



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,602	0.4% ▼
Open Interest (OI)	1,43,77,500	0.3% ▲
Change in OI (abs)	1,43,77,500	40,050 ▲
Premium / Discount (Abs)	69	9 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	50,297	0.3% ▲
Open interest (OI)	33,95,055	1.1% ▼
Change in OI (abs)	33,95,055	38,685 ▼
Premium / Discount (Abs)	117	51 ▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	15.17	0.4 ▲
Nifty ATM IV (%)	13.69	1.0 ▲
Bank Nifty ATM IV (%)	15.75	1.2 ▲
PCR (Nifty)	0.85	0.05 ▲
PCR (Bank Nifty)	0.95	0.00 ▲

\*ATM IV is the midpoint of the IV for the ATM call and put respectively

\*On expiration days, the premium/discount will be the difference between the new front-month contract and the cash market level on the day

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
NATIONALUM	7,37,36,250	7.1%	239.68	8.9%
PEL	1,13,42,250	6.2%	1050.65	0.8%
TATACONSUM	1,44,76,632	4.7%	932.85	0.5%
MFSL	41,56,800	4.6%	1239.3	0.6%
RBLBANK	6,05,55,000	4.1%	158.45	2.3%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
IGL	2,16,57,625	61.2%	326.05	-19.9%
DEEPAKNTR	28,34,700	14.8%	2548.2	-2.8%
MGL	22,98,400	7.9%	1130.4	-14.1%
GLENMARK	41,52,150	7.5%	1484.95	-3.6%
MPHASIS	42,55,900	6.7%	2756.15	-3.0%

### Short Covering (Open Interest Lower + Price Higher)

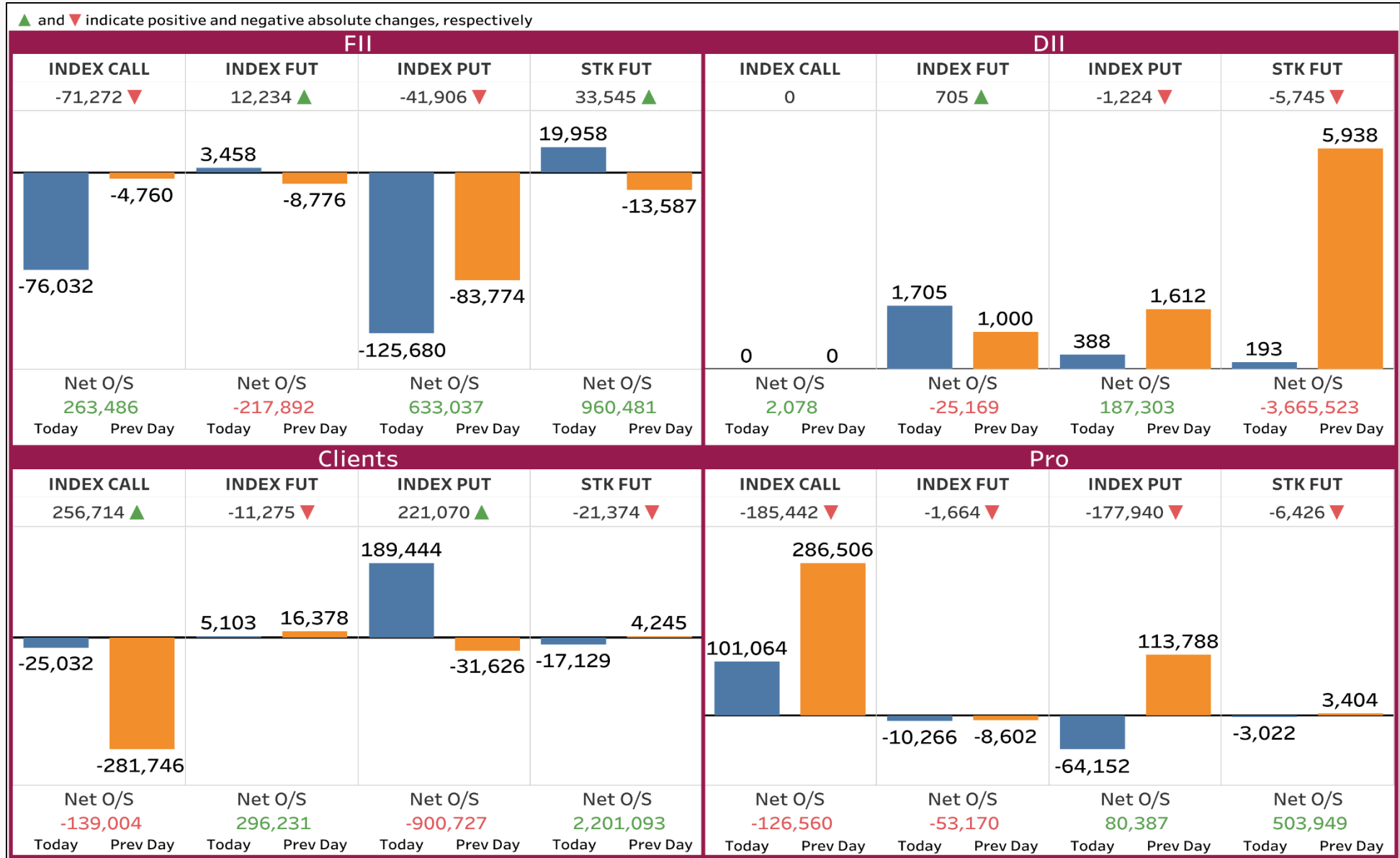
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDALCO	4,90,08,400	-5.1%	652.65	4.0%
NMDC	8,36,28,000	-4.9%	223.23	1.9%
UPL	3,23,20,600	-4.0%	536.2	1.4%
GNFC	69,51,100	-3.3%	558.1	0.6%
LUPIN	98,68,500	-3.1%	2034.9	0.9%

### Long Unwinding (Open Interest Lower + Price Lower)

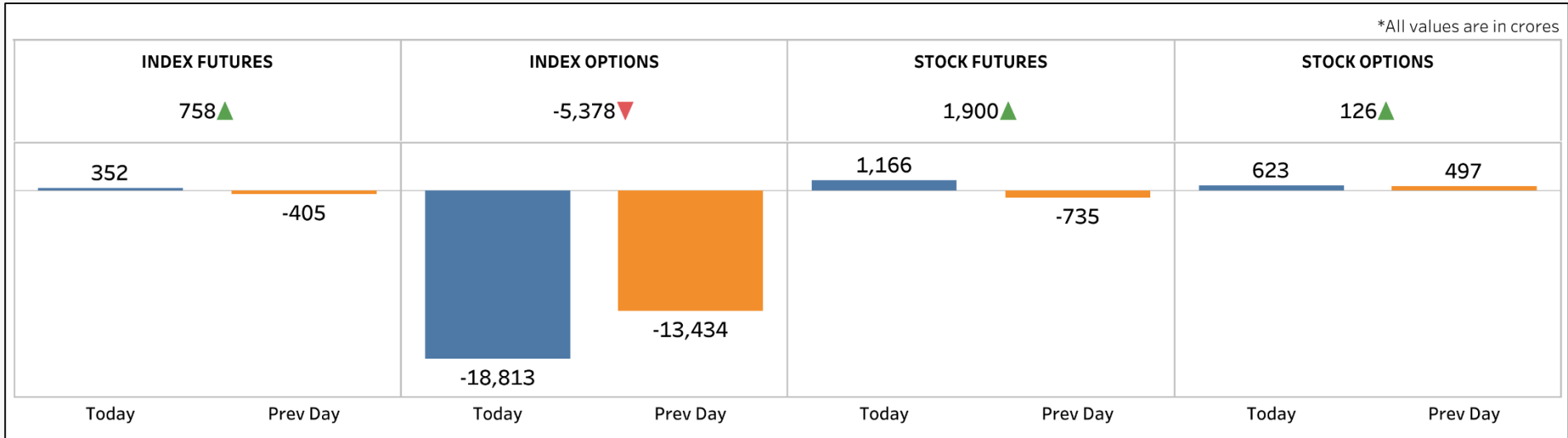
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ALKEM	14,69,800	-6.5%	5504.2	-0.5%
ZYDUSLIFE	1,30,79,700	-3.0%	945.95	-1.2%
TCS	1,34,33,350	-2.6%	4018.9	-3.1%
WIPRO	4,23,99,000	-2.5%	553	-2.6%
TECHM	1,10,87,400	-2.4%	1663.6	-1.4%

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

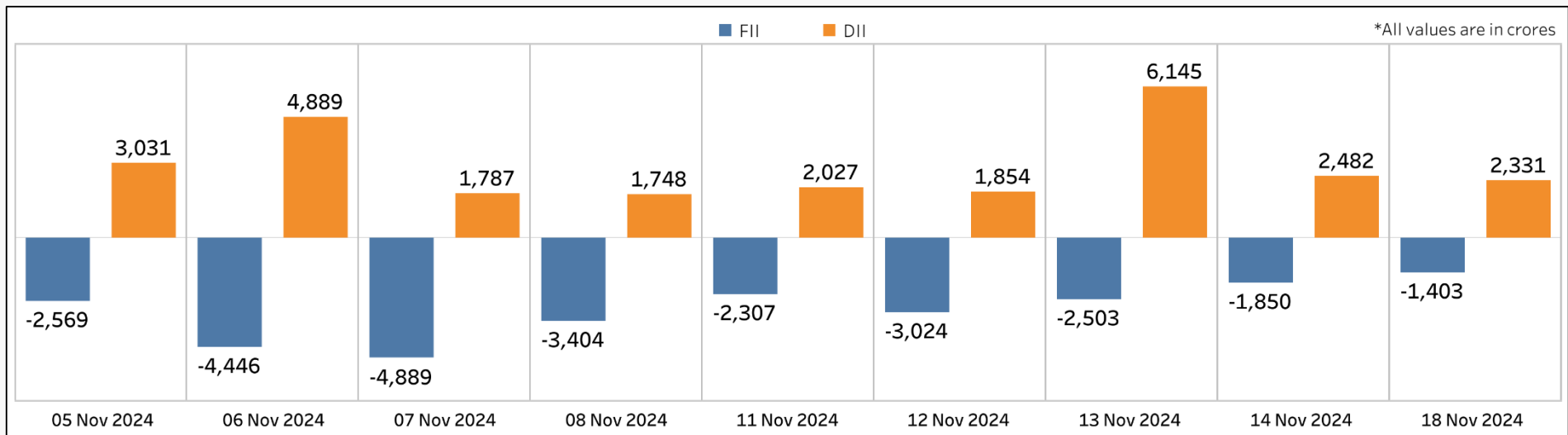
## Open Interest Data by Participant



## Daily Net Open Interest Change

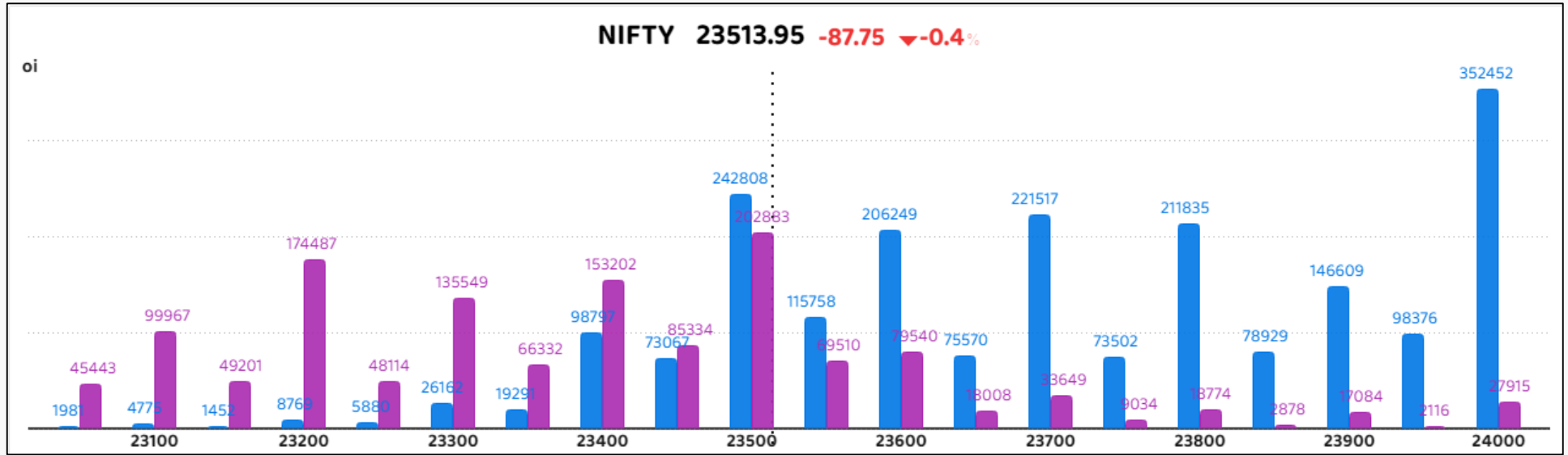


## DII and FII Daily Cash Market Flows



**Positioning Stack by Strike (Current Week Expiry)**

Call ■ Put ■



For the Nifty, the 24,000 call and the 23,500 put had the highest call and put concentration (contracts). For the Bank Nifty, the 51,000 call and the 49,500 put saw the most amount of open interest.

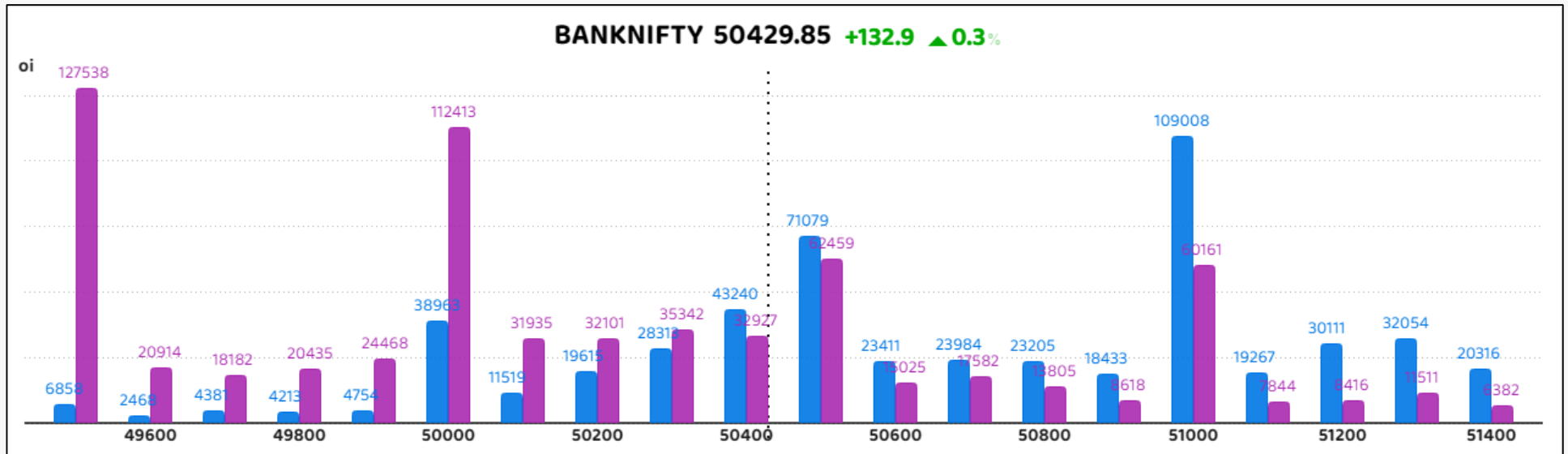
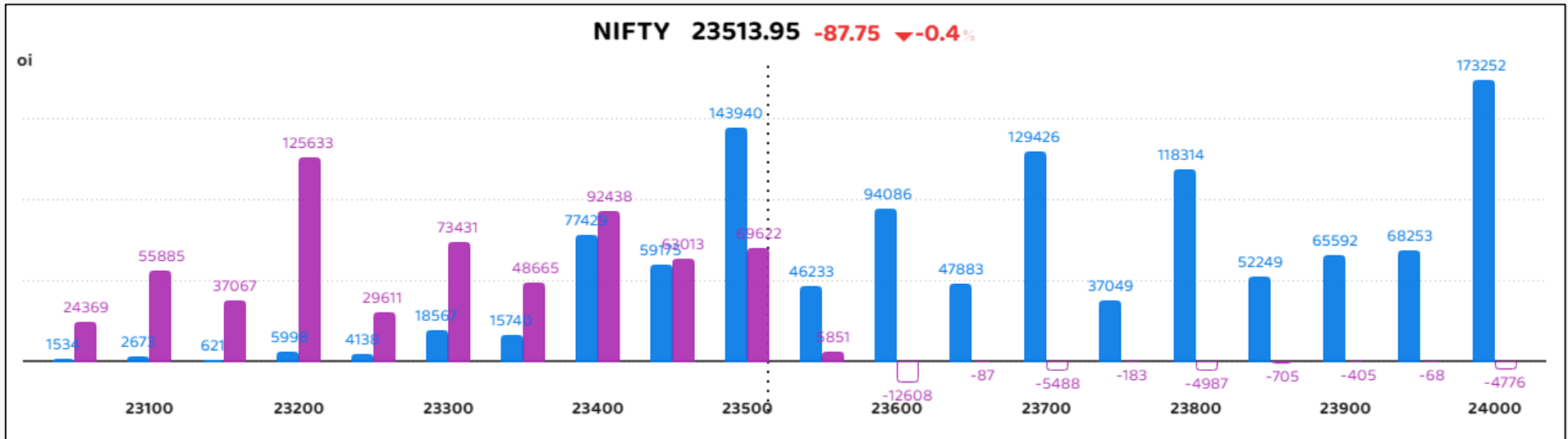


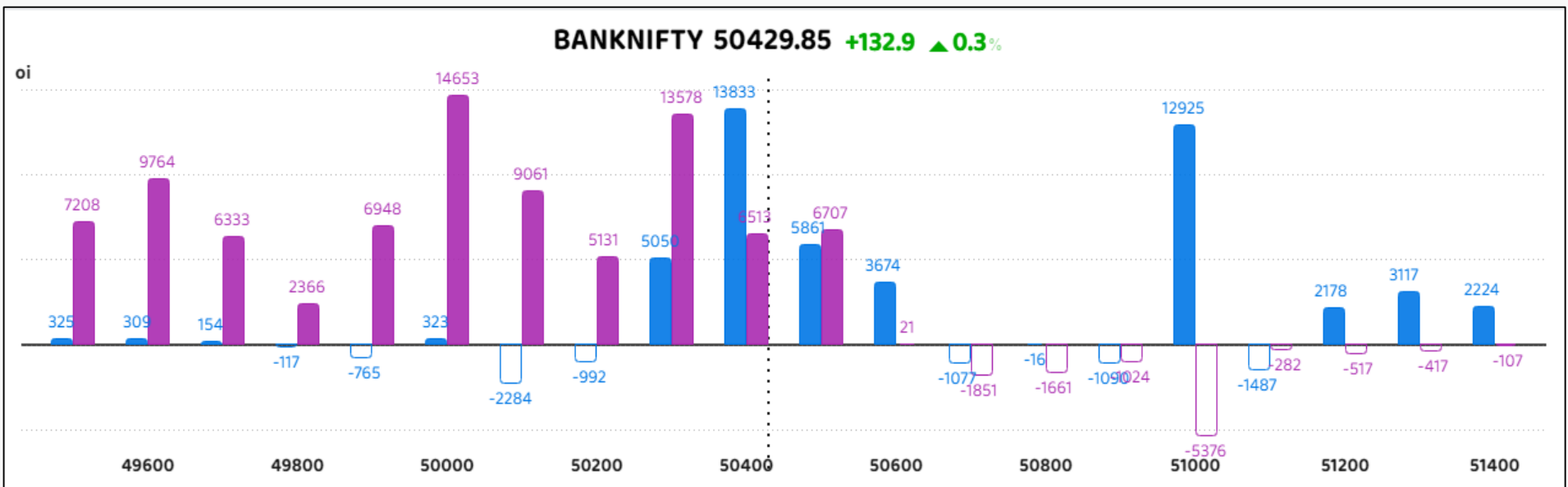
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Current Week Expiry)

Call ■ Put ■

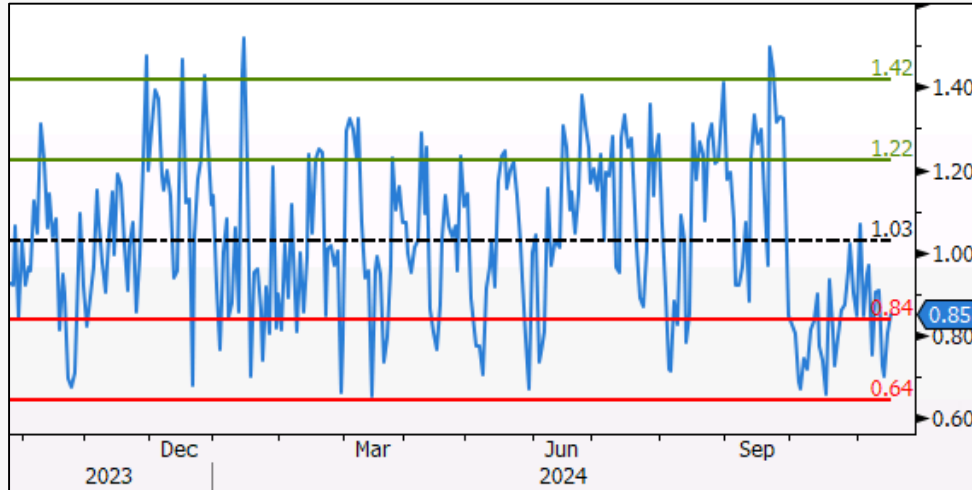


The largest open interest changes (contracts) were seen at the 24,000 call strike and 23,200 put strike.

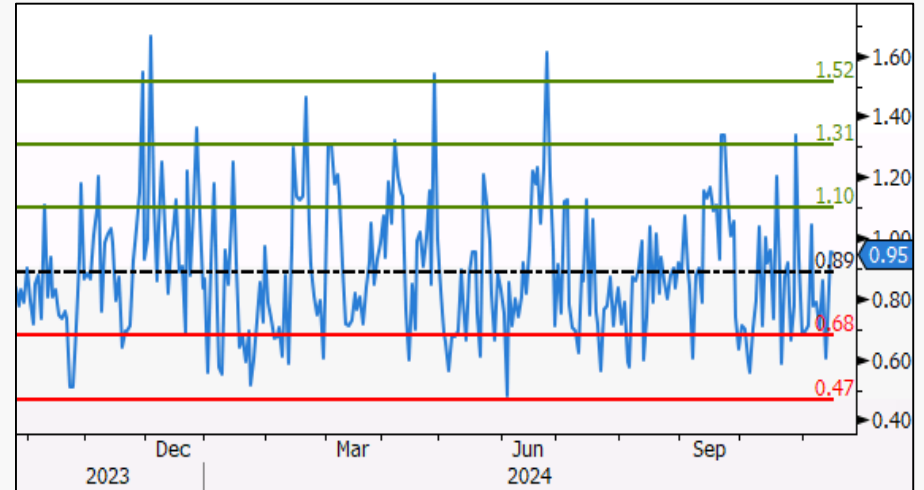


For the Bank Nifty, the biggest open interest changes were seen at the 50,400, Call Strike & 50,000 Put strike.

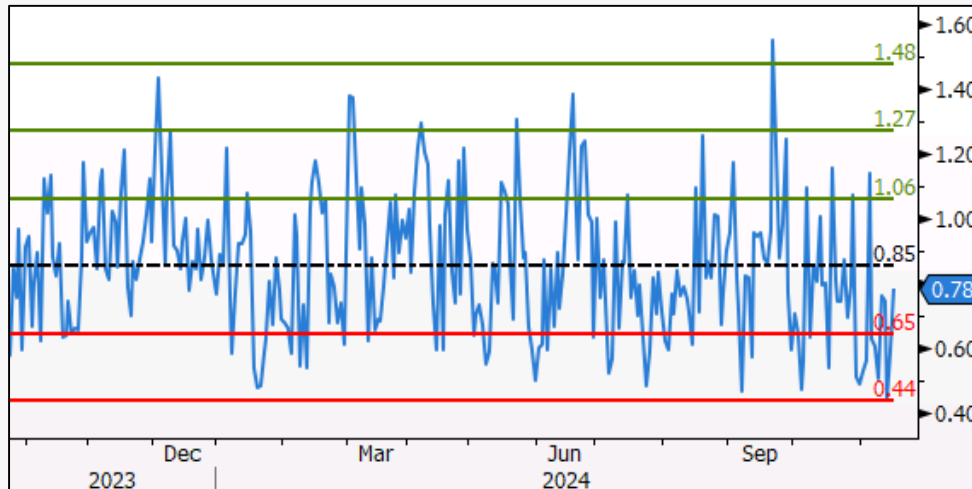
## Nifty



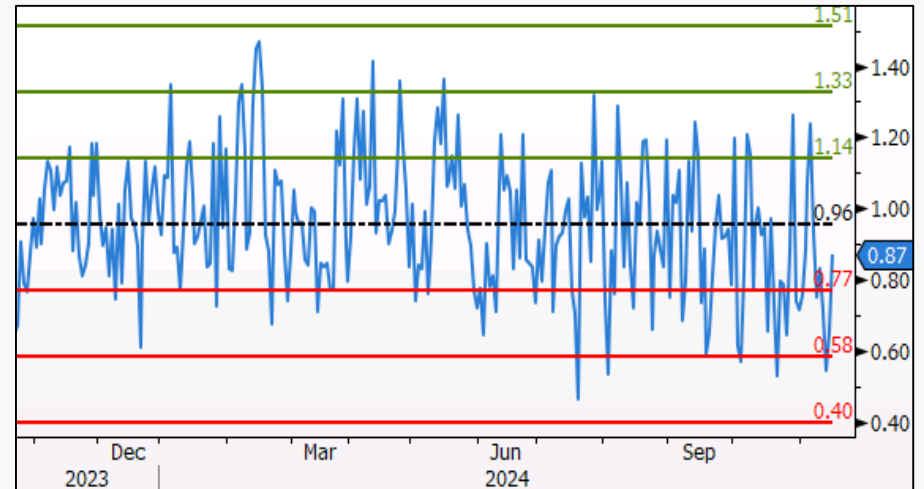
## Bank Nifty



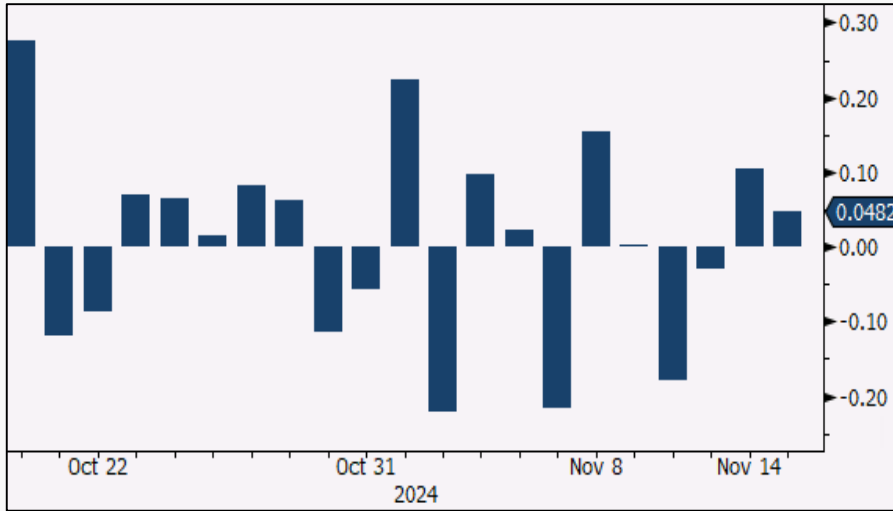
## Fin Nifty



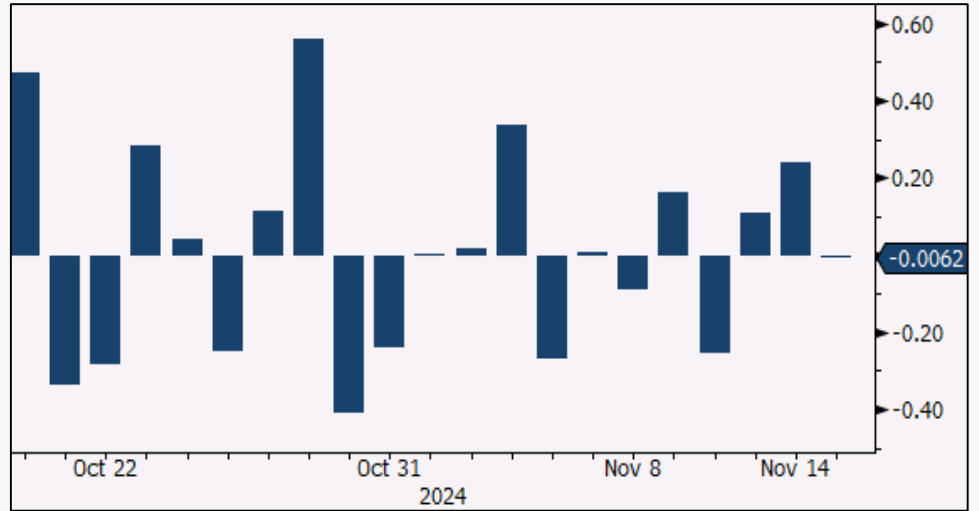
## Midcap Nifty



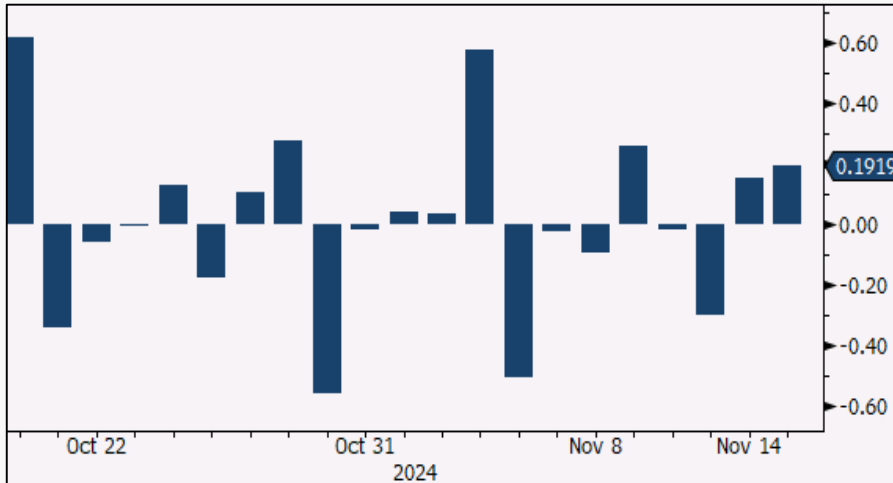
**Nifty**



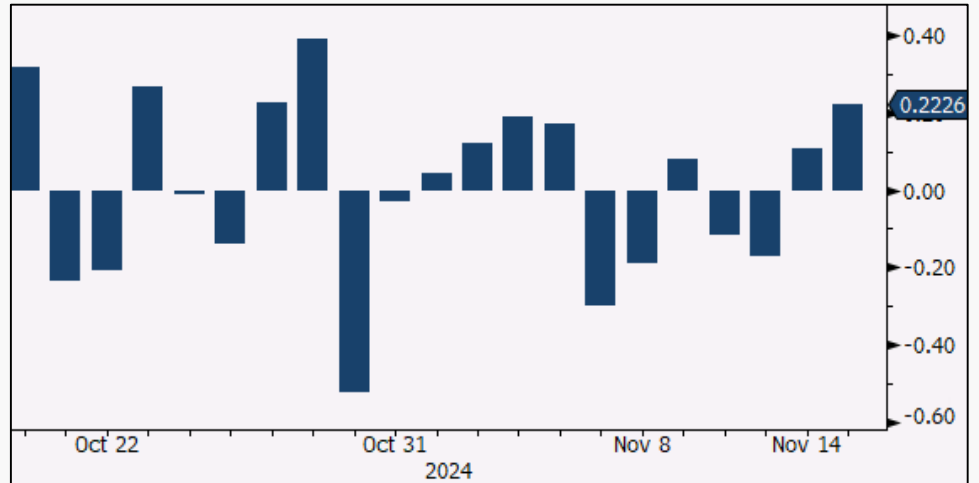
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MAHANAGAR GAS LT	1130	-13.9	38.6	48.5	12.2	72.6
DIXON TECHNOLOGI	14811.45	0.2	37.6	51.3	1.8	72.2
COLGATE PALMOLIV	2749.75	1.5	25.3	31.7	9.5	71.0
IPCA LABS LTD	1566.7	2.0	38.6	49.3	13.7	70.0
INDRAPRASTHA GAS	325.05	-19.9	44.4	55.4	20.3	68.8

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AMBUJA CEMENTS	550.55	1.1	20.9	70.4	20.9	0.0
MRF LTD	120861.1	0.3	8.9	39.1	8.9	0.0
INDIAN RAILWAY C	797.1	-0.3	25.0	59.6	23.5	4.3
REC LTD	501	-0.3	34.5	86.9	31.2	5.9
CITY UNION BANK	171.24	-0.6	28.2	52.1	26.7	6.3

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDRAPRASTHA GAS	325.05	-19.9	44.4	55.4	20.3	96.5
IPCA LABS LTD	1566.7	2.0	38.6	49.3	13.7	95.2
BERGER PAINTS	479.35	-2.6	34.7	50.6	12.0	93.7
HINDUSTAN COPPER	264.4	0.6	59.9	91.5	11.1	93.6
SBI LIFE INSURAN	1562.6	0.0	28.4	35.8	13.4	92.1

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AMBUJA CEMENTS	550.55	1.1	20.9	70.4	20.9	0.0
MRF LTD	120861.1	0.3	8.9	39.1	8.9	0.0
GUJARAT NARM VLY	558.5	0.8	15.8	53.0	4.8	2.0
UNITED SPIRITS	1470.8	2.0	20.9	43.4	16.8	5.0
VEDANTA LTD	447.5	3.3	29.6	57.3	23.7	5.8

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BALKRISHNA INDS	2746.75	0.3	8072	842	9.6
UNITED BREWERIES	1883.6	0.0	5085	969	5.3
INDIAMART INTERM	2242	-1.8	5782	1430	4.0
SUN TV NETWORK	725.2	-0.8	9274	2416	3.8
BAJAJ AUTO LTD	9516.5	0.4	54448	15929	3.4

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
GUJARAT GAS LTD	452.5	-6.9	23844	39253	1.6
JK CEMENTS LTD	3924.3	-1.9	940	1251	1.3
LTIMINDTREE LTD	5841.5	-2.6	11834	15339	1.3
TORRENT PHARMA	3105.6	0.1	1237	1580	1.3
COFORGE LTD	8006.6	-0.8	27993	33768	1.2

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
ABB INDIA LTD	6625.9	-0.8	19107	19107	100.0
BRITANNIA INDS	4911.35	-0.1	48489	48489	100.0
SHRIRAM FINANCE	2848.15	0.9	15076	15076	100.0
CUMMINS INDIA	3352.55	0.7	11924	11924	100.0
COLGATE PALMOLIV	2749.75	1.5	11747	11747	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
ADITYA BIRLA CAP	185.03	-2.1	8348	8348	100.0
COFORGE LTD	8006.6	-0.8	20184	20184	100.0
NATIONAL ALUMIN	239.93	9.1	11282	11282	100.0
MAHANAGAR GAS LT	1130	-13.9	7524	7524	100.0
SAMVARDHANA MOTH	164.95	-0.2	11315	11520	98.2

### Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
NATIONAL ALUMIN	239.93	9.1	103232	103232	100.0

### Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
NATIONAL ALUMIN	239.93	9.1	73429	73429	100.0
MAHANAGAR GAS LT	1130	-13.9	40879	41788	97.8
INDRAPRASTHA GAS	325.05	-19.9	53770	57270	93.9
GUJARAT GAS LTD	452.5	-6.9	39253	44040	89.1

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MUTHOOT FINANCE	1885.65	6.2	54632	8620	6.3
NATIONAL ALUMIN	239.93	9.1	103232	19070	5.4
CROM GREAVES CON	384.25	3.6	25041	5229	4.8
INDRAPRASTHA GAS	325.05	-19.9	75462	18844	4.0
GLENMARK PHARMA	1485.75	-3.1	24064	6545	3.7

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
GUJARAT GAS LTD	452.5	-6.9	39253	6747	5.8
MUTHOOT FINANCE	1885.65	6.2	28771	5145	5.6
NATIONAL ALUMIN	239.93	9.1	73429	13422	5.5
MAHANAGAR GAS LT	1130	-13.9	40879	8046	5.1
INDRAPRASTHA GAS	325.05	-19.9	53770	11362	4.7

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BRITANNIA INDS	4911.35	-0.1	48489	14376	3.4
PI INDUSTRIES	4191.95	-1.7	6032	2352	2.6
GLENMARK PHARMA	1485.75	-3.1	6314	3022	2.1
INDRAPRASTHA GAS	325.05	-19.9	22310	11490	1.9
COLGATE PALMOLIV	2749.75	1.5	11747	6060	1.9

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PI INDUSTRIES	4191.95	-1.7	5469	1640	3.3
BRITANNIA INDS	4911.35	-0.1	16529	6533	2.5
MUTHOOT FINANCE	1885.65	6.2	5570	2391	2.3
MAHANAGAR GAS LT	1130	-13.9	7524	3721	2.0
GUJARAT GAS LTD	452.5	-6.9	5486	2718	2.0

## 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	3000	1631100	6.4%	2819	3000	1799400	6.4%	INFY	1800	2830000	-0.6%	1811	1800	1873600	-0.6%
ADANIPTS	1400	1731600	9.4%	1279	1200	647600	-6.2%	ITC	500	7915200	7.2%	467	470	2542400	0.7%
APOLLOHOSP	7500	251625	11.2%	6742	6800	77125	0.9%	JSWSTEEL	1000	1141425	5.3%	950	900	610875	-5.2%
ASIANPAINT	2600	1363800	4.7%	2484	2400	535000	-3.4%	KOTAKBANK	1800	1893600	4.5%	1723	1700	859600	-1.3%
AXISBANK	1200	3241250	6.6%	1126	1120	1299375	-0.6%	LT	3700	1361700	4.5%	3542	3600	489600	1.6%
BAJAJ-AUTO	11000	394200	15.6%	9517	9500	154125	-0.2%	LTIM	6000	136500	2.7%	5842	5700	79800	-2.4%
BAJAJFINSV	1760	773000	8.9%	1616	1620	249500	0.2%	M&M	3000	1540350	5.4%	2847	2800	679700	-1.6%
BAJFINANCE	7000	881000	6.6%	6568	6500	448000	-1.0%	MARUTI	12000	559950	8.2%	11094	11000	170650	-0.8%
BHARTIARTL	1620	2516550	5.4%	1537	1600	920075	4.1%	NESTLEIND	2400	507800	8.4%	2213	2400	239400	8.4%
BPCL	320	4651200	10.7%	289	300	2496600	3.7%	NTPC	400	10087500	9.1%	367	360	2089500	-1.8%
BRITANNIA	5500	461500	12.0%	4911	5000	160900	1.8%	ONGC	275	24453275	9.7%	251	250	2897125	-0.3%
CIPLA	1600	1058525	9.2%	1465	1400	518050	-4.5%	POWERGRID	330	7227000	5.8%	312	300	3031200	-3.9%
COALINDIA	430	2377200	4.0%	413	484.25	1470000	17.2%	RELIANCE	1350	10946000	7.1%	1261	1500	4394000	19.0%
DIVISLAB	6000	438700	4.0%	5767	5000	379400	-13.3%	SBLIFE	1640	1367625	5.0%	1563	1600	166875	2.4%
DRREDDY	1300	1563750	8.9%	1194	1200	376250	0.5%	SBIN	850	10903500	4.4%	814	800	4372500	-1.8%
EICHERMOT	5000	430850	2.6%	4876	4500	322875	-7.7%	SUNPHARMA	1900	1908550	8.7%	1748	1760	262150	0.7%
GRASIM	2700	506750	7.3%	2517	2500	472750	-0.7%	TATACONSUM	1100	1177848	18.2%	931	900	455544	-3.3%
HCLTECH	1820	1222550	-0.8%	1835	1800	641550	-1.9%	TATAMOTORS	900	8317100	16.6%	772	700	2335850	-9.3%
HDFCBANK	1800	5535200	5.6%	1705	1700	2263250	-0.3%	TATASTEEL	155	47822500	9.8%	141	140	20960500	-0.9%
HDFCLIFE	730	3509000	5.7%	691	660	672100	-4.4%	TCS	4200	1078175	4.5%	4020	4000	546525	-0.5%
HEROMOTOCO	5000	789600	5.6%	4733	4000	257100	-15.5%	TECHM	1700	897000	2.4%	1661	1600	481800	-3.7%
HINDALCO	700	7252000	7.5%	651	650	2556400	-0.2%	TITAN	3300	742700	4.0%	3172	3000	432250	-5.4%
HINDUNILVR	2600	921600	7.3%	2423	2400	545400	-0.9%	ULTRACEMCO	11500	89800	8.2%	10631	11000	76550	3.5%
ICICIBANK	1300	5113500	3.7%	1253	1250	1719200	-0.3%	UPL	550	2291900	2.4%	537	500	2303600	-6.9%
INDUSINDBK	1100	3713000	9.5%	1005	1000	1720000	-0.5%	WIPRO	600	4435500	8.5%	553	540	2500500	-2.3%

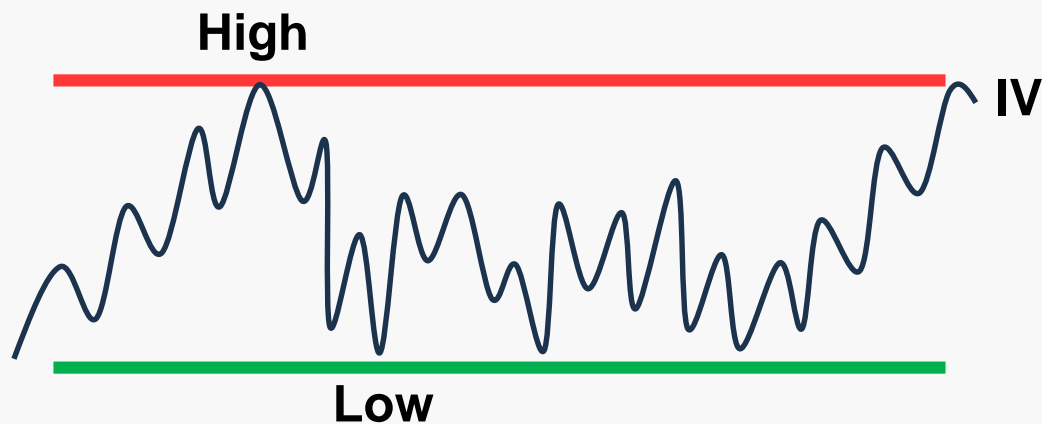
If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green  
 If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike 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



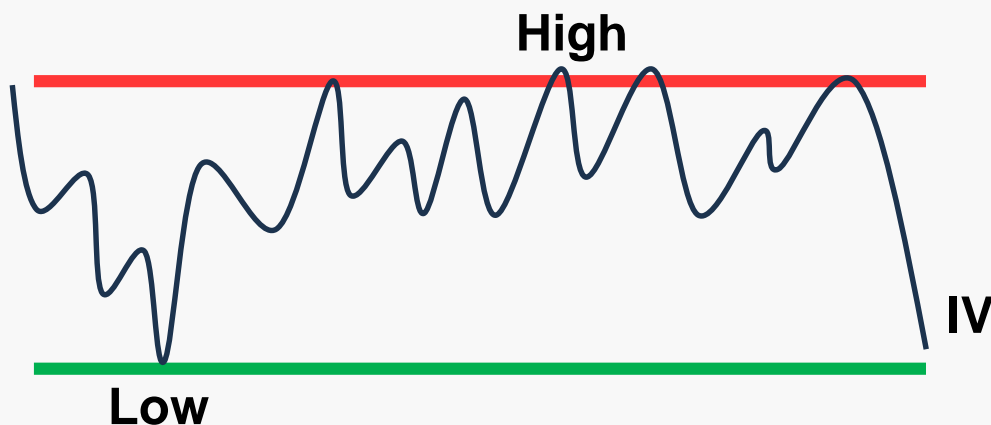
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

- **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

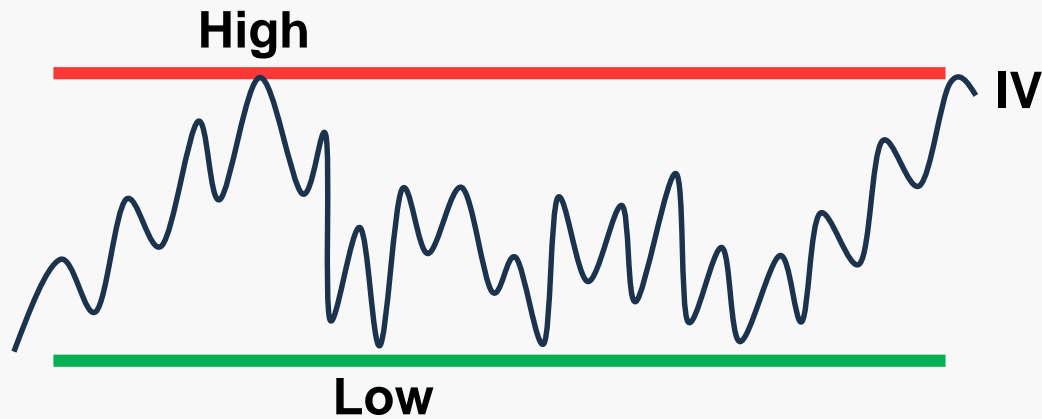


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

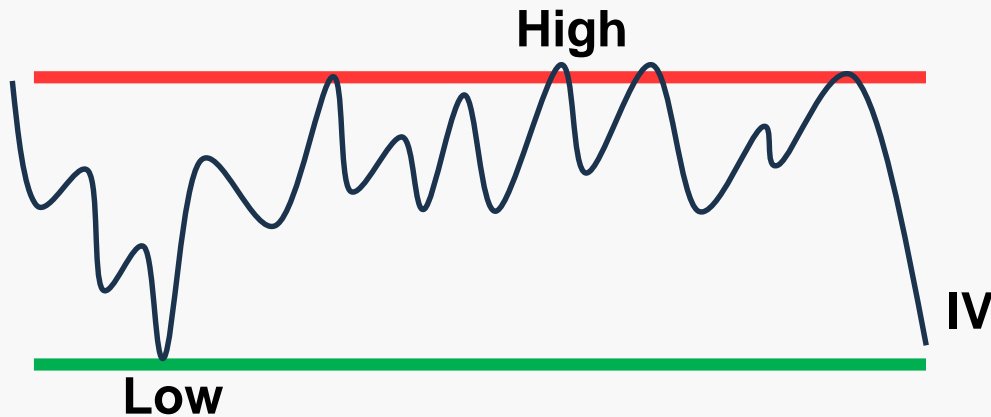


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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