



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,538	1.0% ▼
Open Interest (OI)	1,56,81,075	2.3% ▲
Change in OI (abs)	1,56,81,075	3,45,850 ▲
Premium / Discount (Abs)	66	59 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	52,040	1.2% ▼
Open interest (OI)	31,07,340	4.5% ▲
Change in OI (abs)	31,07,340	1,40,250 ▲
Premium / Discount (Abs)	78	100 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.39	0.6 ▲
Nifty ATM IV (%)	13.35	0.9 ▲
Bank Nifty ATM IV (%)	15.93	1.6 ▲
PCR (Nifty)	0.73	0.1 ▼
PCR (Bank Nifty)	0.59	0.3 ▼

\*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 (%)
CUB	4,36,20,000	8.7%	169.16	12.2%
SHREECEM	3,37,925	6.8%	24199.45	0.4%
COLPAL	34,53,100	4.2%	3341.6	0.0%
LALPATHLAB	9,22,800	4.0%	3318.8	0.4%
ICICIBANK	9,42,58,500	2.7%	1269.35	0.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TATACHEM	95,88,150	12.0%	1138.5	-3.9%
IPCALAB	22,09,350	5.0%	1591.9	-1.7%
BHEL	9,28,98,750	4.8%	233.45	-5.7%
SYNGENE	53,86,000	4.7%	838.3	-2.3%
SBIN	9,89,31,750	4.5%	791.6	-2.9%

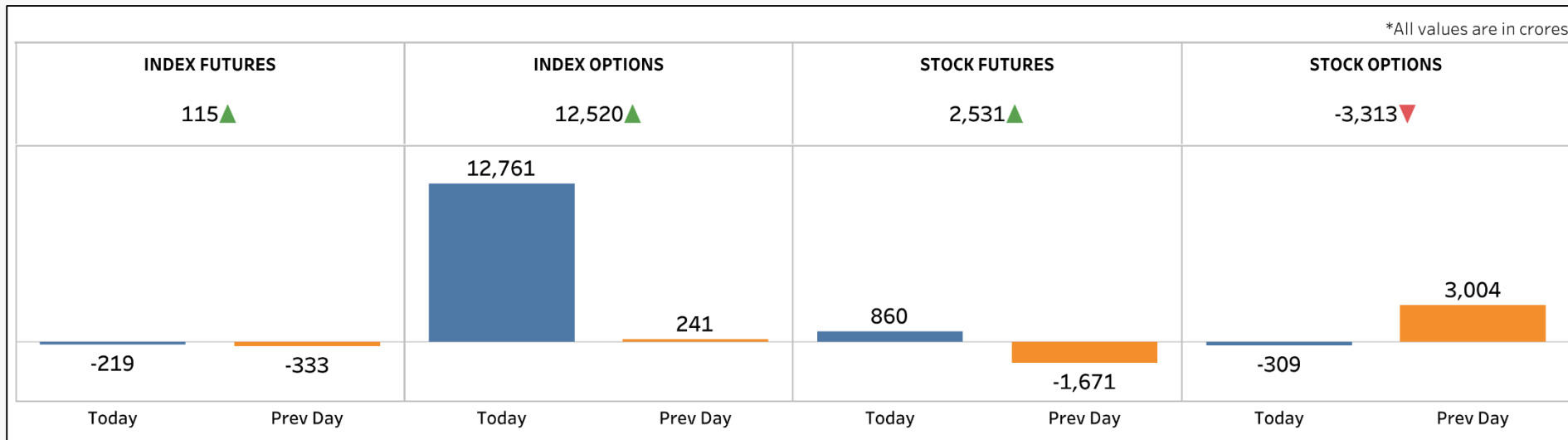
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NESTLEIND	79,19,200	-0.2%	2355.4	0.0%
INFY	5,09,52,000	-0.2%	1835.5	0.2%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BALRAMCHIN	54,57,600	-11.1%	603.15	-4.8%
INDIAMART	34,42,500	-10.3%	2499.4	-0.2%
OBEROIRLTY	79,93,300	-7.3%	1951.5	-2.2%
MCX	18,94,600	-5.2%	6453.35	-2.7%
NAVINFLUOR	22,44,025	-5.2%	3217.4	-2.7%

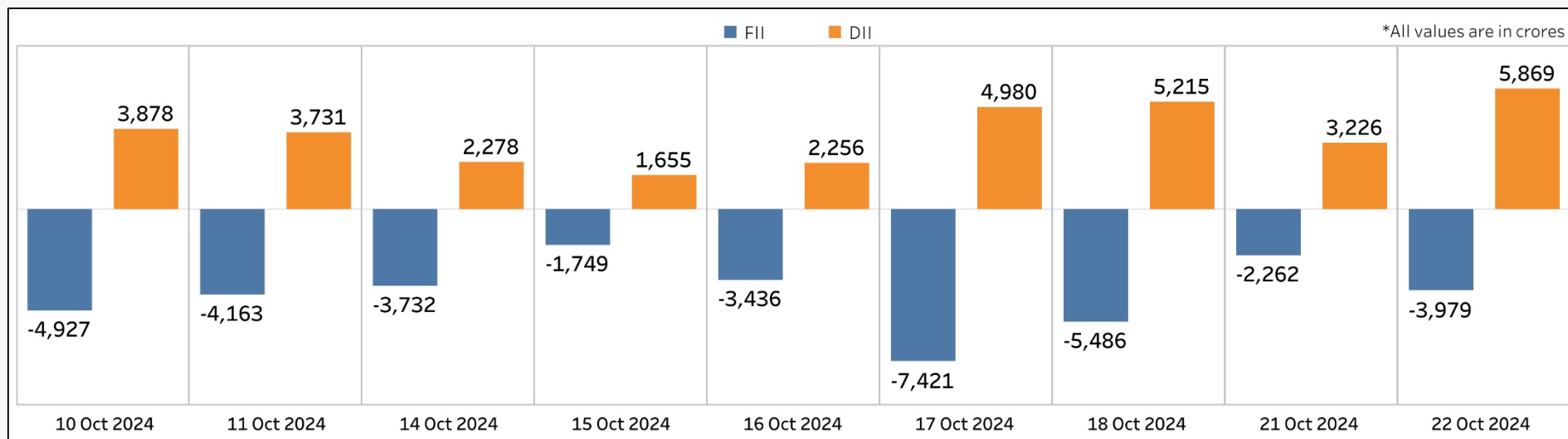
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



## Daily Net Open Interest Change

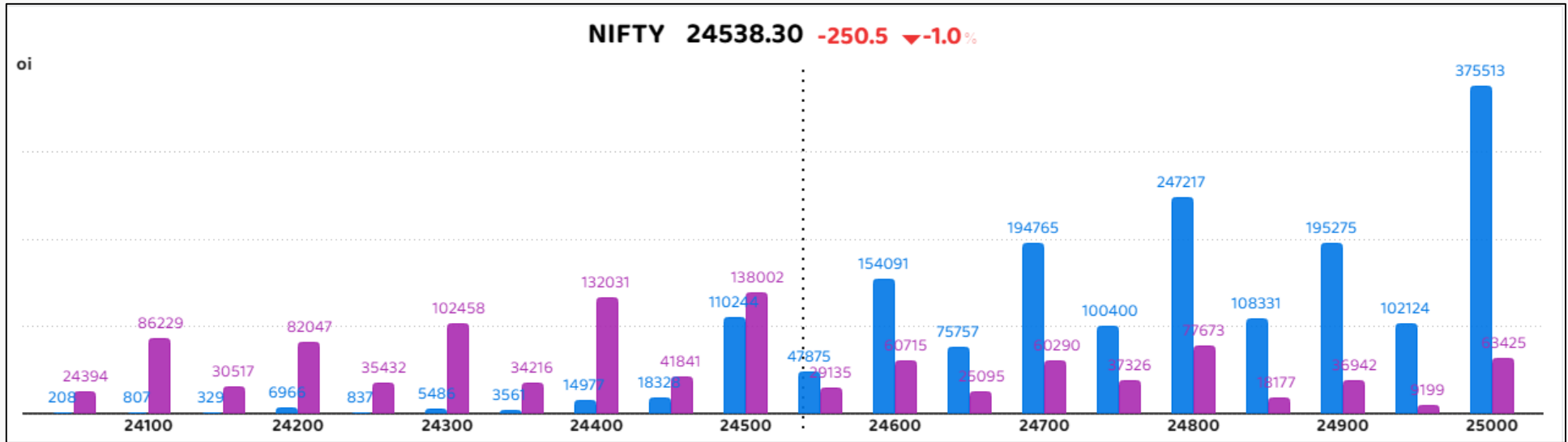


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 25,000 call and the 24,500 put had the highest call and put concentration (contracts). For the Bank Nifty, the 52,000 call and the 51,000 put saw the most amount of open interest.

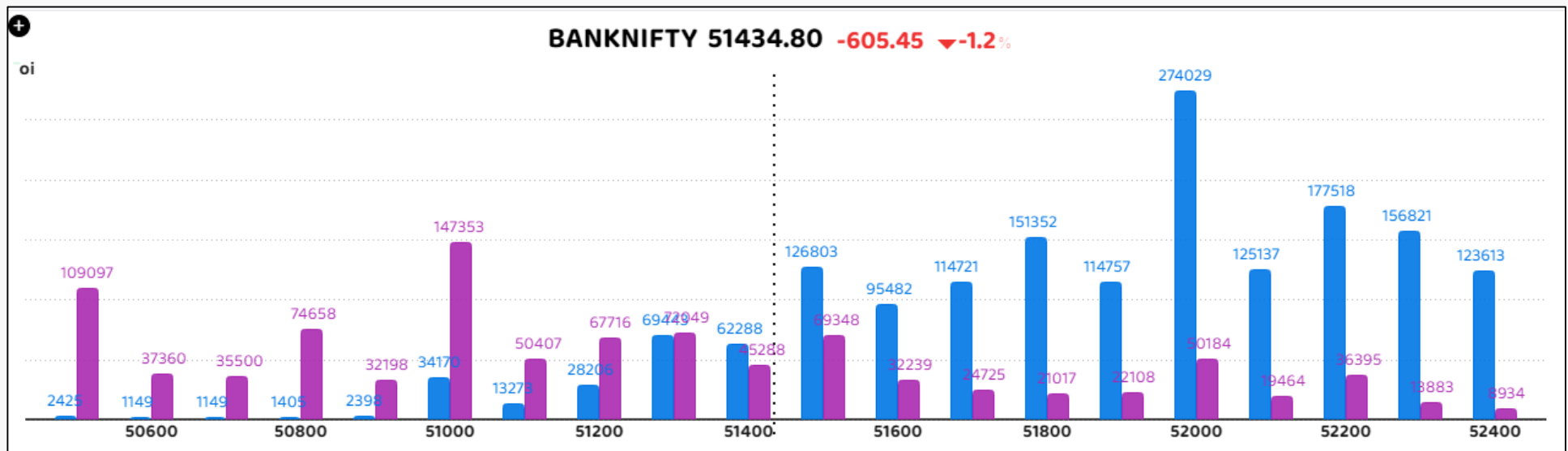
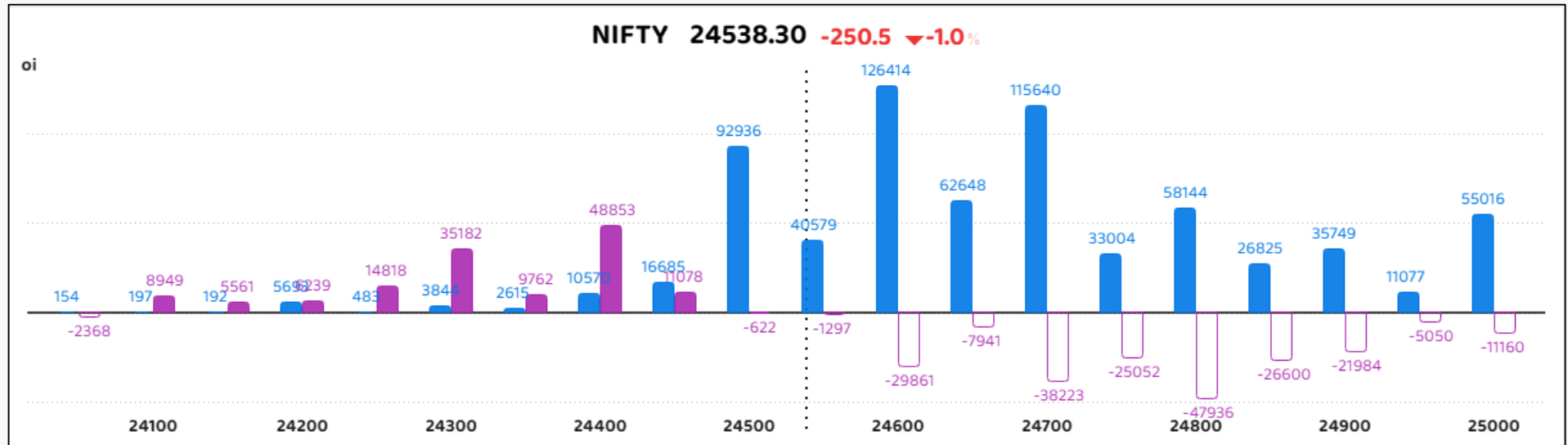


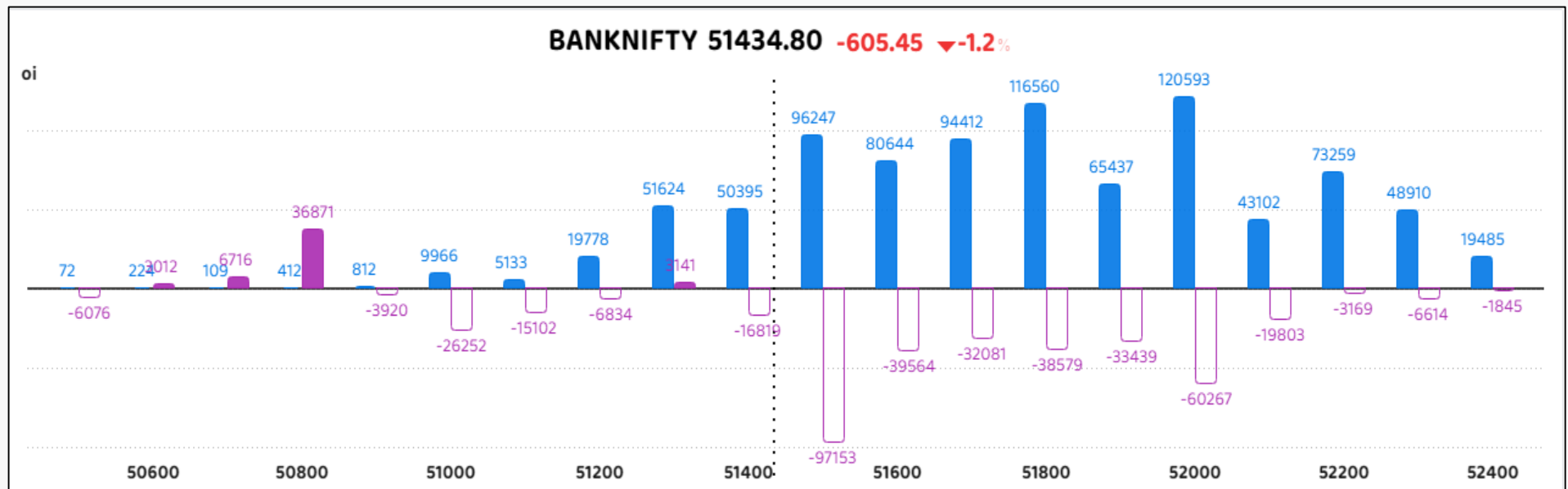
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Current Week Expiry)

Call ■ Put ■

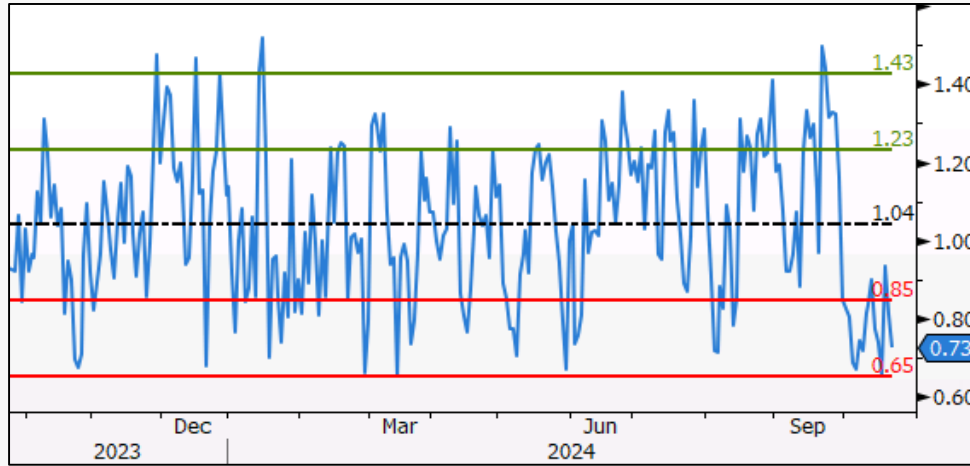


The largest open interest changes (contracts) were seen at the 24,600 call strike and 24,400 put strike.

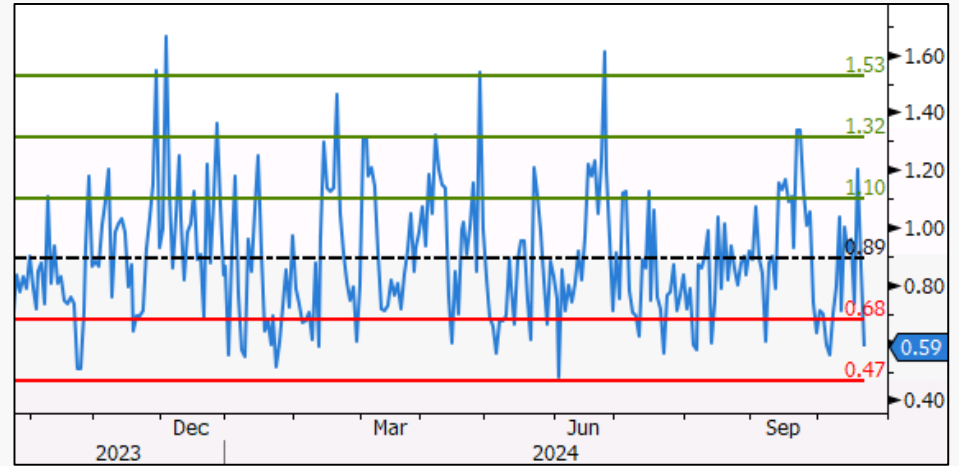


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 51,500 Put strike.

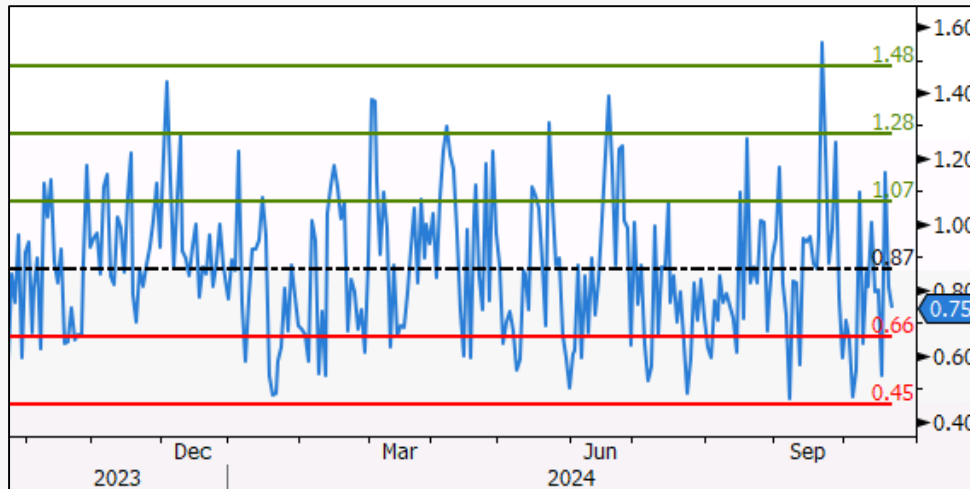
**Nifty**



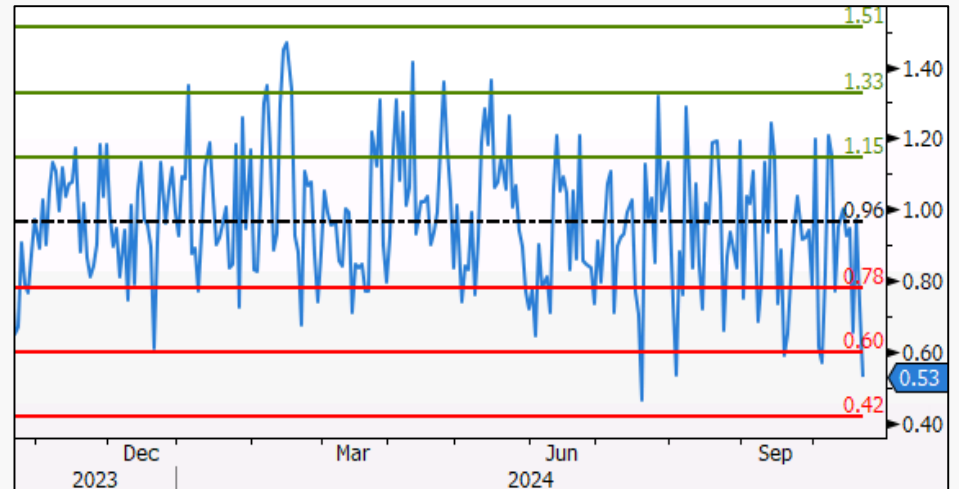
**Bank Nifty**



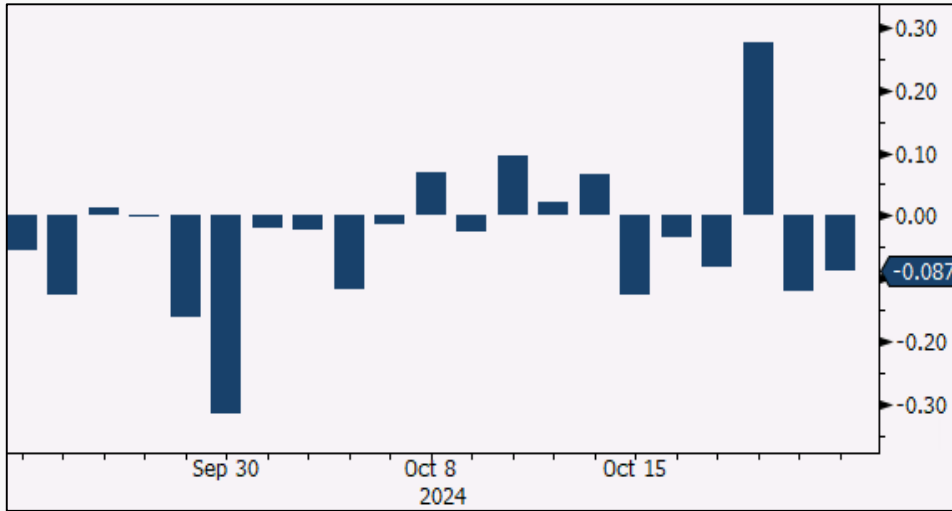
**Fin Nifty**



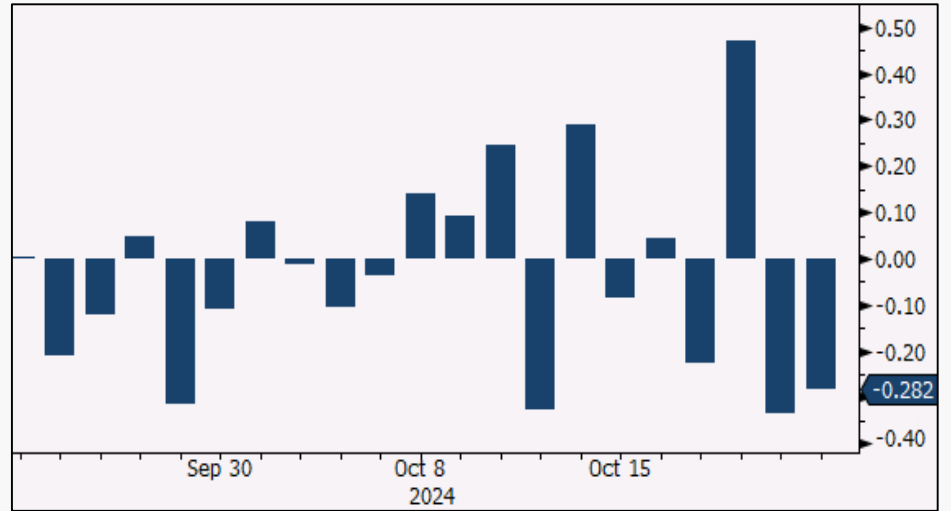
**Midcap Nifty**



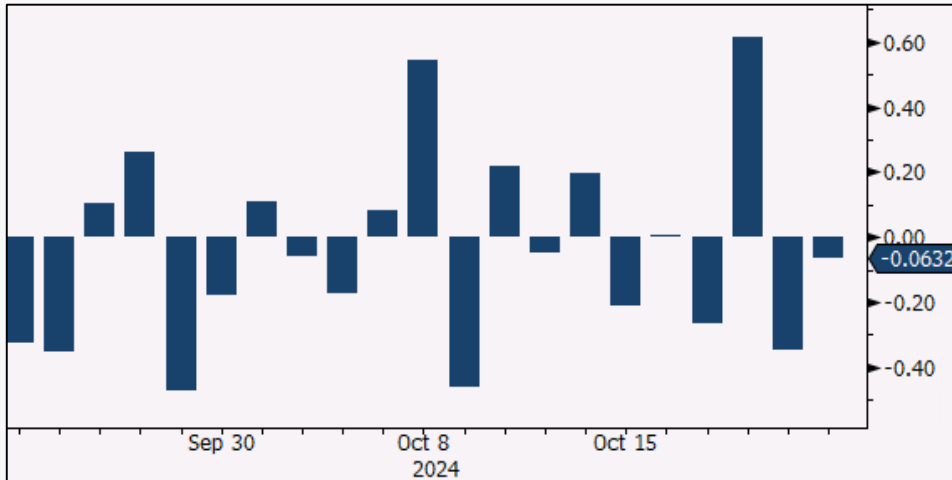
**Nifty**



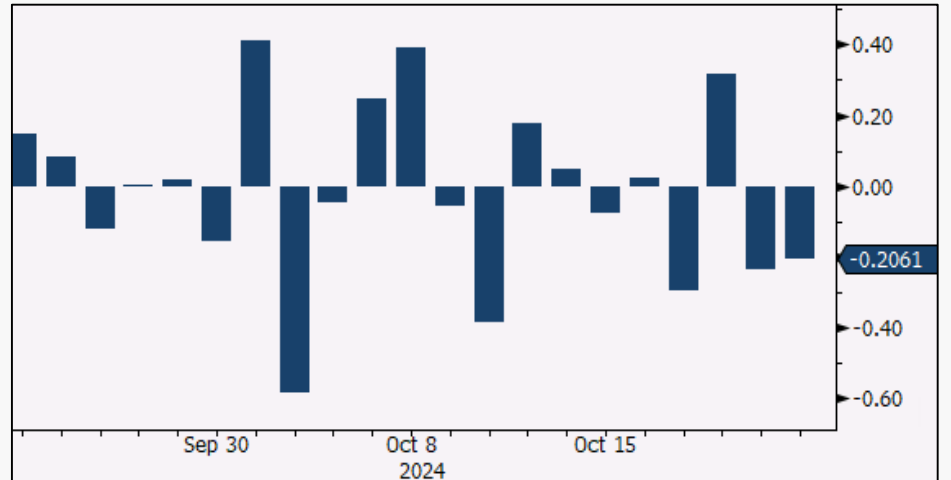
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





## Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	14908.0	-3.1	43.2	51.3	1.8	83.6
TITAN CO LTD	3329.8	-1.0	28.3	33.4	2.3	83.5
TRENT LTD	7497.4	-1.4	44.0	53.6	2.2	81.3
SRF LTD	2178.1	-4.4	36.0	40.8	16.0	80.6
HINDUSTAN UNILEV	2681.7	-0.4	22.2	25.0	11.2	79.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
COAL INDIA LTD	468.4	-3.5	8.2	53.6	8.2	0.0
L&T FINANCE LTD	146.6	-7.1	22.7	46.9	22.6	0.4
STATE BANK IND	790.4	-2.9	5.0	55.4	3.1	3.7
HINDUSTAN COPPER	295.1	-6.8	16.3	91.5	11.1	6.5
CHAMBAL FERTILIS	481.3	-1.2	11.3	77.1	4.3	9.6

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MANAPPURAM FINAN	139.5	-5.0	62.3	80.2	2.7	99.7
IDFC FIRST BANK	68.3	-3.0	55.9	87.4	11.2	99.3
TRENT LTD	7497.4	-1.4	44.0	53.6	2.2	96.8
SRF LTD	2178.1	-4.4	36.0	40.8	16.0	96.5
SBI LIFE INSURAN	1698.2	-0.8	29.0	35.8	10.1	94.2

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
COAL INDIA LTD	468.4	-3.5	8.2	53.6	8.2	0.0
STATE BANK IND	790.4	-2.9	5.0	55.4	3.1	0.5
BANDHAN BANK LTD	173.8	-6.0	18.8	54.2	12.4	0.7
HINDUSTAN COPPER	295.1	-6.8	16.3	91.5	11.1	0.7
L&T FINANCE LTD	146.6	-7.1	22.7	46.9	22.6	0.8

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

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
GUJARAT NARM VLY	635.0	-0.8	208	23	9.0
SHREE CEMENT	24434.4	0.6	13818	3743	3.7
GRANULES INDIA	555.7	-5.9	189	56	3.4
HERO MOTOCORP LT	5175.8	-1.3	33891	10077	3.4
PIRAMAL ENTERPRI	1025.7	-0.6	546	164	3.3

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

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
CAN FIN HOMES	832.9	-3.1	6869	11181	1.6
CUMMINS INDIA	3541.4	-1.1	8013	11406	1.4
SRF LTD	2178.1	-4.4	35705	50173	1.4
DIXON TECHNOLOGI	14908.0	-3.1	23930	28640	1.2
BALRAMPUR CHINI	603.0	-4.7	5589	6587	1.2

### Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
TITAN CO LTD	3329.8	-1.0	58208	58208	100.0
DLF LTD	815.2	-5.3	31837	31837	100.0
TATA CONSUMER PR	998.3	-1.8	30348	30348	100.0
CITY UNION BANK	168.5	11.9	7059	7059	100.0
M&M FIN SERVICES	281.7	-2.6	13135	13178	99.7

### Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
CITY UNION BANK	168.5	11.9	5529	5529	100.0
TATA CONSUMER PR	998.3	-1.8	14659	15111	97.0
TITAN CO LTD	3329.8	-1.0	26743	27604	96.9
MAHANAGAR GAS LT	1531.9	-2.2	5275	5516	95.6
GODREJ PROPERTIE	2907.7	-4.2	8628	9074	95.1

**Call Volume Relative to Record High**

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
CITY UNION BANK	168.5	11.9	67343	67343	100.0
ULTRATECH CEMENT	10825.2	-0.4	95984	150815	63.6
DLF LTD	815.2	-5.3	71992	141931	50.7
INDIAN OIL CORP	155.3	-3.0	38088	76903	49.5
ICICI BANK LTD	1267.5	0.7	142686	344317	41.4

**Put Volume Relative to Record High**

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
CUBK IS	168.5	11.9	35461	35461	100
SRF IS	2178.1	-4.4	50173	55857	89.8
DLF LTD	815.2	-5.3	50987	68607	74.3
ULTRATECH CEMENT	10825.2	-0.4	67133	92956	72.2
INDIAN OIL CORP	155.3	-3.0	26543	37968	69.9

### Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Diff
CITY UNION BANK	168.5	11.9	67343	5806	11.6
ULTRATECH CEMENT	10825.2	-0.4	95984	20453	4.7
SHREE CEMENT	24434.4	0.6	13818	3401	4.1
ICICI PRUDENTIAL	731.1	-2.5	14664	3671	4
SRF LTD	2178.1	-4.4	35705	11202	3.2

### Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Diff
CITY UNION BANK	168.5	11.9	35461	3457	10.3
SRF LTD	2178.1	-4.4	50173	7905	6.3
ULTRATECH CEMENT	10825.2	-0.4	67133	13970	4.8
CANF IS	832.9	-3.1	11181	2586	4.3
IPRU IS	731.1	-2.5	6594	1828	3.6

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

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20 D Call OI Diff
INDIAMART INTERM	2504.0	-0.2	11959	3518	340
BAJAJ AUTO LTD	10368.4	-1.3	104701	42025	249
MAHANAGAR GAS LT	1531.9	-2.2	12465	5574	224
POLYCAB INDIA LT	6651.5	-2.9	23674	11213	211
NESTLE INDIA LTD	2350.3	-0.2	25718	12469	206

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

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20 D Put OI Diff
INDIAMART INTERM	2504.0	-0.2	4518	1683	268
CITY UNION BANK	168.5	11.9	5529	2235	247
ULTRATECH CEMENT	10825.2	-0.4	12334	5397	229
SRF	2178.1	-4.4	11926	5563	214
BAJAJ AUTO LTD	10368.4	-1.3	37277	18964	197

## 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	3200	1624800	13.3%	2824	3200	906600	13.3%	INFY	1960	6246800	5.9%	1852	1800	1437600	-2.8%
ADANIPTS	1500	1893600	10.1%	1363	1400	828400	2.7%	ITC	520	11564800	7.9%	482	500	3972800	3.8%
APOLLOHOSP	7000	218500	1.6%	6892	6900	107875	0.1%	JSWSTEEL	1050	1018575	9.0%	964	1000	571725	3.8%
ASIANPAINT	3400	958000	13.1%	3007	3000	492000	-0.2%	KOTAKBANK	1900	3945200	7.8%	1763	1800	915600	2.1%
AXISBANK	1300	2967500	10.6%	1176	1100	1315625	-6.4%	LT	3800	1719600	8.2%	3512	3550	571050	1.1%
BAJAJ-AUTO	12000	924150	15.7%	10368	10000	233250	-3.6%	LTIM	6500	295200	10.6%	5877	6000	187650	2.1%
BAJAJFINSV	2000	1704000	16.1%	1723	1900	286500	10.3%	M&M	3200	2027550	10.8%	2887	3000	615650	3.9%
BAJFINANCE	7000	897000	4.8%	6678	6800	568375	1.8%	MARUTI	13000	688100	9.0%	11923	12000	214550	0.6%
BHARTIARTL	1740	2457175	2.8%	1692	1700	807500	0.5%	NESTLEIND	2600	565800	10.6%	2350	2600	262800	10.6%
BPCL	380	9291600	17.7%	323	330	2336400	2.2%	NTPC	450	15430500	8.2%	416	400	2656500	-3.8%
BRITANNIA	6000	147800	4.8%	5727	5700	79800	-0.5%	ONGC	300	22994125	10.8%	271	300	3711400	10.8%
CIPLA	1700	1562600	12.6%	1510	1600	434850	5.9%	POWERGRID	360	8506800	11.5%	323	330	4370400	2.2%
COALINDIA	500	4788000	6.8%	468	470	3729600	0.4%	RELIANCE	3000	11254250	11.7%	2687	2700	3295250	0.5%
DIVISLAB	6300	223600	8.3%	5818	5500	187000	-5.5%	SBLIFE	1900	874125	11.9%	1698	1700	232500	0.1%
DRREDDY	6800	668750	2.1%	6662	6200	140000	-6.9%	SBIN	820	9150750	3.7%	790	800	3688500	1.2%
EICHERMOT	4800	461125	0.9%	4759	4500	214550	-5.4%	SUNPHARMA	1960	2816800	3.8%	1888	1900	484750	0.7%
GRASIM	2800	472750	5.4%	2655	2700	184750	1.7%	TATACONSUM	1200	1269504	20.2%	998	1000	760608	0.2%
HCLTECH	1900	2080750	4.2%	1823	1800	989800	-1.2%	TATAMOTORS	1000	14433650	13.7%	880	900	3381950	2.3%
HDFCBANK	1800	9313700	5.0%	1715	1700	2556400	-0.8%	TATASTEEL	170	53658000	13.0%	150	165	16082000	9.7%
HDFCLIFE	750	5856400	3.0%	728	700	1211100	-3.9%	TCS	4300	2208675	7.1%	4016	4000	597450	-0.4%
HEROMOTOCO	6000	1058700	15.9%	5176	5100	276150	-1.5%	TECHM	1700	2031000	0.2%	1697	1600	678000	-5.7%
HINDALCO	800	4124400	11.1%	720	700	1717800	-2.8%	TITAN	3800	1038800	14.1%	3330	3300	631225	-0.9%
HINDUNILVR	3000	1110900	11.9%	2682	2700	697500	0.7%	ULTRACEMCO	12000	256400	10.9%	10825	10800	142700	-0.2%
ICICIBANK	1300	3299100	2.6%	1268	1250	1649200	-1.4%	UPL	620	2099500	16.9%	530	550	663000	3.7%
INDUSINDBK	1500	2081500	17.7%	1274	1300	1543000	2.0%	WIPRO	550	4543500	0.8%	545	530	3610500	-2.8%

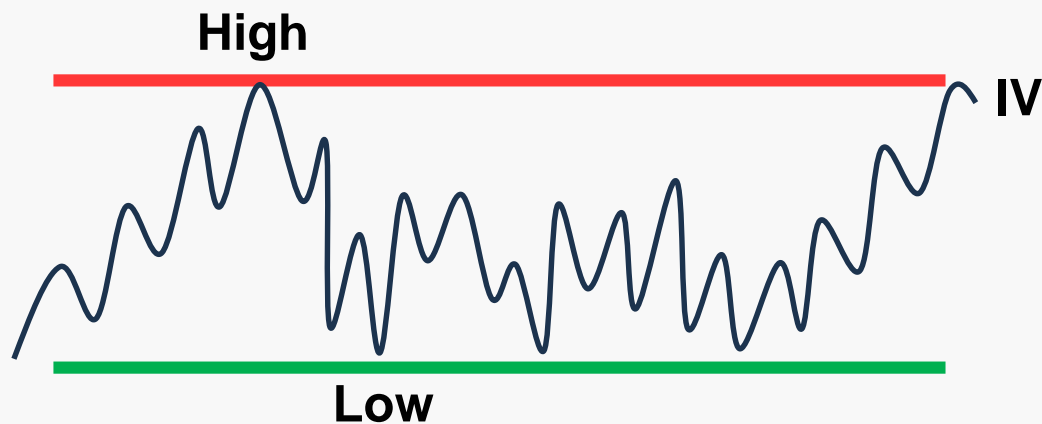
If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green  
 If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike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



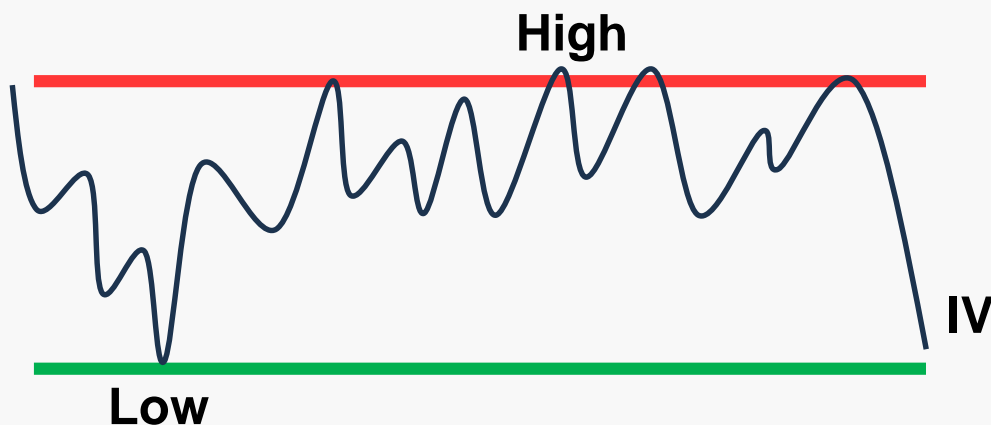
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

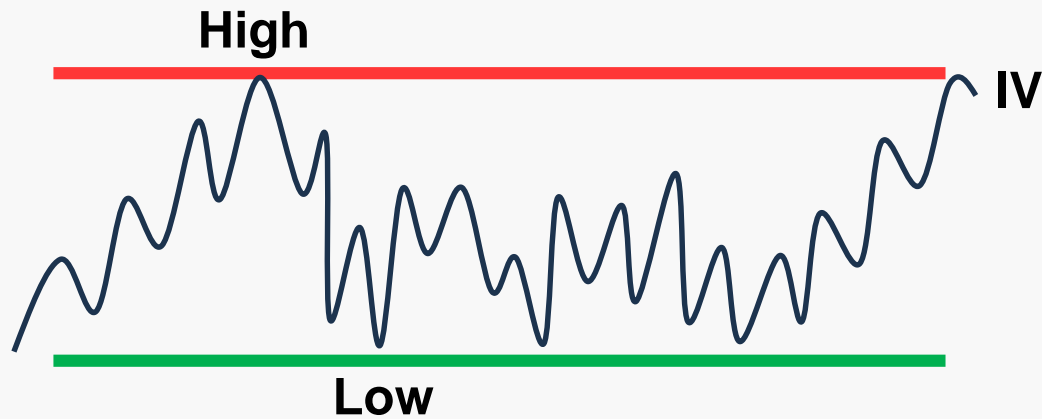


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

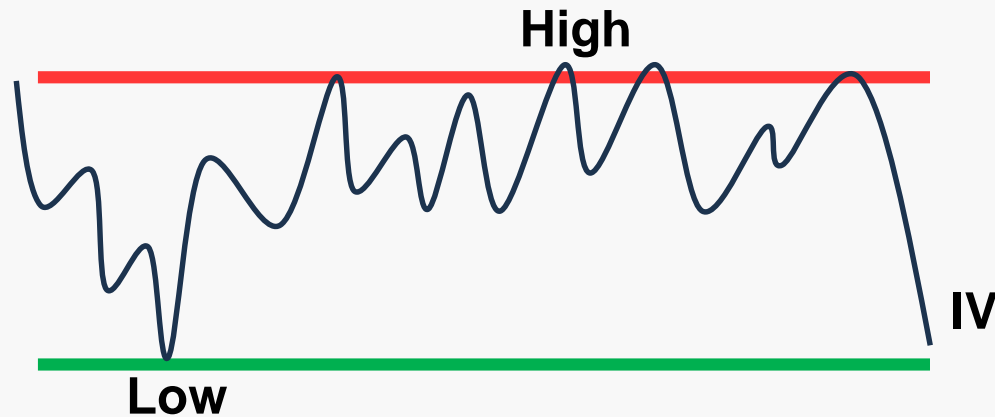


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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