



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,638	<span style="color: red;">0.6% ▼</span>
Open Interest (OI)	1,44,25,950	<span style="color: green;">2.5% ▲</span>
Change in OI (abs)	1,44,25,950	<span style="color: green;">3,52,200 ▲</span>
Premium / Discount (Abs)	118	<span style="color: red;">67 ▼</span>
<b>Inference</b>	<span style="color: red;">Short Build Up</span>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	51,841	<span style="color: red;">0.1% ▼</span>
Open interest (OI)	35,08,110	<span style="color: red;">0.7% ▼</span>
Change in OI (abs)	35,08,110	<span style="color: red;">24,270 ▼</span>
Premium / Discount (Abs)	276	<span style="color: red;">56 ▼</span>
<b>Inference</b>	<span style="color: red;">Long Unwinding</span>	

## Volatility Insights

	Value	Change
India VIX Index	12.72	<span style="color: red;">0.6 ▼</span>
Nifty ATM IV (%)	11.46	<span style="color: red;">1.3 ▼</span>
Bank Nifty ATM IV (%)	13.27	<span style="color: red;">0.9 ▼</span>
PCR (Nifty)	0.92	<span style="color: red;">0.09 ▼</span>
PCR (Bank Nifty)	0.95	<span style="color: red;">0.05 ▼</span>

The Long Ratio for FII Index Futures has dropped to **33.7%**, up from **39.8 %** in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NHPC	7,86,04,800	11.5%	82.46	0.6%
ONGC	12,66,90,025	9.1%	247.6	1.6%
MUTHOOTFIN	32,51,875	7.9%	2395.95	2.0%
NYKAA	3,33,88,100	6.4%	177.85	1.7%
DMART	33,73,350	6.0%	4093.9	0.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ICICIPRULI	1,42,62,000	13.0%	565.3	-5.1%
HUDCO	2,07,09,500	12.7%	200.58	-0.7%
M&MFIN	1,85,60,000	10.2%	282.45	-3.1%
INDUSINDBK	3,96,00,500	8.2%	651.25	-3.8%
HINDCOPPER	4,07,49,050	7.7%	221.63	-1.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RAMCOCEM	53,95,800	-6.5%	897.4	1.0%
BHEL	8,46,48,375	-3.5%	216.79	0.4%
SHREECEM	2,54,725	-3.0%	30672.65	1.0%
GAIL	11,02,94,900	-2.9%	183.7	0.6%
IGL	2,83,91,000	-2.7%	201.63	3.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KEI	17,03,550	-5.6%	2898.6	-0.2%
COFORGE	24,05,100	-4.5%	8124.9	-0.5%
PAYTM	2,53,62,350	-3.6%	786	-3.5%
ABB	29,96,375	-3.1%	5559.95	-0.4%
NBCC	3,09,48,800	-2.8%	82	-1.8%

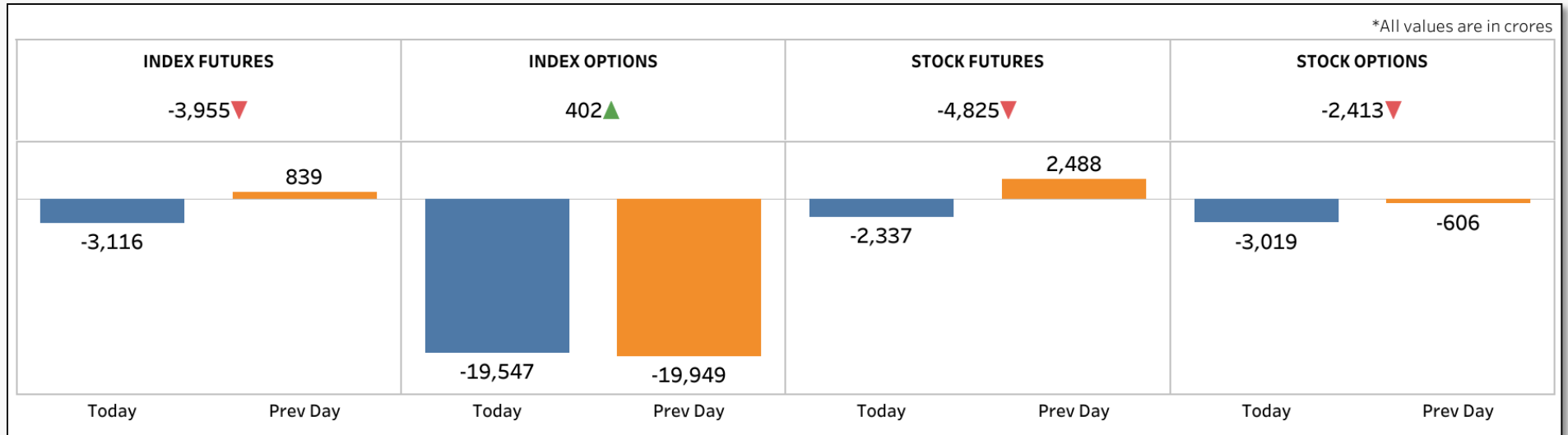
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

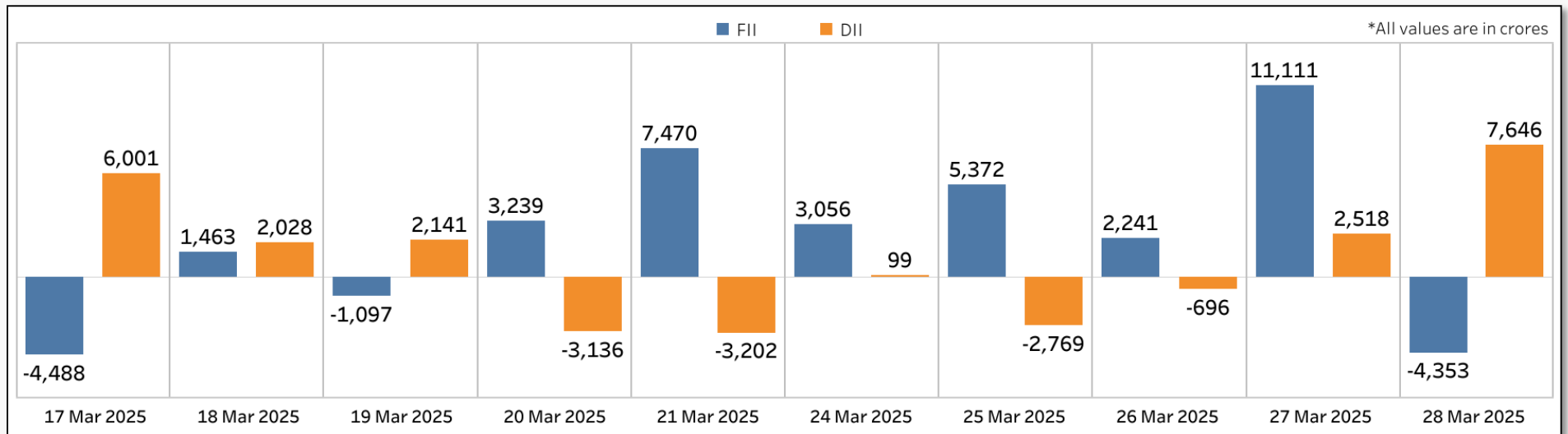
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-155,088 ▼	-41,075 ▼	-173,825 ▼	-1,484,645 ▼	-39 ▼	-52,066 ▼	-84,951 ▼	3,799,686 ▲
	12,103	53,178					3,786,351
-229,006		-243,616	-1,649,492			12,917	
-73,918		-69,791	-164,847				
				-70	-31	-58,103	-6,037
				-72,034			-13,335
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-176,296	4,267	-116,604	-73,857	0	-3,256	1,001	28,883
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
340,935 ▲	37,843 ▲	338,265 ▲	-1,650,626 ▼	-185,808 ▼	55,298 ▲	-79,490 ▼	-664,415 ▼
							238,527
270,621	5,136	267,844	-1,710,971				
-70,314	-32,707	-70,421	-60,345				
				-41,545	-14,434		
				144,263	40,864	47,805	127,295
							-425,888
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
127,458	9,092	158,328	49,361	48,838	-10,103	-42,727	-4,387
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

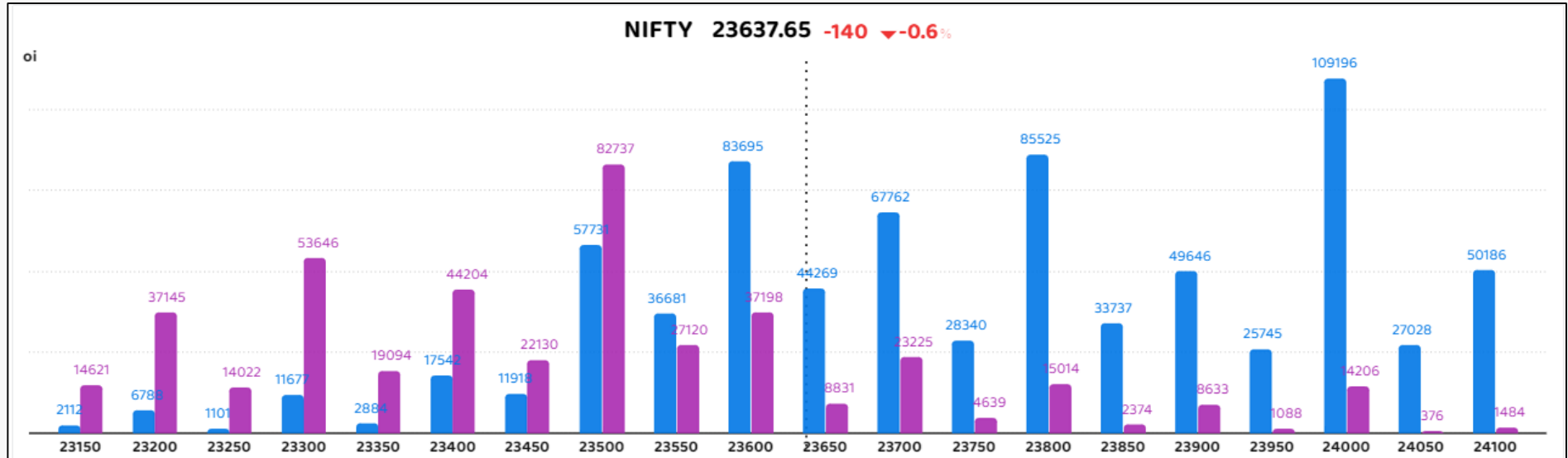


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 24000 Call and the 23500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 52000 Call and the 51000 Put saw the most amount of open interest.

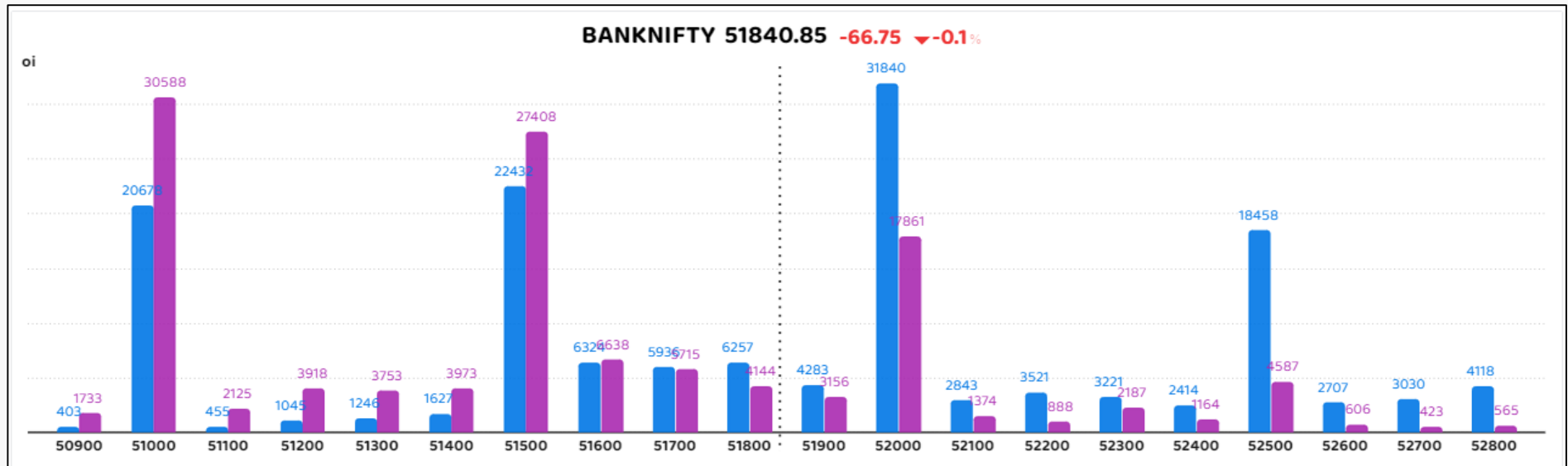
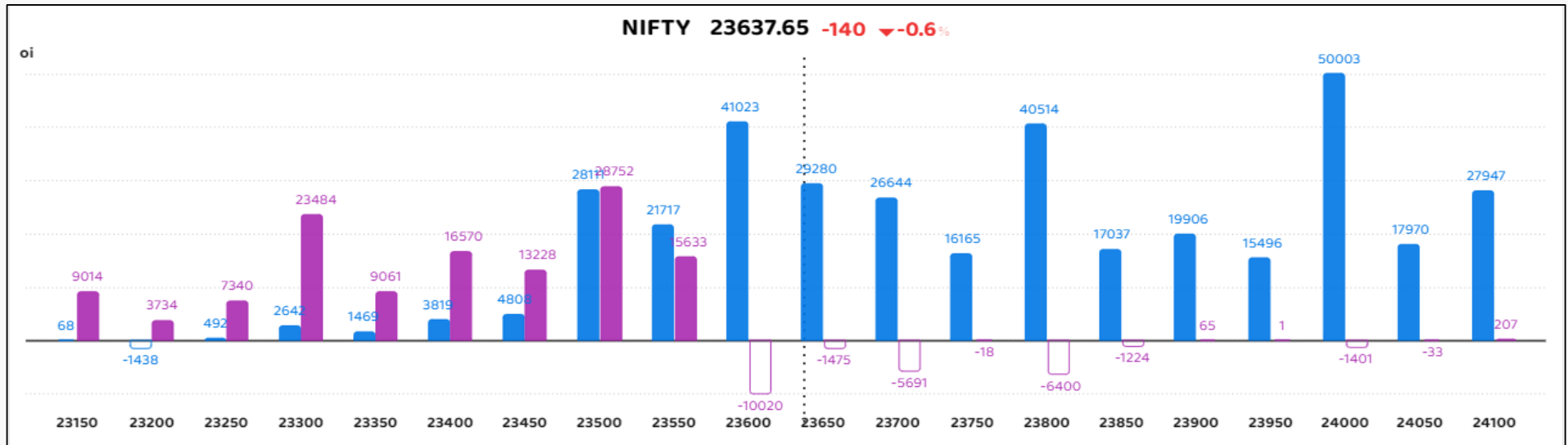


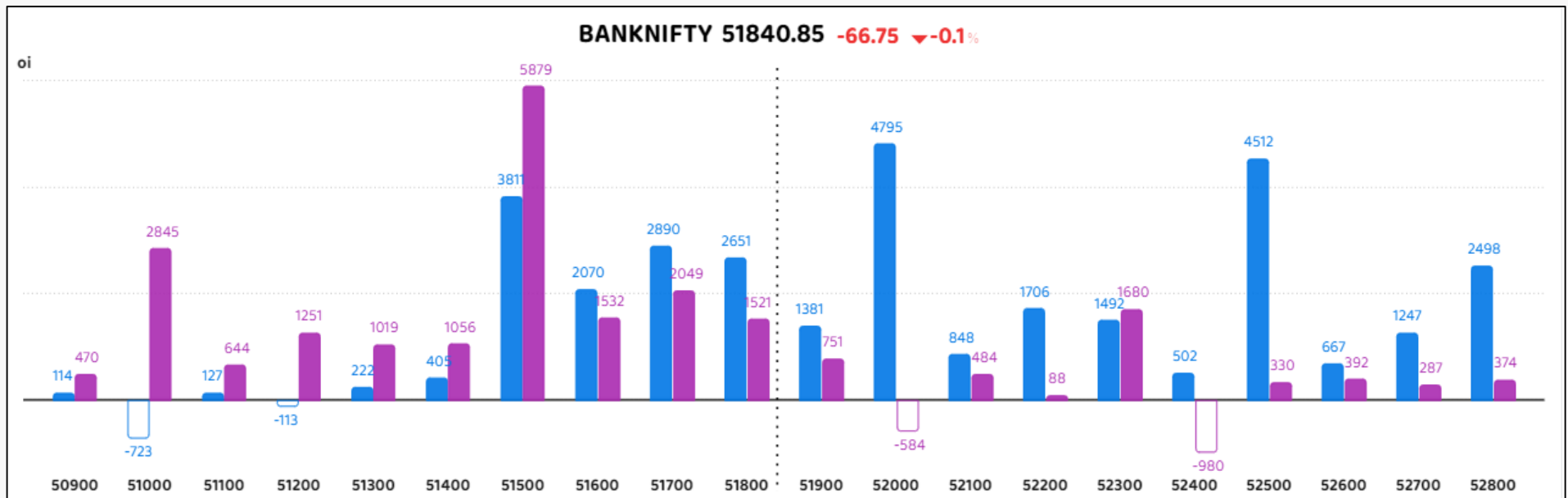
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24000 Call and the 23500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 52000 Call & the 51500 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NHPC LTD	82.2	1.1	47.5	47.5	26.1	100.0
COMPUTER AGE MAN	3723.35	1.0	55.2	55.2	30.0	100.0
DIXON TECHNOLOGI	13179.5	-2.5	49.8	51.6	1.8	96.4
TATA ELXSI LTD	5214.6	-3.8	50.8	51.9	23.8	96.1
DELHIVERY LTD	255.1	0.9	48.0	48.8	29.4	96.1

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SIEMENS LTD	5275.35	-0.7	22.1	47.6	20.5	6.2
ADANI PORTS AND	1182.95	-1.2	31.7	99.7	23.2	11.2
HDFC LIFE INSURA	685.7	0.6	26.8	80.6	19.6	11.7
BANK OF BARODA	228.53	-1.1	29.3	66.9	24.3	11.8
PATANJALI FOODS	1808.4	1.4	33.9	65.0	28.4	14.8

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
NHPC LTD	82.2	1.1	47.5	47.5	26.1	100.0
COMPUTER AGE MAN	3723.35	1.0	55.2	55.2	30.0	100.0
TATA ELXSI LTD	5214.6	-3.8	50.8	51.9	23.8	99.9
INDUSIND BANK	649.85	-3.5	63.5	77.2	12.4	99.5
POONAWALLA FINCO	350.45	3.5	56.4	58.0	29.8	99.4

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SIEMENS LTD	5275.35	-0.7	22.1	47.6	20.5	0.6
MANAPPURAM FINAN	232.75	0.0	33.6	64.2	2.7	14.1
BOSCH LTD	28358.45	0.0	22.7	39.2	3.3	22.2
PATANJALI FOODS	1808.4	1.4	33.9	65.0	28.4	23.6
STATE BANK IND	771.5	-0.1	22.2	55.4	3.1	26.3



**Stocks With High Call Volume To Put Volume**

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
RAMCO CEMENT/THE	896.75	1.6	15699	2964	5.3
CENTRAL DEPOSITO	1220.05	2.7	82131	17802	4.6
TITAGARH RAIL SY	796.25	-2.3	8425	2154	3.9
COMPUTER AGE MAN	3723.35	1.0	16646	4525	3.7
YES BANK LTD	16.88	-2.2	4395	1291	3.4

**Stocks With High Put Volume To Call Volume**

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
GRANULES INDIA	490.4	-0.8	3433	5167	1.5
ALKEM LABORATORI	4960.15	-1.6	1121	1502	1.3
AU SMALL FINANCE	554.4	-3.6	15410	20381	1.3
LTIMINDTREE LTD	4655.9	-3.5	11253	13024	1.2
PB FINTECH LTD	1647.15	-3.5	4643	5113	1.1

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SIEMENS LTD	5314.15	-0.7	29035.0	34047.0	85.3

## Put Open Interest Relative to Record High

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

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
BSE LTD	5479.8	17.0	270436	308856	87.6

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
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
SIEMENS LTD	5275.35	-0.7	29035	13657	2.1
TATA ELXSI LTD	5214.6	-3.8	5124	3884	1.3
JK CEMENTS LTD	4932.65	1.0	1332	1011	1.3
NHPC LTD	82.2	1.1	3221	2727	1.2
SONA BLW PRECISI	461.2	-1.3	2319	2104	1.1

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SIEMENS LTD	5275.35	-0.7	14351	8506	1.7
TATA ELXSI LTD	5214.6	-3.8	2568	1994	1.3
AU SMALL FINANCE	534.6	-3.6	8476	7345	1.2
MANAPPURAM FINAN	232.75	0.0	6248	5439	1.1
VODAFONE IDEA LT	6.8	-1.7	10807	11102	1.0

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
RAMCO CEMENT/THE	896.75	1.6	15699	5310	3.0
OIL & NATURAL GA	246.38	1.7	91844	37217	2.5
TATA CONSUMER PR	1001.9	2.9	32400	13468	2.4
BRITANNIA INDS	4936.9	2.0	36713	18020	2.0
SHREE CEMENT	30502.95	1.2	6214	3125	2.0

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SHREE CEMENT	30502.95	1.2	3002	1111	2.7
UPL LTD	636.25	-3.1	13642	5923	2.3
OIL & NATURAL GA	246.38	1.7	46981	20523	2.3
TATA CONSUMER PR	1001.9	2.9	16690	7542	2.2
ICICI LOMBARD GE	1792.85	-0.1	6163	2846	2.2

## 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	1440600	12.3%	2316	2600	2442900	12.3%	INFY	1700	1864000	8.2%	1571	1500	1157600	-4.5%
ADANIPTS	1200	1115600	1.4%	1183	1200	949600	1.4%	ITC	410	7419200	0.1%	410	410	2816000	0.1%
APOLLOHOSP	6700	66000	1.3%	6616	6600	46500	-0.2%	JSWSTEEL	1100	618975	3.5%	1063	1000	436725	-5.9%
ASIANPAINT	2400	703000	2.5%	2341	2300	268200	-1.7%	KOTAKBANK	2200	930800	1.3%	2171	2100	1062000	-3.3%
AXISBANK	1100	1583125	-0.2%	1102	1000	1217500	-9.3%	LT	3500	423000	0.2%	3492	3400	277350	-2.6%
BAJAJ-AUTO	8500	191175	7.9%	7879	8000	74850	1.5%	M&M	2800	619325	5.0%	2666	2700	313425	1.3%
BAJAJFINSV	2160	723000	7.6%	2007	1800	480000	-10.3%	MARUTI	12000	166300	4.1%	11522	11000	96600	-4.5%
BAJFINANCE	9000	290875	0.6%	8946	8500	292750	-5.0%	NESTLEIND	2300	204800	2.2%	2251	2260	76400	0.4%
BEL	300	5785500	-0.4%	301	300	3126450	-0.4%	NTPC	400	4690500	11.9%	358	360	2124000	0.7%
BHARTIARTL	1800	1063525	3.8%	1733	1700	699200	-1.9%	ONGC	257.5	7850150	4.5%	246	240	2319625	-2.6%
BPCL	280	1780200	0.5%	278	280	1053000	0.5%	POWERGRID	300	3009600	3.3%	290	320	1443600	10.2%
BRITANNIA	5000	151500	1.3%	4937	4800	83400	-2.8%	RELIANCE	1300	7640000	2.0%	1275	1300	3095500	2.0%
CIPLA	1500	491400	4.0%	1442	1400	210600	-2.9%	SBILIFE	1600	261375	3.4%	1548	1460	86250	-5.7%
COALINDIA	420	2703750	5.5%	398	450	2454900	13.0%	SBIN	800	5829750	3.7%	772	800	4423500	3.7%
DRREDDY	1200	1074375	4.9%	1144	1080	320625	-5.6%	SHRIRAMFIN	700	877500	6.7%	656	600	364500	-8.5%
EICHERMOT	6000	85050	12.2%	5348	5000	154350	-6.5%	SUNPHARMA	1800	641550	3.8%	1735	1600	394100	-7.8%
GRASIM	2920	134000	11.8%	2611	2600	94500	-0.4%	TATACONSUM	1000	406296	-0.2%	1002	1000	248064	-0.2%
HCLTECH	1640	391650	3.0%	1593	1400	353500	-12.1%	TATAMOTORS	700	4888400	3.8%	674	670	2138950	-0.7%
HDFCBANK	1900	2090000	3.9%	1828	1800	2269300	-1.5%	TATASTEEL	160	12160500	3.7%	154	150	9124500	-2.7%
HDFCLIFE	700	1378300	2.1%	686	680	322300	-0.8%	TCS	3700	656600	2.6%	3606	3600	407750	-0.2%
HEROMOTOCO	4000	385650	7.4%	3723	3600	149100	-3.3%	TECHM	1500	677400	5.8%	1418	1400	346800	-1.3%
HINDALCO	700	1793400	2.6%	682	700	1068200	2.6%	TITAN	3100	678300	1.2%	3063	3100	432950	1.2%
HINDUNILVR	2300	793500	1.8%	2259	2260	361800	0.1%	TRENT	5500	245000	3.3%	5325	5000	110400	-6.1%
ICICIBANK	1400	1567300	3.8%	1348	1300	2009000	-3.6%	ULTRACEMCO	12500	106950	8.6%	11510	11000	66300	-4.4%
INDUSINDBK	700	2212000	7.7%	650	600	2088500	-7.7%	WIPRO	300	4611000	14.4%	262	240	1860000	-8.5%

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

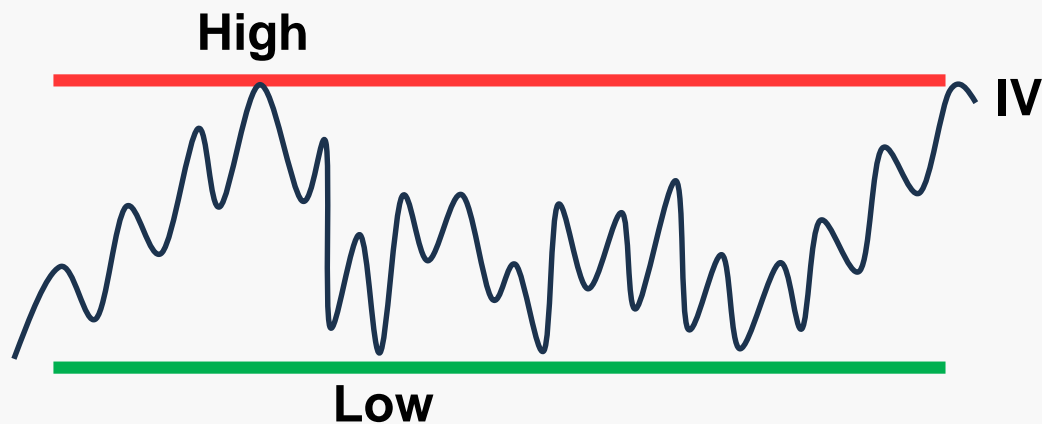
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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

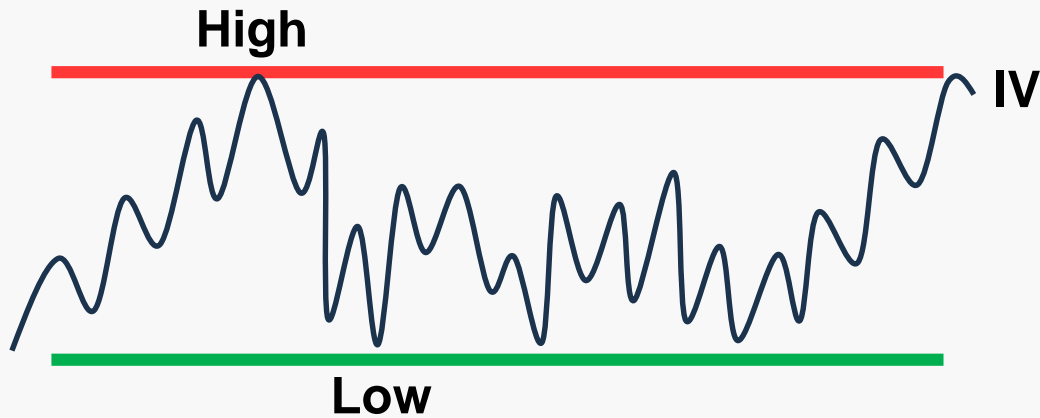


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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. Maneesh Mathew, 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