



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,710	0.6% ▼
Open Interest (OI)	2,04,29,400	1.4% ▲
Change in OI (abs)	2,04,29,400	2,75,475 ▲
Premium / Discount (Abs)	29	16 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	56,179	0.7% ▼
Open interest (OI)	25,12,370	2.3% ▲
Change in OI (abs)	25,12,370	55,755 ▲
Premium / Discount (Abs)	94	37 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.06	0.78 ▲
Nifty ATM IV (%)	11.57	2.2 ▲
Bank Nifty ATM IV (%)	13.97	2.7 ▲
PCR (Nifty)	0.64	0.06 ▼
PCR (Bank Nifty)	0.69	0.06 ▼

The FII Long Ratio in Index Futures **Jump** to 14.6 %, **up** from 14.3% in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDPETRO	6,35,93,100	14.9%	422.65	0.0%
LAURUSLABS	2,34,20,900	9.3%	888.4	6.1%
MARICO	2,05,02,000	6.8%	700.05	0.7%
PPLPHARMA	1,97,92,500	6.4%	204.94	1.0%
MPHASIS	48,91,150	5.6%	2702.8	2.9%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KFINTECH	22,99,500	37.2%	1151.3	-1.3%
LODHA	92,25,450	20.8%	1207.3	-5.9%
IEX	4,15,65,000	20.6%	139.24	-4.4%
APLAPOLLO	50,52,600	16.7%	1507.2	-2.5%
360ONE	57,53,500	11.4%	1075.3	-0.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PEL	46,31,250	-14.1%	1295.6	1.4%
HEROMOTOCO	65,81,700	-13.3%	4292	1.8%
BALKRISIND	10,11,900	-11.9%	2696.7	0.5%
OFSS	10,67,175	-10.1%	8681	0.9%
LICI	82,30,600	-8.2%	893.8	0.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
M&MFIN	1,37,13,520	-21.3%	248.9	-1.6%
IREDA	4,06,89,300	-18.0%	150.35	-2.0%
BLUESTARCO	17,40,050	-17.6%	1744.2	-0.5%
HINDCOPPER	2,05,85,200	-15.4%	248.15	-4.0%
MGL	15,42,400	-14.9%	1377	-0.1%

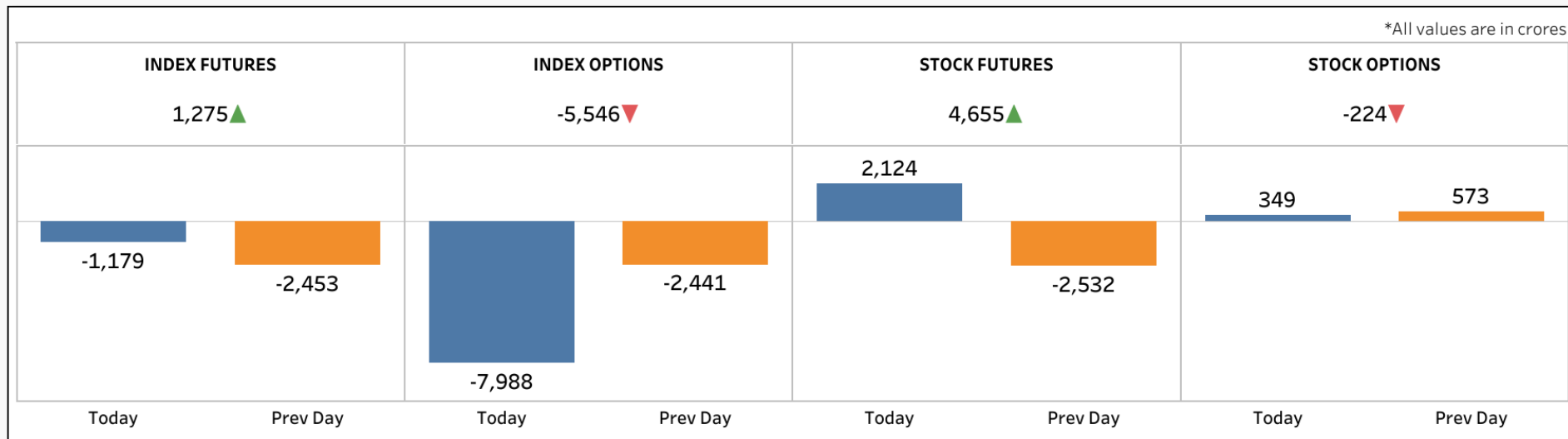
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

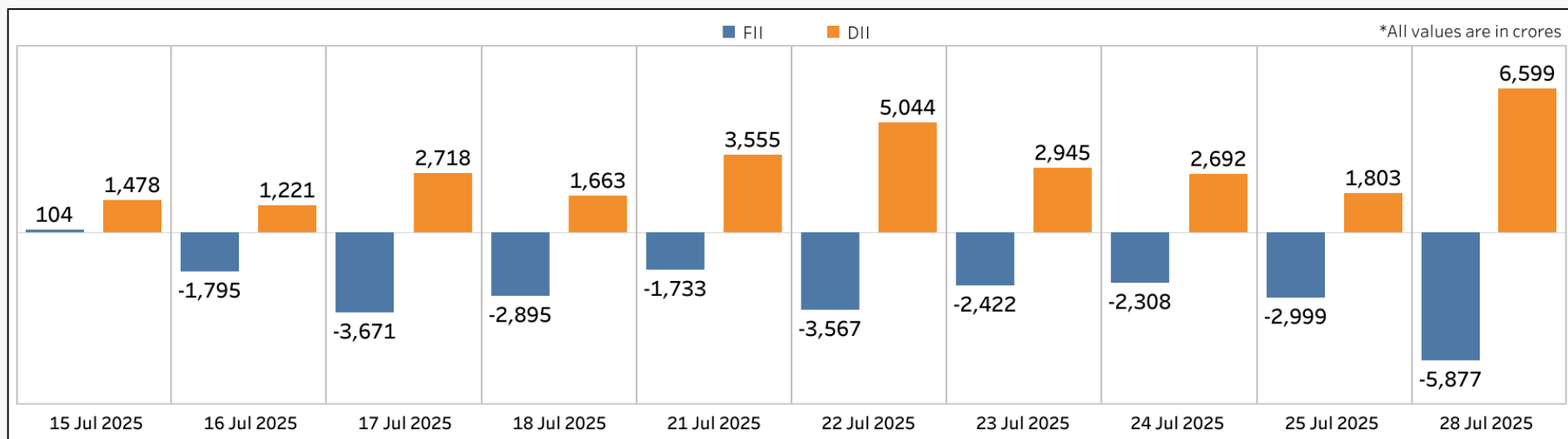
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
5,636 ▲	6,774 ▲	-33,171 ▼	68,944 ▲	0	1,575 ▲	3,333 ▲	-61,846 ▼
		41,356	33,392				23,601
		8,185		0	0	3,333	0
-49,411	-6,208				-2,003		
-55,047	-12,982		-35,552		-3,578		-38,245
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-77,664	-164,728	242,245	1,308,946	1,570	22,674	18,296	-3,997,708
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
-64,112 ▼	2,727 ▲	73,981 ▲	1,258 ▲	58,476 ▲	-11,076 ▼	-44,143 ▼	-8,356 ▼
						66,815	
15,334	10,390			34,076		22,672	13,564
	7,663				8,897		21,920
		-34,190	-8,711		-2,179		
		-108,171	-9,969		-24,400		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
81,656	126,837	-509,312	2,226,612	-5,563	15,217	248,772	462,150
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

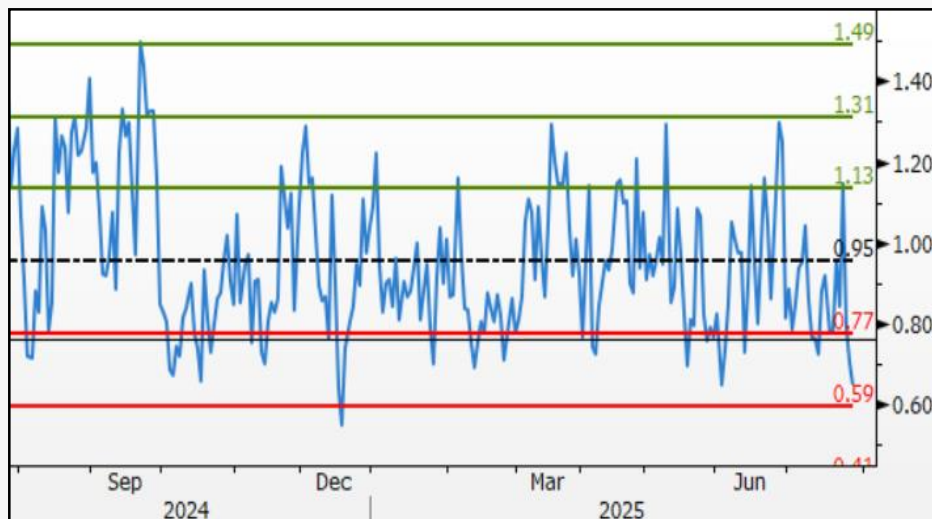
Daily Net Open Interest Change



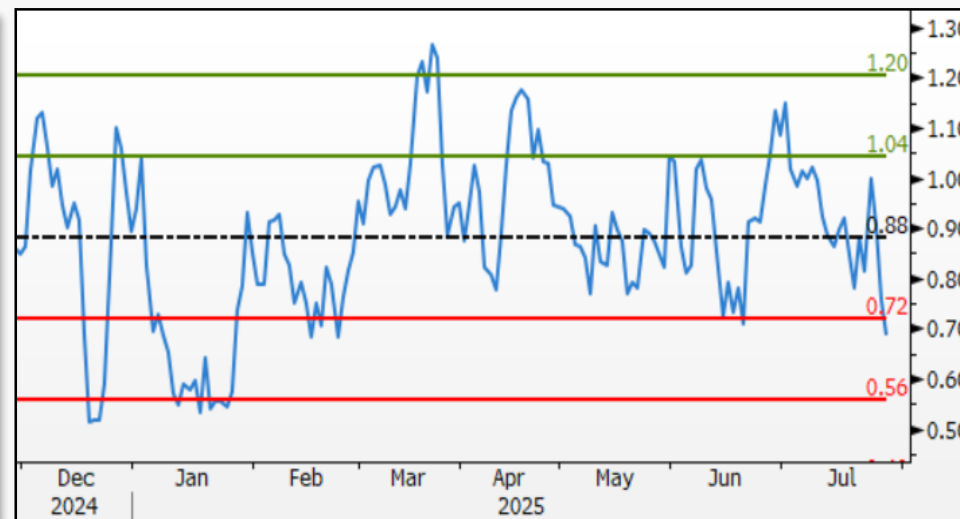
DII and FII Daily Cash Market Flows



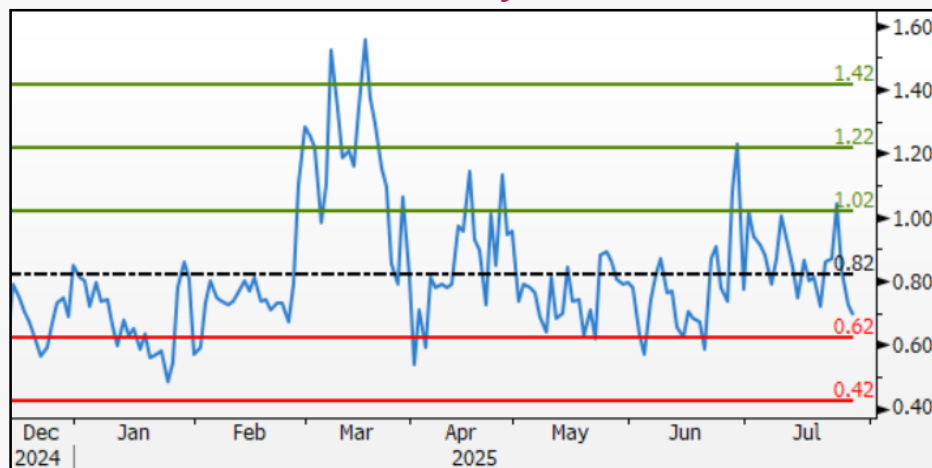
Nifty



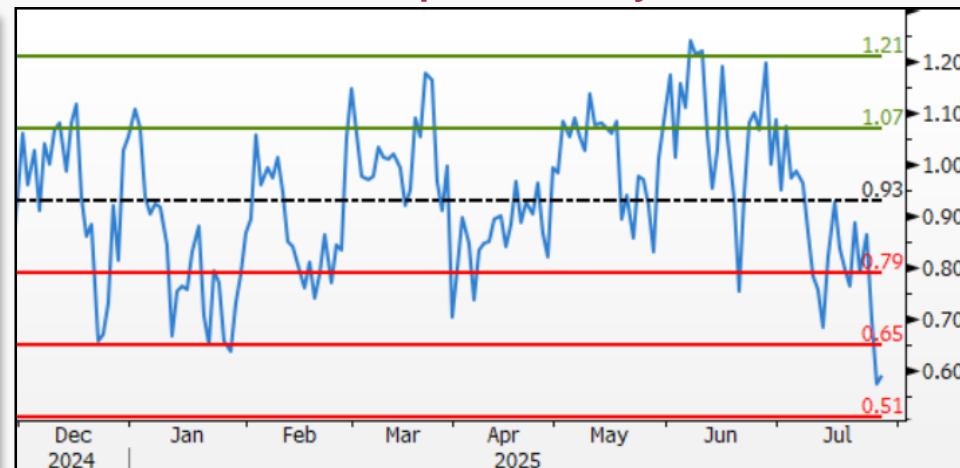
Bank Nifty



Fin Nifty

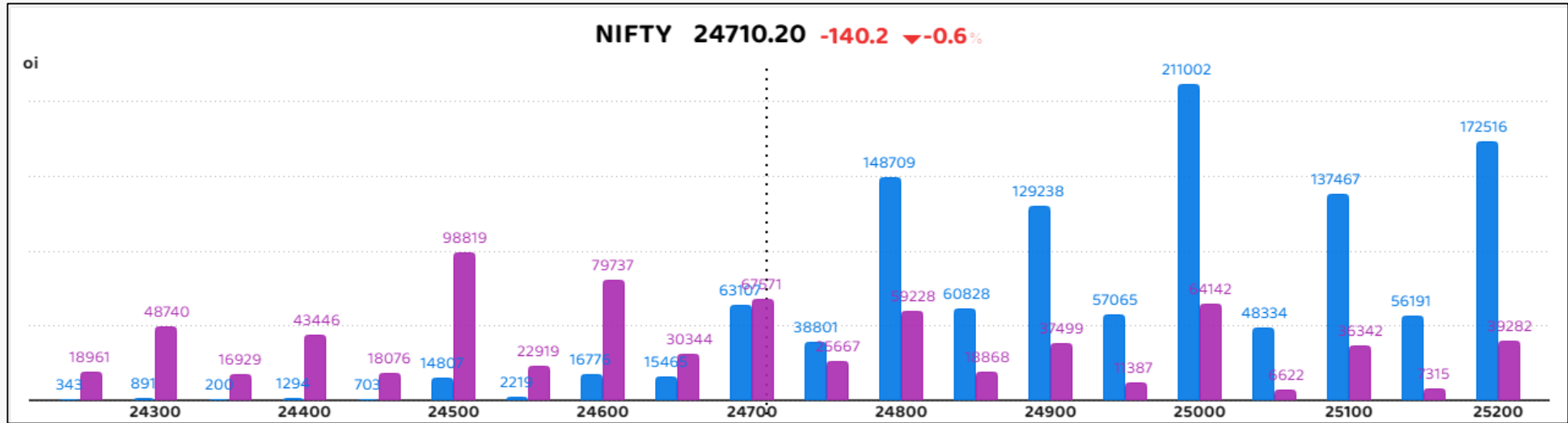


Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 56,000 Put saw the most amount of open interest.

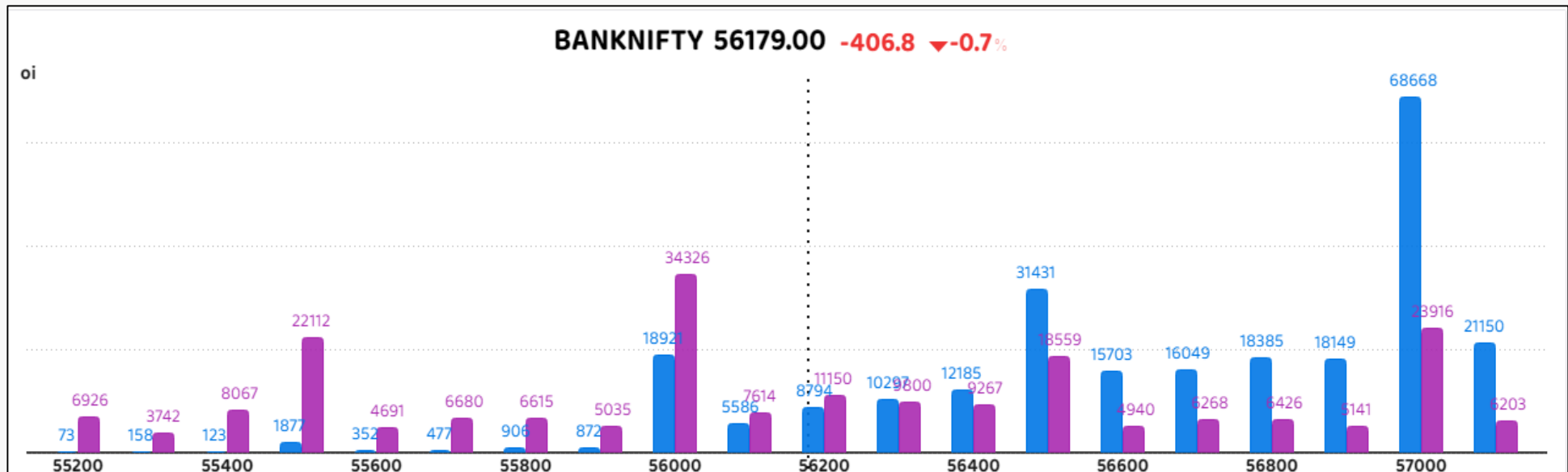
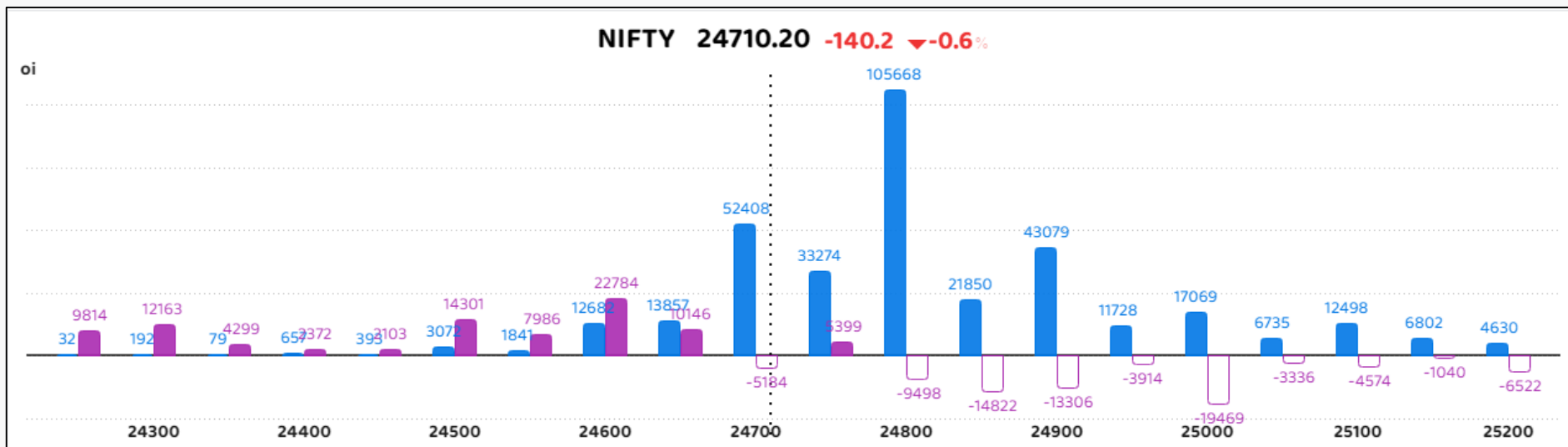


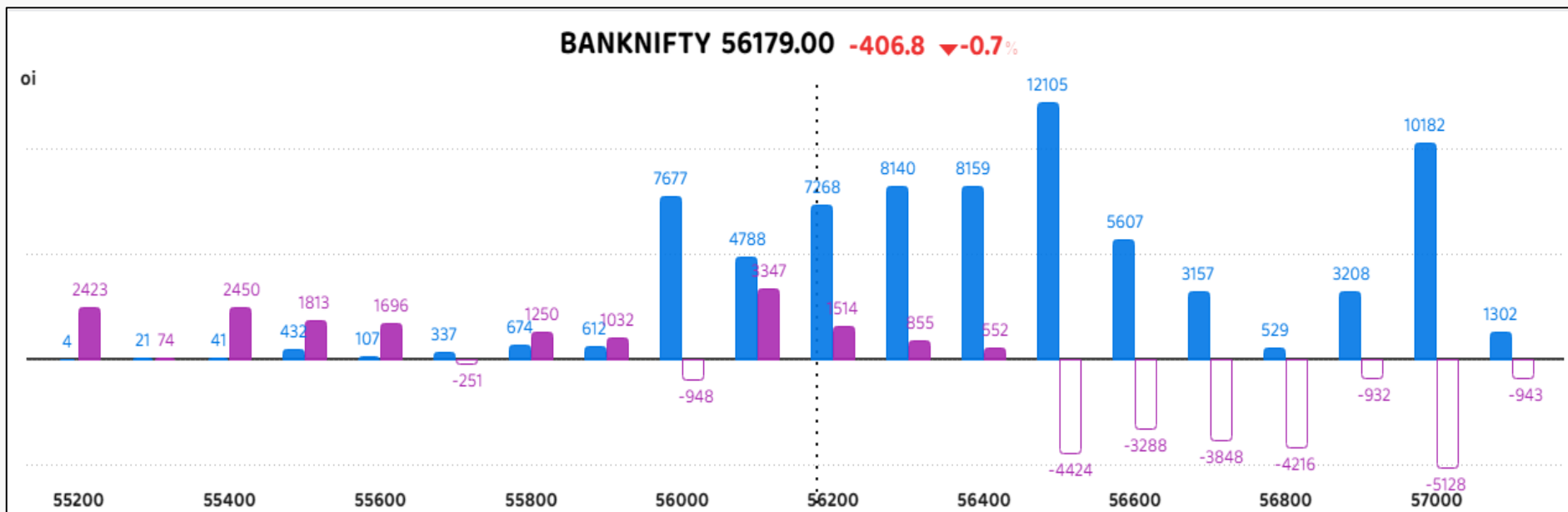
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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 24,600 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 57,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SHREE CEMENT	30695.0	-0.8	31.5	31.9	7.9	98.3
BOSCH LTD	38235.0	1.07	32.3	34.9	3.3	91.5
RAIL VIKAS NIGAM	354.5	-3.0	42.6	45.7	32.0	77.4
MARUTI SUZUKI IN	12340.0	-0.5	23.1	29.9	0.4	76.9
MANKIND PHARMA L	2541.6	-2.3	35.9	39.5	25.0	75.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN ZINC	432.1	-1.6	24.4	54.2	24.4	0
UNION BANK INDIA	133.4	-2.0	26.2	52.4	26.2	0
HDFC LIFE INSURA	761.2	-0.1	20.4	80.6	19.5	1.5
TATA TECHNOLOGIE	699.3	-1.2	26.2	54.4	25.6	1.9
PNB HOUSING FINA	1013.5	0.3	29.7	58.3	28.8	3.1

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SHREE CEMENT	30695.0	-0.8	31.5	31.9	7.9	99.8
BOSCH LTD	38235.0	1.07	32.3	34.9	3.3	99.5
INDIAN ENERGY EX	139.1	-4.0	51.3	76.3	25.8	98.5
MANKIND PHARMA L	2541.6	-2.3	35.9	39.5	25.0	95.3
RAIL VIKAS NIGAM	354.5	-3.0	42.6	45.7	32.0	90.8

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN ZINC	432.1	-1.6	24.4	54.2	24.4	0.0
UNION BANK INDIA	133.4	-2.0	26.2	52.4	26.2	0.0
ACC LTD	1825.6	-1.2	20.0	40.5	18.8	0.7
ICICI BANK LTD	1488.4	0.7	12.7	46.1	9.3	1.1
ORACLE FINANCIAL	8681.0	0.8	30.2	54.7	22.1	1.1

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ALKEM LABORATORI	5047.4	0.7	5682	1241	4.6
PAGE INDUSTRIES	46510.0	0.5	5557	1242	4.5
SYNGENE INTERNAT	690.5	1.3	12775	3307	3.9
BOSCH LTD	38235.0	1.0	23519	6635	3.5
SUN PHARMA INDU	1702.2	0.1	38729	10989	3.5

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
INDUSIND BANK	802.1	-2.6	60950	72950	1.2
IIFL FINANCE LTD	496.3	-3.9	2647	2889	1.1
GAIL INDIA LTD	180.6	-1.5	23396	24124	1
ETERNAL LTD	307.3	-1.0	39449	40219	1
HINDALCO INDS	689.4	-0.5	13833	13134	0.9

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
LODHA DEVELOPERS	1203.2	-5.9	10381	10381	100
TORRENT PHARMA	3622.9	0.5	6535	6535	100
PIRAMAL PHARMA L	204.4	1.0	4042	4042	100
APL APOLLO TUBES	1504.8	-2.5	10697	10709	99.89
PERSISTENT SYS	5149.5	-0.1	39734	39734	97.51

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
LODHA DEVELOPERS	1203.2	-5.9	5360	5360	100
TORRENT PHARMA	3622.9	0.5	3650	3650	100
APL APOLLO TUBES	1504.8	-2.5	7267	7267	100
LAURUS LABS LTD	889.3	6.1	13459	13459	100
KAYNES TECHNOLOG	5517.0	-3.1	2599	2600	99.96

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
LODHA DEVELOPERS	1203.2	-5.9	50462	50462	100
LAURUS LABS LTD	889.25	6.1	123870	123870	100
POONAWALLA FINCO	420.65	1.8	35582	35582	100

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
LODHA DEVELOPERS	1203.2	-5.9	47403	47403	100

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PERSISTENT SYS	5149.5	-0.1	39734	15578	2.6
LODHA DEVELOPERS	1203.2	-5.9	10381	4414	2.4
KOTAK MAHINDRA	1966.6	-7.4	44347	20791	2.1
COLGATE PALMOLIV	2205.8	-0.4	13942	7302	1.9
NESTLE INDIA LTD	2229.3	-1.9	17587	9484	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
LODHA DEVELOPERS	1203.2	-5.9	47403	5529	8.6
POONAWALLA FINCO	420.7	1.7	15391	1885	8.2
KOTAK MAHINDRA	1966.6	-7.4	161036	23614	6.8
LAURUS LABS LTD	889.3	6.1	52052	8435	6.2
ADANI GREEN ENER	1003.9	2.8	27503	5170	5.3

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
POONAWALLA FINCO	420.7	1.7	35582	4132	8.6
LAURUS LABS LTD	889.3	6.1	123870	15943	7.8
LODHA DEVELOPERS	1203.2	-5.9	50462	8212	6.1
CIPLA LTD	1572.0	2.5	141052	24566	5.7
KOTAK MAHINDRA	1966.6	-7.4	194616	33930	5.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
LODHA DEVELOPERS	1203.2	-5.9	47403	5529	8.6
POONAWALLA FINCO	420.7	1.7	15391	1885	8.2
KOTAK MAHINDRA	1966.6	-7.4	161036	23614	6.8
LAURUS LABS LTD	889.3	6.1	52052	8435	6.2
ADANI GREEN ENER	1003.9	2.8	27503	5170	5.3

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	1857300	3.1%	2522	2600	1349400	3.1%	ITC	420	10014400	2.5%	410	420	3758400	2.5%
ADANIPTS	1400	1116250	1.7%	1376	1400	1063525	1.7%	JIOFIN	330	9773650	7.4%	307	300	4389800	-2.4%
APOLLOHOSP	8000	316375	8.7%	7357	7000	144250	-4.8%	JSWSTEEL	1180	1300725	14.7%	1029	1000	621000	-2.8%
ASIANPAINT	2500	1464250	6.0%	2360	2300	388750	-2.5%	KOTAKBANK	2000	1760000	1.7%	1967	2100	720000	6.8%
AXISBANK	1200	6303125	11.8%	1074	1100	1332500	2.5%	LT	3700	2618700	8.1%	3422	3500	519925	2.3%
BAJAJ-AUTO	8400	201750	3.8%	8090	8000	101250	-1.1%	M&M	3300	968800	2.8%	3210	3200	421400	-0.3%
BAJAJFINSV	2100	1359500	6.2%	1978	2000	387000	1.1%	MARUTI	12800	605300	3.7%	12340	11200	73750	-9.2%
BAJFINANCE	950	2382750	7.9%	881	900	1535250	2.2%	NESTLEIND	2500	478750	12.1%	2229	2400	204000	7.7%
BEL	400	9789750	2.8%	389	390	3702150	0.2%	NTPC	345	34483500	3.6%	333	345	3333000	3.6%
BHARTIARTL	2000	2601100	5.8%	1890	1800	598500	-4.8%	ONGC	250	18868500	4.2%	240	240	1530000	0.0%
CIPLA	1600	1238625	1.8%	1572	1500	594000	-4.6%	POWERGRID	300	4402300	2.8%	292	290	1871500	-0.7%
COALINDIA	400	6651450	5.7%	378	395	2971350	4.4%	RELIANCE	1500	9504500	8.1%	1388	1400	2218000	0.9%
DRREDDY	1300	2071250	1.0%	1287	1100	775000	-14.6%	SBILIFE	1860	1589250	0.5%	1851	1800	336750	-2.7%
EICHERMOT	5800	253575	7.7%	5386	5800	103600	7.7%	SBIN	820	19272750	2.9%	797	820	6996000	2.9%
ETERNAL	320	8696050	4.1%	307	300	9377475	-2.4%	SHRIRAMFIN	700	2671350	10.5%	633	600	1098900	-5.3%
GRASIM	2900	210500	6.3%	2727	2600	122000	-4.7%	SUNPHARMA	1720	2587200	1.0%	1702	1700	491750	-0.1%
HCLTECH	1600	1060150	9.1%	1466	1600	414050	9.1%	TATACONSUM	1100	1278200	3.8%	1060	980	504900	-7.5%
HDFCBANK	2020	5710650	0.6%	2009	2000	2490400	-0.4%	TATAMOTORS	700	6379200	2.5%	683	680	2600800	-0.4%
HDFCLIFE	820	3058000	7.7%	761	740	1115400	-2.8%	TATASTEEL	170	20806500	6.5%	160	160	8987000	0.2%
HEROMOTOCO	4500	792750	4.9%	4291	4300	155250	0.2%	TCS	3400	2165975	10.4%	3079	3000	752850	-2.6%
HINDALCO	700	1989400	1.5%	689	680	1054200	-1.4%	TECHM	1600	2530800	10.3%	1451	1390	348000	-4.2%
HINDUNILVR	2560	1107300	4.8%	2442	2300	553800	-5.8%	TITAN	3500	708575	3.2%	3393	3400	204400	0.2%
ICICIBANK	1490	2843400	0.1%	1488	1460	1883000	-1.9%	TRENT	5500	797300	10.1%	4994	6000	275100	20.1%
INDUSINDBK	900	3807300	12.2%	802	800	1727600	-0.3%	ULTRACEMCO	13000	221750	6.2%	12240	12000	67650	-2.0%
INFY	1600	3913200	5.5%	1516	1500	1352800	-1.1%	WIPRO	270	10146000	8.0%	250	260	3585000	4.0%

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 (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, 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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