



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,223	0.8% ▼
Open Interest (OI)	1,77,56,100	1.3% ▲
Change in OI (abs)	1,77,56,100	2,27,400 ▲
Premium / Discount (Abs)	74	7 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	56,918	0.4% ▼
Open interest (OI)	23,75,835	1.6% ▲
Change in OI (abs)	23,75,835	36,750 ▲
Premium / Discount (Abs)	163	53 ▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	11.82	0.15 ▲
Nifty ATM IV (%)	10.71	0.0 ▲
Bank Nifty ATM IV (%)	11.67	0.3 ▼
PCR (Nifty)	0.76	0.21 ▼
PCR (Bank Nifty)	0.88	0.04 ▼

The FII Long Ratio in Index Futures **drop** to 20.2%, **down** from 24.7% in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
x	12,53,250	27.1%	2581	1.5%
HINDUNILVR	1,76,91,000	3.6%	2522.7	4.6%
PAYTM	2,64,92,225	3.0%	955.9	1.1%
DABUR	2,04,48,750	2.9%	528.7	2.1%
JSL	70,74,550	1.8%	680.95	0.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IREDA	4,43,94,600	20.6%	159.28	-6.2%
INFY	6,44,10,000	11.4%	1595.8	-1.5%
COFORGE	1,30,81,500	7.6%	1875.2	-1.1%
BSE	1,57,18,125	7.6%	2366.9	-4.1%
CAMS	26,31,600	6.8%	4066.6	-2.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GLENMARK	1,10,89,125	-12.7%	2181.2	14.1%
BOSCHLTD	2,94,650	-5.8%	36125	1.0%
BALKRISIND	18,90,000	-5.2%	2657	0.6%
NHPC	7,18,40,000	-4.3%	88.31	1.0%
PEL	81,09,750	-4.1%	1219.4	4.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IRB	9,93,77,600	-3.7%	47.64	-1.8%
LODHA	61,45,650	-3.4%	1401.9	-0.9%
FORTIS	75,43,075	-3.3%	764.85	-1.4%
IIFL	1,67,24,400	-3.2%	520.45	-0.2%
EICHERMOT	27,37,175	-3.1%	5618	-0.8%

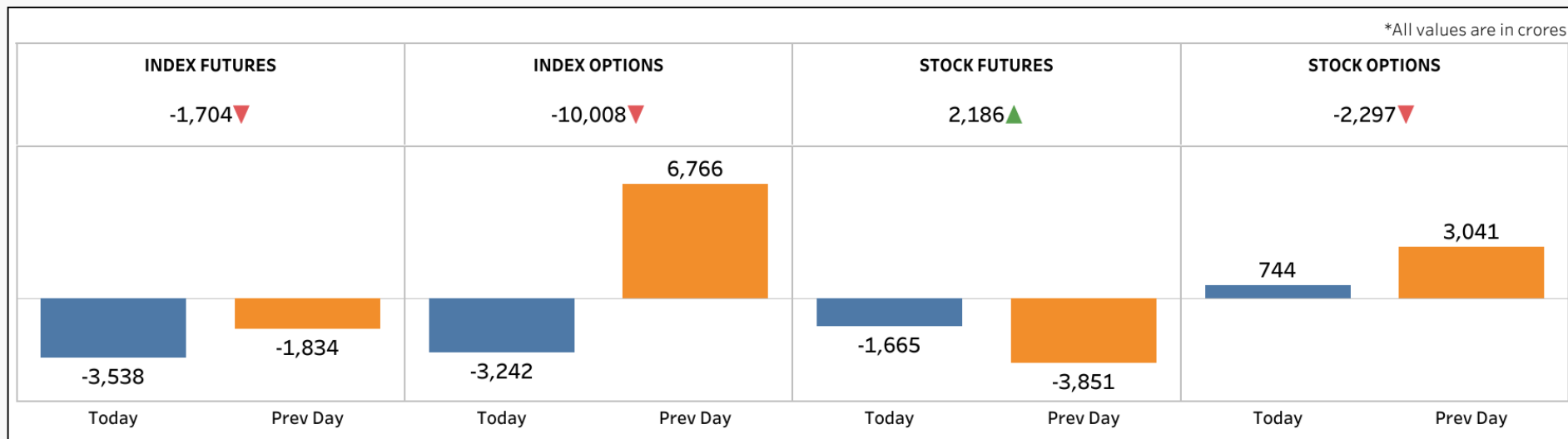
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

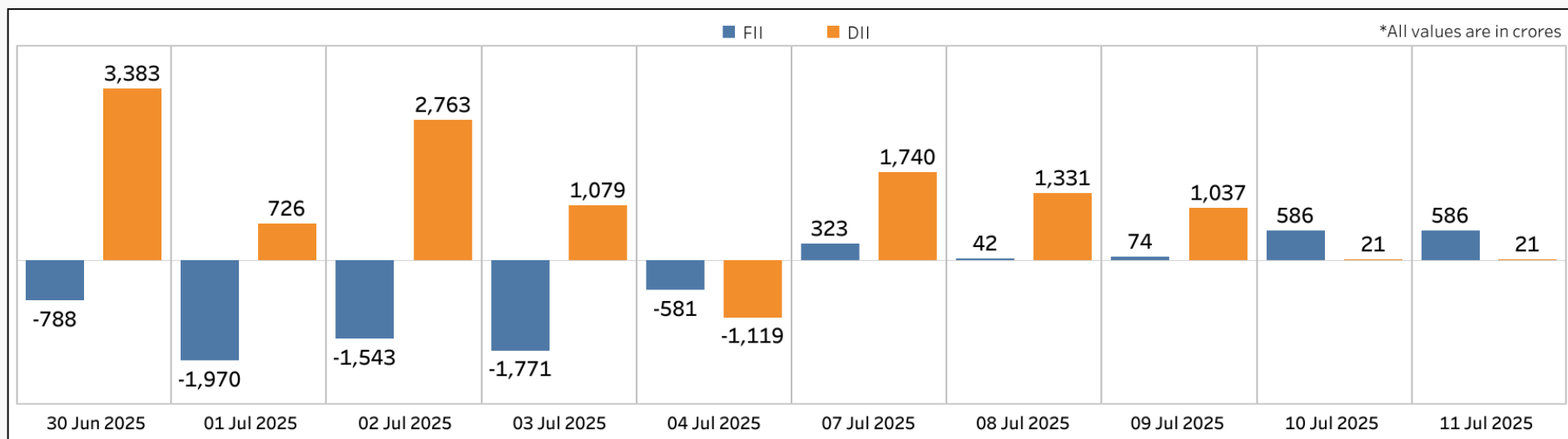
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-66,748 ▼	-8,967 ▼	-2,452 ▼	28,697 ▲	0	2,474 ▲	-2,693 ▼	-12,376 ▼
30,302		18,201	20,653				15,039
-36,446	-18,511		-30,712	0	2,610	-3,693	2,663
	-9,544		-59,409	0	136	-1,000	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
8,685	-103,760	175,004	1,428,954	70	34,163	16,888	-3,934,647
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	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
-24,374 ▼	5,440 ▲	-121,277 ▼	-12,454 ▼	91,121 ▲	1,053 ▲	126,421 ▲	-3,867 ▼
38,451		25,636	24,684			81,132	
14,077	13,834		12,230	22,369	2,067		15,819
	8,394				1,014		19,686
		-95,641		-68,752		-45,289	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-24,996	68,023	-392,811	2,094,732	16,242	1,574	200,919	410,961
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

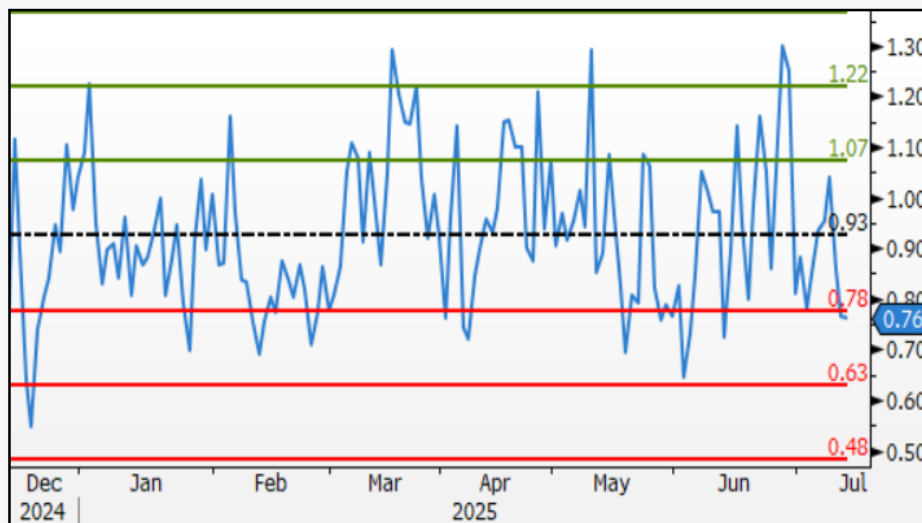
Daily Net Open Interest Change



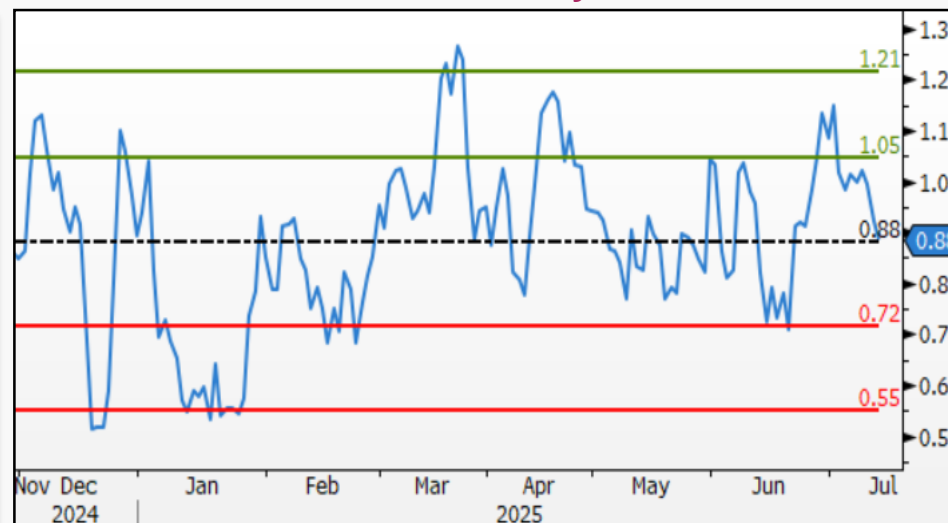
DII and FII Daily Cash Market Flows



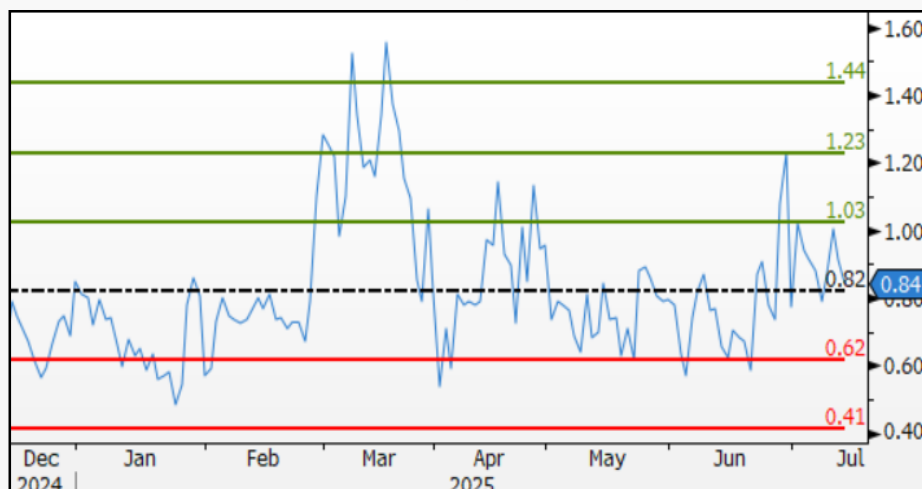
Nifty



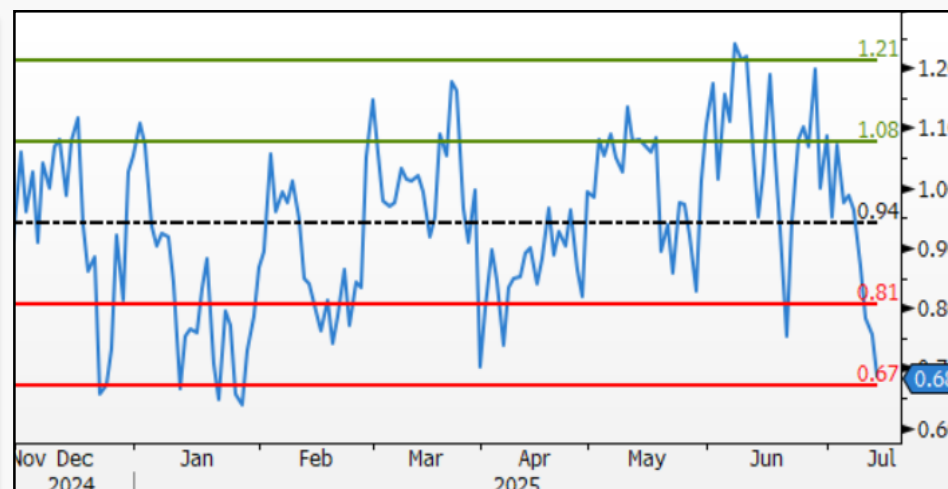
Bank Nifty



Fin Nifty

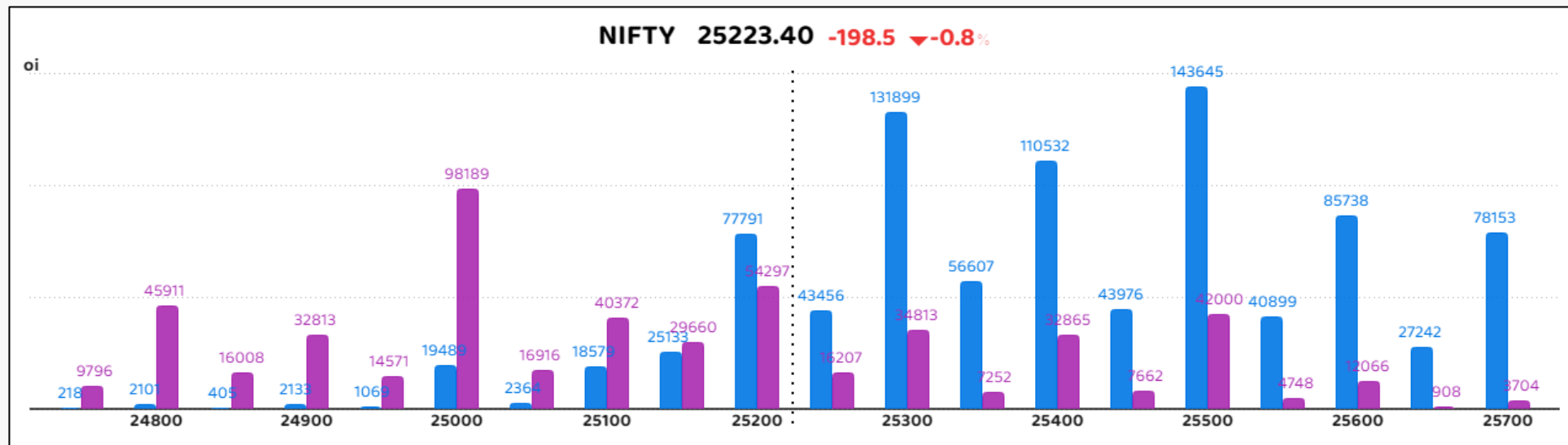


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,500 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 56,000 Put saw the most amount of open interest.

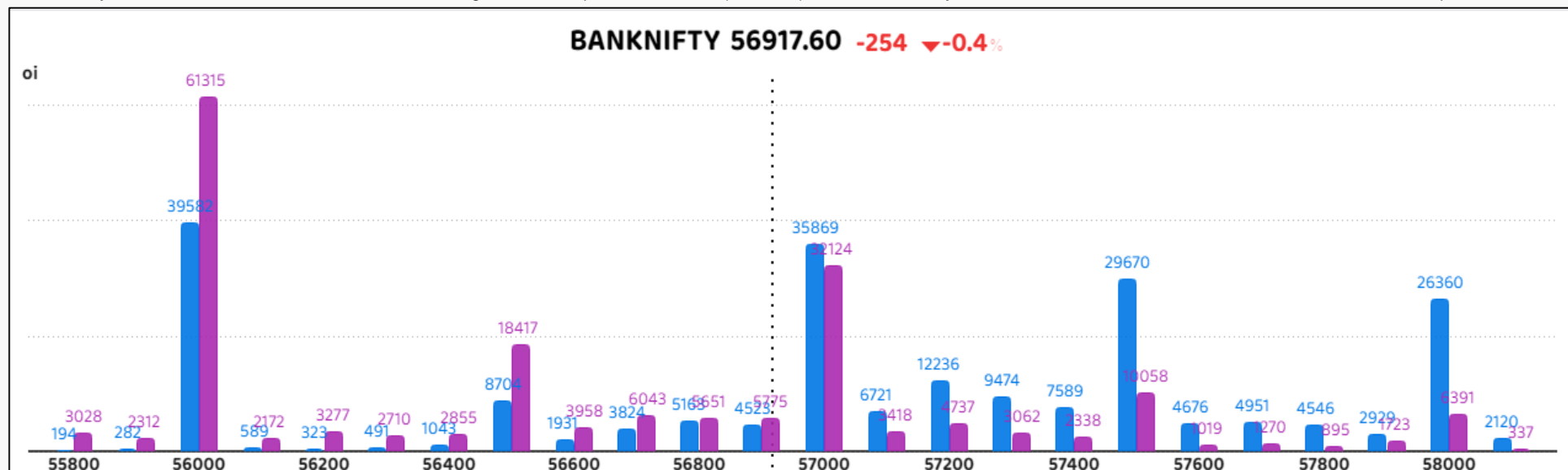
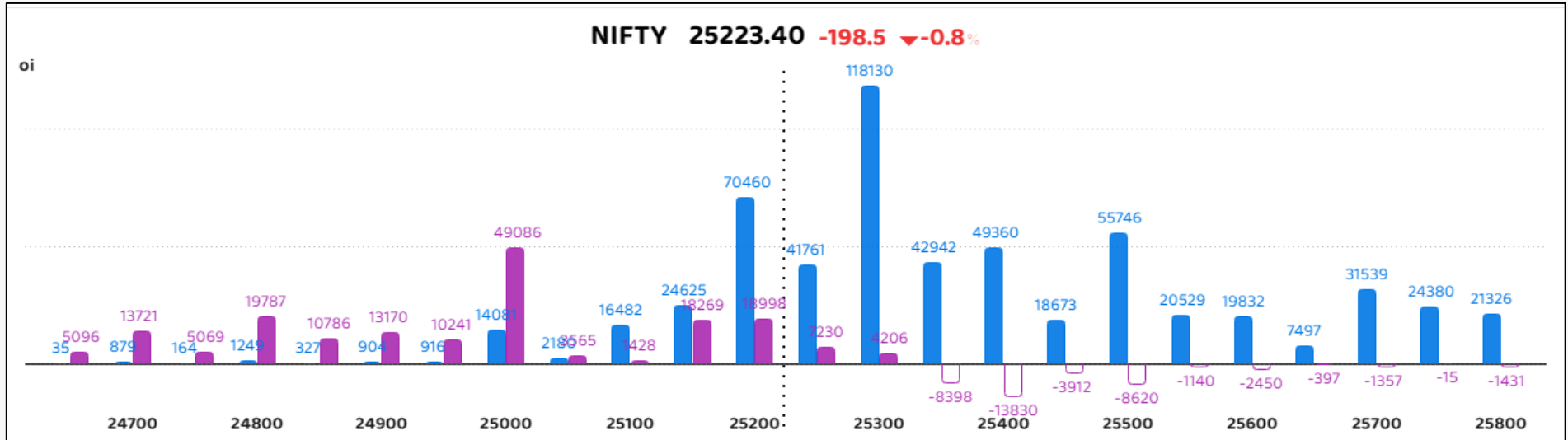


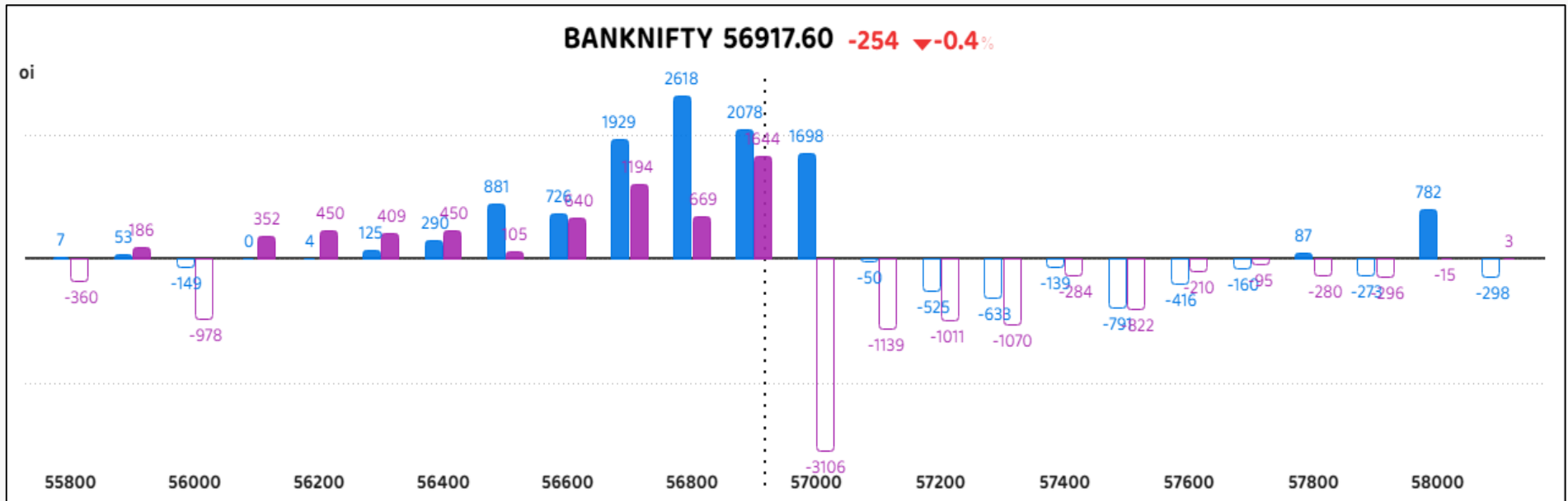
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,300 Call and the 25,000 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MANKIND PHARMA	2578.3	1.3	35.9	35.9	25.0	100.0
BLUE STAR LTD	1799.8	0.2	36.6	37.9	23.4	91.0
BOSCH LTD	36525	0.9	31.0	34.9	3.3	87.5
SBI CARDS & PAYMENTS	913.45	-2.4	28.2	36.9	4.6	73.0
GLENMARK PHARMA	2181.1	14.6	38.6	47.4	15.9	72.1

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NBCC INDIA LTD	112.9	-0.9	33.6	65.4	33.6	0.0
EXIDE INDUS LTD	380.65	-2.1	24.6	49.6	24.4	0.6
FED BANK LTD	207.38	-1.7	24.5	130.9	22.0	2.3
ADANI PORTS	1431.7	-0.8	24.4	99.7	22.5	2.5
SBI LIFE INSURANCE	1835.2	1.4	18.2	32.5	17.8	2.9

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MANKIND PHARMA	2578.3	1.3	35.9	35.9	25.0	100.0
BOSCH LTD	36525	0.9	31.0	34.9	3.3	98.2
GLENMARK PHARMA	2181.1	14.6	38.6	47.4	15.9	95.1
KAYNES TECHNOLOGY	5998	-2.7	40.8	49.4	32.2	94.6
WIPRO LTD	258.3	-2.5	35.4	93.6	21.3	90.7

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
NBCC INDIA LTD	112.9	-0.9	33.6	65.4	33.6	0.0
M&M FIN SERVICES	265.8	-0.7	19.2	50.0	17.3	0.5
SBI LIFE INSURANCE	1835.2	1.4	18.2	32.5	17.8	0.6
EICHER MOTORS	5612.5	-0.7	18.2	36.9	16.6	0.7
BPCL	344.85	-1.7	24.1	69.0	8.7	0.8

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ALKEM LABORATORIES	4806.7	1.6	12434	1669	7.5
CUMMINS INDIA	3546.4	0.8	11470	2549	4.5
BOSCH LTD	36525	0.9	117532	27143	4.3
PIRAMAL ENTERPRISES	1217.5	4.7	24317	5891	4.1
MANKIND PHARMA	2578.3	1.3	86327	21141	4.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
TATA ELXSI LTD	6137.5	-1.2	61205	76216	1.2
BHARAT FORGE CO	1234.8	-1.6	9044	11058	1.2
LTIMINDTREE LTD	5320	-2.1	4821	4788	1.0
INFO EDGE	1420.1	-3.2	10754	10272	1.0
SAMVARDHANA	153.53	-1.8	4950	4551	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
MANKIND PHARMA	2544	1.3	6576	6576	100.0
UNO MINDA LTD	1098.6	-2.3	2959	2959	100.0
PHOENIX MILLS	1509.6	-1.4	4058	4058	100.0
GLENMARK PHARMA	1904	14.6	25909	25909	100.0
TRENT LTD	5431	-1.2	85354	86284	98.9

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUSTAN UNILEVER	2519.6	4.6	25954	25954	100.0
TRENT LTD	5364	-1.2	35000	35000	100.0
MANKIND PHARMA	2578.3	1.3	3118	3118	100.0
UNO MINDA LTD	1073	-2.3	1127	1127	100.0
GLENMARK PHARMA	2181.1	14.6	23776	23776	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MANKIND PHARMA	2578.3	1.3	86327	86327	100.0
GLENMARK PHARMA	2181.1	14.6	218772	218772	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
BOSCH LTD	36525	0.9	14857	6740	2.2
MANKIND PHARMA	2578.3	1.3	6576	3087	2.1
GLENMARK PHARMA	2181.1	14.6	25909	12360	2.1
TATA CONSULTANCY	3266	-3.4	127541	61002	2.1
TRENT LTD	5364	-1.2	85354	42536	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
TATA ELXSI LTD	6066	-1.2	10326	3382	3.1
BOSCH LTD	36525	0.9	7582	3125	2.4
GLENMARK PHARMA	2181.1	14.6	23776	10109	2.4
MANKIND PHARMA	2578.3	1.3	3118	1551	2.0
AVENUE SUPERMART	4064.2	-2.5	11629	6498	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
GLENMARK PHARMA	2181.1	14.6	218772	28798	7.6
MANKIND PHARMA	2578.3	1.3	86327	13418	6.4
PIRAMAL ENTERPRISES	1217.5	4.7	24317	4128	5.9
TATA ELXSI LTD	6066	-1.2	61205	10730	5.7
HINDUSTAN UNILEVER	2519.6	4.6	176304	39436	4.5

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TATA ELXSI LTD	6066	-1.2	76216	7218	10.6
GLENMARK PHARMA	2181.1	14.6	174951	18796	9.3
MANKIND PHARMA	2578.3	1.3	21141	3433	6.2
HINDUSTAN UNILEVER	2519.6	4.6	80081	17583	4.6
IREDA	160	-5.7	12758	3154	4.0

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	1503900	5.5%	2559	2700	1799700	5.5%	ITC	420	12750400	0.8%	417	420	5630400	0.8%
ADANIPTS	1500	1573200	4.8%	1432	1400	1362300	-2.2%	JIOFIN	350	7954750	7.4%	326	300	4871550	-7.9%
APOLLOHOSP	7600	272750	5.7%	7190	7000	173125	-2.6%	JSWSTEEL	1180	1399950	13.8%	1037	1000	759375	-3.6%
ASIANPAINT	2500	1586500	2.5%	2439	2300	484000	-5.7%	KOTAKBANK	2300	864800	3.6%	2221	2100	736400	-5.4%
AXISBANK	1200	7868125	2.2%	1174	1200	1814375	2.2%	LT	3700	1017975	4.5%	3541	3500	578900	-1.1%
BAJAJ-AUTO	9000	219825	11.6%	8067	8000	119475	-0.8%	M&M	3200	1315600	4.1%	3073	3200	386400	4.1%
BAJAJFINSV	2100	1253000	4.1%	2017	1980	472500	-1.8%	MARUTI	12800	568400	1.8%	12574	12600	92200	0.2%
BAJFINANCE	950	2793000	1.8%	934	900	1898250	-3.6%	NESTLEIND	2500	405000	4.0%	2404	2400	190750	-0.1%
BEL	440	11089350	7.5%	409	400	6512250	-2.3%	NTPC	345	23661000	0.7%	343	345	4246500	0.7%
BHARTIARTL	2040	3360625	6.1%	1922	1900	804175	-1.1%	ONGC	250	21084750	3.4%	242	240	2929500	-0.7%
CIPLA	1600	886500	7.7%	1485	1340	397125	-9.8%	POWERGRID	300	4632200	0.5%	299	300	1976000	0.5%
COALINDIA	400	8772300	5.0%	381	400	3404700	5.0%	RELIANCE	1550	6265000	3.7%	1495	1500	2921500	0.3%
DRREDDY	1300	1485000	3.6%	1255	1100	811250	-12.3%	SBILIFE	1860	1135500	1.4%	1835	1840	229500	0.3%
EICHERMOT	5800	309400	3.3%	5613	5800	119700	3.3%	SBIN	820	19505250	1.4%	809	800	4797750	-1.1%
ETERNAL	270	6443225	2.5%	263	250	4076425	-5.1%	SHRIRAMFIN	700	1987425	4.8%	668	700	660825	4.8%
GRASIM	2900	243000	5.0%	2762	2600	125500	-5.9%	SUNPHARMA	1700	1698550	1.7%	1672	1500	605150	-10.3%
HCLTECH	1720	935200	5.0%	1638	1600	564200	-2.3%	TATACONSUM	1230	946550	14.2%	1077	980	564850	-9.0%
HDFCBANK	2020	5478000	1.8%	1984	2000	1967350	0.8%	TATAMOTORS	700	7863200	2.7%	682	700	3648800	2.7%
HDFCLIFE	820	2907300	8.0%	759	740	988900	-2.5%	TATASTEEL	170	20751500	6.4%	160	160	8211500	0.1%
HEROMOTOCO	4400	674100	4.3%	4219	4300	247500	1.9%	TCS	3500	3893225	7.2%	3266	3300	1361325	1.0%
HINDALCO	700	3442600	4.3%	671	650	1132600	-3.1%	TECHM	1670	1077000	4.2%	1603	1390	350400	-13.3%
HINDUNILVR	2560	1174500	1.6%	2520	2300	725400	-8.7%	TITAN	3500	1169875	4.1%	3362	3400	501550	1.1%
ICICIBANK	1450	2615200	2.0%	1422	1400	1810900	-1.5%	TRENT	6000	1132100	11.9%	5364	5500	385800	2.5%
INDUSINDBK	900	2720900	4.8%	859	800	970900	-6.9%	ULTRACEMCO	13800	119550	10.4%	12495	12000	72700	-4.0%
INFY	1700	3622400	6.6%	1595	1600	1868000	0.3%	WIPRO	270	5505000	4.5%	258	260	2706000	0.7%

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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