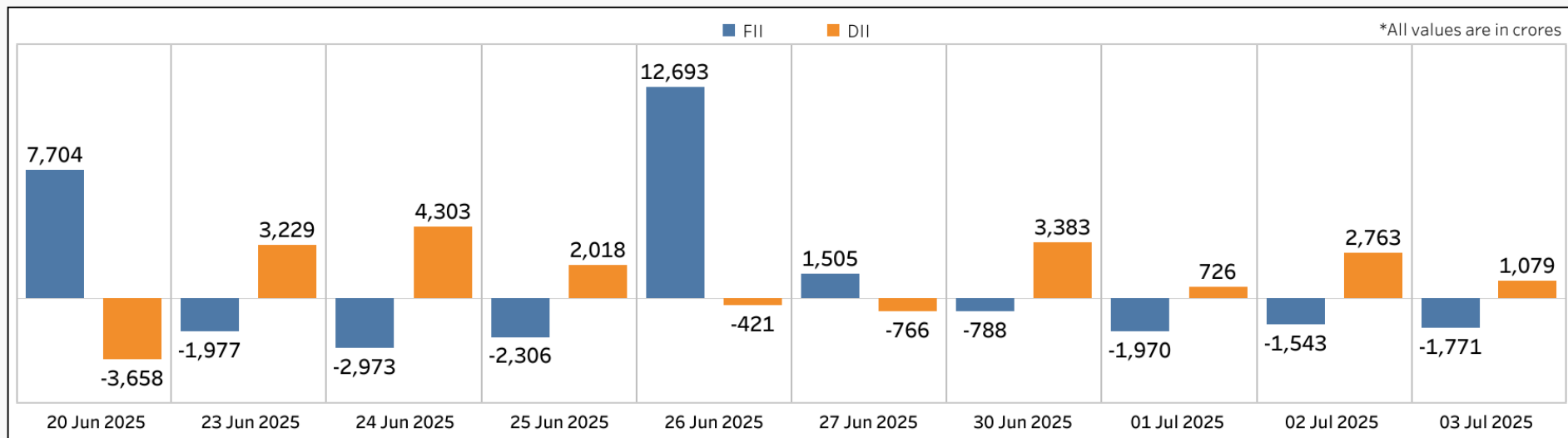
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
201,184 ▲	-2,071 ▼	12,089 ▲	-14,706 ▼	0	414 ▲	800 ▲	2,389 ▲
109,662				0	1,976	0	
		20,935		0	1,562	-800	
	-12,586	8,846	-2,688				-9,870
	-10,515						-12,259
	-91,522						
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
48,539	-61,807	163,947	1,568,229	70	33,417	17,583	-3,920,459
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-245,482 ▼	-4,224 ▼	-111,357 ▼	-2,712 ▼	44,299 ▲	5,881 ▲	98,467 ▲	15,029 ▲
192,260						47,836	
		42,586			2,721		2,475
	7,889	12,113	10,083	-56,440	-3,160	-50,631	-12,554
			12,795				
		-68,771					
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-81,981	25,547	-311,060	2,015,782	33,371	2,843	129,531	336,448
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

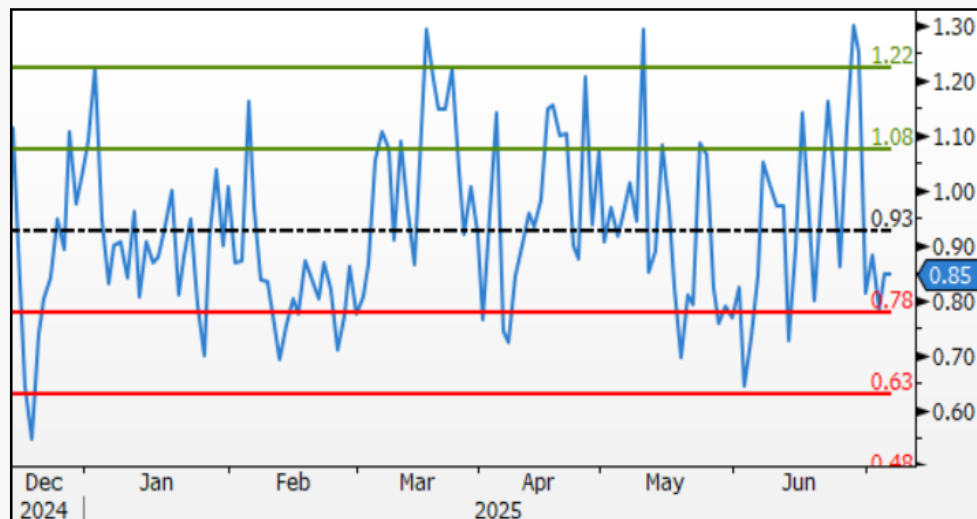
## Daily Net Open Interest Change



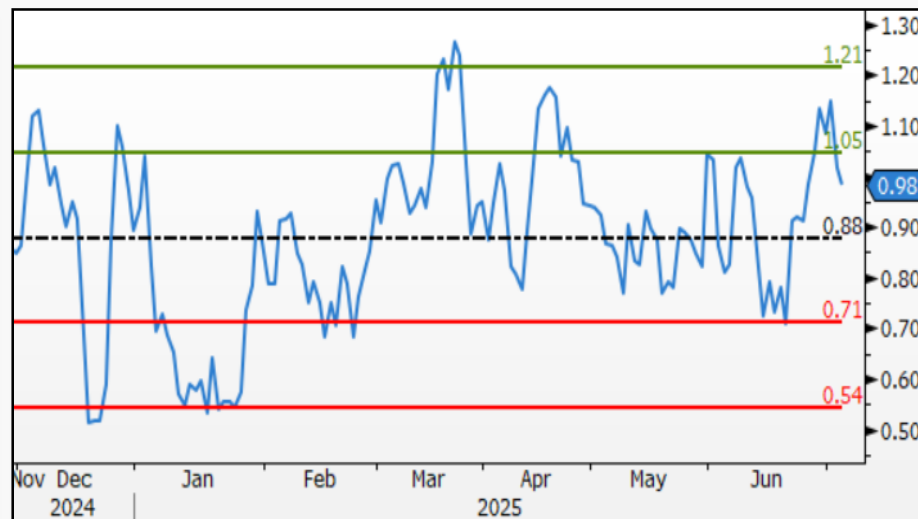
## DII and FII Daily Cash Market Flows



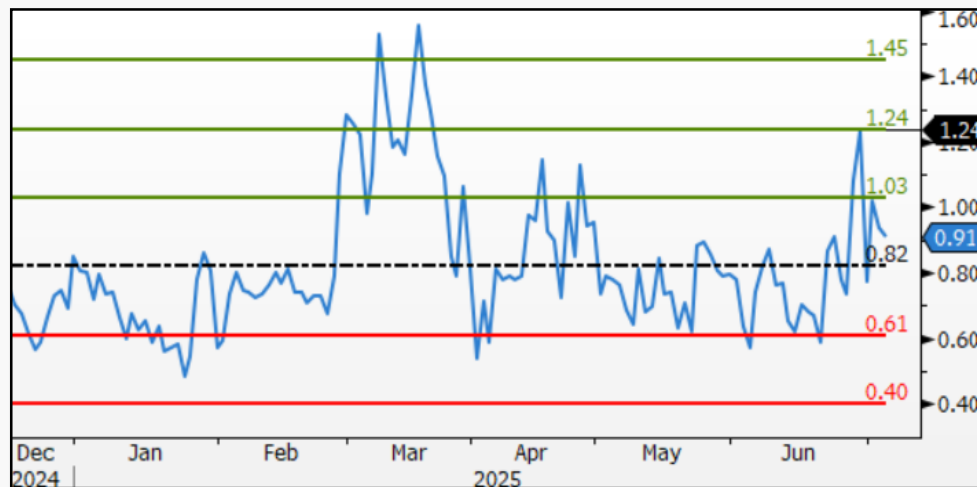
## Nifty



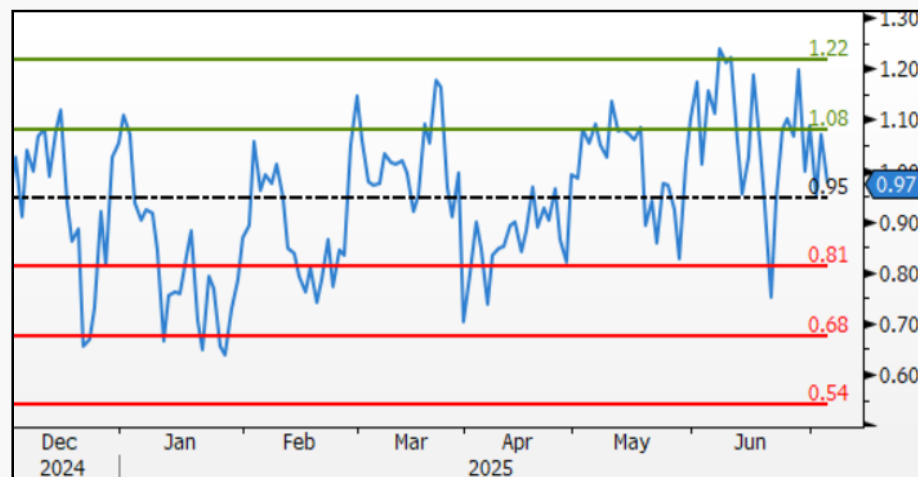
## Bank Nifty



## Fin Nifty

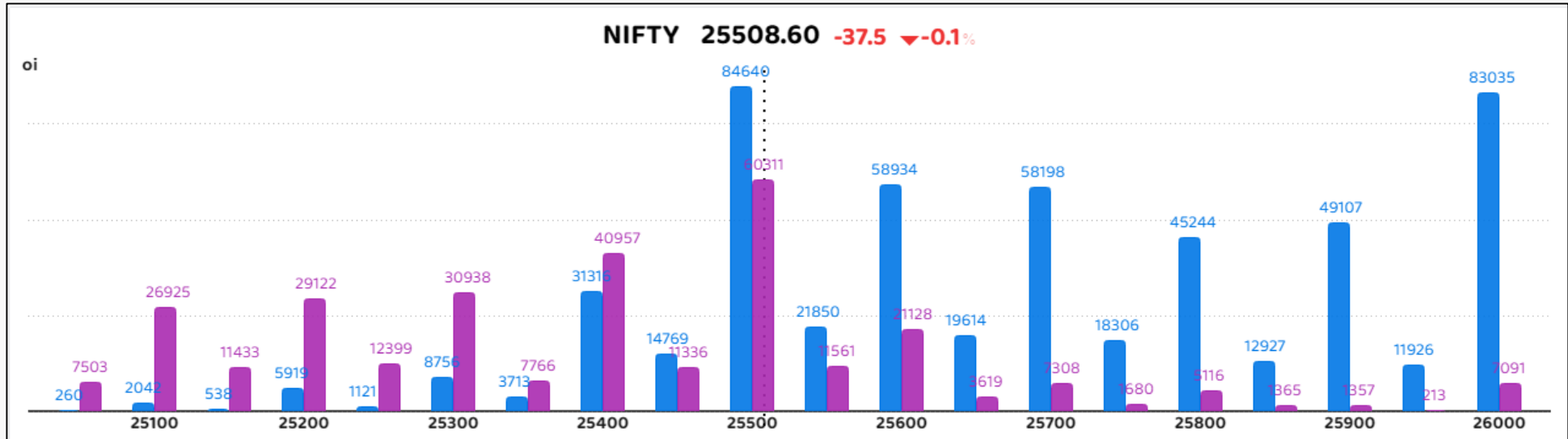


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,000 Call and the 57,000 Put saw the most amount of open interest.

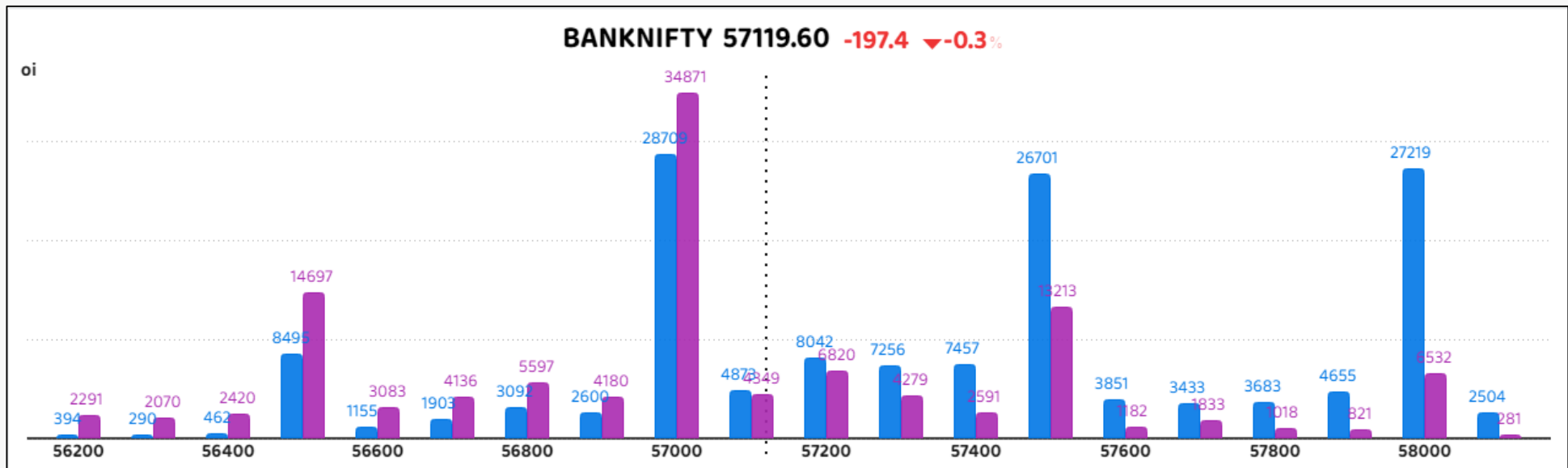
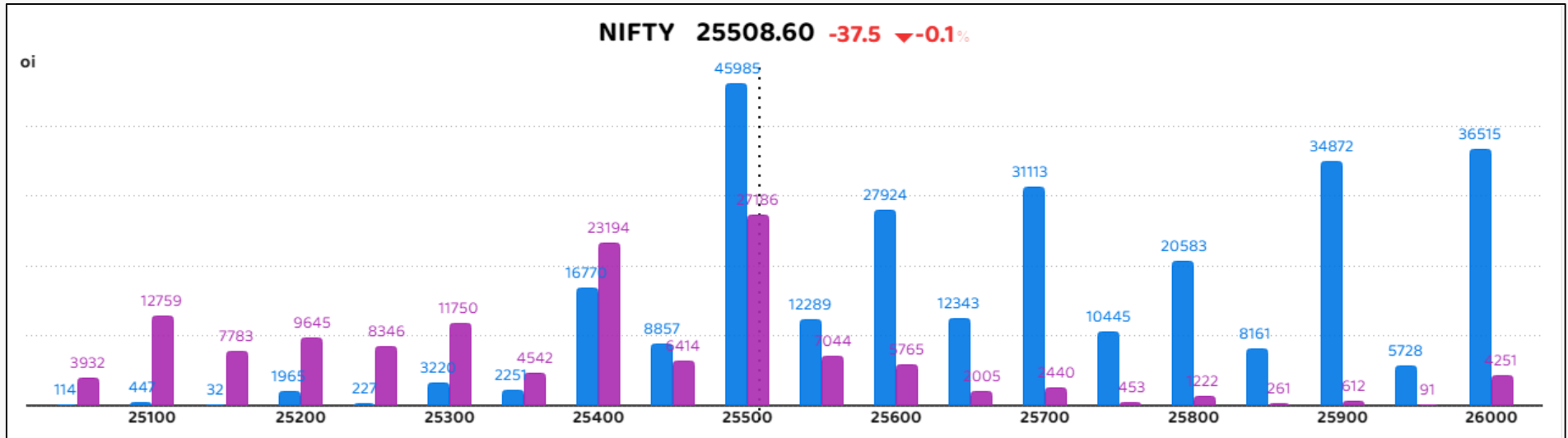


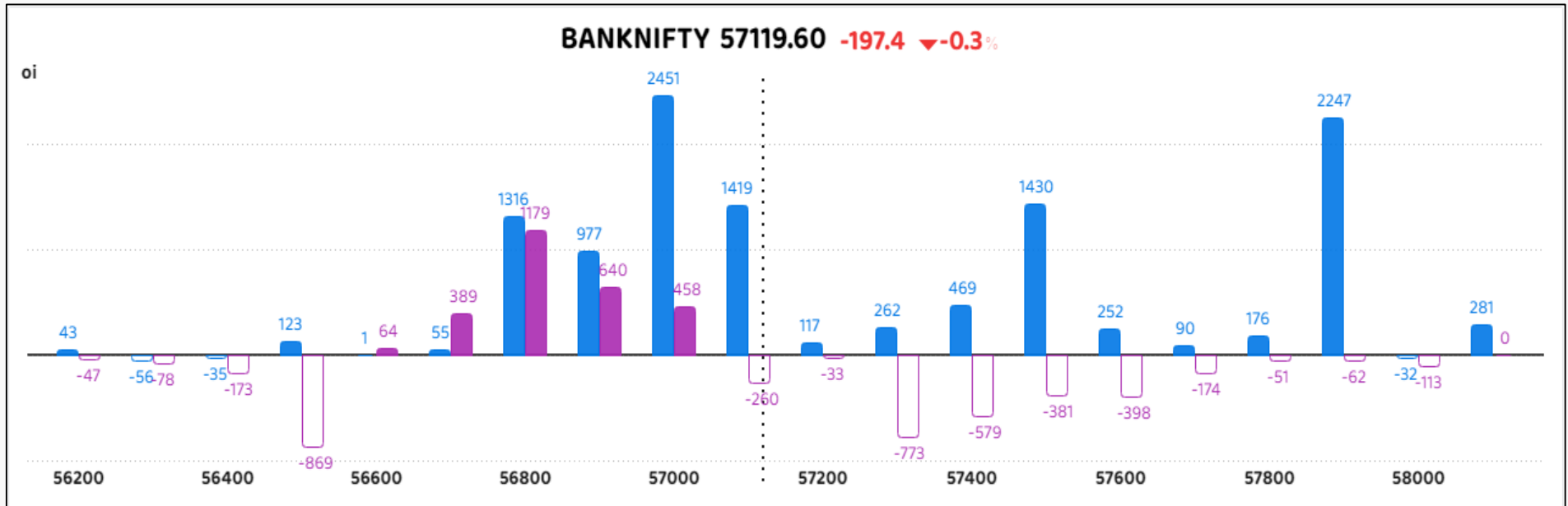
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



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



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 56,800 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SBI CARDS & PAYMENTS	911.4	-0.2	27.7	36.9	4.6	71.4
DIXON TECHNOLOGIES	15074	-0.6	35.8	53.0	1.8	66.4
BOSCH LTD	34405	6.0	24.0	34.9	3.3	65.5
ASTRAL LTD	1493.1	-0.1	25.5	38.4	2.9	63.7
KOTAK MAHINDRA BANK	2126.6	-2.0	21.1	32.4	1.9	63.1

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADANI GREEN ENERGY	1008.5	-1.0	35.4	74.3	35.4	0.0
CESC LTD	178.08	0.6	29.1	53.6	29.0	0.4
TATA TECHNOLOGIES	706.15	0.1	26.4	54.4	26.2	0.5
ADANI PORTS	1431.1	-0.9	23.0	99.7	22.6	0.6
PATANJALI FOODS	1661.2	1.4	24.2	65.0	23.7	1.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KAYNES TECHNOLOGY	6175.5	-1.8	39.0	49.4	32.2	90.7
HCL TECH LTD	1711.9	-0.4	26.8	46.0	17.9	81.8
SBI CARDS & PAYMENTS	911.4	-0.2	27.7	36.9	4.6	81.7
TATA ELXSI LTD	6215	0.5	34.8	51.9	23.0	76.4
INFOSYS LTD	1618.7	0.5	25.4	60.8	4.9	73.3

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI GREEN ENERGY	1008.5	-1.0	35.4	74.3	35.4	0.0
NTPC LTD	334.6	0.3	17.9	116.6	15.7	0.7
ADANI PORTS	1431.1	-0.9	23.0	99.7	22.6	0.8
BHARAT ELECTRONICS	426.25	-0.2	25.8	60.0	25.5	0.8
HPCL	436.6	0.0	28.3	53.3	17.1	0.8

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PI INDUSTRIES	4238.6	1.7	7421	1133	6.6
PRESTIGE ESTATES	1600.8	-0.1	6358	1167	5.5
TATA CHEMICALS	945	1.2	25071	4607	5.4
PIDILITE INDS	3114.5	1.2	9408	1779	5.3
BOSCH LTD	34405	6.0	82005	17785	4.6

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MAX FINANCIAL	1618.9	-1.5	1096	1393	1.3
SHREE CEMENT	31420	-0.7	3922	4558	1.2
TORRENT POWER LTD	1442.4	-1.8	1214	1125	0.9
GODREJ PROPERTIES	2266.1	-1.1	7109	5962	0.8
MANAPPURAM FINANCE	274.85	1.3	2289	1893	0.8

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES TECHNOLOGY	6175.5	-1.8	4633	4633	100.0
UNO MINDA LTD	1099.4	0.1	2278	2366	96.3
BLUE STAR LTD	1842.3	4.9	3331	3471	96.0
GLENMARK PHARMA	1783.5	0.8	10090	12143	83.1
KPIT TECHNOLOGIES	1261.6	1.6	9480	11511	82.4

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BLUE STAR LTD	1842.3	4.9	4080	4080	100.0
MANKIND PHARMA LTD	2361.7	-1.0	1457	1677	86.9
PHOENIX MILLS	1512.5	1.2	1956	2254	86.8
KAYNES TECHNOLOGY	6175.5	-1.8	2012	2455	82.0
PNB HOUSING FINANCE	1084.4	0.0	2399	2963	81.0

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BOSCH LTD	34405	6.0	82005	82005	100.0
BLUE STAR LTD	1842.3	4.9	30922	30922	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NO STOCK OPTION MET THE CONDITION MENTIONED IN THE FOOTNOTE					

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
TORRENT PHARMA	3334.1	-0.5	5168	2917	1.8
APL APOLLO TUBES	1729.2	-0.8	5973	3494	1.7
SBI CARDS & PAYMENTS	911.4	-0.2	12500	7375	1.7
BOSCH LTD	34405	6.0	5451	3589	1.5
UNO MINDA LTD	1099.4	0.1	2278	1529	1.5

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BOSCH LTD	34405	6.0	4387	1324	3.3
BLUE STAR LTD	1842.3	4.9	4080	1645	2.5
LAURUS LABS LTD	758.55	0.2	6260	3525	1.8
SHREE CEMENT	31420	-0.7	2508	1426	1.8
KPIT TECHNOLOGIES	1261.6	1.6	5368	3243	1.7

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BOSCH LTD	34405	6.0	82005	8708	9.4
BLUE STAR LTD	1842.3	4.9	30922	7782	4.0
M&M FIN SERVICES	266.5	1.8	14125	5085	2.8
PIDILITE INDS	3114.5	1.2	9408	4319	2.2
FSN E-COMMERCE	202.31	-4.4	16965	7817	2.2

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BOSCH LTD	34405	6.0	17785	1801	9.9
BLUE STAR LTD	1842.3	4.9	9513	2582	3.7
FSN E-COMMERCE V	202.31	-4.4	8562	2590	3.3
AVENUE SUPERMART	4348.7	-1.0	39182	15127	2.6
M&M FIN SERVICES	266.5	1.8	4517	2046	2.2

## 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	2700	1551300	3.4%	2611	2700	1779900	3.4%	ITC	420	10787200	1.6%	413	420	5556800	1.6%
ADANIPTS	1500	1464425	4.8%	1431	1400	1464900	-2.2%	JIOFIN	350	7235650	7.7%	325	300	5221700	-7.7%
APOLLOHOSP	8000	234500	5.8%	7565	7000	193375	-7.5%	JSWSTEEL	1180	1431000	12.8%	1046	1000	734400	-4.4%
ASIANPAINT	2500	694500	2.8%	2431	2300	536500	-5.4%	KOTAKBANK	2200	1073600	3.5%	2127	2100	789200	-1.3%
AXISBANK	1200	3714375	2.5%	1171	1200	1826875	2.5%	LT	3700	905800	3.3%	3583	3500	547575	-2.3%
BAJAJ-AUTO	9000	169575	7.4%	8383	8000	110100	-4.6%	M&M	3200	1130200	0.8%	3174	3200	426600	0.8%
BAJAJFINSV	2100	1181500	6.0%	1981	1980	615500	0.0%	MARUTI	12800	406750	0.4%	12752	12000	90500	-5.9%
BAJFINANCE	950	3678750	4.4%	910	900	2283750	-1.1%	NESTLEIND	2500	425500	4.7%	2388	2300	185250	-3.7%
BEL	440	7749150	3.2%	426	400	5868150	-6.2%	NTPC	345	19153500	3.1%	335	330	2850000	-1.4%
BHARTIARTL	2040	3334025	1.0%	2019	2000	1008900	-1.0%	ONGC	245	13245750	0.4%	244	240	2472750	-1.7%
CIPLA	1680	666375	11.4%	1509	1320	335625	-12.5%	POWERGRID	300	4271200	2.1%	294	290	2253400	-1.3%
COALINDIA	400	6392250	3.5%	386	400	3454650	3.5%	RELIANCE	1600	4656500	5.4%	1518	1500	2915500	-1.2%
DRREDDY	1400	947500	8.4%	1291	1100	778750	-14.8%	SBILIFE	1900	941625	5.0%	1810	1800	164625	-0.6%
EICHERMOT	5800	274050	1.5%	5716	5800	119175	1.5%	SBIN	820	15818250	1.6%	807	800	5472000	-0.9%
ETERNAL	290	4942150	11.2%	261	250	3778150	-4.2%	SHRIRAMFIN	700	2141700	3.6%	675	700	728475	3.6%
GRASIM	3000	254750	6.5%	2818	2600	114250	-7.7%	SUNPHARMA	1700	1639050	1.2%	1680	1500	478800	-10.7%
HCLTECH	1960	852600	14.5%	1712	1600	346150	-6.5%	TATACONSUM	1230	943250	12.9%	1089	980	565950	-10.0%
HDFCBANK	2020	3494150	1.7%	1987	2000	1658800	0.6%	TATAMOTORS	700	6639200	1.4%	690	680	3607200	-1.5%
HDFCLIFE	820	2660900	4.3%	786	740	1085700	-5.8%	TATASTEEL	170	17160000	2.5%	166	160	9812000	-3.6%
HEROMOTOCO	4300	537600	-0.2%	4311	4200	305850	-2.6%	TCS	3500	1935850	2.9%	3401	3400	855575	0.0%
HINDALCO	700	2919000	1.0%	693	700	938000	1.0%	TECHM	1700	1152600	1.7%	1672	1700	366600	1.7%
HINDUNILVR	2400	1768800	3.7%	2313	2300	1011600	-0.6%	TITAN	3880	572425	5.5%	3679	3600	286300	-2.1%
ICICIBANK	1500	2529100	5.2%	1426	1400	1807400	-1.8%	TRENT	6200	359800	0.1%	6191	6000	237800	-3.1%
INDUSINDBK	900	2550800	4.4%	862	800	1110900	-7.2%	ULTRACEMCO	13800	103250	11.3%	12398	11000	68550	-11.3%
INFY	1700	3252400	5.0%	1619	1600	1221200	-1.2%	WIPRO	310	4683000	16.1%	267	240	2169000	-10.1%

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 (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](http://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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