



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	22,800	1.7%▲
Open Interest (OI)	2,30,23,975	0.9%▼
Change in OI (abs)	2,30,23,975	1,99,680▼
Premium / Discount (Abs)	121	26▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	51,785	2.3%▲
Open interest (OI)	27,12,540	12.6%▼
Change in OI (abs)	27,12,540	3,89,190▼
Premium / Discount (Abs)	336	20▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	25.01	2.88▼
Nifty ATM IV (%)	25.65	2.78▼
Bank Nifty ATM IV (%)	29.27	4.36▼
PCR (Nifty)	0.93	0.01▲
PCR (Bank Nifty)	0.84	0.01▼

The FII Long Ratio in Index Futures **Jump** to **16.2%**, **Up** from **15.3 %** in the previous session.

## Single Stock Futures Movers

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
BOSCHLTD	2,74,300	30.3%	30845	7.0%
NUVAMA	18,99,000	13.0%	1138.2	5.5%
PREMIERENE	98,29,050	9.7%	936.6	7.9%
SAIL	18,40,05,000	9.3%	156.78	2.0%
POLYCAB	20,62,625	7.8%	6936	2.6%

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
ASHOKLEY	16,10,30,000	17.0%	149.9	-3.2%
HDFCLIFE	4,28,51,600	11.2%	576.45	-2.8%
BLUESTARCO	24,75,850	7.9%	1548.7	-3.7%
DRREDDY	1,12,79,375	4.7%	1213.4	-3.8%
SBICARD	2,50,96,000	4.3%	629.2	-0.5%

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	2,30,30,000	-21.1%	239.83	5.2%
NATIONALUM	4,96,08,750	-14.9%	402.05	3.9%
HINDALCO	4,00,85,500	-13.7%	907.45	2.2%
ETERNAL	18,96,51,975	-11.7%	237.85	3.6%
MAZDOCK	43,65,200	-11.6%	2332.9	12.5%

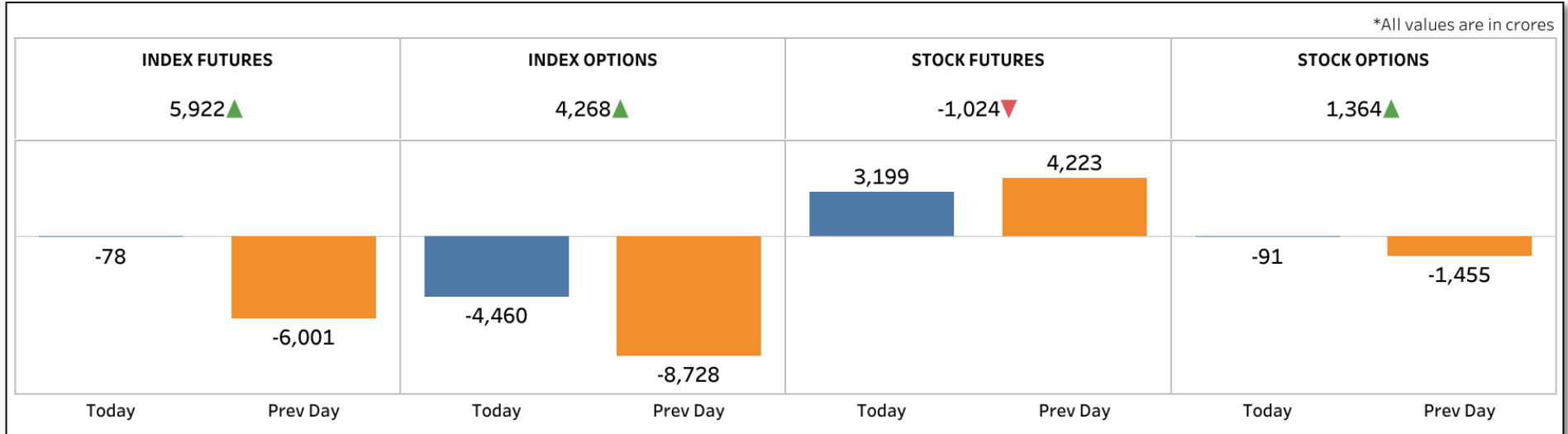
### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
OIL	2,24,89,600	-0.8%	474.55	-0.1%

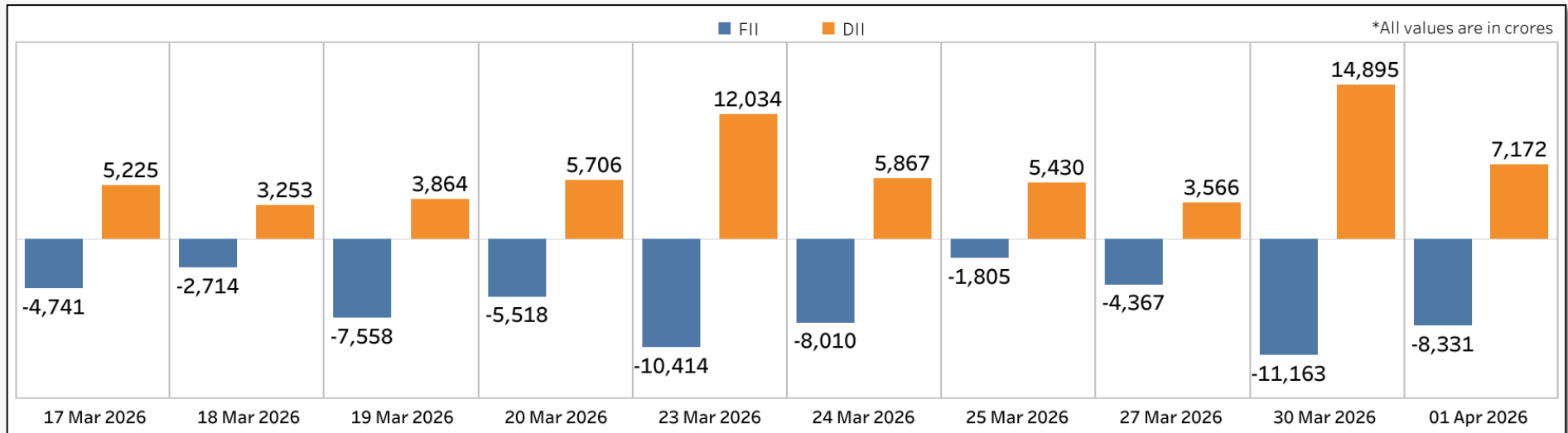
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



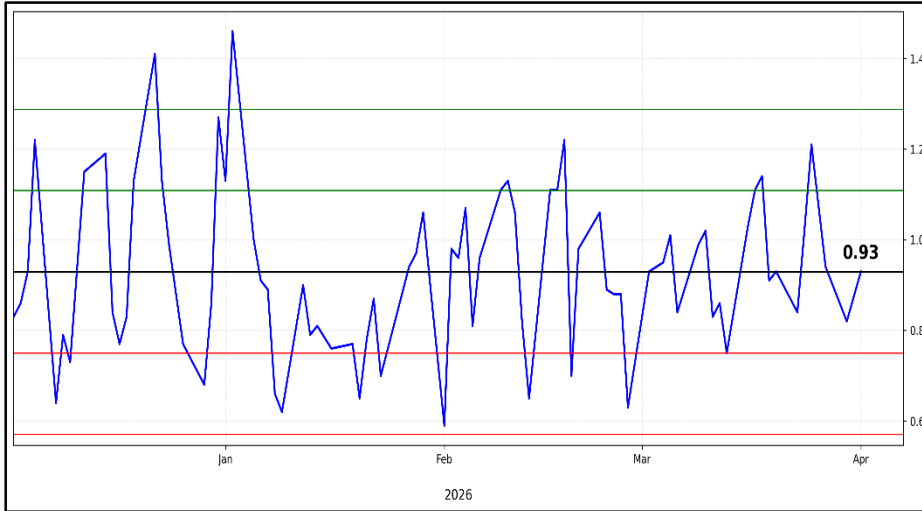
## Daily Net Open Interest Change



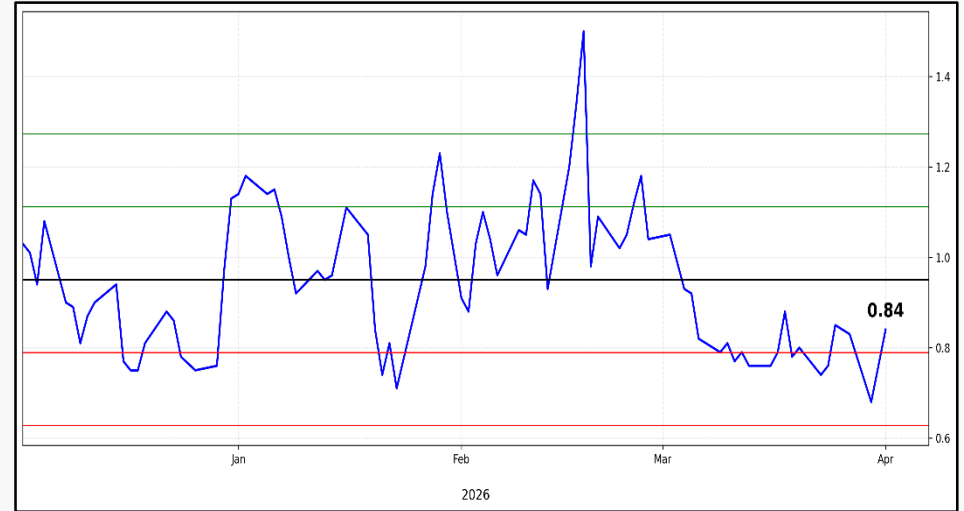
## DII and FII Daily Cash Market Flows



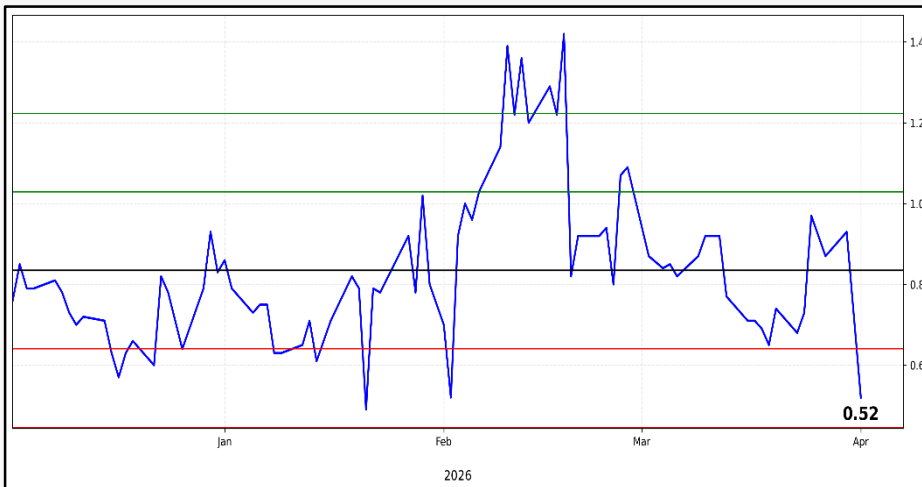
### Nifty



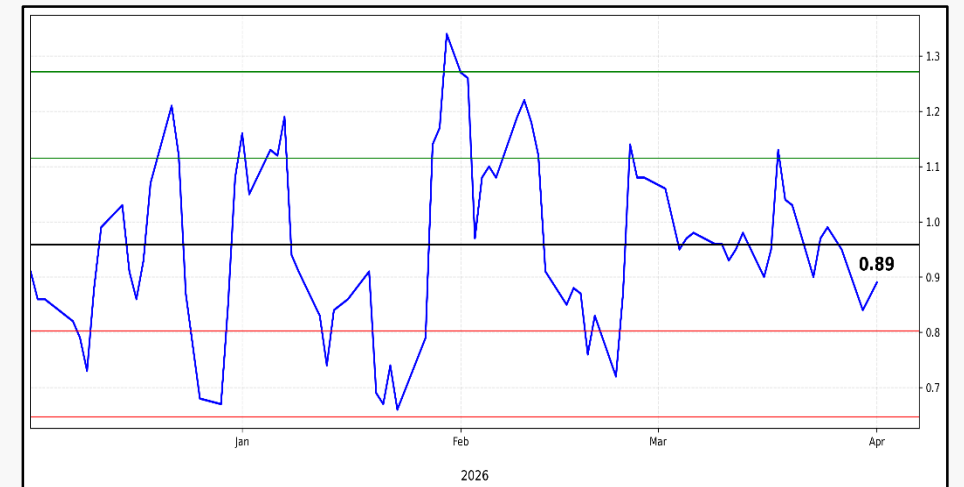
### Bank Nifty



### Fin Nifty

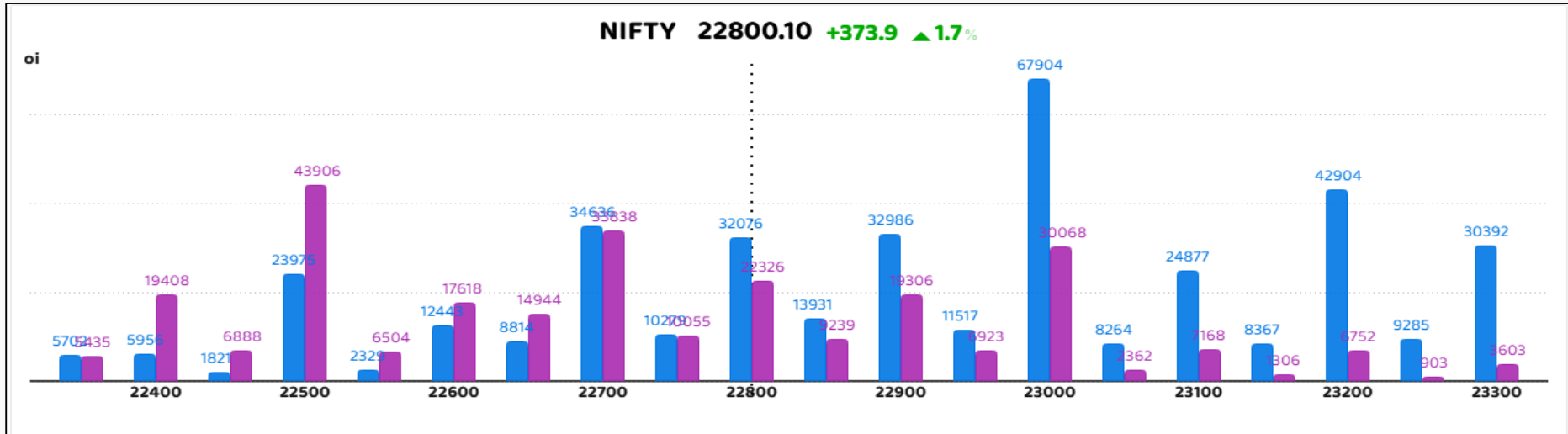


### Midcap Select Nifty



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 23,000 Call and 22,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 52,000 Call and the 51,000 Put saw the most amount of open interest.

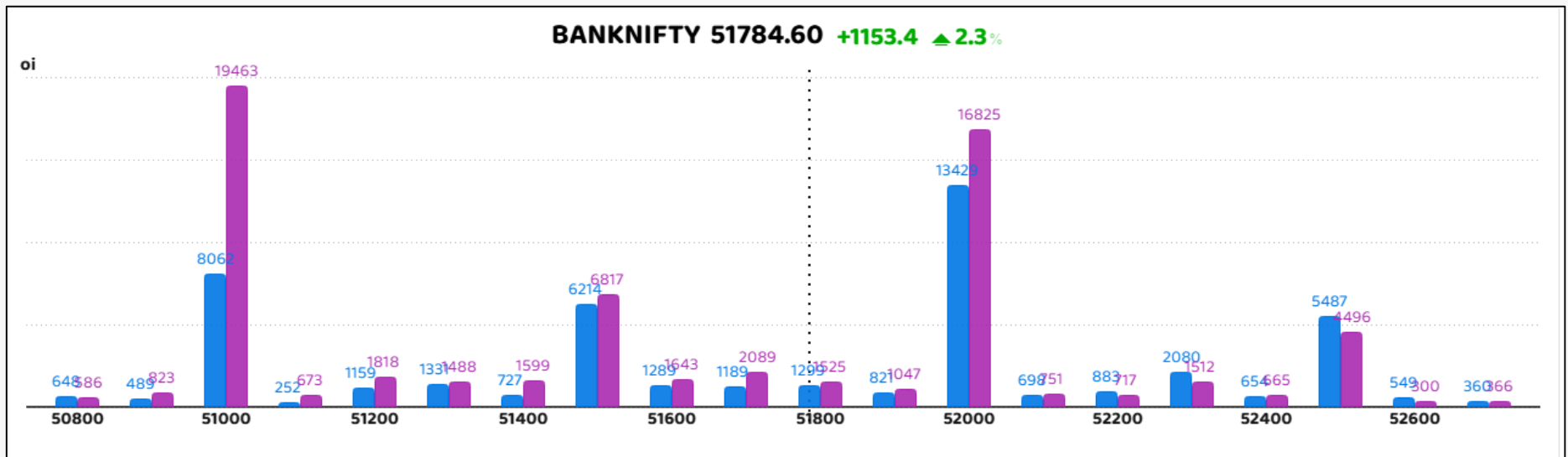
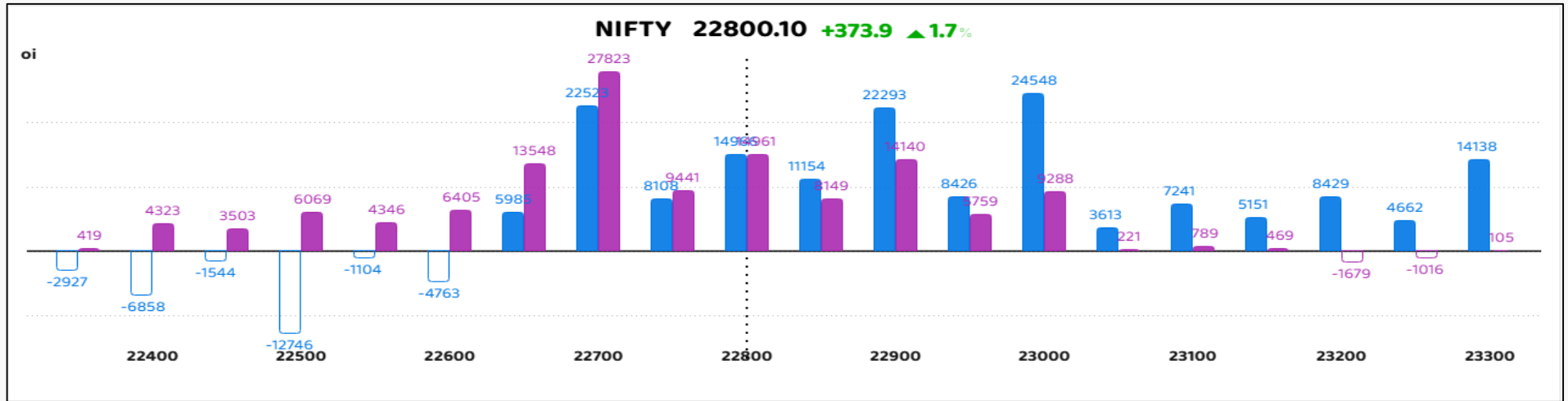


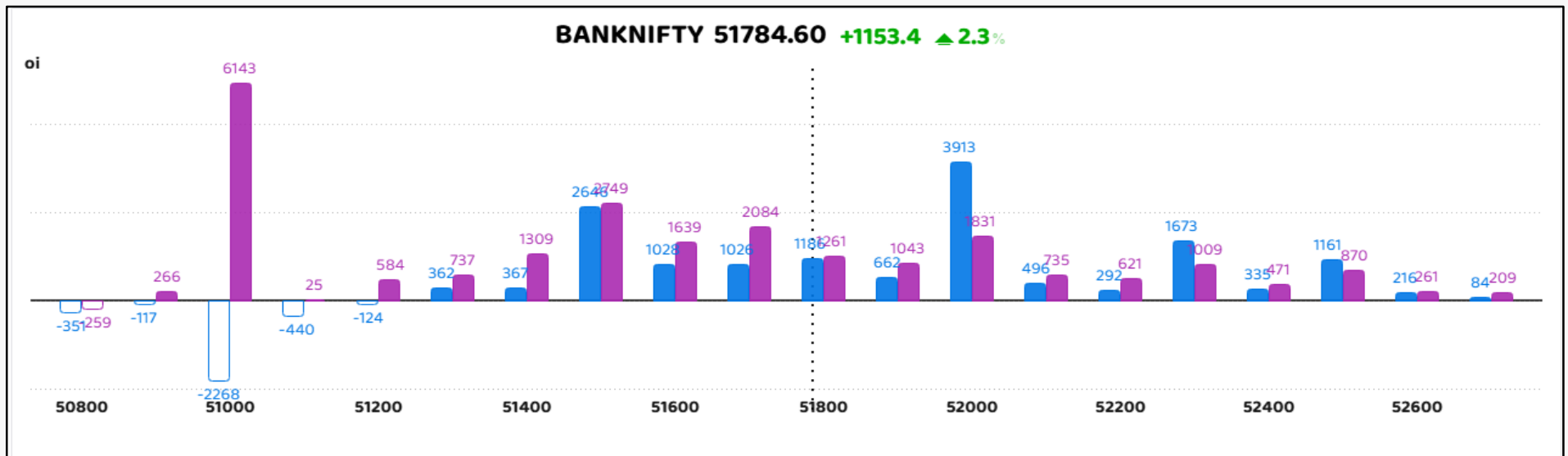
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23,000 Call and the 22,700 Put



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

**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
APOLLO HOSPITALS	7305.5	-1.53%	29.7	29.7	12.9	100
SBI LIFE INSURAN	1790.5	0.74%	31.5	32	12.5	97.4
HAVELLS INDIA	1185.9	-0.39%	38.1	39.3	16.2	94.8
BAJAJ AUTO LTD	8895.5	1.30%	35.1	36.6	18.6	91.5
INTERGLOBE AVIAT	4180.8	6.02%	44.5	47.7	13.2	90.8

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	149.11	-3.26%	49.5	734.8	18.5	4.3
ADITYA BIRLA CAP	302.9	3.64%	40.4	658.6	8.2	4.9
HINDALCO INDS	904.6	2.28%	34	254.2	12.3	9
REC LTD	322.1	5.57%	37.4	244.9	8	12.4
RELIANCE INDUSTR	1369.2	1.88%	7.8	53.2	1.4	12.4

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
APOLLO HOSPITALS	7305.5	-1.50%	29.7	29.7	12.9	100
SBI LIFE INSURAN	1790.5	0.74%	31.5	32	12.5	99.8
BLUE STAR LTD	1556.3	-3.40%	47.7	48	20.3	99.8
HAVELLS INDIA	1185.9	-0.40%	38.1	39.3	16.2	99.8
BAJAJ FINSERV LT	1647	0.90%	34.3	40.3	13	99.1

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
COAL INDIA LTD	449.4	-0.20%	0.8	38.8	0.8	0
CANARA BANK	127.3	3.10%	21	49.6	6.6	0.8
RBL BANK LTD	301.65	4.10%	25.3	71.1	10.6	22.8
JINDAL STAINLESS	704.85	-0.90%		59.2	27	4
RELIANCE INDUSTR	1369.2	1.90%	7.8	53.2	1.4	4.3

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SOLARINDS	12,807.2	6.1	11,945.0	2,835.0	4.2
NAUKRI	985.2	1.8	4,594.0	1,219.0	3.8
BOSCHLTD	30,634.4	6.6	23,769.0	6,478.0	3.7
JSWENERGY	484.2	2.7	3,741.0	1,058.0	3.5
IDEA	8.6	1.3	14,651.0	4,212.0	3.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
AUBANK	874.9	3.8	4,667.0	5,545.0	1.2
APOLLOHOSP	7,305.4	-1.5	9,958.0	10,915.0	1.1
APLAPOLLO	1,934.8	-0.1	4,314.0	4,677.0	1.1
TATACONSUM	1,023.8	0.9	2,070.0	2,185.0	1.1
DRREDDY	1,209.6	-3.6	8,309.0	8,523.0	1.0

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
LODHA	685.4	1.2	12,537.0	16,785.0	74.7
SAMMAANCAP	146.6	-1.9	4,536.0	7,275.0	62.4
RBLBANK	301.6	4.1	5,511.0	9,308.0	59.2
ASHOKLEY	149.1	-3.3	11,976.0	21,126.0	56.7
DMART	4,271.1	7.9	7,605.0	13,795.0	55.1

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
SAMMAANCAP	146.6	-1.9	4,105.0	4,046.0	100.0
SBICARD	637.2	0.3	5,669.0	7,491.0	75.7
DMART	4,271.1	7.9	6,506.0	8,884.0	73.2
HDFCLIFE	573.0	-3.0	4,548.0	6,517.0	69.8
ADANIPOINTS	1,385.4	5.5	12,737.0	18,505.0	68.8

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
SAMMAANCAP	146.6	-1.9	11,728.0	14,297.0	82.0
INDIGO	4,180.8	6.0	112,199.0	146,281.0	76.7
DMART	4,271.1	7.9	59,968.0	87,199.0	68.8
VOLTAS	1,249.7	-1.8	27,094.0	41,523.0	65.3
BOSCHLTD	30,634.4	6.6	23,769.0	36,666.0	64.8

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
DMART	4,271.1	7.9	24,435.0	26,906.0	90.8
HDFCLIFE	573.0	-3.0	11,682.0	14,952.0	78.1
SAMMAANCAP	146.6	-1.9	5,984.0	9,389.0	63.7
CIPLA	1,195.9	-2.3	8,946.0	15,109.0	59.2
BOSCHLTD	30,634.4	6.6	6,478.0	11,197.0	57.9

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
LODHA	685.4	1.2	12,537.0	8,287.7	1.5
SAMMAANCAP	146.6	-1.9	4,536.0	5,341.4	0.8
ASHOKLEY	149.1	-3.3	11,976.0	15,198.5	0.8
DMART	4,271.1	7.9	7,605.0	9,683.2	0.8
RBLBANK	301.6	4.1	5,511.0	7,714.9	0.7

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SAMMAANCAP	146.6	-1.9	4,105.0	2,447.6	1.7
DMART	4,271.1	7.9	6,506.0	6,410.4	1.0
ASHOKLEY	149.1	-3.3	8,323.0	8,207.6	1.0
LODHA	685.4	1.2	6,034.0	6,134.4	1.0
HDFCLIFE	573.0	-3.0	4,548.0	4,898.8	0.9

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SAMMAANCAP	146.6	-1.9	11,728.0	1,145.6	10.2
BOSCHLTD	30,634.4	6.6	23,769.0	7,084.2	3.4
DMART	4,271.1	7.9	59,968.0	21,867.1	2.7
SAIL	155.8	2.9	3,065.0	1,316.1	2.3
ASHOKLEY	149.1	-3.3	33,949.0	17,905.0	1.9

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SAMMAANCAP	146.6	-1.9	5,984.0	746.2	8.0
DMART	4,271.1	7.9	24,435.0	8,930.8	2.7
HDFCLIFE	573.0	-3.0	11,682.0	4,609.6	2.5
INOXWIND	80.5	6.7	8,715.0	4,219.4	2.1
BOSCHLTD	30,634.4	6.6	6,478.0	3,195.4	2.0

## 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
ADANIENT	2000	574740	8.5%	1843	2200	613056	19.4%	JIOFIN	300	3933900	29.3%	232	230	3290000	-0.8%
ADANIPTS	1400	1057350	1.1%	1385	1200	1385575	-13.4%	JSWSTEEL	1200	612225	5.2%	1140	1150	609525	0.8%
APOLLOHOSP	7500	92625	2.7%	7306	7000	105875	-4.2%	KOTAKBANK	370	5076000	3.9%	356	335	3228000	-5.9%
ASIANPAINT	2300	472000	3.3%	2226	1900	432500	-14.6%	LT	4000	729400	10.9%	3608	3600	420875	-0.2%
AXISBANK	1300	747500	9.0%	1193	1100	609375	-7.8%	M&M	3200	563600	5.6%	3032	3000	388800	-1.0%
BAJAJ-AUTO	9000	142275	1.2%	8896	9000	72300	1.2%	MARUTI	14000	112900	11.9%	12509	11500	74450	-8.1%
BAJAJFINSV	1760	332250	6.9%	1647	1620	306500	-1.6%	MAXHEALTH	1000	215775	4.3%	959	1100	134925	14.7%
BAJFINANCE	900	1318500	10.1%	817	800	2053500	-2.1%	NESTLEIND	1200	295000	1.6%	1181	1190	185500	0.8%
BEL	500	4113975	19.4%	419	400	3097950	-4.5%	NTPC	400	4357500	9.7%	365	380	1812000	4.2%
BHARTIARTL	1800	1234050	1.0%	1782	1800	960925	1.0%	ONGC	300	4999500	4.1%	288	270	4286250	-6.3%
CIPLA	1300	519000	8.7%	1196	1160	517875	-3.0%	POWERGRID	320	4330100	9.3%	293	300	2791100	2.5%
COALINDIA	500	2365200	11.3%	449	450	1543050	0.1%	RELIANCE	1400	5589500	2.2%	1369	1400	2231000	2.2%
DRREDDY	1300	355000	7.5%	1210	1200	328750	-0.8%	SBILIFE	2000	101625	11.7%	1791	1800	123000	0.5%
EICHERMOT	8000	143100	17.2%	6826	6900	102500	1.1%	SBIN	1100	3474750	8.1%	1018	1100	2439750	8.1%
ETERNAL	240	5446550	1.5%	237	230	3644775	-2.8%	SHRIRAMFIN	1000	1409100	11.0%	901	900	933075	-0.1%
GRASIM	2600	145750	0.3%	2593	2600	80250	0.3%	SUNPHARMA	1800	452900	4.1%	1729	1690	371350	-2.2%
HCLTECH	1400	569450	3.4%	1354	1360	443450	0.4%	TATACONSUM	1100	244750	7.4%	1024	930	283250	-9.2%
HDFCBANK	800	9214150	7.8%	742	800	2522850	7.8%	TMPV	380	2948000	25.4%	303	300	2438400	-1.0%
HDFCLIFE	600	1722600	4.7%	573	600	609400	4.7%	TATASTEEL	195	11940500	0.2%	195	190	6121500	-2.4%
HINDALCO	900	3043600	-0.5%	905	900	860300	-0.5%	TCS	2400	1108100	-0.3%	2408	2400	1130150	-0.3%
HINDUNILVR	2100	581700	1.7%	2065	2100	423900	1.7%	TECHM	1400	654000	-0.3%	1405	1400	751200	-0.3%
ICICIBANK	1220	2226700	0.6%	1213	1220	1723400	0.6%	TITAN	4200	128800	3.3%	4066	3900	122850	-4.1%
INDIGO	4300	519750	2.9%	4181	4200	303600	0.5%	TRENT	3500	263600	-0.8%	3527	3500	170400	-0.8%
INFY	1280	1774800	0.3%	1276	1280	1661200	0.3%	ULTRACEMCO	12000	63300	12.0%	10714	10000	55700	-6.7%
ITC	300	8334400	2.8%	292	290	4280000	-0.6%	WIPRO	200	6273000	4.6%	191	190	5148000	-0.6%

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

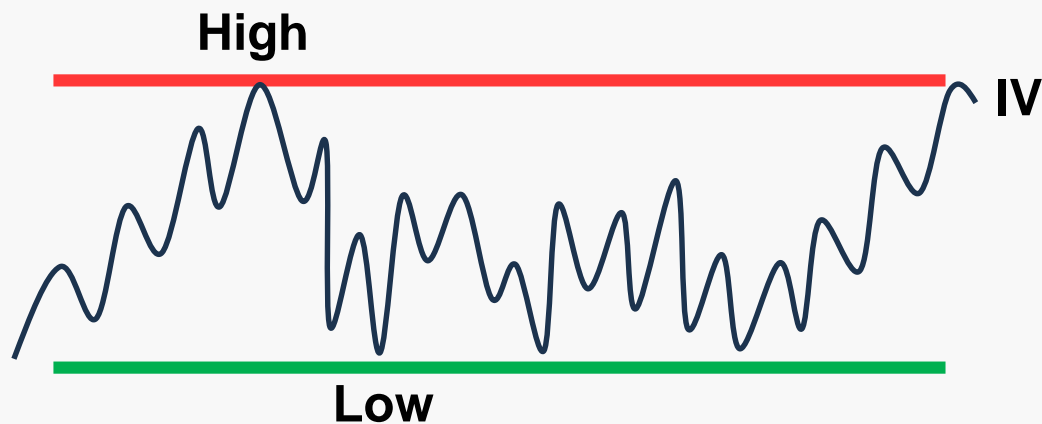
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

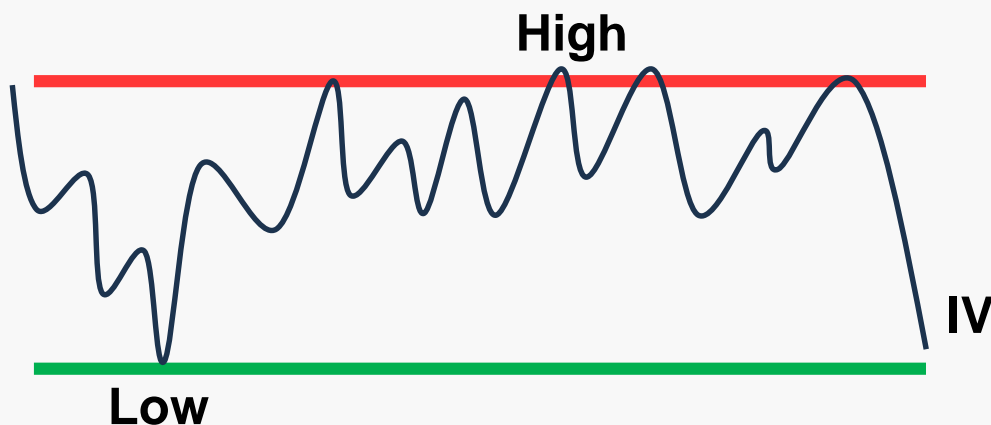
*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

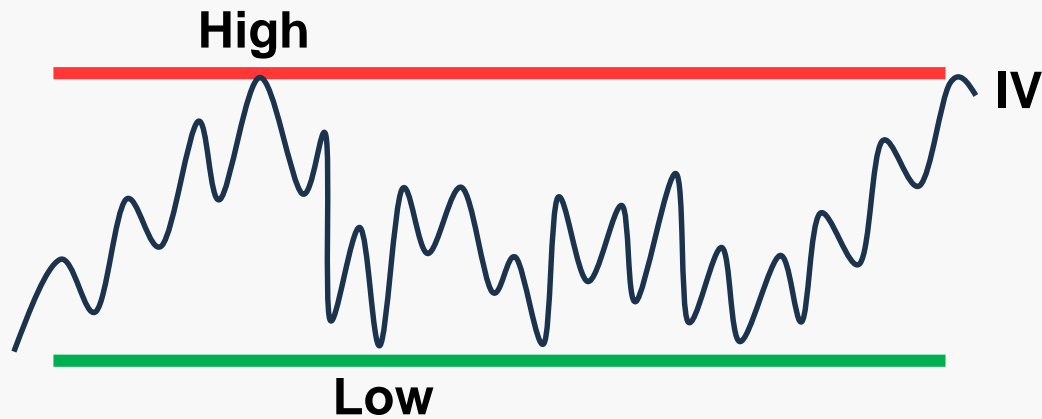


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

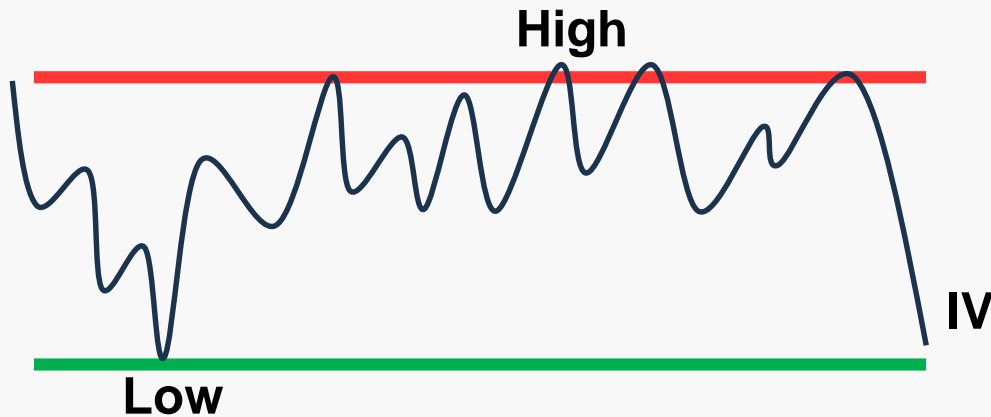


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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