



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,771	0.0% ▼
Open Interest (OI)	1,43,47,175	0.2% ▲
Change in OI (abs)	1,43,47,175	31,600 ▲
Premium / Discount (Abs)	43	27 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	51,728	0.1% ▼
Open interest (OI)	21,90,240	28.8% ▼
Change in OI (abs)	21,90,240	5,56,770 ▲
Premium / Discount (Abs)	495	509 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	13.18	0.3 ▼
Nifty ATM IV (%)	9.50	1.6 ▼
Bank Nifty ATM IV (%)	14.10	0.7 ▲
PCR (Nifty)	0.95	0.11 ▲
PCR (Bank Nifty)	0.87	0.28 ▲

\*The Long Short Ratio for the FI Index Futures now stands at 23.89%, a **decrease** from 30.47% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
COROMANDEL	47,71,550	13.5%	1854.7	0.1%
POONAWALLA	1,42,05,650	12.6%	322.75	1.3%
IGL	2,97,33,000	11.9%	398.35	1.9%
JSL	16,05,800	11.8%	731.6	0.7%
OIL	72,00,350	11.4%	425.7	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
APLAPOLLO	23,45,350	25.1%	1520.15	-1.6%
KEI	3,86,250	15.5%	4181.85	-0.4%
MAXHEALTH	40,60,875	13.1%	1142.6	-0.1%
POLICYBZR	28,54,475	13.0%	2059.6	-2.8%
IRB	4,18,09,750	9.0%	54.51	-1.3%

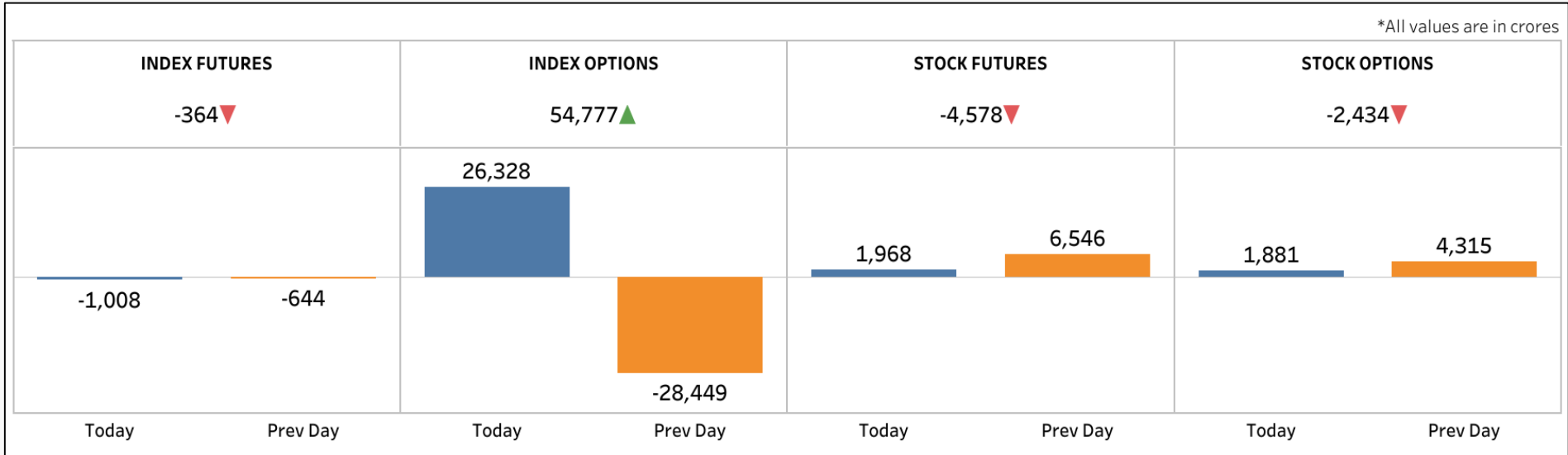
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GRANULES	1,28,12,000	-17.0%	598.75	1.5%
OBEROIRLTY	63,43,750	-9.6%	2296.95	1.3%
MANAPPURAM	4,74,78,000	-8.6%	187.03	0.6%
BANDHANBNK	9,03,92,400	-8.5%	167.2	0.9%
HINDCOPPER	3,58,43,900	-7.7%	282	3.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DALBHARAT	29,48,000	-9.3%	1716.5	-2.3%
CESC	1,27,29,600	-7.4%	182.97	-0.8%
M&MFIN	3,53,22,000	-5.5%	264.45	-0.5%
MARICO	1,91,60,400	-5.2%	632.9	-0.5%
RAMCOCEM	68,51,000	-4.7%	989.05	-1.0%

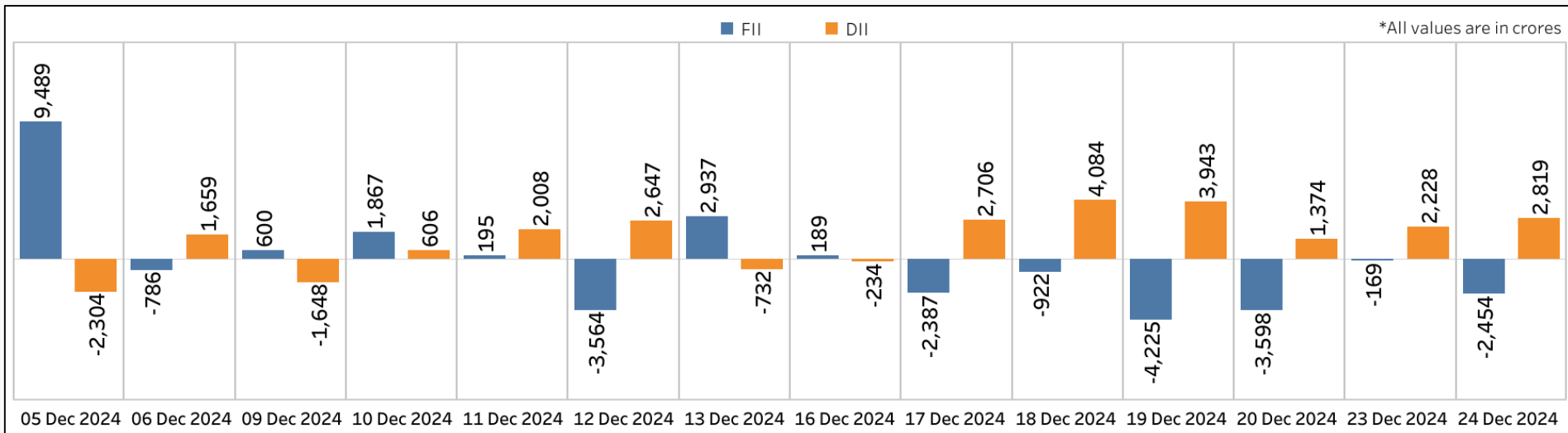
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



## Daily Net Open Interest Change

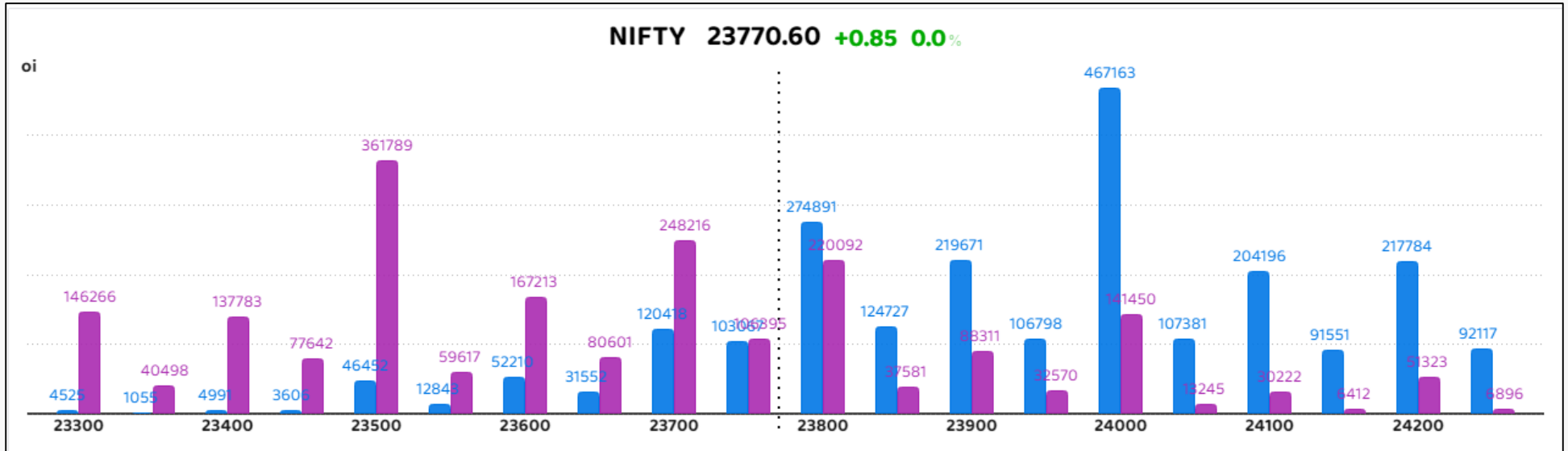


## DII and FII Daily Cash Market Flows



**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 51500 Put saw the most amount of open interest.

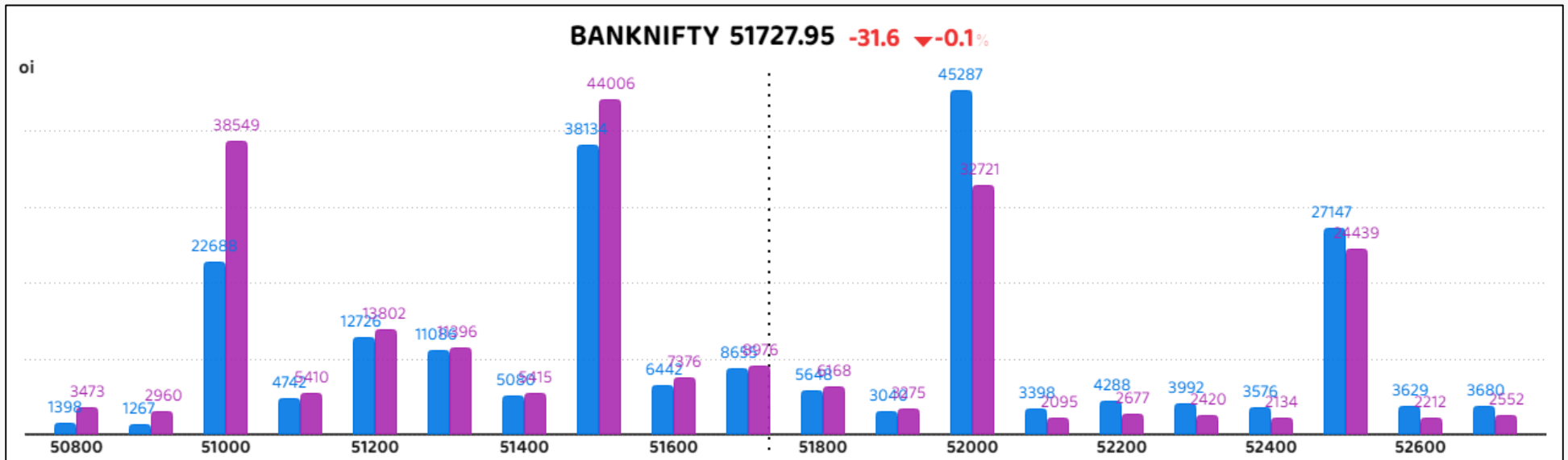
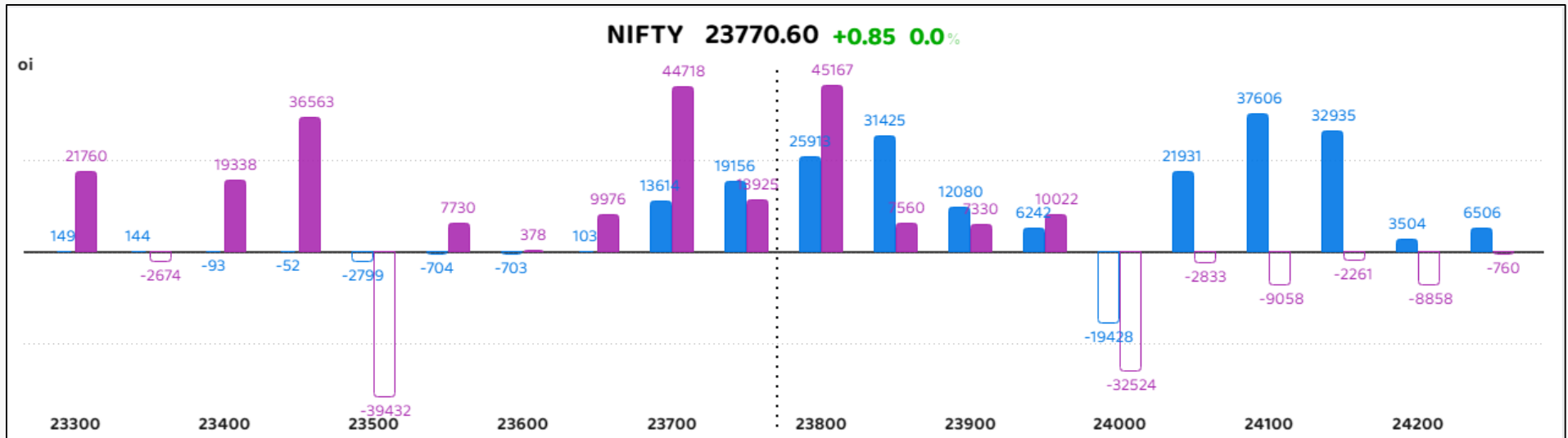


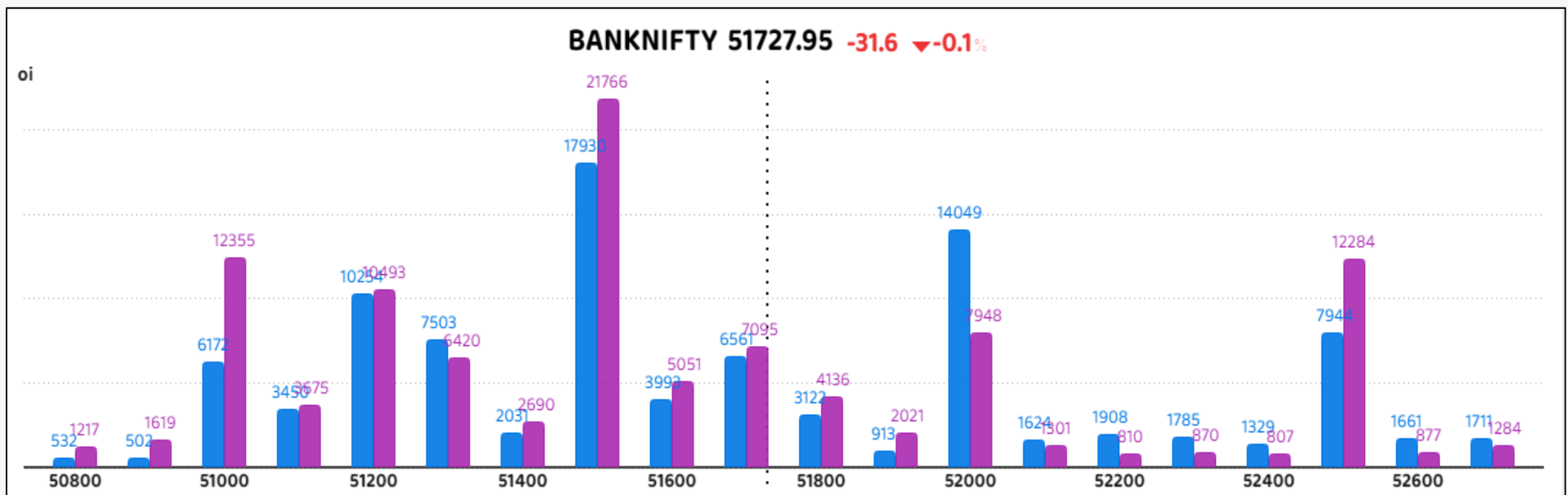
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■

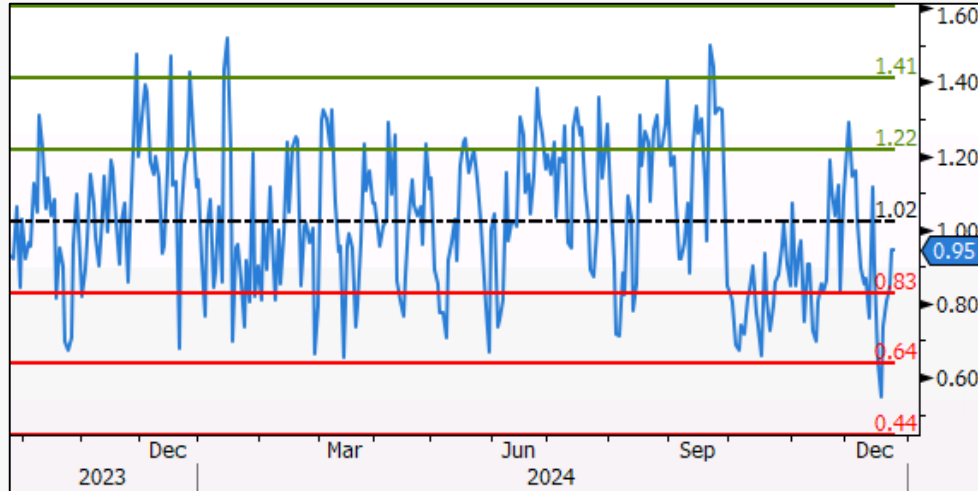


The largest open interest changes (contracts) were seen at the 24100 Call and the 23800 Put

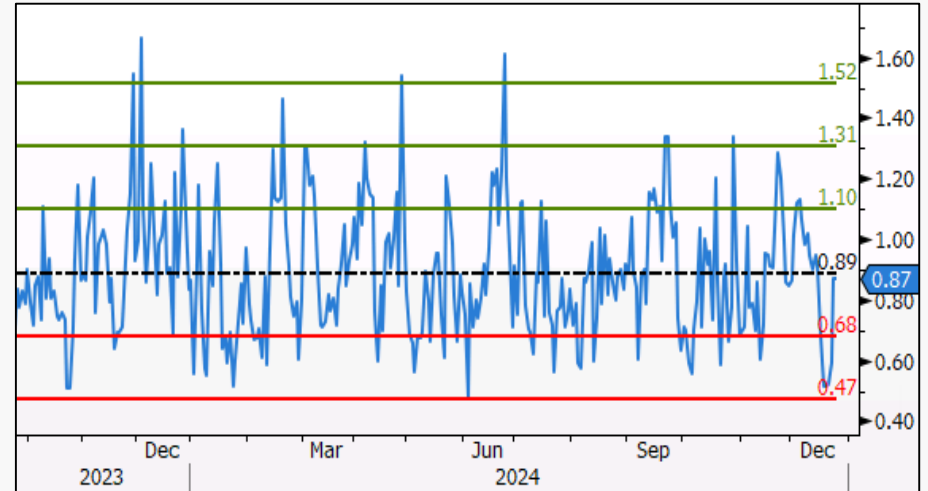


For the Bank Nifty, the biggest open interest changes were seen at the 51500 Call & the 51000 Put

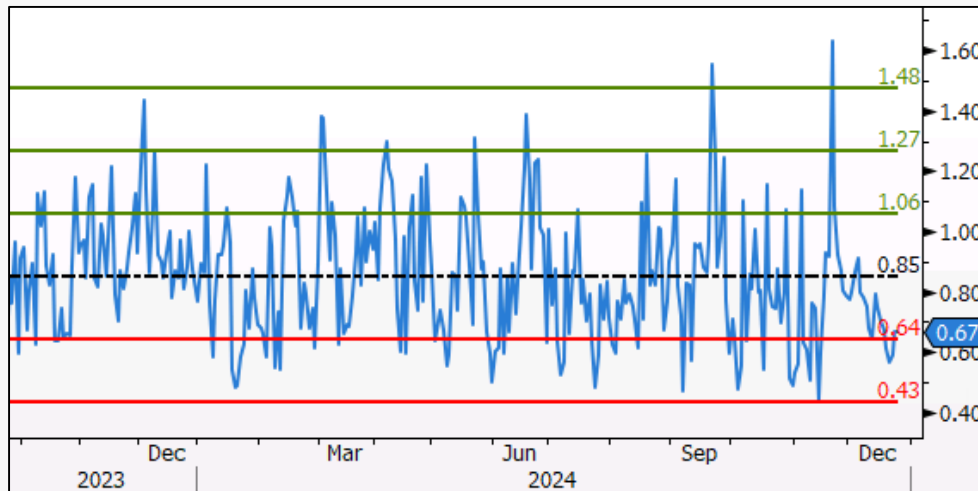
**Nifty**



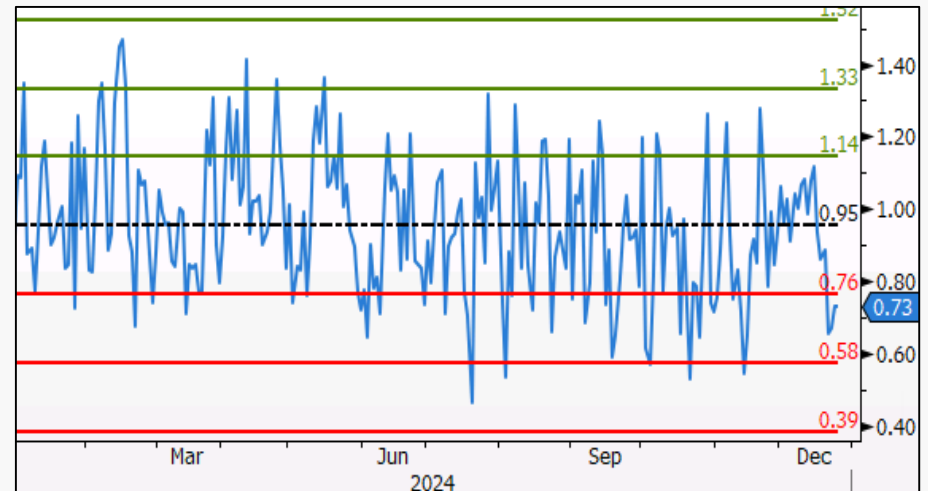
**Bank Nifty**



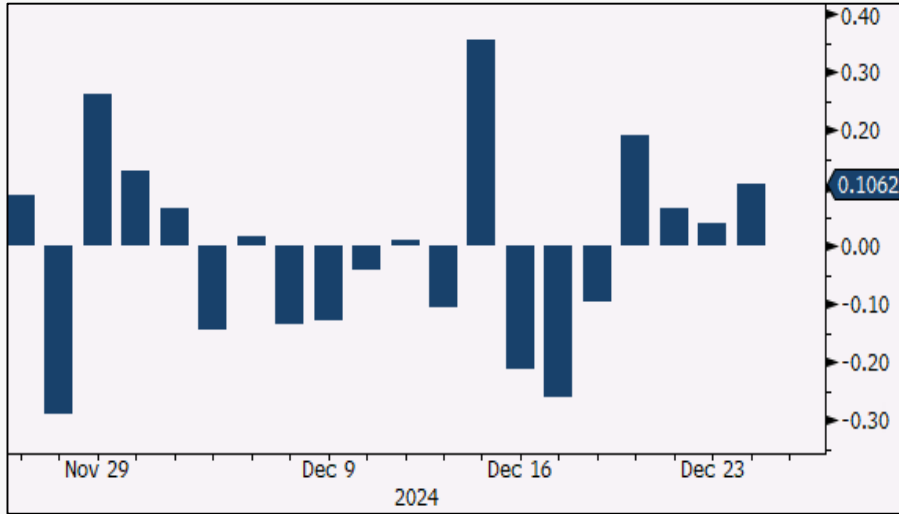
**Fin Nifty**



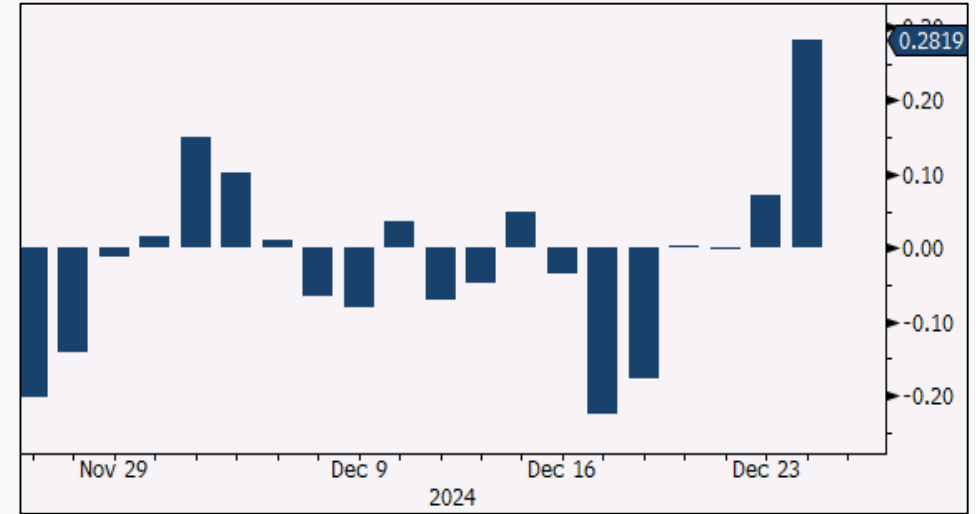
**Midcap Nifty**



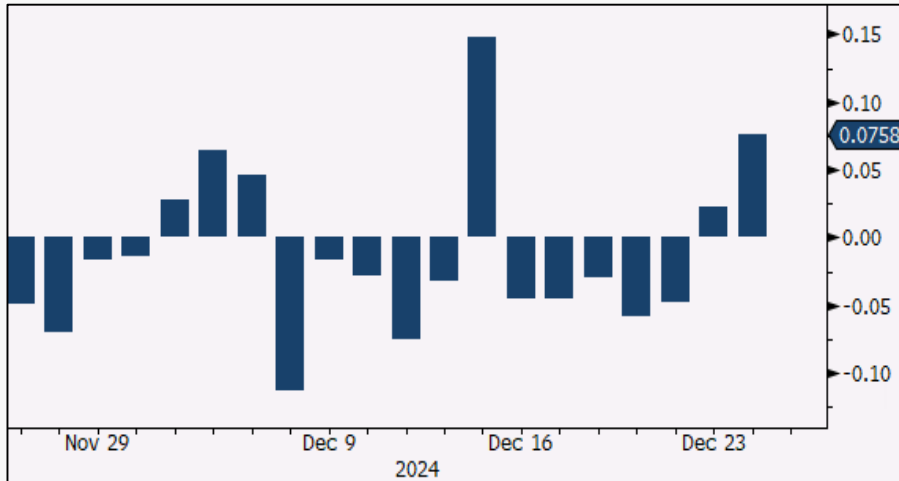
**Nifty**



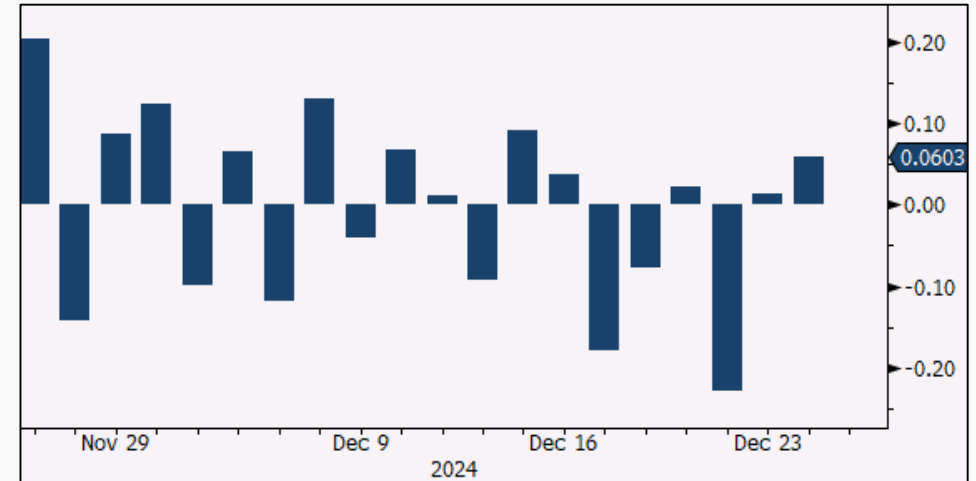
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	17893	-0.6	35.1	51.3	1.8	67.2
ABBOTT INDIA LTD	28513.3	-0.2	23.5	32.6	6.5	64.9
MARUTI SUZUKI IN	10736.6	-0.8	21.1	33.7	0.4	62.3
COLGATE PALMOLIV	2732.1	0.2	23.1	31.7	9.5	61.2
TITAN CO LTD	3353.4	-1.3	21.2	33.5	2.3	60.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
POWER FINANCE	451.2	-1.2	28.8	72.9	28.8	0.0
EICHER MOTORS	4792.9	0.9	18.7	40.3	18.7	0.0
INDIAN RAILWAY C	788.8	0.1	22.7	59.6	22.7	0.0
CITY UNION BANK	174.59	0.0	21.1	52.1	21.1	0.0
BHARAT ELECTRON	292.45	-0.6	26.2	81.6	26.1	0.2

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN COPPER	280.65	3.5	56.1	91.5	16.3	84.2
INDRAPRASTHA GAS	397.35	1.9	38.4	55.4	20.3	83.0
INDUSIND BANK	935.3	-1.1	27.3	60.4	12.4	66.6
ABBOTT INDIA LTD	28513.3	-0.2	23.5	32.6	6.5	55.9
COLGATE PALMOLIV	2732.1	0.2	23.1	31.7	9.5	52.7

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
POWER FINANCE	451.2	-1.2	28.8	72.9	28.8	0.0
EICHER MOTORS	4792.9	0.9	18.7	40.3	18.7	0.0
INDIAN RAILWAY C	788.8	0.1	22.7	59.6	22.7	0.0
CITY UNION BANK	174.59	0.0	21.1	52.1	21.1	0.0
BHARAT ELECTRON	292.45	-0.6	26.2	81.6	26.1	0.5

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
JK CEMENTS LTD	4563.7	-0.5	3386	1053	3.2
ESCORTS KUBOTA L	3156.15	0.4	15499	4874	3.2
NAVIN FLUORINE I	3377	1.9	1065	3601	3.0
DR LAL PATHLABS	2924.15	-0.7	7130	2443	2.9
TATA CHEMICALS	1067.6	3.2	86959	31698	2.7

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
L&T TECHNOLOGY S	4745.05	-0.3	10875	15724	1.4
APOLLO HOSPITALS	7265.1	-0.3	10380	13085	1.3
BALKRISHNA INDS	2816.75	-0.3	4085	5126	1.3
CAN FIN HOMES	726.55	0.0	6616	8144	1.2
METROPOLIS HEALT	2021.7	-0.4	4565	5550	1.2

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
SIEMENS LTD	6820.75	-2.4	33038	34047	97.0
ULTRATECH CEMENT	11472.6	-0.7	28104	30201	93.1
PUNJAB NATL BANK	101.38	0.3	21810	23853	91.4
MCX INDIA LTD	6373.3	-0.5	18316	20604	88.9
COAL INDIA LTD	382.95	0.4	36698	41955	87.5

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
COAL INDIA LTD	384.5	0.4	23275	25673	90.7
SHRIRAM FINANCE	2882.95	0.0	9769	11424	85.5
CONTAINER CORP	775.85	-0.1	6530	7807	83.6
SYNGENE INTERNAT	847.2	0.5	2201	2654	82.9
INDUS TOWERS LTD	333.55	-0.4	11302	13630	82.9

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THIS CRITERIA IN THE MOST RECENT SESSION					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NO STOCK OPTION MET THIS CRITERIA IN THE MOST RECENT SESSION					

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
INTERGLOBE AVIAT	4612.25	3.9	157961	23371	6.8
TATA CHEMICALS	1067.6	3.2	86959	14241	6.1
BIOCON LTD	344.5	4.5	25155	10358	2.4
GAIL INDIA LTD	198.06	2.1	38947	16340	2.4
DABUR INDIA LTD	509.95	0.1	28611	12087	2.4

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
INTERGLOBE AVIAT	4612.25	3.9	81311	13953	5.8
TATA CHEMICALS	1067.6	3.2	31698	6648	4.8
L&T TECHNOLOGY S	4729.55	-0.3	15724	5836	2.7
ICICI LOMBARD GE	1868.95	0.4	8810	3297	2.7
ASTRAL LTD	1693.5	-1.6	6108	2408	2.5

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
SIEMENS LTD	6654.9	-2.4	33038	13676	2.4
LTIMINDTREE LTD	5725.7	-0.1	16187	7827	2.1
ESCORTS KUBOTA L	3156.2	0.4	6628	3632	1.8
ABB INDIA LTD	6878.2	-1.2	12629	7162	1.8
TATA CHEMICALS	1067.6	3.2	12182	7235	1.7

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
COROMANDEL INTER	1855.35	-0.4	4260	2220	1.9
DR REDDY'S LABS	1350.9	0.7	10542	5621	1.9
SIEMENS LTD	6654.9	-2.4	16557	9437	1.8
LTIMINDTREE LTD	5725.7	-0.1	7258	4581	1.6
ITC LTD	478.45	0.9	28861	19259	1.5

## 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	2500	1406100	5.4%	2372	2500	850200	5.4%	INFY	1960	3007200	2.7%	1909	1900	1516800	-0.5%
ADANIPTS	1300	2383600	10.0%	1182	1200	974400	1.5%	ITC	480	6177600	0.3%	478	470	4371200	-1.8%
APOLLOHOSP	7500	97625	3.6%	7240	7000	143125	-3.3%	JSWSTEEL	1000	1110375	8.5%	922	900	443475	-2.4%
ASIANPAINT	2500	1601600	9.5%	2284	2400	374000	5.1%	KOTAKBANK	1900	1827600	8.6%	1749	1700	686400	-2.8%
AXISBANK	1200	3463750	11.2%	1079	1200	746875	11.2%	LT	4000	759450	9.9%	3640	3800	203250	4.4%
BAJAJ-AUTO	10000	235200	13.9%	8778	9000	102225	2.5%	LTIM	6800	167100	18.8%	5726	6200	89100	8.3%
BAJAJFINSV	1700	2272500	8.7%	1565	1400	267000	-10.5%	M&M	3100	578725	5.8%	2929	2800	284200	-4.4%
BAJFINANCE	7200	487750	5.8%	6808	6600	266875	-3.1%	MARUTI	11500	309350	7.1%	10737	10500	120950	-2.2%
BHARTIARTL	1700	2616300	7.3%	1584	1600	608475	1.0%	NESTLEIND	2300	375200	6.2%	2167	2000	151000	-7.7%
BPCL	300	4476600	2.7%	292	280	1513800	-4.1%	NTPC	370	12037500	10.3%	335	330	1294500	-1.6%
BRITANNIA	5000	199400	5.4%	4744	4500	79100	-5.1%	ONGC	264	11326700	10.5%	239	234	1453375	-2.1%
CIPLA	1500	714025	1.6%	1476	1460	612300	-1.1%	POWERGRID	345	5463000	11.3%	310	315	1015200	1.6%
COALINDIA	420	4786950	9.2%	385	420	1367100	9.2%	RELIANCE	1300	14594500	6.3%	1223	1300	6754500	6.3%
DIVISLAB	6000	185400	3.8%	5782	6000	75000	3.8%	SBLIFE	1500	1481625	8.1%	1387	1340	283875	-3.4%
DRREDDY	1400	721250	3.6%	1351	1300	659375	-3.8%	SBIN	870	5544750	7.1%	812	800	2539500	-1.5%
EICHERMOT	5000	252000	4.3%	4793	4500	118125	-6.1%	SUNPHARMA	1820	2989350	0.1%	1819	1820	877800	0.1%
GRASIM	2700	309500	7.9%	2502	2600	105750	3.9%	TATACONSUM	940	1330152	3.6%	907	940	370728	3.6%
HCLTECH	1960	1285200	3.3%	1897	1900	411600	0.2%	TATAMOTORS	800	9926400	8.7%	736	800	2504700	8.7%
HDFCBANK	1870	4412100	4.0%	1798	1800	1963500	0.1%	TATASTEEL	150	26009500	6.9%	140	140	8948500	-0.3%
HDFCLIFE	650	2479400	4.4%	623	650	833800	4.4%	TCS	4400	706650	5.3%	4180	4000	313075	-4.3%
HEROMOTOCO	4600	517200	8.0%	4259	4600	244350	8.0%	TECHM	1800	1027200	5.6%	1705	1700	249600	-0.3%
HINDALCO	670	3354400	6.8%	627	670	1342600	6.8%	TITAN	3500	381850	4.4%	3353	3250	251475	-3.1%
HINDUNILVR	2500	864900	7.0%	2336	2300	292500	-1.5%	ULTRACEMCO	12200	197150	7.1%	11390	11000	83200	-3.4%
ICICIBANK	1340	4613000	3.3%	1297	1300	862400	0.2%	UPL	560	1249310	11.0%	505	500	403790	-0.9%
INDUSINDBK	1000	3489500	6.9%	935	1000	1609500	6.9%	WIPRO	320	4269000	4.8%	305	300	3405000	-1.7%

*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*

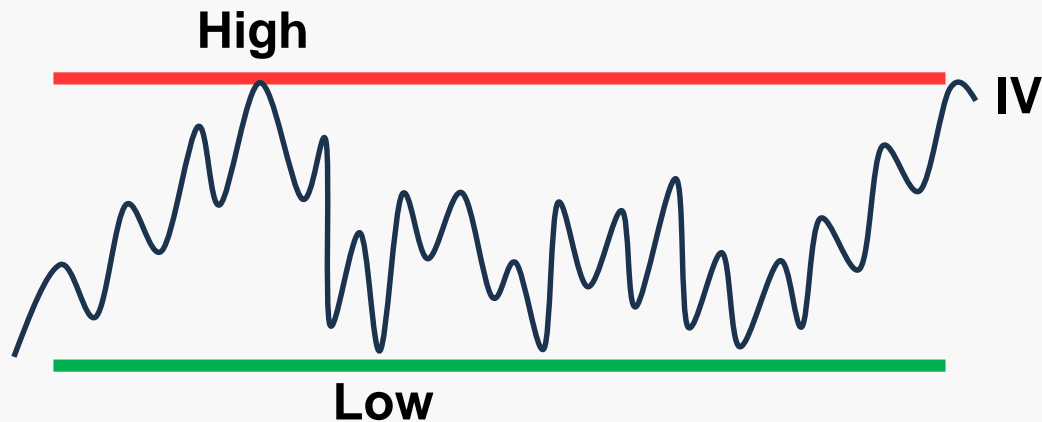


- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

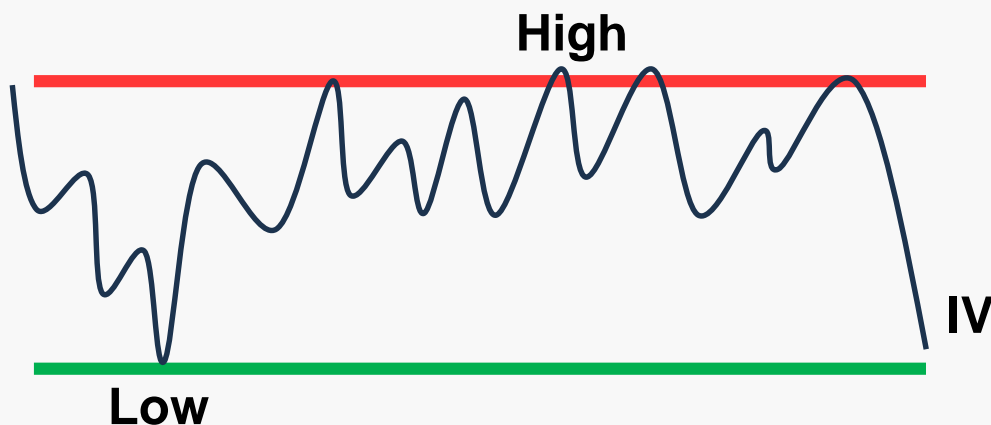
*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

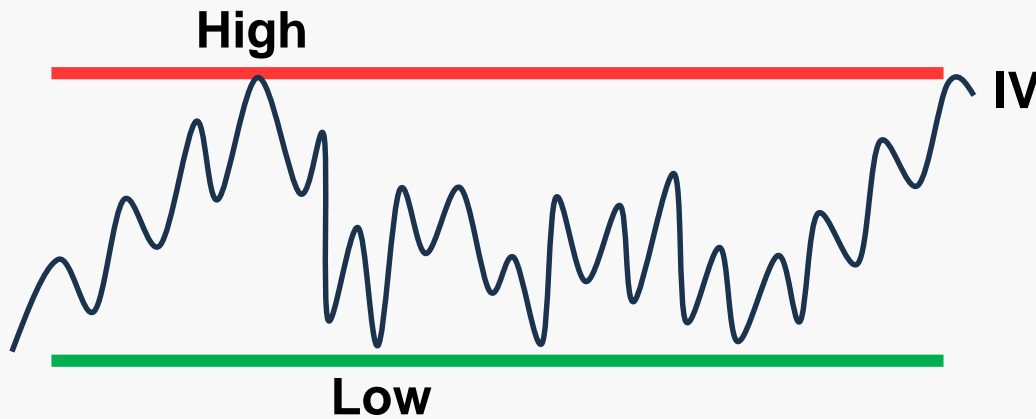


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

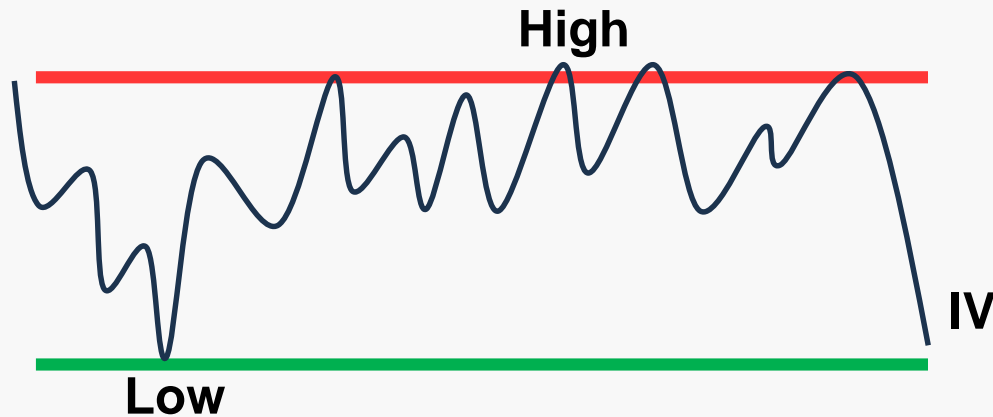


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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