



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,153	1.3% ▼
Open Interest (OI)	1,86,18,300	1.6% ▲
Change in OI (abs)	1,86,18,300	2,98,575 ▲
Premium / Discount (Abs)	81	4 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	50,234	1.1% ▼
Open interest (OI)	32,63,760	17.0% ▲
Change in OI (abs)	32,63,760	5,53,650 ▲
Premium / Discount (Abs)	253	25 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.87	0.4 ▲
Nifty ATM IV (%)	17.40	1.2 ▲
Bank Nifty ATM IV (%)	17.13	0.4 ▲
PCR (Nifty)	0.69	0.06 ▼
PCR (Bank Nifty)	0.75	0.08 ▼

The Long Ratio for the FII Index Futures **dropped** to 14.2%, against 14.9% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
OIL	1,09,77,900	2.7%	406.7	1.8%
BHARTIARTL	4,07,39,325	0.6%	1698.75	0.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ESCORTS	12,76,800	23.5%	3131.4	-5.4%
NATIONALUM	4,65,33,750	12.1%	184.14	-3.1%
LICI	74,01,975	10.2%	801.15	-1.1%
EICHERMOT	35,35,175	9.5%	4981	-6.7%
ATGL	49,94,100	8.2%	595.9	-2.0%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIANT	1,62,55,500	-3.5%	2328.95	1.3%
GRASIM	1,08,81,000	-3.1%	2501.2	1.0%
BATAINDIA	26,90,250	-3.1%	1349	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CHAMBLFERT	67,79,200	-14.5%	527.8	-3.6%
ABBOTINDIA	54,840	-13.2%	29262.2	-1.5%
KEI	6,37,650	-7.7%	3573.4	-6.0%
KALYANKJIL	1,87,34,075	-6.1%	516.15	-1.0%
COROMANDEL	27,73,750	-6.0%	1816.2	-2.0%

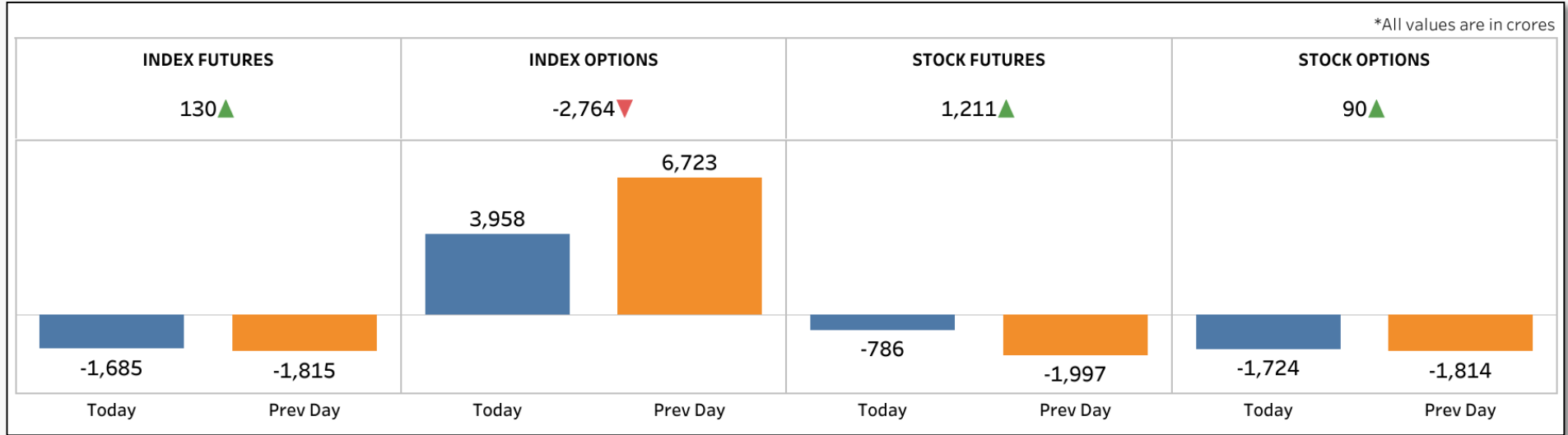
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

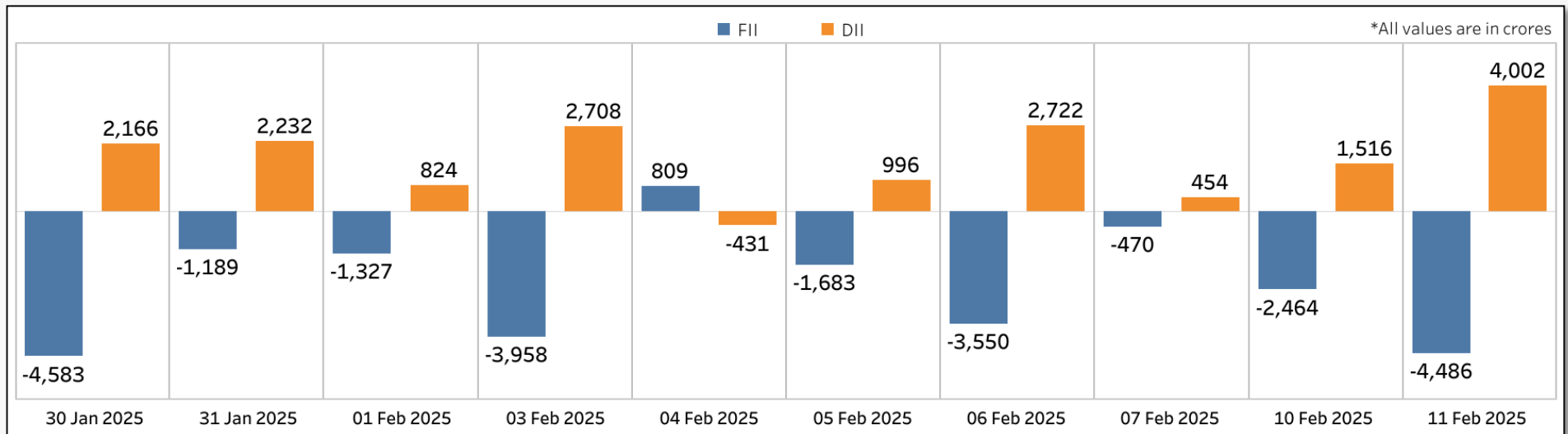
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-10,153 ▼	56 ▲	-5,171 ▼	19,378 ▲	0	3,010 ▲	1,228 ▲	-4,980 ▼
1,881	12,034	18,013	23,184	0	4,041	1,031	
	-10,962		-15,215			-372	-25,400
	-11,018		-34,593			-1,600	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-48,257	-161,729	142,896	1,093,559	70	12,531	18,248	-3,858,347
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
82,831 ▲	-5,107 ▼	51,255 ▲	-8,478 ▼	-72,678 ▼	2,041 ▲	-47,310 ▼	-5,920 ▼
84,090	1,259	11,800	20,278		5,641	39,810	33,795
	1,280	-10,140		-85,971		-7,500	39,715
	6,387	-61,395			3,600		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
21,353	141,581	-244,642	2,264,393	26,834	7,617	83,495	500,395
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

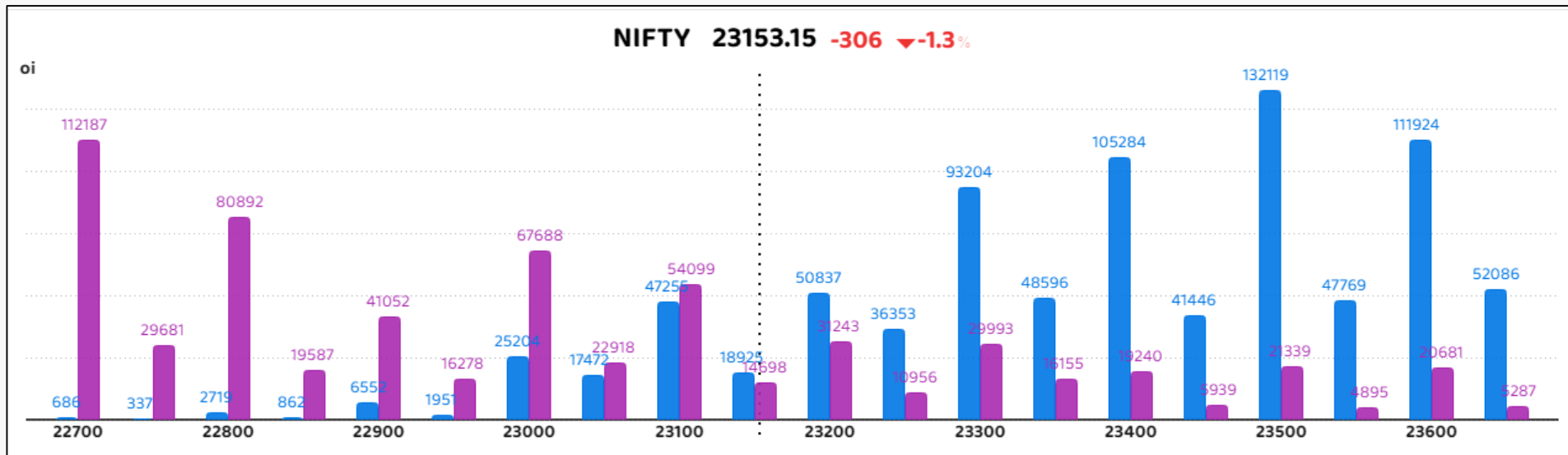


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 23500 Call and the 22700 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 50000 Call and the 49000 Put saw the most amount of open interest.

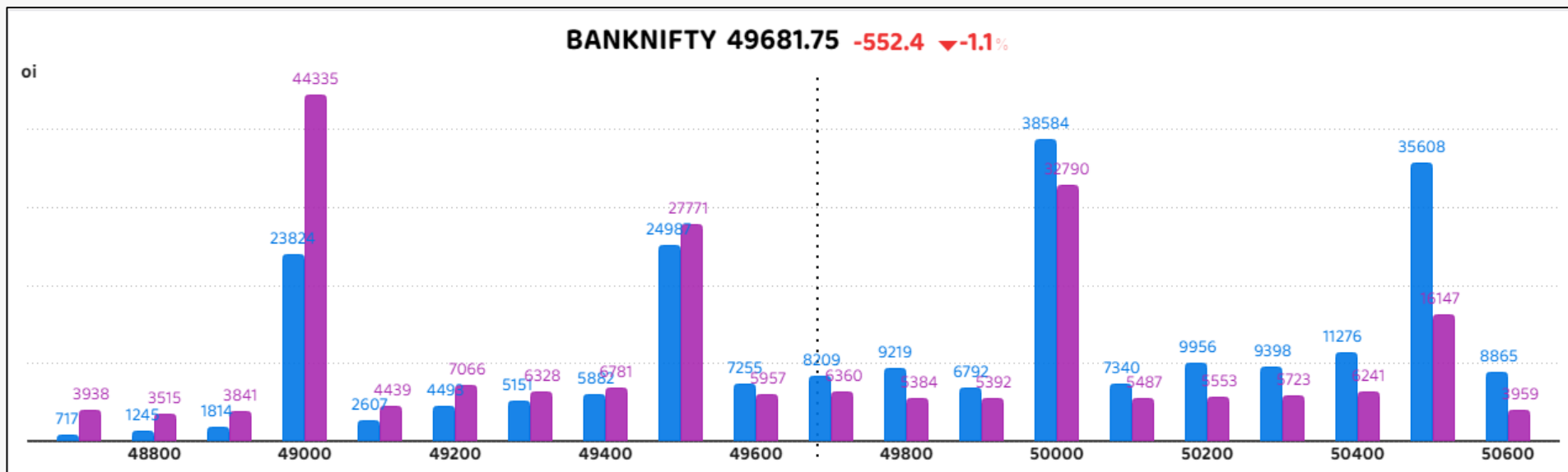
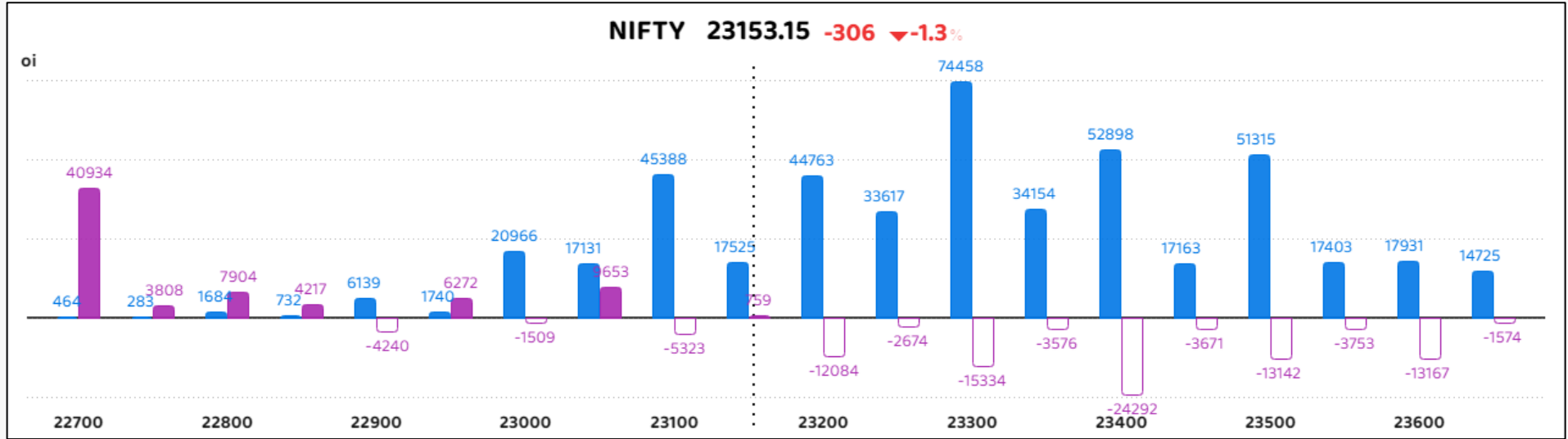


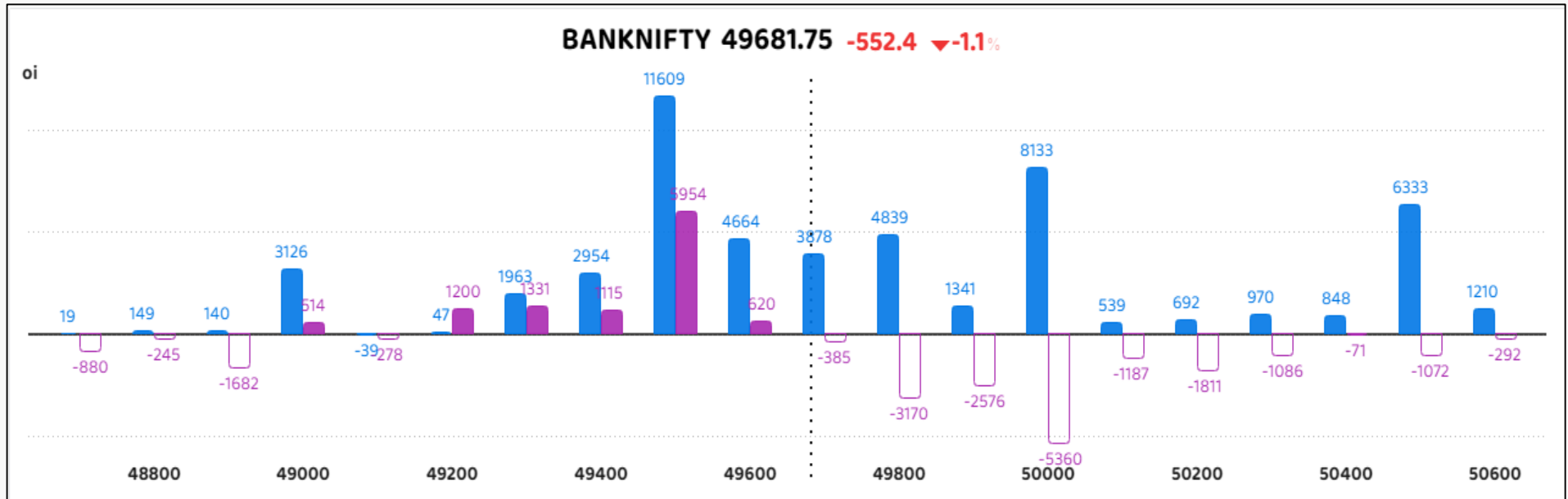
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23300 Call and the 22700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 49500 Call & the 50000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
UNITED BREWERIES	2023.3	-1.6	41.5	47.4	13.6	82.5
DIXON TECHNOLOGI	14666.3	-0.9	40.0	51.5	1.8	76.8
GUJARAT NARM VLY	561.55	-2.2	41.2	53.0	4.8	75.6
TATA MOTORS LTD	677.75	-2.6	32.4	41.8	3.9	75.4
CROM GREAVES CON	343.1	-1.7	41.6	49.4	17.9	75.2

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BAJAJ FINSERV LT	1744.85	-2.7	19.2	37.7	19.2	0.0
TATA COMMUNICATI	1525.35	-3.0	23.6	40.9	22.7	4.7
HDFC LIFE INSURA	618.6	-2.7	24.0	80.6	19.6	7.2
ADANI PORTS AND	1140.1	-0.4	30.5	97.8	23.2	9.8
CIPLA LTD	1453.15	-0.4	23.2	61.3	18.0	12.0

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SBI LIFE INSURAN	1419	-2.0	30.2	35.8	13.9	97.8
UNITED BREWERIES	2023.3	-1.6	41.5	47.4	13.6	97.4
SIEMENS LTD	5204.85	-2.7	40.0	47.6	20.7	94.4
LUPIN LTD	2067.6	-4.7	35.6	44.9	21.3	93.2
IPCA LABS LTD	1419.9	-1.9	38.7	49.3	14.4	93.2

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BAJAJ FINSERV LT	1744.85	-2.7	19.2	37.7	19.2	0.0
BHARTI AIRTEL	1696.75	0.2	18.4	34.3	4.6	2.2
RAMCO CEMENT/THE	876.85	-1.9	20.7	43.6	0.5	2.2
TATA COMMUNICATI	1525.35	-3.0	23.6	40.9	22.7	4.0
DR REDDY'S LABS	1209.8	-0.9	18.5	35.3	14.4	4.6



### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGE INDUSTRIES	42114.85	-3.5	21698	4718	4.6
BOSCH LTD	27223.45	-1.7	4216	1152	3.7
UNITED BREWERIES	2023.3	-1.6	6311	2185	2.9
ITC LTD	418.3	-2.1	77390	30400	2.6
ADANI ENTERPRISE	2321.75	1.4	111560	45681	2.4

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PI INDUSTRIES	3419.6	-3.0	11546	31144	2.7
COROMANDEL INTER	1819.6	-1.7	1302	3460	2.7
DR LAL PATHLABS	2716.3	-2.0	1191	3084	2.6
INDIAMART INTERM	2148.9	-1.6	1722	4388	2.5
ATUL LTD	5820.4	-3.3	1121	2671	2.4

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
HINDUSTAN AERONA	3649.45	-3.6	58493	68088	85.9

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
LARSEN & TOUBRO	3239.65	-2.7	37479	37479	100.0
TRENT LTD	5228.35	0.6	32044	33246	96.4
MARUTI SUZUKI IN	12724.35	-1.4	43685	53706	81.3

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NONE OF THE STOCK OPTIONS MATCH THE CRITERIA MENTIONED IN THE FOOTNOTE					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NONE OF THE STOCK OPTIONS MATCH THE CRITERIA MENTIONED IN THE FOOTNOTE					

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
APOLLO HOSPITALS	6317.35	-6.6	142377	26360	5.4
EICHER MOTORS	4972.35	-6.8	95242	25251	3.8
NATIONAL ALUMIN	183.31	-4.1	44670	12743	3.5
GRASIM INDS LTD	2491.45	0.7	58213	17104	3.4
ADANI ENTERPRISE	2321.75	1.4	111560	40033	2.8

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
EICHER MOTORS	4972.35	-6.8	84395	15301	5.5
GRASIM INDS LTD	2491.45	0.7	53573	11203	4.8
ADANI ENTERPRISE	2321.75	1.4	45681	22126	2.1
BHARTI AIRTEL	1696.75	0.2	49536	33956	1.5
GAIL INDIA LTD	161.69	-3.8	13765	9938	1.4

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PAGE INDUSTRIES	42114.85	-3.5	19704	6375	3.1
ALKEM LABORATORI	4703.5	-2.0	9977	3450	2.9
APOLLO HOSPITALS	6317.35	-6.6	22372	9683	2.3
ITC LTD	418.3	-2.1	64454	32056	2
EICHER MOTORS	4972.35	-6.8	21982	11434	1.9

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ALKEM LABORATORI	4703.5	-2.0	5744	2203	2.6
ABBOTT INDIA LTD	29128.9	-1.9	2823	1218	2.3
PAGE INDUSTRIES	42114.85	-3.5	4291	2003	2.1
PI INDUSTRIES	3419.6	-3.0	5641	3008	1.9
APOLLO HOSPITALS	6317.35	-6.6	9043	4867	1.9

## 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	2400	1296300	3.4%	2322	2800	2617500	20.6%	INFY	1920	3990000	2.4%	1876	1800	1176400	-4.0%
ADANIPTS	1200	1764800	5.3%	1140	1100	611600	-3.5%	ITC	450	14088000	7.6%	418	400	4718400	-4.4%
APOLLOHOSP	7000	472500	10.8%	6317	6000	170000	-5.0%	JSWSTEEL	1000	984150	4.8%	955	900	708750	-5.7%
ASIANPAINT	2400	1529800	7.1%	2241	2100	409200	-6.3%	KOTAKBANK	2000	3010000	4.2%	1919	1800	814400	-6.2%
AXISBANK	1050	7793750	4.2%	1007	1000	2205000	-0.7%	LT	3600	1728750	11.1%	3240	3300	820200	1.9%
BAJAJ-AUTO	9000	183075	2.7%	8762	9000	78000	2.7%	LTIM	6000	95100	5.7%	5678	5500	51900	-3.1%
BAJAJFINSV	1860	1906000	6.6%	1745	1700	555000	-2.6%	M&M	3200	1027600	3.7%	3086	3100	558600	0.5%
BAJFINANCE	8500	529500	3.8%	8191	7500	380875	-8.4%	MARUTI	13200	608800	3.7%	12724	12000	340550	-5.7%
BHARTIARTL	1700	4729100	0.2%	1697	1600	1714275	-5.7%	NESTLEIND	2400	681600	9.3%	2196	2000	267400	-8.9%
BPCL	270	1E+07	5.8%	255	250	1463400	-2.0%	NTPC	340	10356000	11.3%	306	390	3769500	27.6%
BRITANNIA	5000	369500	2.0%	4904	5000	89000	2.0%	ONGC	270	12350800	13.0%	239	240	2845150	0.4%
CIPLA	1500	1574300	3.2%	1453	1260	318825	-13.3%	POWERGRID	300	9090000	14.7%	261	240	2066400	-8.2%
COALINDIA	400	5463150	11.4%	359	450	3084900	25.3%	RELIANCE	1300	12572500	5.3%	1235	1200	3522500	-2.8%
DIVISLAB	6200	208800	4.3%	5947	5400	134400	-9.2%	SBLIFE	1460	709500	2.9%	1419	1400	220875	-1.3%
DRREDDY	1240	1269375	2.5%	1210	1200	525000	-0.8%	SBIN	800	23388750	9.4%	731	700	6075750	-4.3%
EICHERMOT	5500	501375	10.6%	4972	5000	240100	0.6%	SUNPHARMA	1800	1764700	5.9%	1700	1700	562100	0.0%
GRASIM	2500	358750	0.3%	2491	2500	324750	0.3%	TATACONSUM	1100	544920	8.5%	1014	900	670320	-11.2%
HCLTECH	1760	1179850	2.1%	1723	1540	564550	-10.6%	TATAMOTORS	800	11215050	18.0%	678	700	3545850	3.3%
HDFCBANK	1760	9759750	3.4%	1701	1700	2256650	-0.1%	TATASTEEL	150	35145000	15.3%	130	120	12298000	-7.8%
HDFCLIFE	640	2701600	3.5%	619	540	833800	-12.7%	TCS	4200	1070825	6.0%	3964	4000	499450	0.9%
HEROMOTOCO	4300	618300	5.2%	4086	4200	310800	2.8%	TECHM	1700	787200	1.9%	1669	1500	483000	-10.1%
HINDALCO	610	2734200	2.4%	596	600	2098600	0.7%	TITAN	3600	1096900	9.7%	3282	3200	593425	-2.5%
HINDUNILVR	2500	1714800	8.0%	2315	2200	471000	-5.0%	ULTRACEMCO	12000	272300	6.2%	11300	11000	78100	-2.7%
ICICIBANK	1300	5655300	3.8%	1253	1200	2181900	-4.2%	UPL	640	1383455	4.8%	611	600	1143620	-1.8%
INDUSINDBK	1100	4925000	4.3%	1054	1000	1139000	-5.1%	WIPRO	320	3252000	2.2%	313	300	2667000	-4.2%

*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*

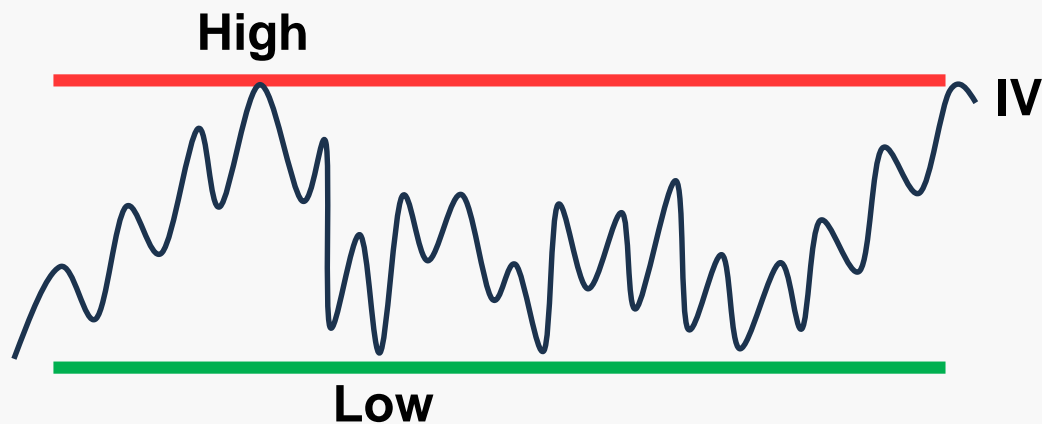
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

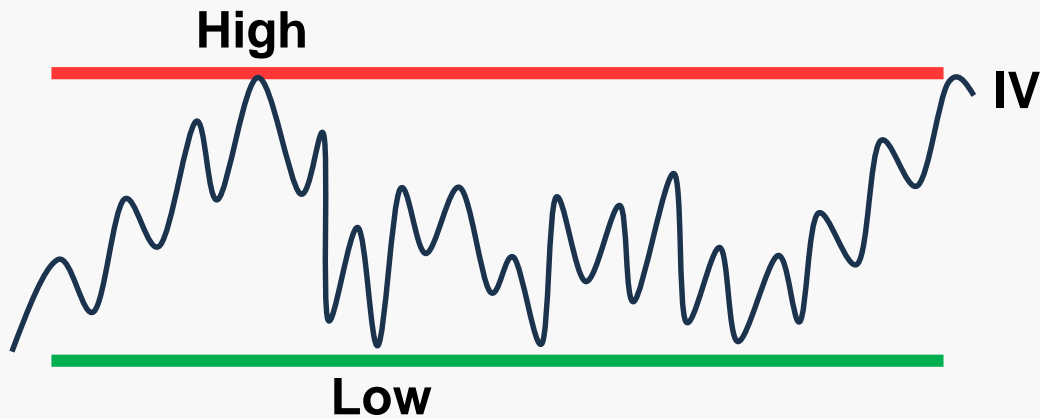


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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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