



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	22,530	<span style="color: red;">0.2% ▼</span>
Open Interest (OI)	2,00,48,625	<span style="color: green;">0.3% ▲</span>
Change in OI (abs)	2,00,48,625	<span style="color: green;">61,950 ▲</span>
Premium / Discount (Abs)	60	<span style="color: red;">7 ▼</span>
<b>Inference</b>	<span style="color: red;">Short Build Up</span>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	48,214	<span style="color: green;">0.5% ▲</span>
Open interest (OI)	45,04,080	<span style="color: red;">0.0% ▼</span>
Change in OI (abs)	45,04,080	<span style="color: red;">1,080 ▼</span>
Premium / Discount (Abs)	157	<span style="color: green;">12 ▲</span>
<b>Inference</b>	<span style="color: green;">Short Covering</span>	

## Volatility Insights

	Value	Change
India VIX Index	13.69	<span style="color: red;">0.4 ▼</span>
Nifty ATM IV (%)	12.62	<span style="color: red;">0.7 ▼</span>
Bank Nifty ATM IV (%)	14.50	<span style="color: red;">1.0 ▼</span>
PCR (Nifty)	0.96	<span style="color: red;">0.13 ▼</span>
PCR (Bank Nifty)	0.98	<span style="color: green;">0.04 ▲</span>

The Long Ratio for the FII Index Futures drop to 17.9%, against 18.3% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MCX	24,50,000	31.9%	4792.2	2.1%
NCC	1,32,68,125	11.4%	186.41	0.4%
ADANIGREEN	1,73,57,250	8.9%	857.3	3.6%
CHOLAFIN	1,23,43,750	8.2%	1443.45	0.2%
ADANIENSOL	1,21,31,875	6.8%	784	2.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RAMCOCEM	55,54,750	32.2%	820.2	-4.2%
CAMS	12,41,625	10.2%	3296.65	-2.3%
MFSL	65,20,000	10.1%	1065.85	-2.2%
DELHIVERY	83,28,025	7.6%	239.42	-4.0%
PAYTM	2,52,18,700	7.3%	703.85	-1.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDUSINDBK	6,17,76,000	-13.1%	685.15	4.3%
JKCEMENT	5,53,000	-5.2%	4369.6	0.1%
ITC	8,03,04,000	-4.5%	412.65	1.5%
BAJAJ-AUTO	28,27,350	-4.0%	7522.05	0.1%
BSE	53,08,625	-2.9%	4007.7	4.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POLICYBZR	56,52,075	-6.0%	1406.95	-4.4%
DALBHARAT	24,68,950	-3.0%	1645.85	-2.9%
DEEPAKNTR	15,27,600	-2.8%	1964.75	-0.1%
BIOCON	2,35,30,000	-2.7%	326.05	-1.3%
ALKEM	9,65,400	-2.4%	4749.05	-0.1%

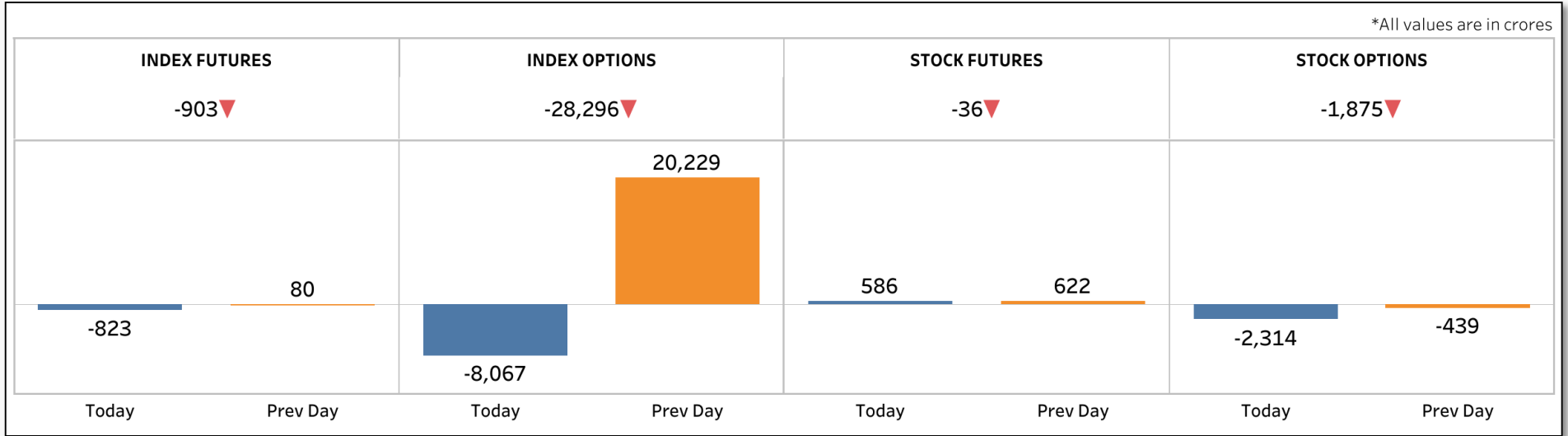
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

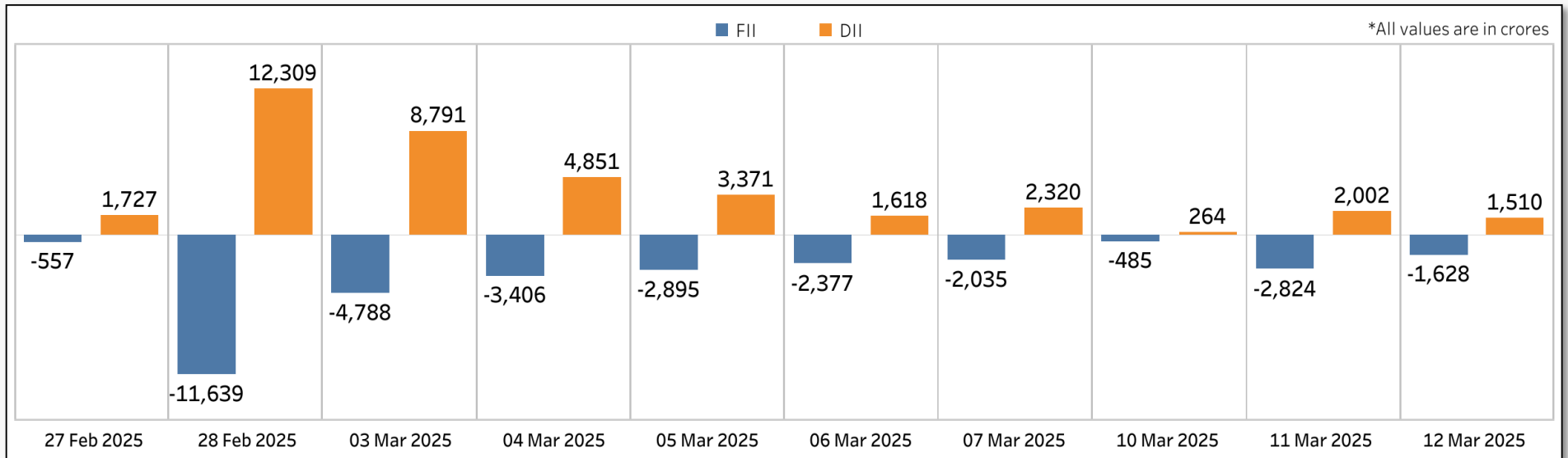
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-87,442 ▼	-5,018 ▼	-93,548 ▼	13,629 ▲	-502 ▼	-4,540 ▼	-150 ▼	38,970 ▲
55,638	508	73,735	10,624		144	4,684	27,635
-31,804	-4,510	-19,813	-3,005	-551	-49	-41	-11,335
Net O/S 119,501 Today Prev Day	Net O/S -160,762 Today Prev Day	Net O/S 317,945 Today Prev Day	Net O/S 1,529,764 Today Prev Day	Net O/S 1,575 Today Prev Day	Net O/S 55,929 Today Prev Day	Net O/S 18,278 Today Prev Day	Net O/S -3,911,164 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
204,149 ▲	4,853 ▲	38,992 ▲	2,637 ▲	-116,205 ▼	4,705 ▲	54,704 ▲	-55,236 ▼
112,715	6,057	63,627		35,845			25,149
-91,434	1,204	24,635	-8,172	-80,360	-1,691	-43,774	-30,087
			-10,809		-6,396	-98,478	
Net O/S -148,362 Today Prev Day	Net O/S 138,542 Today Prev Day	Net O/S -194,428 Today Prev Day	Net O/S 2,020,944 Today Prev Day	Net O/S 27,286 Today Prev Day	Net O/S -33,709 Today Prev Day	Net O/S -141,797 Today Prev Day	Net O/S 360,456 Today Prev Day

## Daily Net Open Interest Change

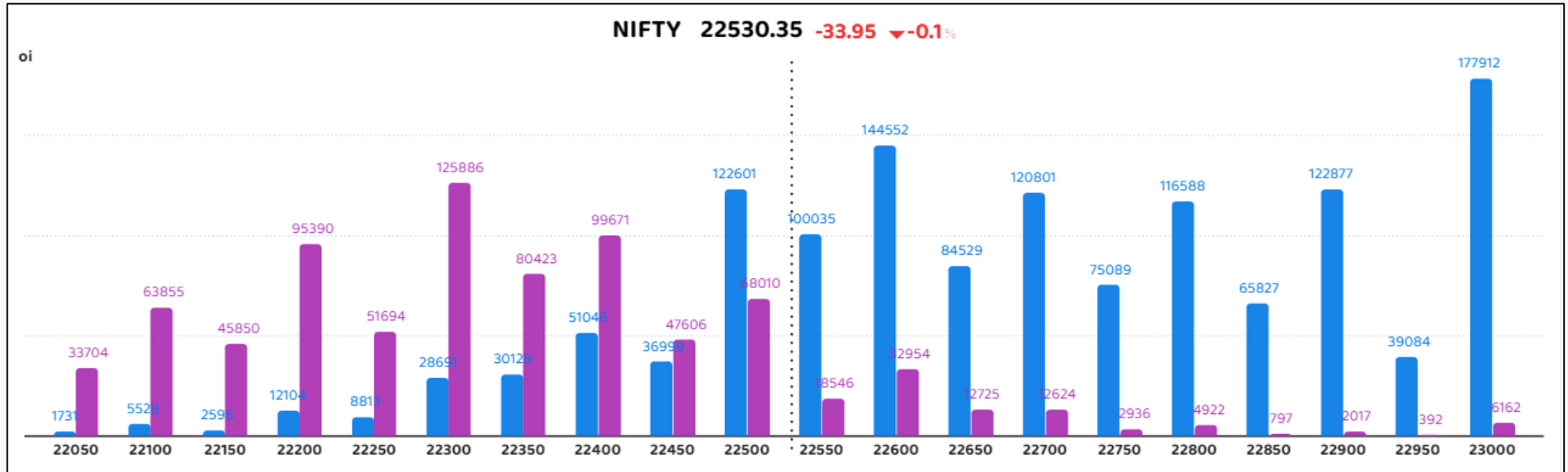


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 23000 Call and the 22300 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 48000 Put saw the most amount of open interest.

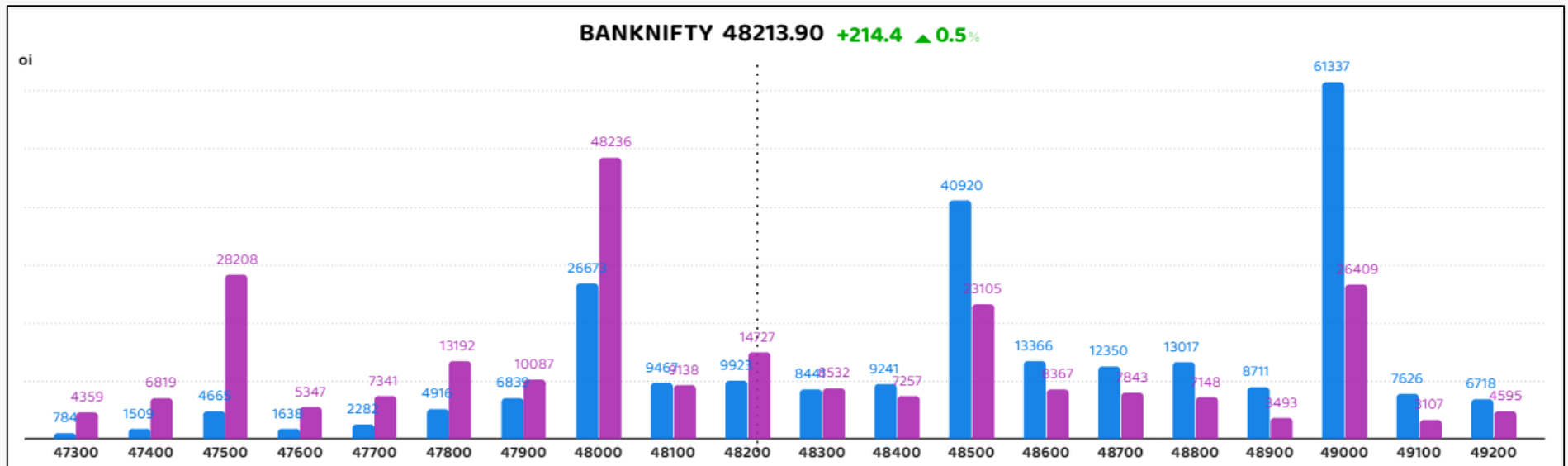
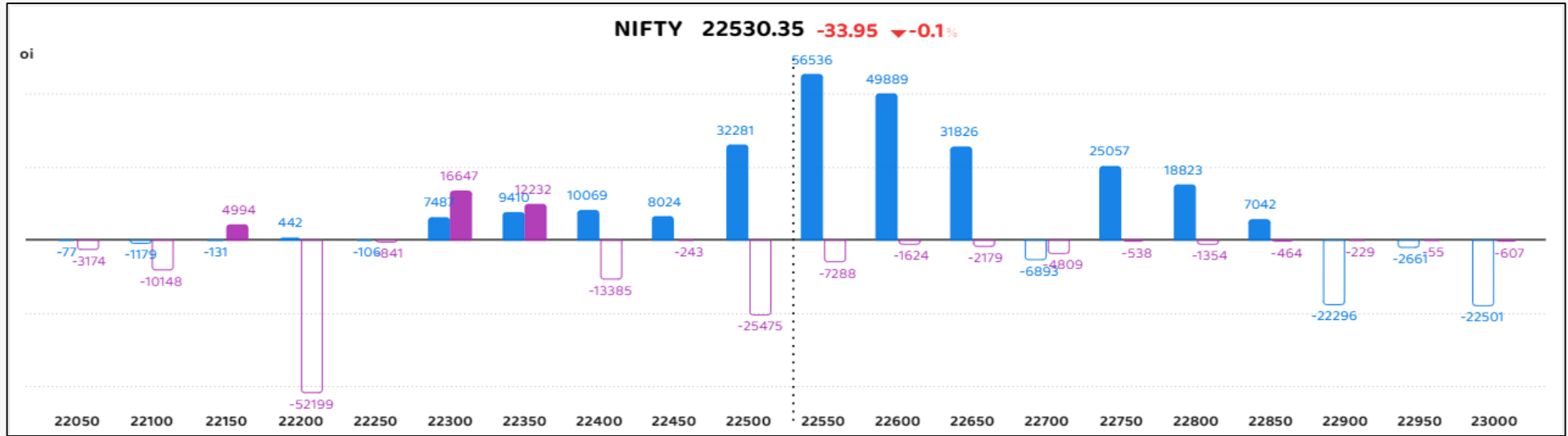


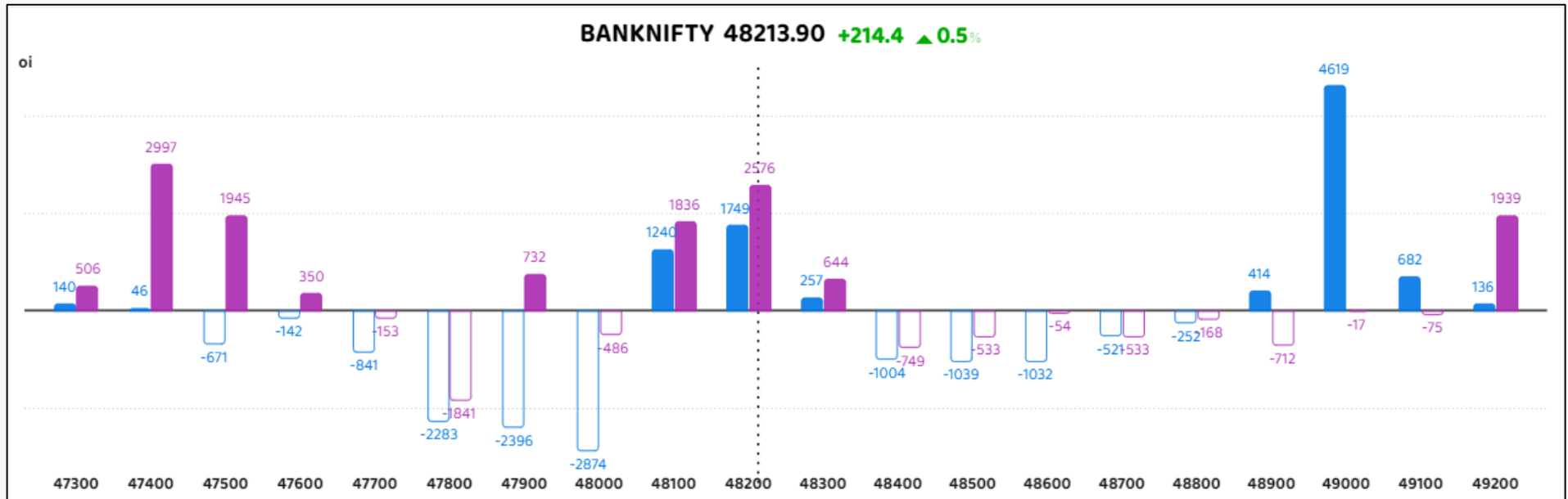
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 22500 Call and the 22200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 49000 Call & the 47400 Put

**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BSE LTD	4014.4	5.4	64.8	64.8	37.1	100.0
CESC LTD	139.58	0.3	48.0	48.0	31.2	100.0
LTIMINDTREE LTD	4485.9	-3.6	35.4	36.6	20.0	92.5
DIXON TECHNOLOGI	13078.95	-1.7	47.2	51.5	1.8	91.4
APL APOLLO TUBES	1402.95	-3.2	41.5	43.9	20.9	89.6

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDIAN RENEWABLE	141.26	-0.5	56.2	63.1	56.2	0.0
TORRENT PHARMA	3096.5	1.3	13.9	45.4	12.0	5.7
PATANJALI FOODS	1734.75	-0.5	37.0	65.0	34.2	9.1
NBCC INDIA LTD	79.11	0.3	45.9	65.4	43.9	9.2
AUROBINDO PHARMA	1107.9	1.6	24.9	46.2	22.4	10.4

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BSE LTD	4014.4	5.4	64.8	64.8	37.1	100.0
CESC LTD	139.58	0.3	48.0	48.0	31.2	100.0
INDUSIND BANK	684.7	4.4	49.1	64.6	12.4	99.3
APL APOLLO TUBES	1402.95	-3.2	41.5	43.9	20.9	99.1
LTIMINDTREE LTD	4485.9	-3.6	35.4	36.6	20.0	98.7

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDIAN RENEWABLE	141.26	-0.5	56.2	63.1	56.2	0.0
TORRENT PHARMA	3096.5	1.3	13.9	45.4	12.0	0.7
ICICI BANK LTD	1243.95	-0.1	13.7	46.1	9.3	1.3
MANAPPURAM FINAN	206.46	2.5	26.0	64.2	2.7	5.6
PIDILITE INDS	2749.3	1.0	18.5	33.7	13.3	5.9



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BSE LTD	4014.4	5.4	4072	972	4.2
AARTI INDUS LTD	391.75	-0.2	12404	2980	4.2
MRF LTD	107264.3	0.7	2215	560	4.0
BHARAT FORGE CO	1090.2	2.4	11936	3439	3.5
INDIAN RENEWABLE	141.26	-0.5	3060	906	3.4

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PATANJALI FOODS	1734.75	-0.5	2279	4585	2.0
SUPREME INDS LTD	3356.85	0.7	3006	5019	1.7
ONE 97 COMMUNICA	702	-1.6	14203	20804	1.5
SONA BLW PRECISI	504.8	-0.6	1887	2736	1.4
JSW STEEL LTD	1010.4	-0.8	13991	19953	1.4

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
IIFL FINANCE LTD	313.1	0.4	2431	2431	100.0
SOLAR INDUSTRIES	9781.1	0.2	2827	2827	100.0
TATA TECHNOLOGIE	642.1	-0.7	3119	3119	100.0
INDIAN RENEWABLE	141.26	-0.5	4487	4487	100.0
PATANJALI FOODS	1734.75	-0.5	4961	5031	98.6

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
IIFL FINANCE LTD	313.1	0.4	2156	2156	100.0
TITAGARH RAIL SY	699.55	0.0	1979	1979	100.0
TATA TECHNOLOGIE	642.1	-0.7	1707	1707	100.0
PATANJALI FOODS	1734.75	-0.5	4335	4335	100.0
VARUN BEVERAGES	478.35	-1.4	12041	12048	99.9

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
PB FINTECH LTD	1405.7	-4.3	21460	24930	86.1
JIO FINANCIAL SE	225.53	3.7	47635	59305	80.3

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
RAMCO CEMENT/THE	820.1	-4.0	26356	26356	100.0
PB FINTECH LTD	1405.7	-4.3	21793	25421	85.7

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
INDUSIND BANK	684.7	4.4	128011	45330	2.8
TITAGARH RAIL SY	699.55	0.0	3640	2031	1.8
RAMCO CEMENT/THE	820.1	-4.0	3680	2268	1.6
INFOSYS LTD	1590.85	-4.3	62944	38974	1.6
IIFL FINANCE LTD	313.1	0.4	2431	1514	1.6

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
RAMCO CEMENT/THE	820.1	-4.0	3314	1828	1.8
INDUSIND BANK	684.7	4.4	49876	27520	1.8
TATA COMMUNICATI	1508.05	1.1	6615	3729	1.8
TITAGARH RAIL SY	699.55	0.0	1979	1122	1.8
SOLAR INDUSTRIES	9781.1	0.2	1658	1030	1.6

### 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	820.1	-4.0	25289	3773	6.7
INFOSYS LTD	1590.85	-4.3	191637	53304	3.6
INDUS TOWERS LTD	324.65	-4.9	33322	10447	3.2
WIPRO LTD	268.55	-3.3	60651	19199	3.2
BHARTI AIRTEL	1642.85	-1.2	185387	59025	3.1

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
RAMCO CEMENT/THE	820.1	-4.0	26356	3265	8.1
INDUS TOWERS LTD	324.65	-4.9	40758	8181	5.0
DALMIA BHARAT LT	1641.1	-2.7	7736	1964	3.9
INFOSYS LTD	1590.85	-4.3	171874	46723	3.7
TATA COMMUNICATI	1508.05	1.1	14829	4831	3.1

## 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	1256100	16.0%	2242	2600	2710500	16.0%	INFY	1700	3057600	6.9%	1591	1500	1126800	-5.7%
ADANIPTS	1200	1166000	6.4%	1128	1100	934800	-2.5%	ITC	420	5742400	1.8%	412	400	4649600	-3.0%
APOLLOHOSP	6800	107750	10.7%	6144	6000	73750	-2.3%	JSWSTEEL	1000	850500	-1.0%	1010	900	866700	-10.9%
ASIANPAINT	2300	746400	2.2%	2251	2000	326200	-11.2%	KOTAKBANK	2000	1340800	0.9%	1983	1900	1135200	-4.2%
AXISBANK	1050	2419375	3.8%	1011	1000	1941875	-1.1%	LT	3300	830700	3.3%	3194	3100	540300	-2.9%
BAJAJ-AUTO	8000	293625	6.5%	7515	7000	120675	-6.9%	LTIM	4800	200700	7.0%	4486	4500	99150	0.3%
BAJAJFINSV	1900	1228500	4.4%	1819	1560	464500	-14.3%	M&M	3000	1395275	13.1%	2653	2500	650125	-5.8%
BAJFINANCE	9000	537500	6.1%	8484	8000	321250	-5.7%	MARUTI	11800	257050	1.4%	11640	11500	120700	-1.2%
BHARTIARTL	1700	4740025	3.5%	1643	1600	1998800	-2.6%	NESTLEIND	2260	206600	2.9%	2196	2100	279200	-4.3%
BPCL	270	1.6E+07	1.4%	266	260	2561400	-2.4%	NTPC	340	12690000	3.0%	330	300	2907000	-9.1%
BRITANNIA	4900	98000	2.3%	4792	4100	87900	-14.4%	ONGC	240	10400775	7.0%	224	225	2862475	0.3%
CIPLA	1600	697125	10.0%	1454	1240	589875	-14.7%	POWERGRID	280	6939000	4.8%	267	260	1764000	-2.7%
COALINDIA	395	4901400	3.8%	381	450	2713200	18.2%	RELIANCE	1300	7737000	3.4%	1257	1200	5003000	-4.5%
DIVISLAB	6000	158100	5.9%	5667	4700	94600	-17.1%	SBLIFE	1500	633375	6.5%	1409	1400	270750	-0.6%
DRREDDY	1200	2400000	8.6%	1105	1100	497500	-0.5%	SBIN	800	7603500	10.6%	723	700	5593500	-3.2%
EICHERMOT	5100	244825	1.6%	5017	4800	216125	-4.3%	SUNPHARMA	1680	2250850	0.2%	1677	1600	938350	-4.6%
GRASIM	2420	303500	0.9%	2399	2400	176500	0.0%	TATACONSUM	1000	621984	5.8%	945	950	538536	0.5%
HCLTECH	1600	662550	3.9%	1541	1400	762300	-9.1%	TATAMOTORS	700	7378800	4.7%	668	600	2924900	-10.2%
HDFCBANK	1800	3516700	5.2%	1711	1700	2753300	-0.7%	TATASTEEL	155	35255000	3.1%	150	140	15064500	-6.9%
HDFCLIFE	630	1380500	-0.3%	632	550	957000	-13.0%	TCS	4000	1229375	14.1%	3506	3500	682150	-0.2%
HEROMOTOCO	4000	509250	10.8%	3610	3200	175500	-11.4%	TECHM	1600	1059000	11.2%	1438	1340	548400	-6.8%
HINDALCO	700	3369800	1.5%	690	620	2559200	-10.1%	TITAN	3200	636125	6.0%	3019	3000	337225	-0.6%
HINDUNILVR	2300	867900	4.9%	2193	2200	566400	0.3%	ULTRACEMCO	11000	161150	4.6%	10520	10000	75550	-4.9%
ICICIBANK	1300	1967000	4.5%	1244	1200	3021200	-3.5%	UPL	640	2056890	5.3%	608	610	844165	0.3%
INDUSINDBK	750	6562500	9.5%	685	600	1918500	-12.4%	WIPRO	300	9909000	11.7%	269	240	3777000	-10.6%

*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*

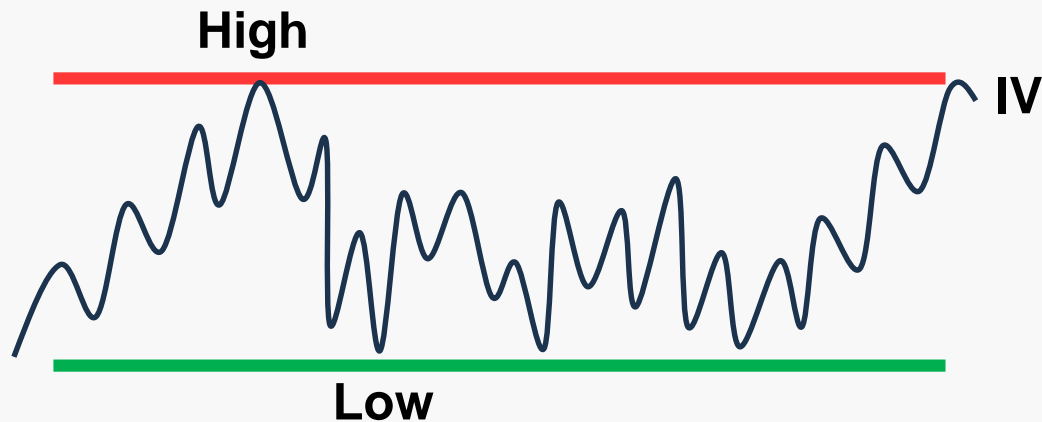
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

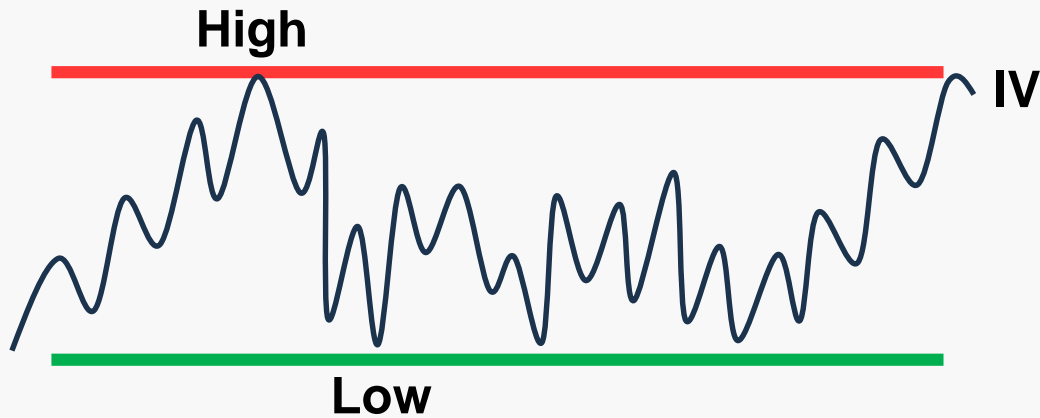


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



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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