



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	23,462	1.2% ▼
Open Interest (OI)	1,93,09,875	4.1% ▲
Change in OI (abs)	1,93,09,875	7,52,505 ▲
Premium / Discount (Abs)	79	122 ▼
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	53,973	1.44% ▼
Open interest (OI)	27,80,400	3.7% ▲
Change in OI (abs)	27,80,400	99,150 ▲
Premium / Discount (Abs)	330	191 ▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	16.54	0.36 ▲
Nifty ATM IV (%)	14.92	0.56 ▼
Bank Nifty ATM IV (%)	18.68	0.68 ▲
PCR (Nifty)	0.69	0.05 ▼
PCR (Bank Nifty)	0.81	0.13 ▼

The FII Long Ratio in Index Futures **Drop to 10%**, **down** from **12 %** in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COALINDIA	7,87,18,500	8.4%	476.35	3.1%
NUVAMA	15,55,500	4.1%	1562	0.1%
NBCC	10,80,95,000	3.6%	105.2	3.4%
BDL	70,89,125	3.5%	1143.8	0.3%
COFORGE	1,58,13,200	2.4%	1459.6	1.7%

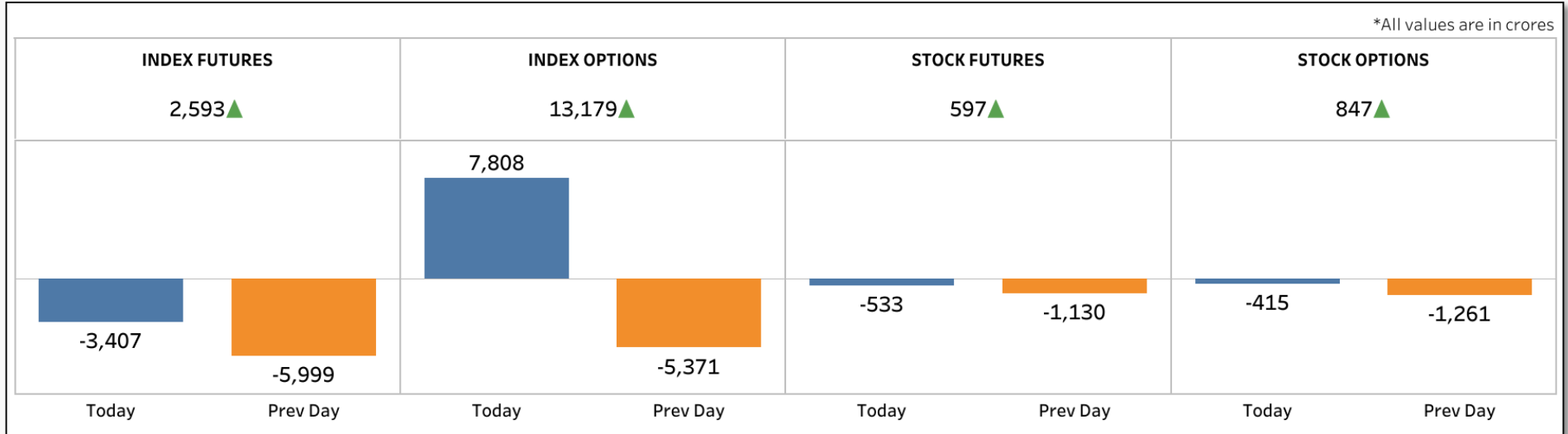
Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GVT&D	2,23,250	21.7%	4789	-7.6%
IREDA	6,63,18,125	16.6%	119.61	-5.5%
KAYNES	47,30,150	8.0%	3015.4	-3.8%
NAM-INDIA	37,65,625	7.6%	1072.1	-1.7%
INOXWIND	9,09,70,175	7.6%	84.25	-10.2%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HCLTECH	3,90,46,200	-4.9%	1199	2.1%
LTM	34,24,800	-4.0%	4192.8	2.5%
NATIONALUM	4,43,66,250	-3.3%	438.3	2.6%
MPHASIS	41,70,375	-2.5%	2321.5	1.6%
NAUKRI	1,47,14,750	-2.4%	1009.05	0.3%

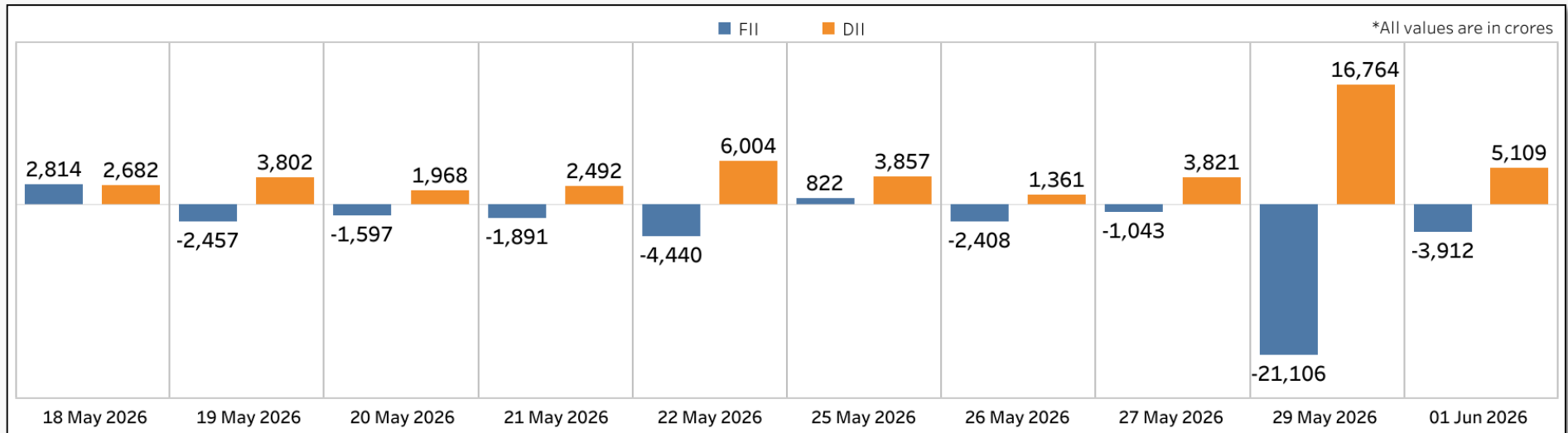
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SONACOMS	1,56,27,325	-3.5%	600.45	-2.1%
PNBHOUSING	1,12,69,050	-3.5%	1011	-3.2%
BLUESTARCO	27,29,025	-2.9%	1544	-3.3%
MANAPPURAM	4,55,97,000	-2.8%	317.85	-3.1%
CAMS	59,18,025	-2.5%	771.1	-3.0%

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

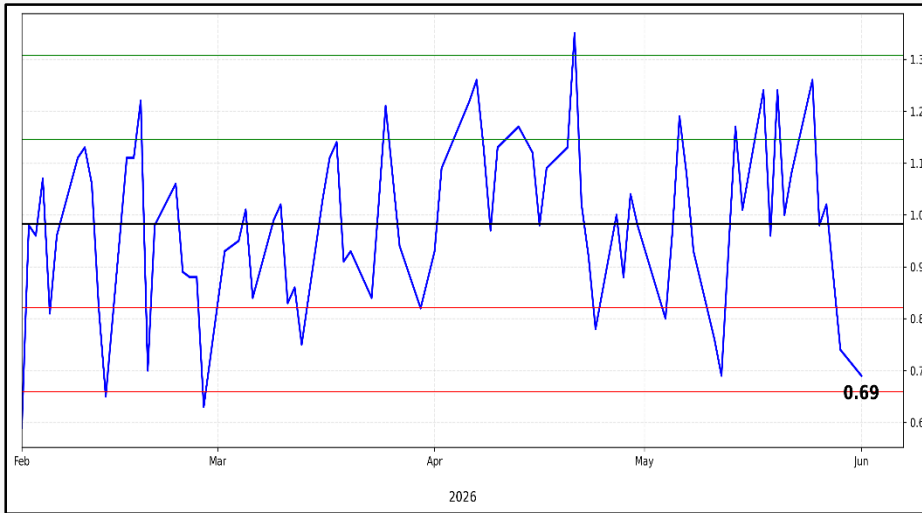
Daily Net Open Interest Change



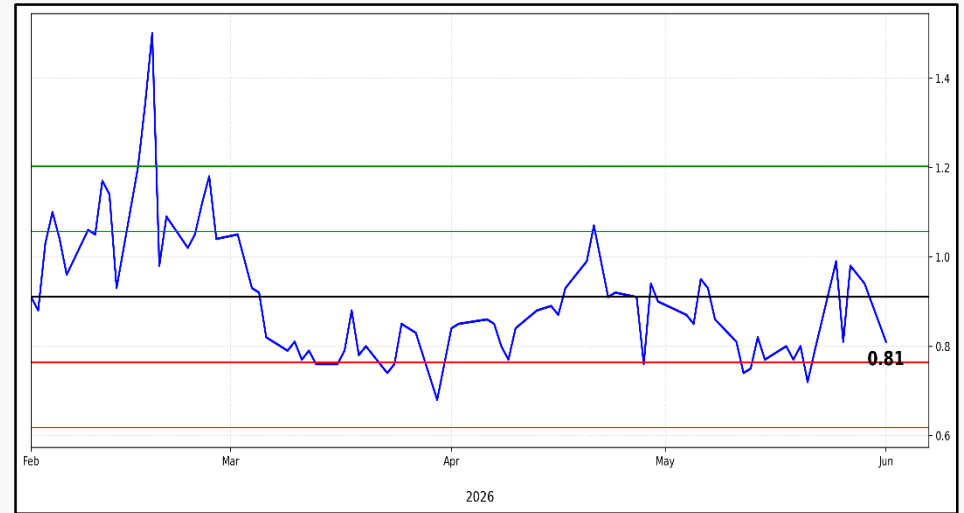
DII and FII Daily Cash Market Flows



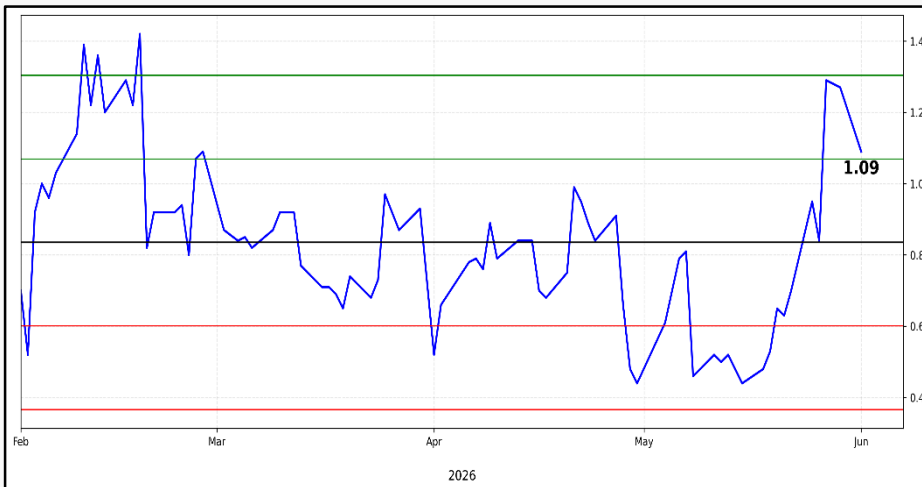
Nifty



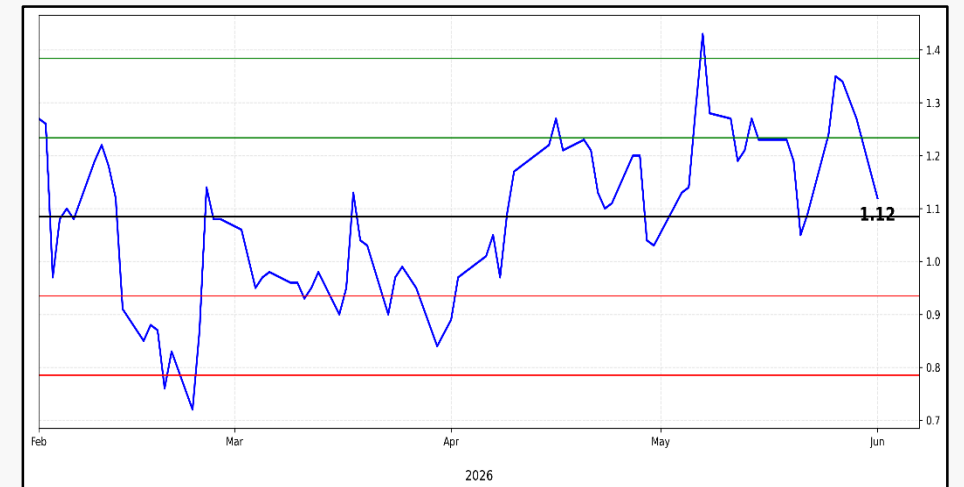
Bank Nifty



Fin Nifty



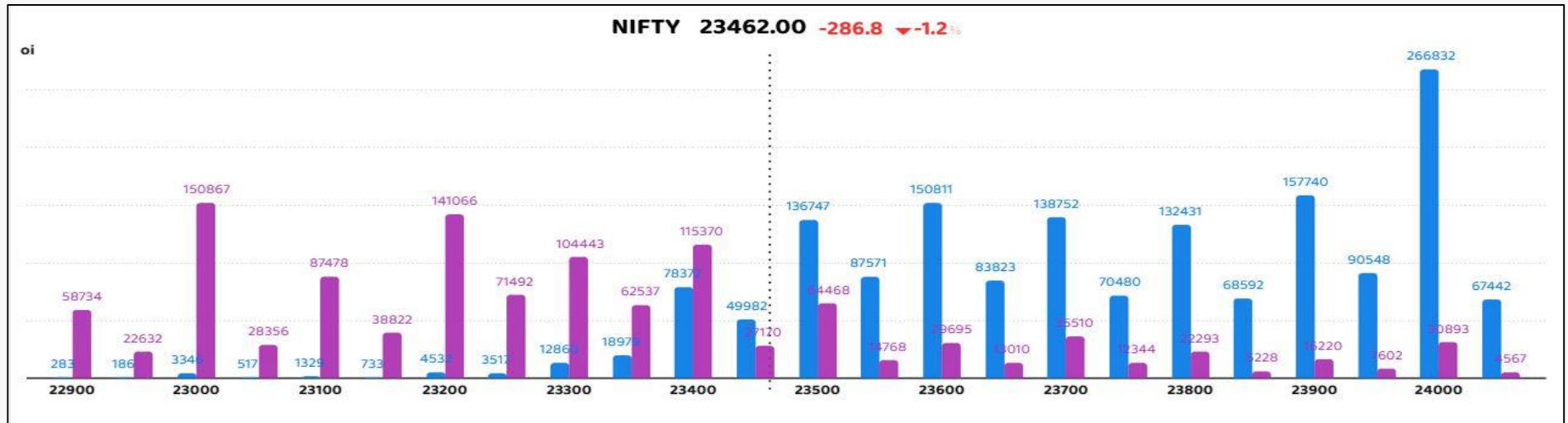
Midcap Select Nifty



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 23,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.

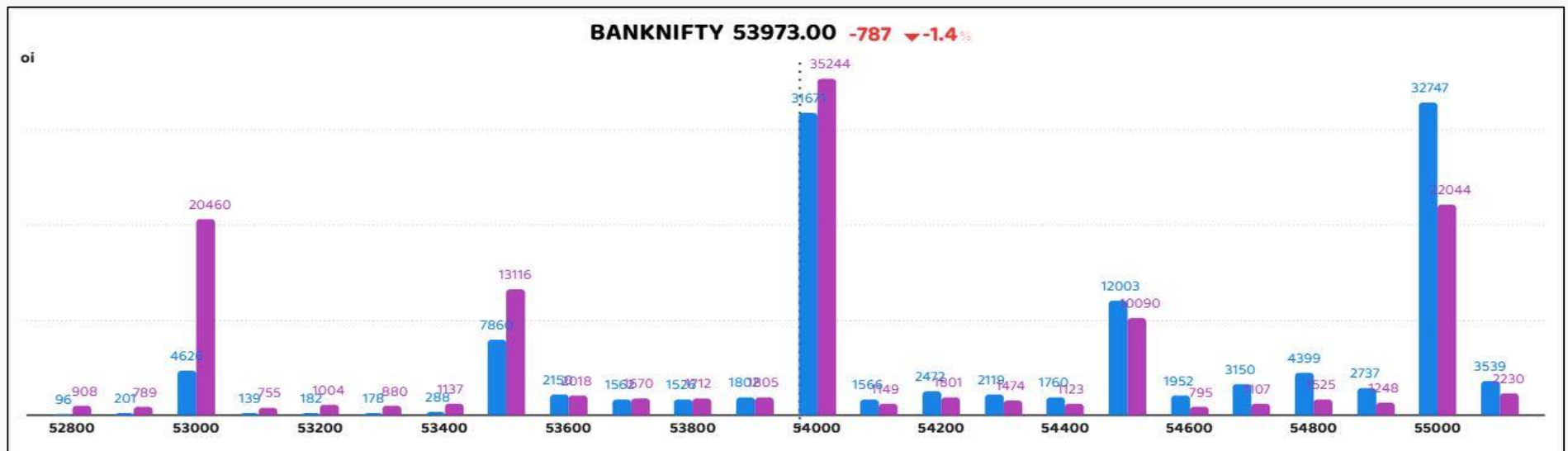
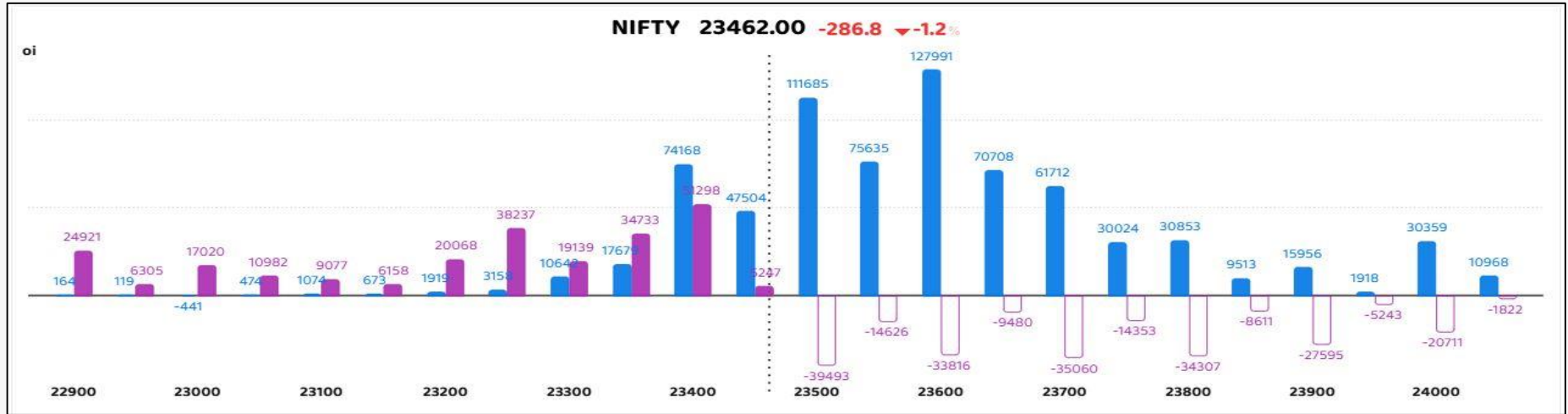


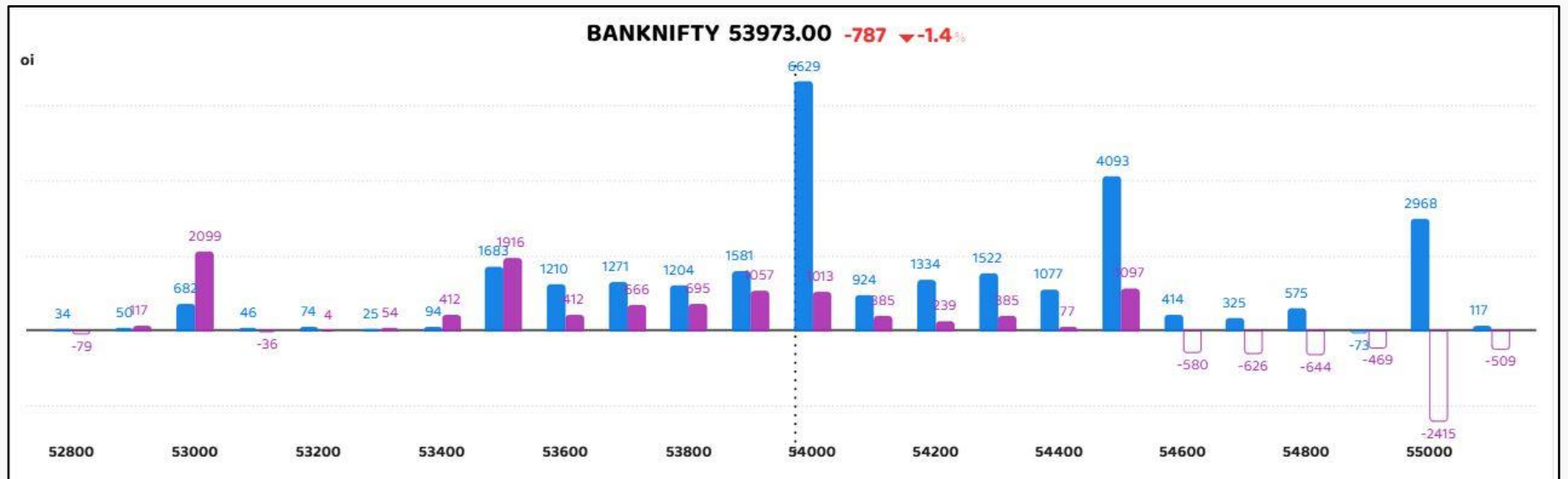
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23,600 Call and the 23,400 Put



For the Bank Nifty, the biggest open interest changes were seen at the 54,000 Call & the 55,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SHREE CEMENT	25060.0	-0.9	31.9	36.7	13.5	79.5
VEDANTA LTD	337.2	-4.4	39.0	47.4	9.2	78.1
BHARAT HEAVY ELE	404.8	-2.9	35.3	45.1	5.2	75.5
TECH MAHINDRA LT	1543.2	4.0	27.3	39.1	3.2	67.0
HDFC ASSET MANAG	2604.7	-2.6	29.6	43.3	5.1	64.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	149.8	-3.6	34.6	734.8	18.5	2.2
ADITYA BIRLA CAP	350.6	-3.5	29.1	658.6	8.2	3.2
INDUS TOWERS LTD	431.5	-2.4	23.6	51.0	22.6	3.7
HINDALCO INDS	1141.3	1.3	26.0	254.2	12.3	5.6
LAURUS LABS LTD	1388.4	1.9	25.7	48.4	24.2	6.1

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHARAT DYNAMICS	1204.0	-0.1	56.8	67.3	27.9	99.3
SHREE CEMENT	25060.0	-0.9	31.9	36.7	13.5	98.2
WIPRO LTD	206.4	1.1	41.2	68.1	2.1	93.7
INDIAN RENEWABLE	126.3	-5.2	43.8	75.0	6.7	89.9
VEDANTA LTD	337.2	-4.4	39.0	47.4	9.2	88.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DIVI LABS LTD	6553.5	-1.7	17.0	34.9	4.8	1.5
HDFC BANK LTD	742.7	-0.3	4.6	43.1	1.5	1.7
INDUS TOWERS LTD	431.5	-2.4	23.6	51.0	22.6	1.9
BSE LTD	4066.6	-1.9	34.6	55.9	30.7	2.2
DELHIVERY LTD	437.3	-3.3	26.4	42.8	24.4	2.3

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
TATAELXSI	4,302.8	0.4	10,969.0	2,139.0	5.1
KPITTECH	786.1	1.8	24,533.0	4,849.0	5.1
KAYNES	3,100.2	-1.1	48,821.0	9,686.0	5.0
IEX	125.4	-2.3	5,988.0	1,342.0	4.5
ANGELONE	335.6	-0.5	19,497.0	4,641.0	4.2

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SUPREMEIND	3,520.7	-0.8	1,235.0	2,464.0	2.0
SOLARINDS	18,203.0	-0.2	3,337.0	5,347.0	1.6
POWERINDIA	36,380.0	-5.4	26,304.0	34,067.0	1.3
KEI	5,173.5	-1.8	2,038.0	2,617.0	1.3
ALKEM	5,314.5	-3.3	10,004.0	11,579.0	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INOXWIND	83.8	-9.9	12,464.0	13,042.0	95.6
GLENMARK	2,201.2	-3.2	8,584.0	9,001.0	95.4
ASHOKLEY	149.8	-3.6	24,109.0	25,447.0	94.7
MAXHEALTH	938.4	-2.8	14,297.0	15,299.0	93.5
CONCOR	464.1	0.1	8,987.0	9,895.0	90.8

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
COALINDIA	472.6	3.2	32,532.0	29,730.0	100.0
ASHOKLEY	149.8	-3.6	14,800.0	15,583.0	95.0
GLENMARK	2,201.2	-3.2	5,217.0	5,674.0	91.9
BDL	1,204.0	0.0	9,884.0	11,943.0	82.8
SBICARD	616.0	-1.4	7,807.0	9,564.0	81.6

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NMDC	92.4	5.0	34,506.0	34,877.0	98.9
NBCC	104.4	4.1	13,699.0	17,958.0	76.3
ASIANPAINT	2,632.4	-1.5	87,804.0	129,228.0	67.9
COALINDIA	472.6	3.2	97,491.0	177,031.0	55.1
INDIGO	4,453.3	1.1	70,641.0	146,281.0	48.3

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NMDC	92.4	5.0	10,076.0	11,882.0	84.8
ASIANPAINT	2,632.4	-1.5	38,261.0	55,880.0	68.5
NBCC	104.4	4.1	4,309.0	6,865.0	62.8
INOXWIND	83.8	-9.9	22,958.0	44,639.0	51.4
COALINDIA	472.6	3.2	62,951.0	129,719.0	48.5

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ALKEM	5,314.5	-3.3	5,415.0	2,852.8	1.9
NYKAA	266.7	1.7	9,063.0	4,792.2	1.9
BDL	1,204.0	0.0	17,201.0	9,186.6	1.9
CONCOR	464.1	0.1	8,987.0	4,807.8	1.9
MAXHEALTH	938.4	-2.8	14,297.0	7,838.2	1.8

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BDL	1,204.0	0.0	9,884.0	5,198.4	1.9
COALINDIA	472.6	3.2	32,532.0	17,384.2	1.9
NYKAA	266.7	1.7	3,342.0	1,830.5	1.8
ALKEM	5,314.5	-3.3	2,671.0	1,475.0	1.8
INOXWIND	83.8	-9.9	6,218.0	3,819.2	1.6

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
INOXWIND	83.8	-9.9	26,863.0	6,231.4	4.3
IREDA	126.3	-5.3	17,321.0	4,379.3	4.0
NBCC	104.4	4.1	13,699.0	4,810.0	2.8
NMDC	92.4	5.0	34,506.0	12,317.2	2.8
TECHM	1,543.2	4.0	48,999.0	18,655.4	2.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INOXWIND	83.8	-9.9	22,958.0	2,242.0	10.2
ALKEM	5,314.5	-3.3	11,579.0	2,474.9	4.7
IREDA	126.3	-5.3	5,515.0	1,782.2	3.1
GLENMARK	2,201.2	-3.2	16,447.0	5,824.2	2.8
NBCC	104.4	4.1	4,309.0	1,797.6	2.4

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
ADANIANT	3000	1414911	3.1%	2909	2800	678873	-3.8%	JIOFIN	250	7444800	6.4%	235	230	4175950	-2.1%
ADANIPTS	1800	943825	0.9%	1784	1800	481175	0.9%	JSWSTEEL	1300	591975	0.0%	1299	1200	383400	-7.6%
APOLLOHOSP	9100	144000	12.2%	8109	7500	77000	-7.5%	KOTAKBANK	400	5562000	6.0%	377	370	3860000	-2.0%
ASIANPAINT	2800	825500	6.4%	2632	2600	339250	-1.2%	LT	4100	847875	2.2%	4011	4000	748300	-0.3%
AXISBANK	1300	1060000	1.9%	1276	1300	1005000	1.9%	M&M	3200	796600	7.7%	2970	3100	462600	4.4%
BAJAJ-AUTO	11000	302925	6.0%	10376	9800	98700	-5.6%	MARUTI	13500	139300	4.3%	12946	12500	88000	-3.4%
BAJAJFINSV	1840	577500	4.6%	1759	1700	537250	-3.3%	MAXHEALTH	1100	1573425	17.2%	938	1000	321300	6.6%
BAJFINANCE	950	2204250	6.9%	889	950	1359000	6.9%	NESTLEIND	1440	352000	3.5%	1392	1400	176500	0.6%
BEL	420	5208375	3.1%	407	420	3633750	3.1%	NTPC	400	7608000	5.6%	379	400	2208000	5.6%
BHARTIARTL	1900	2180250	4.9%	1811	1700	807500	-6.1%	ONGC	300	10264500	13.5%	264	280	4133250	5.9%
CIPLA	1540	397500	10.8%	1390	1280	558750	-7.9%	POWERGRID	300	3974800	4.8%	286	300	2280000	4.8%
COALINDIA	500	4968000	5.8%	473	450	5644350	-4.8%	RELIANCE	1400	7794500	6.1%	1320	1300	3206000	-1.5%
DRREDDY	1350	766875	4.6%	1290	1200	733125	-7.0%	SBILIFE	1900	278250	4.8%	1813	1700	328500	-6.2%
EICHERMOT	8000	181100	12.7%	7101	6800	134700	-4.2%	SBIN	1000	6227250	4.8%	954	970	3618000	1.7%
ETERNAL	260	4816050	4.8%	248	250	3608400	0.8%	SHRIRAMFIN	1000	1678875	8.8%	919	950	599775	3.4%
GRASIM	3200	208750	3.1%	3103	3000	201250	-3.3%	SUNPHARMA	1900	1805650	5.8%	1797	1800	1009050	0.2%
HCLTECH	1200	1018850	0.4%	1195	1200	731150	0.4%	TATACONSUM	1300	904200	13.7%	1143	1100	743050	-3.8%
HDFCBANK	800	20459450	7.7%	743	750	5589100	1.0%	TMPV	400	2850400	3.9%	385	340	1472000	-11.7%
HDFCLIFE	650	1841400	10.8%	587	585	1801800	-0.3%	TATASTEEL	220	16203000	4.5%	211	200	5962000	-5.0%
HINDALCO	1110	1962800	-2.7%	1141	1000	842800	-12.4%	TCS	2300	1395800	0.1%	2297	2300	1186850	0.1%
HINDUNILVR	2300	1478700	10.3%	2084	2000	548400	-4.0%	TECHM	1640	746400	6.3%	1543	1300	426600	-15.8%
ICICIBANK	1280	4813200	3.3%	1240	1300	2601200	4.9%	TITAN	4200	390075	4.4%	4025	3500	205100	-13.0%
INDIGO	4600	499500	3.3%	4453	4500	181950	1.0%	TRENT	4500	285400	8.2%	4157	4200	132100	1.0%
INFY	1200	2843600	-0.2%	1203	1200	1859600	-0.2%	ULTRACEMCO	13000	51650	15.7%	11232	10700	66050	-4.7%
ITC	302	15848000	8.0%	280	292	4049600	4.4%	WIPRO	210	29937000	1.7%	206	190	14406000	-8.0%

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, 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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