



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,381	<b>0.8% ▼</b>
Open Interest (OI)	2,03,61,510	<b>2.3% ▲</b>
Change in OI (abs)	2,03,61,510	<b>4,50,645 ▲</b>
Premium / Discount (Abs)	3	<b>5 ▼</b>
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,147	<b>0.40% ▼</b>
Open interest (OI)	23,74,770	<b>1.4% ▼</b>
Change in OI (abs)	23,74,770	<b>32,760 ▼</b>
Premium / Discount (Abs)	23	<b>20 ▲</b>
<b>Inference</b>	<b>Long Unwinding</b>	

## Volatility Insights

	Value	Change
India VIX Index	18.3	<b>0.77 ▲</b>
Nifty ATM IV (%)	17.31	<b>0.52 ▼</b>
Bank Nifty ATM IV (%)	20.40	<b>0.78 ▼</b>
PCR (Nifty)	1.02	<b>0.16 ▼</b>
PCR (Bank Nifty)	0.99	<b>0.08 ▼</b>

The FII Long Ratio in Index Futures **drop** to **21.7%**, **down** from **22.6 %** in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
HAVELLS	1,04,79,000	18.7%	1343.7	1.2%
ASHOKLEY	14,46,50,000	9.9%	178.94	1.0%
ABB	26,58,375	8.6%	7615	5.2%
KEI	26,04,700	8.1%	4905.8	1.5%
OFSS	17,02,800	7.8%	8160.5	2.7%

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
CDSL	1,42,29,100	15.6%	1319.2	-2.9%
HCLTECH	5,19,66,250	13.4%	1264.5	-10.6%
SBILIFE	1,25,14,500	13.1%	1889.7	-1.3%
FORCEMOT	1,64,550	11.9%	21720	-0.5%
COFORGE	2,00,83,875	10.1%	1240.9	-4.2%

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

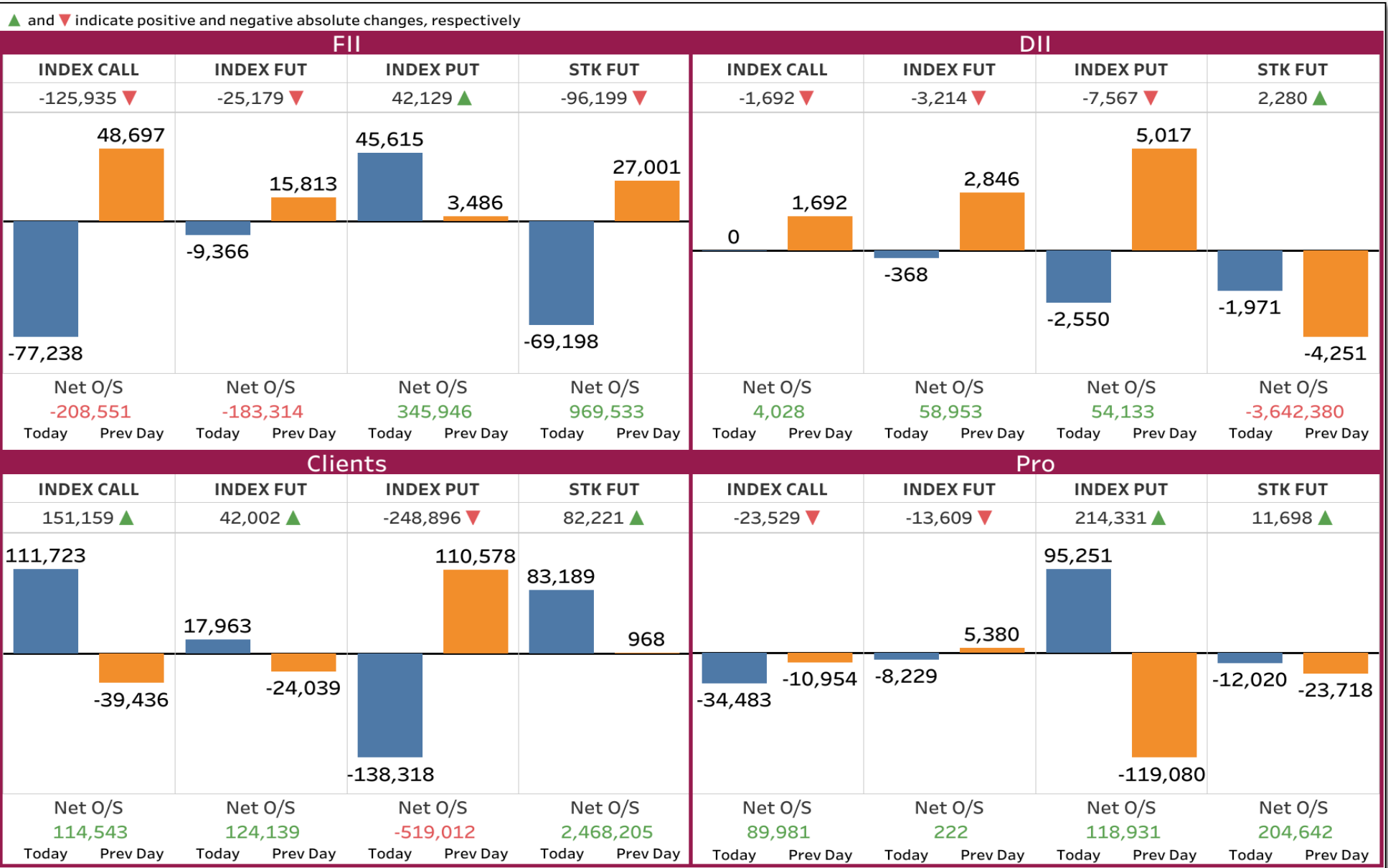
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NESTLEIND	1,73,09,500	-10.9%	1394.1	0.9%
ADANIPOWER	8,36,27,350	-6.3%	215.39	5.8%
ETERNAL	18,59,65,975	-4.1%	262.62	1.3%
LODHA	1,81,68,750	-4.0%	883.6	0.9%
HUDCO	2,42,84,025	-4.0%	200.12	0.9%

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

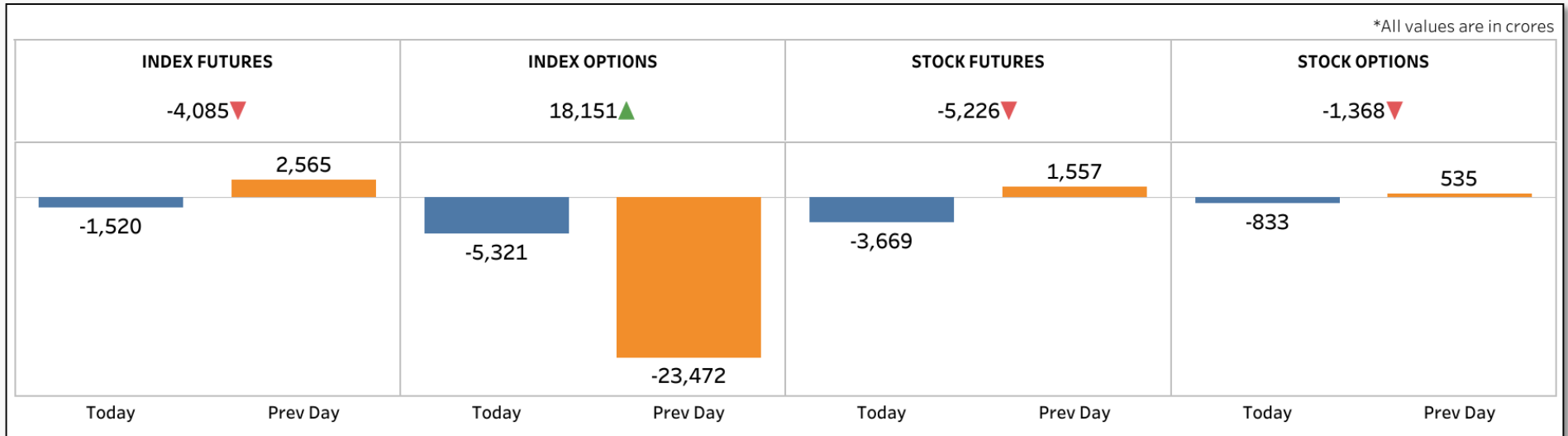
Symbol	Open Interest	Chg (%)	Price	Chg (%)
APOLLOHOSP	21,53,125	-7.9%	7646	-1.2%
HINDPETRO	3,77,41,950	-2.9%	383.2	-0.2%
INFY	7,92,83,600	-1.8%	1272.2	-3.3%
CHOLAFIN	1,94,01,875	-1.7%	1565.9	-1.4%
EICHERMOT	40,78,500	-1.7%	7220.5	-0.2%

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

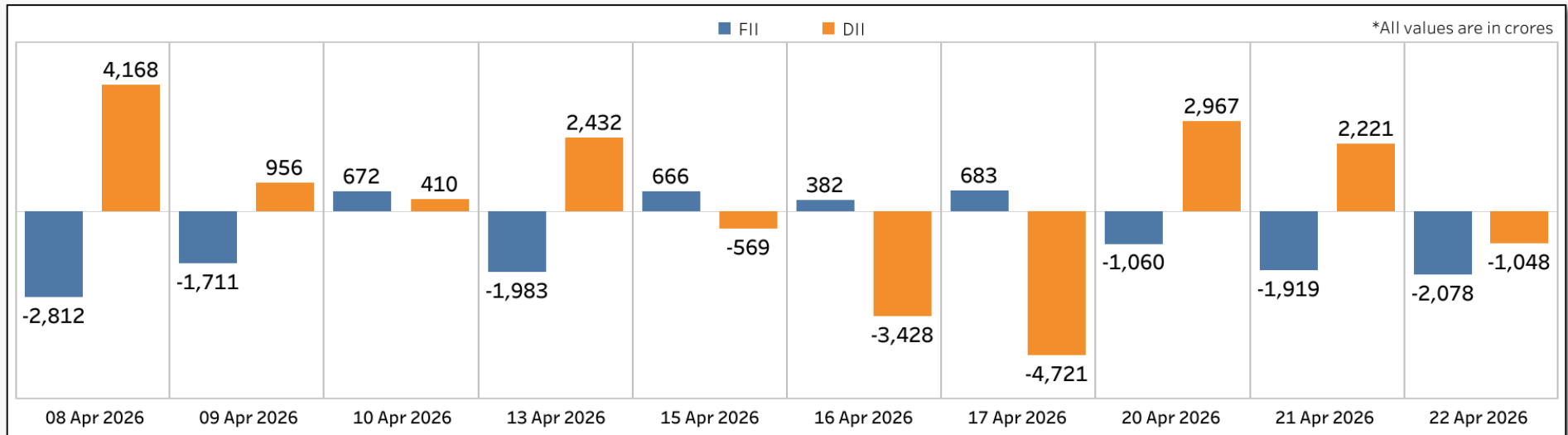
## Open Interest Trends by Participant



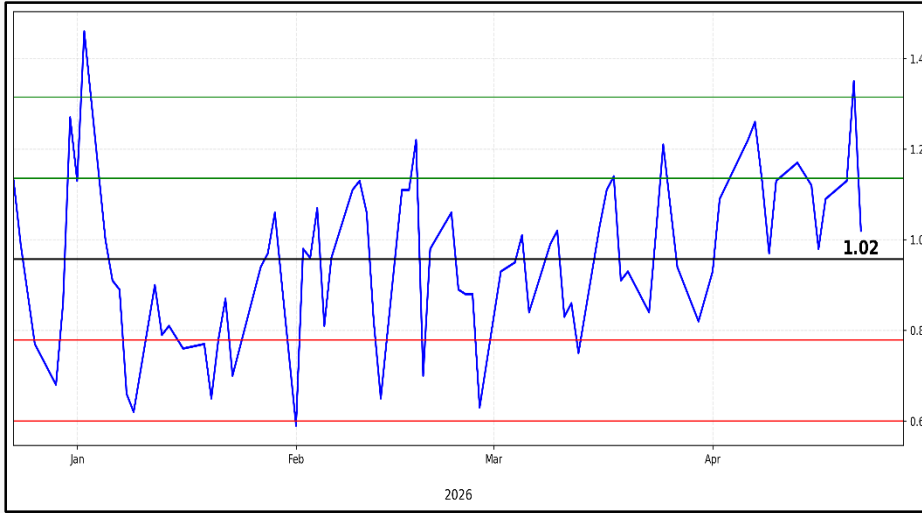
## Daily Net Open Interest Change



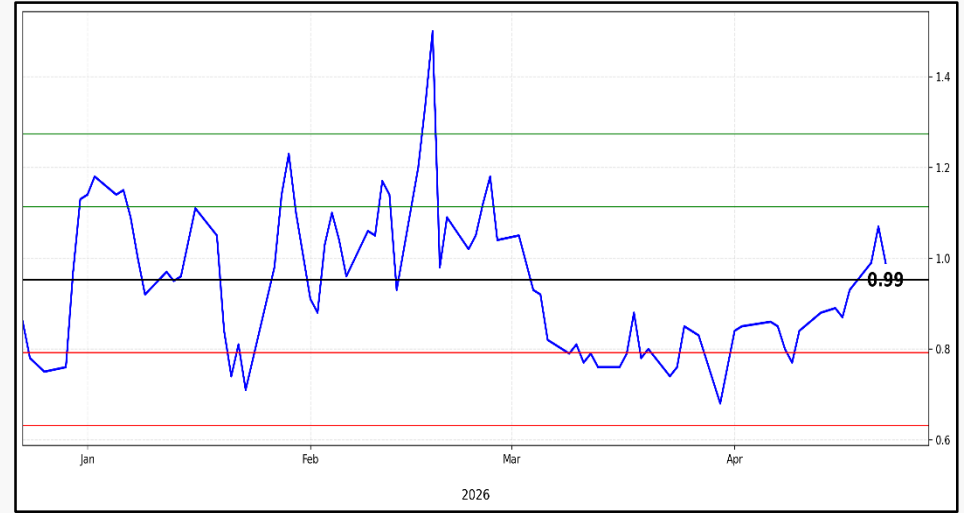
## DII and FII Daily Cash Market Flows



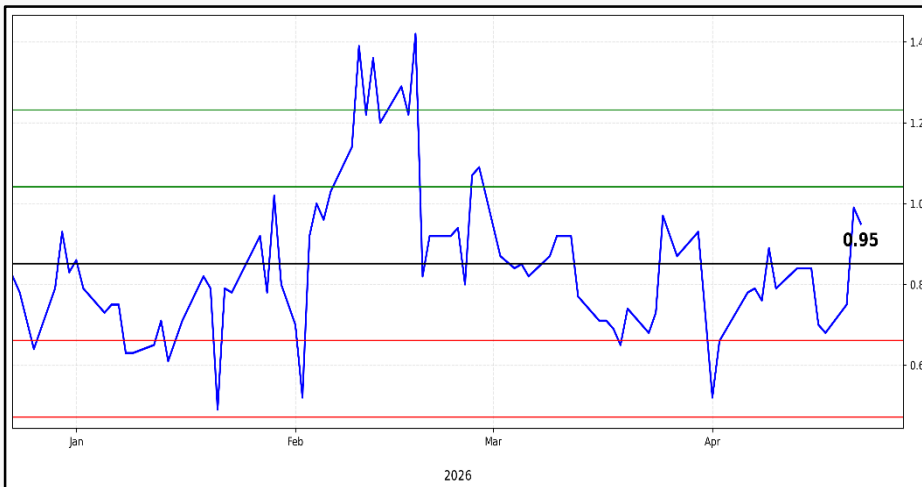
### Nifty



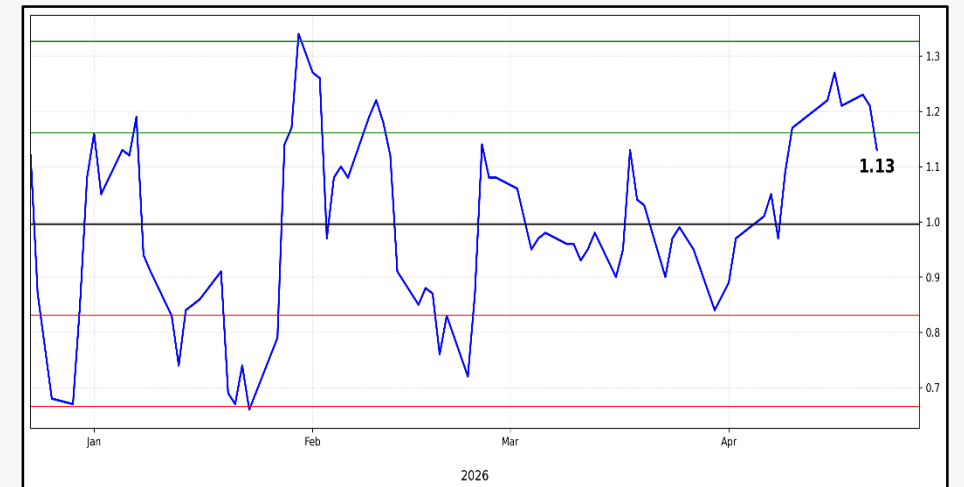
### Bank Nifty



### Fin Nifty



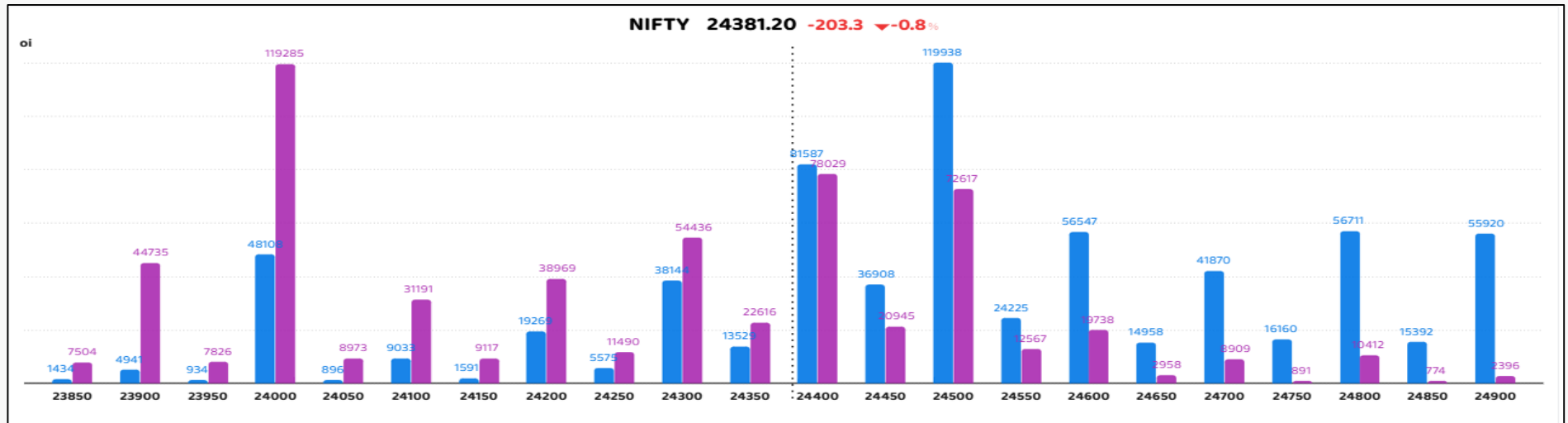
### Midcap Select Nifty



*On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation*

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

Call ■ Put ■



For Nifty, the 24,500 Call and 24,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,000 Call and the 57,000 Put saw the most amount of open interest.

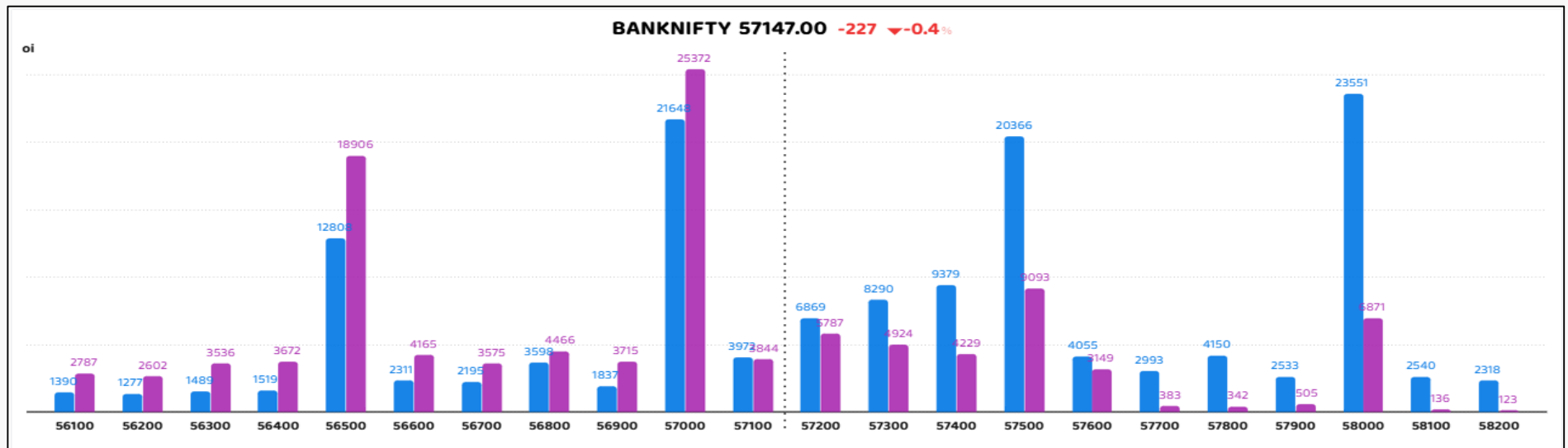
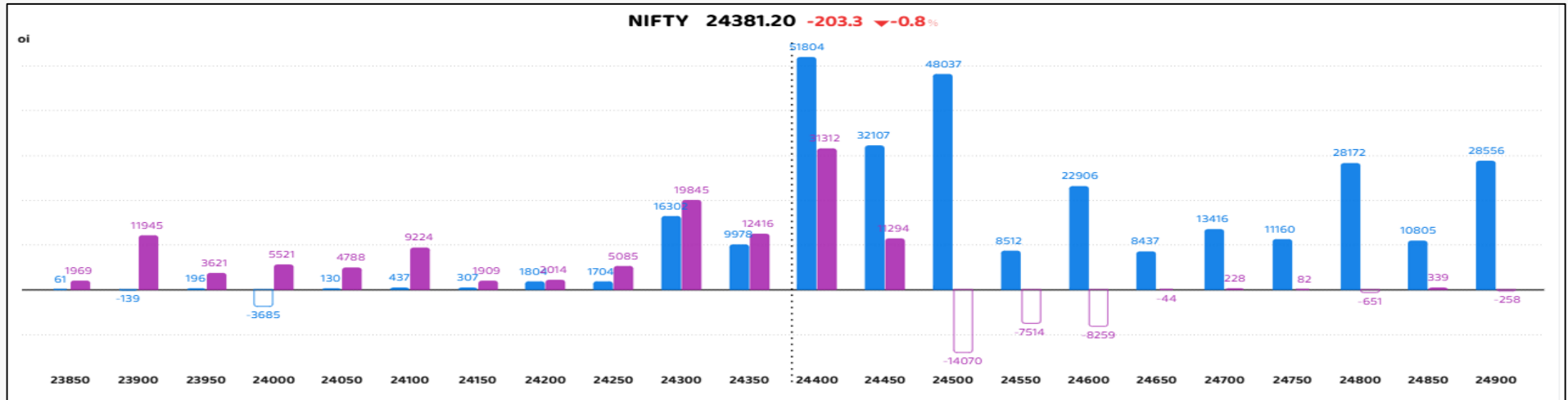


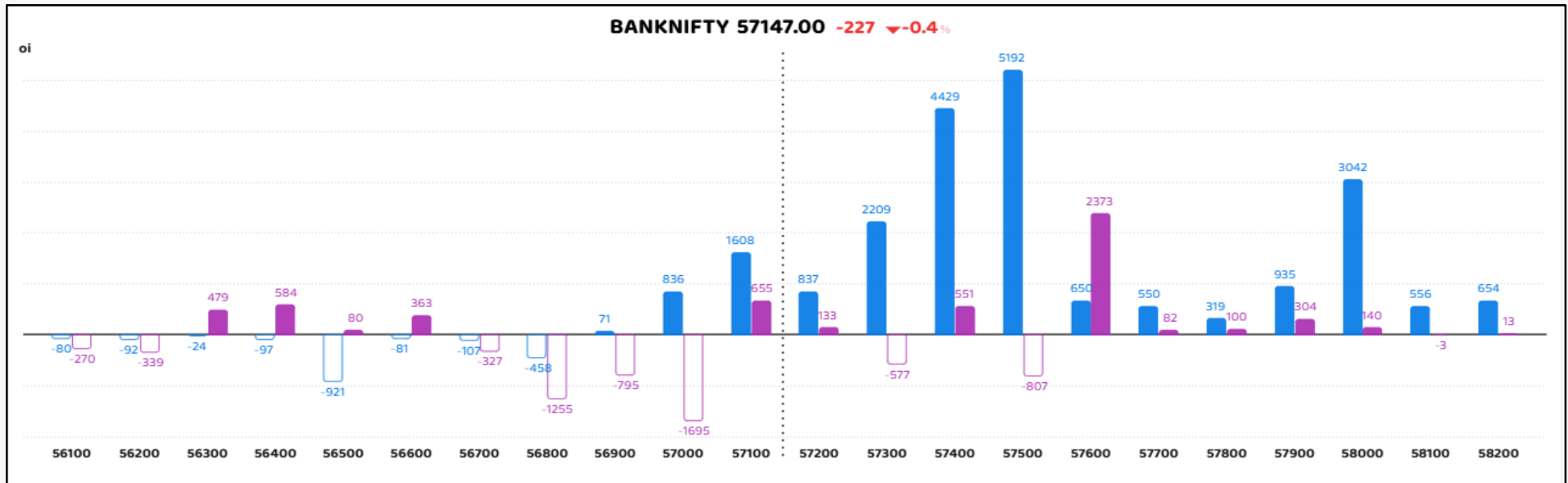
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,400 Call and the 24,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,500 Call & the 57,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BRITANNIA INDS	5729.5	-1.9	29.9	29.9	16.3	99.8
SBI LIFE INSURAN	1884.8	-1.4	31.3	32.0	12.5	96.8
ZYDUS LIFESCIENC	929.9	0.1	35.8	36.8	16.5	94.9
MAX FINANCIAL SE	1627.4	-1.3	39.4	40.9	18.4	93.1
TORRENT PHARMA	4084.6	-1.2	31.9	34.0	15.4	88.6

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
GAIL INDIA LTD	166.1	3.3	20.0	91.4	19.4	0.9
ASHOK LEYLAND	179.0	1.3	43.2	734.8	18.5	3.4
ADITYA BIRLA CAP	350.7	1.8	35.6	658.6	8.2	4.2
CHOLAMANDALAM IN	1565.6	-1.5	33.9	186.8	19.6	8.5
HINDALCO INDS	1039.9	1.8	35.5	254.2	12.3	9.6

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BRITANNIA INDS	5729.5	-1.9	29.9	29.9	16.3	100.0
INOX WIND LTD	104.6	4.5	68.5	70.9	24.4	99.7
SBI LIFE INSURAN	1884.8	-1.4	31.3	32.0	12.5	99.5
MAX FINANCIAL SE	1627.4	-1.3	39.4	40.9	18.4	99.5
ADANI ENERGY SOL	1368.1	8.1	55.8	70.1	20.6	99.3

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
GAIL INDIA LTD	166.1	3.3	20.0	91.4	19.4	2.1
VEDANTA LTD	757.0	-1.3	20.8	46.2	9.6	2.3
PIDILITE INDS	1419.0	0.8	16.3	34.4	11.8	8.8
PAGE INDUSTRIES	37855.0	-0.3	20.3	35.9	15.7	8.9
GODREJ CONSUMER	1139.6	1.3	21.9	37.4	14.2	17.8

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
CONCOR	515.7	2.3	12,948.0	2,370.0	5.5
PATANJALI	472.2	0.9	12,002.0	2,783.0	4.3
SONACOMS	588.4	1.2	3,880.0	1,003.0	3.9
IRFC	105.8	2.1	22,869.0	5,930.0	3.9
OIL	469.8	1.0	7,442.0	1,975.0	3.8

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BOSCHLTD	37,885.0	-0.6	8,049.0	46,134.0	5.7
SHREECEM	25,735.0	0.8	2,357.0	10,790.0	4.6
BAJAJHLDNG	10,376.0	0.5	2,196.0	3,943.0	1.8
KEI	4,910.1	1.7	7,554.0	12,867.0	1.7
POWERINDIA	30,335.0	1.5	14,012.0	21,473.0	1.5

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
360ONE	1,055.0	-4.8	12,594.0	8,584.0	100.0
ADANIPOINTS	1,588.6	-0.3	21,949.0	21,925.0	100.0
ADANIENSOL	1,368.2	8.1	8,485.0	6,509.0	100.0
DELHIVERY	462.7	-2.0	7,885.0	6,957.0	100.0
HAVELLS	1,348.8	1.5	22,711.0	7,538.0	100.0

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ADANIENSOL	1,368.2	8.1	6,007.0	5,495.0	100.0
ASHOKLEY	179.0	1.3	13,764.0	13,751.0	100.0
HCLTECH	1,285.3	-10.8	47,244.0	24,478.0	100.0
DABUR	460.0	1.8	6,878.0	6,697.0	100.0
EXIDEIND	354.6	6.4	8,941.0	7,513.0	100.0

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
360ONE	1,055.0	-4.8	49,935.0	24,944.0	100.0
ADANIENSOL	1,368.2	8.1	53,306.0	36,997.0	100.0
HCLTECH	1,285.3	-10.8	442,272.0	98,700.0	100.0
CONCOR	515.7	2.3	12,948.0	11,484.0	100.0
EXIDEIND	354.6	6.4	66,256.0	14,994.0	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
360ONE	1,055.0	-4.8	26,697.0	9,570.0	100.0
ADANIENSOL	1,368.2	8.1	16,965.0	15,279.0	100.0
CDSL	1,321.2	-3.0	20,111.0	18,550.0	100.0
DELHIVERY	462.7	-2.0	9,038.0	5,950.0	100.0
EXIDEIND	354.6	6.4	21,018.0	7,878.0	100.0

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
HCLTECH	1,285.3	-10.8	107,904.0	16,972.8	6.4
360ONE	1,055.0	-4.8	12,594.0	2,497.8	5.0
HAVELLS	1,348.8	1.5	22,711.0	5,172.8	4.4
NESTLEIND	1,395.8	1.2	25,346.0	6,860.4	3.7
PNBHOUSING	990.2	1.1	9,652.0	3,495.0	2.8

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
NESTLEIND	1,395.8	1.2	15,846.0	4,082.8	3.9
HCLTECH	1,285.3	-10.8	47,244.0	13,420.6	3.5
HAVELLS	1,348.8	1.5	10,854.0	3,632.9	3.0
PNBHOUSING	990.2	1.1	8,436.0	2,928.8	2.9
360ONE	1,055.0	-4.8	5,414.0	1,920.0	2.8

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
HAVELLS	1,348.8	1.5	165,643.0	5,476.8	30.2
EXIDEIND	354.6	6.4	66,256.0	4,994.0	13.3
HCLTECH	1,285.3	-10.8	442,272.0	37,006.4	12.0
360ONE	1,055.0	-4.8	49,935.0	4,380.4	11.4
IREDA	140.4	9.0	69,452.0	6,583.8	10.5

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
HAVELLS	1,348.8	1.5	68,614.0	2,998.1	22.9
HCLTECH	1,285.3	-10.8	282,143.0	20,372.6	13.8
360ONE	1,055.0	-4.8	26,697.0	2,268.0	11.8
TECHM	1,462.6	-2.5	128,093.0	12,598.4	10.2
SHREECEM	25,735.0	0.8	10,790.0	1,075.2	10.0

## 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
ADANIANT	2200	558363	-2.7%	2261	2200	572268	-2.7%	JIOFIN	240	9884100	0.6%	239	240	6925450	0.6%
ADANIAPORTS	1600	1310050	0.7%	1589	1500	1129075	-5.6%	JSWSTEEL	1300	810000	2.9%	1263	1220	377325	-3.4%
APOLLOHOSP	7700	119250	0.5%	7662	6700	73125	-12.6%	KOTAKBANK	370	3592000	-1.8%	377	335	3218000	-11.1%
ASIANPAINT	2600	399000	1.4%	2563	2400	403000	-6.4%	LT	4100	1077300	2.0%	4021	4000	619675	-0.5%
AXISBANK	1400	2133125	1.5%	1380	1300	1231875	-5.8%	M&M	3300	648200	4.8%	3150	3100	283400	-1.6%
BAJAJ-AUTO	10000	134025	4.1%	9602	8000	114750	-16.7%	MARUTI	14000	216250	5.0%	13337	13000	94350	-2.5%
BAJAJFINSV	1760	335250	-4.5%	1843	1800	289000	-2.3%	MAXHEALTH	1020	629475	1.5%	1005	1000	231525	-0.5%
BAJFINANCE	950	2825250	1.6%	935	900	1821750	-3.7%	NESTLEIND	1420	1130500	1.7%	1396	1300	752000	-6.9%
BEL	500	4497300	11.4%	449	450	2376900	0.3%	NTPC	395	8188500	-2.6%	405	400	5176500	-1.3%
BHARTIARTL	1900	2122775	3.9%	1829	1800	872575	-1.6%	ONGC	290	13896000	2.2%	284	270	4563000	-4.8%
CIPLA	1240	570000	0.3%	1236	1160	508875	-6.2%	POWERGRID	315	6317500	-1.5%	320	300	2741700	-6.2%
COALINDIA	450	3612600	1.3%	444	400	2550150	-9.9%	RELIANCE	1400	9140500	2.8%	1362	1300	4574500	-4.6%
DRREDDY	1240	814375	1.9%	1217	1200	921250	-1.4%	SBILIFE	2000	1418625	6.1%	1885	1900	465000	0.8%
EICHERMOT	8000	283000	10.7%	7230	6500	128000	-10.1%	SBIN	1200	3380250	8.8%	1103	1000	3465750	-9.4%
ETERNAL	260	6261350	-1.1%	263	260	3647200	-1.1%	SHRIRAMFIN	1100	1532850	5.3%	1045	1000	1204500	-4.3%
GRASIM	2800	227750	0.8%	2777	2700	94000	-2.8%	SUNPHARMA	1800	1031450	7.8%	1670	1600	442750	-4.2%
HCLTECH	1300	3858400	1.1%	1285	1200	1677900	-6.6%	TATACONSUM	1200	396550	1.8%	1179	930	442200	-21.1%
HDFCBANK	850	7524000	6.3%	800	800	4170650	0.0%	TMPV	360	7320000	-0.5%	362	360	2522400	-0.5%
HDFCLIFE	600	2396900	-0.7%	604	600	1249600	-0.7%	TATASTEEL	195	23655500	-8.5%	213	200	8101500	-6.1%
HINDALCO	900	2618000	-13.5%	1040	900	1119300	-13.5%	TCS	2600	2702700	2.4%	2539	2400	897225	-5.5%
HINDUNILVR	2260	1292400	-4.6%	2369	2260	454200	-4.6%	TECHM	1500	2321400	2.6%	1463	1420	1176600	-2.9%
ICICIBANK	1400	4485600	2.4%	1368	1300	1931300	-4.9%	TITAN	4500	404075	1.0%	4455	4200	296800	-5.7%
INDIGO	4700	860250	1.3%	4641	4700	439050	1.3%	TRENT	4500	547900	1.5%	4435	4000	289300	-9.8%
INFY	1400	3014800	10.4%	1269	1280	2177200	0.9%	ULTRACEMCO	11800	137350	-3.2%	12193	12100	46000	-0.8%
ITC	300	19816000	-1.8%	306	300	4796800	-1.8%	WIPRO	210	25830000	2.9%	204	200	12252000	-2.0%

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**

*\*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

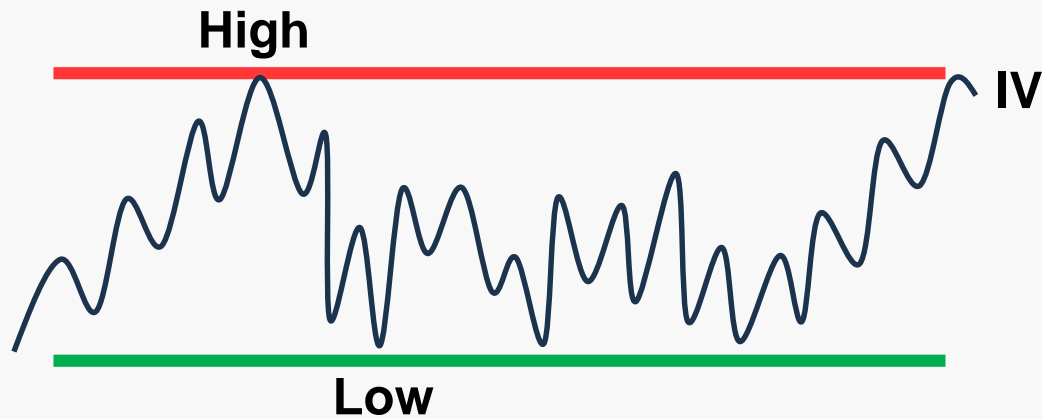


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

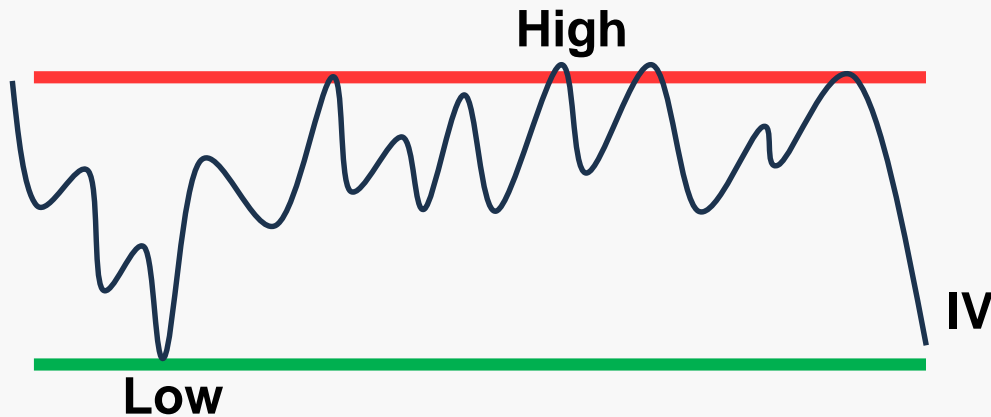


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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