



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,602	0.2% ▼
Open Interest (OI)	1,43,77,500	3.0% ▲
Change in OI (abs)	1,43,77,500	4,15,650 ▲
Premium / Discount (Abs)	69	31 ▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	50,297	0.1% ▼
Open interest (OI)	33,95,055	1.1% ▼
Change in OI (abs)	33,95,055	37,290 ▼
Premium / Discount (Abs)	117	153 ▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Volatility Insights

	Value	Change
India VIX Index	14.78	0.7 ▼
Nifty ATM IV (%)	12.70	1.3 ▼
Bank Nifty ATM IV (%)	14.56	0.5 ▼
PCR (Nifty)	0.80	0.10 ▲
PCR (Bank Nifty)	0.95	0.24 ▲

\*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 (%)
EICHERMOT	45,57,175	17.4%	4893.35	6.6%
UBL	19,69,200	6.9%	1862.8	1.1%
UPL	3,36,80,400	5.0%	528.8	2.0%
DEEPAKNTR	24,69,000	4.3%	2620.5	5.7%
APOLLOTYRE	1,39,31,500	3.8%	473.55	4.5%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
PIIND	14,76,500	19.6%	4251.3	-4.6%
TATACONSUM	1,38,23,184	12.5%	927.9	-2.8%
MANAPPURAM	6,01,68,000	9.5%	155.11	-1.3%
ABB	18,36,125	9.1%	6700.3	-1.8%
DALBHARAT	24,85,725	8.3%	1718.9	-1.3%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
GNFC	71,91,600	-11.1%	554.65	1.6%
NATIONALUM	6,88,23,750	-7.9%	220.05	0.7%
CANFINHOME	34,34,925	-5.7%	825.4	1.1%
CUB	3,42,75,000	-5.5%	172.24	0.8%
MOTHERSON	10,66,24,250	-4.3%	165.77	3.2%

### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
ALKEM	15,72,000	-10.2%	5529.9	-0.9%
APOLLOHOSP	18,99,125	-4.2%	6861.7	-0.2%
HINDALCO	5,16,44,600	-3.9%	627.35	-0.2%
ZYDUSLIFE	1,34,82,000	-3.8%	957.15	-0.7%
DIVISLAB	32,27,500	-3.3%	5749.95	-0.6%

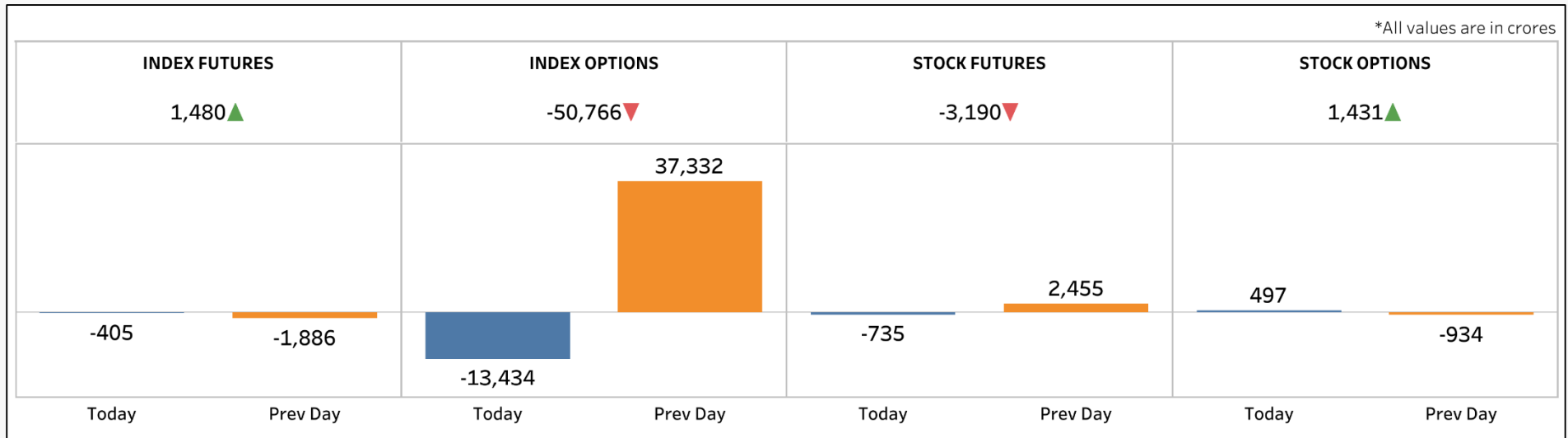
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

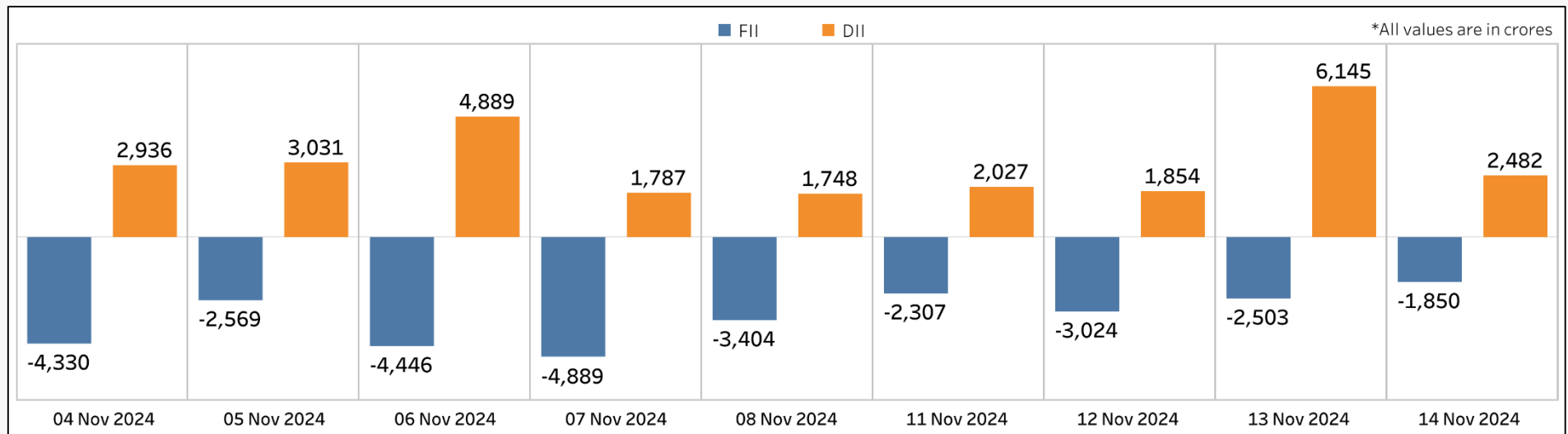
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-96,808 ▼	18,426 ▲	-179,290 ▼	-49,031 ▼	0	-269 ▼	-2,388 ▼	12,841 ▲
92,048		95,516	35,444	0	1,000	1,269	5,938
-4,760	-8,776	-83,774	-13,587				-6,903
	-27,202					4,000	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
339,518	-221,350	758,717	940,523	2,078	-26,874	186,915	-3,665,716
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
-81,376 ▼	-23,827 ▼	9,645 ▲	45,876 ▲	178,184 ▲	5,670 ▲	172,033 ▲	-9,686 ▼
	16,378		4,245	286,506			
	40,205	-31,626		108,322			
-281,746		-41,271	-41,631		-8,602	113,788	
					-14,272	-58,245	
							3,404
							13,090
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-113,972	291,128	-1,090,171	2,218,222	-227,624	-42,904	144,539	506,971
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

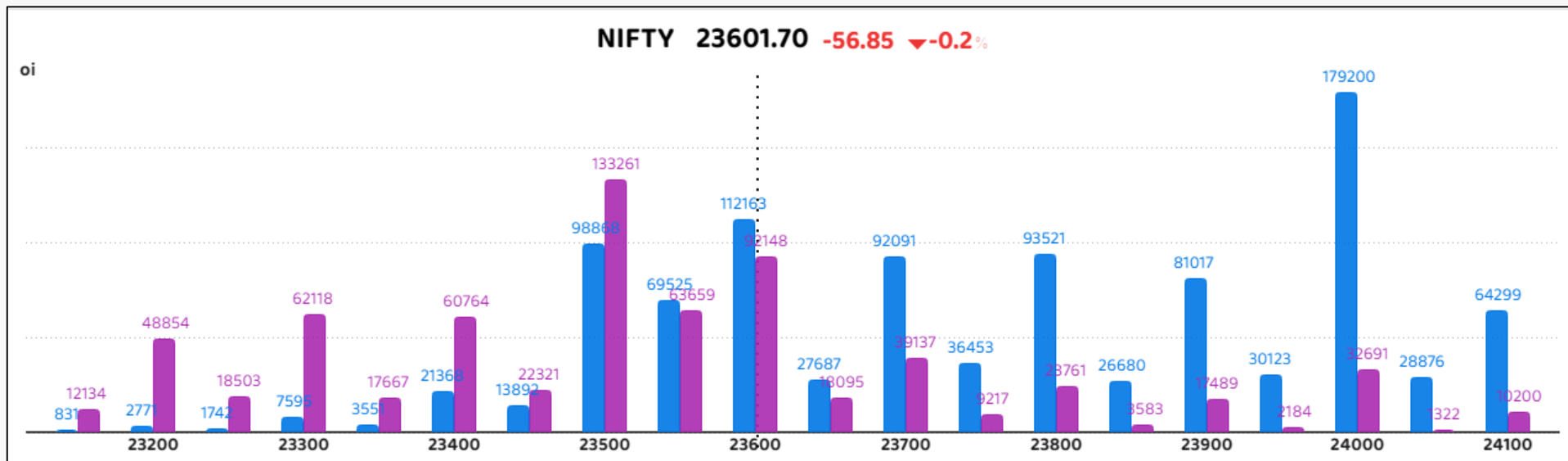


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 24,000 call and the 23,500 put had the highest call and put concentration (contracts). For the Bank Nifty, the 51,000 call and the 49,500 put saw the most amount of open interest.

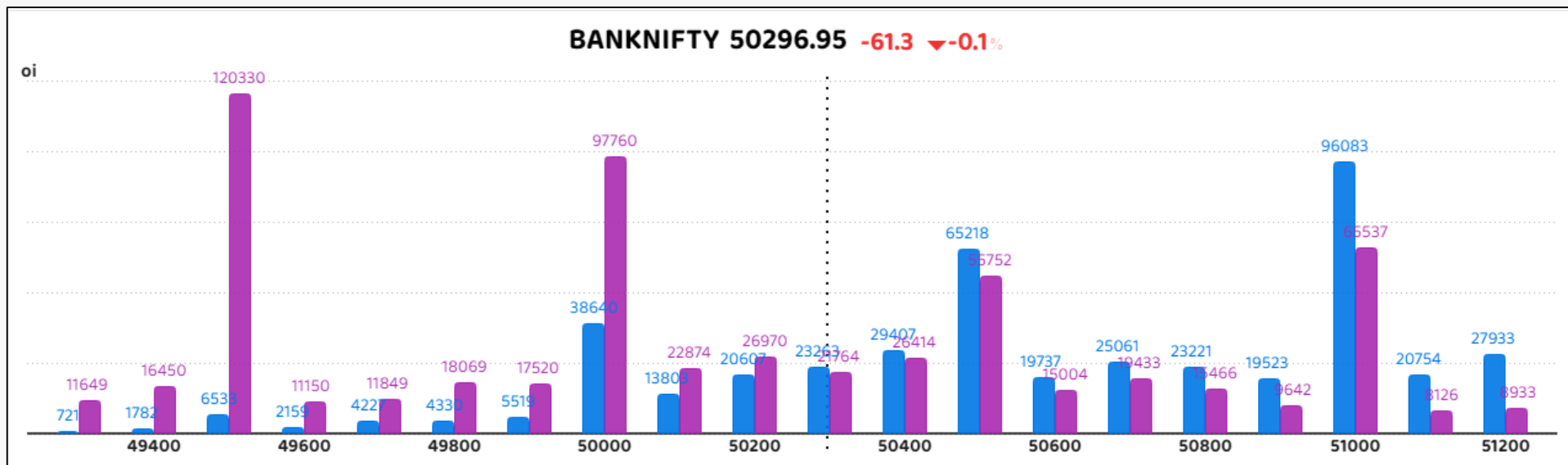
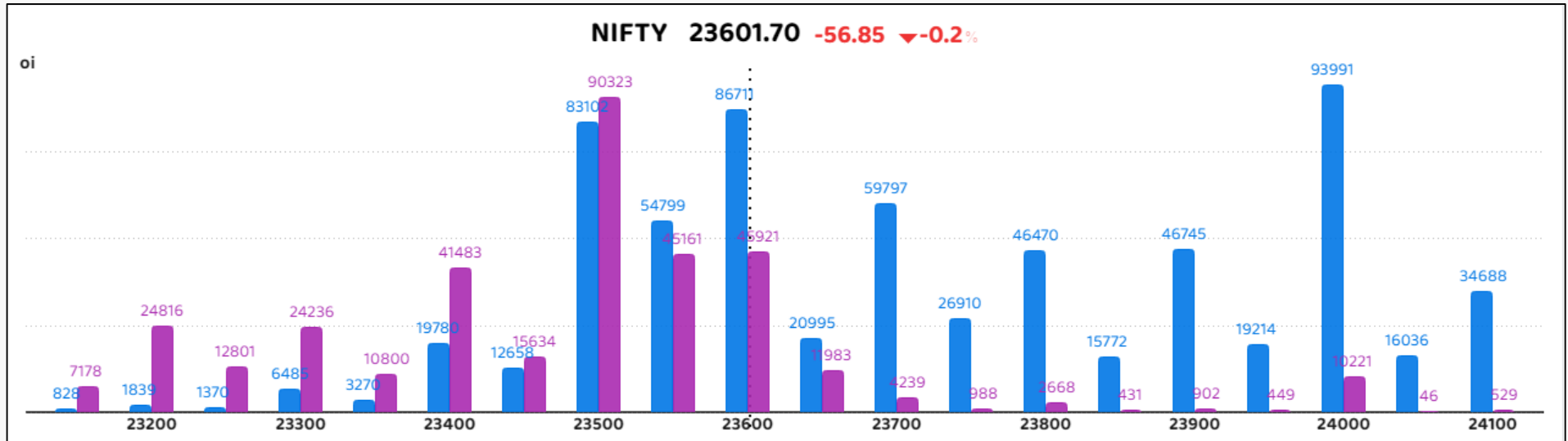


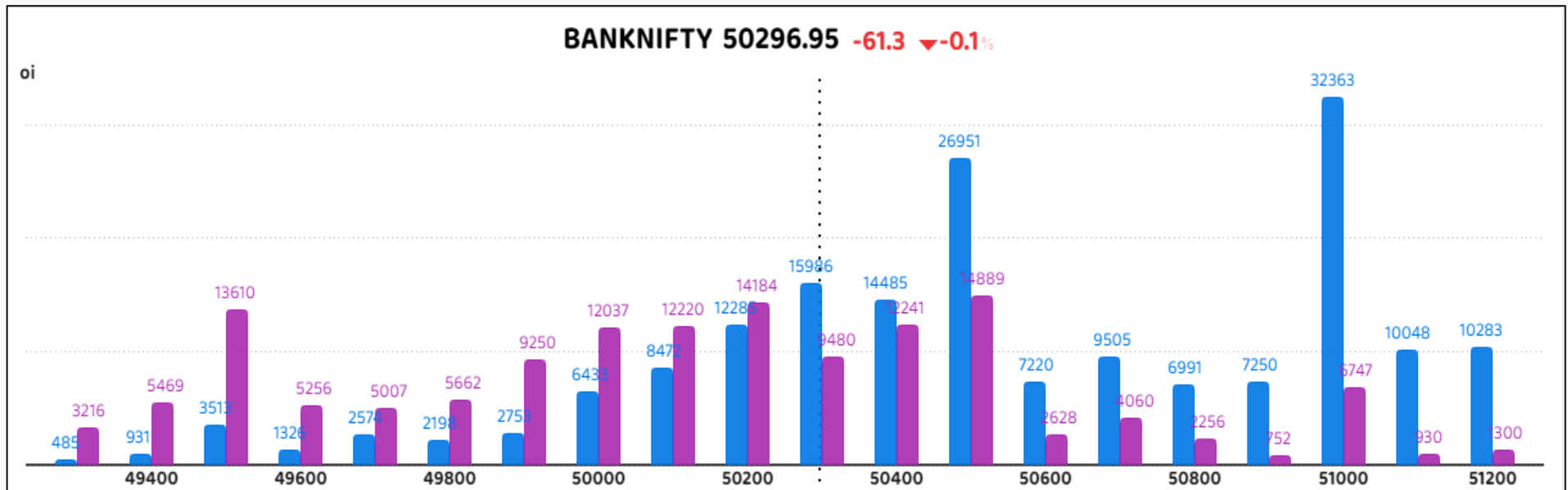
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

**Open Interest Change (Current Week Expiry)**

Call ■ Put ■

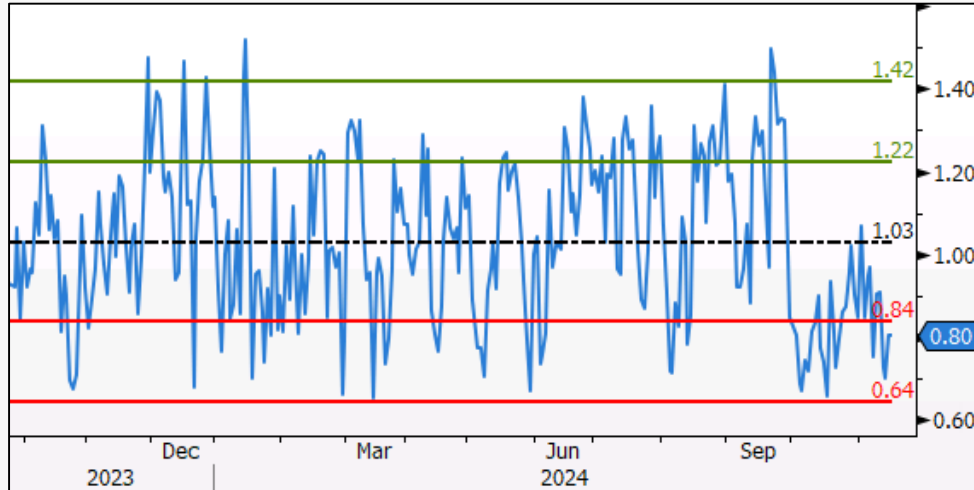


The largest open interest changes (contracts) were seen at the 24,000 call strike and 23,500 put strike.

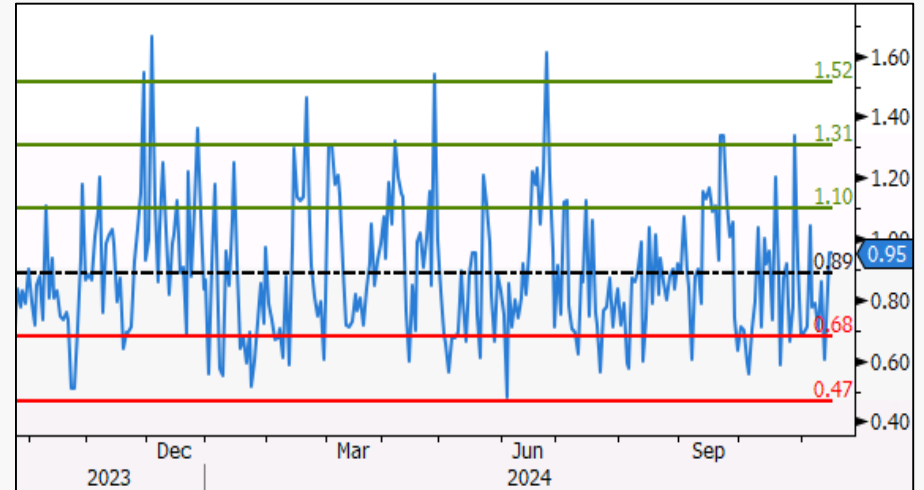


For the Bank Nifty, the biggest open interest changes were seen at the 51,000, Call Strike & 49,500 Put strike.

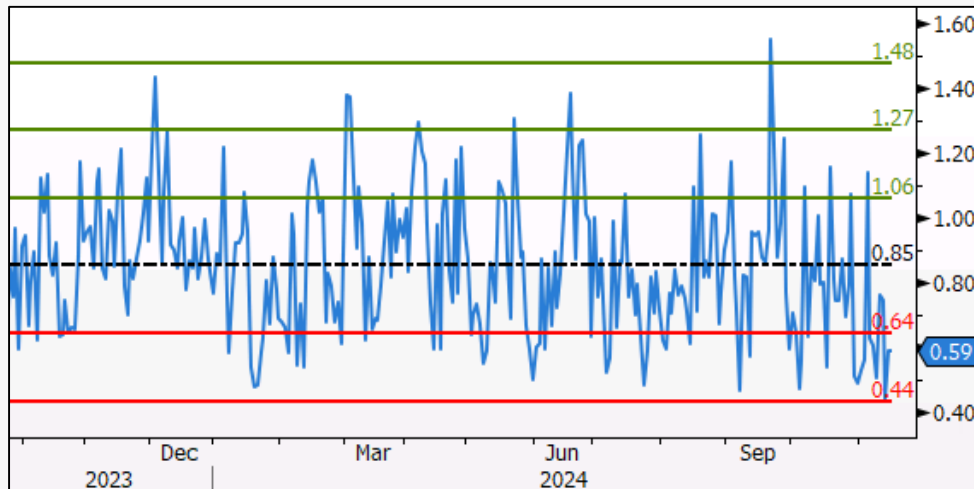
## Nifty



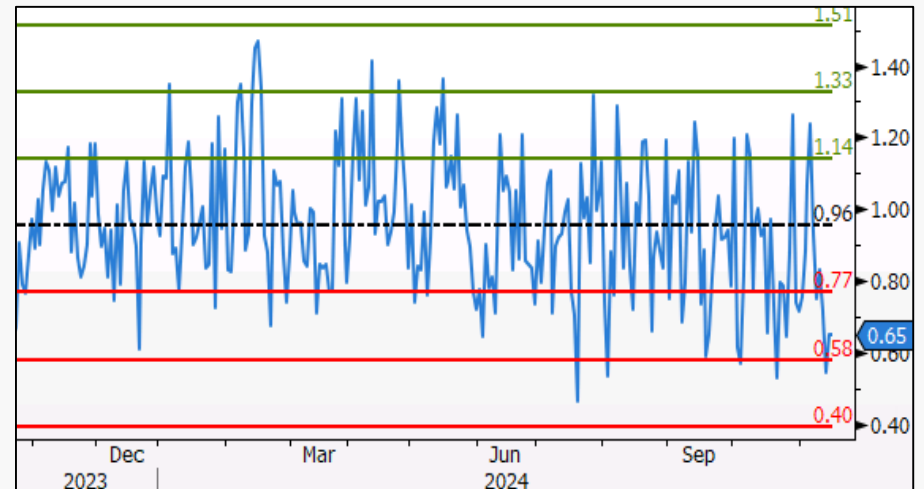
## Bank Nifty



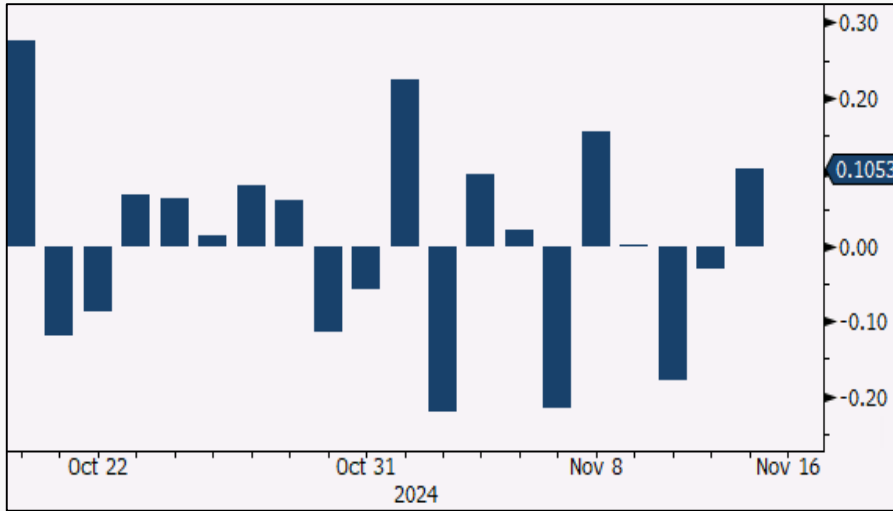
## Fin Nifty



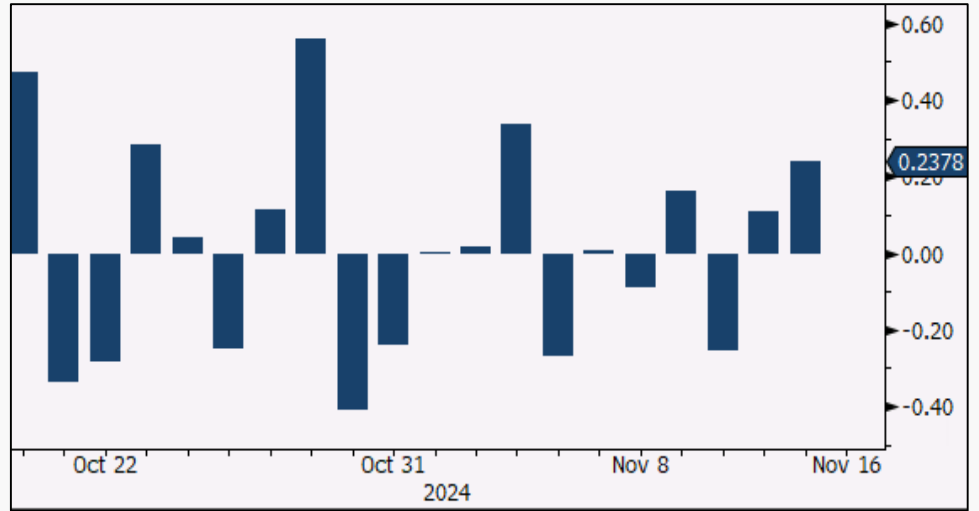
## Midcap Nifty



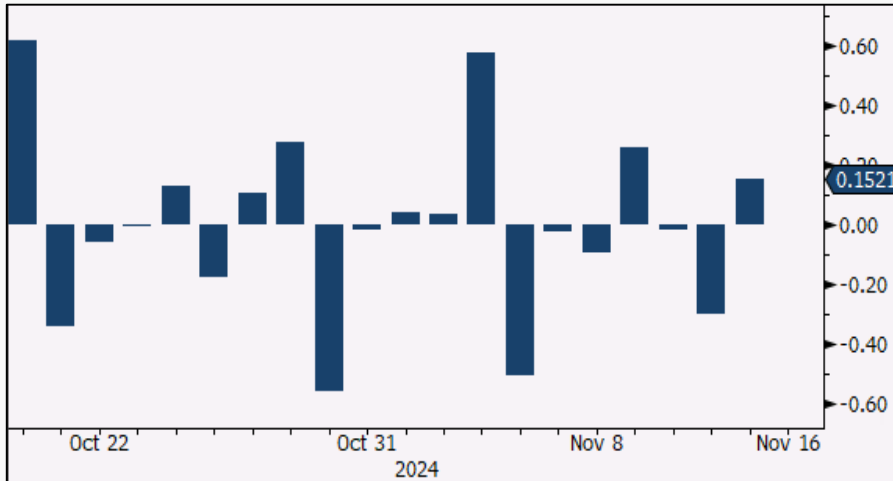
**Nifty**



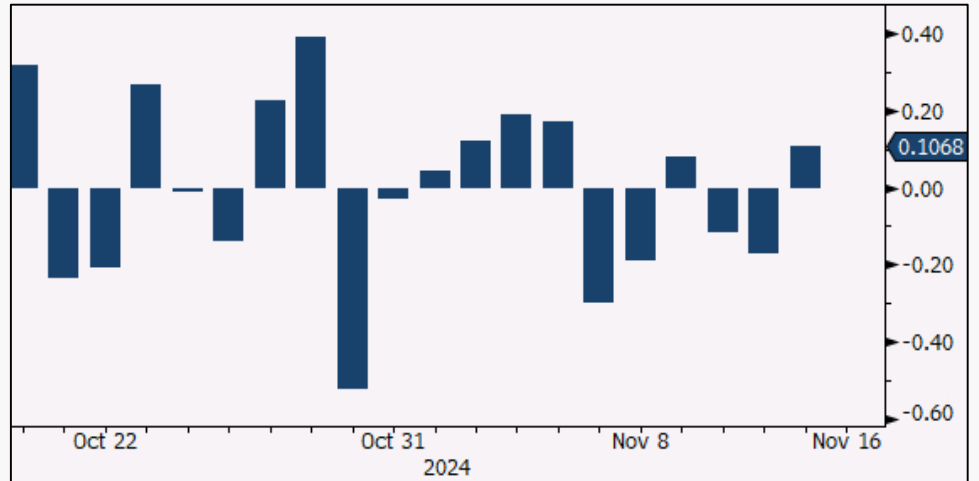
**Bank Nifty**



**Fin Nifty**



**Midcap Nifty**





**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HEROMOTOCO	4604.0	1.9	32.6	40.4	2.8	79.3
COLPAL	2709.0	-2.0	26.4	31.7	9.5	76.1
SBILIFE	1562.3	1.0	29.5	35.8	13.4	72.1
MARUTI	11006.1	-0.4	24.3	33.7	0.4	71.8
DIXON	14776.1	0.4	37.3	51.3	1.8	71.8

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
AMBUJACEM	544.5	-0.2	21.3	70.4	21.3	0.0
RECLTD	502.4	-1.2	34.9	86.9	31.2	6.7
HDFCLIFE	694.0	1.3	23.7	80.5	19.6	6.8
ADANIPOINTS	1264.6	-1.8	27.8	85.8	23.2	7.3
JKCEMENT	3999.3	0.6	13.5	42.6	11.0	7.7

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
SBILIFE	1562.3	1.0	29.5	35.8	13.4	94.7
HEROMOTOCO	4604.0	1.9	32.6	40.4	2.8	91.6
COLPAL	2709.0	-2.0	26.4	31.7	9.5	90.3
PIIND	4265.3	-4.1	34.0	46.7	19.3	88.0
CROMPTON	371.1	-3.6	39.0	49.4	17.0	85.3

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AMBUJACEM	544.5	-0.2	21.3	70.4	21.3	0.0
JKCEMENT	3999.3	0.6	13.5	42.6	11.0	1.0
BERGEPAIN	491.9	0.4	16.7	50.6	12.0	1.9
MRF	120551.8	0.1	14.6	39.1	11.7	2.2
LTIM	5994.7	0.8	23.0	39.1	20.0	2.4

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ATUL	7303.2	1.1	1657	342	4.8
BALKRISIND	2738.7	3.2	15303	3278	4.7
PAGEIND	45377.3	-1.0	6920	1613	4.3
COROMANDEL	1716.0	1.8	2658	831	3.2
GUJGASLTD	486.0	-1.2	9051	2945	3.1

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALBHARAT	1713.8	-1.4	4952	8115	1.6
PIIND	4265.3	-4.1	47494	62095	1.3
LALPATHLAB	2956.4	0.0	2871	3682	1.3
JKCEMENT	3999.3	0.6	493	569	1.2
MANAPPURAM	155.6	-1.6	7406	8302	1.1

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
SHRIRAMFIN	2822.6	-1.1	14930	14930	100.0
ABB	6680.15	-1.8	18980	18980	100.0
CUMMINSIND	3329.8	0.1	11550	11550	100.0
MCX	5950.65	0.0	18579	18579	100.0
COLPAL	2708.95	-2.0	11634	11634	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
MOTHERSON	165.36	3.42	11520	11520	100.0
COLPAL	2708.95	-1.95	5549	5549	100.0
TRENT	6463	-0.54	22650	22650	100.0
BRITANNIA	4915.6	-2.59	17271	17415	99.2
ABCAPITAL	188.92	0.70	8151	8309	98.1

**Call Volume Relative to Record High**

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
EICHERMOT	4883.7	6.43	165743	182872	90.6

**Put Volume Relative to Record High**

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
PIIND	4265.25	-4.07	62095	62095	100.0
APOLLOTYRE	475.3	4.10	26268	31642	83.0

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PIIND	4265.3	-4.1	47494	6140	7.7
EICHERMOT	4883.7	6.4	165743	27761	6.0
SUNTV	730.8	0.8	12340	3037	4.1
DEEPAKNTR	2638.5	5.8	43941	10950	4.0
HAL	4087.1	0.5	199206	50480	3.9

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PIIND	4265.3	-4.1	62095	4861	12.8
EICHERMOT	4883.7	6.4	115506	19053	6.1
SUNTV	730.8	0.8	9760	1737	5.6
BHARATFORG	1328.8	0.5	37858	8682	4.4
HAL	4087.1	0.5	138861	33652	4.1

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BRITANNIA	4915.6	-2.6	48055	12065	4.0
PIIND	4265.3	-4.1	5293	2187	2.4
COLPAL	2709.0	-2.0	11634	5668	2.1
ASIANPAINT	2483.2	0.5	63054	33610	1.9
HINDALCO	627.4	0.1	35053	18925	1.9

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PIIND	4265.3	-4.1	6806	1418	4.8
BRITANNIA	4915.6	-2.6	17271	5812	3.0
EICHERMOT	4883.7	6.4	15436	6995	2.2
GRASIM	2524.0	0.8	9333	4932	1.9
ASIANPAINT	2483.2	0.5	40244	21490	1.9

## 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	1617300	6.1%	2827	3000	1833000	6.1%	INFY	1800	2748000	-3.5%	1865	1800	1926400	-3.5%
ADANIPTS	1400	2094400	10.7%	1265	1300	744400	2.8%	ITC	500	8078400	7.3%	466	470	2516800	0.9%
APOLLOHOSP	7500	270000	9.3%	6861	6900	79500	0.6%	JSWSTEEL	1000	1219050	6.5%	939	900	641250	-4.2%
ASIANPAINT	2600	1424000	4.7%	2483	2400	614200	-3.3%	KOTAKBANK	1800	2076400	5.4%	1708	1680	1198400	-1.6%
AXISBANK	1200	3346250	5.2%	1141	1200	1131250	5.2%	LT	3700	1362750	4.9%	3526	3600	481500	2.1%
BAJAJ-AUTO	11000	413775	16.0%	9483	9500	145725	0.2%	LTIM	6000	159900	0.1%	5995	6000	68100	0.1%
BAJAJFINSV	1780	930000	8.5%	1640	1640	227500	0.0%	M&M	3000	1708350	6.9%	2807	2500	614950	-10.9%
BAJFINANCE	7000	892250	6.9%	6549	6500	370000	-0.8%	MARUTI	12000	565200	9.0%	11006	11000	145100	-0.1%
BHARTIARTL	1620	2637675	4.5%	1551	1600	982300	3.2%	NESTLEIND	2400	542000	10.0%	2183	2400	250400	10.0%
BPCL	320	5221800	7.3%	298	300	3049200	0.6%	NTPC	400	9577500	7.4%	373	380	2118000	2.0%
BRITANNIA	5500	510000	11.9%	4916	5000	210700	1.7%	ONGC	275	24514875	9.6%	251	250	2949100	-0.3%
CIPLA	1600	954200	6.7%	1500	1500	572325	0.0%	POWERGRID	330	7410600	5.7%	312	300	2817000	-3.9%
COALINDIA	484.25	2495850	18.2%	410	484.25	1478400	18.2%	RELIANCE	1400	10759000	10.4%	1268	1500	4536500	18.3%
DIVISLAB	6000	441700	4.3%	5750	5000	376600	-13.0%	SBLIFE	1640	1347750	5.0%	1562	1600	172125	2.4%
DRREDDY	1300	1546250	6.0%	1227	1200	363750	-2.2%	SBIN	850	10818000	5.7%	804	800	4269750	-0.5%
EICHERMOT	5000	430325	2.4%	4884	4500	325500	-7.9%	SUNPHARMA	1900	1973650	7.5%	1768	1780	302050	0.7%
GRASIM	2700	547750	7.0%	2524	2500	476250	-0.9%	TATACONSUM	1100	1213416	18.9%	925	900	459192	-2.7%
HCLTECH	1820	1205400	-2.1%	1859	1800	617750	-3.2%	TATAMOTORS	900	8535450	16.2%	774	800	2216500	3.3%
HDFCBANK	1800	6034600	6.3%	1693	1700	2025100	0.4%	TATASTEEL	155	49395500	12.3%	138	140	18425000	1.5%
HDFCLIFE	730	3540900	5.2%	694	660	687500	-4.9%	TCS	4200	716100	1.3%	4146	4000	477925	-3.5%
HEROMOTOCO	5000	625050	8.6%	4604	4000	300300	-13.1%	TECHM	1700	840600	0.7%	1688	1600	482400	-5.2%
HINDALCO	700	8706600	11.6%	627	600	2192400	-4.4%	TITAN	3300	738500	3.7%	3184	3000	457625	-5.8%
HINDUNILVR	2600	960000	8.8%	2389	2400	563400	0.5%	ULTRACEMCO	11500	94800	7.2%	10729	11000	83900	2.5%
ICICIBANK	1300	5039300	3.4%	1257	1250	1668100	-0.6%	UPL	550	2511600	4.6%	526	500	1931800	-4.9%
INDUSINDBK	1100	3612000	8.1%	1017	1000	1641000	-1.7%	WIPRO	600	4285500	5.9%	567	540	2079000	-4.7%

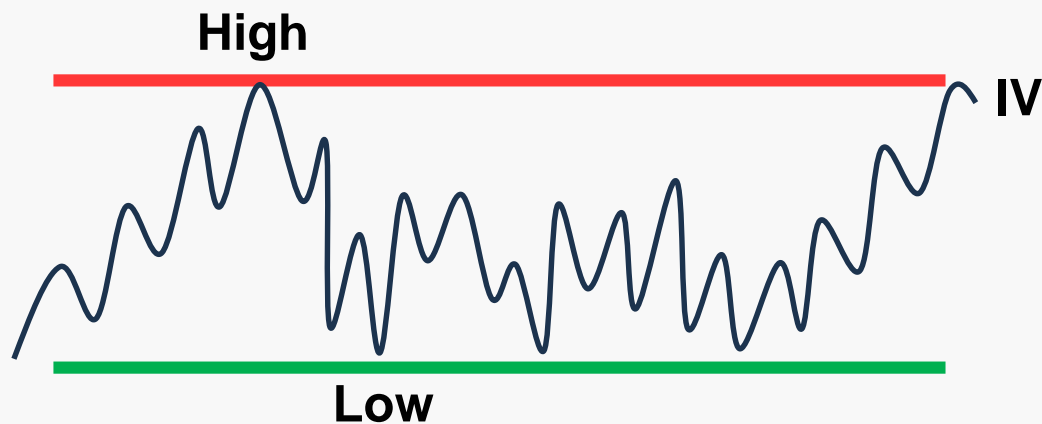
If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green  
 If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike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



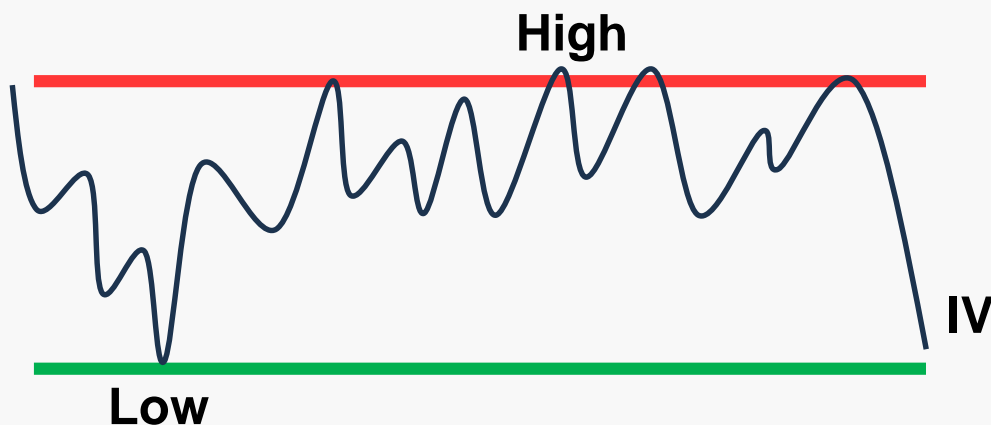
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

- **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

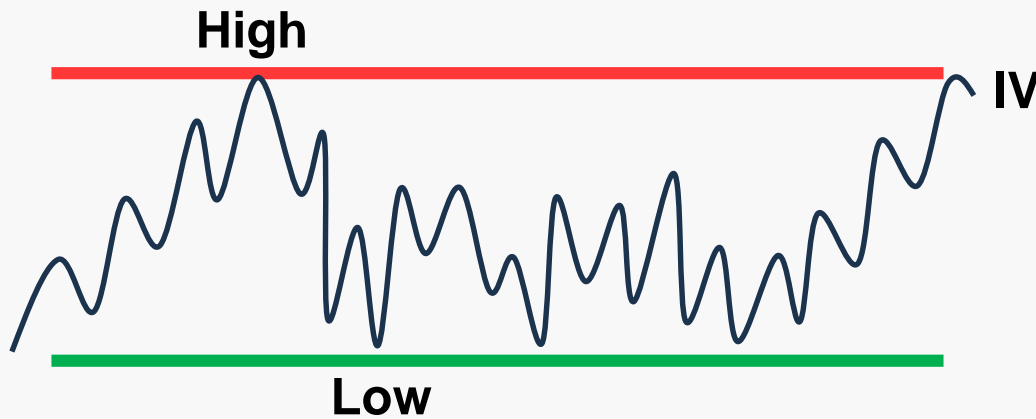


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

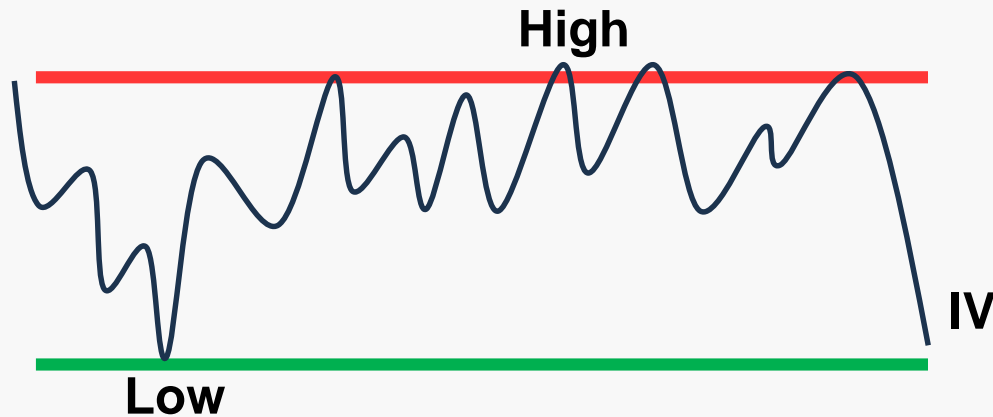


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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