



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,295	0.8%▲
Open Interest (OI)	1,25,45,500	0.9%▲
Change in OI (abs)	1,25,45,500	1,12,225▲
Premium / Discount (Abs)	82	37▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	52,394	1.6%▲
Open interest (OI)	27,22,350	8.6%▼
Change in OI (abs)	27,22,350	2,54,460▼
Premium / Discount (Abs)	187	150▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	16.12	0.6▼
Nifty ATM IV (%)	14.83	1.1▼
Bank Nifty ATM IV (%)	16.19	1.8▼
PCR (Nifty)	0.94	0.09▲
PCR (Bank Nifty)	1.04	0.33▲

*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	7,26,30,000	16.7%	235.46	1.9%
SBIN	11,71,93,500	10.2%	853.3	2.2%
MANAPPURAM	6,28,44,000	8.5%	158.83	3.8%
PNB	27,69,04,000	7.4%	105.35	1.0%
TITAN	1,18,28,250	5.3%	3243.3	0.2%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MGL	20,36,800	9.2%	1387	-0.6%
INDIAMART	10,83,900	8.9%	2447.1	-1.2%
JKCEMENT	5,95,375	8.3%	4145.15	-3.5%
TRENT	37,24,800	6.3%	7002.25	-1.5%
RBLBANK	5,67,52,500	5.8%	172.2	-0.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BAJAJ-AUTO	27,16,575	-9.1%	9892.75	3.4%
IPCALAB	18,22,600	-7.5%	1595.5	0.1%
BATAINDIA	36,44,625	-5.5%	1358.95	2.8%
TATASTEEL	25,25,10,500	-4.8%	152.88	3.7%
POLYCAB	22,22,250	-4.6%	6644.7	1.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ESCORTS	12,33,550	-5.3%	3723.15	-0.7%
LALPATHLAB	7,96,950	-4.7%	3079.85	-0.1%
COLPAL	39,35,750	-2.8%	2997.1	-0.2%
TECHM	1,33,84,800	-2.7%	1640.65	-0.1%
AUROPHARMA	1,18,57,450	-2.1%	1397.65	-0.8%

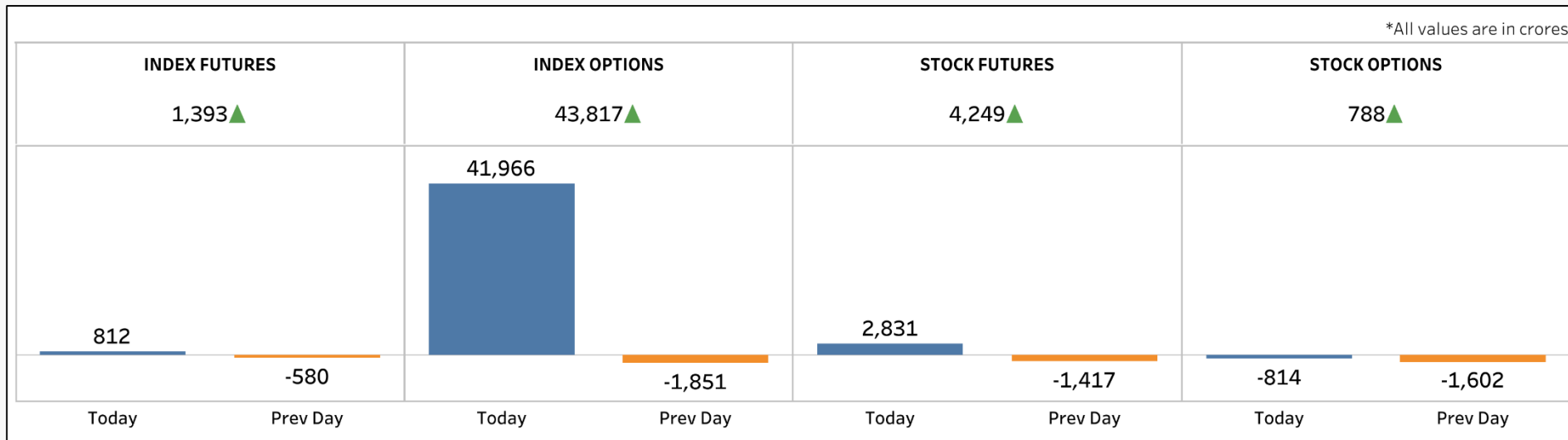
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Data by Participant

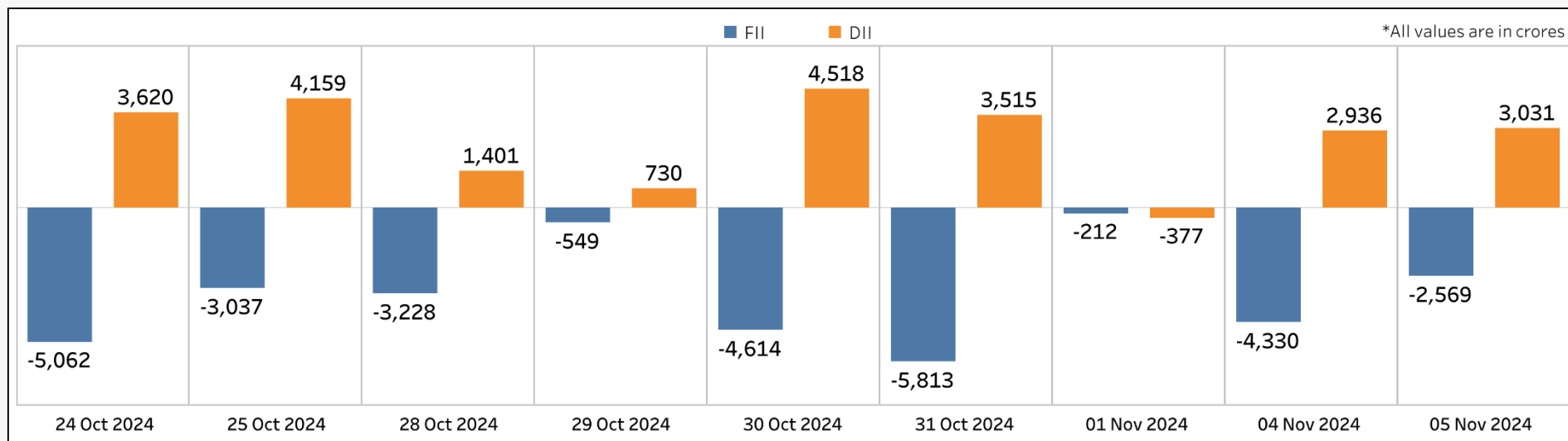
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
123,365 ▲	19,318 ▲	136,643 ▲	56,703 ▲	0	-282 ▼	-3,500 ▼	-4,512 ▼
206,361		114,291	31,384	0	515	-7,000	21,149
82,996				0	797	-3,500	25,661
10,038	-9,280	-22,352	-25,319				
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
617,614	-150,849	803,038	1,152,391	2,078	-30,576	160,881	-3,764,980
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-640,997 ▼	-32,560 ▼	10,362 ▲	-29,602 ▼	517,632 ▲	13,524 ▲	-143,505 ▼	-22,589 ▼
290,647		239,516	1,197	143,989			
		229,154					
	25,370				-3,363	-203,302	-24,128
					-16,887		-1,539
-350,350	-7,190		-28,405			-346,807	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-395,194	224,837	-661,228	2,182,088	-224,498	-43,412	-302,691	430,501
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

Daily Net Open Interest Change

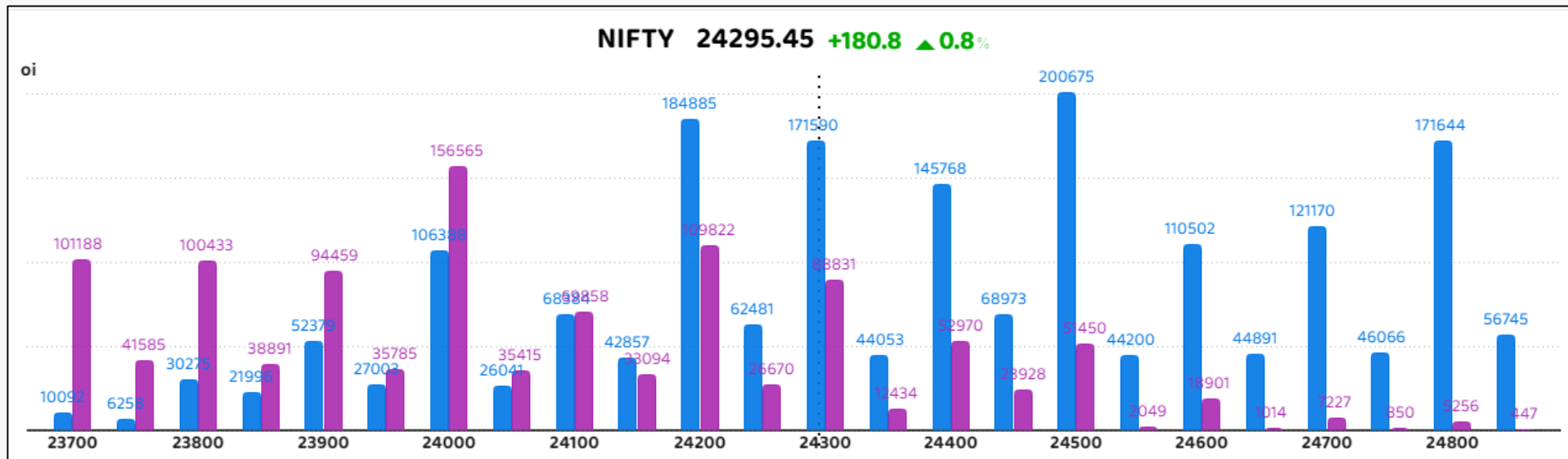


DII and FII Daily Cash Market Flows



Positioning Stack by Strike (Current Week Expiry)

Call ■ Put ■



For the Nifty, the 24,500 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 53,000 call and the 51,500 put saw the most amount of open interest.

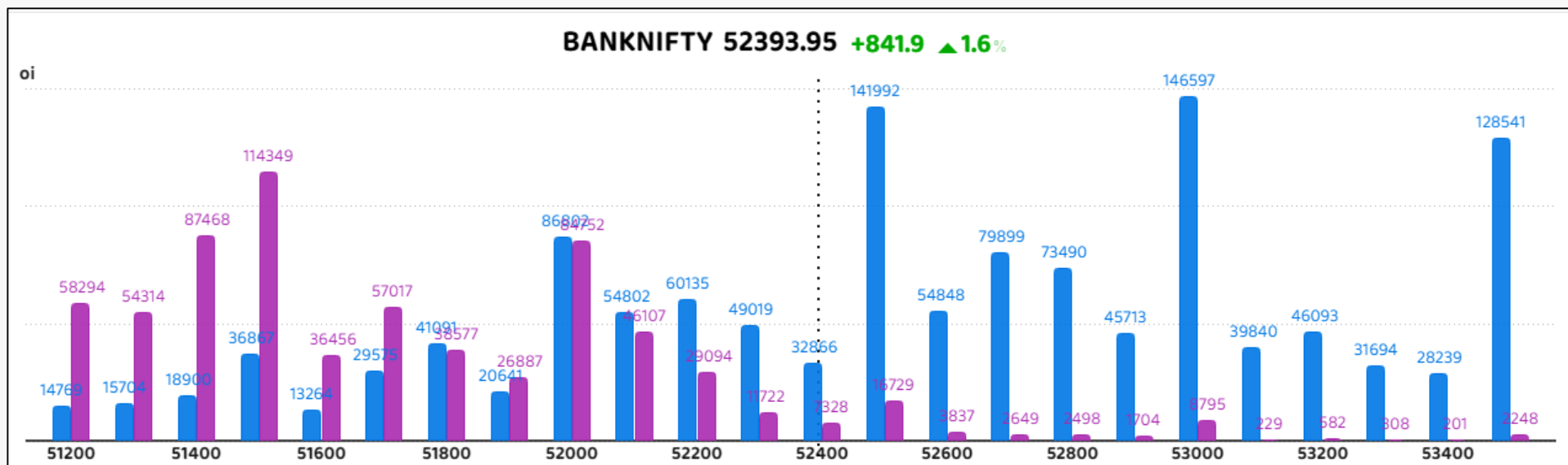
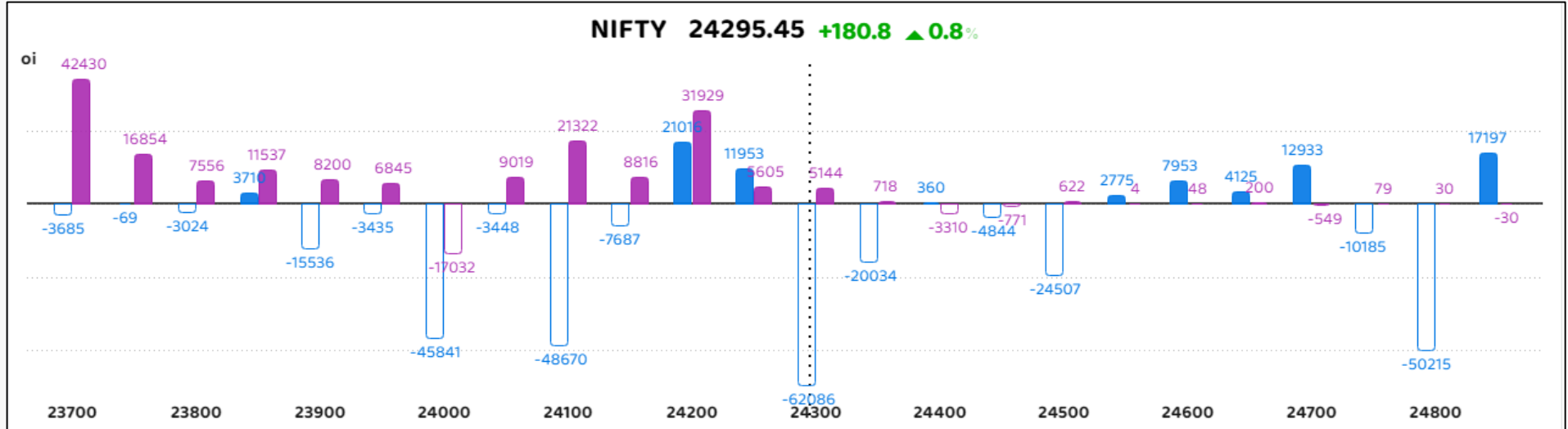


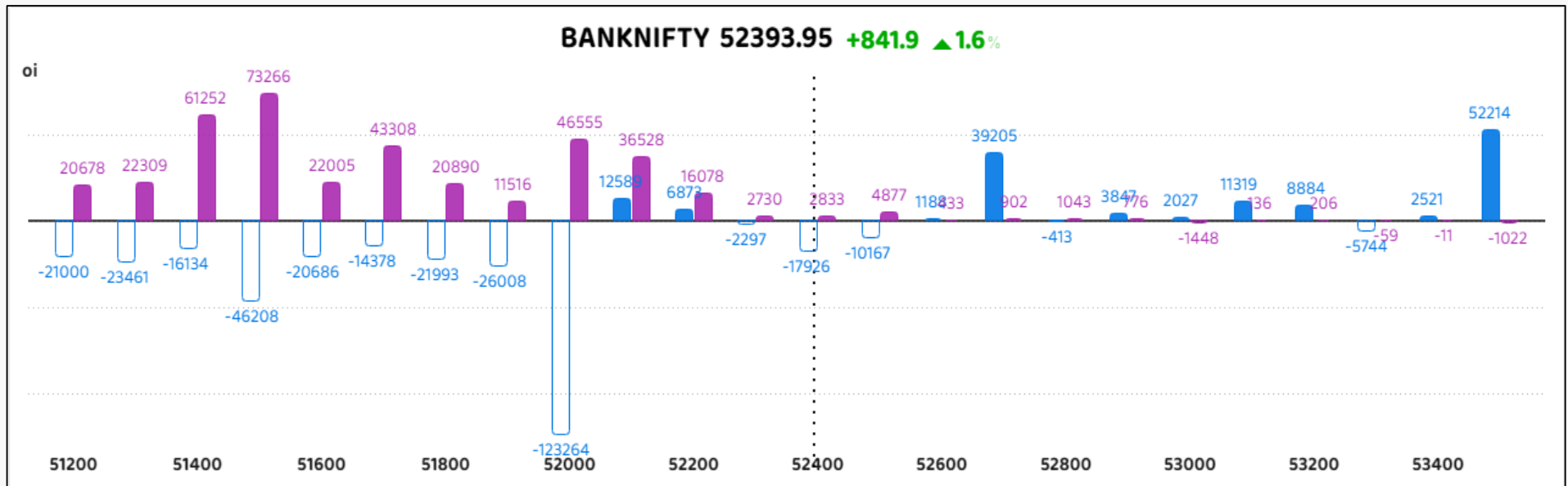
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Current Week Expiry)

Call ■ Put ■

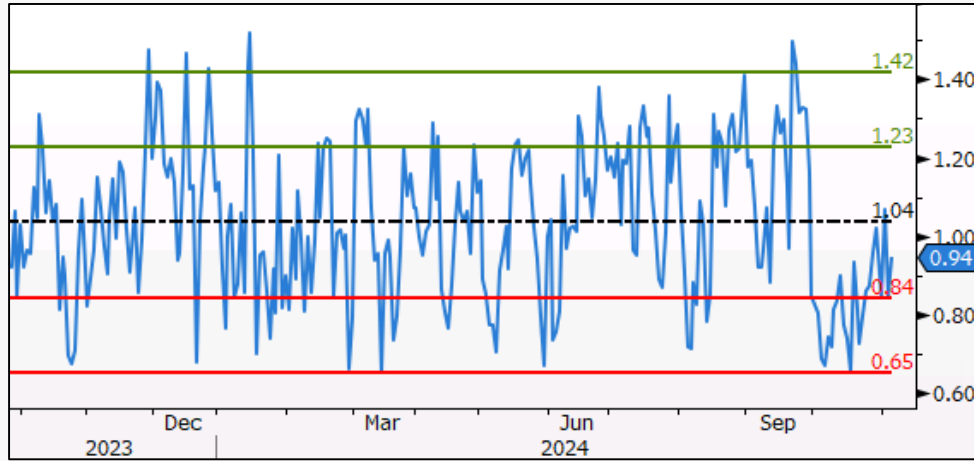


The largest open interest changes (contracts) were seen at the 24,300 call strike and 23,700 put strike.

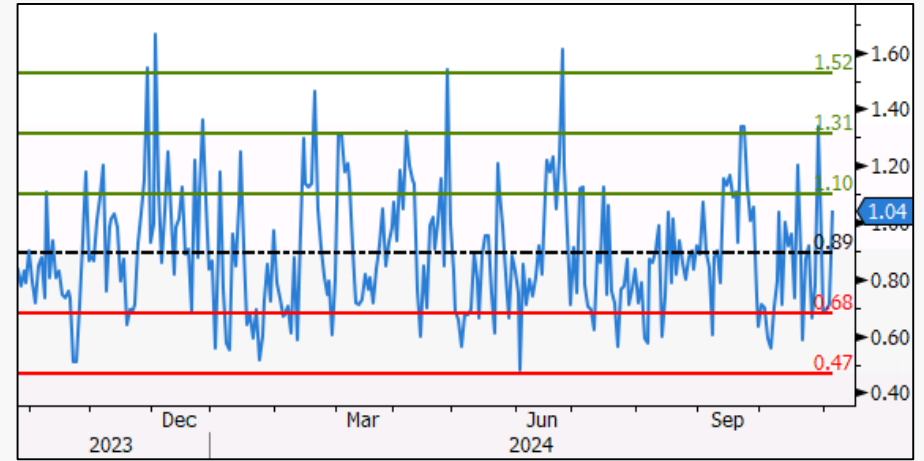


For the Bank Nifty, the biggest open interest changes were seen at the 52,000, Call Strike & 51,500 Put strike.

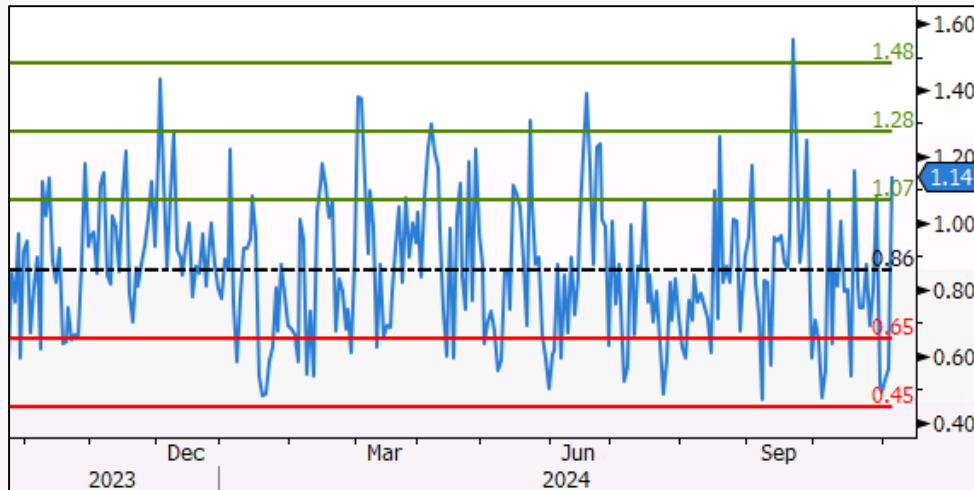
Nifty



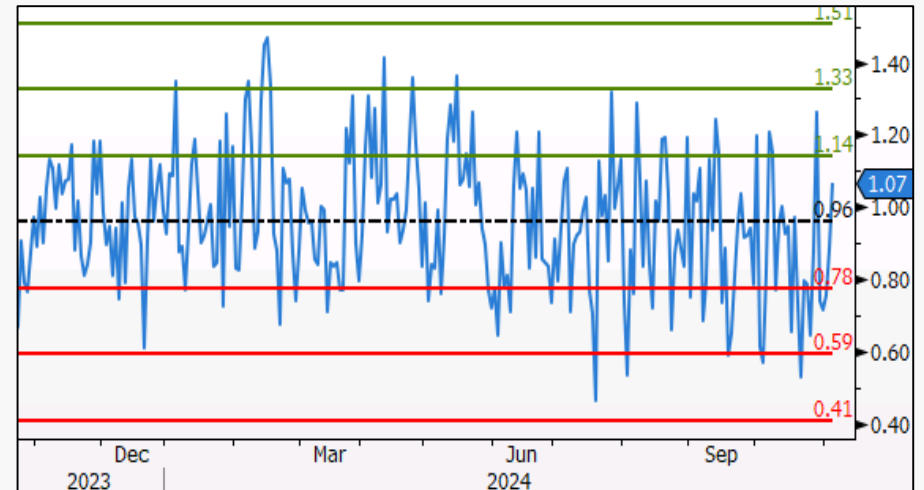
Bank Nifty



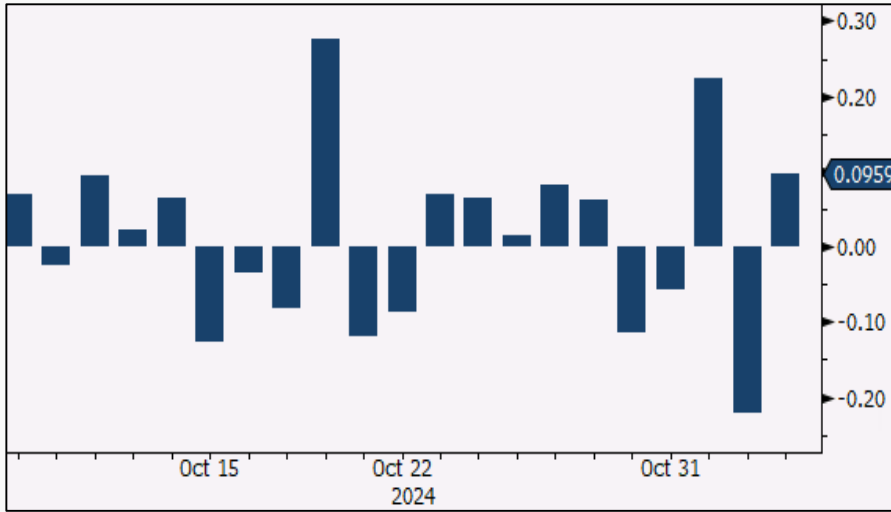
Fin Nifty



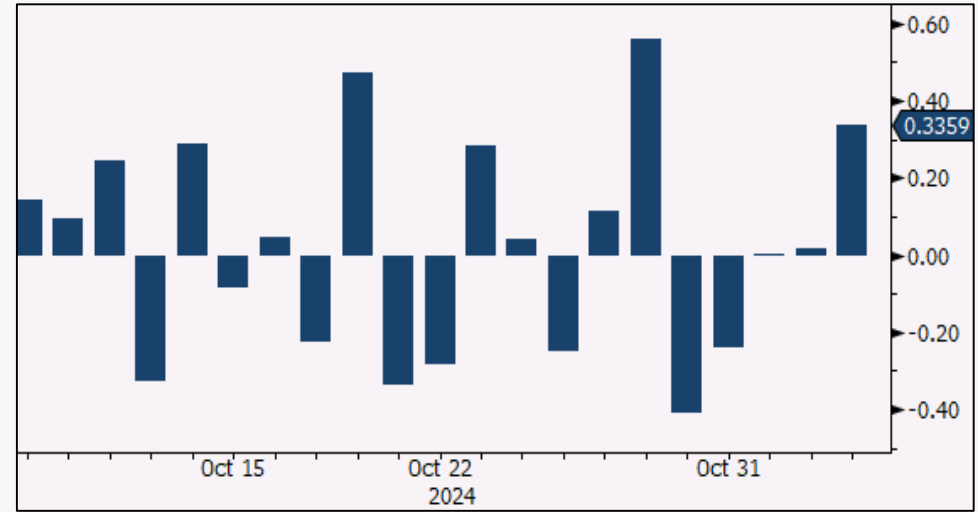
Midcap Nifty



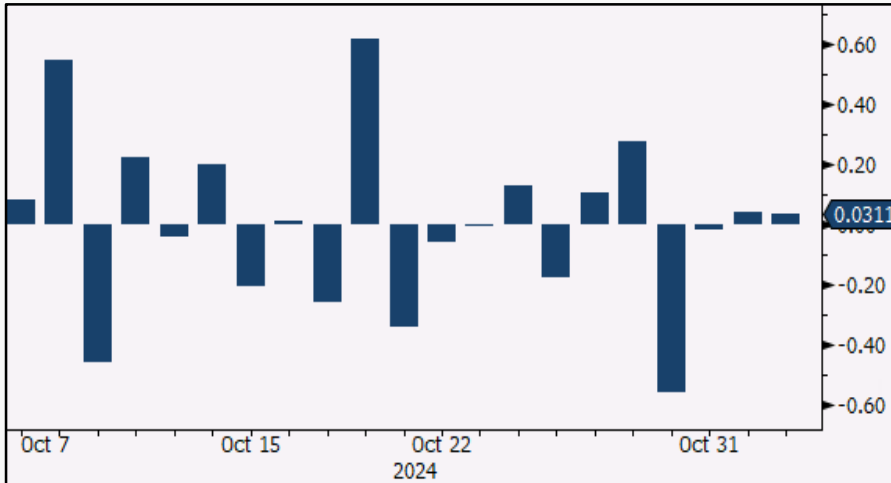
Nifty



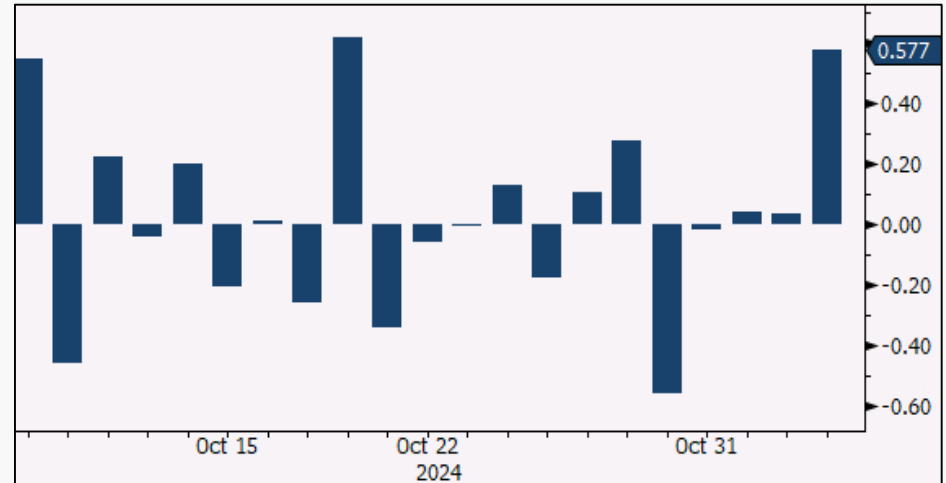
Bank Nifty



Fin Nifty



Midcap Nifty



Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TRENT LTD	6968.35	-1.4	48.3	53.6	2.2	89.7
TITAN CO LTD	3230.25	0.3	30.0	33.5	2.3	88.9
WIPRO LTD	543.7	0.5	35.8	39.1	15.7	85.7
HMCL IS	4820.7	0.3	34.3	40.4	2.8	83.7
TATA MOTORS LTD	835.65	1.4	36.2	41.8	19.8	74.5

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AMBUJA CEMENTS	572	0.1	25.8	70.4	19.1	13.1
STATE BANK IND	849.2	2.3	10.1	55.4	3.1	13.2
ADANI PORTS AND	1329.35	-1.5	29.2	85.8	16.7	18.0
NESTLE INDIA LTD	2262.45	0.7	20.9	72.4	9.2	18.5
ITC LTD	480.2	-0.9	19.6	60.7	10.2	18.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BALRAMPUR CHINI	610.35	0.2	50.1	52.3	12.0	99.4
TITAN CO LTD	3230.25	0.3	30.0	33.5	2.3	98.3
TRENT LTD	6968.35	-1.4	48.3	53.6	2.2	96.7
LUPIN LTD	2181.75	-0.3	38.3	45.8	18.9	96.5
CUMMINS INDIA	3484.45	0.3	43.2	57.0	17.2	95.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STATE BANK IND	849.2	2.3	10.1	55.4	3.1	1.0
AXIS BANK LTD	1171.7	2.8	16.2	34.7	2.8	1.8
HAVELLS INDIA	1633.55	0.3	20.4	43.3	17.5	2.0
ADANI ENTERPRISE	2915.55	0.6	29.1	84.3	2.4	5.2
TATA COMMUNICATI	1756.05	0.6	23.9	47.2	18.7	6.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
UNITED BREWERIES	1951	1.6	3485	520	6.7
OIL & NATURAL GA	267.4	0.8	34886	9603	3.6
VODAFONE IDEA LT	8.14	3.3	12390	3639	3.4
NESTLE INDIA LTD	2262.45	0.7	6761	2142	3.2
SAMVARDHANA MOTH	184.17	-0.5	18198	6095	3.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
COLGATE PALMOLIV	2981.65	-0.1	6122	12417	2.0
ICICI PRUDENTIAL	732.15	-0.5	8749	11723	1.3
MAX FINANCIAL SE	1251	-0.4	1554	1862	1.2
DIVI LABS LTD	5811.25	-1.5	13061	14497	1.1
BERGER PAINTS	513.4	-2.1	7703	8510	1.1

Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
MCX INDIA LTD	6538.8	1.3	16648	17055	97.6
ADITYA BIRLA CAP	201.99	1.5	12263	12798	95.8
ABB INDIA LTD	7132.85	-3.1	13980	16361	85.5
TRENT LTD	6968.35	-1.4	18212	21846	83.4

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
CIPLA LTD	1601.2	1.0	19412	19412	100.0
ADITYA BIRLA CAP	201.99	1.5	8061	8061	100.0
BATA INDIA LTD	1356.1	1.5	5916	6318	93.6
MCX INDIA LTD	6538.8	1.3	10247	10972	93.4
MANAPPURAM FINAN	158.98	4.0	4353	5115	85.1

Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
No stock option met the 80% criteria					

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
BATA INDIA LTD	1356.1	1.5	29075	29075	100

Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MANAPPURAM FINAN	158.98	4.0	18304	2842	6.4
BATA INDIA LTD	1356.1	1.5	36062	8990	4.0
ABB INDIA LTD	7132.85	-3.1	100815	26278	3.8
GUJARAT NARM VLY	614.05	1.1	5780	1602	3.6
JSW STEEL LTD	999.5	4.7	66920	20795	3.2

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MANAPPURAM FINAN	158.98	4.0	10159	1539.7	6.6
ABB INDIA LTD	7132.85	-3.1	84614	15322.75	5.5
BATA INDIA LTD	1356.1	1.5	29075	6115.45	4.8
GUJARAT NARM VLY	614.05	1.1	3826	1137.7	3.4
INDIAN RAILWAY C	829.1	1.6	36371	11262.65	3.2

Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ADITYA BIRLA CAP	201.99	1.5	12263	7610	1.6
MCX INDIA LTD	6538.8	1.3	16648	11434	1.5
ABB INDIA LTD	7132.85	-3.1	13980	10098	1.4
DIXON TECHNOLOGI	14402.65	-0.2	31441	23219	1.4
COAL INDIA LTD	434.9	-1.9	22917	17746	1.3

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
CIPLA LTD	1601.2	1.0	19412	8765	2.2
ADITYA BIRLA CAP	201.99	1.5	8061	5077	1.6
HINDUSTAN AERONA	4261.95	1.3	21628	14678	1.5
BATA INDIA LTD	1356.1	1.5	5916	4038	1.5
REC LTD	526	1.5	17003	12483	1.4

Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

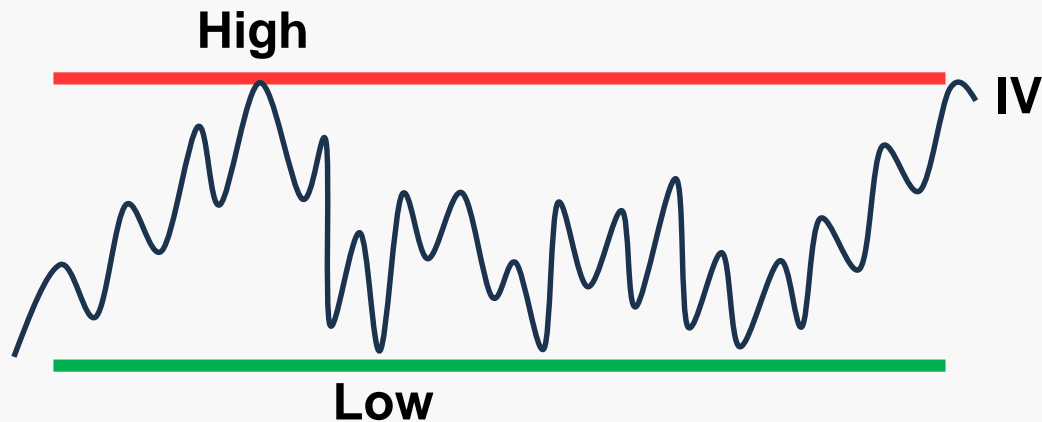
Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	3000	1379700	2.9%	2916	3000	1833300	2.9%	INFY	1800	2252000	2.6%	1754	1800	699200	2.6%
ADANIPTS	1400	1602400	5.3%	1329	1300	627600	-2.2%	ITC	490	7606400	2.0%	480	480	2406400	0.0%
APOLLOHOSP	7000	90500	0.5%	6966	7000	60875	0.5%	JSWSTEEL	1070	950400	7.1%	1000	980	636525	-2.0%
ASIANPAINT	3000	516200	3.9%	2887	2900	432600	0.4%	KOTAKBANK	1800	1288000	2.4%	1757	1800	714000	2.4%
AXISBANK	1200	2410625	2.4%	1172	1200	1164375	2.4%	LT	3600	1096350	0.7%	3575	3600	440700	0.7%
BAJAJ-AUTO	11000	391875	11.4%	9875	9000	160575	-8.9%	LTIM	6000	100950	4.9%	5720	5700	45900	-0.3%
BAJAJFINSV	1780	871500	2.6%	1736	1700	348000	-2.1%	M&M	3000	869225	3.5%	2899	2700	509425	-6.9%
BAJFINANCE	7500	391500	8.2%	6930	6800	226875	-1.9%	MARUTI	12000	398650	7.4%	11170	11000	157700	-1.5%
BHARTIARTL	1700	1568925	7.7%	1578	1600	1199375	1.4%	NESTLEIND	2400	464200	6.1%	2262	2400	244600	6.1%
BPCL	320	4525200	3.9%	308	300	2001600	-2.6%	NTPC	430	5797500	6.7%	403	400	1834500	-0.8%
BRITANNIA	5800	65900	3.5%	5605	5500	40800	-1.9%	ONGC	275	11234300	2.8%	267	300	2487100	12.2%
CIPLA	1600	855075	-0.1%	1601	1500	1177150	-6.3%	POWERGRID	330	6440400	4.2%	317	320	2223000	1.1%
COALINDIA	484.25	4134900	11.3%	435	484.25	1525650	11.3%	RELIANCE	1400	11688000	7.3%	1305	1450	5151000	11.1%
DIVISLAB	6000	131500	3.2%	5811	5000	178700	-14.0%	SBLIFE	1640	1260750	0.4%	1633	1640	245625	0.4%
DRREDDY	1300	1651250	2.2%	1272	1200	646250	-5.7%	SBIN	850	5406750	0.1%	849	800	3795000	-5.8%
EICHERMOT	5100	180075	4.1%	4900	4800	128275	-2.0%	SUNPHARMA	1900	1183000	5.3%	1804	1800	388850	-0.2%
GRASIM	2700	304500	1.9%	2651	2600	280500	-1.9%	TATACONSUM	1100	1096680	9.9%	1001	950	303696	-5.1%
HCLTECH	1800	954800	1.5%	1774	1760	270550	-0.8%	TATAMOTORS	900	4971450	7.7%	836	850	1959650	1.7%
HDFCBANK	1800	4713500	2.4%	1758	1700	2570150	-3.3%	TATASTEEL	155	26801500	1.8%	152	150	12402500	-1.5%
HDFCLIFE	740	1721500	3.2%	717	700	488400	-2.4%	TCS	4200	762475	5.8%	3971	4000	485625	0.7%
HEROMOTOCO	5000	363000	3.7%	4821	4800	138150	-0.4%	TECHM	1800	976800	10.3%	1633	1600	487200	-2.0%
HINDALCO	700	2185400	0.4%	698	700	908600	0.4%	TITAN	3300	888475	2.2%	3230	3000	505575	-7.1%
HINDUNILVR	2600	753900	3.1%	2521	2400	350700	-4.8%	ULTRACEMCO	11500	71750	2.9%	11176	11000	56950	-1.6%
ICICIBANK	1300	3190600	0.3%	1297	1300	1363600	0.3%	UPL	600	1012700	7.3%	559	550	579800	-1.6%
INDUSINDBK	1200	3157500	10.1%	1090	1000	1927000	-8.3%	WIPRO	550	2775000	1.2%	544	500	1648500	-8.0%

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

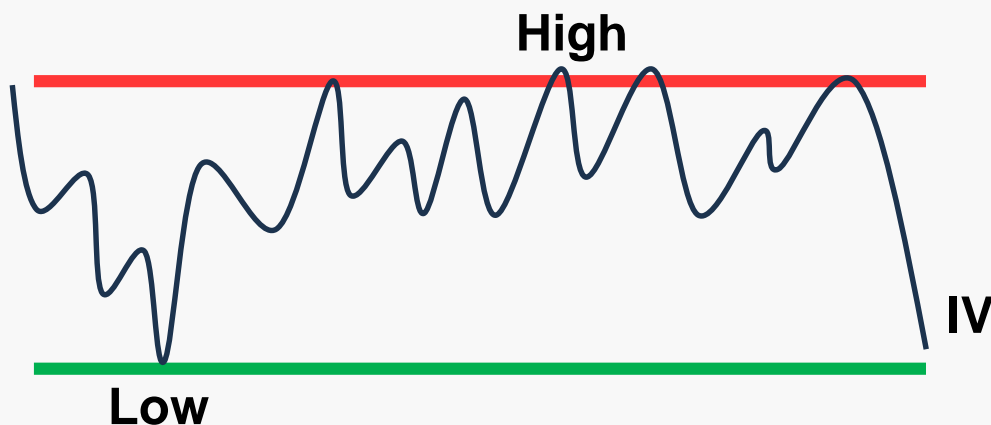
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

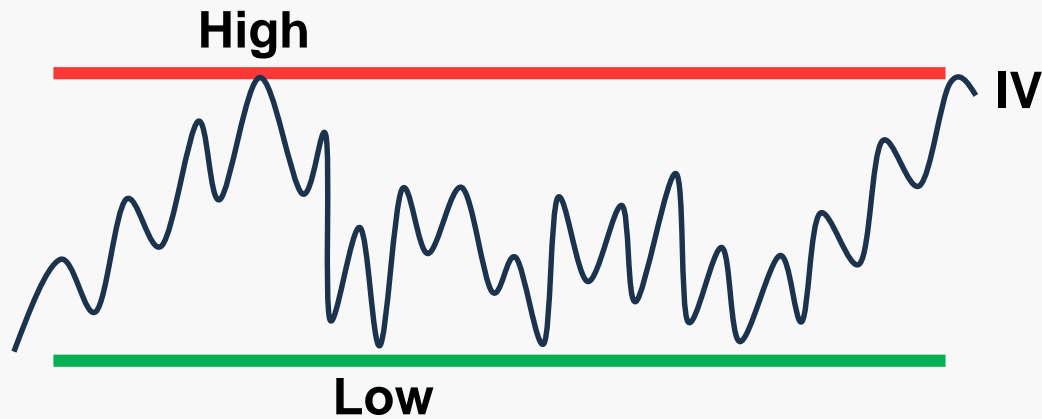


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

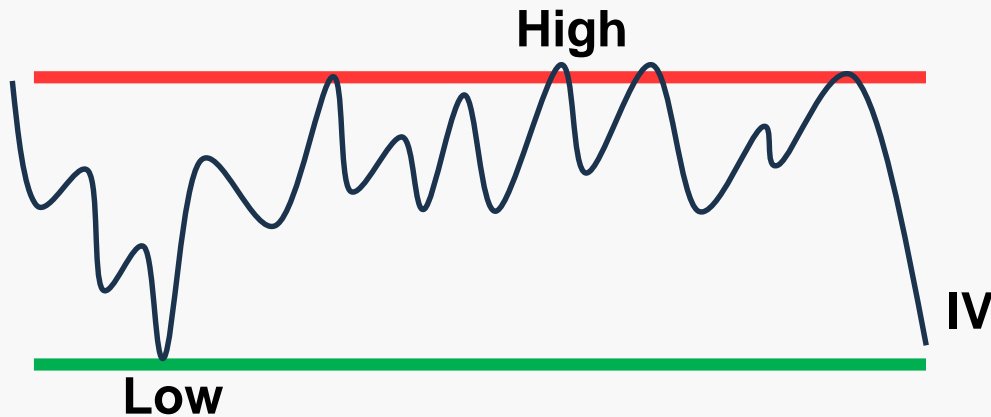


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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