



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	22,441	1.1%▲
Open Interest (OI)	1,98,25,275	0.4%▲
Change in OI (abs)	1,98,25,275	78,675▲
Premium / Discount (Abs)	104	4▼
<b>Inference</b>	<b>Long Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	48,715	0.5%▲
Open interest (OI)	40,32,480	2.6%▲
Change in OI (abs)	40,32,480	1,02,990▲
Premium / Discount (Abs)	225	2▼
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	13.67	0.2▼
Nifty ATM IV (%)	12.92	0.3▼
Bank Nifty ATM IV (%)	15.20	0.2▼
PCR (Nifty)	1.05	0.19▲
PCR (Bank Nifty)	1.02	0.02▲

The Long Ratio for the FII Index Futures **jump** to 17.9%, against 16.7% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	51,97,150	51.4%	315.6	10.7%
IREDA	1,90,93,600	13.9%	141.85	3.6%
NBCC	2,66,16,200	11.2%	79.41	5.9%
ADANIENSOL	95,56,250	10.2%	712.95	9.7%
KPITTECH	17,97,600	10.2%	1269.25	4.5%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CHOLAFIN	1,07,30,625	9.7%	1438.9	-0.5%
BSE	43,62,000	9.5%	4304.15	-3.6%
BALKRISIND	22,75,500	6.7%	2489.55	-1.2%
MUTHOOTFIN	34,95,250	2.7%	2136.3	-1.0%
PRESTIGE	47,42,725	1.1%	1180.95	-1.2%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POLYCAB	28,14,125	-8.5%	5064.35	3.4%
DEEPAKNTR	15,79,200	-7.1%	1935.4	3.9%
BIOCON	2,44,40,000	-6.3%	325.7	3.2%
LTTS	6,12,200	-6.1%	4766.35	4.2%
NCC	1,16,65,300	-4.8%	187.6	4.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GRASIM	1,12,54,000	-0.4%	2405.1	-0.1%
BERGEPAIN	96,57,120	-0.3%	478.25	-0.4%
AUBANK	2,47,49,000	0.3%	548.9	-0.2%
BAJFINANCE	93,22,750	0.6%	8341.85	-3.1%
HDFCBANK	13,69,26,350	0.7%	1699.2	-0.9%

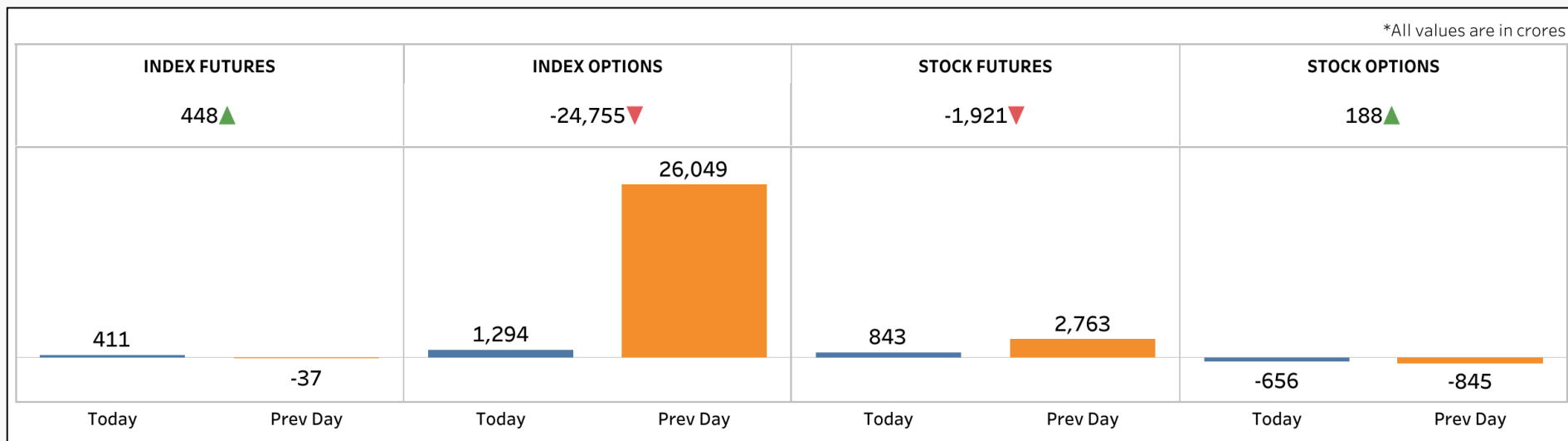
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

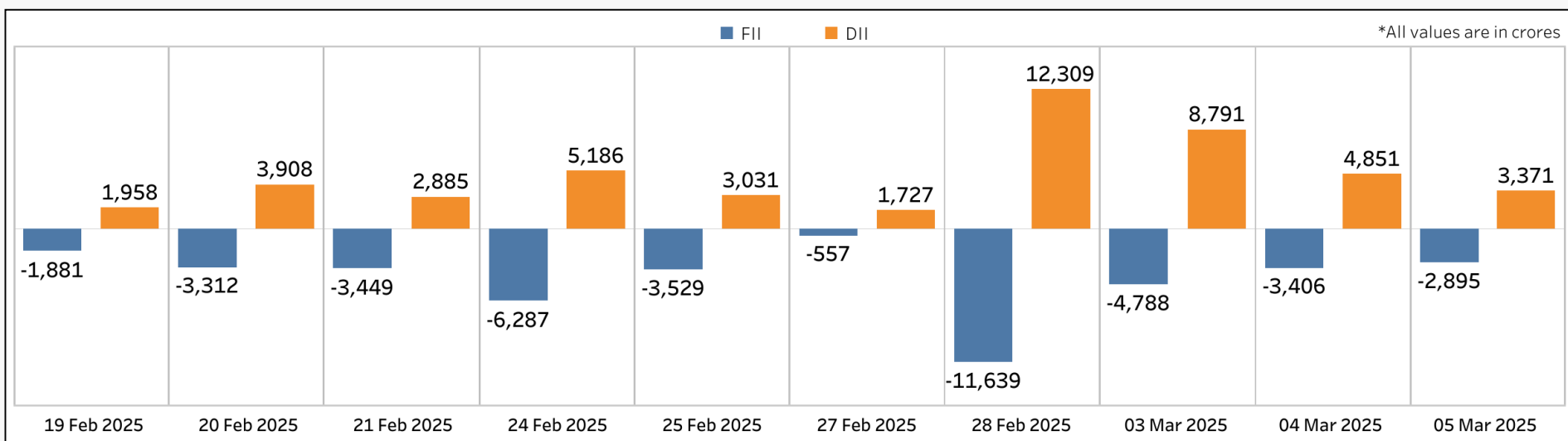
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-51,103 ▼	2,476 ▲	-103,221 ▼	-17,102 ▼	-1,400 ▼	-2,780 ▼	1,470 ▲	5,024 ▲
20,202	71,305	83,415	44,455	0	1,400	543	3,083
2,845	369	27,353		751	3,531	-927	-1,941
		-19,806					
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
55,122	-161,859	226,687	1,545,648	4,870	44,434	17,594	-4,028,148
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
11,407 ▲	-3,629 ▼	123,045 ▲	9,024 ▲	41,096 ▲	3,933 ▲	-21,295 ▼	3,054 ▲
		80,626		31,621			
	1,713	5,342					
-51,823	-63,230	-42,419	-14,240	-9,475	-5,309	-40,069	-28,274
			-5,216		-9,242	-61,364	-25,220
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-249,558	144,034	-167,945	2,064,867	189,566	-26,609	-76,339	417,633
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

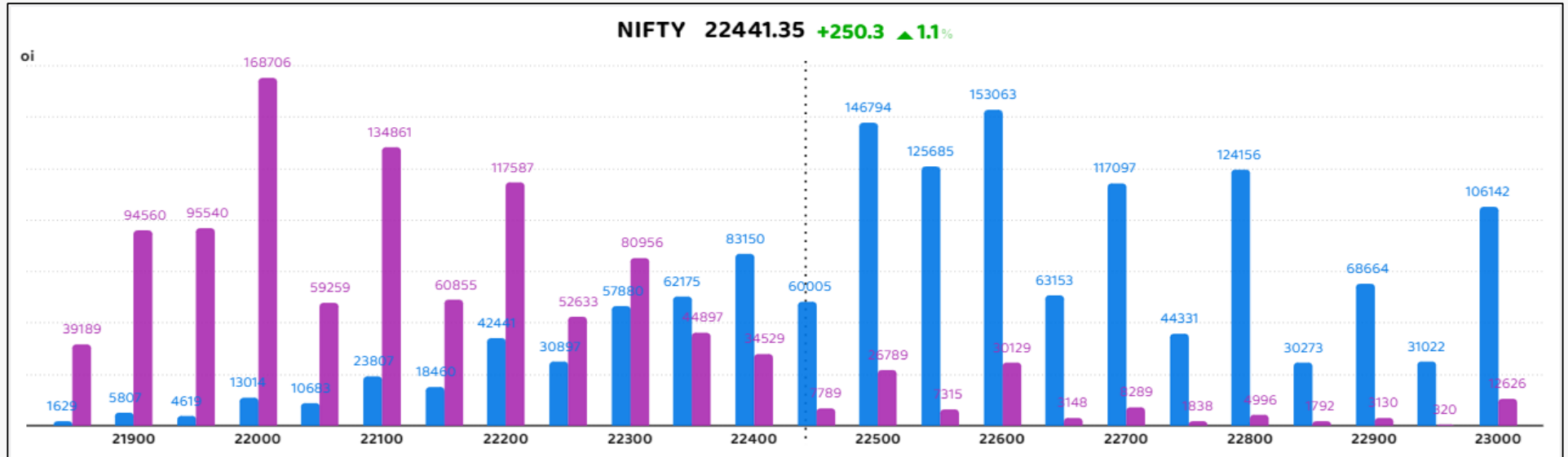


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 22600 Call and the 22000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 48000 Put saw the most amount of open interest.

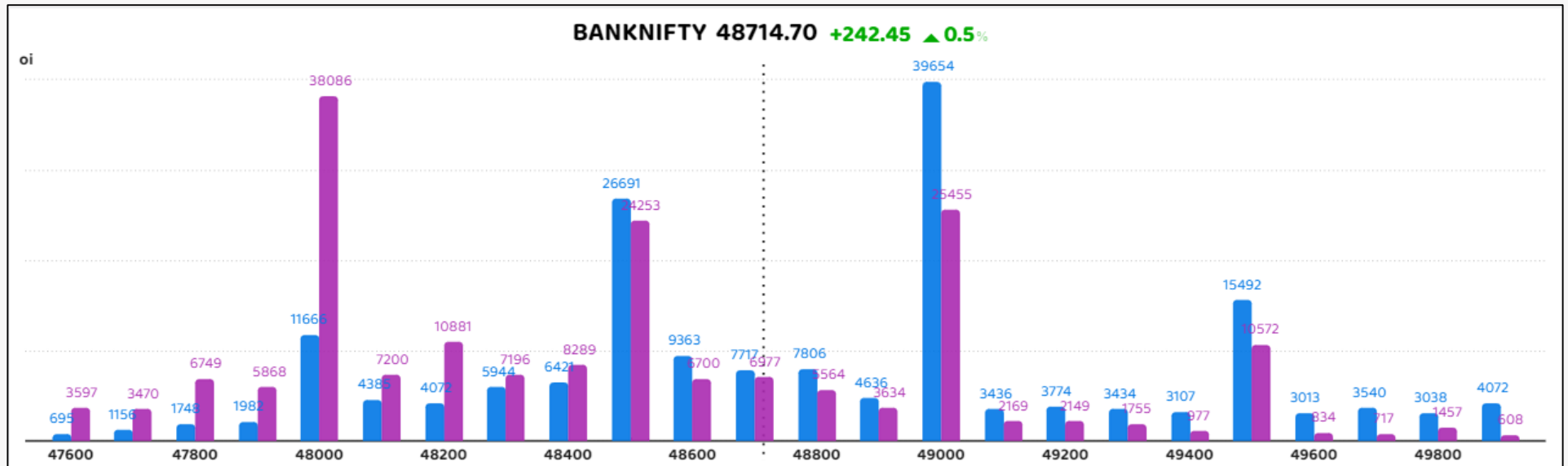
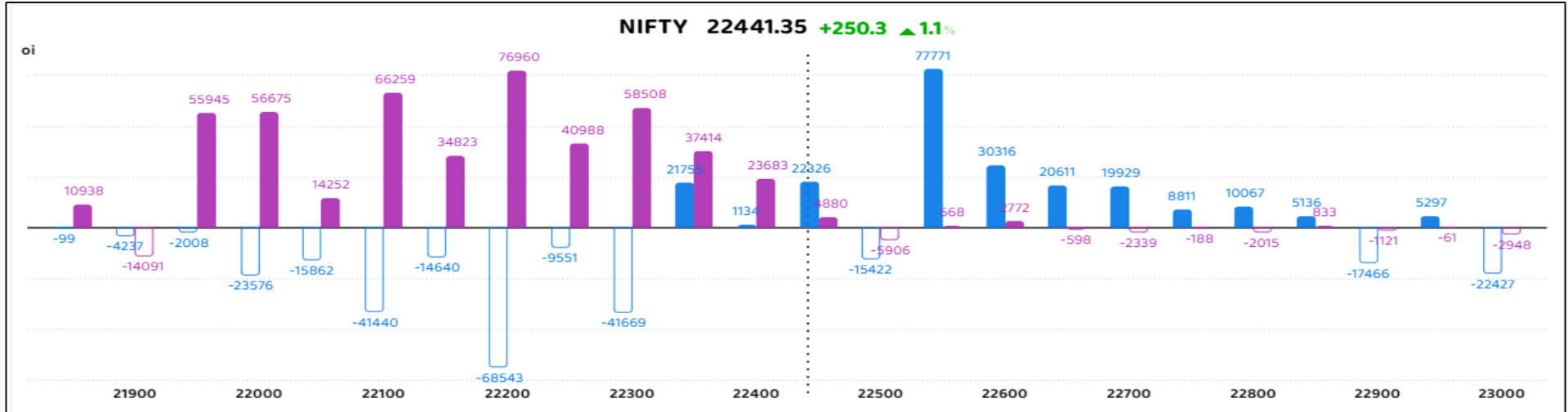


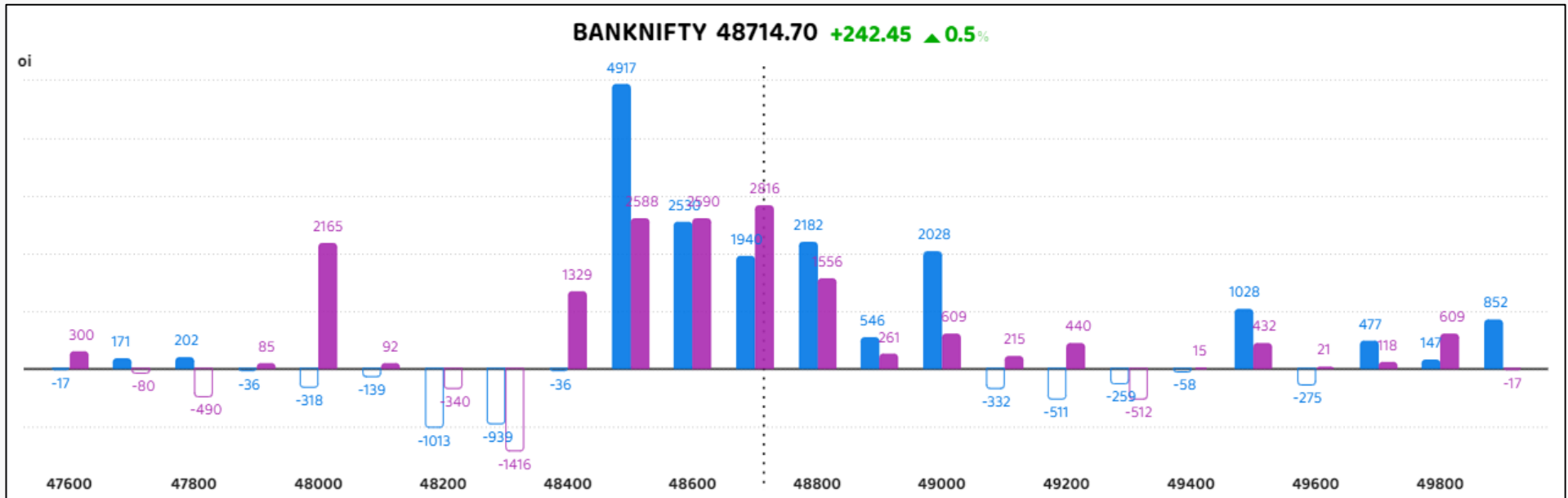
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 22600 Call and the 22200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 48500 Call & the 48700 Put

**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NTPC LTD	326.2	4.0	87.1	87.1	15.7	100.0
TATA POWER CO	351.4	1.6	43.7	50.0	4.0	86.3
CITY UNION BANK	152.95	4.0	46.8	52.1	21.1	83.1
DIXON TECHNOLOGI	14497.45	2.2	42.0	51.5	1.8	80.9
LAURUS LABS LTD	566.5	3.8	39.0	44.8	16.1	79.7

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CIPLA LTD	1419.75	1.3	22.1	61.3	18.0	9.5
INDIAN OIL CORP	122.25	3.6	26.8	51.7	23.7	11.3
ADANI PORTS AND	1112.7	5.2	33.2	97.8	23.2	13.4
BHARAT ELECTRON	274.92	3.9	34.1	81.6	25.5	15.3
BANK OF BARODA	205.22	4.7	31.2	66.9	24.3	16.1

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
NTPC LTD	326.2	4.0	87.1	87.1	15.7	100.0
CITY UNION BANK	152.95	4.0	46.8	52.1	21.1	99.6
ITC LTD	405.05	2.6	34.0	66.4	1.0	98.5
TATA POWER CO	351.4	1.6	43.7	50.0	4.0	98.2
PUNJAB NATL BANK	89.74	3.0	56.7	108.3	12.3	97.6

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CIPLA LTD	1419.75	1.3	22.1	61.3	18.0	9.5
INDIAN OIL CORP	122.25	3.6	26.8	51.7	23.7	11.3
ADANI PORTS AND	1112.7	5.2	33.2	97.8	23.2	13.4
BHARAT ELECTRON	274.92	3.9	34.1	81.6	25.5	15.3
BANK OF BARODA	205.22	4.7	31.2	66.9	24.3	16.1



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BOSCH LTD	27073.45	3.1	9700	1014	9.6
PIRAMAL ENTERPRI	910.2	2.5	3950	1002	3.9
VODAFONE IDEA LT	7.86	5.8	16675	4332	3.9
IDFC FIRST BANK	57.95	2.0	19929	5557	3.6
ESCORTS KUBOTA L	3033.05	2.5	4115	1184	3.5

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MAX FINANCIAL SE	1014.55	1.1	2155	2677	1.2
GRANULES INDIA	483.7	2.6	9616	9716	1.0
GUJARAT GAS LTD	385.75	4.2	9163	8815	1.0
L&T TECHNOLOGY S	4754.4	4.1	6471	5989	0.9
MUTHOOT FINANCE	2125.9	-1.2	3223	2876	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NO STOCK OPTION MET THE CONDITIONS MENTIONED IN THE FOOTNOTE					

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BAJAJ AUTO LTD	7420.3	1.2	27240	17573	1.6
POLYCAB INDIA LT	5071.3	3.4	21102	17309	1.2
JSW STEEL LTD	1002.7	2.9	10749	8841	1.2
CITY UNION BANK	152.95	4.0	3773	3266	1.2
BERGER PAINTS	484	0.5	4065	3539	1.1

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
COFORGE LTD	7814.2	8.3	18165	10329	1.8
POLYCAB INDIA LT	5071.3	3.4	13515	9671	1.4
BAJAJ AUTO LTD	7420.3	1.2	15183	11409	1.3
INTERGLOBE AVIAT	4698.1	2.2	8970	7179	1.2
HINDUSTAN PETRO	326.15	3.5	7365	5999	1.2

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
COFORGE LTD	7814.2	8.3	190125	44207	4.3
COROMANDEL INTER	1703.1	5.7	7341	2310	3.2
BOSCH LTD	27073.45	3.1	9700	3257	3.0
BALKRISHNA INDS	2497.2	-1.2	5005	2124	2.4
TATA COMMUNICATI	1390	5.6	11826	5256	2.3

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
COFORGE LTD	7814.2	8.3	117714	33088	3.6
COROMANDEL INTER	1703.1	5.7	6488	1999	3.2
GUJARAT GAS LTD	385.75	4.2	8815	2910	3.0
HINDUSTAN PETRO	326.15	3.5	16019	5740	2.8
GRANULES INDIA	483.7	2.6	9716	4254	2.3

## 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
ADANIENT	2600	1188300	15.8%	2246	2600	2709300	15.8%	INFY	1900	1405200	11.0%	1712	1600	882000	-6.5%
ADANIPTS	1100	1033600	-1.1%	1113	1100	691600	-1.1%	ITC	420	6763200	3.7%	405	400	2923200	-1.2%
APOLLOHOSP	6800	126375	9.4%	6214	6000	76500	-3.5%	JSWSTEEL	1000	1343925	-0.3%	1003	900	546750	-10.2%
ASIANPAINT	2300	565200	6.3%	2164	2200	245800	1.7%	KOTAKBANK	2000	940400	3.5%	1933	1900	722800	-1.7%
AXISBANK	1050	2071250	3.5%	1014	1000	1555000	-1.4%	LT	3300	775500	1.9%	3240	3200	677550	-1.2%
BAJAJ-AUTO	8000	260175	7.8%	7420	7000	138525	-5.7%	LTIM	5000	173100	4.7%	4774	4500	78300	-5.7%
BAJAJFINSV	1900	1052500	5.5%	1802	1560	518500	-13.4%	M&M	3000	1091300	10.0%	2727	2500	634900	-8.3%
BAJFINANCE	9000	525750	8.5%	8299	8000	274750	-3.6%	MARUTI	13000	204250	11.9%	11617	11000	109700	-5.3%
BHARTIARTL	1700	1252100	5.1%	1618	1600	906775	-1.1%	NESTLEIND	2260	205400	2.9%	2197	1960	156200	-10.8%
BPCL	260	2176200	1.6%	256	250	1668600	-2.3%	NTPC	320	3009000	-1.9%	326	380	2653500	16.5%
BRITANNIA	5000	72600	5.9%	4722	4100	87600	-13.2%	ONGC	250	2660350	9.2%	229	225	2019325	-1.7%
CIPLA	1600	392275	12.7%	1420	1240	581100	-12.7%	POWERGRID	280	1551600	5.9%	264	250	1612800	-5.4%
COALINDIA	400	2407650	8.6%	368	450	2723700	22.2%	RELIANCE	1300	6769500	10.6%	1176	1200	3518000	2.1%
DIVISLAB	6000	142900	8.8%	5517	4700	98100	-14.8%	SBLIFE	1500	421500	5.6%	1421	1400	193125	-1.5%
DRREDDY	1200	646250	6.5%	1126	960	348750	-14.8%	SBIN	800	7301250	9.5%	730	700	5469750	-4.2%
EICHERMOT	5000	232575	0.2%	4988	4800	233975	-3.8%	SUNPHARMA	1600	1038450	1.1%	1582	1600	593950	1.1%
GRASIM	2620	265500	9.5%	2392	2300	173750	-3.8%	TATACONSUM	1100	450072	15.0%	957	880	310992	-8.0%
HCLTECH	1600	454650	1.7%	1573	1360	740250	-13.5%	TATAMOTORS	700	6604950	9.2%	641	600	2289100	-6.4%
HDFCBANK	1700	3553550	0.6%	1690	1700	3116850	0.6%	TATASTEEL	150	35524500	2.7%	146	130	11698500	-11.0%
HDFCLIFE	620	1287000	-0.2%	621	550	988900	-11.5%	TCS	4000	1289050	12.8%	3547	3500	558950	-1.3%
HEROMOTOCO	4000	420000	11.5%	3589	3500	143250	-2.5%	TECHM	1800	1083600	17.0%	1538	1500	471600	-2.5%
HINDALCO	650	2588600	-1.1%	657	620	1698200	-5.7%	TITAN	3200	413700	3.7%	3087	3000	278425	-2.8%
HINDUNILVR	2300	843300	6.0%	2170	2200	473400	1.4%	ULTRACEMCO	11000	149300	5.1%	10464	10000	72650	-4.4%
ICICIBANK	1300	2121000	6.9%	1216	1200	2867900	-1.3%	UPL	640	1841445	1.9%	628	600	677500	-4.4%
INDUSINDBK	1100	2208500	13.2%	972	1000	1006000	2.9%	WIPRO	300	4821000	5.2%	285	280	2496000	-1.8%

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

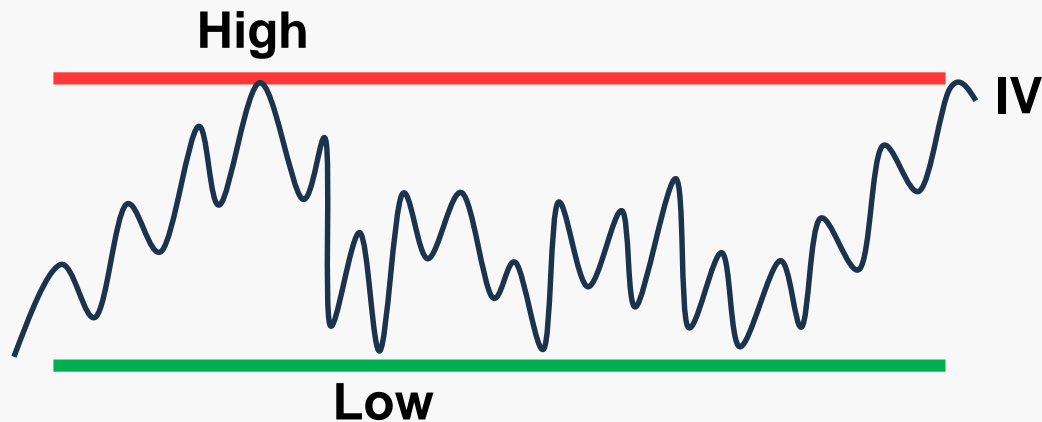
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

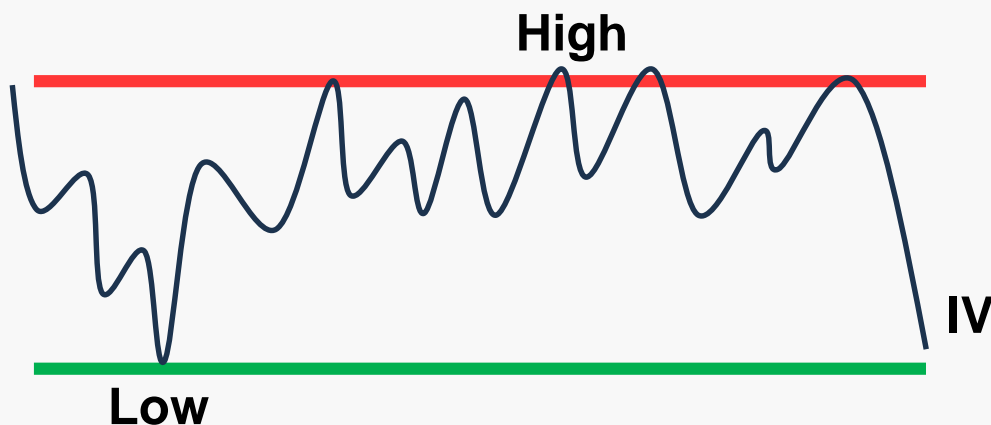
- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, 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

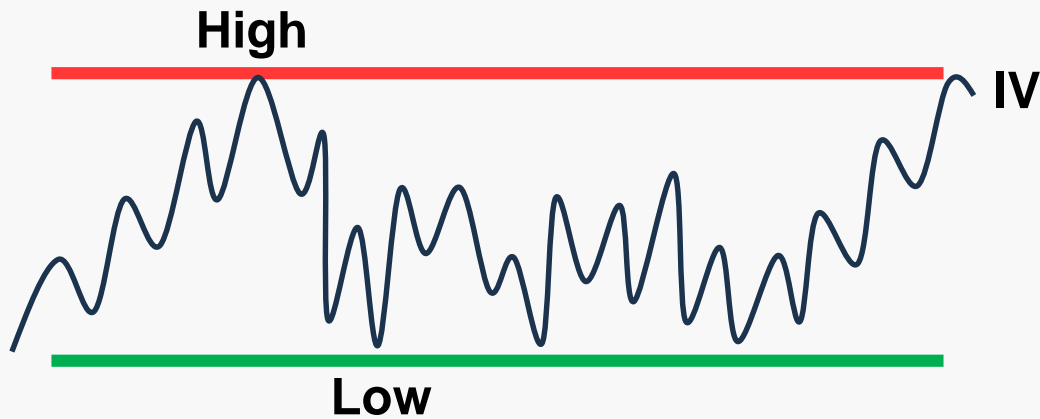


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

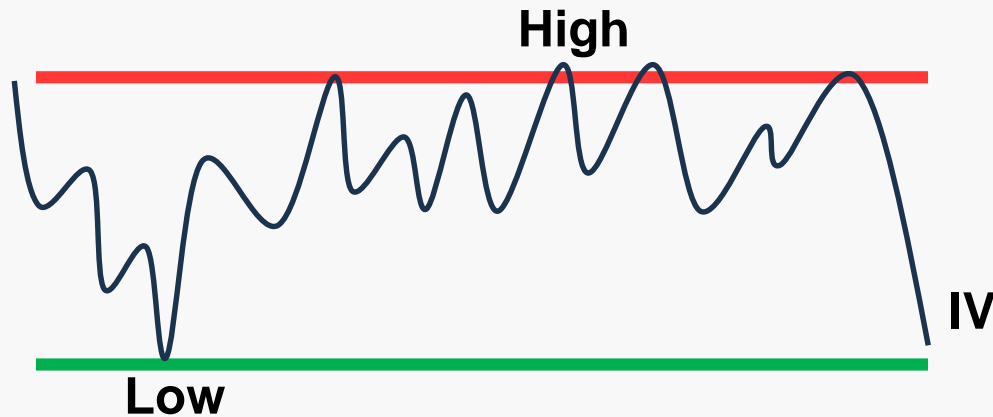


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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In case of any grievances please call us at 022-40508080 or write to us [helpdesk@axisdirect.in](mailto:helpdesk@axisdirect.in).

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