



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,175	0.3% ▼
Open Interest (OI)	1,90,50,300	1.3% ▲
Change in OI (abs)	1,90,50,300	2,50,875 ▲
Premium / Discount (Abs)	63	29 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	56,973	0.5% ▼
Open interest (OI)	25,86,780	1.3% ▲
Change in OI (abs)	25,86,780	33,950 ▲
Premium / Discount (Abs)	145	48 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	11.24	0.00 ▲
Nifty ATM IV (%)	9.95	0.3 ▲
Bank Nifty ATM IV (%)	12.38	0.5 ▲
PCR (Nifty)	0.94	0.02 ▲
PCR (Bank Nifty)	0.85	0.07 ▼

The FII Long Ratio in Index Futures **drop** to 16.7%, **down** from 18.2% in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PHOENIXLTD	44,05,800	10.0%	1509.3	1.5%
ABB	31,41,625	9.3%	5655.5	1.7%
HAVELLS	99,86,500	7.1%	1527.6	0.1%
BLUESTARCO	22,65,250	5.5%	1876.7	1.0%
360ONE	19,67,500	4.5%	1210	0.7%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RBLBANK	9,11,22,500	23.4%	269.32	-0.1%
LTIM	26,67,900	12.7%	5165.5	-3.4%
BDL	41,93,150	7.9%	1751	-3.1%
AMBER	2,70,800	7.3%	7627	0.0%
POLYCAB	25,46,250	6.9%	6908	-1.0%

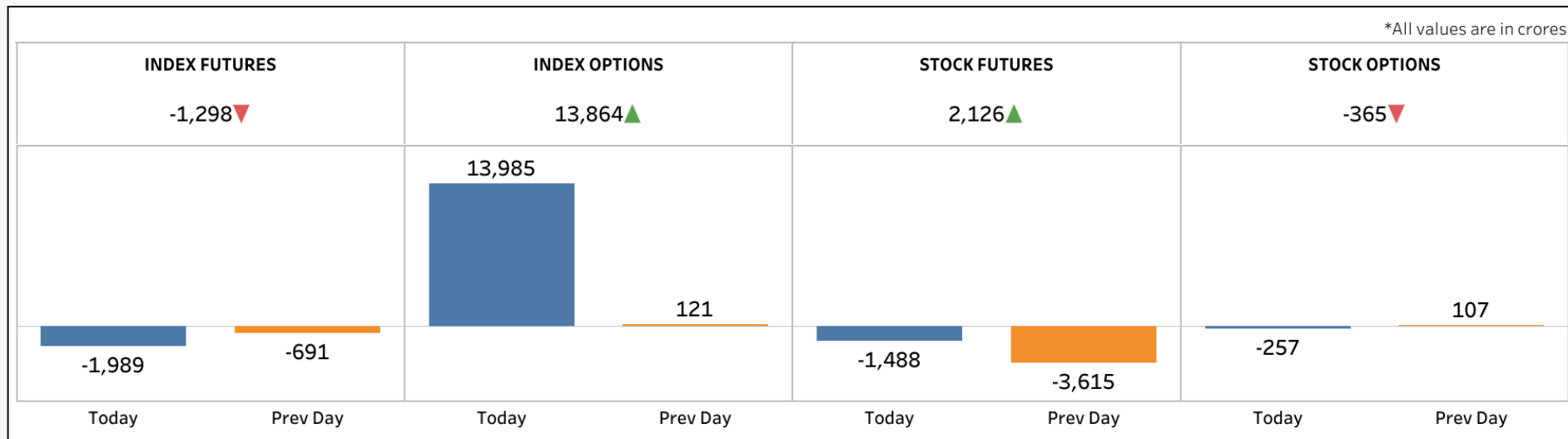
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MGL	20,26,400	-16.0%	1522.9	2.9%
ANGELONE	31,91,250	-14.5%	2731.4	1.1%
BALKRISIND	14,83,500	-9.4%	2753.5	3.6%
GODREJPROP	67,84,525	-4.8%	2343.2	2.2%
ASTRAL	59,89,950	-4.5%	1508	1.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ICICIGI	55,66,275	-4.0%	1954.8	-1.0%
M&MFIN	2,33,15,040	-3.7%	261.95	-1.3%
NIFTYNXT50	22,725	-3.1%	68759	-0.3%
MPHASIS	47,83,900	-2.9%	2846.6	-1.2%
INDIANB	67,47,000	-2.2%	638.75	-0.8%

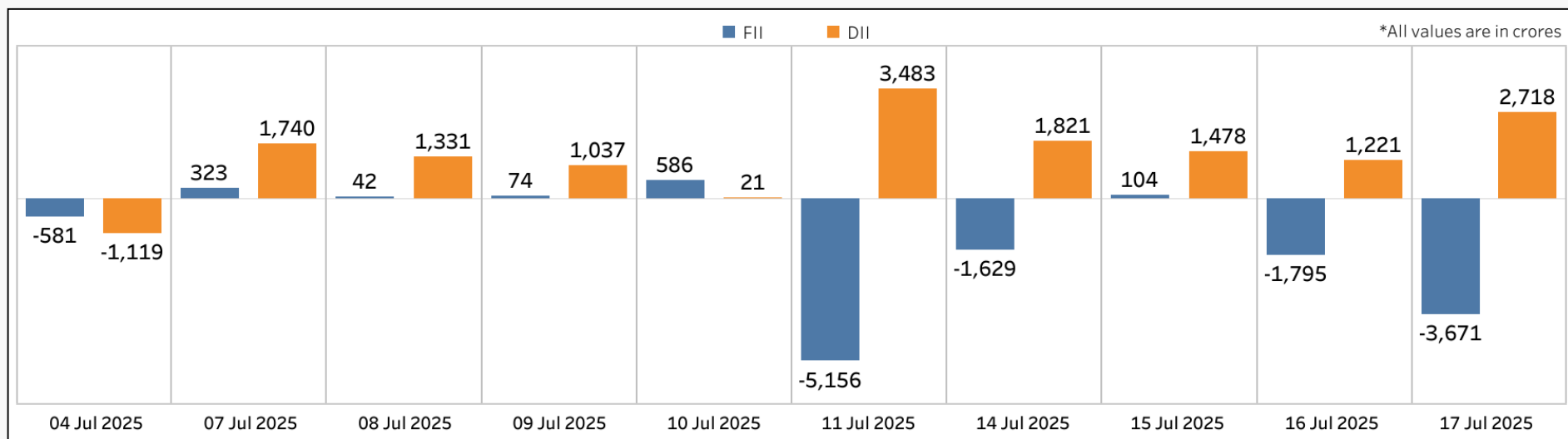
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



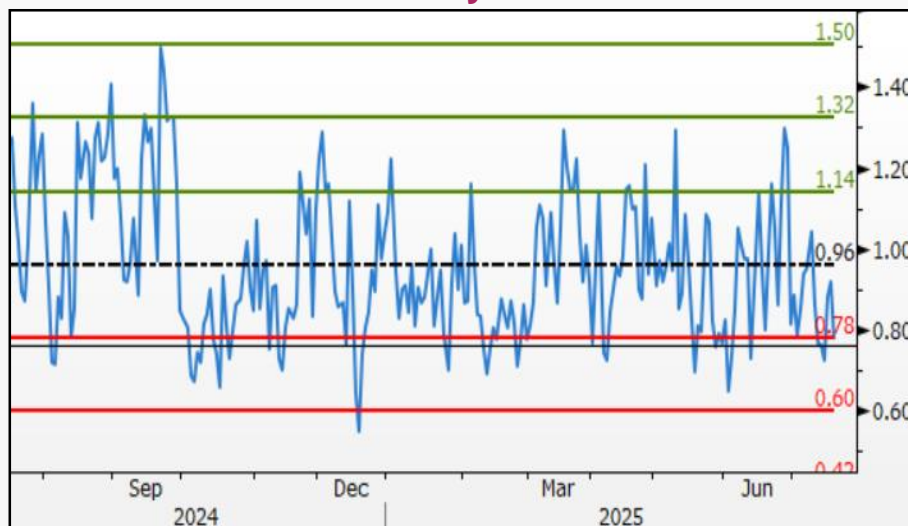
## Daily Net Open Interest Change



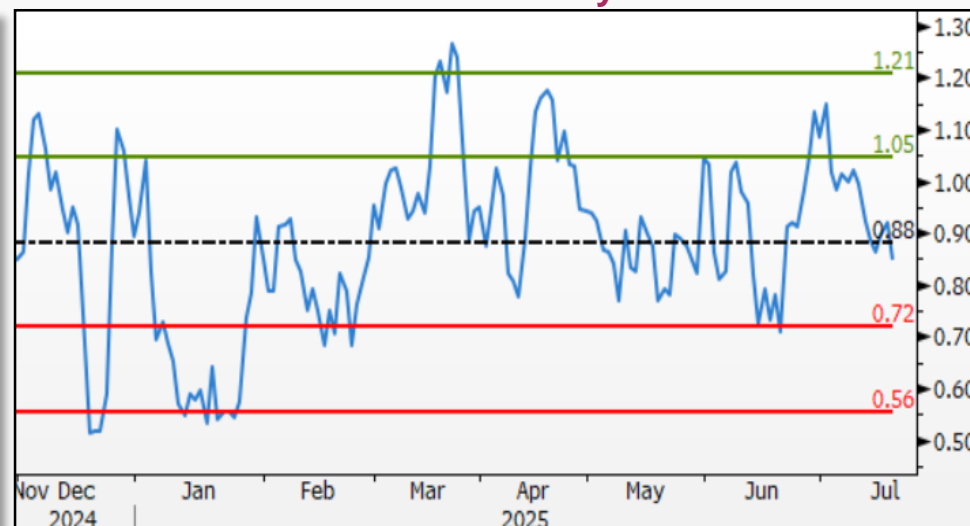
## DII and FII Daily Cash Market Flows



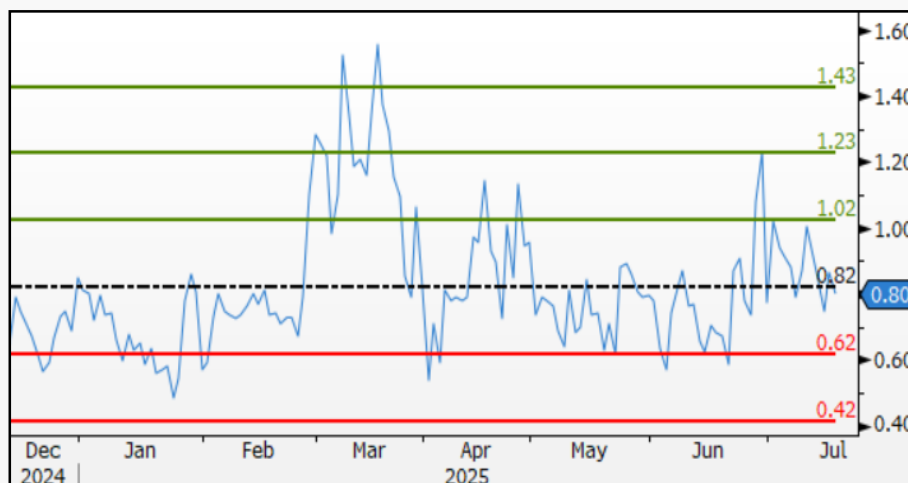
## Nifty



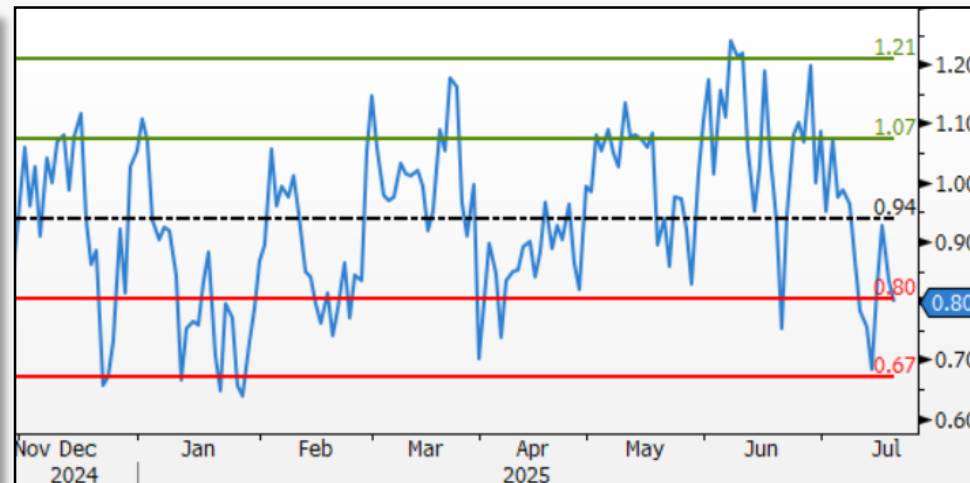
## Bank Nifty



## Fin Nifty

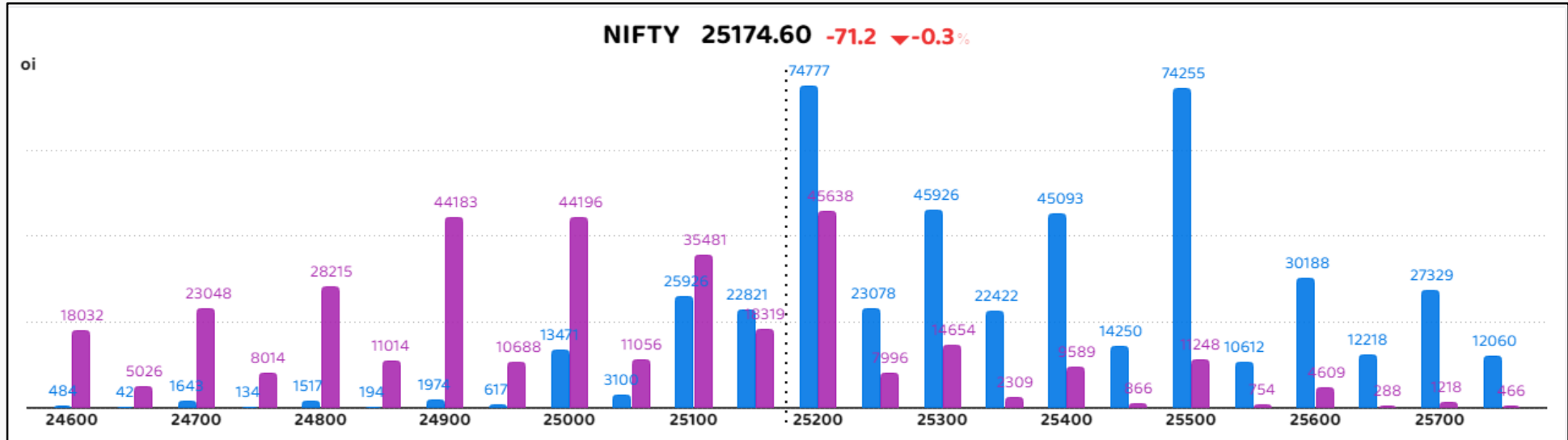


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,200 Call and the 25,000 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.

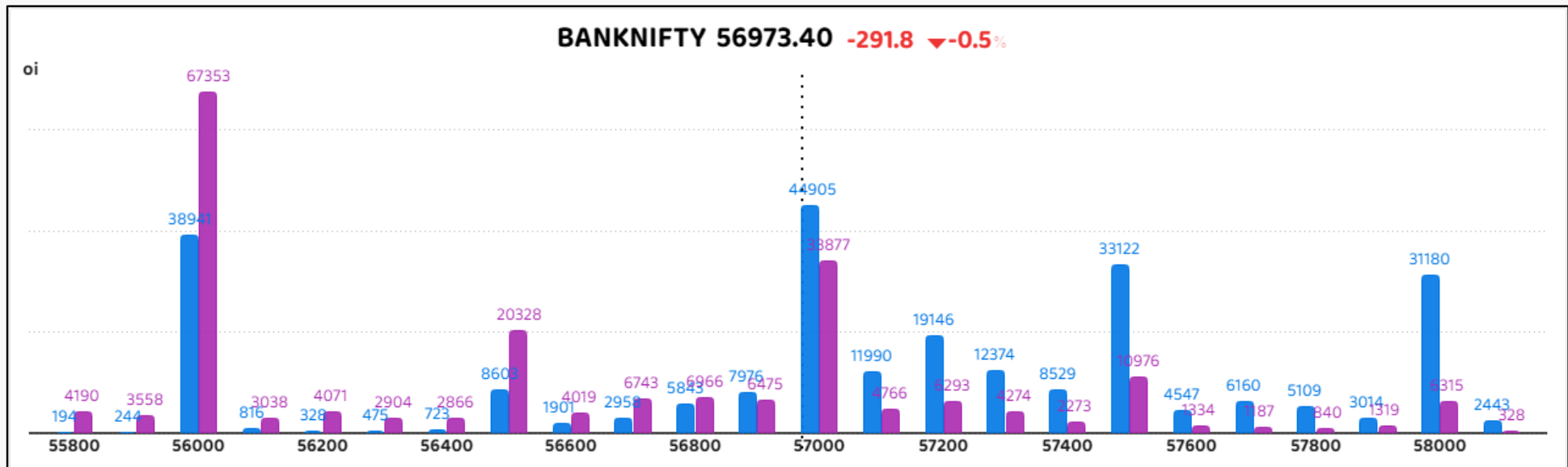
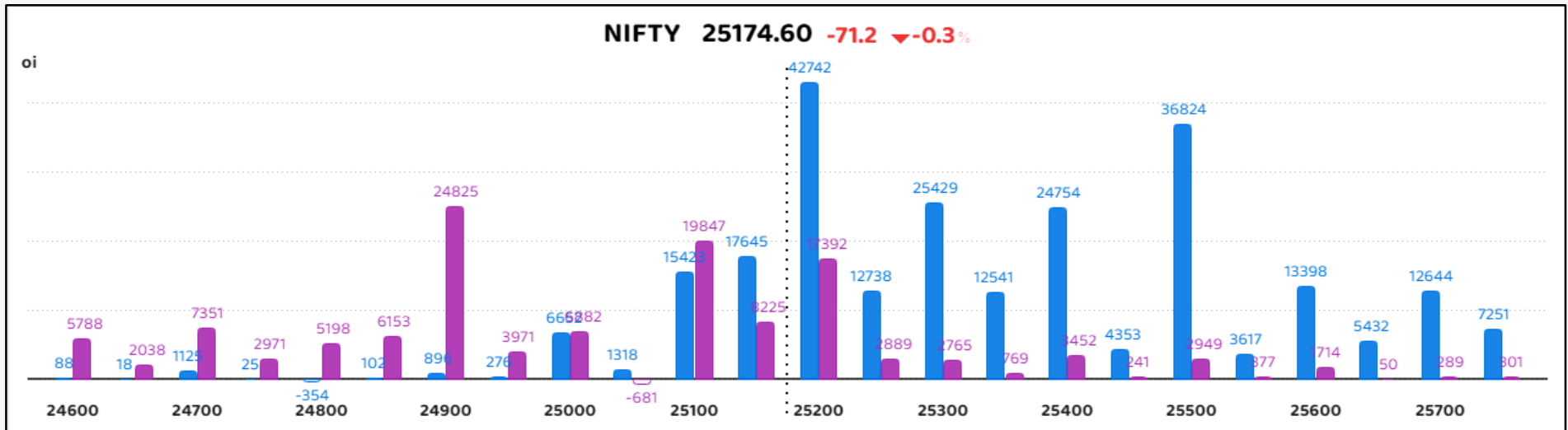


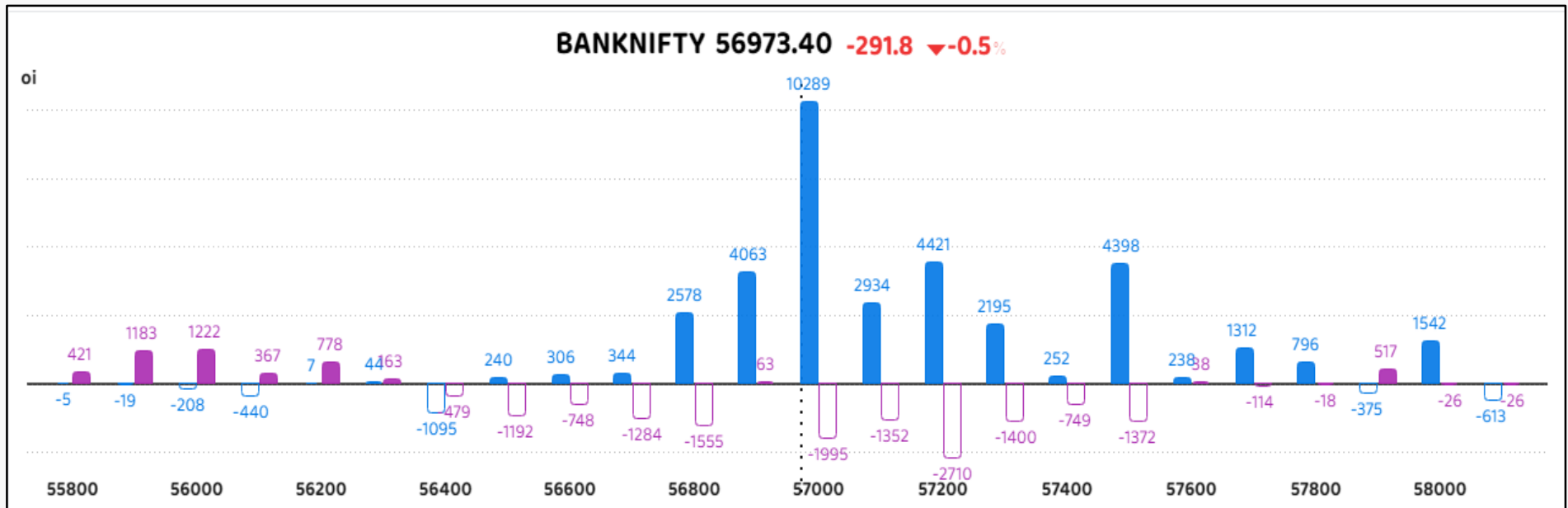
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,100 Call and the 25,200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,200 Call & the 57,200 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
UNO MINDA LTD	1116.8	-0.2	43.6	43.6	30.4	100.0
BLUE STAR LTD	1882.6	1.2	38.3	38.3	23.4	100.0
PIRAMAL PHARMA	216.88	0.9	40.0	40.1	31.0	98.5
BOSCH LTD	38645	0.4	32.1	34.9	3.3	91.1
KAYNES TECHNOLOGY	5953.5	-0.4	45.1	49.4	32.2	74.9

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AVENUE SUPERMART	4055.9	-0.7	23.3	62.3	23.3	0.0
VARUN BEVERAGES	490.15	2.1	24.8	51.1	24.5	0.9
HDFC LIFE INSURANCE	751.8	-0.5	20.8	80.6	19.5	2.1
DELHIVERY LTD	425.3	1.0	30.3	58.6	29.3	3.2
FED BANK LTD	212.59	-1.0	26.3	130.9	22.0	4.0



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
UNO MINDA LTD	1116.8	-0.2	43.6	43.6	30.4	100.0
BLUE STAR LTD	1882.6	1.2	38.3	38.3	23.4	100.0
PIRAMAL PHARMA	216.88	0.9	40.0	40.1	31.0	99.6
BOSCH LTD	38645	0.4	32.1	34.9	3.3	98.6
KAYNES TECHNOLOGY	5953.5	-0.4	45.1	49.4	32.2	97.8

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AVENUE SUPERMART	4055.9	-0.7	23.3	62.3	23.3	0.0
VEDANTA LTD	444.35	-0.7	24.7	57.4	15.1	0.8
VARUN BEVERAGES	490.15	2.1	24.8	51.1	24.5	0.9
PETRONET LNG LTD	310.9	0.1	19.8	50.4	17.4	1.6
FSN E-COMMERCE	217.47	0.8	28.0	51.1	22.8	1.7

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ASTRAL LTD	1505.1	0.8	22148	3499	6.3
MAHANAGAR GAS LTD	1522.8	3.0	19948	3549	5.6
TORRENT PHARMA	3504.6	1.3	21913	4279	5.1
IRCTC	774.75	-0.2	6150	1208	5.1
PHOENIX MILLS	1502.4	1.5	6204	1234	5.0

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MPHASIS LTD	2844	-1.1	1188	1803	1.5
MAX FINANCIAL	1537.6	-2.0	9875	14719	1.5
APL APOLLO TUBES	1694.8	-1.2	2905	3506	1.2
TATA ELXSI LTD	6196.5	-1.8	9278	9015	1.0
LAURUS LABS LTD	821.5	-0.1	4439	4213	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BOSCH LTD	38645	0.4	19624	19624	100.0
PATANJALI FOODS	1909.3	2.7	14594	14594	100.0
KAYNES TECHNOLOGY	5953.5	-0.4	6152	6152	100.0
BLUE STAR LTD	1873.6	1.2	4628	4628	100.0
TRENT LTD	5417.5	0.7	86531	89417	96.8

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5417.5	0.7	35330	35330	100.0
PATANJALI FOODS	1909.3	2.7	8928	8928	100.0
PHOENIX MILLS	1502.4	1.5	2335	2335	100.0
SONA BLW PRECISION	486	6.8	4468	4468	100.0
BLUE STAR LTD	1882.6	1.2	5062	5062	100.0

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
SONA BLW PRECISION	486.0	6.8	126034	126034	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NO STOCK OPTION MET THE CONDITION MENTIONED IN THE FOOTNOTE					

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ICICI LOMBARD	1948.9	-1.1	11108	3983	2.8
TECH MAHINDRA LTD	1563.7	-2.7	24245	8992	2.7
PATANJALI FOODS	1909.3	2.7	14594	5814	2.5
HDFC ASSET MANAGEMENT	5510	2.9	14192	5937	2.4
HCL TECH LTD	1543.9	-1.2	52981	22538	2.4

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PATANJALI FOODS	1909.3	2.7	8928	3374	2.6
HDFC ASSET MANAGEMENT	5510	2.9	8220	3176	2.6
PIRAMAL ENTERPRISES	1339.3	1.9	4923	2252	2.2
BOSCH LTD	38645	0.4	11220	5205	2.2
SONA BLW PRECISION	486	6.8	4468	2269	2.0

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SONA BLW PRECISION	486	6.8	126034	9510	13.3
BALKRISHNA INDS	2742.1	3.4	53629	7248	7.4
HDFC ASSET MANAGEMENT	5510	2.9	101934	15436	6.6
TECH MAHINDRA LTD	1563.7	-2.7	85819	13984	6.1
PATANJALI FOODS	1909.3	2.7	93477	17904	5.2

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SONA BLW PRECISION	486	6.8	39150	3275	12.0
HDFC ASSET MANAGEMENT	5510	2.9	36972	5189	7.1
MAX FINANCIAL	1537.6	-2.0	14719	2207	6.7
ABB INDIA LTD	5637.5	1.6	42037	6409	6.6
PATANJALI FOODS	1909.3	2.7	33664	5595	6.0

## 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	2700	1553100	3.2%	2617	2700	1788300	3.2%	ITC	420	9520000	-0.9%	424	420	5214400	-0.9%
ADANIPTS	1500	1740400	3.3%	1453	1400	1224075	-3.6%	JIOFIN	330	12257600	3.7%	318	300	6147600	-5.7%
APOLLOHOSP	8000	249875	8.8%	7351	7000	169875	-4.8%	JSWSTEEL	1180	1335825	14.1%	1034	1000	741150	-3.3%
ASIANPAINT	2500	1829500	4.2%	2399	2400	424000	0.0%	KOTAKBANK	2200	985600	1.3%	2171	2100	823200	-3.3%
AXISBANK	1200	8325625	3.5%	1160	1200	1701250	3.5%	LT	3700	1586725	6.5%	3474	3500	620550	0.7%
BAJAJ-AUTO	9000	241875	8.0%	8330	8000	127950	-4.0%	M&M	3200	1297400	0.2%	3195	3200	480000	0.2%
BAJAJFINSV	2100	1325000	3.6%	2027	1980	445000	-2.3%	MARUTI	12800	570400	2.6%	12476	12500	81050	0.2%
BAJFINANCE	1000	2905500	8.3%	923	900	2391750	-2.5%	NESTLEIND	2500	471750	2.1%	2449	2400	197500	-2.0%
BEL	430	11596650	6.4%	404	400	6563550	-1.0%	NTPC	345	32715000	0.7%	343	345	5028000	0.7%
BHARTIARTL	2040	3201500	5.7%	1930	1900	879700	-1.5%	ONGC	250	20767500	2.5%	244	240	2342250	-1.6%
CIPLA	1600	924000	7.9%	1482	1340	393000	-9.6%	POWERGRID	300	6292800	1.1%	297	300	2342700	1.1%
COALINDIA	400	8891100	3.7%	386	400	3370950	3.7%	RELIANCE	1550	6522000	5.0%	1476	1500	2273000	1.6%
DRREDDY	1300	1673125	2.9%	1263	1100	797500	-12.9%	SBILIFE	1860	1510125	3.2%	1803	1800	310500	-0.2%
EICHERMOT	5800	272825	2.7%	5650	5800	117775	2.7%	SBIN	820	18094500	-1.1%	829	820	6678750	-1.1%
ETERNAL	290	7502950	11.7%	260	250	4510500	-3.7%	SHRIRAMFIN	700	2308350	5.2%	665	700	610500	5.2%
GRASIM	2900	259250	4.8%	2766	2800	130250	1.2%	SUNPHARMA	1720	2483250	1.0%	1703	1700	676200	-0.2%
HCLTECH	1700	2095450	10.1%	1544	1560	715400	1.0%	TATACONSUM	1230	942700	11.2%	1106	980	562650	-11.4%
HDFCBANK	2020	5468100	1.7%	1987	2000	2291300	0.7%	TATAMOTORS	700	7817600	2.7%	682	680	3779200	-0.2%
HDFCLIFE	820	3242800	9.1%	752	760	1091200	1.1%	TATASTEEL	170	21934000	6.3%	160	160	8646000	0.1%
HEROMOTOCO	4500	845250	1.3%	4444	4300	308100	-3.2%	TCS	3500	4078025	9.1%	3209	3200	1221675	-0.3%
HINDALCO	700	3700200	3.8%	675	670	1220800	-0.7%	TECHM	1600	2409600	2.3%	1564	1600	624600	2.3%
HINDUNILVR	2560	1116300	2.0%	2510	2400	762600	-4.4%	TITAN	3700	969150	7.8%	3433	3400	387100	-1.0%
ICICIBANK	1500	2734900	5.7%	1419	1400	1726200	-1.3%	TRENT	6000	1210300	10.8%	5418	5500	370200	1.5%
INDUSINDBK	900	3969700	4.0%	865	850	910700	-1.7%	ULTRACEMCO	13000	120600	4.0%	12495	12000	62600	-4.0%
INFY	1600	4275600	1.0%	1584	1600	1891200	1.0%	WIPRO	270	9171000	3.6%	261	260	5394000	-0.2%

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](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);

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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