



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,540	0.1%▲
Open Interest (OI)	1,58,10,975	0.2%▼
Change in OI (abs)	1,58,10,975	28,200▼
Premium / Discount (Abs)	79	24▼
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,294	0.3%▲
Open interest (OI)	23,01,145	2.3%▼
Change in OI (abs)	23,01,145	54,670▼
Premium / Discount (Abs)	262	66▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.31	0.07▼
Nifty ATM IV (%)	11.33	0.3▼
Bank Nifty ATM IV (%)	12.29	0.4▼
PCR (Nifty)	0.93	0.06▼
PCR (Bank Nifty)	1.01	0.03▲

The FII Long Ratio in Index Futures **drop** to 26.3%, **down** from 29.3% in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PAGEIND	2,20,935	13.9%	47985	0.4%
BOSCHLTD	3,53,350	11.3%	35510	4.5%
<b>BLUESTARCO</b>	20,19,225	8.1%	1826.6	0.6%
PETRONET	4,46,27,400	7.1%	301.25	0.6%
IGL	1,88,45,750	6.7%	227.47	3.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	26,33,250	20.2%	2772.9	-6.5%
BSE	1,23,54,375	16.7%	2640.1	-6.9%
KFINTECH	8,48,700	9.8%	1301.4	-2.7%
CDSL	94,43,475	5.3%	1761.7	-2.8%
MCX	25,43,625	4.9%	8931.5	-1.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
LTF	5,57,83,924	-4.7%	206.24	1.3%
HAL	91,02,000	-4.5%	5020.3	1.3%
ACC	42,69,000	-3.8%	1970.4	0.4%
BIOCON	3,84,15,000	-3.7%	381.15	1.4%
INOXWIND	4,02,64,125	-3.4%	180.89	2.3%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DALBHARAT	31,02,125	-8.4%	2184.8	-1.7%
EICHERMOT	29,15,500	-4.2%	5653	-1.4%
OBEROIRLTY	45,87,800	-2.7%	1877.1	-0.1%
OIL	1,56,39,400	-2.2%	448.2	-1.3%
HINDCOPPER	3,47,36,200	-1.7%	278.95	-1.0%

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

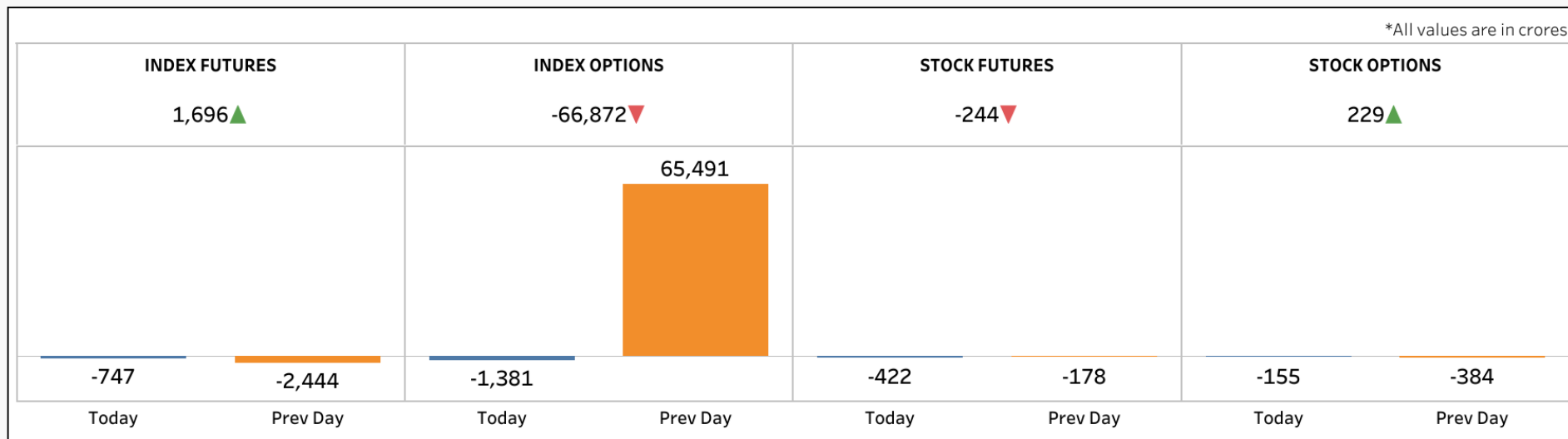
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-105,798 ▼	8,706 ▲	-32,856 ▼	-3,089 ▼	0	-3,841 ▼	501 ▲	-117 ▼
109,662				0	1,976	501	
3,864		20,935			-1,865		
	-3,880	-11,921	-5,777				-9,987
	-12,586		-2,688				-9,870
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
52,403	-65,687	152,026	1,562,452	70	31,552	18,084	-3,930,446
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

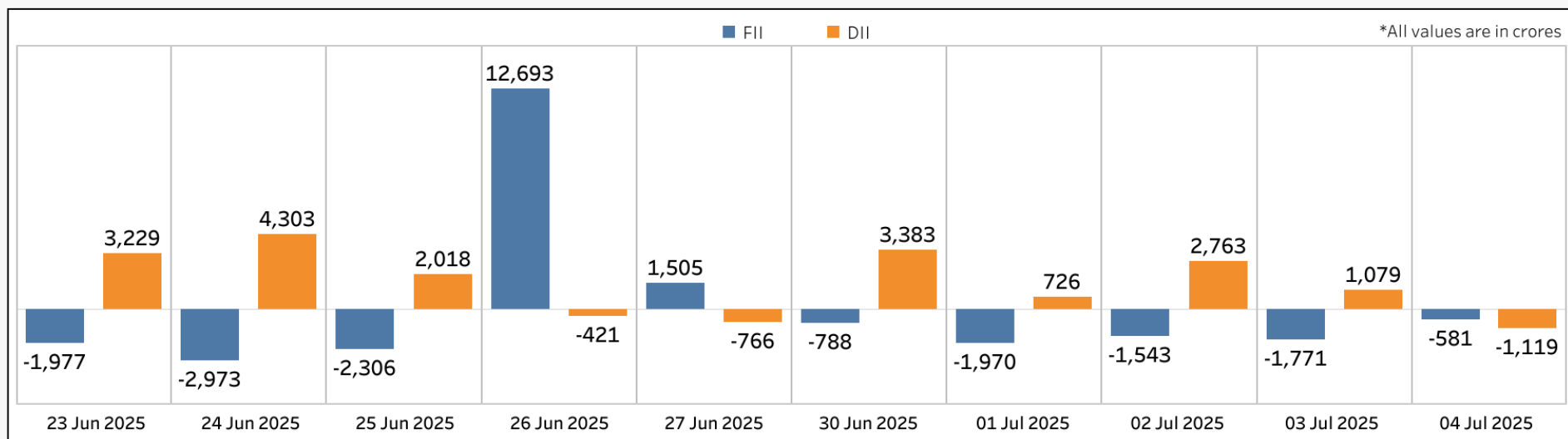
  

Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-131,230 ▼	-1,732 ▼	32,991 ▲	-3,683 ▼	237,029 ▲	-3,133 ▼	-636 ▼	6,889 ▲
	6,157		6,400	180,589			
	7,889		10,083		2,721	47,200	9,364
-53,222		-35,780		-56,440	-412	47,836	2,475
		-68,771					
-184,452							
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-266,433	31,704	-346,840	2,022,182	213,960	2,431	176,731	345,812
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

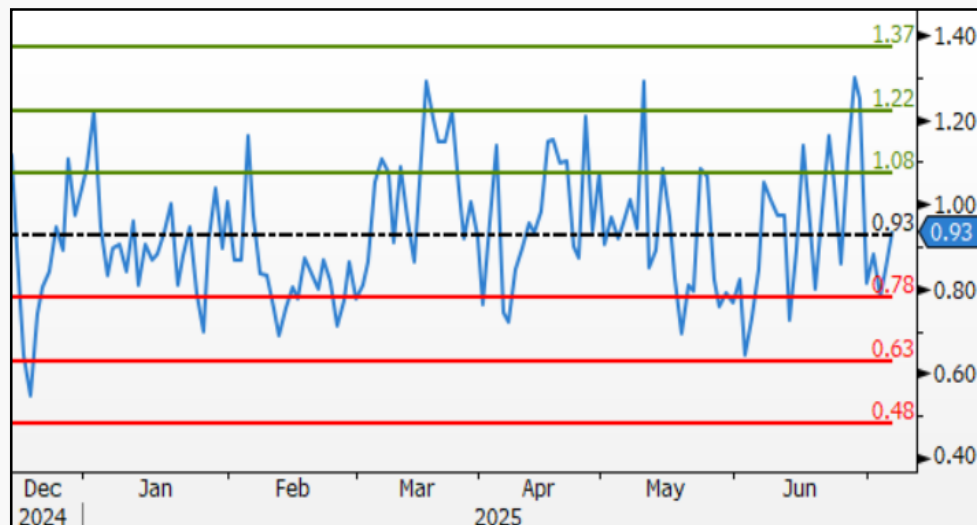
## Daily Net Open Interest Change



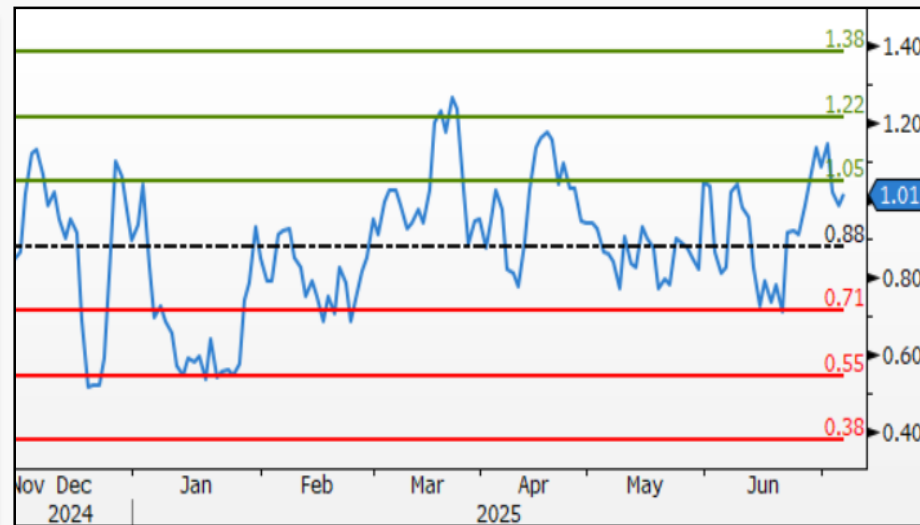
## DII and FII Daily Cash Market Flows



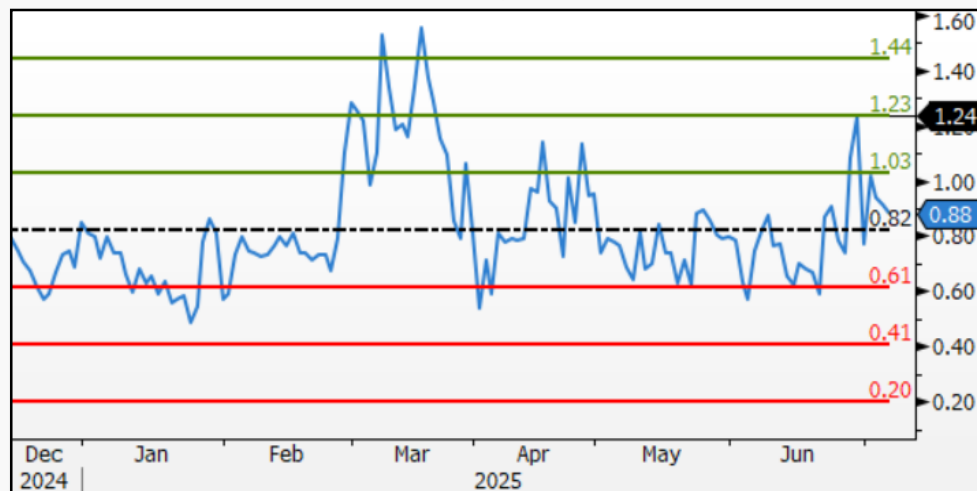
## Nifty



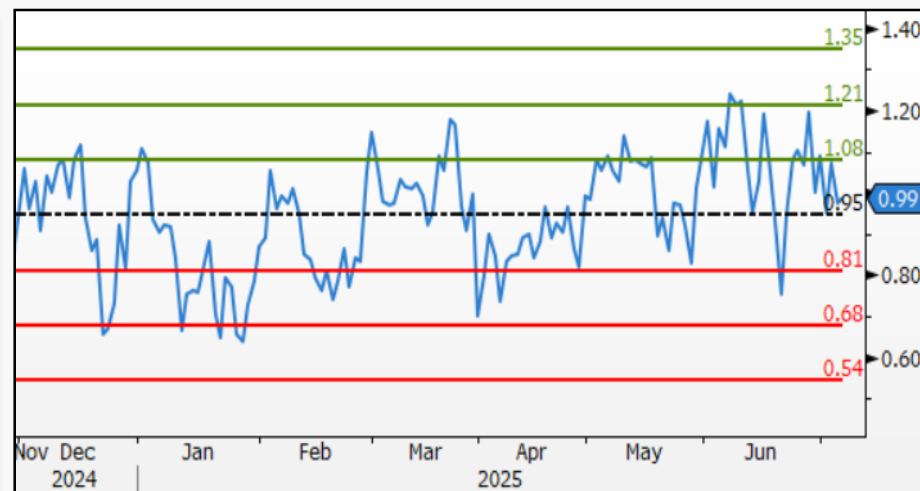
## Bank Nifty



## Fin Nifty

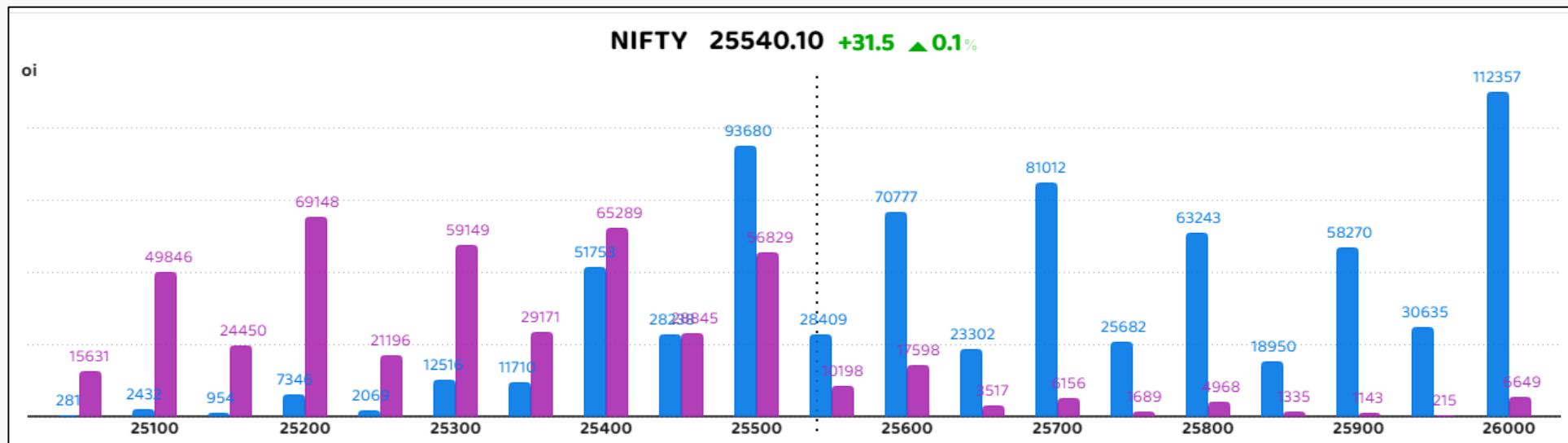


## Midcap Select Nifty



## 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 57,000 Call and the 57,000 Put saw the most amount of open interest.

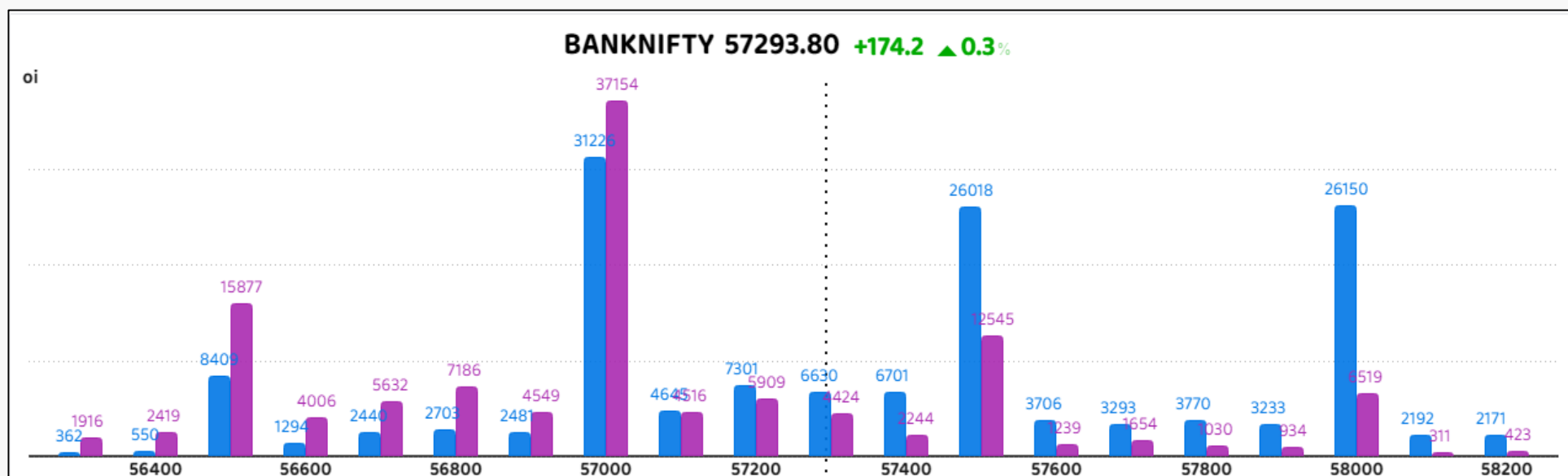
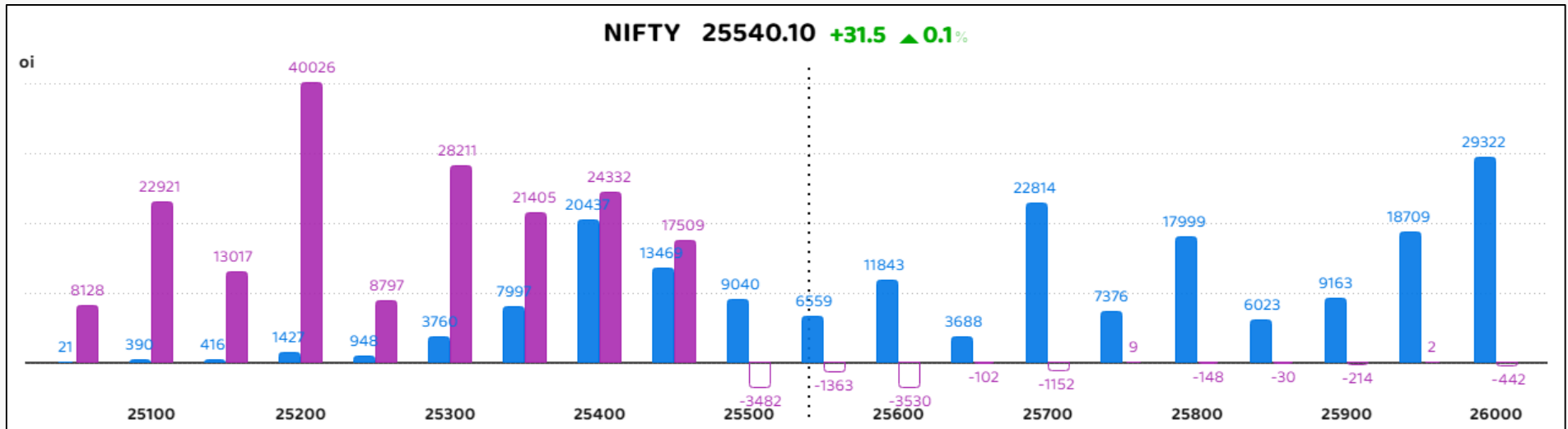


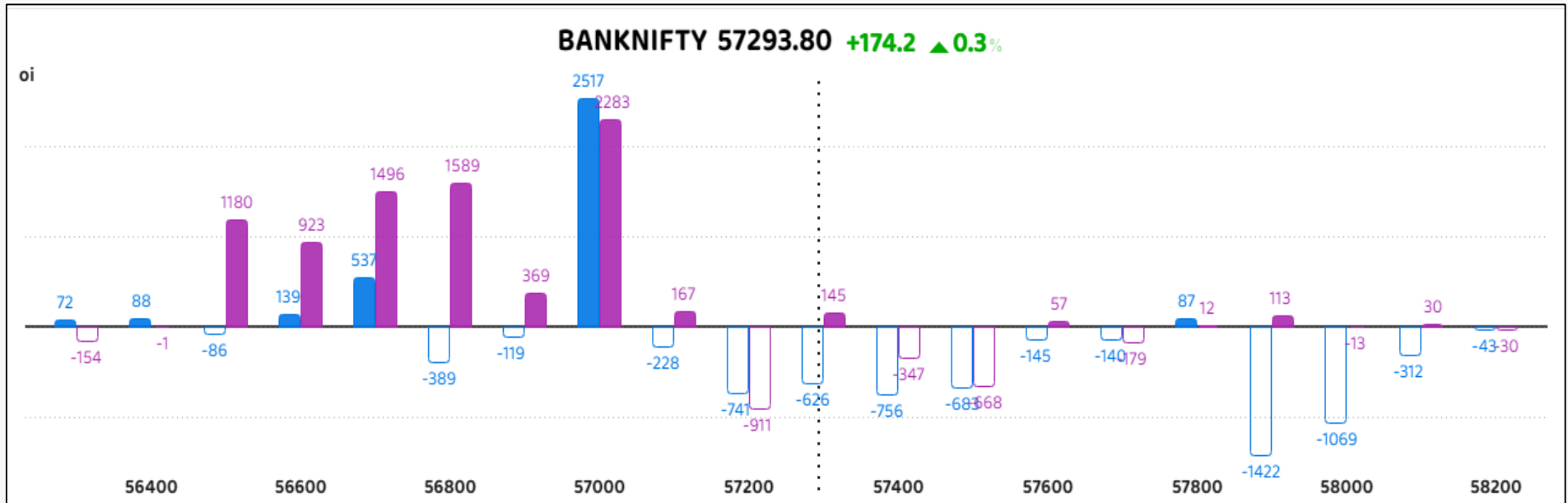
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,200 Put



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

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
IREDA	166.67	-0.5	74.5	74.5	33.6	100.0
SBI CARDS & PAYMENTS	909.6	-0.2	28.2	36.9	4.6	72.9
BOSCH LTD	35930	4.4	25.7	34.9	3.3	70.7
DIXON TECHNOLOGIES	15202	0.8	36.5	53.0	1.8	67.8
TITAN CO LTD	3686.9	0.2	22.0	33.5	2.3	63.1

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADANI PORTS	1424.4	-0.5	22.5	99.7	22.5	0.0
ADANI GREEN ENERGY	996.8	-1.2	35.3	74.3	35.3	0.0
MAZAGON DOCK	3329	1.3	37.1	48.4	37.1	0.0
UNO MINDA LTD	1098.6	-0.1	31.3	42.4	31.3	0.0
VODAFONE IDEA LTD	7.36	-1.7	40.4	137.0	40.2	0.3



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
IREDA	166.67	-0.5	74.5	74.5	33.6	100.0
HCL TECH LTD	1725.9	0.8	28.5	46.0	17.9	91.7
KAYNES TECHNOLOGY	6156.5	-0.3	39.0	49.4	32.2	90.2
TATA ELXSI LTD	6209	-0.1	36.9	51.9	23.0	85.8
SBI CARDS & PAYMENTS	909.6	-0.2	28.2	36.9	4.6	82.7

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI PORTS	1424.4	-0.5	22.5	99.7	22.5	0.0
ADANI GREEN ENERGY	996.8	-1.2	35.3	74.3	35.3	0.0
MAZAGON DOCK	3329	1.3	37.1	48.4	37.1	0.0
UNO MINDA LTD	1098.6	-0.1	31.3	42.4	31.3	0.0
VODAFONE IDEA LTD	7.36	-1.7	40.4	137.0	40.2	0.6

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BOSCH LTD	35930	4.4	186568	30793	6.1
EXIDE INDUS LTD	383.45	0.1	8339	1377	6.1
ADITYA BIRLA FASHION	78.33	2.3	20112	3390	5.9
INFO EDGE	1486.4	2.9	10660	1831	5.8
MANKIND PHARMA	2439.5	3.3	29361	5263	5.6

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALMIA BHARAT LTD	2179.3	-1.4	3274	5690	1.7
HFCL LTD	84.6	0.1	1050	1523	1.5
MAX FINANCIAL	1589.9	-1.8	1969	2615	1.3
GRASIM INDS LTD	2805.9	-0.4	3234	3521	1.1
MCX INDIA LTD	8884.5	-1.3	17200	14648	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5456	-11.9	76759	76759	100.0
BLUE STAR LTD	1841.2	-0.1	3552	3552	100.0
BOSCH LTD	35930	4.4	9500	9551	99.5
GLENMARK PHARMA	1830.4	2.6	11722	12143	96.5
KAYNES TECHNOLOGY	6156.5	-0.3	4386	4633	94.7

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5456	-11.9	33666	33666	100.0
MANKIND PHARMA	2439.5	3.3	1719	1719	100.0
BOSCH LTD	35930	4.4	7346	7346	100.0
BLUE STAR LTD	1841.2	-0.1	4455	4455	100.0
LAURUS LABS LTD	776	2.3	7681	8491	90.5

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BOSCH LTD	35930	4.4	186568	186568	100.0
MANKIND PHARMA	2439.5	3.3	29361	31000	94.7

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
TRENT LTD	5456	-11.9	283186	283186	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
TRENT LTD	5456	-11.9	76759	28000	2.7
BOSCH LTD	35930	4.4	9500	3920	2.4
MARICO LTD	728.6	2.1	6283	3553	1.8
APL APOLLO TUBES	1717.6	-0.7	6271	3630	1.7
TORRENT PHARMA	3368	1.0	5206	3088	1.7

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BOSCH LTD	35930	4.4	7346	1655	4.4
BLUE STAR LTD	1841.2	-0.1	4455	1834	2.4
LAURUS LABS LTD	776	2.3	7681	3788	2.0
TRENT LTD	5456	-11.9	33666	19113	1.8
SHREE CEMENT	31315	-0.3	2487	1501	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	35930	4.4	186568	17921	10.4
ADITYA BIRLA FAS	78.33	2.3	20112	3703	5.4
MARICO LTD	728.6	2.1	30175	5785	5.2
MANKIND PHARMA L	2439.5	3.3	29361	6155	4.8
TRENT LTD	5456	-11.9	356167	107855	3.3

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BOSCH LTD	35930	4.4	30793	3320	9.3
TRENT LTD	5456	-11.9	283186	54963	5.2
MARICO LTD	728.6	2.1	14013	2935	4.8
DALMIA BHARAT LT	2179.3	-1.4	5690	1705	3.3
MANKIND PHARMA L	2439.5	3.3	5263	1757	3.0

## 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	1530600	3.9%	2599	2700	1789800	3.9%	ITC	420	12155200	1.8%	413	420	5601600	1.8%
ADANIPTS	1500	1567025	5.3%	1424	1400	1472975	-1.7%	JIOFIN	350	7134600	7.7%	325	300	4876250	-7.7%
APOLLOHOSP	8000	235625	5.9%	7554	7000	193500	-7.3%	JSWSTEEL	1180	1460700	13.3%	1041	1000	753975	-4.0%
ASIANPAINT	2500	766500	3.1%	2424	2300	523250	-5.1%	KOTAKBANK	2200	1128400	3.3%	2130	2100	826800	-1.4%
AXISBANK	1200	4762500	1.9%	1178	1200	1766250	1.9%	LT	3700	927675	2.9%	3595	3500	564550	-2.6%
BAJAJ-AUTO	9000	179025	6.7%	8433	8000	113400	-5.1%	M&M	3200	1115800	1.2%	3163	3200	430000	1.2%
BAJAJFINSV	2100	1447500	5.3%	1994	1980	614000	-0.7%	MARUTI	12800	405500	1.2%	12646	12000	88250	-5.1%
BAJFINANCE	950	3738750	2.7%	925	900	2239500	-2.7%	NESTLEIND	2500	415500	4.5%	2393	2300	184250	-3.9%
BEL	430	8755200	0.6%	428	400	5725650	-6.4%	NTPC	345	19152000	2.8%	336	330	2944500	-1.6%
BHARTIARTL	2040	3296025	1.1%	2017	1900	980875	-5.8%	ONGC	245	13279500	-0.1%	245	240	2713500	-2.1%
CIPLA	1680	696000	11.0%	1513	1340	407625	-11.5%	POWERGRID	300	4208500	2.0%	294	290	2205900	-1.4%
COALINDIA	400	6605550	3.6%	386	400	3465450	3.6%	RELIANCE	1600	4771000	4.8%	1527	1500	2927000	-1.8%
DRREDDY	1400	1088750	7.1%	1307	1100	798125	-15.9%	SBILIFE	1900	940125	5.6%	1800	1800	194250	0.0%
EICHERMOT	5800	284900	3.0%	5629	5800	119525	3.0%	SBIN	820	15872250	1.0%	812	800	5685000	-1.5%
ETERNAL	270	5642975	3.3%	261	250	3758750	-4.4%	SHRIRAMFIN	700	2140875	3.5%	676	700	714450	3.5%
GRASIM	3000	252250	6.9%	2806	2600	117750	-7.3%	SUNPHARMA	1700	1618750	1.4%	1676	1500	463750	-10.5%
HCLTECH	1960	859600	13.6%	1726	1600	368200	-7.3%	TATACONSUM	1230	944900	12.9%	1090	980	563200	-10.1%
HDFCBANK	2020	3723500	1.5%	1989	2000	1798500	0.5%	TATAMOTORS	700	7244800	1.6%	689	680	3672800	-1.3%
HDFCLIFE	820	2632300	4.4%	785	740	1094500	-5.7%	TATASTEEL	170	20691000	4.3%	163	160	8816500	-1.8%
HEROMOTOCO	4300	471900	-1.0%	4345	4200	298200	-3.3%	TCS	3500	1967000	2.3%	3420	3400	919100	-0.6%
HINDALCO	700	2898000	0.1%	699	700	956200	0.1%	TECHM	1670	1067400	0.9%	1655	1390	360600	-16.0%
HINDUNILVR	2400	1338900	2.6%	2339	2300	950400	-1.7%	TITAN	3880	572600	5.2%	3687	3600	311500	-2.4%
ICICIBANK	1500	2705500	4.0%	1443	1400	1941800	-3.0%	TRENT	6000	1018300	10.0%	5456	4800	451300	-12.0%
INDUSINDBK	900	2755900	5.1%	856	800	1066800	-6.6%	ULTRACEMCO	13800	101800	10.3%	12506	11000	68600	-12.0%
INFY	1700	3966800	3.6%	1641	1600	1150000	-2.5%	WIPRO	280	5127000	3.7%	270	240	2232000	-11.1%

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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