



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,744	0.5%▲
Open Interest (OI)	2,11,57,240	0.6%▼
Change in OI (abs)	2,11,57,240	1,31,495▼
Premium / Discount (Abs)	25	48▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	54,237	1.32%▲
Open interest (OI)	30,17,130	2.7%▲
Change in OI (abs)	30,17,130	80,250▲
Premium / Discount (Abs)	182	90▲
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	17.91	0.09▲
Nifty ATM IV (%)	14.36	1.30▼
Bank Nifty ATM IV (%)	18.02	1.36▼
PCR (Nifty)	1.08	0.08▲
PCR (Bank Nifty)	0.79	0.07▲

The FII Long Ratio in Index Futures **Jump to 14%**, **up** from **11.8 %** in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MAZDOCK	52,96,000	11.6%	2472	0.6%
DALBHARAT	42,04,850	6.9%	1797.3	2.6%
NYKAA	5,51,21,875	6.0%	277.95	1.1%
EICHERMOT	34,41,200	5.2%	6999	1.4%
LICI	1,21,28,200	5.1%	816.6	1.6%

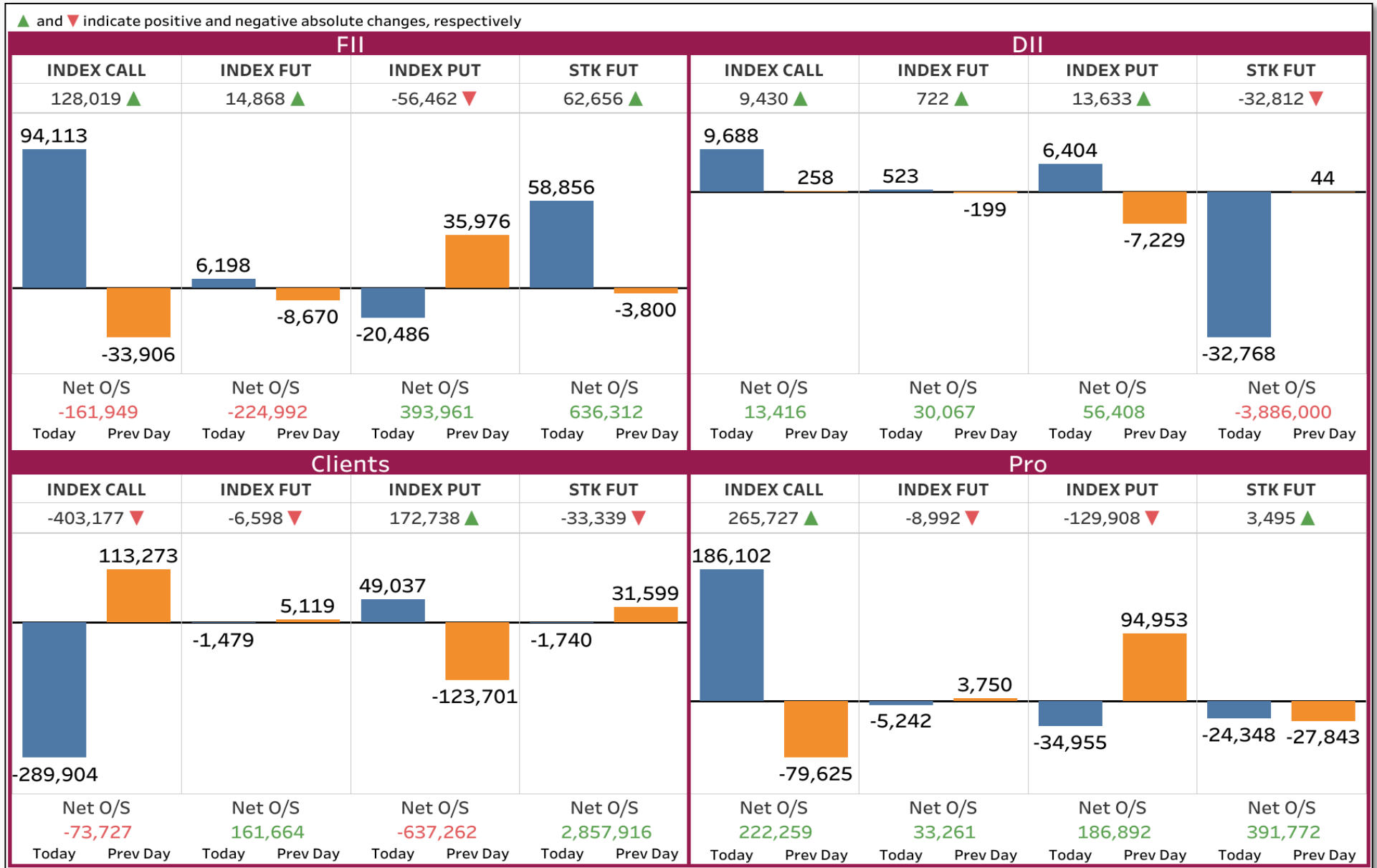
Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PREMIERENE	1,70,60,775	17.2%	990.8	-1.6%
MAXHEALTH	1,50,87,975	16.7%	1024.4	-6.3%
LTM	44,74,200	14.4%	3959.2	-3.0%
PAYTM	1,57,24,525	12.9%	1114.5	-3.7%
MCX	1,12,74,200	5.5%	3280.7	-1.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KAYNES	43,58,000	-21.8%	3308.6	6.0%
RVNL	5,60,23,675	-15.3%	271.75	0.3%
FORCEMOT	2,38,050	-12.5%	19958	3.0%
GODFRYPHLP	27,03,250	-10.9%	2321.4	0.1%
HYUNDAI	1,37,32,675	-8.3%	1856.9	0.2%

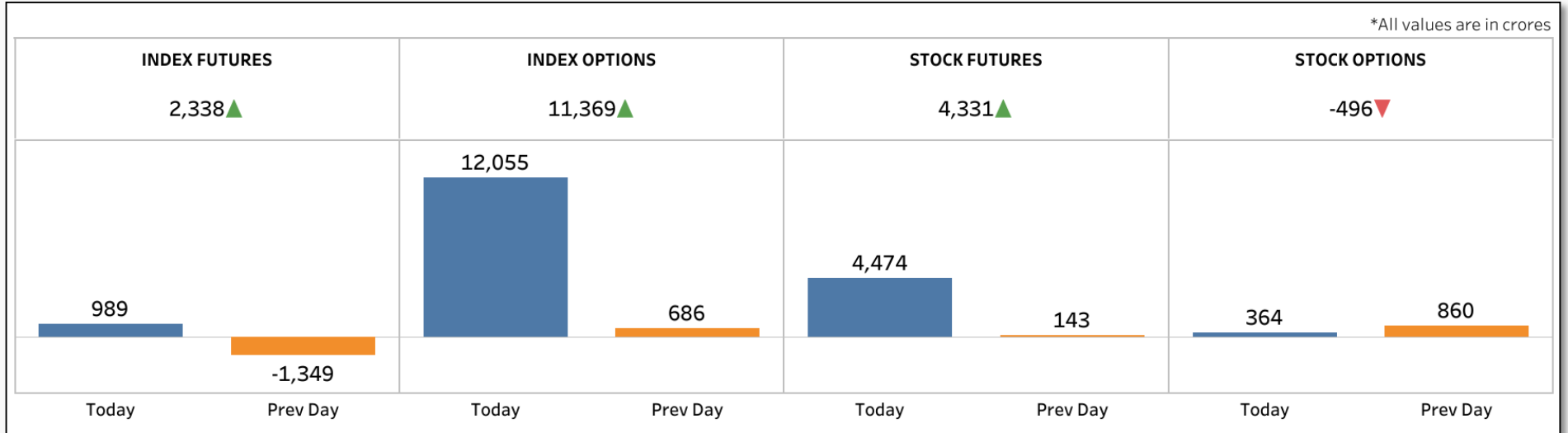
Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
AMBER	29,06,600	-10.4%	7370	-2.7%
COALINDIA	6,04,38,150	-9.9%	458.4	-0.6%
KFINTECH	63,71,300	-8.6%	817.4	-1.8%
HCLTECH	4,26,53,800	-7.3%	1165.5	-0.4%
CAMS	74,89,425	-6.4%	760.45	-1.3%

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

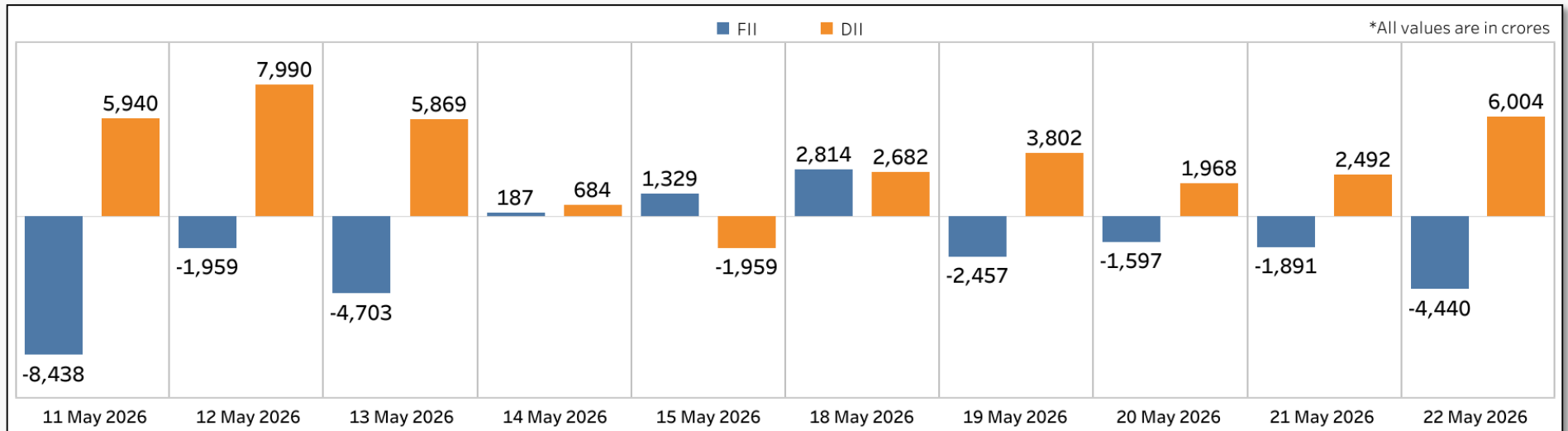
## Open Interest Trends by Participant



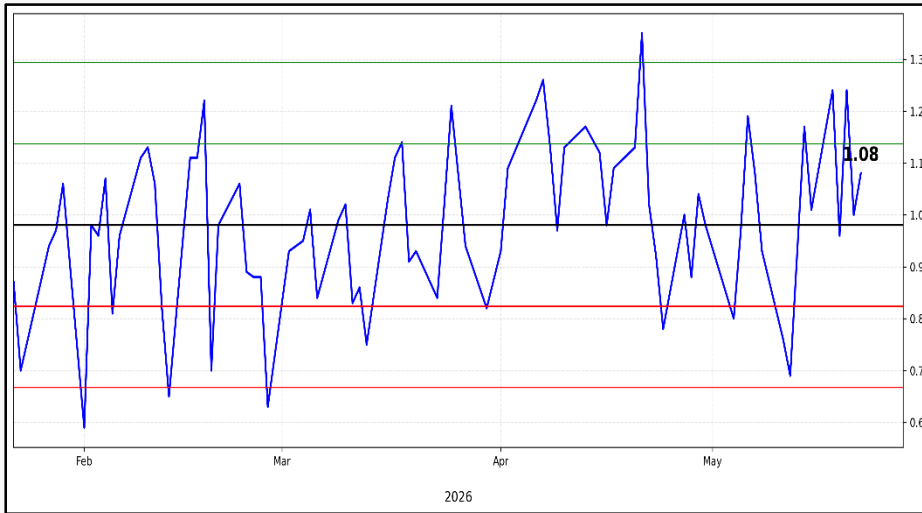
## Daily Net Open Interest Change



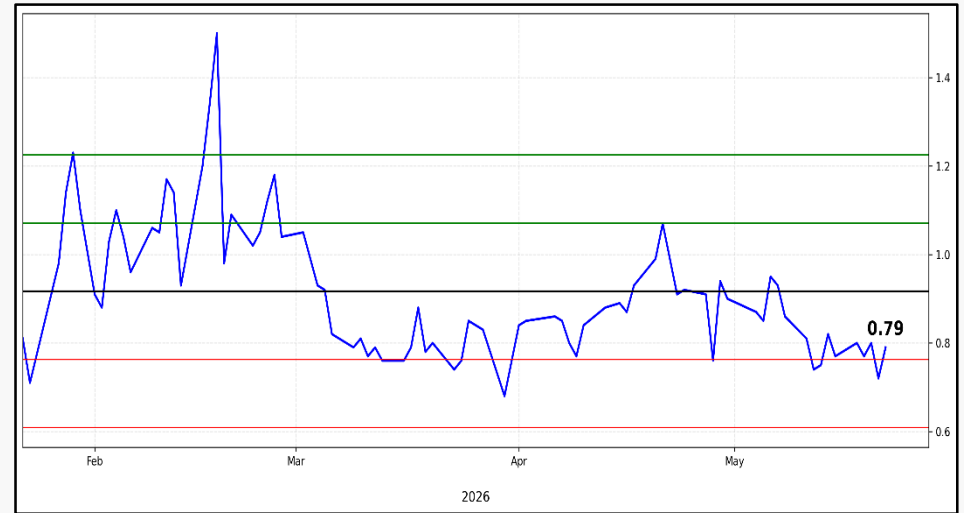
## DII and FII Daily Cash Market Flows



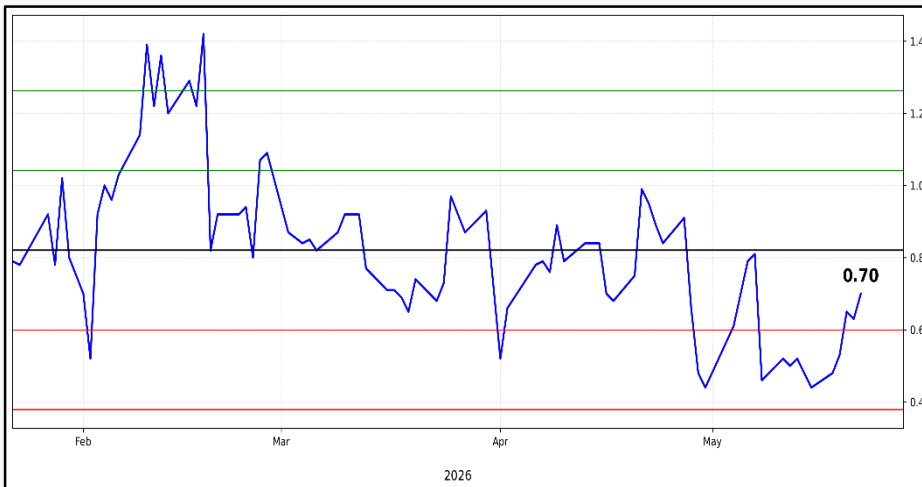
### Nifty



### Bank Nifty



### Fin Nifty



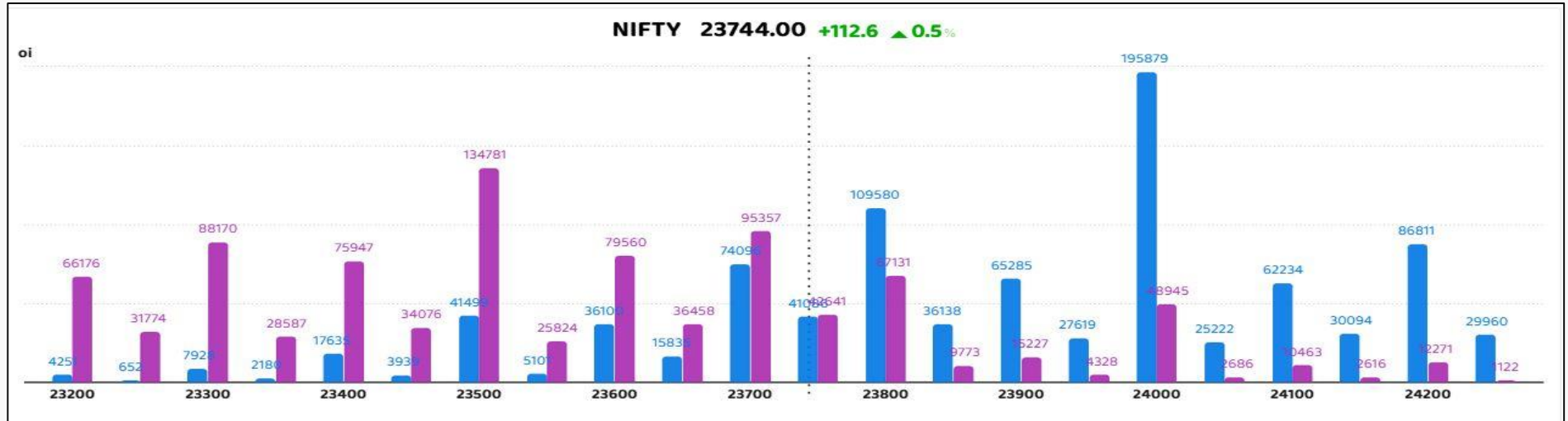
### Midcap Select Nifty



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 24,000 Call and 23,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.

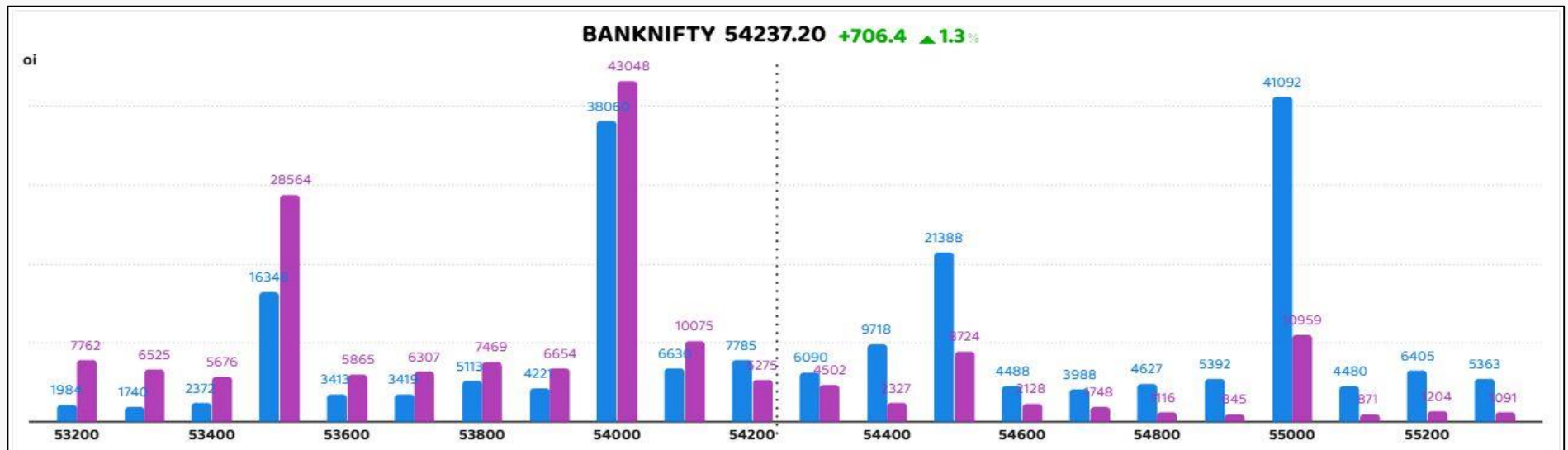
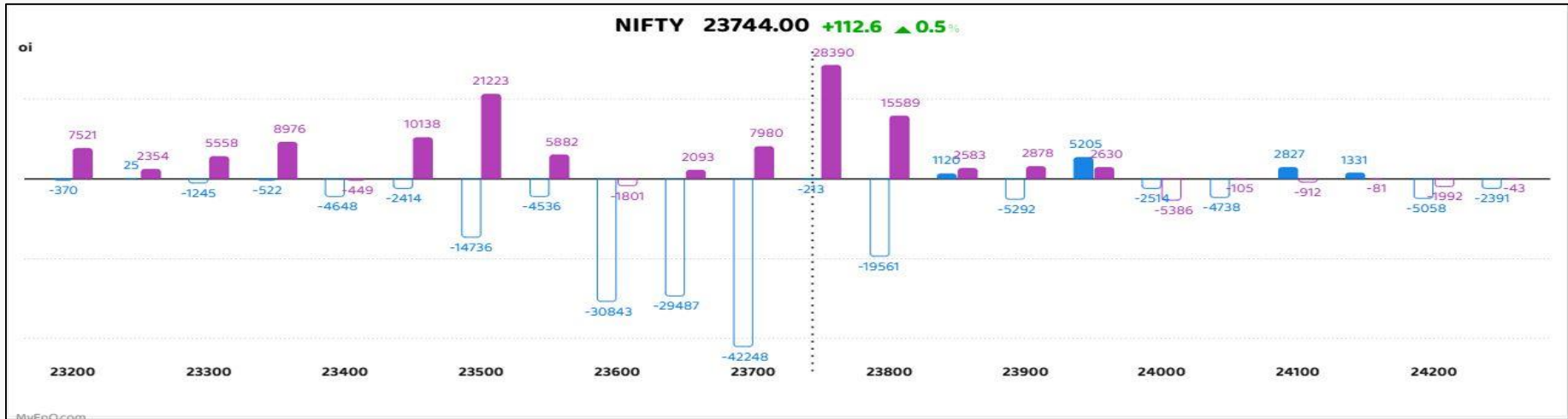


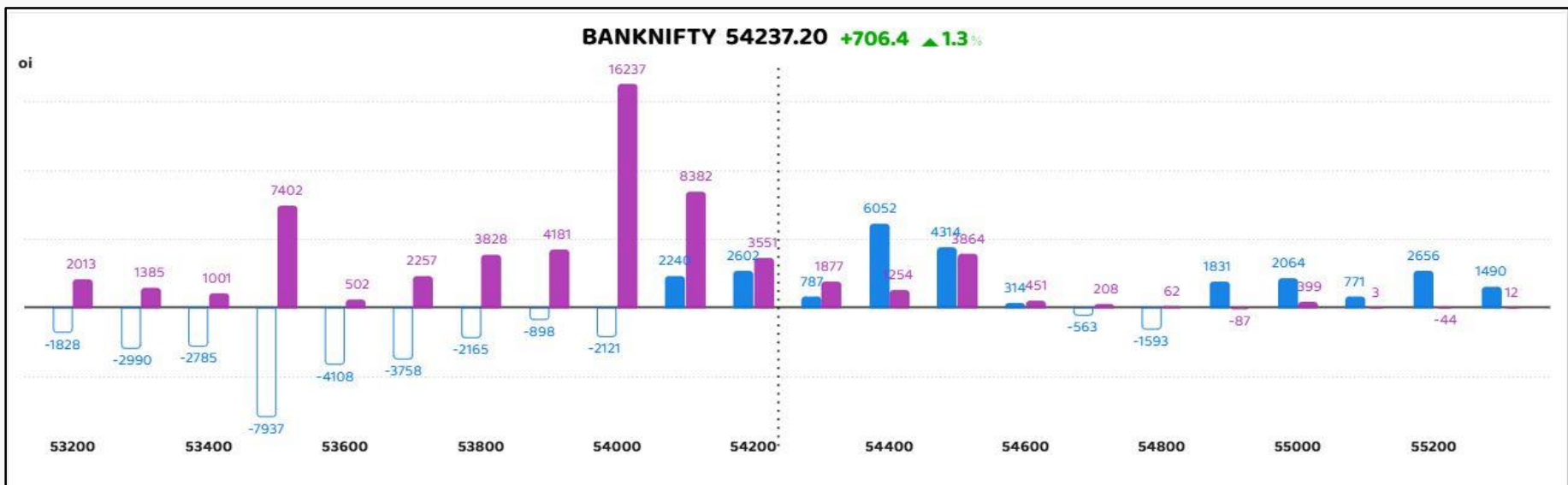
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23,700 Call and the 23,750 Put



For the Bank Nifty, the biggest open interest changes were seen at the 53,500 Call & the 54,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
WIPRO LTD	203.1	1.7	68.1	68.1	2.1	100.0
TORRENT PHARMA	4486.2	0.4	31.0	31.9	15.4	94.5
GLENMARK PHARMA	2259.1	-5.6	40.0	42.2	22.9	88.4
EICHER MOTORS	6981.5	1.3	34.7	39.3	7.6	85.4
VEDANTA LTD	330.0	0.1	41.2	47.4	9.2	83.7

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	158.2	2.4	38.7	734.8	18.5	2.8
ADITYA BIRLA CAP	357.3	2.3	31.6	658.6	8.2	3.6
VODAFONE IDEA LT	13.7	0.8	14.6	212.9	7.2	3.6
INDUS TOWERS LTD	432.1	0.1	24.7	51.0	23.4	4.5
CHOLAMANDALAM IN	1539.8	2.4	32.8	186.8	19.6	7.9

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
WIPRO LTD	203.1	1.7	68.1	68.1	2.1	100.0
GLENMARK PHARMA	2259.1	-5.6	40.0	42.2	22.9	99.0
TORRENT PHARMA	4486.2	0.4	31.0	31.9	15.4	98.8
PI INDUSTRIES	2781.0	1.5	39.2	57.8	12.5	97.3
EICHER MOTORS	6981.5	1.3	34.7	39.3	7.6	96.9

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
VODAFONE IDEA LT	13.7	0.8	14.6	212.9	7.2	1.2
BANK OF INDIA	139.9	0.5	20.4	68.6	6.4	1.5
INDIAN ENERGY EX	127.1	0.0	24.1	76.3	8.0	1.6
BAJAJ FINANCE LT	916.6	1.0	19.5	70.8	12.6	1.6
STEEL AUTHORITY	201.2	2.4	10.3	91.3	0.6	2.2

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SBILIFE	1,870.7	0.6	28,260.0	5,505.0	5.1
SONACOMS	593.8	1.6	8,803.0	1,851.0	4.8
MFSL	1,680.0	3.3	15,660.0	3,299.0	4.7
DELHIVERY	447.7	-1.1	8,660.0	1,854.0	4.7
TATACONSUM	1,191.8	-0.3	22,270.0	4,917.0	4.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ADANIPOINTS	1,786.9	-0.4	24,032.0	44,464.0	1.9
360ONE	1,112.4	0.1	2,709.0	3,789.0	1.4
TATASTEEL	209.2	0.3	72,578.0	74,282.0	1.0
BAJAJHLDNG	10,483.0	0.8	1,939.0	1,961.0	1.0
POLICYBZR	1,792.4	-1.5	13,434.0	13,581.0	1.0

**Call Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
INDUSTOWER	432.0	0.1	19,180.0	18,970.0	100.0
NYKAA	277.2	1.0	9,589.0	7,268.0	100.0
NAUKRI	961.0	3.7	14,299.0	14,073.0	100.0
SUNPHARMA	1,844.6	-2.5	55,603.0	55,324.0	100.0
MAXHEALTH	1,023.2	-6.2	15,299.0	9,918.0	100.0

**Put Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
TATASTEEL	209.2	0.3	28,893.0	28,372.0	100.0
MAXHEALTH	1,023.2	-6.2	7,359.0	7,141.0	100.0
MPHASIS	2,222.4	-0.2	5,344.0	5,293.0	100.0
INDUSTOWER	432.0	0.1	15,558.0	15,342.0	100.0
BLUESTARCO	1,657.2	-0.3	4,570.0	4,570.0	100.0

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NAUKRI	961.0	3.7	154,046.0	37,159.0	100.0
BOSCHLTD	36,065.0	2.4	172,107.0	84,648.0	100.0
DIXON	11,722.0	4.1	375,014.0	331,296.0	100.0
MAXHEALTH	1,023.2	-6.2	133,014.0	47,699.0	100.0
DALBHARAT	1,795.7	2.7	19,206.0	18,341.0	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
MAXHEALTH	1,023.2	-6.2	95,219.0	21,658.0	100.0
BOSCHLTD	36,065.0	2.4	60,706.0	57,235.0	100.0
NAUKRI	961.0	3.7	64,111.0	36,390.0	100.0
GLENMARK	2,259.1	-5.6	40,553.0	18,121.0	100.0
PAGEIND	39,455.0	2.8	78,247.0	29,809.0	100.0

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PAGEIND	39,455.0	2.8	10,288.0	2,497.9	4.1
NYKAA	277.2	1.0	9,589.0	3,019.4	3.2
BOSCHLTD	36,065.0	2.4	14,980.0	4,820.4	3.1
AMBER	7,359.0	-2.4	37,012.0	13,698.7	2.7
MAXHEALTH	1,023.2	-6.2	15,299.0	6,091.8	2.5

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PAGEIND	39,455.0	2.8	5,585.0	2,084.8	2.7
GRASIM	3,155.3	0.0	12,672.0	5,140.3	2.5
NYKAA	277.2	1.0	3,340.0	1,395.2	2.4
AMBER	7,359.0	-2.4	18,382.0	8,029.6	2.3
NAUKRI	961.0	3.7	7,447.0	3,467.3	2.1

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PAGEIND	39,455.0	2.8	183,408.0	4,547.8	40.3
NYKAA	277.2	1.0	69,415.0	3,184.9	21.8
NAUKRI	961.0	3.7	154,046.0	7,541.8	20.4
BOSCHLTD	36,065.0	2.4	172,107.0	10,466.3	16.4
LICI	813.0	1.6	111,040.0	7,096.5	15.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MAXHEALTH	1,023.2	-6.2	95,219.0	4,426.2	21.5
NAUKRI	961.0	3.7	64,111.0	3,147.2	20.4
PAGEIND	39,455.0	2.8	78,247.0	4,055.6	19.3
NYKAA	277.2	1.0	18,198.0	1,260.2	14.4
LICI	813.0	1.6	35,794.0	2,905.4	12.3

## 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
ADANIEN	2800	915567	3.0%	2717	2500	669603	-8.0%	JIOFIN	260	12368050	9.2%	238	250	3811700	5.0%
ADANIPTS	1800	1247825	0.7%	1787	1700	682100	-4.9%	JSWSTEEL	1300	1065825	1.1%	1286	1240	429975	-3.5%
APOLLOHOSP	8400	134375	0.4%	8363	8000	161500	-4.3%	KOTAKBANK	390	6490000	1.5%	384	360	3644000	-6.3%
ASIANPAINT	2660	950750	0.8%	2640	2500	449750	-5.3%	LT	4000	1097950	1.9%	3927	3900	309050	-0.7%
AXISBANK	1300	3286250	1.1%	1285	1280	1482500	-0.4%	M&M	3100	595200	0.6%	3081	3100	593000	0.6%
BAJAJ-AUTO	11000	205575	4.3%	10550	10000	140700	-5.2%	MARUTI	14000	315200	7.8%	12987	12500	105950	-3.7%
BAJAJFINSV	1820	918500	3.1%	1766	1680	323250	-4.9%	MAXHEALTH	1100	829500	7.5%	1023	1000	386400	-2.3%
BAJFINANCE	950	2248500	3.6%	917	900	1452750	-1.8%	NESTLEIND	1500	770000	5.4%	1423	1460	369000	2.6%
BEL	440	6630525	5.6%	417	440	2401125	5.6%	NTPC	400	13516500	2.9%	389	390	2946000	0.3%
BHARTIARTL	1920	3939175	2.6%	1871	1800	1406000	-3.8%	ONGC	305	13788000	5.2%	290	280	4173750	-3.4%
CIPLA	1440	1108500	2.9%	1399	1300	820125	-7.1%	POWERGRID	320	4516300	8.7%	294	300	1565600	1.9%
COALINDIA	500	3967650	9.5%	457	450	2093850	-1.4%	RELIANCE	1500	5776000	10.7%	1355	1360	2016000	0.4%
DRREDDY	1400	1326875	7.1%	1307	1200	725000	-8.2%	SBILIFE	1860	1288500	-0.6%	1871	1860	346875	-0.6%
EICHERMOT	7000	183600	0.3%	6982	6500	112200	-6.9%	SBIN	1100	10099500	15.9%	949	950	3913500	0.1%
ETERNAL	260	9156800	7.5%	242	240	3669025	-0.8%	SHRIRAMFIN	940	1959375	-0.1%	941	930	747450	-1.2%
GRASIM	3180	270000	0.8%	3155	3100	269250	-1.8%	SUNPHARMA	1900	4526550	3.0%	1845	1800	1330350	-2.4%
HCLTECH	1290	6715100	10.8%	1164	1200	1102150	3.1%	TATACONSUM	1250	405350	4.9%	1192	1100	331100	-7.7%
HDFCBANK	800	10589700	4.3%	767	750	3883000	-2.2%	TMPV	370	6543200	1.8%	363	360	3090400	-0.9%
HDFCLIFE	600	2955700	-2.7%	617	615	1609300	-0.3%	TATASTEEL	210	19357250	0.4%	209	200	10004500	-4.4%
HINDALCO	1100	1147300	-0.8%	1109	1100	1244600	-0.8%	TCS	2500	2051350	7.9%	2317	2200	619675	-5.1%
HINDUNILVR	2400	1271700	8.9%	2204	2300	648900	4.4%	TECHM	1460	1319400	2.7%	1422	1380	696000	-3.0%
ICICIBANK	1300	3776500	2.8%	1264	1260	2808400	-0.3%	TITAN	4500	693000	10.3%	4080	4200	263550	2.9%
INDIGO	4500	849450	1.4%	4439	4200	430350	-5.4%	TRENT	4500	519300	4.7%	4297	4100	194400	-4.6%
INFY	1200	4524800	2.2%	1175	1170	1494000	-0.4%	ULTRACEMCO	12200	143600	5.5%	11569	11600	41700	0.3%
ITC	310	22116800	2.8%	302	290	4451200	-3.9%	WIPRO	200	12048000	-1.5%	203	195	6735000	-4.0%

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

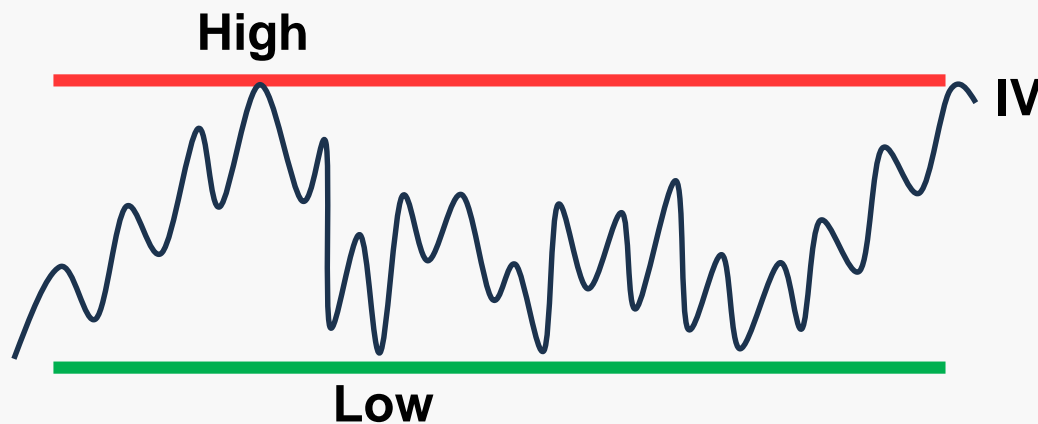
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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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