



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,301	1.2% ▼
Open Interest (OI)	1,31,40,800	4.2% ▲
Change in OI (abs)	1,31,40,800	5,27,625 ▲
Premium / Discount (Abs)	101	2 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	52,200	0.9% ▼
Open interest (OI)	28,65,555	2.3% ▲
Change in OI (abs)	28,65,555	65,640 ▲
Premium / Discount (Abs)	283	50 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.94	0.1 ▲
Nifty ATM IV (%)	13.73	0.4 ▲
Bank Nifty ATM IV (%)	15.10	0.3 ▼
PCR (Nifty)	0.75	0.22 ▼
PCR (Bank Nifty)	0.79	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 (%)
APOLLOHOSP	22,46,500	17.0%	7463.65	6.6%
DIVISLAB	35,98,500	12.7%	5992.55	0.0%
PIIND	11,28,625	10.5%	4715.8	1.7%
SUNTV	53,88,750	4.1%	744.55	0.2%
FEDERALBNK	6,18,65,000	3.4%	206.99	0.6%

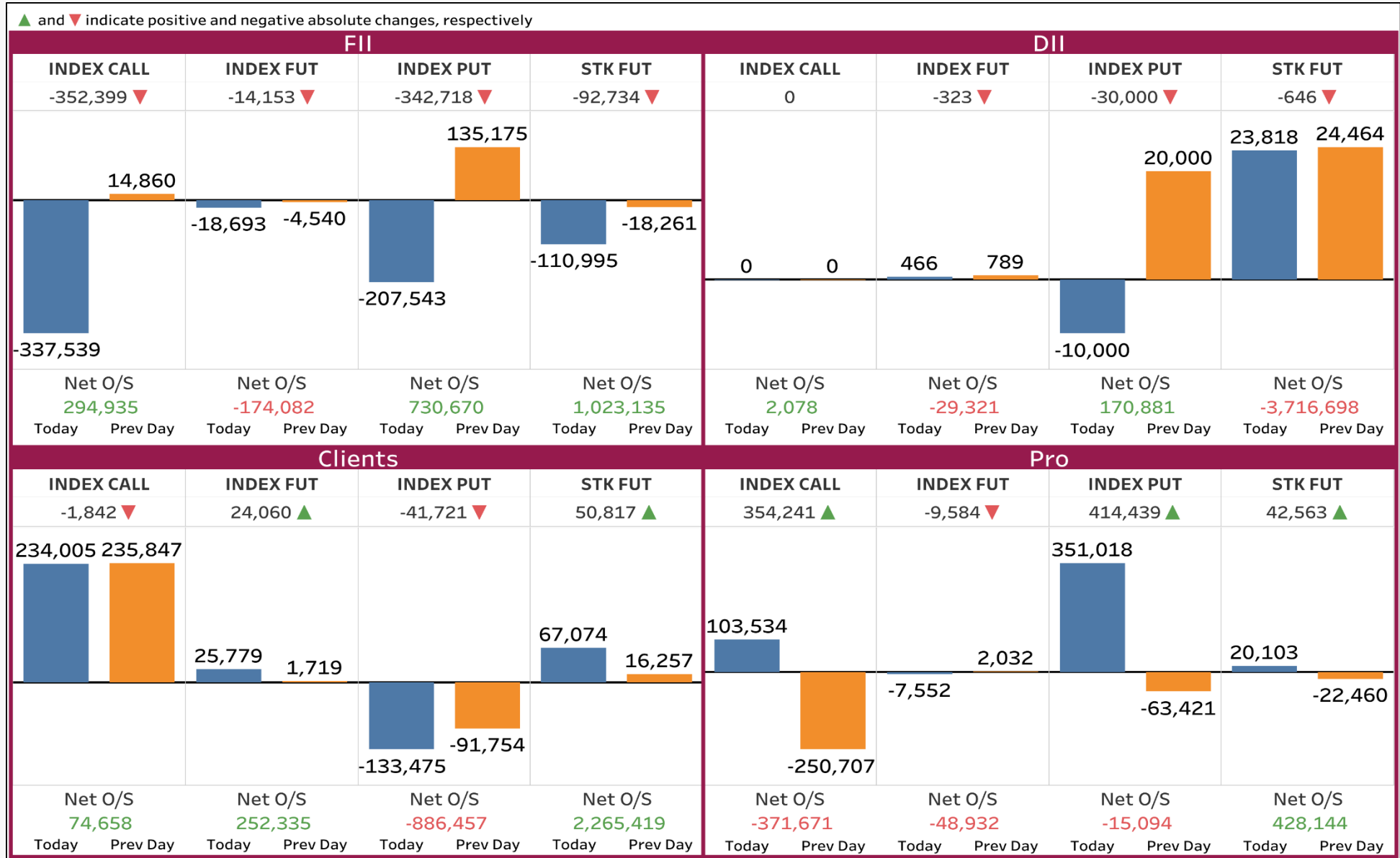
Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HINDALCO	5,30,40,400	25.7%	651.2	-8.5%
GRANULES	2,01,63,000	21.8%	572.95	-1.3%
ABBOTINDIA	1,36,160	13.9%	28351.55	-3.2%
ABFRL	6,53,22,400	12.8%	297.55	-1.2%
ESCORTS	13,47,725	9.2%	3651.5	-2.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TCS	1,41,27,225	-7.9%	4160.75	0.2%
GUJGASLTD	75,16,250	-4.5%	542.6	2.5%
HAL	1,22,57,400	-3.0%	4442.75	0.8%
HDFCAMC	36,31,350	-2.5%	4530.35	0.2%
HDFCLIFE	1,94,87,600	-2.2%	713.25	0.3%

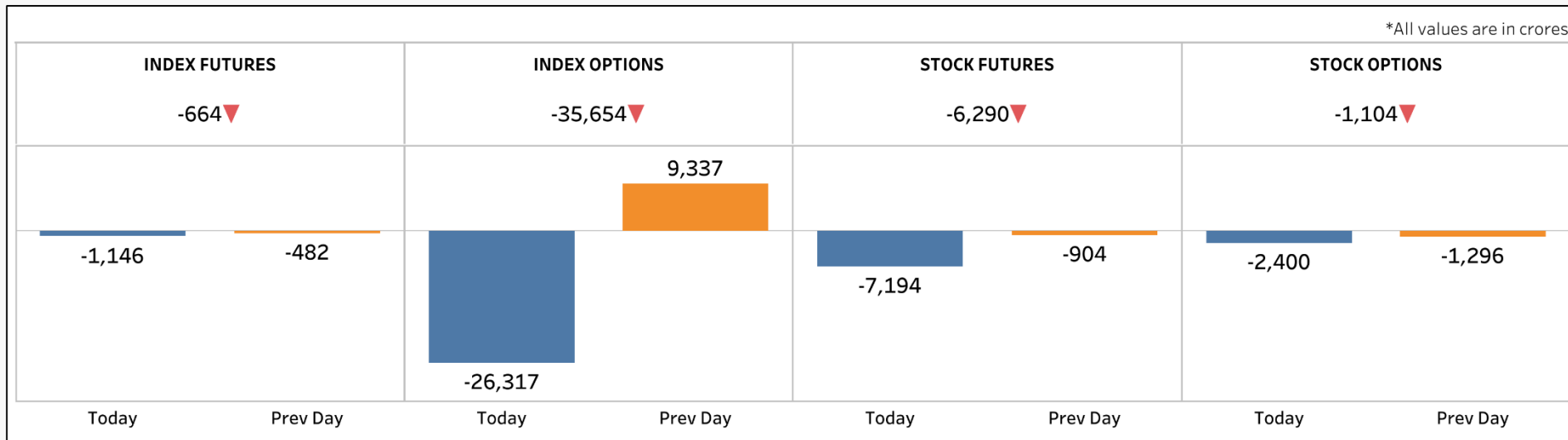
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PERSISTENT	15,17,800	-6.8%	5746.75	-0.1%
ALKEM	17,82,900	-5.8%	5717.65	-2.4%
EICHERMOT	39,62,350	-5.2%	4891.4	-1.1%
LTTS	9,26,200	-4.9%	5164.35	-1.2%
MCX	17,47,400	-3.5%	6431.7	-0.9%

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

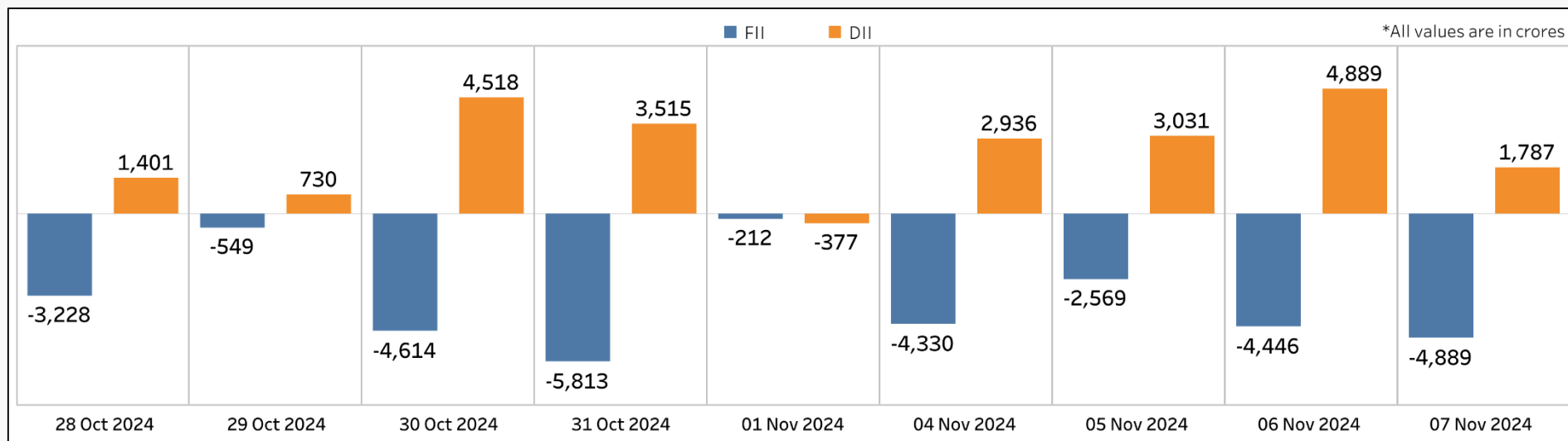
## Open Interest Data by Participant



## Daily Net Open Interest Change

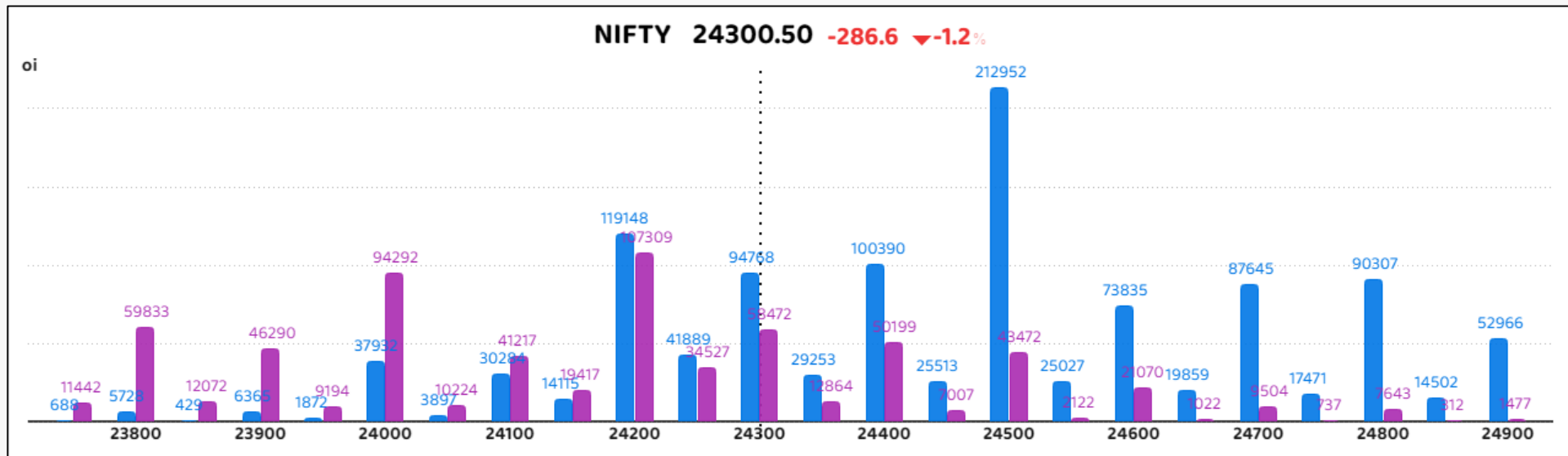


## DII and FII Daily Cash Market Flows



## Positioning Stack by Strike (Current Week Expiry)

Call ■ Put ■



For the Nifty, the 24,500 call and the 24,200 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.

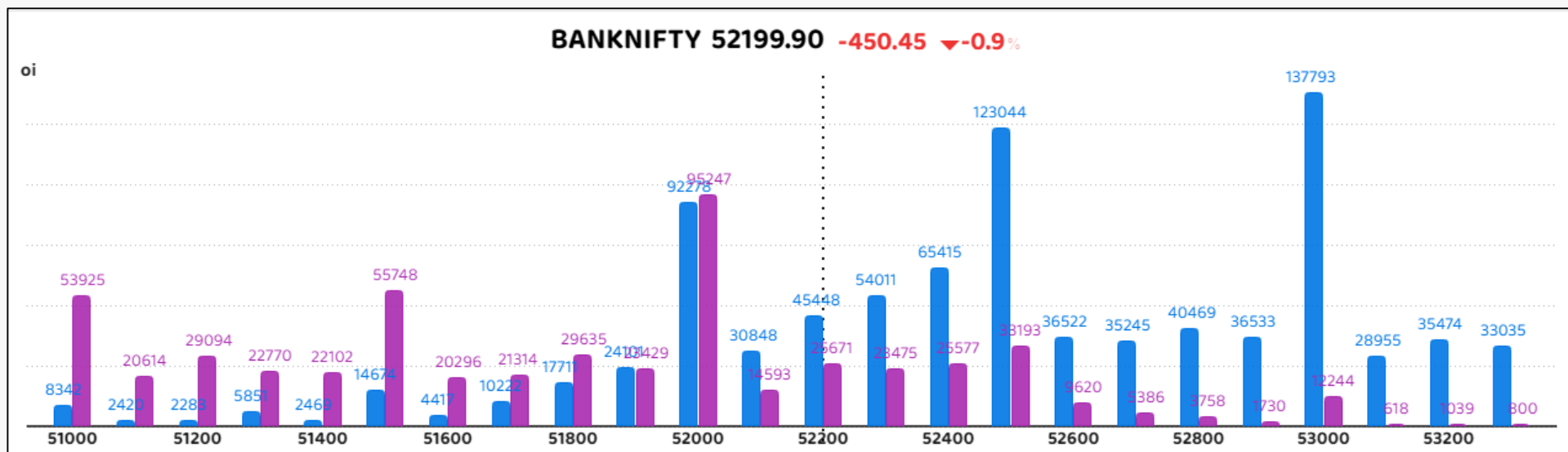
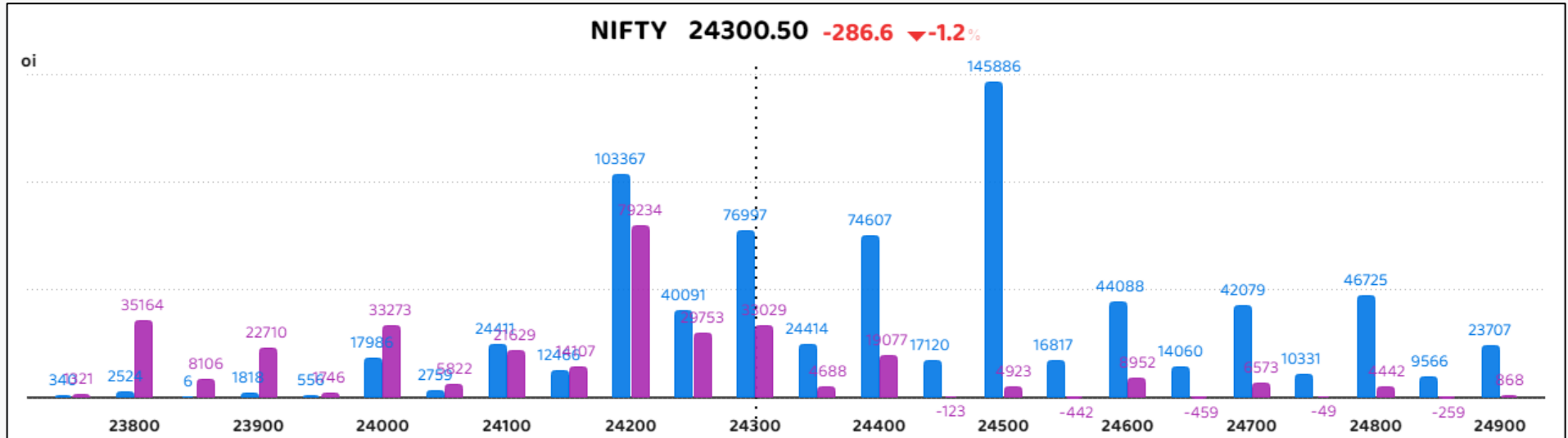


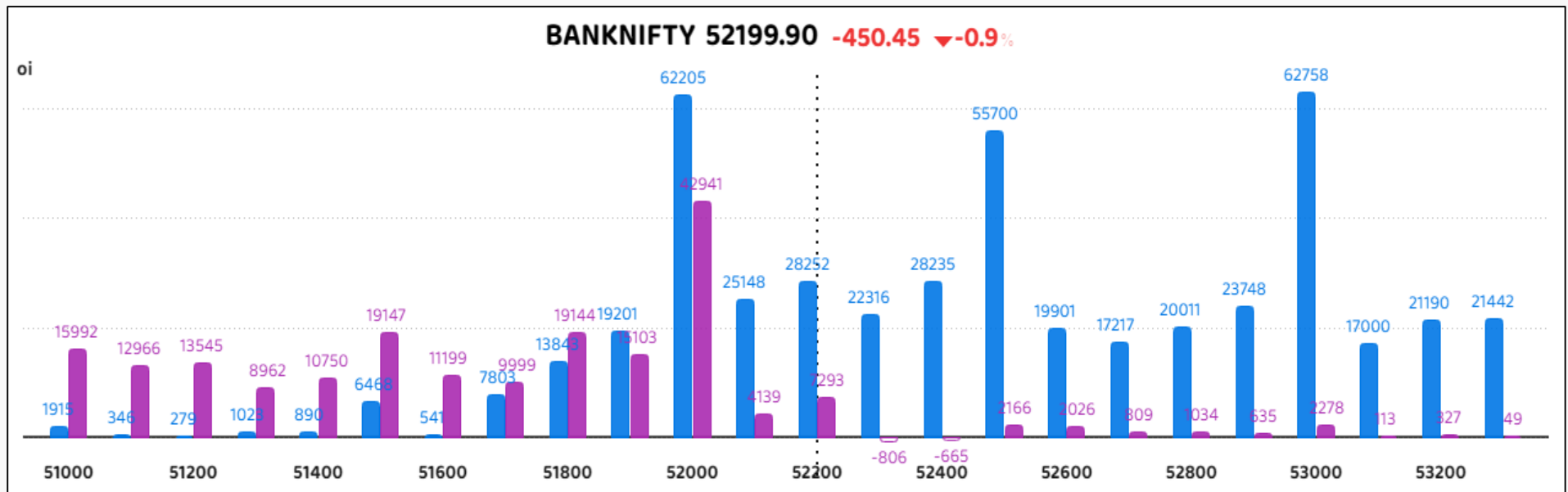
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Current Week Expiry)

Call ■ Put ■

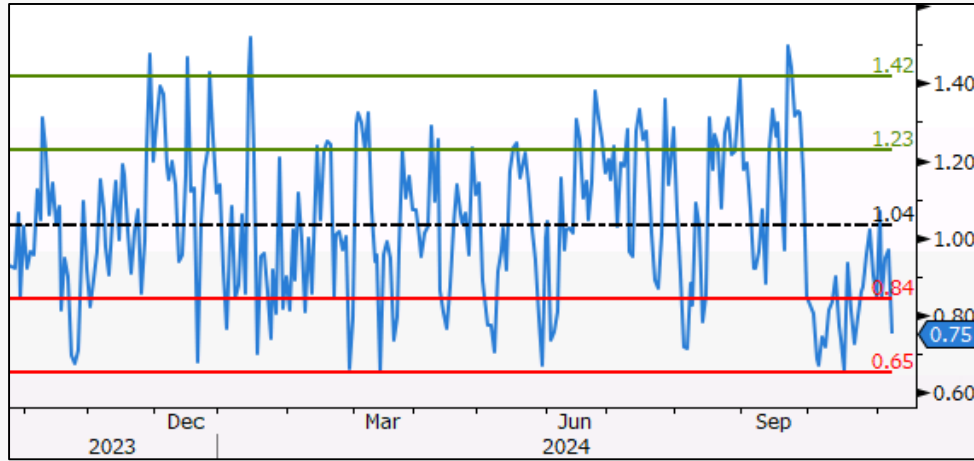


The largest open interest changes (contracts) were seen at the 24,500 call strike and 24,200 put strike.

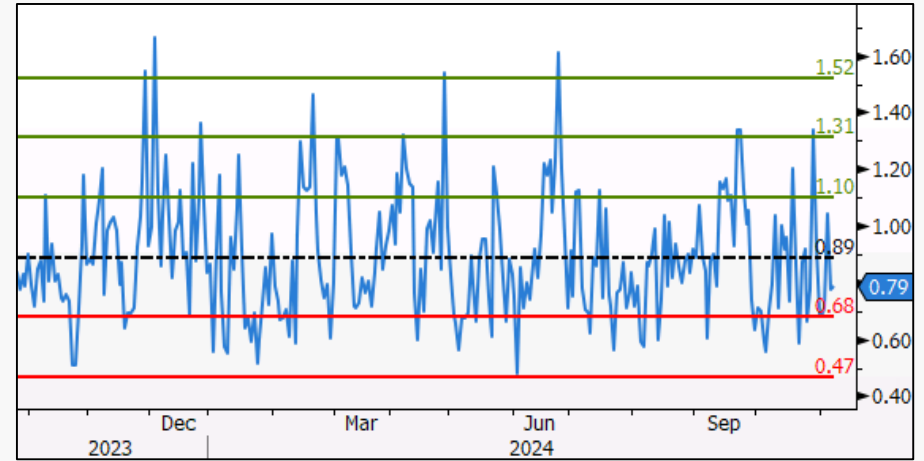


For the Bank Nifty, the biggest open interest changes were seen at the 53,000, Call Strike & 52,000 Put strike.

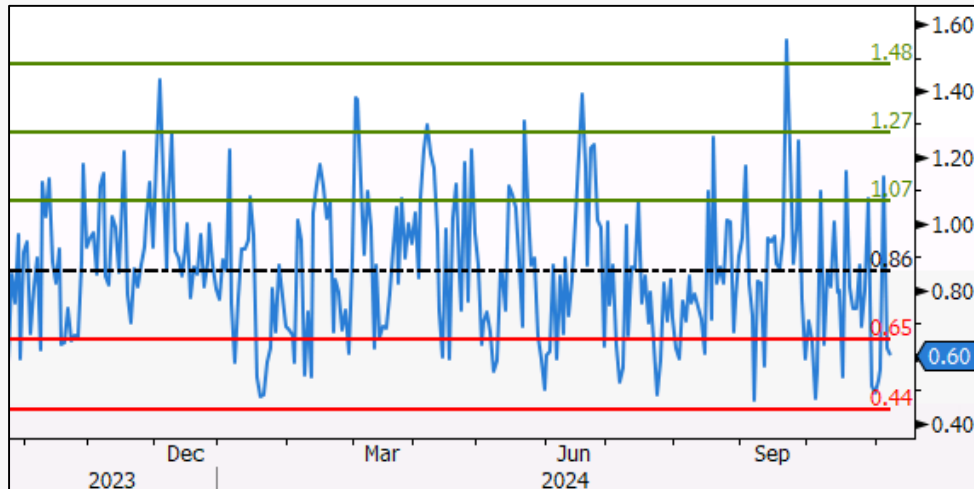
**Nifty**



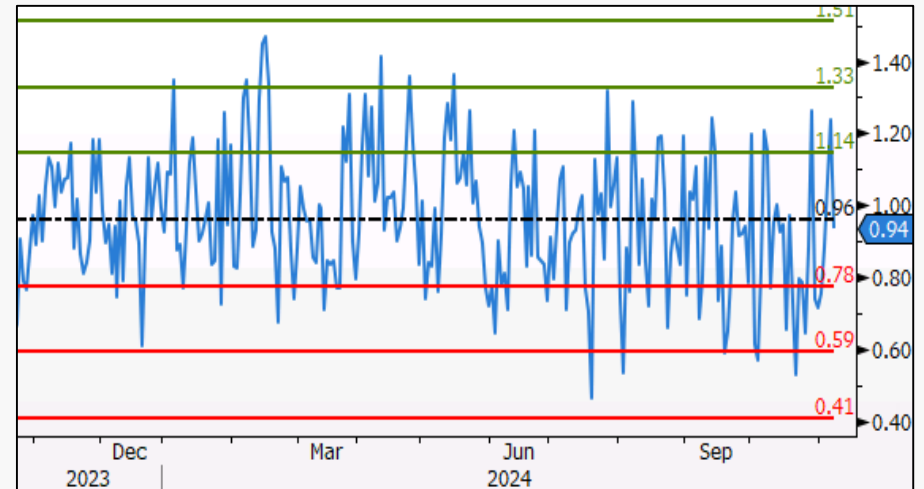
**Bank Nifty**



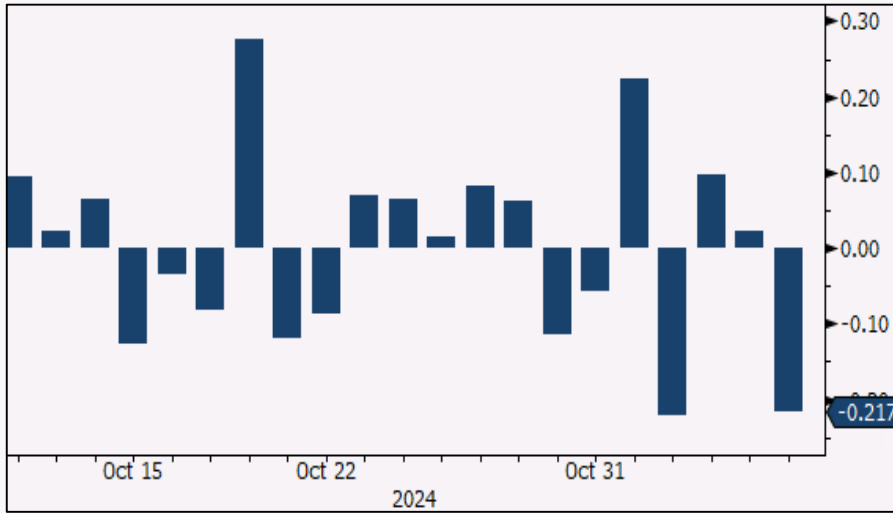
**Fin Nifty**



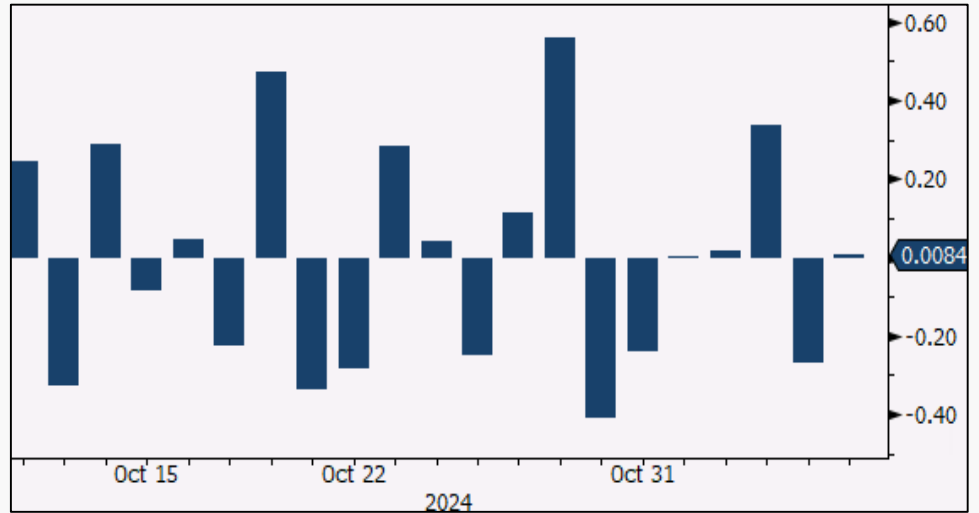
**Midcap Nifty**



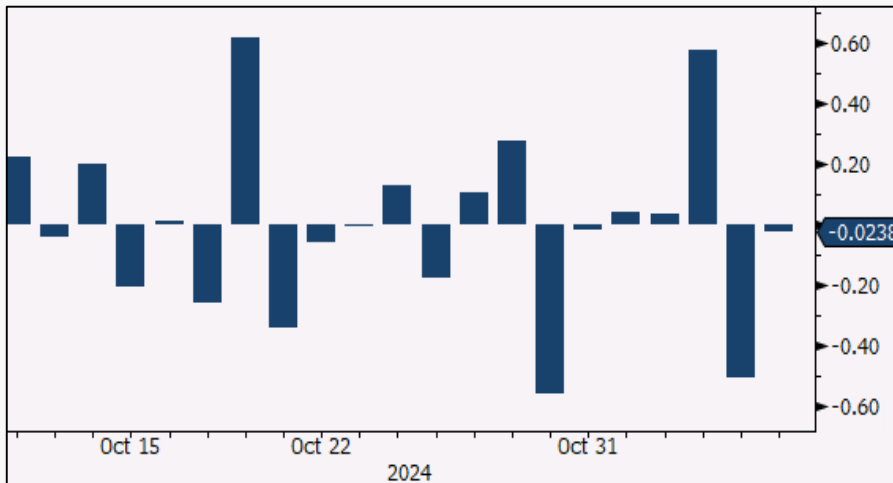
**Nifty**



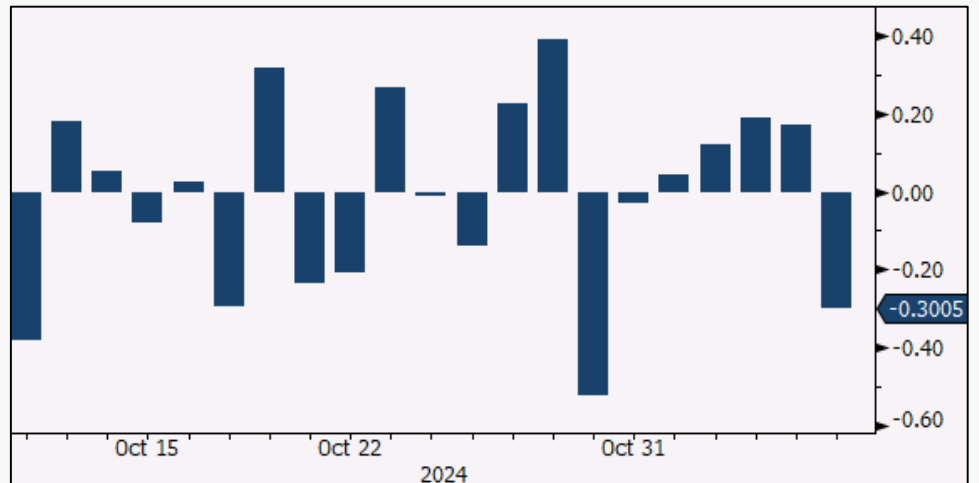
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TATA MOTORS LTD	819.75	-2.4	37.3	41.8	19.8	79.7
HERO MOTOCORP LT	4816	-1.6	32.0	40.4	2.8	77.6
TRENT LTD	6505.5	-6.5	41.6	54.5	2.2	75.3
DIXON TECHNOLOGI	15698.5	0.3	38.1	51.3	1.8	73.4
TITAN CO LTD	3120.85	-1.8	24.5	33.5	2.3	71.3

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
GMR AIRPORTS INF	80.89	-0.9	30.3	69.5	28.1	5.2
HDFC LIFE INSURA	711.7	0.4	21.4	80.5	17.4	6.3
INDIAN RAILWAY C	844.05	-1.6	25.4	59.6	22.6	7.7
BANK OF BARODA	262.75	0.1	27.9	66.9	24.5	8.0
AMBUJA CEMENTS	570.7	-2.1	23.4	70.4	19.1	8.3

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA MOTORS LTD	819.75	-2.4	37.3	41.8	19.8	91.9
LUPIN LTD	2111.5	-2.5	34.9	45.8	18.9	91.2
ICICI BANK LTD	1278.7	-1.8	25.0	35.4	9.3	90.1
MUTHOOT FINANCE	1823.85	-3.7	36.3	51.9	15.7	89.2
ALKEM LABORATORI	5723.8	-2.2	34.4	48.8	14.7	89.1

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DR REDDY'S LABS	1287.35	-1.1	17.3	35.3	14.8	2.0
AMBUJA CEMENTS	570.7	-2.1	23.4	70.4	19.1	2.6
GMR AIRPORTS INF	80.89	-0.9	30.3	69.5	28.1	2.6
METROPOLIS HEALT	2111.85	-3.6	26.5	54.6	23.4	2.8
COAL INDIA LTD	435.35	-0.1	23.6	53.6	4.3	3.0

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BALKRISHNA INDS	2866.6	-0.1	3993	691	5.8
NAVIN FLUORINE I	3540.85	1.3	9031	1936	4.7
COROMANDEL INTER	1777.95	3.0	9190	2257	4.1
VODAFONE IDEA LT	8.05	-1.5	10205	2609	3.9
INDUS TOWERS LTD	339.5	-0.7	12601	3332	3.8

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
INDIAN RAILWAY C	844.05	-1.6	13372	48539	3.6
UNITED SPIRITS	1438.95	-1.2	6441	9470	1.5
IPCA LABS LTD	1558.4	-1.6	1260	1527	1.2
MUTHOOT FINANCE	1823.85	-3.7	10427	11888	1.1
BHARAT FORGE CO	1446.65	-1.7	4253	4243	1.0

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
TRENT LTD	6505.5	-6.5	48855	48855	100.0
ABB INDIA LTD	6999.75	-2.3	17811	17811	100.0
ADITYA BIRLA CAP	203.27	-1.4	12076	12798	94.4
CUMMINS INDIA	3554.55	-1.6	7997	8565	93.4
MCX INDIA LTD	6422.6	-0.5	15258	17217	88.6

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
CUMMINS INDIA	3554.55	-1.6	7359	7359	100.0
DIXON TECHNOLOGI	15698.5	0.3	27560	27560	100.0
ADITYA BIRLA CAP	203.27	-1.4	7962	8061	98.8
MCX INDIA LTD	6422.6	-0.5	10130	10972	92.3
TRENT LTD	6505.5	-6.5	19620	21365	91.8

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
TRENT LTD	6505.5	-6.5	281075	281075	100

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
TRENT LTD	6505.5	-6.5	169484	169484	100

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
APOLLO HOSPITALS	7424.85	6.6	147258	18121	8.1
TRENT LTD	6505.5	-6.5	281075	39883	7.0
CHAMBAL FERTILIS	515.65	2.4	31687	5028	6.3
GRANULES INDIA	572.1	-0.8	31921	5117	6.2
ABBOTT INDIA LTD	28314	-2.9	9392	1863	5.0

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TRENT LTD	6505.5	-6.5	169484	22054	7.7
APOLLO HOSPITALS	7424.85	6.6	62785	10219	6.1
ABBOTT INDIA LTD	28314	-2.9	5848	1034	5.7
CHAMBAL FERTILIS	515.65	2.4	13436	2382	5.6
GRANULES INDIA	572.1	-0.8	16056	2939	5.5

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
TRENT LTD	6505.5	-6.5	48855	20780	1.8
GRANULES INDIA	572.1	-0.8	6948	3313	1.6
ABBOTT INDIA LTD	28314	-2.9	2276	1198	1.5
ABB INDIA LTD	6999.75	-2.3	17811	11235	1.5
APOLLO HOSPITALS	7424.85	6.6	12264	8232	1.4

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
APOLLO HOSPITALS	7424.85	6.6	10269	5044	2.0
GRANULES INDIA	572.1	-0.8	4280	2362	1.8
ABBOTT INDIA LTD	28314	-2.9	1671	946	1.8
CIPLA LTD	1576.15	-1.1	17500	10073	1.7
TRENT LTD	6505.5	-6.5	19620	11914	1.6

## 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	3100	1232100	4.4%	2970	3000	1885200	1.0%	INFY	1800	2855600	-0.2%	1803	1800	1189600	-0.2%
ADANIPTS	1400	1964000	3.5%	1353	1300	700800	-3.9%	ITC	500	8777600	4.6%	478	480	2865600	0.4%
APOLLOHOSP	7500	207500	1.0%	7425	7000	170250	-5.7%	JSWSTEEL	1070	1117800	8.1%	990	1000	594675	1.0%
ASIANPAINT	3000	770200	5.5%	2843	2800	555400	-1.5%	KOTAKBANK	1800	2255200	3.0%	1747	1760	897600	0.7%
AXISBANK	1200	3041250	3.5%	1160	1200	1175000	3.5%	LT	3700	1486350	1.5%	3647	3600	545550	-1.3%
BAJAJ-AUTO	11000	424500	11.6%	9857	9500	130800	-3.6%	LTIM	6500	95700	10.4%	5886	5500	51150	-6.6%
BAJAJFINSV	1800	1016000	4.1%	1730	1700	308000	-1.7%	M&M	3000	1715350	3.8%	2891	2800	626850	-3.2%
BAJFINANCE	7000	559875	1.4%	6905	7000	273250	1.4%	MARUTI	12000	459700	6.2%	11300	11000	156200	-2.7%
BHARTIARTL	1620	2174075	2.8%	1576	1600	1143325	1.5%	NESTLEIND	2400	513000	6.1%	2263	2400	258400	6.1%
BPCL	320	4480200	1.6%	315	300	1643400	-4.8%	NTPC	420	6583500	4.0%	404	400	2461500	-0.9%
BRITANNIA	6000	59000	5.5%	5689	5200	75800	-8.6%	ONGC	275	25664100	3.7%	265	300	2492875	13.1%
CIPLA	1600	888875	1.5%	1576	1500	1059825	-4.8%	POWERGRID	330	6931800	5.4%	313	310	2473200	-0.9%
COALINDIA	484.25	4141200	11.2%	435	484.25	1514100	11.2%	RELIANCE	1400	12951000	7.2%	1306	1300	5317000	-0.4%
DIVISLAB	6000	313000	0.7%	5960	5000	237000	-16.1%	SBLIFE	1640	1258500	3.2%	1590	1600	190875	0.6%
DRREDDY	1300	1603750	1.0%	1287	1200	461250	-6.8%	SBIN	900	7389750	4.7%	860	800	4200000	-6.9%
EICHERMOT	5000	382025	2.5%	4878	4800	155400	-1.6%	SUNPHARMA	1900	2006550	6.1%	1791	1800	374500	0.5%
GRASIM	2700	372750	5.4%	2563	2500	231750	-2.4%	TATACONSUM	1100	1249440	11.7%	985	950	409944	-3.5%
HCLTECH	1820	1209250	-0.7%	1832	1800	526050	-1.7%	TATAMOTORS	900	6063200	9.8%	820	800	2751100	-2.4%
HDFCBANK	1800	6211700	3.1%	1747	1700	2340250	-2.7%	TATASTEEL	155	39209500	2.7%	151	150	17127000	-0.6%
HDFCLIFE	730	2652100	2.6%	712	710	575300	-0.2%	TCS	4200	805875	1.2%	4151	4000	575750	-3.6%
HEROMOTOCO	5000	357450	3.8%	4816	5000	126600	3.8%	TECHM	1800	976800	9.0%	1651	1600	476400	-3.1%
HINDALCO	700	5475400	8.0%	648	600	2139200	-7.4%	TITAN	3300	1021475	5.7%	3121	3000	560525	-3.9%
HINDUNILVR	2600	836400	5.0%	2476	2400	382500	-3.0%	ULTRACEMCO	11500	89750	4.1%	11051	11000	71200	-0.5%
ICICIBANK	1300	3339700	1.7%	1279	1200	1563100	-6.2%	UPL	600	1154400	5.8%	567	550	643500	-3.0%
INDUSINDBK	1200	3900500	13.6%	1057	1000	1914000	-5.4%	WIPRO	600	3486000	6.5%	563	500	1611000	-11.3%

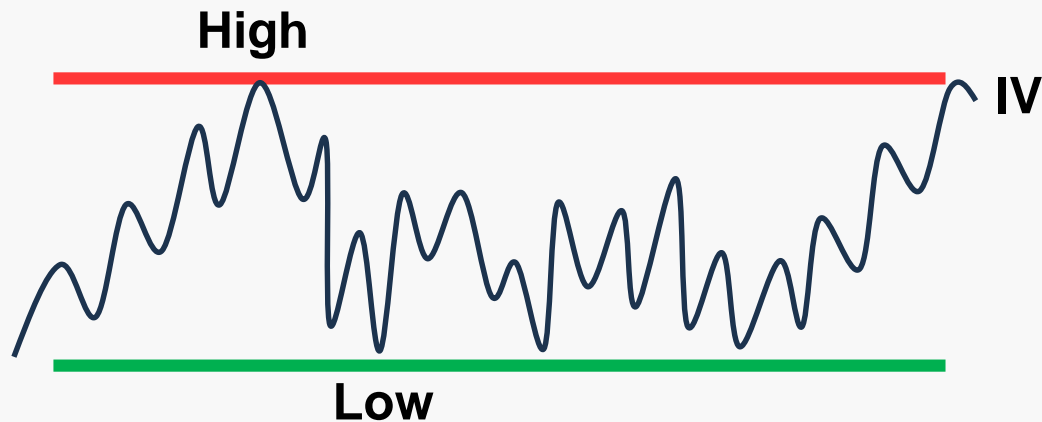
If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green  
 If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike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



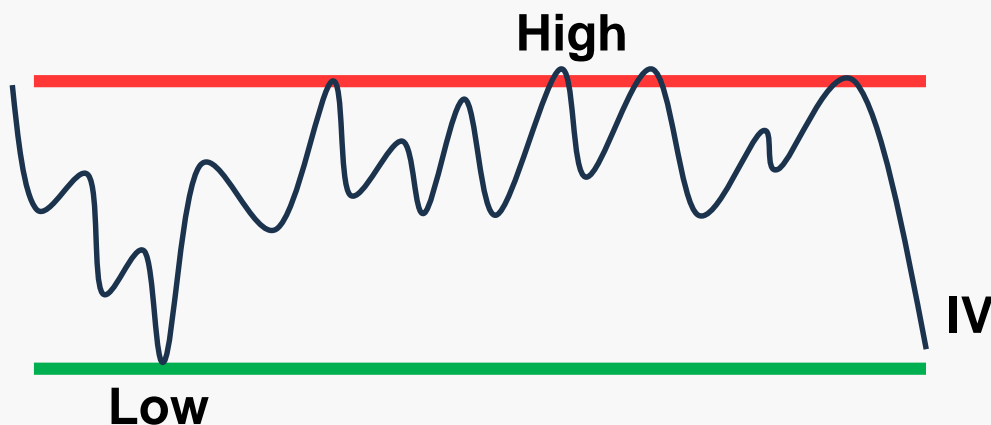
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

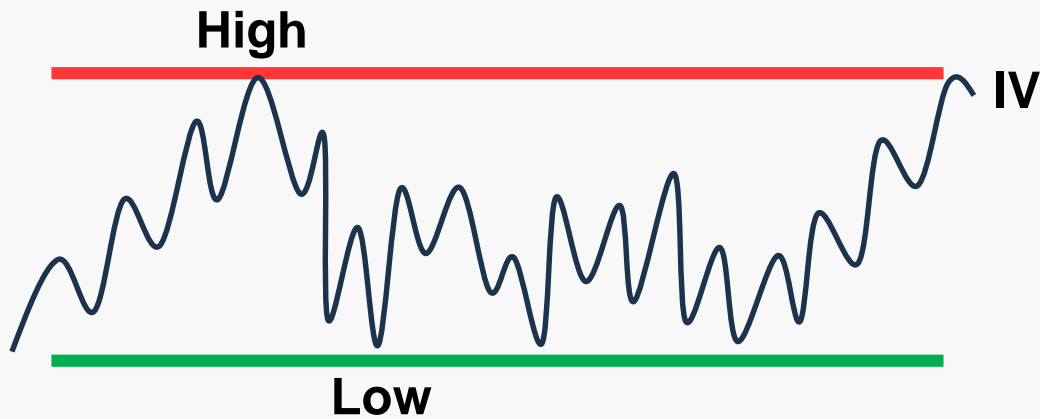


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

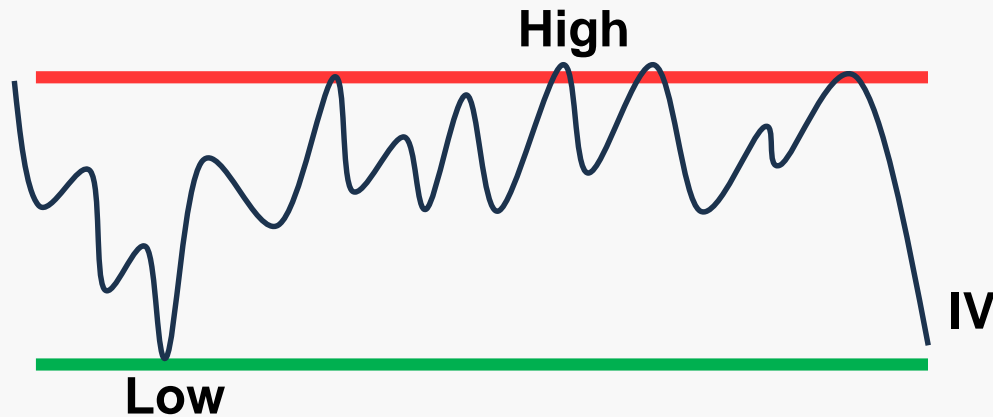


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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