



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,555	0.3% ▼
Open Interest (OI)	1,83,38,625	0.7% ▲
Change in OI (abs)	1,83,38,625	1,31,475 ▲
Premium / Discount (Abs)	68	25 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,287	0.5% ▼
Open interest (OI)	31,31,135	3.4% ▲
Change in OI (abs)	31,31,135	1,03,285 ▲
Premium / Discount (Abs)	244	214 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.23	0.01 ▲
Nifty ATM IV (%)	10.59	0.2 ▲
Bank Nifty ATM IV (%)	11.63	0.5 ▲
PCR (Nifty)	0.78	0.25 ▼
PCR (Bank Nifty)	0.76	0.05 ▼

The FII Long Ratio in Index Futures **drop** to 7.9 %, **down** from 8.5 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ALKEM	14,21,750	28.1%	5171.5	6.5%
NUVAMA	1,34,700	22.7%	6890	0.6%
JINDALSTEL	1,27,19,375	7.2%	999.9	0.8%
PATANJALI	1,06,46,400	4.8%	1822.5	2.0%
MARUTI	31,33,550	3.1%	12857	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ASTRAL	89,31,375	39.1%	1271.2	-8.2%
360ONE	52,81,000	13.7%	1022.6	-2.3%
RVNL	1,65,66,000	9.3%	326.9	-4.3%
KALYANKJIL	2,61,77,825	8.7%	524.95	-2.6%
EICHERMOT	34,18,450	6.4%	5680	-0.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PGEL	1,42,28,900	-13.5%	516	1.2%
JSL	45,14,350	-9.5%	712.7	5.1%
CESC	1,12,70,125	-6.2%	165.26	1.7%
MCX	19,29,750	-4.5%	8162	2.5%
ATGL	28,63,875	-3.4%	614.55	2.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CUMMINSIND	34,78,400	-3.0%	3770.4	-1.0%
DELHIVERY	1,32,50,950	-2.7%	464	-1.3%
GODREJCP	78,73,500	-2.3%	1196.9	0.0%
SBIN	10,78,24,500	-2.2%	822.45	-0.4%
ITC	9,50,48,000	-2.0%	417.1	-0.2%

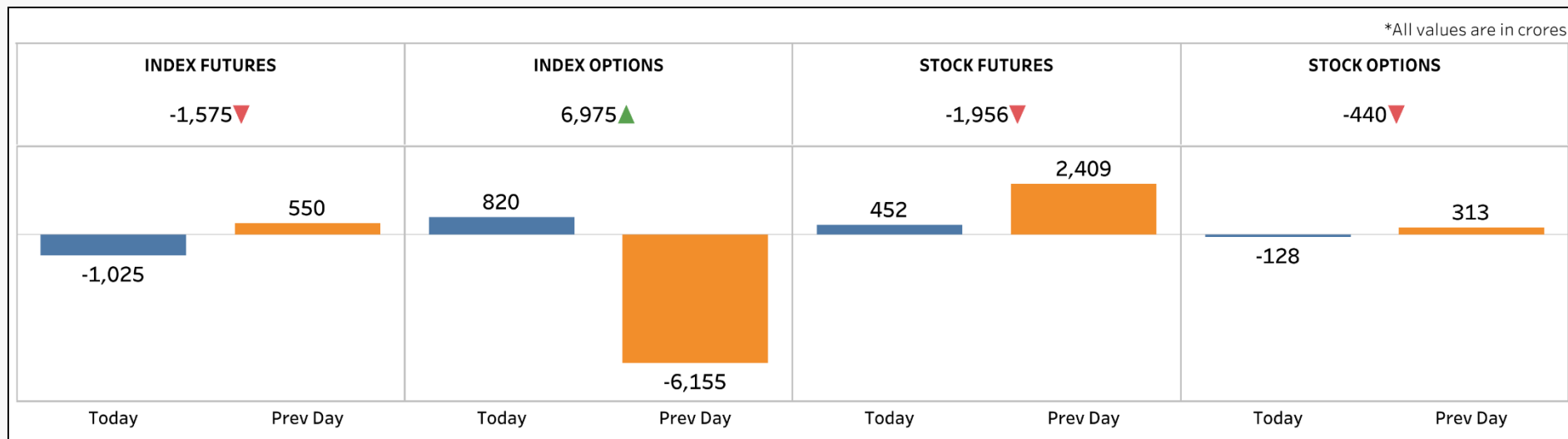
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

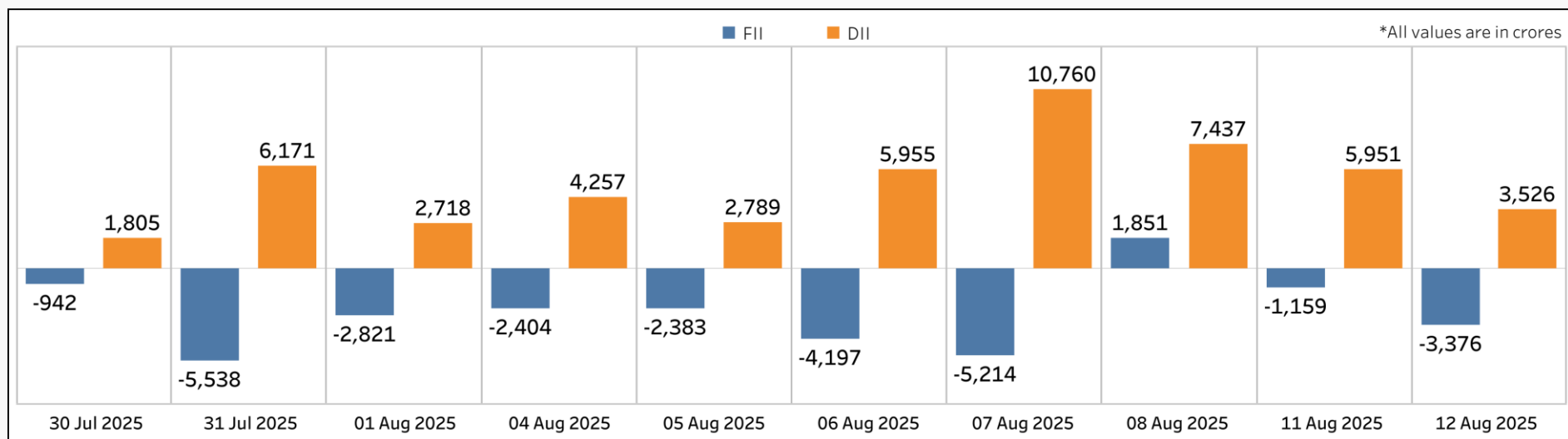
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-45,082 ▼	-8,474 ▼	76,712 ▲	-29,530 ▼	12,000 ▲	1,488 ▲	-2,500 ▼	21,778 ▲
24,367	2,943	22,862	36,127			2,500	9,419
-20,715	-5,531	-53,850	6,597	0	-735	0	-12,359
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-87,161	-185,258	252,147	1,303,170	70	38,542	34,894	-3,988,712
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
425,095 ▲	6,738 ▲	-152,005 ▼	34,904 ▲	-392,013 ▼	248 ▲	77,792 ▲	-27,152 ▼
180,299	4,934	81,708	2,416	232,429	1,332	47,435	8,720
-244,796	-1,804	-70,297	-32,488	-159,584	1,084	-30,357	-18,432
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
94,427	127,288	-479,902	2,234,240	-7,336	19,428	192,862	451,302
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

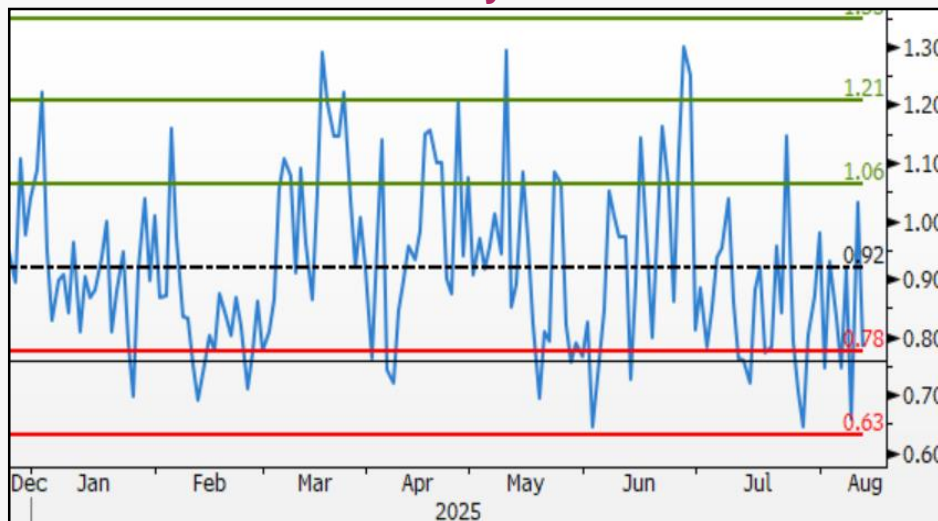
## Daily Net Open Interest Change



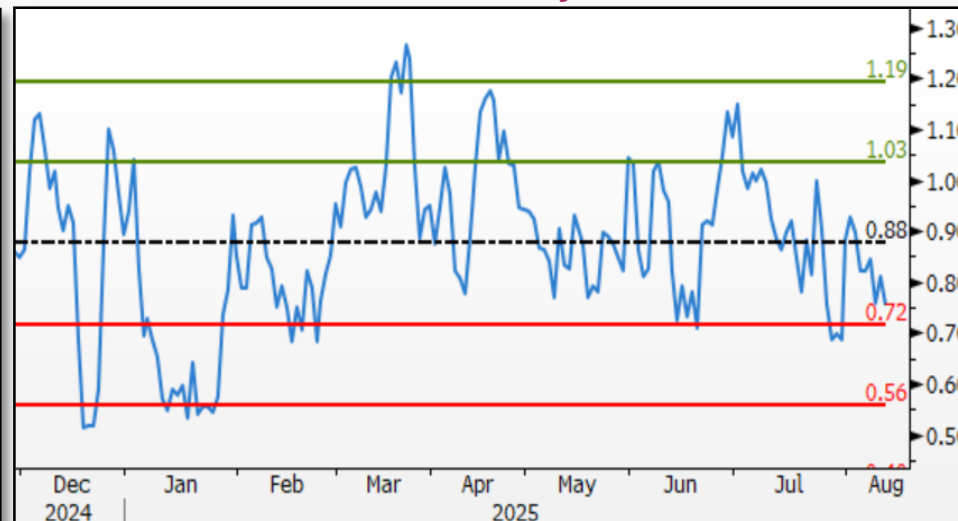
## DII and FII Daily Cash Market Flows



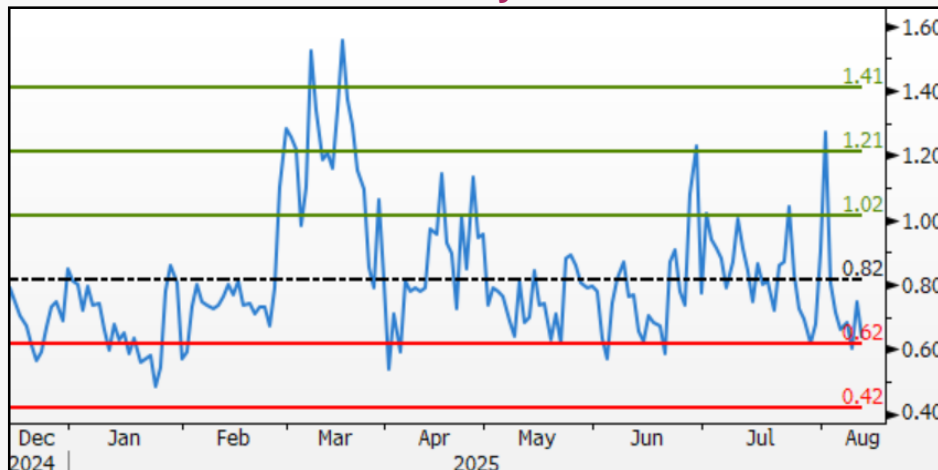
## Nifty



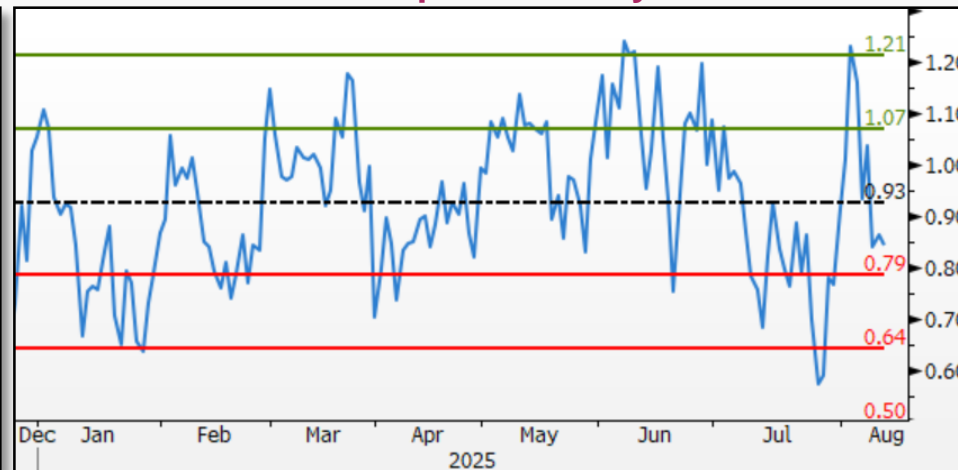
## Bank Nifty



## Fin Nifty

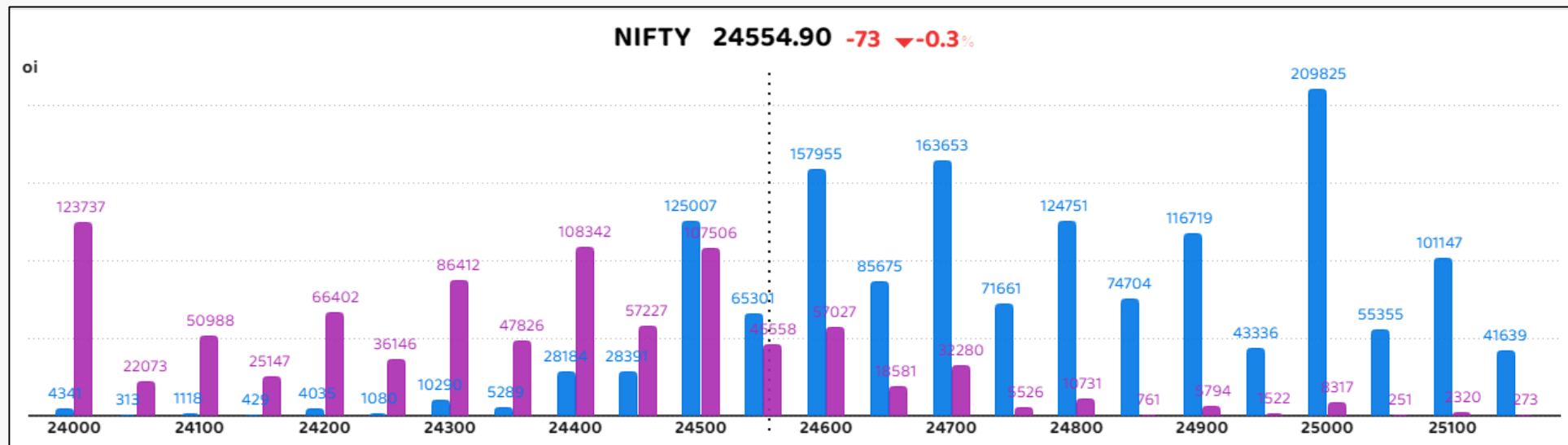


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

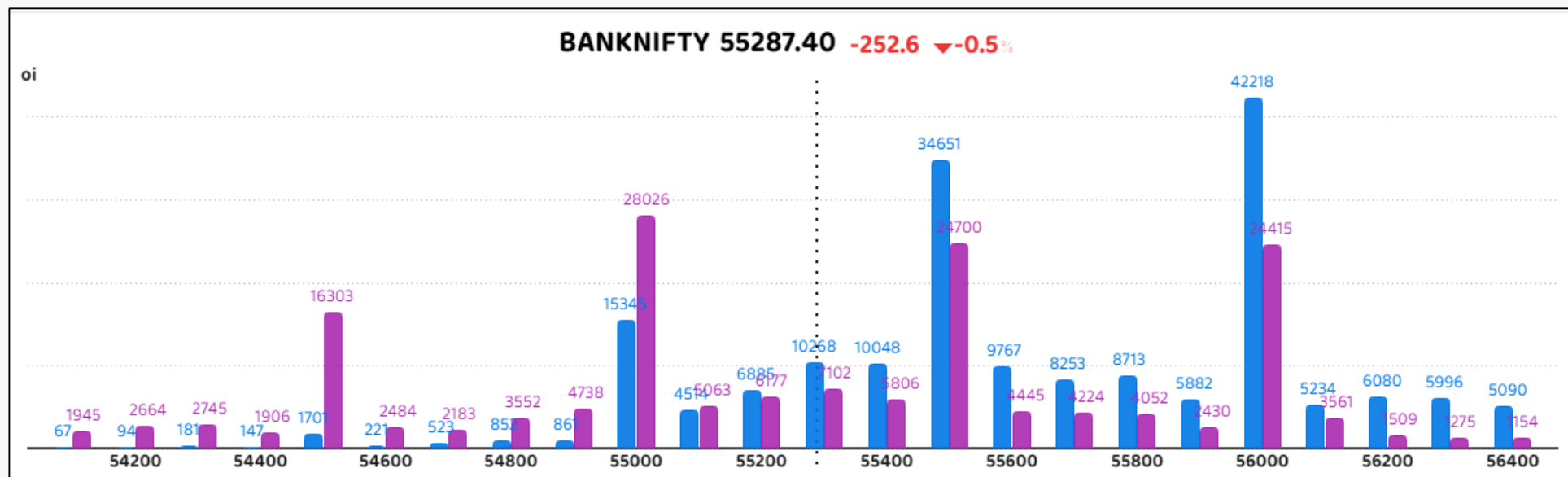
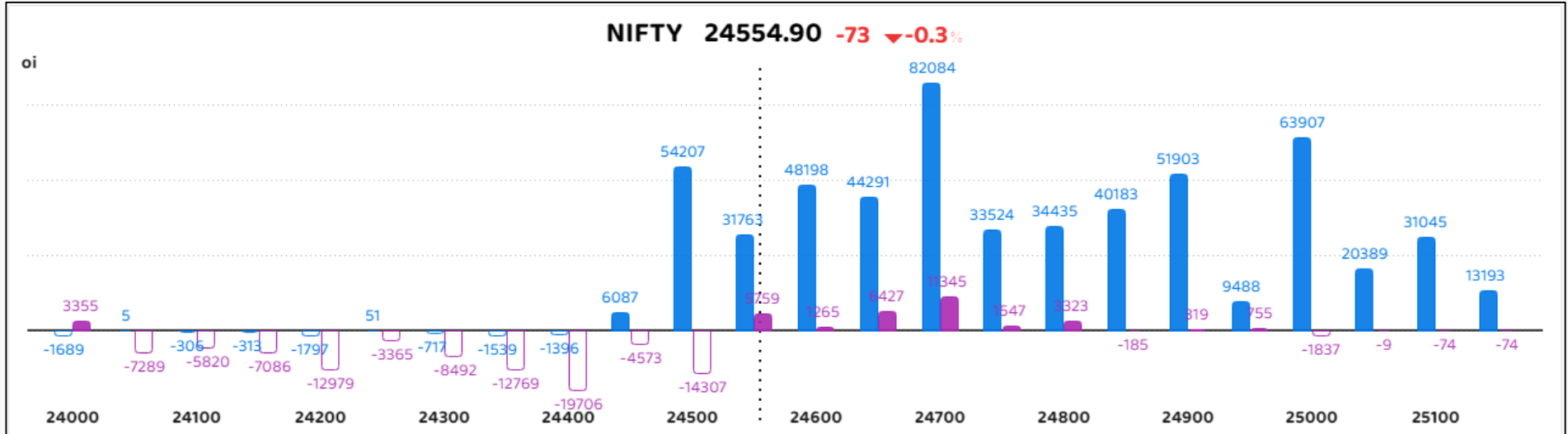


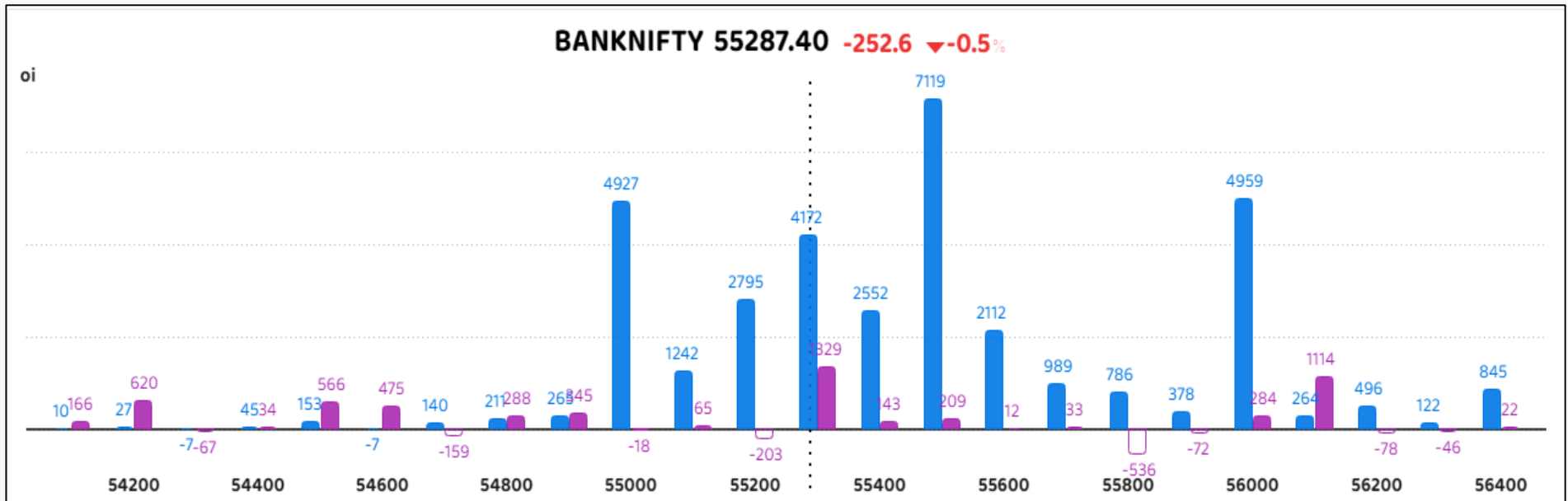
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,700 Call and the 24,400 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 55,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SUZLON ENERGY	63.13	-0.3	50.1	50.1	41.5	100.0
NUVAMA WEALTH	6853	0.2	47.2	47.2	40.9	100.0
RAIL VIKAS NIGAM	329.45	-3.8	47.0	50.3	32.0	81.9
BOSCH LTD	38610	-0.3	28.6	36.2	2.1	77.8
ASTRAL LTD	1269.3	-8.1	29.7	40.4	2.9	71.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HERO MOTOCORP	4645.2	1.8	22.1	37.4	22.1	0.0
LIC	916.5	1.1	21.0	40.4	21.0	0.0
INDIAN OIL	142.65	0.9	22.6	42.1	22.6	0.0
HDFC LIFE	766.2	0.2	18.9	80.6	18.9	0.0
POWER FINANCE	415.7	-0.7	26.4	51.5	26.4	0.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SUZLON ENERGY	63.13	-0.3	50.1	50.1	41.5	100.0
NUVAMA WEALTH	6853	0.2	47.2	47.2	40.9	100.0
RAIL VIKAS NIGAM	329.45	-3.8	47.0	50.3	32.0	98.3
MUTHOOT FINANCE	2533.2	-2.2	37.0	49.6	21.8	94.7
PG ELECTROPLAST	515.2	1.8	52.6	63.7	35.6	94.4

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LIC INSURANCE	916.5	1.1	21.0	40.4	21.0	0.0
INDIAN OIL	142.65	0.9	22.6	42.1	22.6	0.0
HDFC LIFE	766.2	0.2	18.9	80.6	18.9	0.0
POWER FINANCE	415.7	-0.7	26.4	51.5	26.4	0.0
PATANJALI FOODS	1819.3	2.0	5.4	65.0	5.4	0.0

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
TUBE INVESTMENTS	3021.7	0.7	8164	1349	6.1
ORACLE FINANCIAL	8513.5	1.3	12268	2600	4.7
SUZLON ENERGY	63.13	-0.3	20054	4542	4.4
TATA ELXSI LTD	5617.5	-1.0	5652	1462	3.9
LTIMINDTREE LTD	5107	0.8	7437	2000	3.7

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ASTRAL LTD	1269.3	-8.1	69574	73580	1.1
INOX WIND LTD	140.76	-0.7	1183	1227	1.0
MUTHOOT FINANCE	2533.2	-2.2	4838	4896	1.0
PRESTIGE ESTATES	1630.8	-1.3	2693	2626	1.0
TATA MOTORS LTD	654.1	0.1	59174	51189	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES TECHNOLOGY	5808.5	-0.7	11157	11157	100.0
AMBER ENTERPRISES	6843	-1.0	9566	9566	100.0
NUVAMA WEALTH	6853	0.2	1657	1657	100.0
ASTRAL LTD	1269.3	-8.1	14168	16491	85.9

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
AMBER ENTERPRISES	6843	-1.0	4071	4071	100.0
KAYNES TECHNOLOGY	5808.5	-0.7	6191	6250	99.1
ASTRAL LTD	1269.3	-8.1	8487	9349	90.8

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ALKEM LABORATORIES	5149	6.3	50763	61649	82.3

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ASTRAL LTD	1269.3	-8.1	73580	73580	100.0
SJVN LTD	97.99	5.4	6107	7459	81.9
TITAGARH RAIL	799.45	3.0	43341	53064	81.7

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PG ELECTROPLAST	515.2	1.8	18379	5042	3.6
KALYAN JEWELLERS	522.7	-2.8	19594	6675	2.9
AMBER ENTERPRISES	6843	-1.0	9566	3965	2.4
ASTRAL LTD	1269.3	-8.1	14168	6514	2.2
ALKEM LABORATORIES	5149	6.3	4473	2099	2.1

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
AMBER ENTERPRISES	6843	-1.0	4071	4071	100.0
KAYNES TECHNOLOGY	5808.5	-0.7	6191	6250	99.1
ASTRAL LTD	1269.3	-8.1	8487	9349	90.8

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ALKEM LABORATORIES	5149	6.3	50763	5223	9.7
SJVN LTD	97.99	5.4	18739	2201	8.5
TITAGARH RAIL	799.45	3.0	57430	7072	8.1
ASTRAL LTD	1269.3	-8.1	69574	9926	7.0
SUZLON ENERGY	63.13	-0.3	20054	4383	4.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ASTRAL LTD	1269.3	-8.1	73580	6912	10.6
TITAGARH RAIL	799.45	3.0	43341	4269	10.2
ALKEM LABORATORIES	5149	6.3	18618	1985	9.4
RAIL VIKAS NIGAM	329.45	-3.8	7952	1313	6.1
HINDALCO INDS	667.05	-0.9	41730	8936	4.7

## 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	2600	1695900	13.6%	2288	2700	1308300	18.0%	ITC	420	15377600	0.9%	416	410	4145600	-1.5%
ADANIPTS	1400	1930875	5.2%	1331	1400	1263025	5.2%	JIOFIN	350	10753600	7.0%	327	310	4890350	-5.2%
APOLLOHOSP	7500	234000	3.6%	7237	7000	76750	-3.3%	JSWSTEEL	1060	1200825	1.1%	1048	920	567000	-12.2%
ASIANPAINT	2500	851500	0.9%	2478	2400	438750	-3.2%	KOTAKBANK	2200	1209600	12.3%	1959	2000	693600	2.1%
AXISBANK	1100	3222500	2.8%	1070	1060	1423750	-0.9%	LT	3700	1027950	0.4%	3686	3600	432075	-2.3%
BAJAJ-AUTO	9000	194625	9.8%	8197	8000	108750	-2.4%	M&M	3400	1827600	5.1%	3237	3100	1471400	-4.2%
BAJAJFINSV	2000	1113000	4.8%	1908	1720	554000	-9.9%	MARUTI	13000	385850	1.2%	12840	12500	171200	-2.6%
BAJFINANCE	900	8899500	5.5%	853	900	3467250	5.5%	NESTLEIND	1150	849000	5.4%	1091	1050	348000	-3.8%
BEL	400	10775850	5.2%	380	390	4411800	2.5%	NTPC	340	16812000	0.0%	340	340	4159500	0.0%
BHARTIARTL	2000	3486975	8.1%	1850	1860	1302925	0.5%	ONGC	235	15536250	-0.2%	236	235	4488750	-0.2%
CIPLA	1600	850875	5.2%	1522	1500	375375	-1.4%	POWERGRID	300	6024900	5.4%	285	280	1761300	-1.6%
COALINDIA	400	6245100	3.8%	385	370	2343600	-4.0%	RELIANCE	1400	11578500	1.4%	1380	1400	5401000	1.4%
DRREDDY	1300	1802500	6.5%	1220	1200	784375	-1.7%	SBILIFE	1900	1202250	3.4%	1838	1800	177375	-2.1%
EICHERMOT	5700	224175	0.7%	5658	5800	154525	2.5%	SBIN	830	9427500	1.1%	821	800	7809000	-2.5%
ETERNAL	320	10999800	4.6%	306	300	6154650	-1.9%	SHRIRAMFIN	700	1649175	14.4%	612	600	924000	-1.9%
GRASIM	2800	277500	2.2%	2740	2700	189500	-1.5%	SUNPHARMA	1800	880600	11.0%	1622	1500	1264550	-7.5%
HCLTECH	1500	948850	0.1%	1499	1500	488600	0.1%	TATACONSUM	1100	853600	5.1%	1047	1000	396000	-4.5%
HDFCBANK	2000	3281850	1.5%	1970	2000	2468950	1.5%	TATAMOTORS	700	7081600	7.0%	654	600	2948800	-8.3%
HDFCLIFE	800	2071300	4.4%	766	730	785400	-4.7%	TATASTEEL	180	17319500	12.4%	160	160	7595500	-0.1%
HEROMOTOCO	4600	591300	-1.0%	4645	4600	210900	-1.0%	TCS	3200	2599100	5.4%	3035	3000	1067150	-1.2%
HINDALCO	700	3571400	4.9%	667	660	1936200	-1.1%	TECHM	1600	871200	6.0%	1509	1500	597600	-0.6%
HINDUNILVR	2600	2346600	4.7%	2484	2400	684000	-3.4%	TITAN	3500	520100	0.4%	3487	3400	456400	-2.5%
ICICIBANK	1500	3866100	5.5%	1422	1400	1581300	-1.5%	TRENT	5500	541000	2.5%	5366	5000	274700	-6.8%
INDUSINDBK	900	2826600	14.9%	783	800	1549100	2.2%	ULTRACEMCO	12300	98800	-1.2%	12449	12000	56450	-3.6%
INFY	1600	4059600	12.4%	1424	1400	1730000	-1.7%	WIPRO	260	7026000	7.6%	242	250	3342000	3.4%

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 (DII)s, 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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