



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,827	0.2% ▼
Open Interest (OI)	1,81,92,375	1.2% ▼
Change in OI (abs)	1,81,92,375	2,27,400 ▼
Premium / Discount (Abs)	15	1 ▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,899	0.2% ▲
Open interest (OI)	22,75,720	1.1% ▼
Change in OI (abs)	22,75,720	24775 ▼
Premium / Discount (Abs)	70	4 ▲
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.28	0.12 ▼
Nifty ATM IV (%)	14.02	0.0 ▲
Bank Nifty ATM IV (%)	14.73	0.1 ▲
PCR (Nifty)	0.80	0.15 ▼
PCR (Bank Nifty)	0.79	0.05 ▲

The Long Ratio for FII Index Futures **drop** at 20.5 %, **down** from 20.9% in the **last session**..

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
<b>KAYNES</b>	5,93,100	38.6%	5741.5	1.5%
MARUTI	32,68,400	3.8%	12705	1.1%
DMART	46,37,250	4.9%	4240.9	4.2%
<b>BDL</b>	23,22,775	4.8%	1911.2	0.2%
DELHIVERY	1,35,54,925	4.6%	365.7	1.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDZINC	4,19,37,875	144.3%	454.2	-6.6%
BIOCON	4,98,62,500	31.9%	342.1	-3.1%
<b>PPLPHARMA</b>	1,13,67,500	18.6%	193.97	-0.7%
BLUESTARCO	10,48,775	12.4%	1637.9	-1.6%
APLAPOLLO	29,31,600	7.6%	1801.9	-1.8%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BPCL	4,03,93,125	-3.8%	315.85	0.7%
CYIENT	29,99,225	-3.7%	1355.3	1.7%
DIXON	20,15,300	-3.6%	14410	0.9%
ASTRAL	57,51,285	-3.5%	1569.6	0.4%
RBLBANK	8,25,71,450	-3.5%	228.31	4.3%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MGL	30,46,000	-6.9%	1429.6	-0.3%
MANAPPURAM	3,68,22,000	-3.2%	265.87	-1.9%
MUTHOOTFIN	39,22,325	-3.2%	2639.1	-0.1%
IEX	5,41,38,750	-1.9%	183.79	-1.7%
DRREDDY	1,10,97,500	-1.8%	1316.6	-0.4%

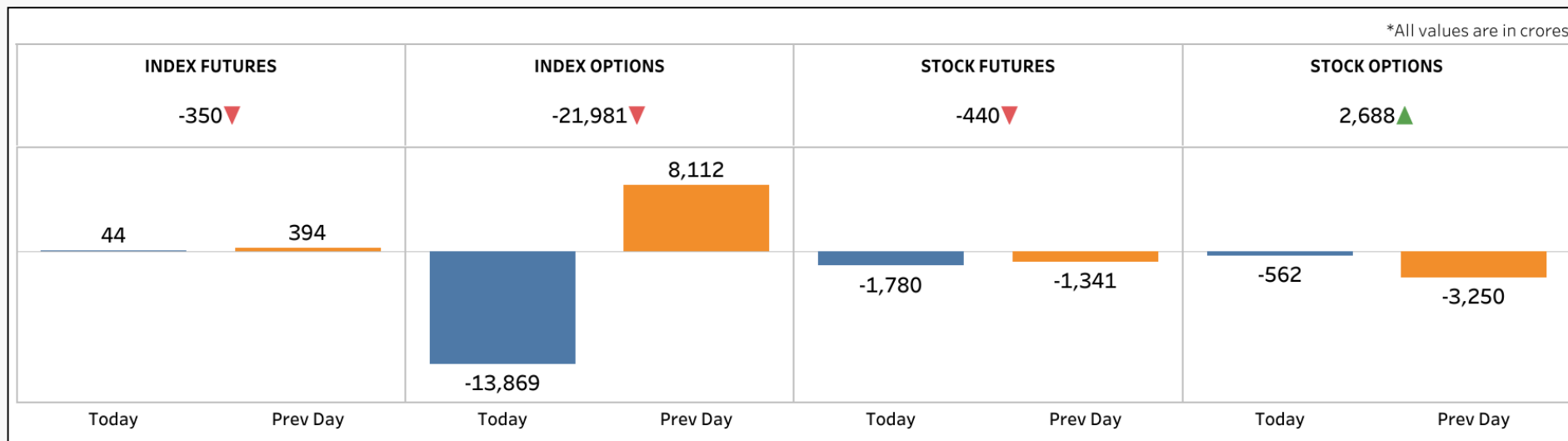
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

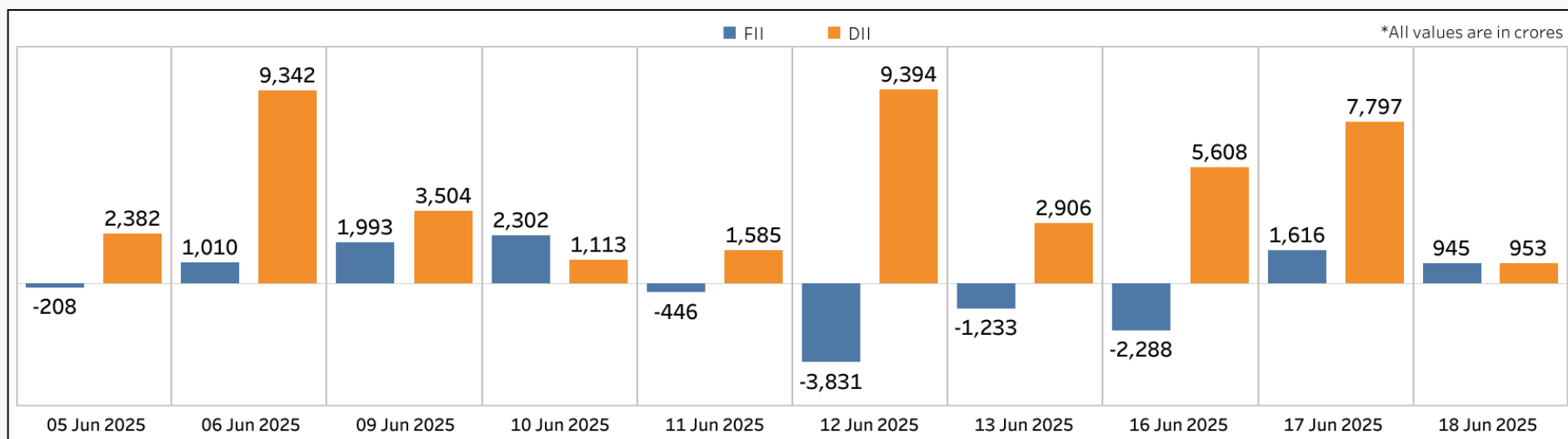
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-59,997 ▼	-1,910 ▼	-56,065 ▼	-1,320 ▼	0	-3,367 ▼	-341 ▼	-35,940 ▼
13,820	350	26,560					27,298
-46,177	2,260	-29,505	-27,429 -26,109	0	-3,724 -357	0	-8,642
Net O/S 130,839 Today Prev Day	Net O/S -99,133 Today Prev Day	Net O/S 180,088 Today Prev Day	Net O/S 1,402,287 Today Prev Day	Net O/S 70 Today Prev Day	Net O/S 42,546 Today Prev Day	Net O/S 15,887 Today Prev Day	Net O/S -3,988,265 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-120,029 ▼	-5,984 ▼	59,058 ▲	17,189 ▲	180,025 ▲	11,261 ▲	-2,654 ▼	20,071 ▲
147,779				18,426	4,800	23,031	25,685
27,750	4,558	6,473	25,640	-161,599	-6,461	10,431	-9,640
-1,426		-52,585	8,451				
Net O/S -287,058 Today Prev Day	Net O/S 68,661 Today Prev Day	Net O/S -254,088 Today Prev Day	Net O/S 2,112,971 Today Prev Day	Net O/S 156,149 Today Prev Day	Net O/S -12,074 Today Prev Day	Net O/S 58,112 Today Prev Day	Net O/S 473,007 Today Prev Day

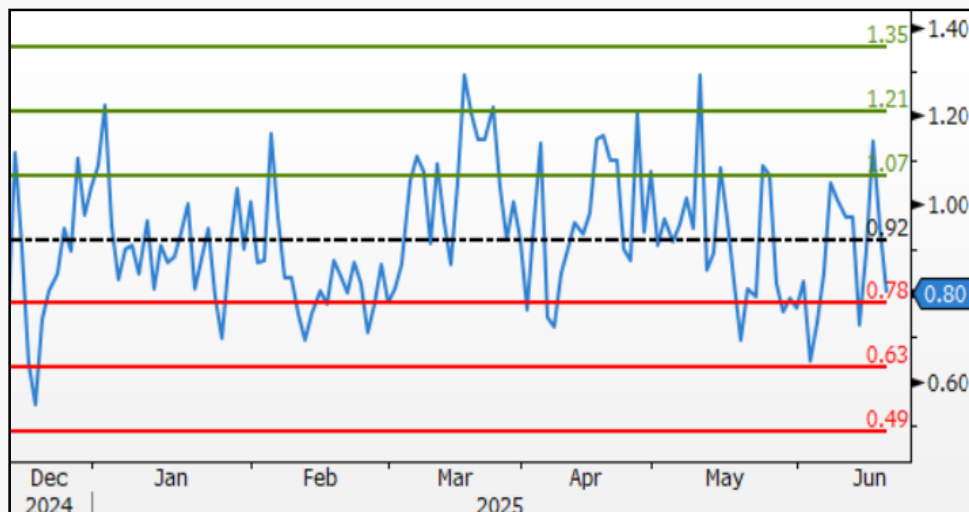
## Daily Net Open Interest Change



## DII and FII Daily Cash Market Flows



## Nifty



## Bank Nifty



## Fin Nifty

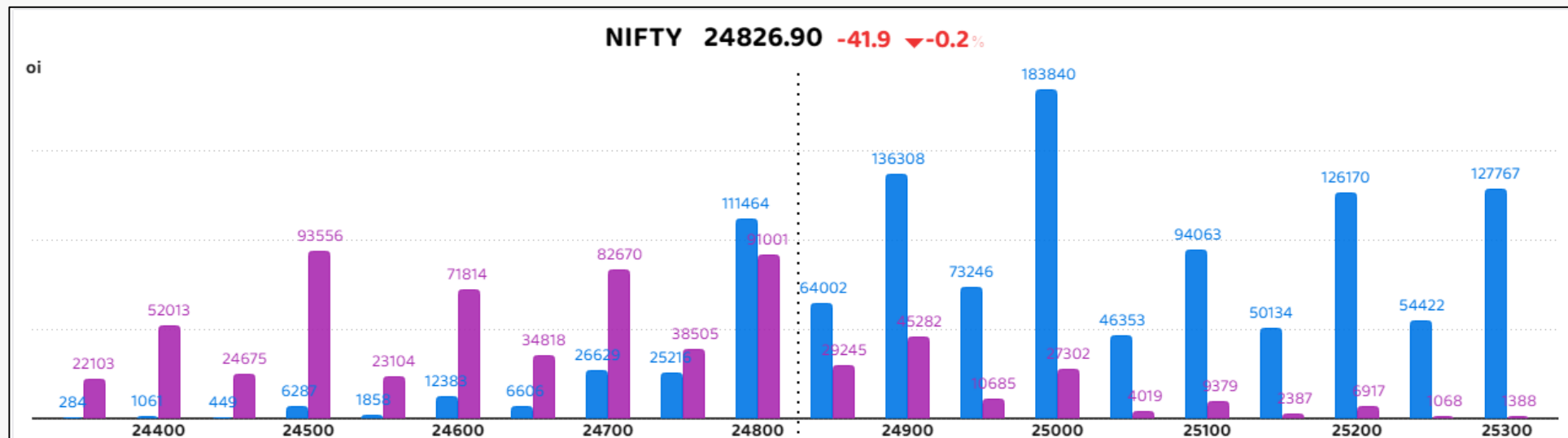


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 56,000 Put saw the most amount of open interest.

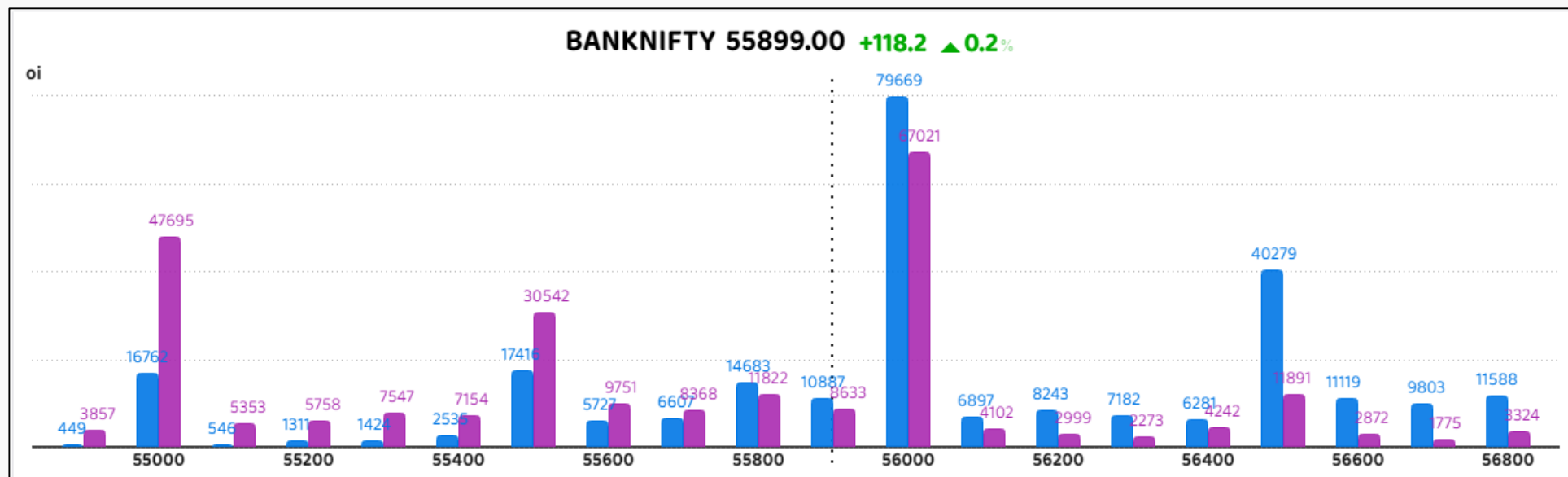
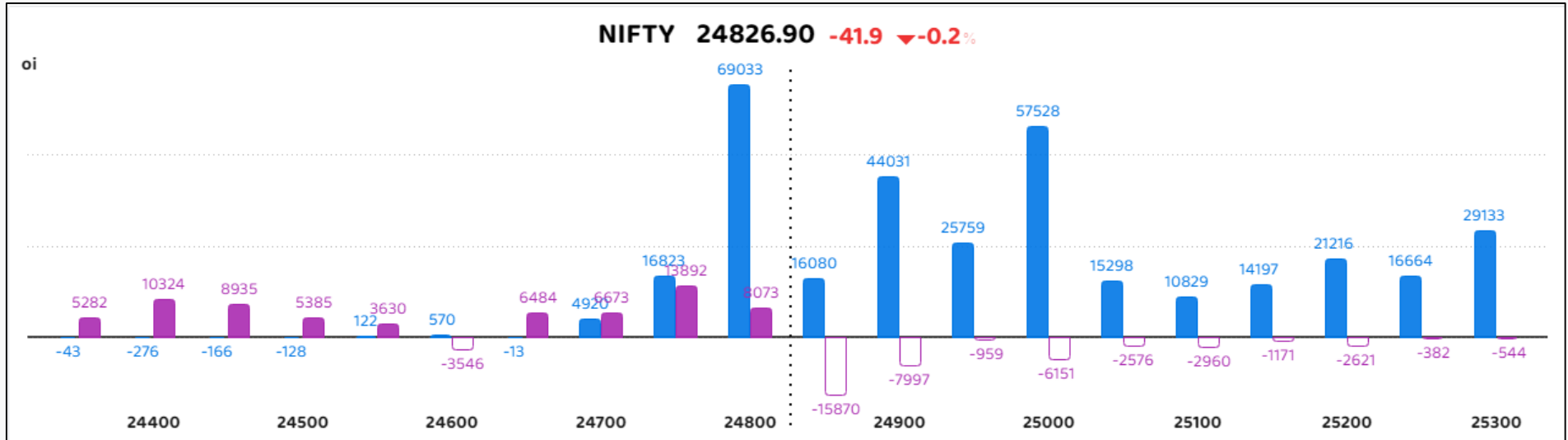


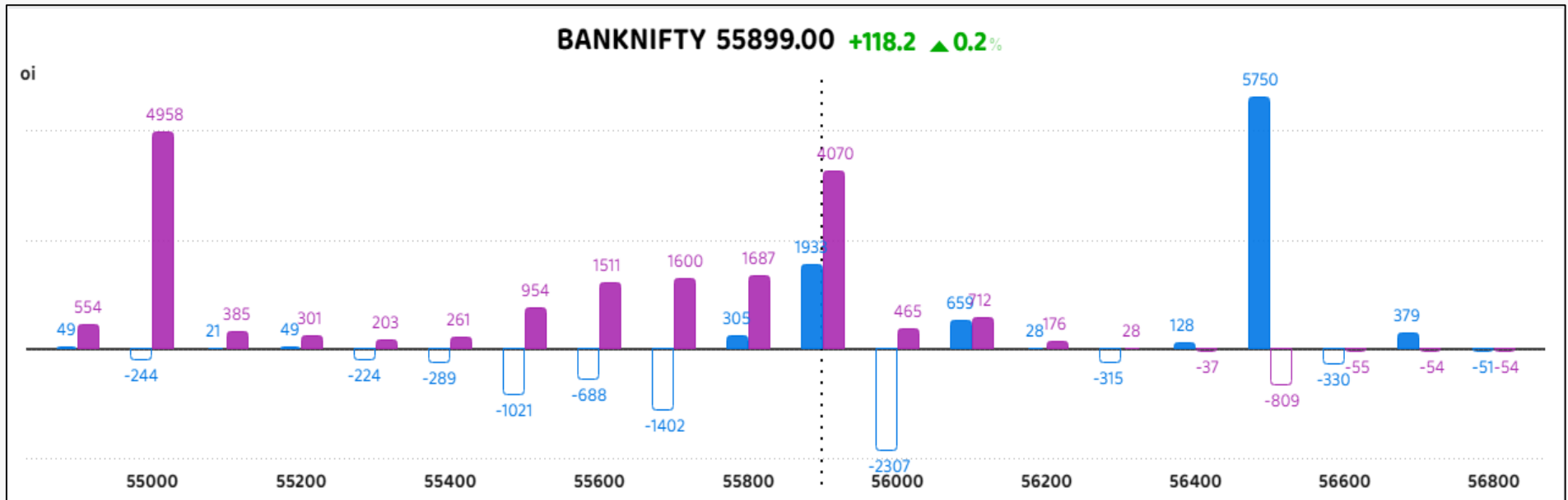
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,800 Call and the 24,850 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 55,900 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ADITYA BIRLA FASHION	74.43	-0.4	36.3	60.3	9.9	99.2
SHREE CEMENT	29305	-1.1	24.1	31.9	7.9	71.1
MARUTI SUZUKI	12748	1.2	19.4	29.9	0.4	66.8
TATA CONSUMER	1065.2	-0.6	24.1	34.4	5.5	65.8
BOSCH LTD	32390	0.5	23.3	34.9	3.3	65.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MANKIND PHARMA	2358.3	0.2	32.4	33.2	28.6	0.0
CDSL	1680.3	-0.4	34.6	60.7	27.1	0.0
ACC LTD	1840.6	-1.1	22.2	40.5	21.2	0.0
PIRAMAL PHARMA	193.37	-1.0	39.1	39.1	35.8	0.0
PNB HOUSING	1057.5	-0.3	31.7	58.3	31.0	0.4



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI LOMBARD	1932.3	0.8	26.3	38.2	9.9	67.2
IREDA	165.2	0.1	46.9	69.2	33.6	48.1
TATA CONSULTANCY	3451.4	-1.8	20.7	57.2	1.3	48.6
TATA CONSUMER	1065.2	-0.6	24.1	34.4	5.5	61.3
INDUSIND BANK	850.5	5.1	28.8	77.2	0.5	59.0

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHARAT DYNAMICS	1906.1	0.1	39.0	46.7	39.0	0.0
TATA CHEMICALS	928.3	-0.7	23.4	41.0	23.4	0.0
UPL LTD	638.2	-1.2	21.6	42.7	2.9	0.8
DABUR INDIA LTD	470.2	-0.4	18.2	37.5	11.6	1.1
COAL INDIA LTD	390.3	-0.2	20.8	38.8	4.3	1.3

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGE INDUSTRIES	45185.00	-1.4	3002	2237	5.2
RAIL VIKAS NIGAM	398.00	-0.7	12422	2728	5.1
UNO MINDA LTD	1063.6	1.3	13846	2796	5.0
PETRONET LNG LTD	297.15	0.0	4790	1547	4.6
TATA TECHNOLOGIES	732.00	-1.0	9094	2958	4.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
NCC LTD	223.63	-0.9	2660	4223	2.4
FORTIS HEALTHCARE	759.00	-0.3	2676	4086	1.3
GRANULES INDIA	494.90	-0.7	5034	5155	1.2
DR REDDY'S LABS	1313.30	-0.4	26490	40652	1.2
JINDAL STAINLESS	671.05	-2.3	1418	2371	1.2

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
HINDUSTAN ZINC	452.80	-6.9	21009	21009	100.0
MAZAGON DOCK	3257.40	-1.5	27806	27806	100.0
MANKIND PHARMA	2358.30	0.2	2579	2579	100.0
JSW ENERGY LTD	504.05	0.1	15105	15105	100.0
UNO MINDA LTD	1063.60	1.3	1094	1262	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
HINDUSTAN ZINC	452.8	-6.9	15452	15452	100.0
MAZAGON DOCK	3257.4	-1.5	9225	9225	100.0
RAIL VIKAS NIGAM	398	-0.7	4483	4483	100.0
BHARAT DYNAMICS	1906.1	0.1	5071	5071	100.0
GLENMARK PHARMA	1660.4	0.4	10566	10566	100.0

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
AVENUE SUPERMART	4228.4	4.2	12809	147405	100.0
HINDUSTAN ZINC	452.8	-6.9	39354	52026	100.0
UNO MINDA LTD	1049.5	1.3	13846	13846	100.0
KAYNES TECHNOLOGIES	5720	1.3	9311	9311	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
HINDUSTAN ZINC	452.8	-6.9	24760	24760	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
HINDUSTAN ZINC	452.8	-6.9	21009	8405	3.8
UNITED SPIRITS	1461.8	-0.9	29319	11970	2.3
OIL INDIA LTD	469.65	-1.8	10730	4730	2.2
BIOCON LTD	342	-3.0	11462	7120	2.1
KAYNES TECHNOLOGIES	5720	1.3	2750	1489	2.0

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HINDUSTAN ZINC	452.8	-6.9	15452	3902	3.4
UNITED SPIRITS	1461.8	-0.9	13125	6115	2.0
OIL INDIA LTD	469.65	-1.8	5563	2698	1.9
AVENUE SUPERMART	4228.4	4.2	8857	4757	1.8
GLENMARK PHARMA	1660.4	0.4	10566	5617	1.8

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
UNO MINDA LTD	1049.5	1.3	13846	2048	6.8
KAYNES TECHNOLOGIES	5720	1.3	9311	2074	6.7
AVENUE SUPERMART	4228.4	4.2	12809	15833	6.7
HINDUSTAN ZINC	452.8	-6.9	39354	17662	4.7
EICHER MOTORS	5393	1.0	8622	10790	4.1

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AVENUE SUPERMART	4228.4	4.2	8097	6597	5.9
HINDUSTAN ZINC	452.8	-6.9	24760	6348	5.5
BIOCON LTD	342	-3.0	23761	5046	3.0
EICHER MOTORS	5393	1.0	4617	4730	3.0
MARUTI SUZUKI IN	12748	1.2	20878	33861	2.8

## 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	1583100	5.7%	2459	2700	1095600	9.8%	ITC	440	11979200	5.8%	416	420	5104000	1.0%
ADANIPTS	1500	1858800	9.3%	1373	1400	1100400	2.0%	JIOFIN	300	11026950	4.1%	288	290	4506150	0.6%
APOLLOHOSP	7100	299875	2.4%	6934	6900	143750	-0.5%	JSWSTEEL	1020	1311525	3.4%	986	840	486000	-14.8%
ASIANPAINT	2300	1185000	0.8%	2281	2200	1329600	-3.6%	KOTAKBANK	2160	1012800	1.3%	2132	2000	540000	-6.2%
AXISBANK	1250	4728750	2.4%	1221	1200	1486250	-1.7%	LT	3740	1226100	3.8%	3602	3600	452850	0.0%
BAJAJ-AUTO	9000	612825	6.3%	8468	8500	151275	0.4%	M&M	3100	1219225	1.9%	3041	3000	848400	-1.4%
BAJAJFINSV	2100	2065000	6.0%	1981	2000	554500	0.9%	MARUTI	13000	348350	2.0%	12748	12500	163300	-1.9%
BAJFINANCE	1000	9756250	8.8%	919	900	3858750	-2.1%	NESTLEIND	2500	288000	6.8%	2341	2200	174000	-6.0%
BEL	400	12502950	-0.1%	401	400	7048050	-0.1%	NTPC	340	10966500	2.3%	332	340	3406500	2.3%
BHARTIARTL	2000	3978600	7.2%	1866	1860	1568925	-0.3%	ONGC	255	19126800	1.9%	250	240	4321625	-4.1%
CIPLA	1600	1237275	6.8%	1498	1320	546650	-11.9%	POWERGRID	300	9399600	4.4%	287	270	3241800	-6.0%
COALINDIA	400	6255900	2.5%	390	400	3493350	2.5%	RELIANCE	1500	6763500	4.9%	1430	1400	2877500	-2.1%
DRREDDY	1300	1184375	-1.0%	1313	1300	665625	-1.0%	SBILIFE	1860	1130625	3.5%	1797	1800	353625	0.2%
EICHERMOT	5500	296975	2.0%	5393	5000	120750	-7.3%	SBIN	820	13795500	3.5%	792	820	5391750	3.5%
ETERNAL	260	9170000	4.7%	248	240	8886000	-3.4%	SHRIRAMFIN	700	2313750	5.7%	662	660	923250	-0.3%
GRASIM	2700	323000	0.9%	2675	2600	241000	-2.8%	SUNPHARMA	1700	2642500	3.2%	1648	1660	738850	0.7%
HCLTECH	1740	1232000	1.4%	1716	1700	567350	-0.9%	TATACONSUM	1200	1022352	12.7%	1065	1000	226176	-6.1%
HDFCBANK	2000	6597250	3.4%	1934	1940	2535500	0.3%	TATAMOTORS	720	8761500	7.4%	670	650	3159750	-3.0%
HDFCLIFE	800	3810400	4.4%	766	730	697400	-4.7%	TATASTEEL	161.4	18249000	6.1%	152	146.4	7243500	-3.8%
HEROMOTOCO	4400	616500	1.0%	4358	4200	216900	-3.6%	TCS	3500	1656375	1.4%	3451	3400	853300	-1.5%
HINDALCO	700	4806200	8.5%	645	600	922600	-7.0%	TECHM	1800	855600	5.2%	1711	1600	984000	-6.5%
HINDUNILVR	2400	2972700	4.5%	2297	2300	875700	0.1%	TITAN	3600	474950	3.8%	3468	3400	265475	-2.0%
ICICIBANK	1450	4692100	2.6%	1413	1420	2168600	0.5%	TRENT	6000	548900	4.6%	5735	5500	350200	-4.1%
INDUSINDBK	820	3892000	-3.6%	851	820	2536000	-3.6%	ULTRACEMCO	12000	211550	5.2%	11406	9800	117500	-14.1%
INFY	1640	2498800	0.4%	1633	1600	1737200	-2.0%	WIPRO	270	7794000	3.2%	262	250	4086000	-4.4%

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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Compliance Officer Details: Name – **Mr. Rajiv Kejriwal**, Tel No. – 022-68555574, Email id – [compliance.officer@axisdirect.in](mailto:compliance.officer@axisdirect.in);

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in