



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,512	0.0%▼
Open Interest (OI)	2,16,73,730	3.4%▲
Change in OI (abs)	2,16,73,730	7,10,775▲
Premium / Discount (Abs)	95	15▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	54,617	0.18%▲
Open interest (OI)	26,76,120	1.1%▼
Change in OI (abs)	26,76,120	30,510▼
Premium / Discount (Abs)	309	23▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	15.88	0.40▼
Nifty ATM IV (%)	14.74	0.20▼
Bank Nifty ATM IV (%)	18.65	0.28▼
PCR (Nifty)	1.00	0.02▼
PCR (Bank Nifty)	0.87	0.00▲

The FII Long Ratio in Index Futures **Jump to 8.8%**, **up** from **8.3 %** in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
GVT&D	6,39,625	18.3%	5123.5	2.3%
KALYANKJIL	4,32,12,075	10.7%	365.2	2.5%
NAM-INDIA	61,16,250	10.4%	1125	4.9%
BLUESTARCO	28,19,050	9.2%	1606.4	0.8%
NHPC	16,35,32,750	6.5%	76.76	1.6%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	53,05,000	5.8%	1078.7	-0.1%
RELIANCE	12,76,53,500	3.3%	1309.7	-0.7%
ASHOKLEY	20,71,60,000	3.3%	145.7	-1.2%
LTF	4,68,90,000	2.9%	266.05	-0.6%
SONACOMS	1,59,32,350	2.8%	604.7	-0.4%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
HYUNDAI	81,70,525	-7.1%	1944.2	3.3%
FORCEMOT	2,53,500	-5.6%	18684	6.3%
BSE	90,17,125	-4.3%	4055.6	1.3%
MCX	1,24,87,350	-4.3%	2907.7	1.9%
GAIL	7,62,57,000	-2.6%	168.58	2.3%

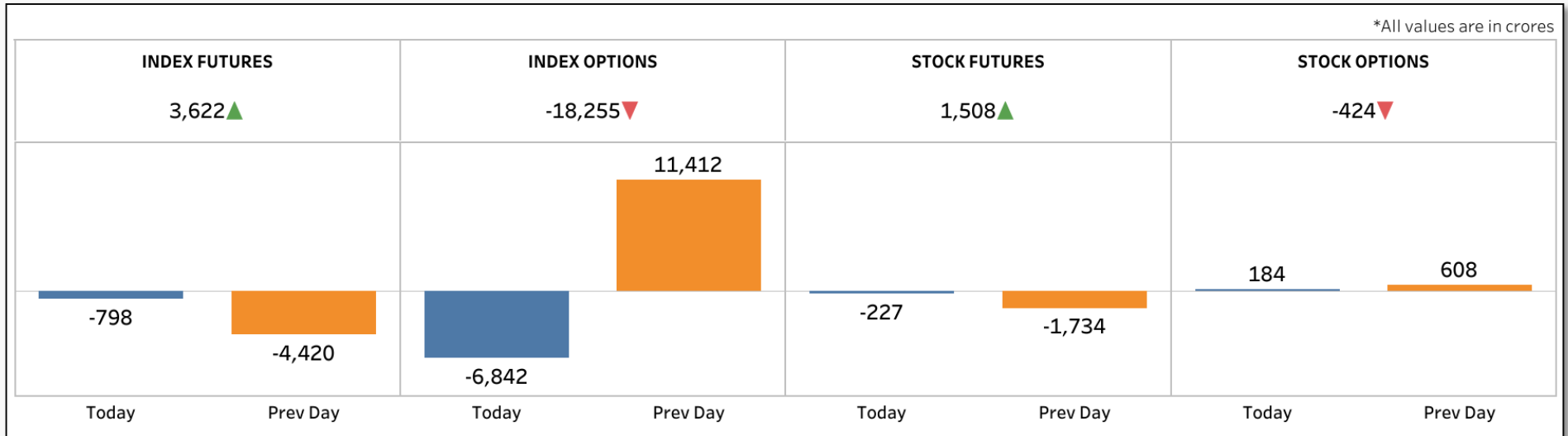
### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
ASIANPAINT	1,08,54,250	-3.8%	2650.6	-0.2%
POWERGRID	8,57,81,200	-2.3%	287	-0.2%
DMART	33,33,000	-2.3%	4174.6	-0.8%
INDIANB	1,65,40,000	-1.9%	831.95	-1.7%
NYKAA	4,78,34,375	-1.6%	269.15	-0.7%

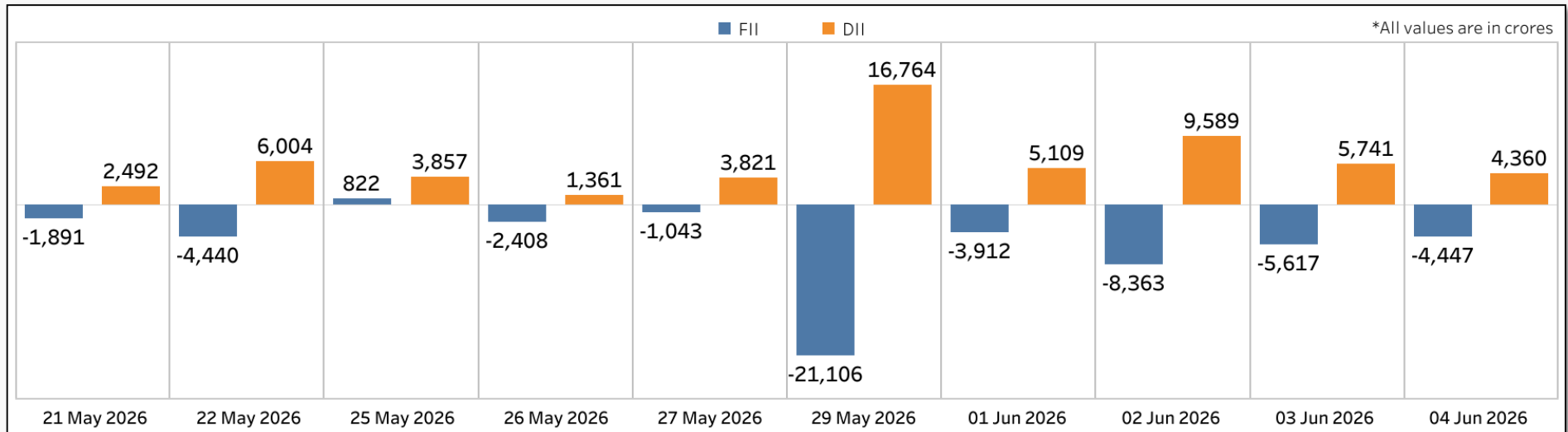
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



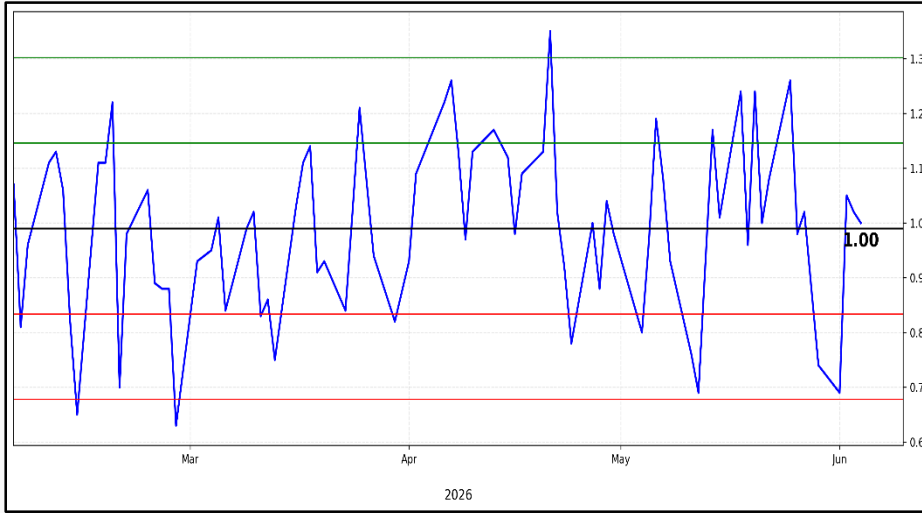
## Daily Net Open Interest Change



## DII and FII Daily Cash Market Flows



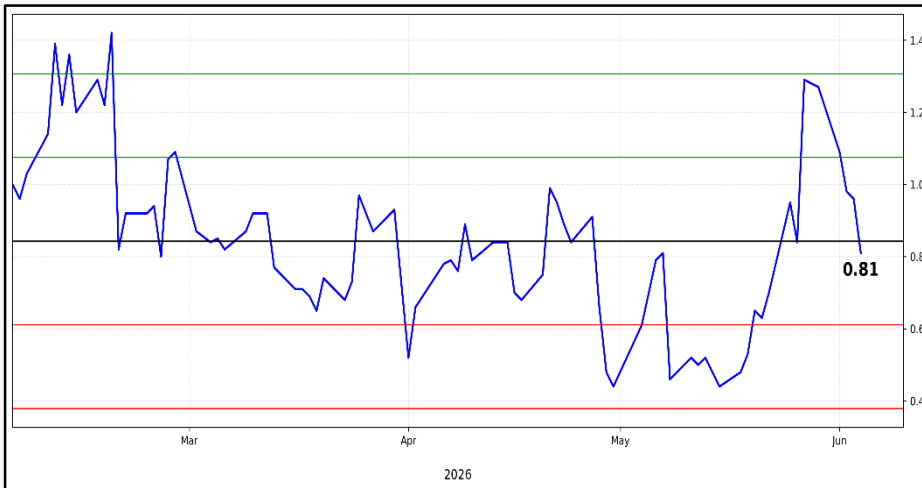
### Nifty



### Bank Nifty



### Fin Nifty



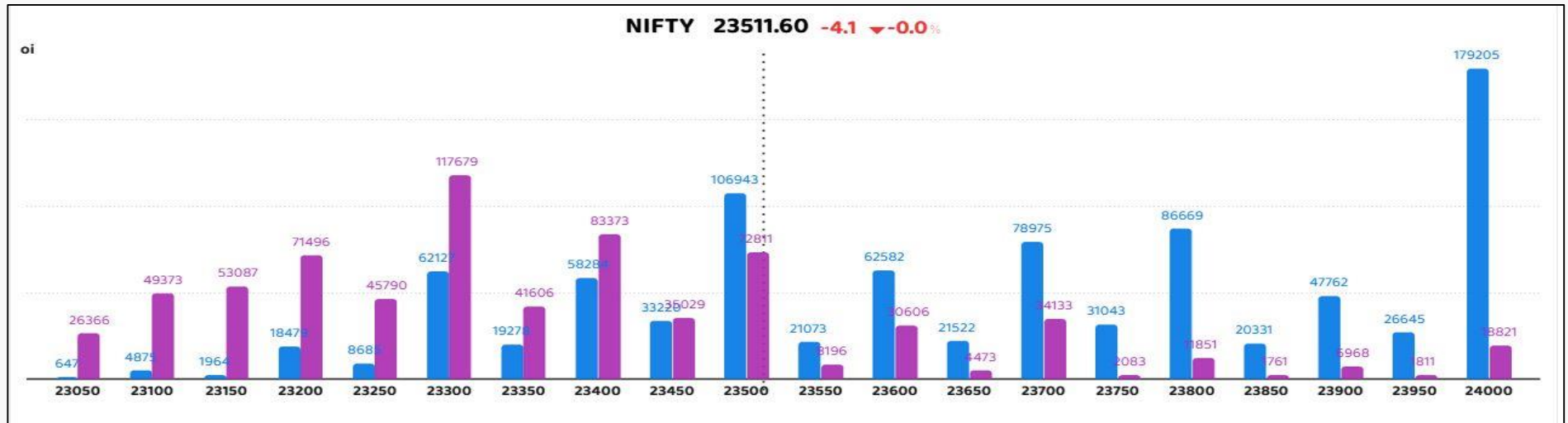
### Midcap Select Nifty



On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation

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

Call ■ Put ■



For Nifty, the 24,000 Call and 23,300 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 54,000 Call and the 54,000 Put saw the most amount of open interest.

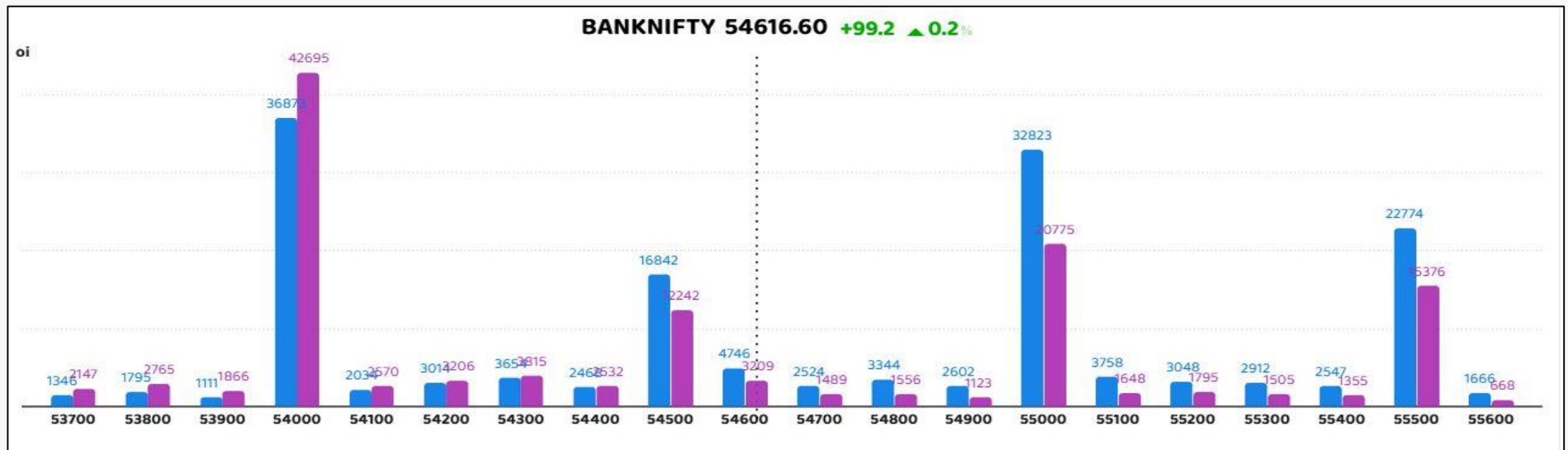
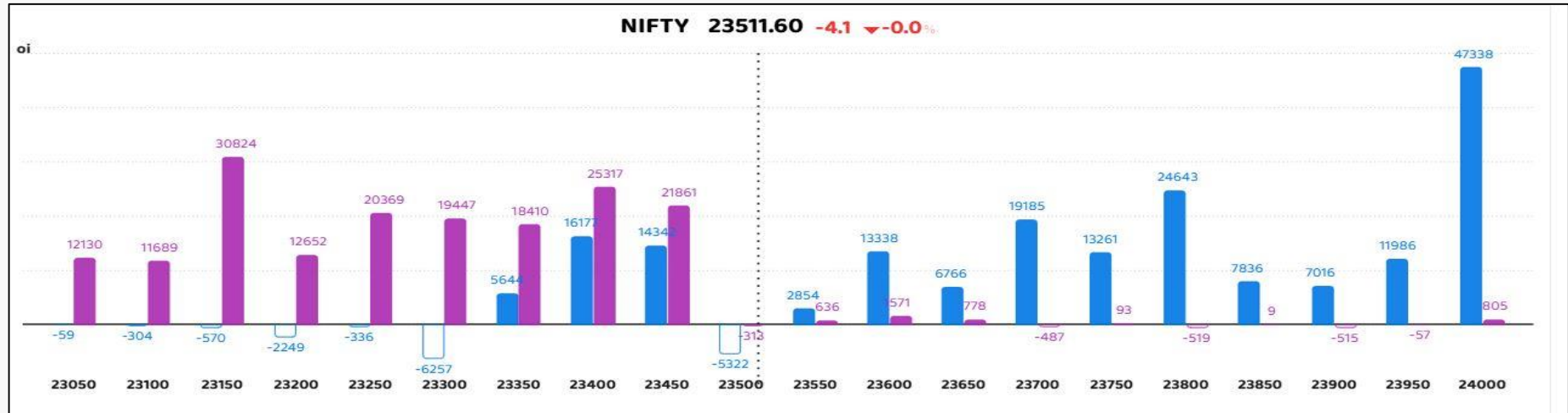


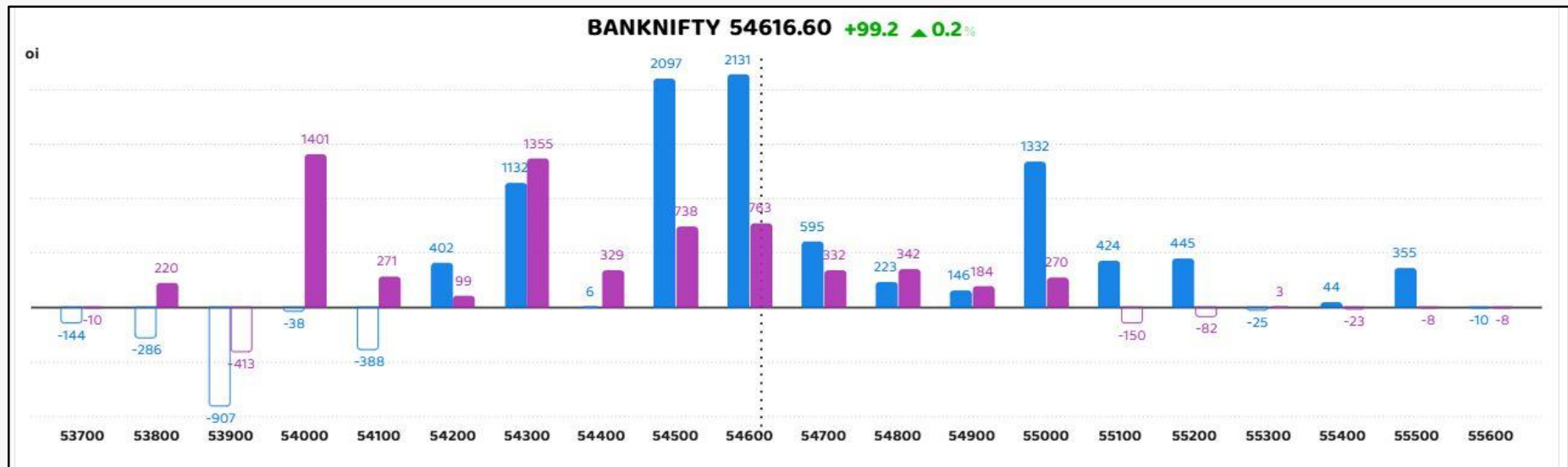
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,000 Call and the 23,150 Put



For the Bank Nifty, the biggest open interest changes were seen at the 54,600 Call & the 54,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
VEDANTA LTD	327.5	-0.2	42.1	47.4	9.2	86.0
BHARAT HEAVY ELE	389.2	-4.2	39.4	45.1	5.2	85.6
TECH MAHINDRA LT	1487.3	1.0	27.5	39.1	3.2	67.6
HINDUSTAN AERONA	4191.0	-1.7	29.6	43.1	1.9	67.1
COAL INDIA LTD	481.7	2.0	23.9	35.3	0.8	66.9

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	144.4	-1.0	38.5	734.8	18.5	2.8
ADITYA BIRLA CAP	353.7	1.4	32.0	658.6	8.2	3.7
HINDALCO INDS	1125.6	-1.2	28.4	254.2	12.3	6.7
REC LTD	335.2	2.9	27.1	244.9	8.0	8.1
GAIL INDIA LTD	167.6	2.3	25.3	91.4	19.4	8.2

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
VEDANTA LTD	327.5	-0.2	42.1	47.4	9.2	93.3
ADANI ENERGY SOL	1520.0	1.8	50.7	70.1	20.6	90.5
RELIANCE INDUSTR	1303.7	-0.7	25.3	53.2	1.4	89.9
TATA CONSULTANCY	2241.0	0.0	30.0	44.6	1.6	89.2
BHARAT HEAVY ELE	389.2	-4.2	39.4	45.1	5.2	87.5

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDIAN RAILWAY F	96.1	0.3	18.9	120.5	16.5	0.8
INDIAN ENERGY EX	124.1	0.6	26.7	76.3	8.0	2.4
DELHIVERY LTD	438.4	0.1	26.5	42.8	24.4	3.5
AUROBINDO PHARMA	1463.6	1.6	24.4	40.1	21.5	5.8
INDUS TOWERS LTD	430.5	0.3	25.3	51.0	22.6	8.4

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BRITANNIA	5,090.0	0.5	23,282.0	2,595.0	9.0
SWIGGY	253.6	0.7	9,574.0	1,620.0	5.9
AMBUJACEM	426.4	-0.1	10,130.0	1,733.0	5.8
BLUESTARCO	1,607.5	1.7	18,636.0	3,291.0	5.7
CUMMINSIND	5,787.5	1.7	18,107.0	3,407.0	5.3

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ASTRAL	1,549.3	0.8	2,516.0	10,348.0	4.1
LODHA	881.8	0.3	3,359.0	5,260.0	1.6
TATACONSUM	1,149.3	0.5	4,675.0	5,812.0	1.2
ADANIGREEN	1,423.3	-0.3	6,611.0	8,066.0	1.2
DIXON	11,487.0	2.3	36,165.0	41,932.0	1.2

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SBICARD	589.5	-1.2	13,388.0	13,383.0	100.0
GLENMARK	2,180.6	0.3	9,543.0	9,252.0	100.0
WIPRO	204.3	0.1	63,850.0	60,377.0	100.0
CONCOR	454.4	0.5	10,206.0	9,895.0	100.0
MAXHEALTH	966.2	0.1	16,717.0	15,751.0	100.0

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ASHOKLEY	144.4	-1.0	16,755.0	16,108.0	100.0
COALINDIA	481.6	2.0	35,797.0	32,532.0	100.0
NHPC	76.1	1.4	12,192.0	11,551.0	100.0
GLENMARK	2,180.6	0.3	6,795.0	6,648.0	100.0
DIVISLAB	6,596.5	0.3	11,011.0	11,419.0	96.4

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
VOLTAS	1,286.5	4.2	47,772.0	61,365.0	77.8
BLUESTARCO	1,607.5	1.7	18,636.0	25,330.0	73.6
CGPOWER	937.9	3.4	34,608.0	75,515.0	45.8
NHPC	76.1	1.4	19,805.0	48,710.0	40.7
LAURUSLABS	1,427.2	2.4	12,863.0	33,376.0	38.5

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NATIONALUM	414.0	-5.2	11,125.0	23,004.0	48.4
NHPC	76.1	1.4	12,265.0	26,037.0	47.1
VOLTAS	1,286.5	4.2	13,860.0	30,173.0	45.9
CGPOWER	937.9	3.4	9,693.0	22,594.0	42.9
IDEA	14.9	0.5	10,851.0	27,465.0	39.5

**Call Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
CONCOR	454.4	0.5	10,206.0	5,630.5	1.8
MCX	2,893.5	2.1	21,598.0	12,237.8	1.8
MAXHEALTH	966.2	0.1	16,717.0	9,531.4	1.8
ALKEM	5,276.5	0.0	5,887.0	3,520.9	1.7
NHPC	76.1	1.4	15,543.0	9,623.0	1.6

**Put Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
NHPC	76.1	1.4	12,192.0	4,788.4	2.5
COALINDIA	481.6	2.0	35,797.0	20,256.4	1.8
ALKEM	5,276.5	0.0	2,998.0	1,734.5	1.7
NYKAA	267.6	-0.7	3,791.0	2,200.6	1.7
BOSCHLTD	37,000.0	-2.0	6,017.0	3,519.6	1.7

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BLUESTARCO	1,607.5	1.7	18,636.0	7,024.2	2.7
SAIL	197.3	-3.2	2,284.0	928.6	2.5
GMRAIRPORT	102.0	3.2	21,551.0	8,863.3	2.4
VOLTAS	1,286.5	4.2	47,772.0	21,272.0	2.2
INOXWIND	85.8	3.3	13,145.0	7,381.1	1.8

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SAIL	197.3	-3.2	1,714.0	425.0	4.0
NHPC	76.1	1.4	12,265.0	4,987.8	2.5
SUPREMEIND	3,642.8	2.0	5,308.0	2,346.0	2.3
GMRAIRPORT	102.0	3.2	6,705.0	3,305.1	2.0
NATIONALUM	414.0	-5.2	11,125.0	7,539.8	1.5

## 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
ADANIEN	3000	1538820	0.9%	2973	2900	688761	-2.4%	JIOFIN	250	7994700	6.0%	236	230	4559000	-2.4%
ADANIPTS	1900	1342825	6.1%	1791	1800	609900	0.5%	JSWSTEEL	1440	484650	10.7%	1301	1300	410400	-0.1%
APOLLOHOSP	9000	147750	9.1%	8249	7500	90500	-9.1%	KOTAKBANK	400	6348000	4.8%	382	370	4024000	-3.0%
ASIANPAINT	2800	866750	5.2%	2662	2300	322250	-13.6%	LT	4100	880075	4.0%	3942	4000	793275	1.5%
AXISBANK	1400	2044375	11.7%	1253	1300	933125	3.7%	M&M	3200	780200	6.1%	3016	3000	509200	-0.5%
BAJAJ-AUTO	11000	292575	6.2%	10362	10000	89175	-3.5%	MARUTI	14000	152600	7.2%	13064	12500	97250	-4.3%
BAJAJFINSV	1780	1285750	4.1%	1710	1700	599000	-0.6%	MAXHEALTH	1100	1678950	13.8%	966	950	289800	-1.7%
BAJFINANCE	950	2667750	8.6%	874	900	1487250	2.9%	NESTLEIND	1440	300500	4.1%	1383	1400	144500	1.2%
BEL	450	6604875	9.8%	410	400	3730650	-2.4%	NTPC	400	10123500	9.2%	366	400	2200500	9.2%
BHARTIARTL	1900	2610600	4.5%	1819	1800	944775	-1.0%	ONGC	300	10219500	12.1%	268	280	4090500	4.7%
CIPLA	1540	388125	10.1%	1399	1280	573375	-8.5%	POWERGRID	300	6066700	5.4%	285	300	2179300	5.4%
COALINDIA	500	6219450	3.8%	482	460	5146200	-4.5%	RELIANCE	1400	9714500	7.4%	1304	1300	4355000	-0.3%
DRREDDY	1400	808750	10.5%	1268	1200	750625	-5.3%	SBILIFE	1900	340875	7.7%	1765	1700	332250	-3.7%
EICHERMOT	8000	206300	12.5%	7110	6800	135700	-4.4%	SBIN	1000	7395000	2.1%	979	970	3800250	-0.9%
ETERNAL	260	6123125	2.2%	254	250	4542025	-1.7%	SHRIRAMFIN	1000	2201925	9.2%	916	900	820050	-1.7%
GRASIM	3200	214250	3.1%	3104	3000	207250	-3.3%	SUNPHARMA	1900	2194150	6.7%	1780	1800	1039500	1.1%
HCLTECH	1300	1172500	11.3%	1168	1060	604800	-9.3%	TATACONSUM	1300	954800	13.1%	1149	1100	718850	-4.3%
HDFCBANK	800	19272000	6.1%	754	750	6639600	-0.6%	TMPV	400	5797600	0.1%	400	380	1800800	-4.9%
HDFCLIFE	600	2555300	4.6%	574	585	1845800	2.0%	TATASTEEL	220	19327000	4.5%	211	210	6363500	-0.3%
HINDALCO	1110	1948800	-1.4%	1126	1100	905100	-2.3%	TCS	2300	3032575	2.6%	2241	2300	1762250	2.6%
HINDUNILVR	2300	1472700	10.6%	2079	2000	583800	-3.8%	TECHM	1560	1708200	4.9%	1487	1300	923400	-12.6%
ICICIBANK	1280	4468100	2.3%	1252	1300	2555000	3.9%	TITAN	4200	411775	-0.7%	4231	4000	261800	-5.5%
INDIGO	4500	688350	-0.2%	4509	4400	225750	-2.4%	TRENT	2866.65	513600	1.0%	2838	2800	200700	-1.3%
INFY	1300	5017600	8.2%	1201	1200	1726800	-0.1%	ULTRACEMCO	12000	76850	9.1%	10997	10700	78000	-2.7%
ITC	302	17579200	7.7%	280	292	3758400	4.2%	WIPRO	210	36216000	2.8%	204	190	14196000	-7.0%

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 (DIIs), 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: Axis Securities Limited, 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