



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,429	0.5%▲
Open Interest (OI)	1,29,45,775	3.7%▲
Change in OI (abs)	1,29,45,775	4,58,150▲
Premium / Discount (Abs)	152	21▼
<b>Inference</b>	<b>Long Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	52,395	0.1%▲
Open interest (OI)	26,05,680	3.6%▲
Change in OI (abs)	26,05,680	91,455▲
Premium / Discount (Abs)	286	23▼
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.7	0.3▲
Nifty ATM IV (%)	17.65	5.1▲
Bank Nifty ATM IV (%)	15.98	1.0▲
PCR (Nifty)	1.22	0.13▲
PCR (Bank Nifty)	0.86	0.01▲

\*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 (%)
LODHA	4,86,450	334.1%	1299.2	3.0%
IRB	1,06,60,000	211.4%	55.18	2.6%
CDSL	20,55,900	178.4%	1676.4	1.5%
PRESTIGE	6,02,550	149.2%	1729.9	4.3%
ADANIGREEN	36,96,000	133.7%	1335.5	0.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
JSWENERGY	9,58,500	226.0%	649.35	-1.5%
OIL	14,87,800	123.2%	482.15	-2.2%
BANKINDIA	74,30,500	108.7%	109.61	-1.5%
IRFC	1,05,60,900	99.7%	145.56	-2.0%
DELHIVERY	30,13,400	82.0%	328.75	-1.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
APOLLOHOSP	17,78,750	-4.1%	7091.3	3.1%
PETRONET	2,89,17,000	-3.6%	340.15	1.2%
JUBLFOOD	1,47,85,000	-2.3%	655.65	1.1%
LAURUSLABS	2,41,80,800	-2.3%	579.55	1.8%
INDHOTEL	1,82,46,000	-2.1%	804.95	0.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
FEDERALBNK	6,91,55,000	-3.4%	209.82	-1.0%
MFSL	39,64,000	-3.3%	1122	-1.7%
MARICO	2,38,23,600	-3.1%	648.85	-0.1%
EICHERMOT	35,11,375	-2.6%	4841.8	-0.5%
METROPOLIS	9,84,000	-2.2%	2147.3	-0.4%

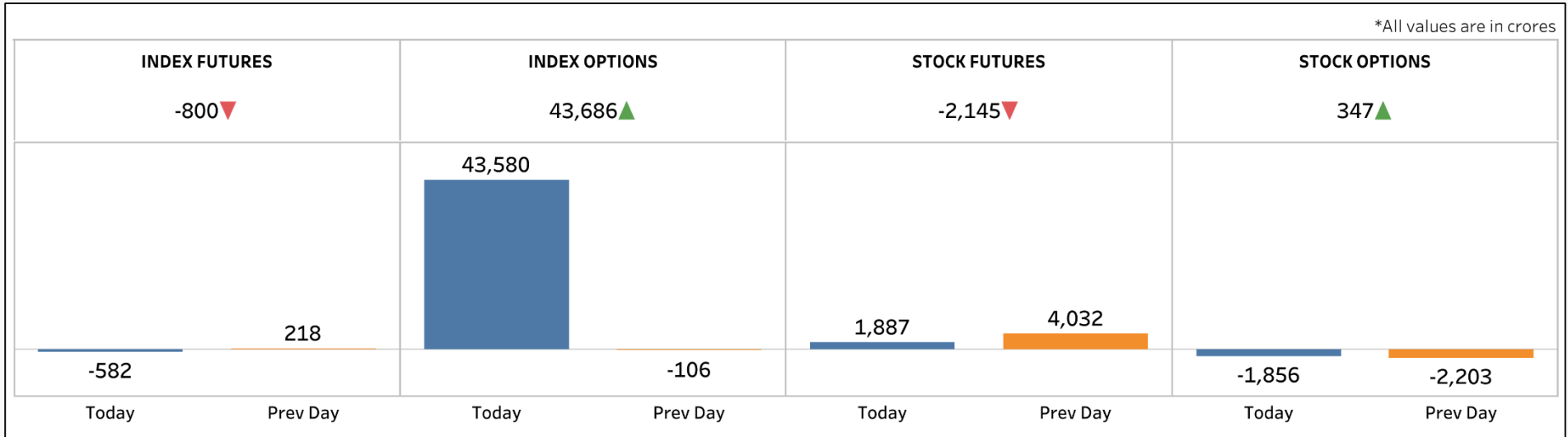
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

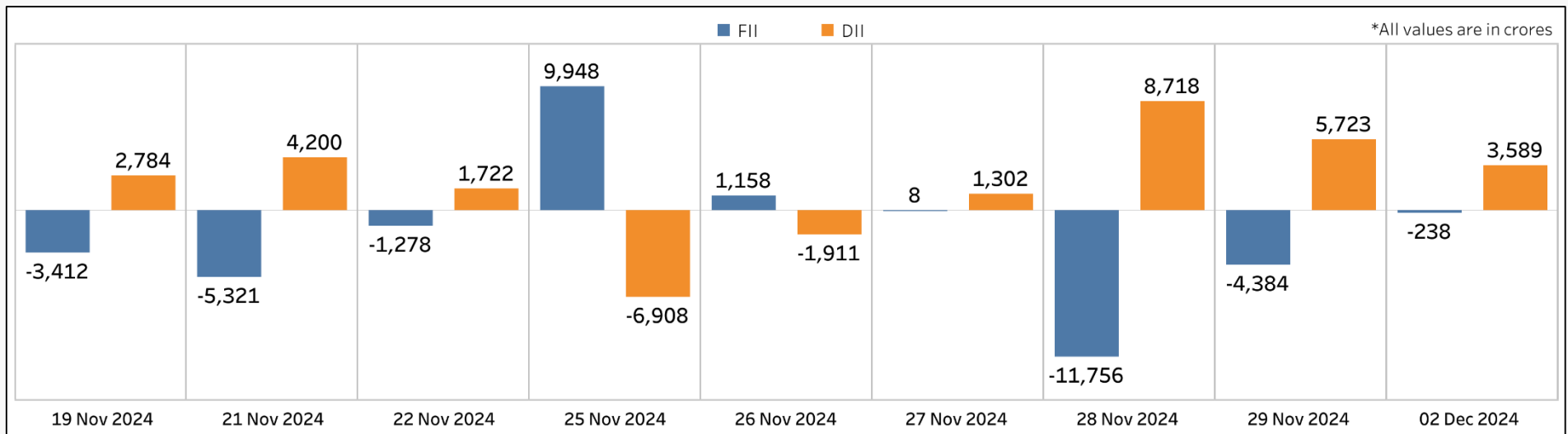
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
306,640 ▲	-12,833 ▼	384,600 ▲	-35,186 ▼	164 ▲	1,506 ▲	10,000 ▲	31,581 ▲
371,365		336,446		0	1,001	10,000	0
64,725	3,492		24,461	-164	-505	0	-34,800
	-9,341	-48,154					-66,381
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
514,092	-124,354	781,763	1,177,394	0	-10,738	232,906	-3,807,400
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
24,674 ▲	365 ▲	-433,021 ▼	9,326 ▲	-331,478 ▼	10,962 ▲	38,421 ▲	-5,721 ▼
		180,896	25,905	318,758			
	-1,194	-1,559	16,579	9,534			
-358,645		-252,125		-12,720	-1,428	-94,321	-15,566
						-132,742	-9,845
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-730,292	180,581	-932,413	2,191,872	216,200	-45,489	-82,256	438,134
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

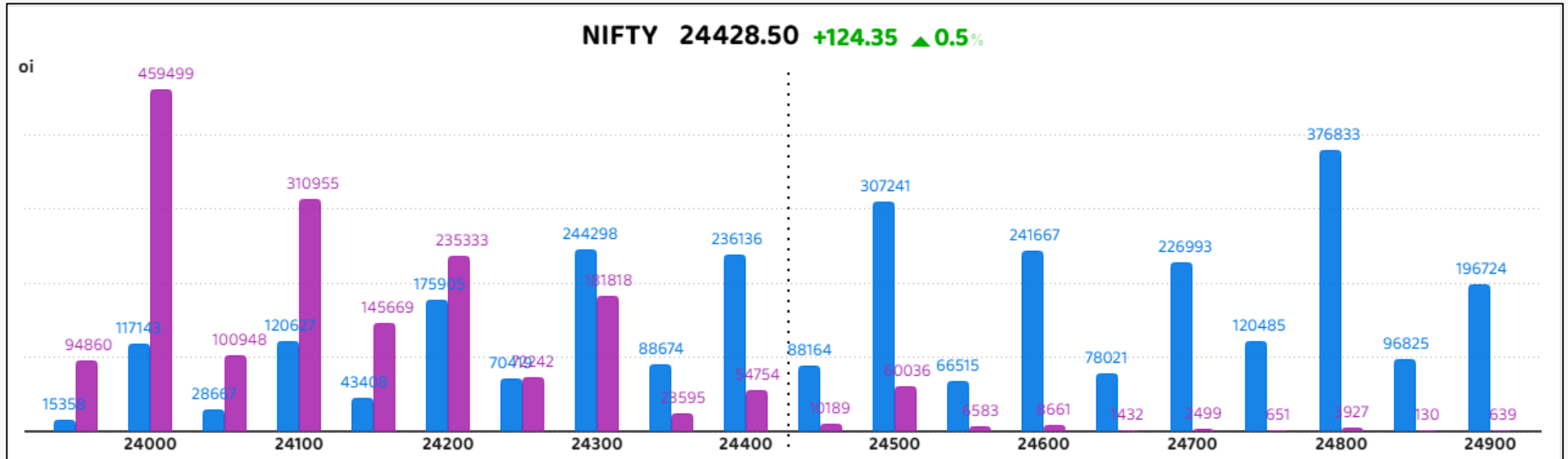


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 24,800 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 53,000 call and the 52,000 put saw the most amount of open interest.

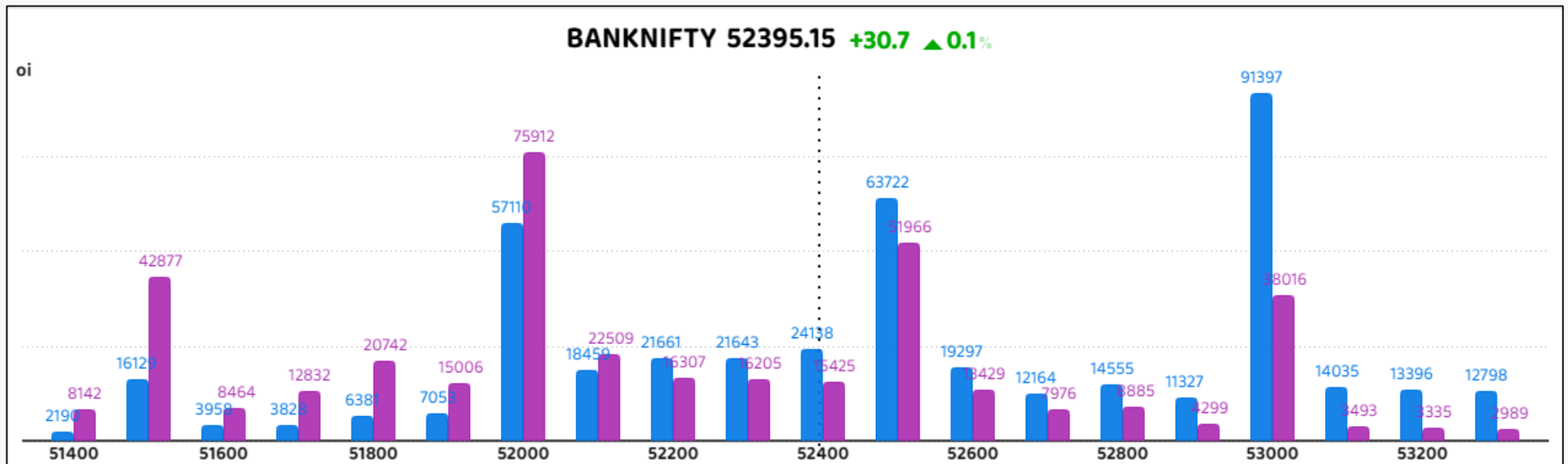
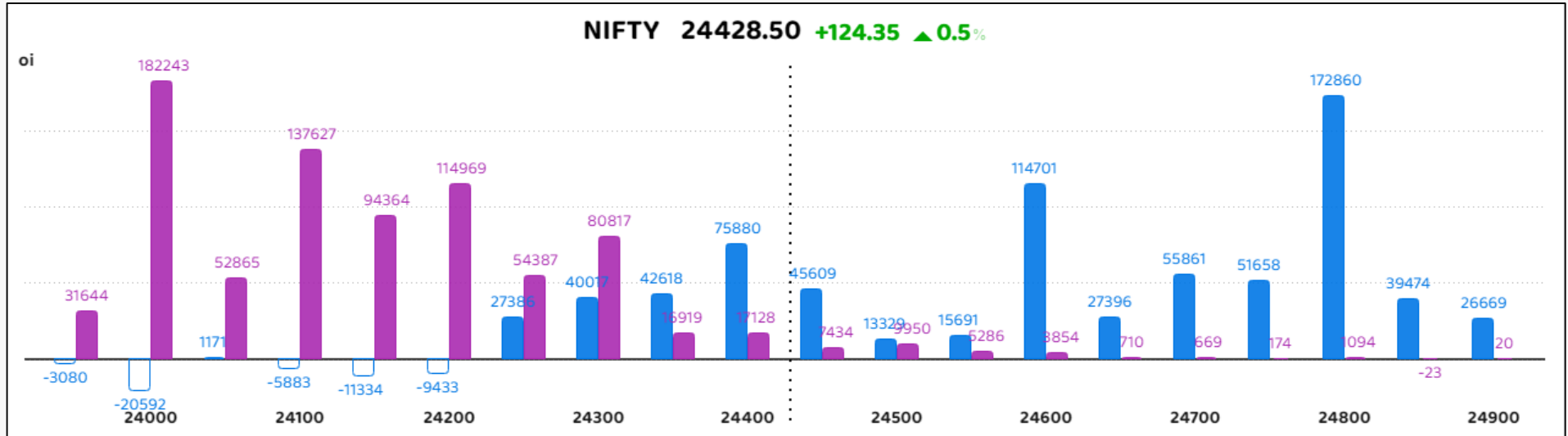


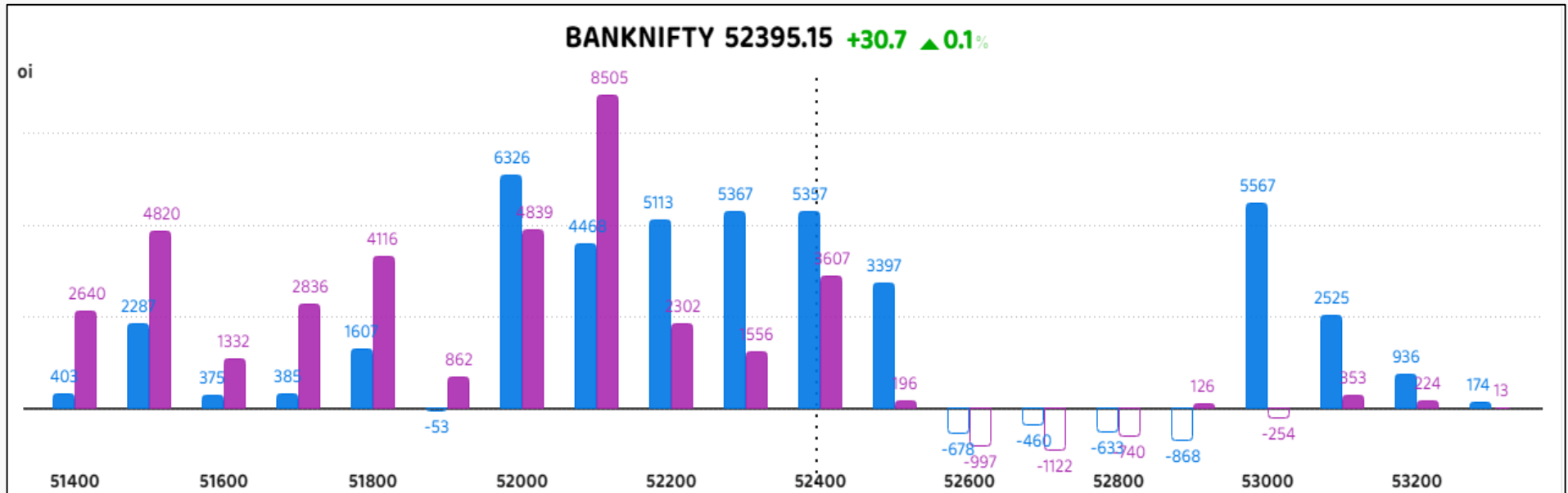
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■

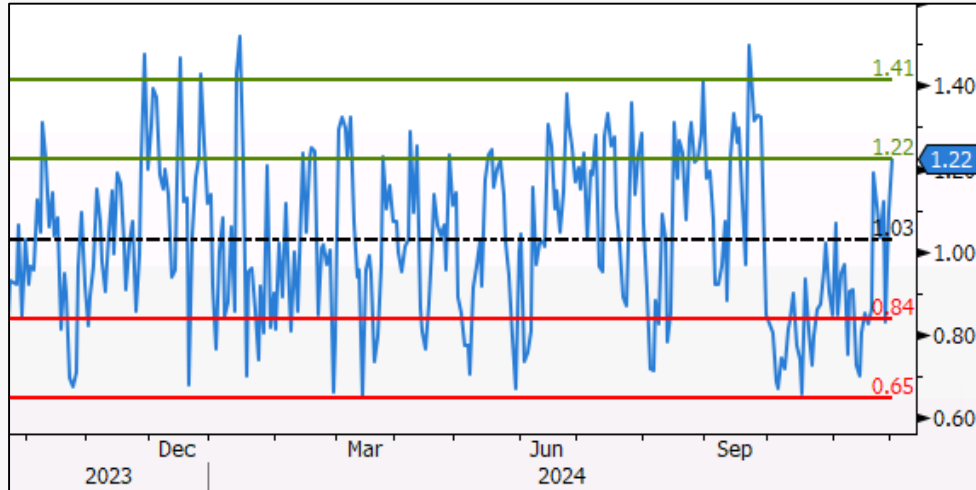


The largest open interest changes (contracts) were seen at the 24,800 call strike and 24,000 put strike.

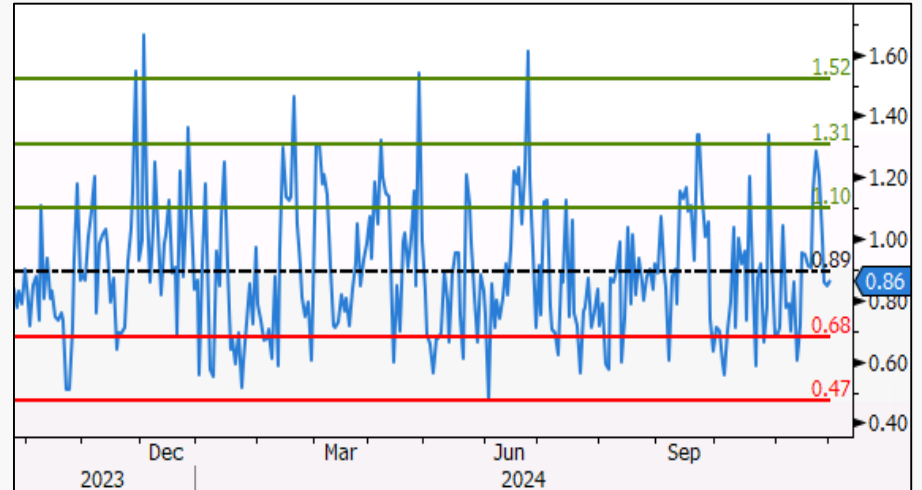


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 52,100 Put strike.

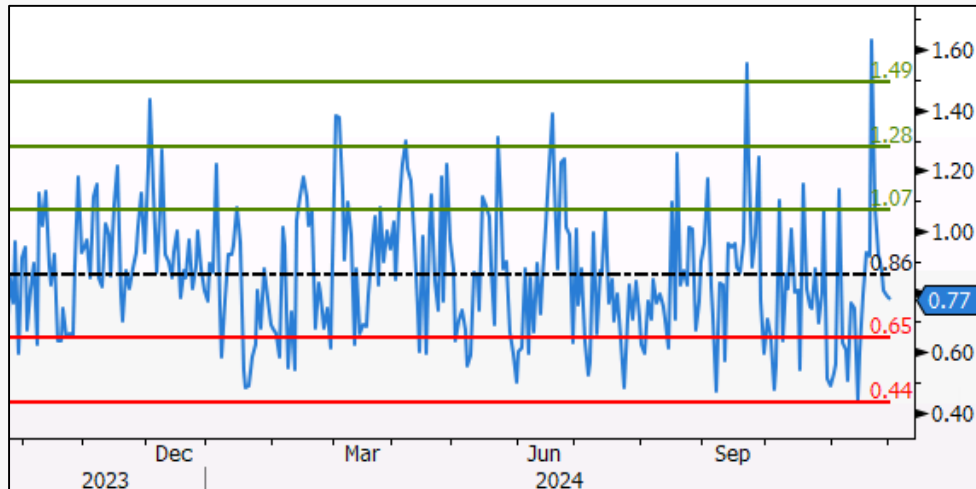
**Nifty**



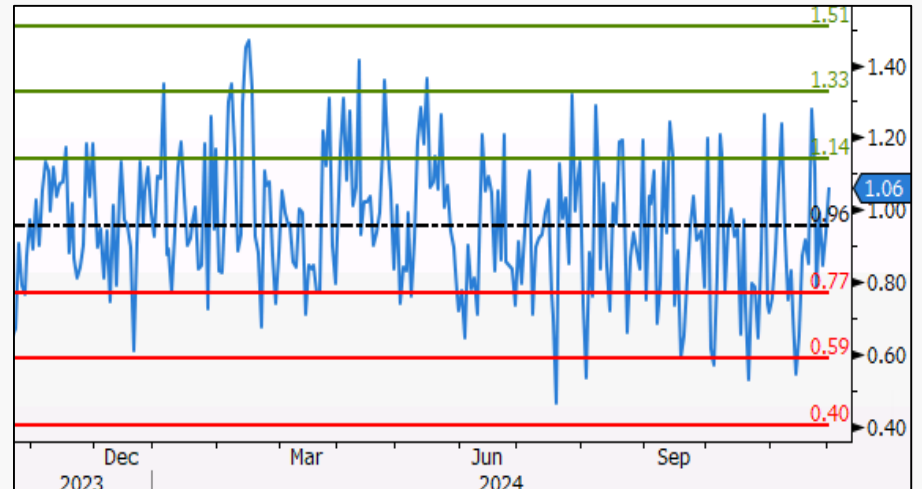
**Bank Nifty**



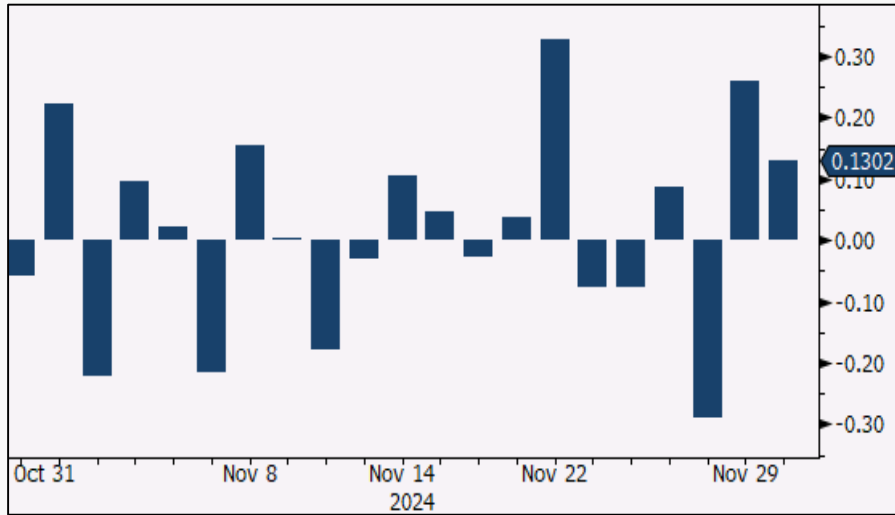
**Fin Nifty**



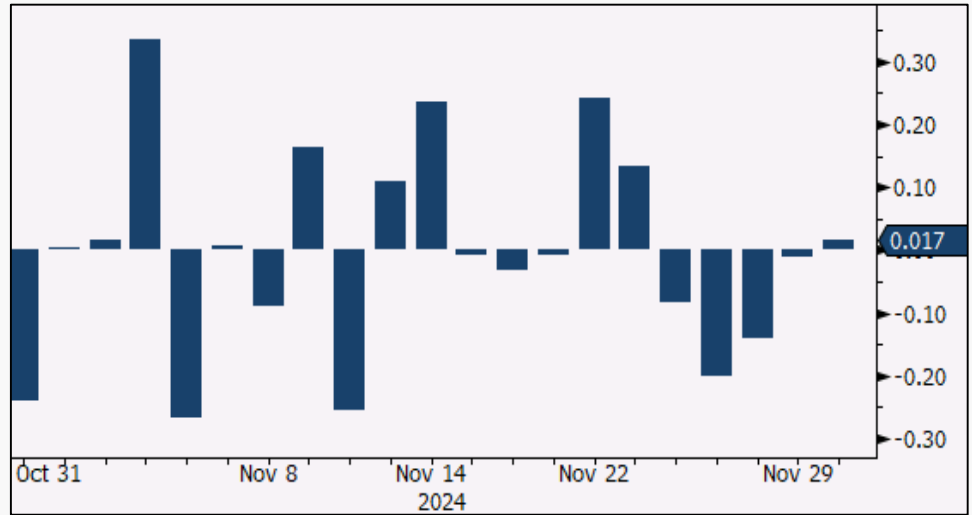
**Midcap Nifty**



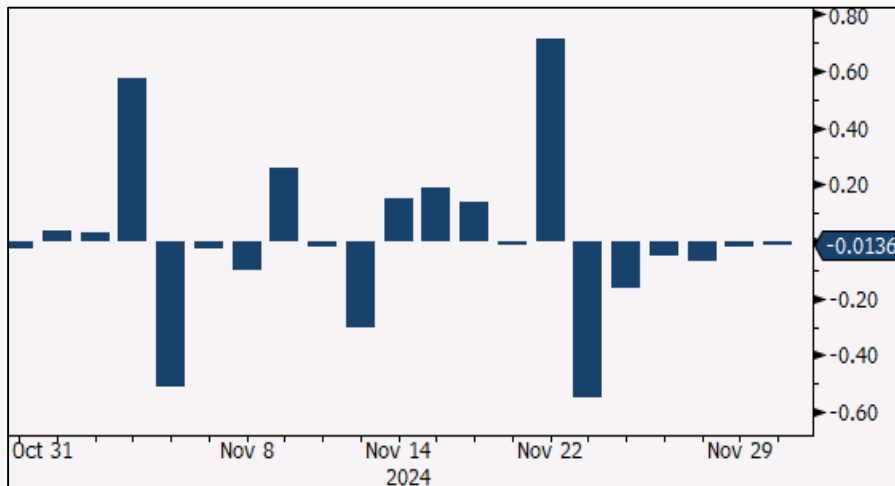
**Nifty**



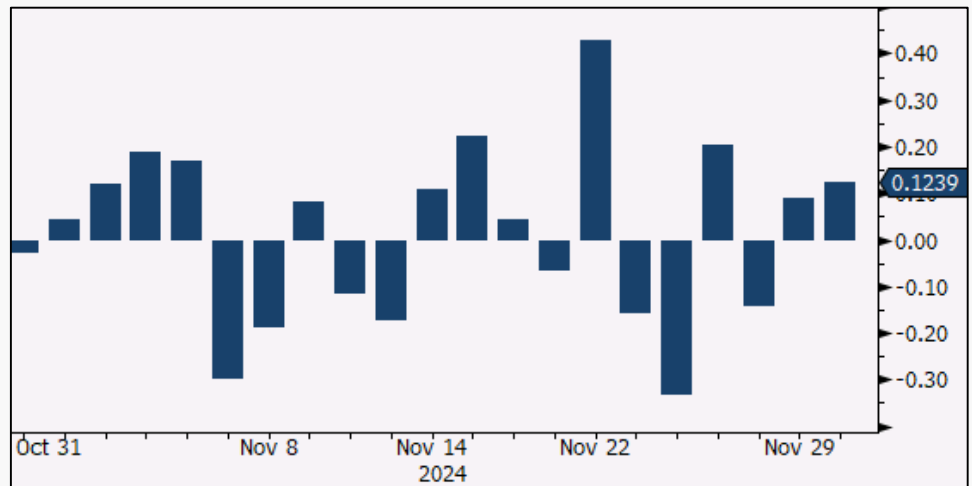
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGI	16763.9	6.1	36.8	51.3	1.8	70.7
MARUTI SUZUKI IN	11239.3	1.5	22.3	33.7	0.4	65.9
KOTAK MAHINDRA	1753.95	-0.6	19.0	28.7	1.9	63.8
GUJARAT NARM VLY	652.25	2.1	35.4	53.0	4.8	63.6
TITAN CO LTD	3306.85	1.8	21.8	33.5	2.3	62.5

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INDUSIND BANK	990.95	-0.5	12.4	60.4	12.4	0.0
REC LTD	531.9	-0.1	33.0	86.9	31.2	3.1
POWER FINANCE	495.75	0.1	33.6	72.9	31.7	4.6
GMR AIRPORTS INF	83.34	0.2	30.2	69.5	28.3	4.7
INDIAN RAILWAY C	816.5	0.1	25.3	59.6	23.5	5.0

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MAHANAGAR GAS LT	1236.5	3.8	37.5	48.5	23.3	84.5
CIPLA LTD	1507.7	-1.7	25.6	61.3	17.0	71.3
TATA CONSUMER PR	957	-0.2	24.5	32.3	13.6	70.4
GODREJ PROPERTIE	2901.4	4.5	37.0	58.5	16.5	70.0
ADANI ENTERPRISE	2457.05	-0.2	45.8	89.6	2.4	69.1

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDUSIND BANK	990.95	-0.5	12.4	60.4	12.4	0.0
VEDANTA LTD	460.55	1.6	27.9	57.3	23.7	1.4
GMR AIRPORTS INF	83.34	0.2	30.2	69.5	28.3	1.5
INDIAN ENERGY EX	178.19	1.1	31.3	66.6	12.2	1.5
COFORGE LTD	8710.7	0.3	27.9	46.6	26.0	1.9

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ASTRAL LTD	1816.3	1.4	9347	1408	6.6
DALMIA BHARAT LT	1879.75	3.3	12860	2058	6.3
TORRENT PHARMA	3339.15	0.4	6007	1452	4.1
TVS MOTOR CO LTD	2493.4	2.4	27421	7399	3.7
MCX INDIA LTD	6323	2.2	20381	5765	3.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BALKRISHNA INDS	2814.95	1.3	1818	1723	0.9
BHARAT HEAVY ELE	249.65	-0.6	6665	5590	0.8
DABUR INDIA LTD	523.9	-0.6	3682	2977	0.8
RBL BANK LTD	155.96	0.6	48767	39233	0.8
BANK OF BARODA	246.41	0.0	10028	7756	0.8

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
COLGATE PALMOLIV	2887.45	-0.1	13102	13102	100.0
SBI LIFE INSURAN	1422.05	-1.1	16645	20703	80.4

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
COLGATE PALMOLIV	2887.45	-0.1	5537	6323	87.6
RBL BANK LTD	155.96	0.6	8447	10209	82.7
ULTRATECH CEMENT	11648.55	4.0	11751	14292	82.2

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
ULTRATECH CEMENT	11648.55	4.0	135785	150815	90.0

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THIS CRITERIA					

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
JK CEMENTS LTD	4495.65	5.1	12721	2412	5.3
RBL BANK LTD	155.96	0.6	48767	9250	5.3
ULTRATECH CEMENT	11648.55	4.0	135785	30957	4.4
CAN FIN HOMES	814.55	-1.1	18014	4669	3.9
DALMIA BHARAT LT	1879.75	3.3	12860	3599	3.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
RBL BANK LTD	156.0	0.6	39233	5981	6.6
JK CEMENTS LTD	4495.7	5.1	4016	1222	3.3
ULTRATECH CEMENT	11648.6	4.0	56276	18992	3.0
CAN FIN HOMES	814.6	-1.1	7180	2591	2.8
DIXON TECHNOLOGI	16763.9	6.1	97412	48202	2.0

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
RBL BANK LTD	155.96	0.6	10917	6863	1.6
COLGATE PALMOLIV	2887.45	-0.1	13102	8957	1.5
ULTRATECH CEMENT	11648.55	4.0	14716	10269	1.4
JK CEMENTS LTD	4495.65	5.1	1391	1014	1.4
DALMIA BHARAT LT	1879.75	3.3	2108	1538	1.4

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
RBL BANK LTD	155.96	0.6	8447	4451	1.9
ULTRATECH CEMENT	11648.55	4.0	11751	7416	1.6
SBI LIFE INSURAN	1422.05	-1.1	6680	4301	1.6
LAURUS LABS LTD	576.8	1.7	5183	3400	1.5
HDFC LIFE INSURA	640.2	-2.7	6449	4423	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	1693800	1.7%	2457	3000	2090700	22.1%	INFY	2000	1626000	6.4%	1880	1800	970400	-4.2%
ADANIPTS	1200	2390400	-1.3%	1216	1200	1614800	-1.3%	ITC	500	6788800	4.8%	477	450	2129600	-5.7%
APOLLOHOSP	7500	101875	6.1%	7066	7000	102250	-0.9%	JSWSTEEL	1000	886950	1.0%	990	980	339525	-1.0%
ASIANPAINT	2600	686000	4.9%	2479	2500	455000	0.8%	KOTAKBANK	1900	1656400	8.3%	1754	1800	622000	2.6%
AXISBANK	1200	2310000	5.5%	1137	1140	1061875	0.3%	LT	3800	680550	2.6%	3704	3700	308250	-0.1%
BAJAJ-AUTO	10000	328350	9.5%	9130	9000	135300	-1.4%	LTIM	6500	86850	4.6%	6213	6000	40800	-3.4%
BAJAJFINSV	1700	784000	6.5%	1597	1600	535000	0.2%	M&M	3000	771400	-0.5%	3016	2900	560700	-3.9%
BAJFINANCE	7000	738750	5.3%	6651	6500	292750	-2.3%	MARUTI	12000	256100	6.8%	11239	11000	128850	-2.1%
BHARTIARTL	1640	1389375	-0.2%	1644	1600	1117675	-2.7%	NESTLEIND	2400	341600	6.6%	2252	2200	181600	-2.3%
BPCL	300	4534200	2.0%	294	300	1429200	2.0%	NTPC	370	11625000	3.3%	358	360	1596000	0.5%
BRITANNIA	5000	206200	1.9%	4907	5000	60800	1.9%	ONGC	260	8729875	1.0%	258	255	1917300	-1.0%
CIPLA	1600	399100	6.1%	1508	1500	278525	-0.5%	POWERGRID	350	2498400	6.8%	328	300	1699200	-8.5%
COALINDIA	420	2465400	-0.4%	422	420	1796550	-0.4%	RELIANCE	1300	10164000	-0.7%	1309	1300	8891500	-0.7%
DIVISLAB	6500	155400	3.9%	6255	6200	111100	-0.9%	SBLIFE	1440	985125	1.3%	1422	1400	429000	-1.6%
DRREDDY	1220	594375	-0.1%	1222	1200	384375	-1.8%	SBIN	900	6176250	7.6%	836	800	3729750	-4.4%
EICHERMOT	5000	225750	3.7%	4821	4500	211575	-6.7%	SUNPHARMA	1820	819000	0.6%	1809	1800	397250	-0.5%
GRASIM	2700	336750	0.2%	2694	2500	146750	-7.2%	TATACONSUM	1000	730512	4.5%	957	960	282264	0.3%
HCLTECH	2000	610750	6.9%	1872	1800	371350	-3.8%	TATAMOTORS	800	6848050	1.3%	790	800	3180650	1.3%
HDFCBANK	1800	6515850	-0.3%	1805	1700	2679050	-5.8%	TATASTEEL	150	23694000	2.5%	146	140	12683000	-4.4%
HDFCLIFE	700	3070100	9.3%	640	650	1035100	1.5%	TCS	4400	549325	2.9%	4277	4000	509425	-6.5%
HEROMOTOCO	5000	351600	5.3%	4748	4800	228000	1.1%	TECHM	1800	630600	3.1%	1746	1600	630000	-8.4%
HINDALCO	700	2240000	5.6%	663	600	1181600	-9.4%	TITAN	3300	340375	-0.2%	3307	3100	310450	-6.3%
HINDUNILVR	2500	595200	0.8%	2479	2400	324600	-3.2%	ULTRACEMCO	12000	106700	3.0%	11649	11000	114700	-5.6%
ICICIBANK	1340	4071200	2.7%	1305	1300	1640800	-0.4%	UPL	575.55	569100	3.7%	555	556.35	565035	0.2%
INDUSINDBK	1000	2732500	0.9%	991	1000	1959500	0.9%	WIPRO	600	3201000	2.6%	585	580	1335000	-0.8%

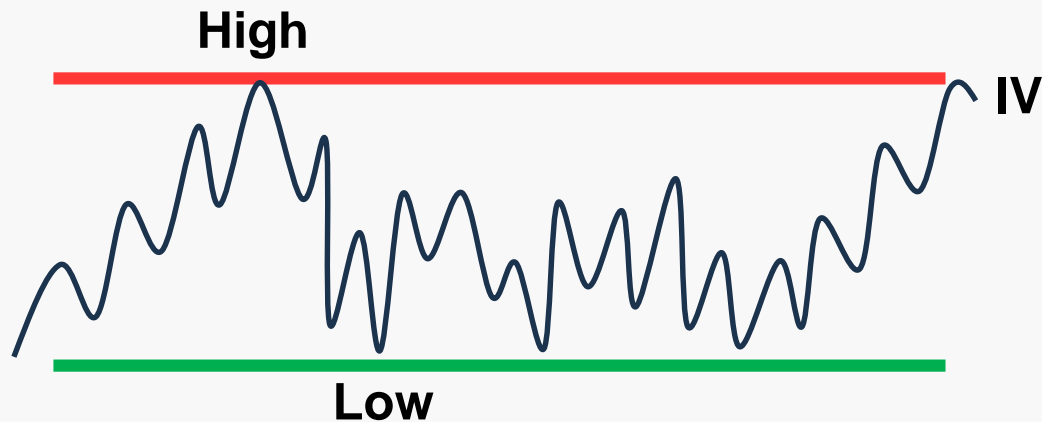
If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green  
 If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike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



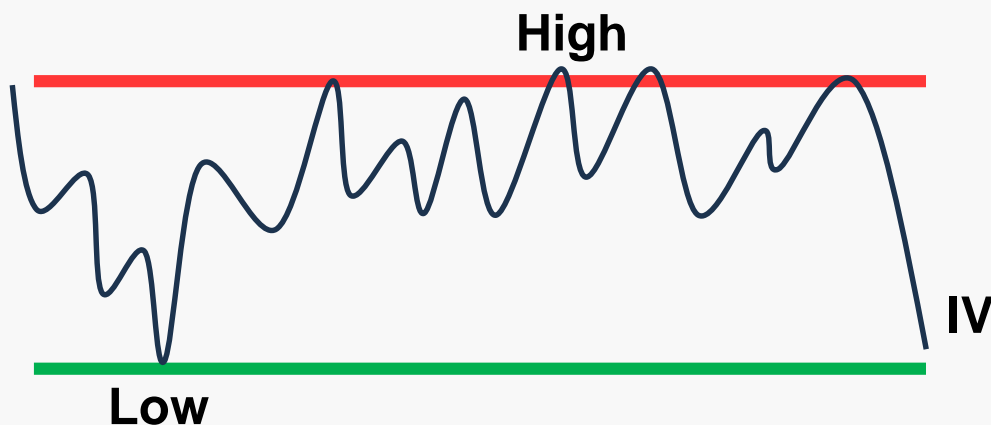
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

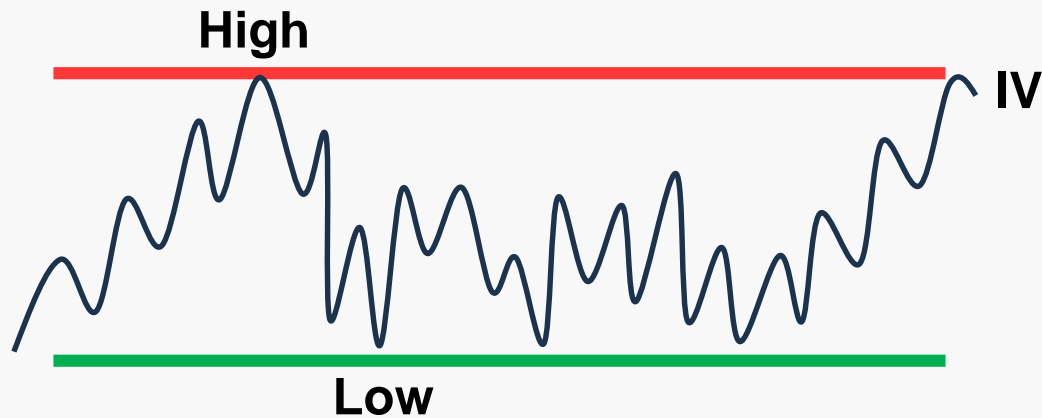


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

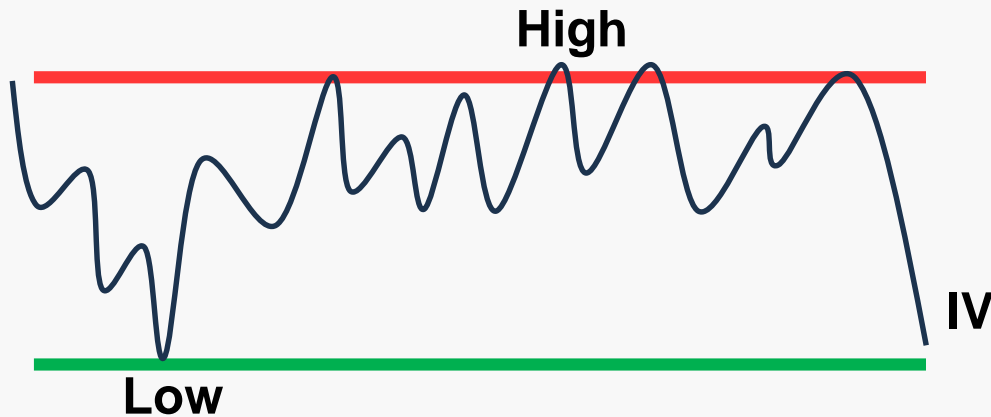


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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Compliance Officer Details: Name – Mr. Maneesh Mathew, Tel No. – 022-68555574, Email id – [compliance.officer@axisdirect.in](mailto:compliance.officer@axisdirect.in);

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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