



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,539	0.0%▲
Open Interest (OI)	1,60,91,550	1.8%▲
Change in OI (abs)	1,60,91,550	2,80,575▲
Premium / Discount (Abs)	78	1▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	57,188	0.2%▼
Open interest (OI)	23,10,035	0.4%▲
Change in OI (abs)	23,10,035	8,890▲
Premium / Discount (Abs)	239	23▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.56	0.25▲
Nifty ATM IV (%)	11.82	0.5▲
Bank Nifty ATM IV (%)	12.73	0.4▲
PCR (Nifty)	0.95	0.02▲
PCR (Bank Nifty)	1.00	0.01▼

The FII Long Ratio in Index Futures **drop** to 26.2%, **down** from 26.3% in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	1,77,45,750	6.2%	489.55	2.7%
PGEL	34,04,100	6.1%	762.65	0.6%
LTIM	23,24,100	3.7%	5363.5	0.4%
GLENMARK	1,06,76,625	3.5%	1869.2	1.5%
PAGEIND	2,28,300	3.3%	48170	0.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KFINTECH	9,18,000	8.2%	1268.5	-2.5%
BLUESTARCO	21,41,750	6.1%	1809	-1.0%
JUBLFOOD	2,33,03,750	5.8%	685.7	-3.7%
MCX	26,83,000	5.5%	8798	-1.5%
HAVELLS	89,25,000	5.3%	1541.1	-2.8%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	11,68,500	-8.4%	1253.2	0.4%
NYKAA	5,98,15,625	-7.3%	201.91	1.8%
DABUR	2,12,36,250	-6.2%	508.9	3.6%
HINDUNILVR	1,74,34,800	-4.6%	2416.6	3.0%
AMBER	2,12,900	-3.6%	7451.5	0.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BSOFT	1,02,99,900	-4.7%	430.4	-0.8%
IGL	1,81,88,500	-3.5%	227.34	-0.1%
MGL	26,73,200	-3.3%	1543.5	-0.2%
OIL	1,52,01,200	-2.8%	441.45	-1.5%
HINDZINC	4,09,23,575	-2.6%	438.45	-1.8%

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

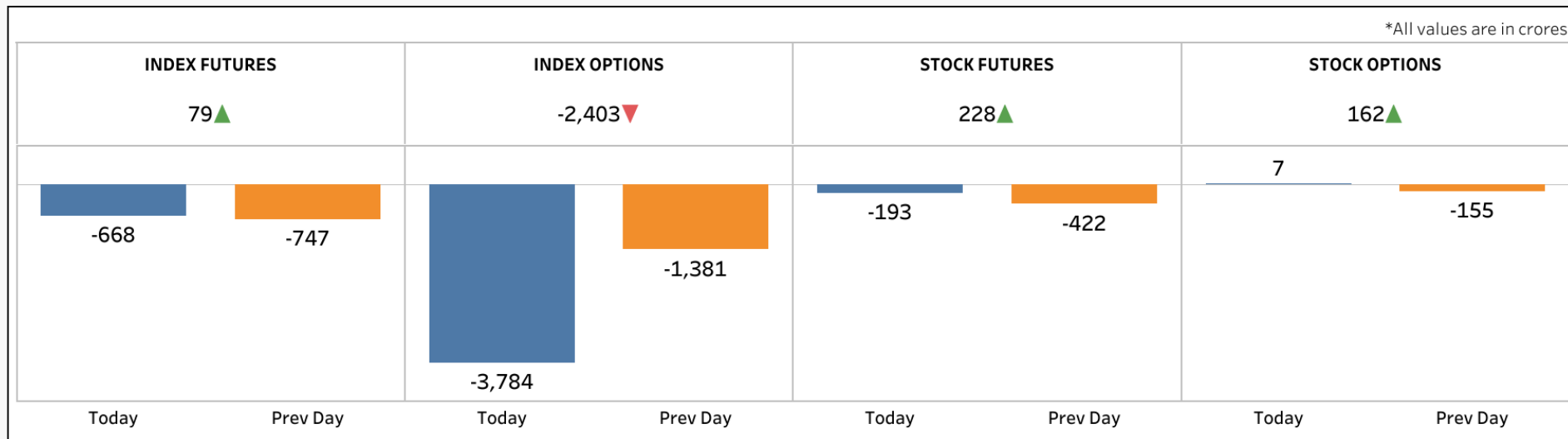
Open Interest Trends by Participant

▲ and ▼ indicate positive and negative absolute changes, respectively

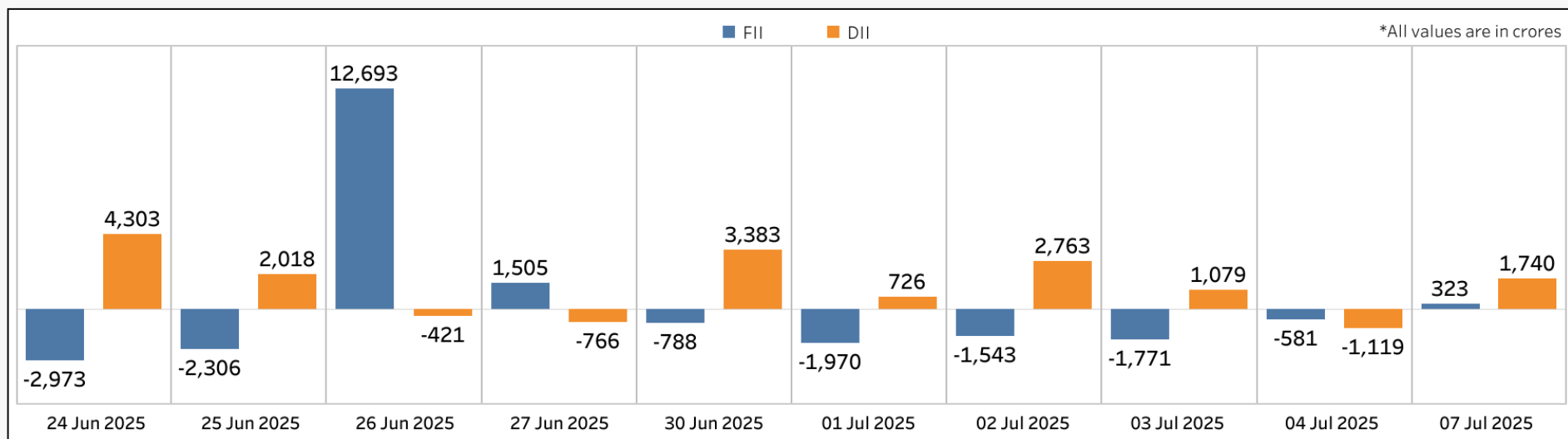
FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-14,084 ▼	464 ▲	2,184 ▲	691 ▲	0	1,745 ▲	-501 ▼	3,086 ▲
3,864				0	0	0	501
-10,220	-3,416	-9,737	-5,086	-120	-1,865		-6,901
	-3,880	-11,921	-5,777				-9,987
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
42,183	-69,103	142,289	1,557,366	70	31,432	18,084	-3,937,347
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
270,463 ▲	-345 ▼	47,570 ▲	-654 ▼	-256,379 ▼	-1,864 ▼	-49,254 ▼	-3,123 ▼
86,011	5,812	11,790	5,746	180,589			
	6,157	-35,780	6,400			47,200	6,241
-184,452				-75,790	-2,276	-2,054	9,364
					-412		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-180,422	37,516	-335,050	2,027,928	138,170	155	174,677	352,053
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

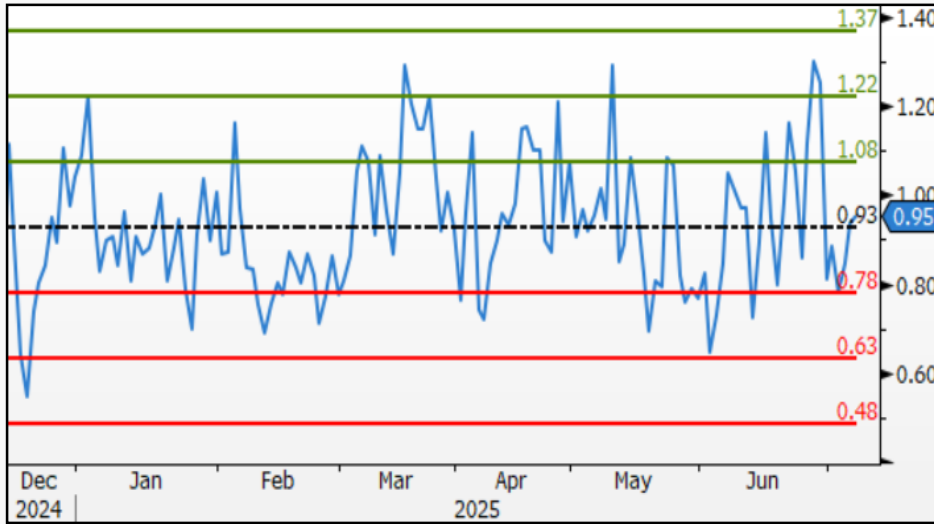
Daily Net Open Interest Change



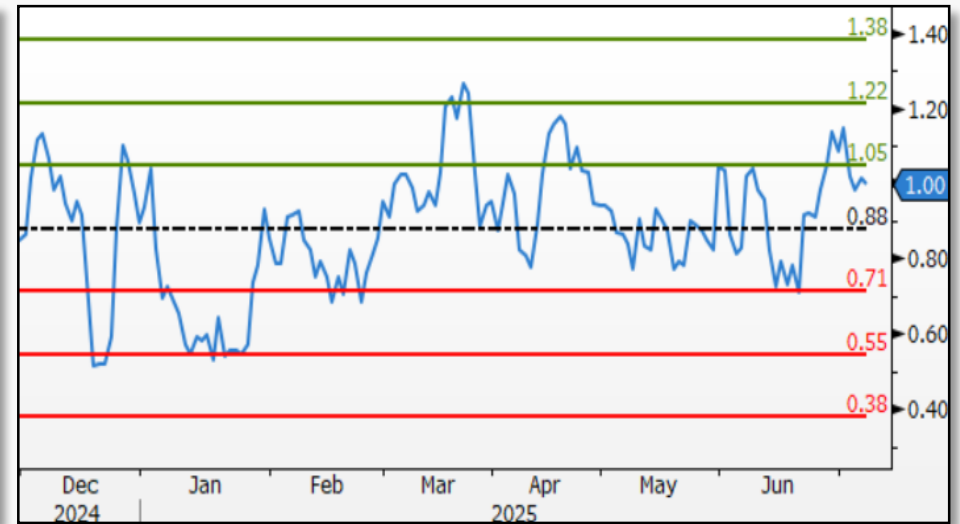
DII and FII Daily Cash Market Flows



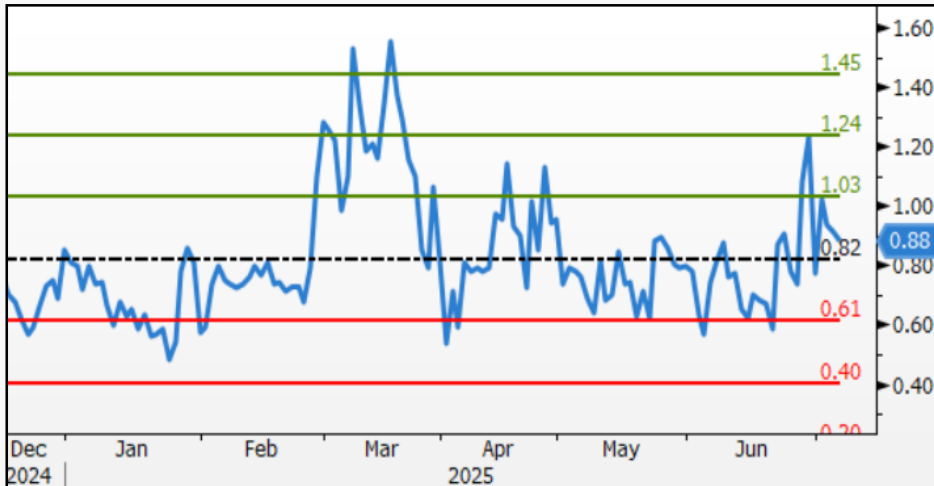
Nifty



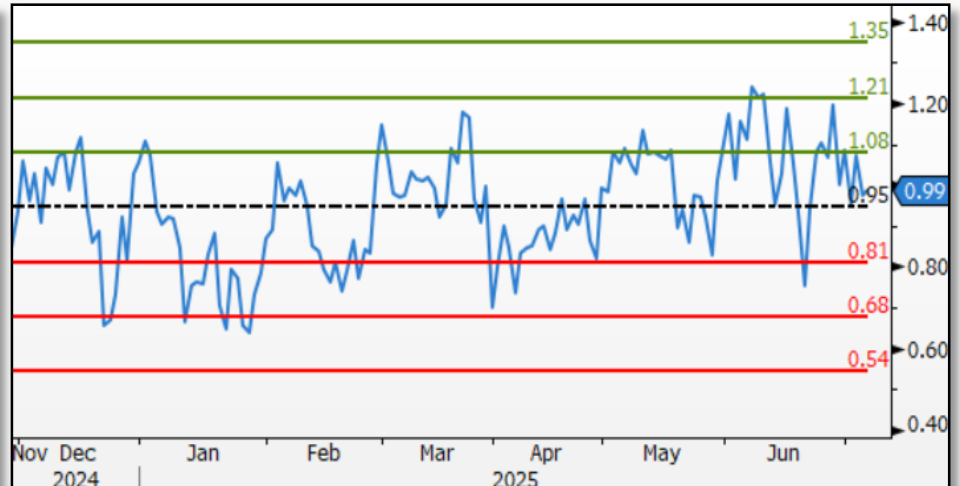
Bank Nifty



Fin Nifty

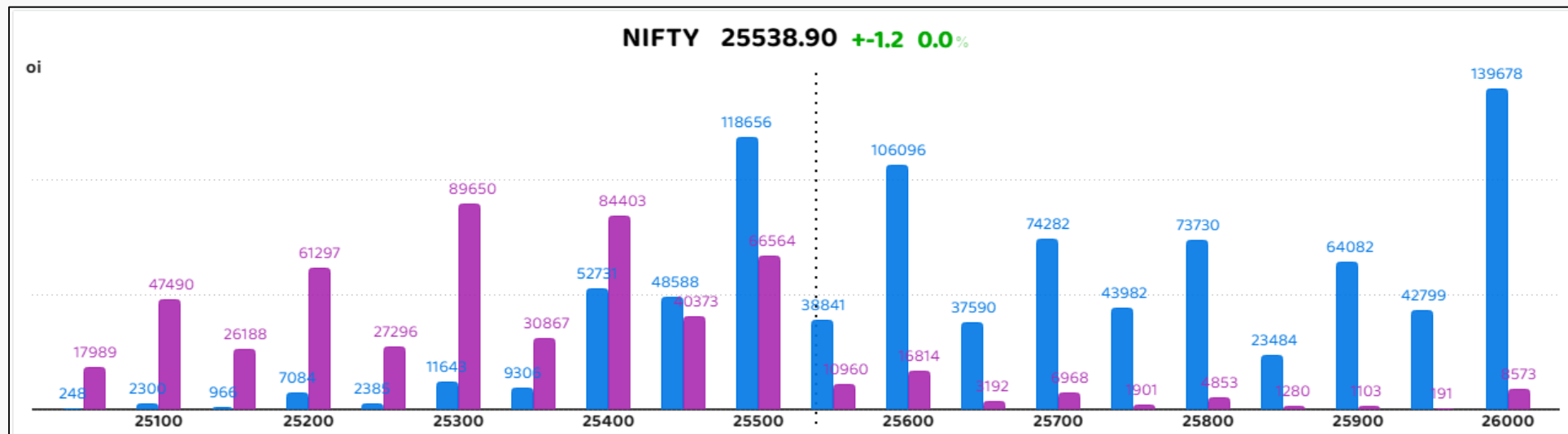


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,300 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 57,000 Put saw the most amount of open interest.

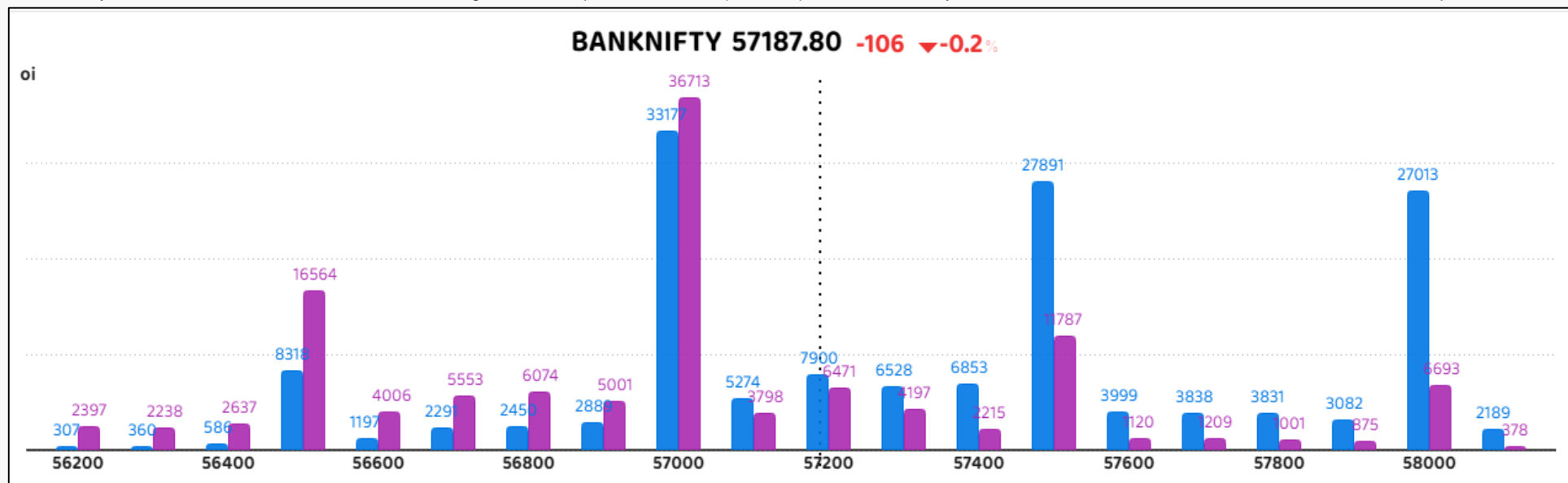
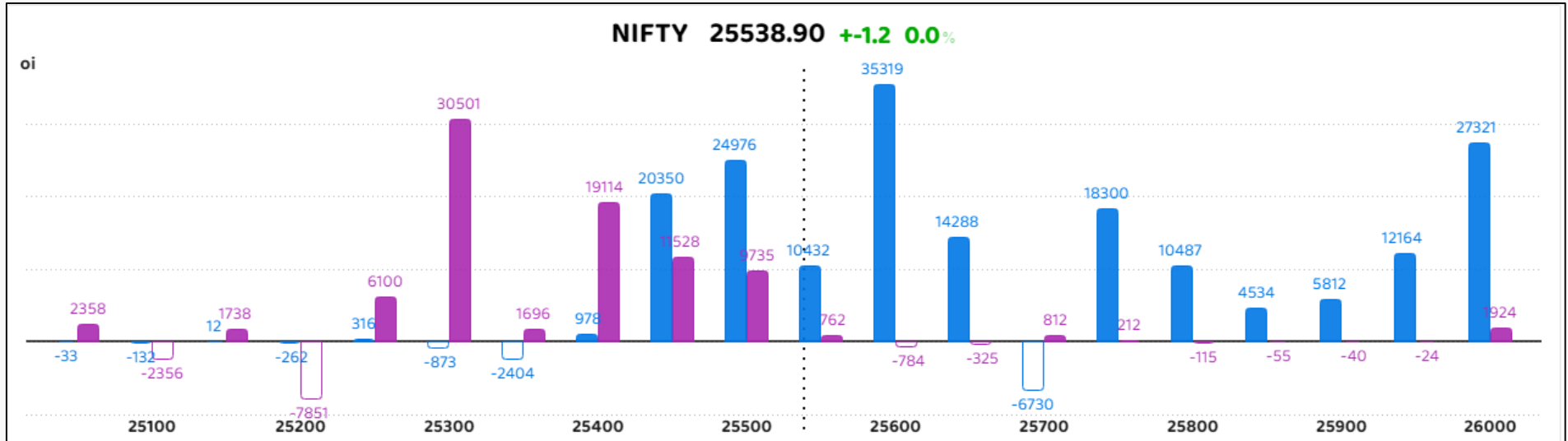


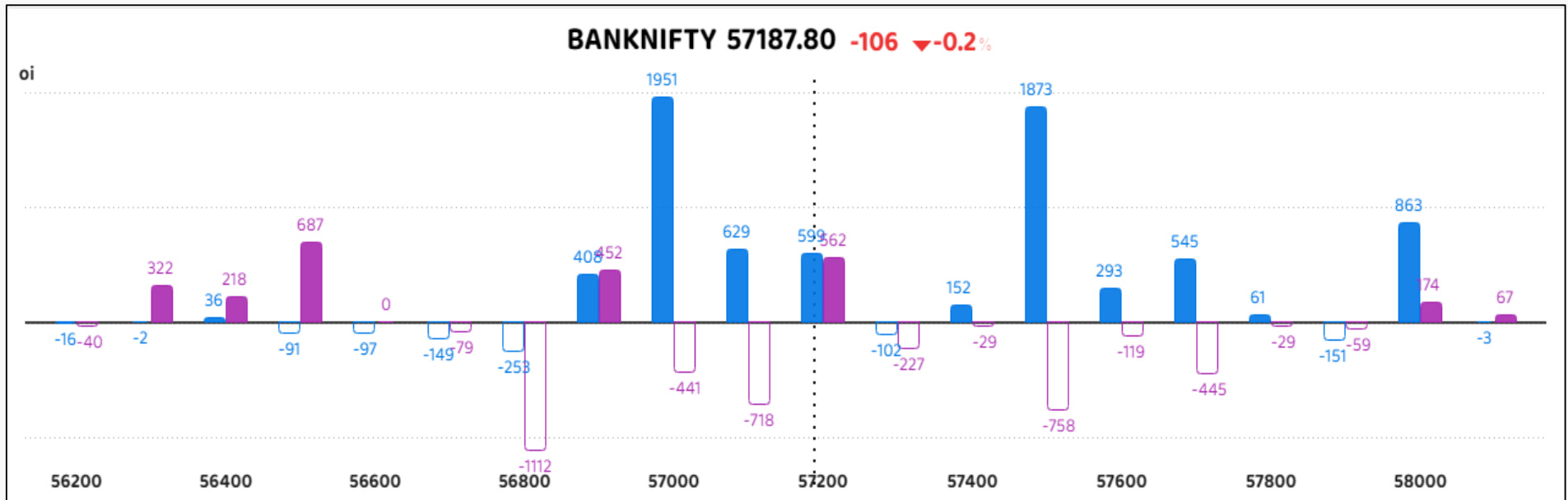
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,600 Call and the 25,300 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)
DIXON TECHNOLOGIES	15433	1.5	37.7	53.0	1.8	70.2
BOSCH LTD	36045	0.3	25.0	34.9	3.3	68.6
TITAN CO LTD	3666.1	-0.6	22.6	33.5	2.3	65.1
SBI CARDS & PAYMENTS	908.95	-0.1	25.3	36.9	4.6	64.1
ASTRAL LTD	1488.7	0.4	25.6	38.4	2.9	64.0

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
UNO MINDA LTD	1093.8	-0.4	30.5	42.4	30.5	0.0
CESC LTD	180.53	1.1	28.6	53.6	28.6	0.0
ADANI PORTS	1435.6	0.8	23.4	99.7	22.5	1.2
POWER FINANCE	411.5	-0.4	27.5	51.5	27.1	1.4
IREDA	167.13	0.3	34.3	74.5	33.6	1.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HCL TECH LTD	1710.4	-0.9	27.0	46.0	17.9	82.2
KAYNES TECHNOLOGY	6175	0.3	37.6	49.4	32.2	71.5
OBEROI REALTY	1844.3	-1.3	36.0	50.6	23.1	71.2
HAVELLS INDIA	1537.6	-2.5	27.8	39.1	17.8	69.5
DR REDDY'S LABS	1310.5	0.2	24.6	39.7	14.4	68.3

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
UNO MINDA LTD	1093.8	-0.4	30.5	42.4	30.5	0.0
CESC LTD	180.53	1.1	28.6	53.6	28.6	0.0
IRCTC	784.35	0.4	21.4	44.6	20.7	1.0
ADANI ENERGY	883.35	0.7	32.1	67.9	14.8	1.5
NTPC LTD	337.45	0.6	19.8	116.6	15.7	1.6

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
CUMMINS INDIA	3436.1	2.8	17548	2781	6.3
VARUN BEVERAGES	464.05	1.7	25747	4258	6.1
COLGATE PALMOLIVE	2465.4	0.8	9971	1968	5.1
TATA CONSUMER	1101.9	1.1	13487	2680	5.0
IIFL FINANCE LTD	487.2	2.6	22274	4586	4.9

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ICICI LOMBARD	2025.5	-0.5	1352	1260	0.9
ASHOK LEYLAND	249.8	0.0	1733	1554	0.9
BLUE STAR LTD	1826.7	-0.8	1988	1612	0.8
SONA BLW PRECISION	468.3	-2.1	2194	1728	0.8
POLYCAB INDIA LTD	6700	-0.3	5134	3996	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5499	0.8	78852	78852	100.0
BOSCH LTD	36045	0.3	15041	15041	100.0
GLENMARK PHARMA	1860.1	1.6	14899	14899	100.0
BLUE STAR LTD	1826.7	-0.8	3553	3553	100.0
UNO MINDA LTD	1093.8	-0.4	2287	2366	96.7

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5499	0.8	34015	34015	100.0
MANKIND PHARMA	2410.4	-1.2	1773	1773	100.0
BOSCH LTD	36045	0.3	8200	8200	100.0
BLUE STAR LTD	1826.7	-0.8	4319	4455	97.0
DABUR INDIA LTD	512.75	3.6	10968	11728	93.5

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
DABUR INDIA LTD	512.75	3.6	87715	87715	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	36045	0.3	15041	4516	3.3
TRENT LTD	5499	0.8	78852	31014	2.5
APL APOLLO TUBES	1734.1	1.0	6584	3789	1.7
SBI CARDS & PAYMENTS	908.95	-0.1	13011	7991	1.6
TORRENT PHARMA	3352.3	-0.5	5289	3259	1.6

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BOSCH LTD	36045	0.3	8200	2021	4.1
GODREJ CONSUMER	1268.4	6.3	4948	2132	2.3
BLUE STAR LTD	1826.7	-0.8	4319	1993	2.2
LAURUS LABS LTD	776.25	0.0	7937	4062	2.0
TRENT LTD	5499	0.8	34015	20045	1.7

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
GODREJ CONSUMER	1268.4	6.3	60113	6850	8.8
DABUR INDIA LTD	512.75	3.6	87715	11640	7.5
IIFL FINANCE LTD	487.2	2.6	22274	4321	5.2
BOSCH LTD	36045	0.3	100658	22879	4.4
HINDUSTAN UNILEVER	2410.4	3.0	130536	31650	4.1

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
GODREJ CONSUMER	1268.4	6.3	25589	2627	9.7
DABUR INDIA LTD	512.75	3.6	40849	6663	6.1
INFO EDGE	1431.1	-3.7	18524	3330	5.6
BOSCH LTD	36045	0.3	23469	4475	5.2
HINDUSTAN UNILEVER	2410.4	3.0	46083	13804	3.3

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	1575600	4.8%	2576	2700	1793400	4.8%	ITC	420	11812800	0.9%	416	420	5550400	0.9%
ADANIPTS	1500	1464900	4.5%	1436	1400	1481525	-2.5%	JIOFIN	330	8168600	0.6%	328	300	4871550	-8.6%
APOLLOHOSP	7600	241000	-0.2%	7616	7000	194875	-8.1%	JSWSTEEL	1180	1458675	13.2%	1043	1000	729000	-4.1%
ASIANPAINT	2500	962000	2.3%	2443	2300	537750	-5.8%	KOTAKBANK	2200	1154000	2.3%	2150	2100	779200	-2.3%
AXISBANK	1200	5041875	2.1%	1175	1200	1759375	2.1%	LT	3700	955325	3.3%	3581	3500	576275	-2.3%
BAJAJ-AUTO	9000	177000	6.3%	8464	8000	118425	-5.5%	M&M	3200	1184000	1.3%	3160	3200	438600	1.3%
BAJAJFINSV	2100	1376000	4.7%	2006	1980	610000	-1.3%	MARUTI	12800	434650	2.2%	12520	12000	87000	-4.2%
BAJFINANCE	950	3672000	2.7%	925	900	2134500	-2.7%	NESTLEIND	2500	419000	3.2%	2422	2300	162500	-5.0%
BEL	430	9886650	3.1%	417	400	6421050	-4.1%	NTPC	345	20157000	2.2%	337	330	2787000	-2.2%
BHARTIARTL	2040	3306475	0.3%	2034	1900	1085375	-6.6%	ONGC	250	14739750	3.5%	242	240	2661750	-0.6%
CIPLA	1600	783750	5.9%	1511	1340	406125	-11.3%	POWERGRID	300	4457400	1.4%	296	290	2065300	-2.0%
COALINDIA	400	7360200	4.1%	384	400	3461400	4.1%	RELIANCE	1600	4560500	3.8%	1542	1500	3102000	-2.7%
DRREDDY	1400	1110625	6.8%	1311	1100	796875	-16.1%	SBILIFE	1900	944250	5.1%	1808	1800	190875	-0.5%
EICHERMOT	5800	300650	2.1%	5683	5800	120050	2.1%	SBIN	820	17571000	1.6%	807	800	5623500	-0.8%
ETERNAL	270	5739975	4.4%	259	250	3836350	-3.3%	SHRIRAMFIN	700	2097150	4.3%	671	700	716925	4.3%
GRASIM	3000	255500	7.9%	2779	2600	112750	-6.4%	SUNPHARMA	1700	1663200	1.2%	1680	1500	462000	-10.7%
HCLTECH	1960	847350	14.6%	1710	1700	370300	-0.6%	TATACONSUM	1230	942700	11.6%	1102	980	564300	-11.1%
HDFCBANK	2020	4414300	1.6%	1987	1900	1888150	-4.4%	TATAMOTORS	700	7558400	1.6%	689	700	3693600	1.6%
HDFCLIFE	820	2644400	3.9%	789	740	1084600	-6.3%	TATASTEEL	170	20273000	4.7%	162	160	8959500	-1.5%
HEROMOTOCO	4400	552000	2.2%	4307	4200	285600	-2.5%	TCS	3500	2073750	2.6%	3412	3400	890400	-0.3%
HINDALCO	700	3304000	1.1%	692	700	953400	1.1%	TECHM	1670	1079400	2.8%	1624	1390	353400	-14.4%
HINDUNILVR	2400	1141800	-0.4%	2410	2300	1181700	-4.6%	TITAN	3880	575925	5.8%	3666	3600	306950	-1.8%
ICICIBANK	1500	2658600	4.5%	1436	1400	1863400	-2.5%	TRENT	6000	1075100	9.1%	5499	5500	457600	0.0%
INDUSINDBK	900	2800000	5.3%	854	800	1044400	-6.4%	ULTRACEMCO	13800	118550	11.8%	12345	11000	63500	-10.9%
INFY	1700	3852400	4.5%	1627	1600	1144800	-1.7%	WIPRO	310	5394000	15.8%	268	240	2298000	-10.4%

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 (DIIIs), 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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