



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	23,418	0.6%▲
Open Interest (OI)	1,81,08,975	13.7%▼
Change in OI (abs)	1,81,08,975	34,90,875▼
Premium / Discount (Abs)	169	139▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	49,687	0.5%▲
Open interest (OI)	31,37,910	12.9%▼
Change in OI (abs)	31,37,910	5,63,040▼
Premium / Discount (Abs)	375	251▲
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	17.39	1.3▼
Nifty ATM IV (%)	24.51	6.3▼
Bank Nifty ATM IV (%)	21.23	10.5▼
PCR (Nifty)	0.97	0.09▼
PCR (Bank Nifty)	0.93	0.14▲

The Long Ratio for the FII Index Futures **plunged** to 11.1%, against 24.8% recorded in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ICICIBANK	11,20,87,500	6.2%	1262.4	0.5%
DABUR	1,86,01,250	3.9%	537.6	3.1%
BPCL	6,87,45,600	3.5%	258.15	0.1%
ITC	6,37,08,800	3.2%	433.6	0.7%
BHARTIARTL	4,26,56,425	3.0%	1648.95	2.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIPTS	3,54,40,000	15.3%	1084	-1.9%
ABB	24,27,375	13.1%	5755.2	-6.3%
LT	1,66,13,850	7.7%	3438.15	-1.0%
HCLTECH	1,94,92,900	6.0%	1723.8	-0.4%
AMBUJACEM	3,61,17,900	3.1%	512.15	-2.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BERGEPAIN	68,57,400	-40.5%	474.7	3.4%
INDIAMART	8,78,100	-34.9%	2089.05	1.0%
CYIENT	22,43,400	-28.8%	1364.15	1.1%
APOLLOTYRE	1,00,07,900	-28.4%	434.3	2.2%
BANKINDIA	4,54,75,625	-28.3%	111.99	0.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DALBHARAT	30,40,125	-37.9%	1824.55	-0.6%
CANFINHOME	51,54,825	-27.4%	658.3	-1.9%
LUPIN	66,15,550	-22.8%	2077.65	-0.1%
KALYANKJIL	1,66,81,100	-21.7%	443.05	-1.8%
POLYCAB	20,43,875	-20.5%	5817.65	-0.5%

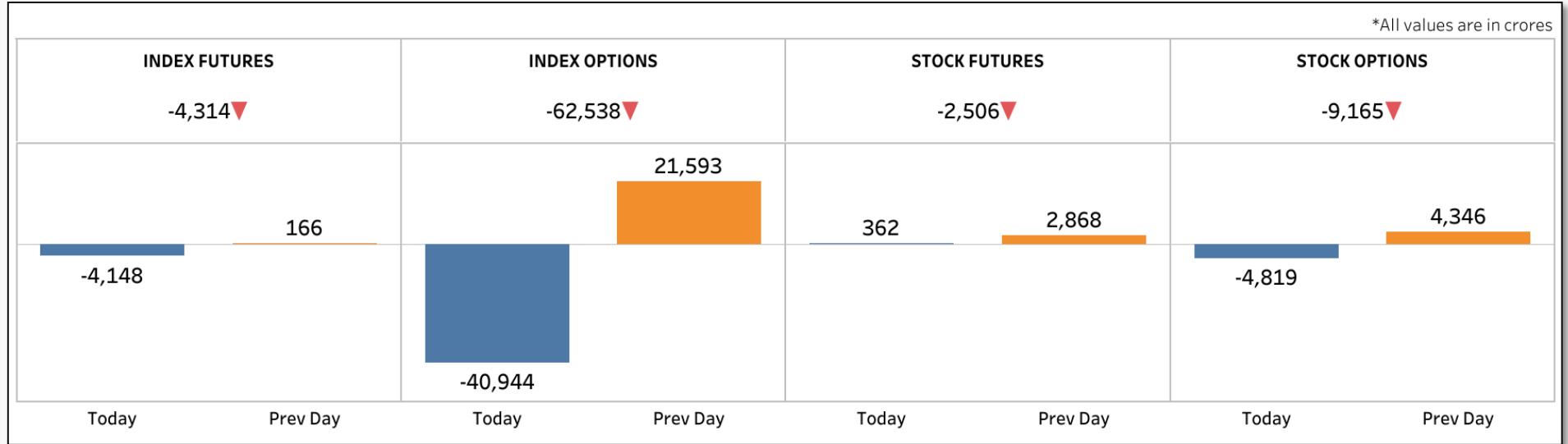
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Data by Participant

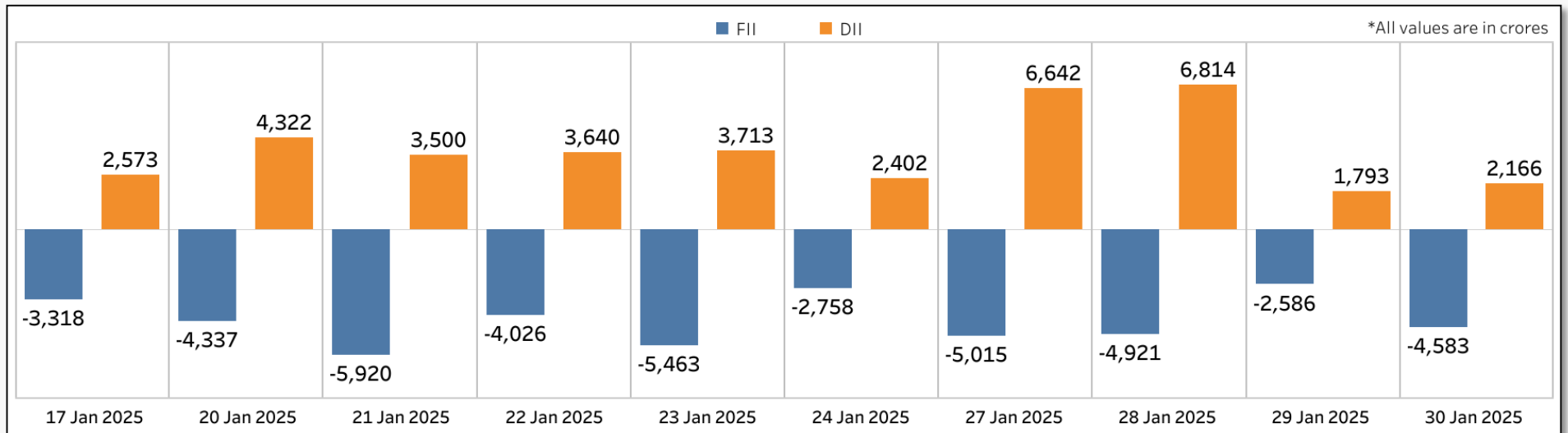
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-806,346 ▼	38,685 ▲	-419,508 ▼	-223,673 ▼	0	-36,274 ▼	-53,478 ▼	-8,511 ▼
217,315	51,181	190,796	43,431	0	17,596	17,145	25,656
12,496				0			
-589,031		-228,712	-180,242		-18,678	-74,811	
						-21,333	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-84,305	-150,290	59,900	1,120,162	70	15,552	31,665	-3,828,055
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
1,206,445 ▲	-53,771 ▼	430,500 ▲	36,198 ▲	-400,099 ▼	51,360 ▲	42,490 ▲	195,986 ▲
936,942		307,174	31,257	52,188	48,059		131,840
-269,503	-80,562	-123,326	-4,941	-347,911	-3,301	-3,649	
	-26,791					-46,139	-64,146
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
10,151	144,407	-92,380	2,207,691	74,084	-9,669	814	500,202
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

## Daily Net Open Interest Change

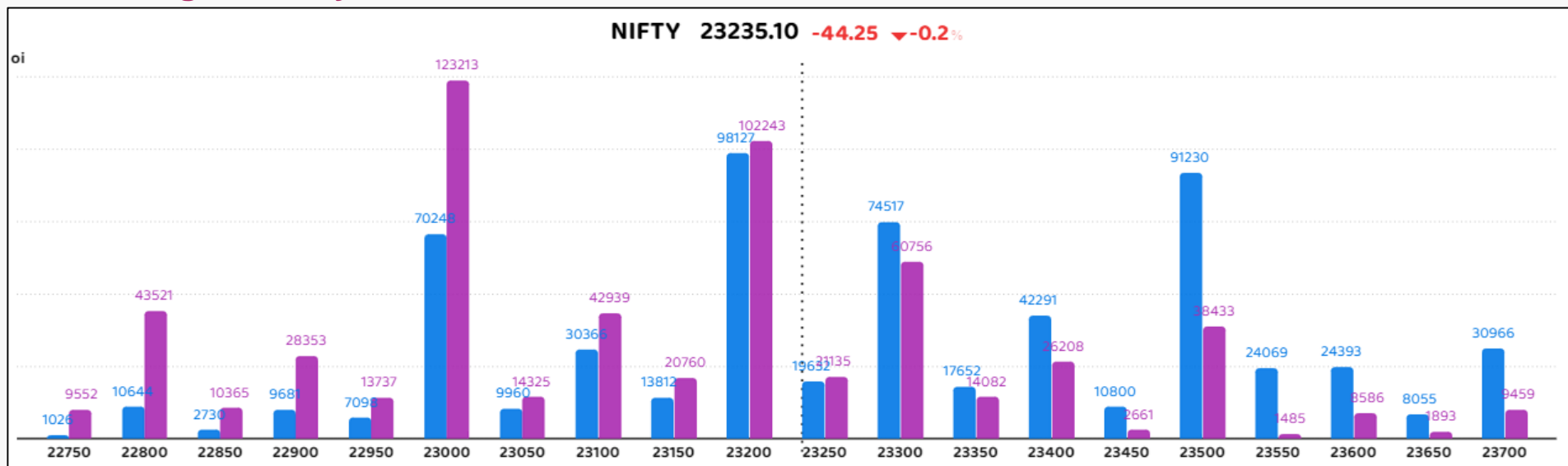


## DII and FII Daily Cash Market Flows



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

Call ■ Put ■



For the Nifty, the 23200 Call and the 23000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 49000 Put saw the most amount of open interest.

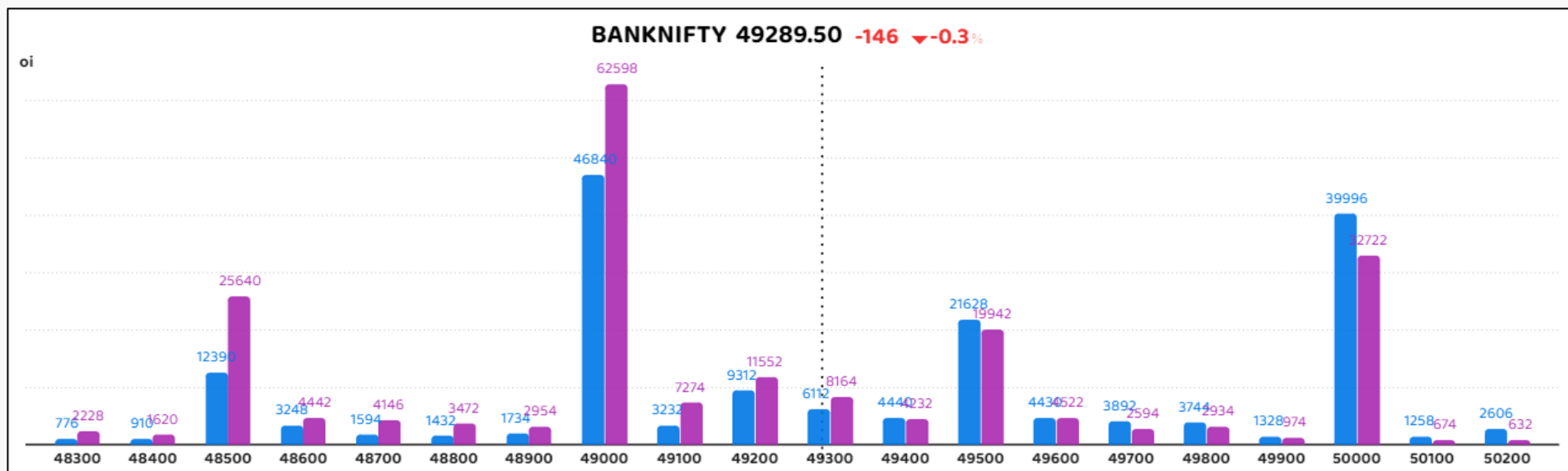
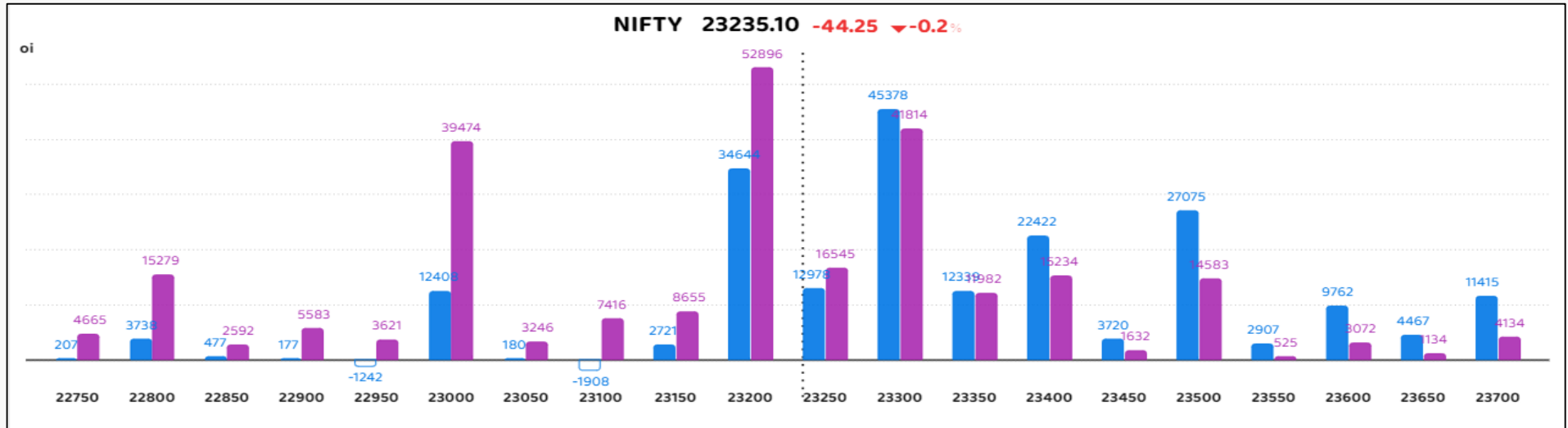


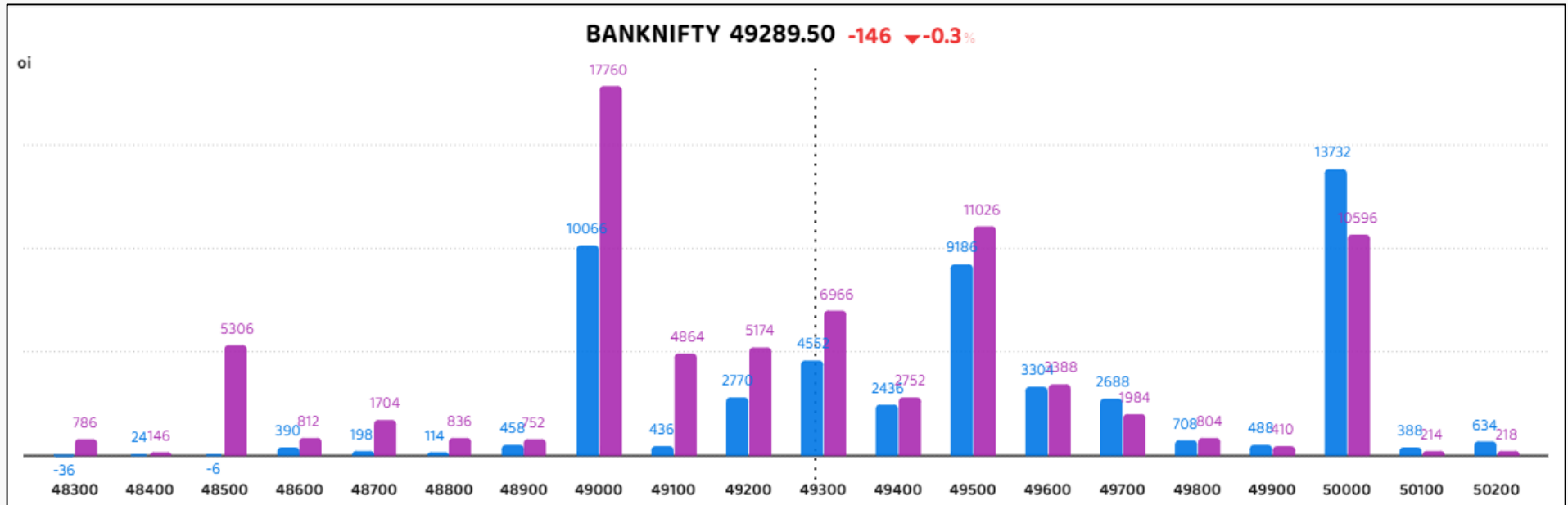
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 23300 Call and the 23200 Put



For the Bank Nifty, the biggest open interest changes were seen at the 50000 Call & the 49000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
NAVIN FLUORINE I	3908.25	4.5	48.5	48.5	16.8	100.0
LAURUS LABS LTD	588.45	8.2	42.4	44.3	16.1	99.6
VOLTAS LTD	1269.3	-13.9	44.3	50.4	21.9	99.6
TATA CONSUMER PR	966.7	0.6	33.6	34.0	13.6	99.5
AARTI INDUS LTD	438	2.4	49.2	55.8	15.5	99.4

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	28583.55	1.5	22.1	39.2	3.3	21.9
COLGATE PALMOLIV	2771.3	1.4	21.4	32.8	9.5	24.9
ABBOTT INDIA LTD	26129.4	2.5	21.1	36.5	6.5	30.0
LTIMINDTREE LTD	5840.25	-0.7	28.0	36.6	20.0	39.4
APOLLO HOSPITALS	6824.65	0.6	24.3	40.3	17.7	43.3

## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
NAVIN FLUORINE I	3908.25	4.5	48.5	48.5	16.8	100.0
LAURUS LABS LTD	588.45	8.2	42.4	44.3	16.1	99.6
VOLTAS LTD	1269.3	-13.9	44.3	50.4	21.9	99.6
TATA CONSUMER PR	966.7	0.6	33.6	34.0	13.6	99.5
AARTI INDUS LTD	438	2.4	49.2	55.8	15.5	99.4

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ABBOTT INDIA LTD	26129.4	2.5	21.1	36.5	6.5	30.0
LTIMINDTREE LTD	5840.25	-0.7	28.0	36.6	20.0	39.4
APOLLO HOSPITALS	6824.65	0.6	24.3	40.3	17.7	43.3



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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
OBEROI REALTY	1755.7	2.2	10777	2539	4.2
GRANULES INDIA	564.45	5.5	6978	1723	4.1
ICICI PRUDENTIAL	611.4	0.8	8890	2211	4.0
GODREJ PROPERTIE	2288.4	2.3	11551	3057	3.8
ESCORTS KUBOTA L	3590.95	1.6	2229	593	3.8

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

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MARICO LTD	672.15	0.0	1522	4242	2.8
UNITED BREWERIES	2124.4	2.5	815	1841	2.3
GUJARAT NARM VLY	545.6	-0.5	808	1796	2.2
PETRONET LNG LTD	300.6	-0.3	3010	4448	1.5
UNITED SPIRITS	1426.9	-0.1	1858	2230	1.2

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
VOLTAS LTD	1269.3	-13.9	30002	30002	100.0

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
STEEL AUTHORITY	105.45	1.0	12430	12430	100.0
VOLTAS LTD	1269.3	-13.9	15902	15902	100.0
TRENT LTD	5511.2	-1.5	20738	23457	88.4
POWER FINANCE	413.7	3.7	18341	21435	85.6

### Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
NO STOCK OPTION MET THIS CRITERIA IN THE PREVIOUS SESSION					

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
NO STOCK OPTION MET THIS CRITERIA IN THE PREVIOUS SESSION					

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
VOLTAS LTD	1269.3	-13.9	71299	20208	3.5
ADANI PORTS AND	1077.05	-1.8	125938	41783	3.0
BAJAJ FINANCE LT	7901.65	1.8	166912	77800	2.1
BHARAT ELECTRON	278.75	4.3	67271	31642	2.1
SRF LTD	2831.15	6.2	51793	24787	2.1

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ADANI PORTS AND	1077.05	-1.8	63405	20171	3.1
VOLTAS LTD	1269.3	-13.9	42240	14455	2.9
BAJAJ FINANCE LT	7901.65	1.8	101118	49942	2.0
ABB INDIA LTD	5719.35	-6.4	16791	9095	1.8
BAJAJ FINSERV LT	1745.2	-2.5	28210	16432	1.7

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
VOLTAS LTD	1269.3	-13.9	30002	10831	2.8
SYNGENE INTERNAT	759.7	0.0	4851	3437	1.4
TATA MOTORS LTD	696.85	-7.4	141122	104013	1.4
AMBUJA CEMENTS	509.55	-2.4	13897	10768	1.3
SRF LTD	2831.15	6.2	13702	11219	1.2

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
VOLTAS LTD	1269.3	-13.9	15902	7524	2.1
SHREE CEMENT	26830.5	0.7	2111	1297	1.6
ULTRATECH CEMENT	11479.4	-0.6	19197	13964	1.4
WIPRO LTD	309	-1.1	21140	15688	1.3
TVS MOTOR CO LTD	2455.25	-0.4	7689	5772	1.3

## 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	2800	1456800	24.3%	2253	2800	2621100	24.3%	INFY	2000	700400	7.5%	1860	1800	687200	-3.2%
ADANIPTS	1100	1801600	2.1%	1077	1100	713200	2.1%	ITC	450	3270400	3.2%	436	400	2036800	-8.3%
APOLLOHOSP	7000	35500	2.6%	6825	7000	18125	2.6%	JSWSTEEL	1000	384075	5.2%	951	900	401625	-5.3%
ASIANPAINT	2500	518400	11.1%	2250	2600	289600	15.6%	KOTAKBANK	1900	1034800	-0.1%	1902	1800	789600	-5.3%
AXISBANK	1000	2323125	1.6%	985	980	1366250	-0.5%	LT	3500	701100	2.3%	3421	3400	637050	-0.6%
BAJAJ-AUTO	9000	141900	2.9%	8748	8000	62400	-8.5%	LTIM	7000	63150	19.9%	5840	5500	40950	-5.8%
BAJAJFINSV	1900	837500	8.9%	1745	1700	452000	-2.6%	M&M	3000	298200	1.0%	2971	2900	237825	-2.4%
BAJFINANCE	8000	362000	1.2%	7902	7500	237500	-5.1%	MARUTI	13000	211050	8.3%	12000	12000	123200	0.0%
BHARTIARTL	1700	463125	3.6%	1641	1600	782325	-2.5%	NESTLEIND	2400	408000	8.2%	2217	2100	131800	-5.3%
BPCL	300	5151600	16.7%	257	250	1834200	-2.8%	NTPC	390	3877500	20.7%	323	390	3786000	20.7%
BRITANNIA	5200	73000	2.5%	5075	5000	61400	-1.5%	ONGC	300	3407250	16.9%	257	250	1643950	-2.6%
CIPLA	1500	497900	2.9%	1457	1440	279175	-1.2%	POWERGRID	300	2057400	1.6%	295	320	1146600	8.3%
COALINDIA	400	2235450	3.9%	385	450	3125850	16.9%	RELIANCE	1400	6441000	11.7%	1253	1400	3338000	11.7%
DIVISLAB	6000	62900	4.6%	5736	5400	57400	-5.9%	SBLIFE	1600	496125	8.6%	1473	1400	162375	-4.9%
DRREDDY	1300	689375	8.8%	1195	1200	206875	0.5%	SBIN	800	4921500	4.9%	763	800	3120000	4.9%
EICHERMOT	5200	91875	0.7%	5164	5000	71400	-3.2%	SUNPHARMA	1800	181300	3.5%	1739	1720	237650	-1.1%
GRASIM	2600	215000	4.3%	2492	2400	111250	-3.7%	TATACONSUM	1000	409944	3.4%	967	900	346560	-6.9%
HCLTECH	1900	520100	10.9%	1713	1540	314650	-10.1%	TATAMOTORS	800	6133600	14.8%	697	700	4226750	0.5%
HDFCBANK	1800	2801700	6.4%	1692	1700	1480600	0.5%	TATASTEEL	140	12419000	6.8%	131	160	11236500	22.0%
HDFCLIFE	700	819500	10.4%	634	600	625900	-5.4%	TCS	4500	259175	9.8%	4100	4000	302575	-2.4%
HEROMOTOCO	4500	210750	7.7%	4178	4000	132900	-4.3%	TECHM	1800	366000	7.8%	1670	1600	238200	-4.2%
HINDALCO	600	1128400	2.1%	588	600	1436400	2.1%	TITAN	3400	185850	0.9%	3368	3300	143325	-2.0%
HINDUNILVR	2500	672900	3.8%	2409	2300	347100	-4.5%	ULTRACEMCO	12000	114700	4.5%	11479	11000	81500	-4.2%
ICICIBANK	1300	1973300	3.5%	1256	1200	1857800	-4.4%	UPL	600	1330610	5.8%	567	550	621945	-3.0%
INDUSINDBK	1000	2280500	4.5%	957	1000	1073500	4.5%	WIPRO	294	2001000	-4.9%	309	274	2589000	-11.3%

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

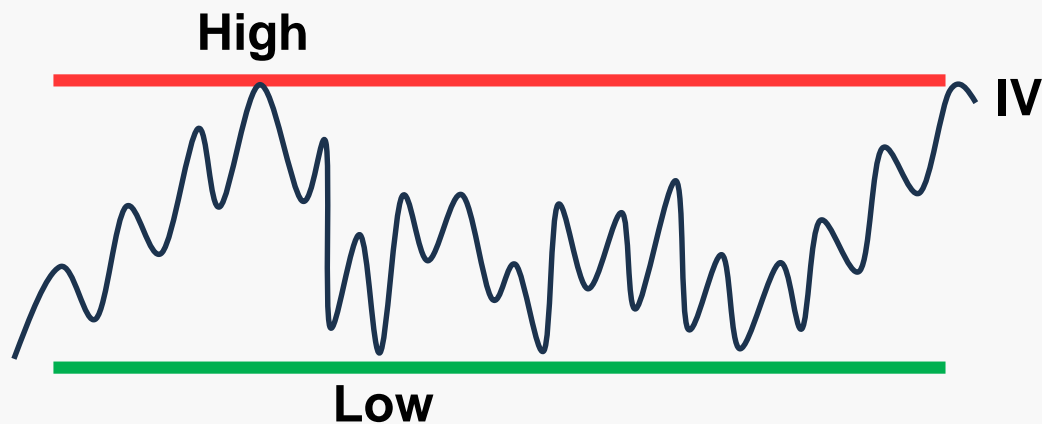
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

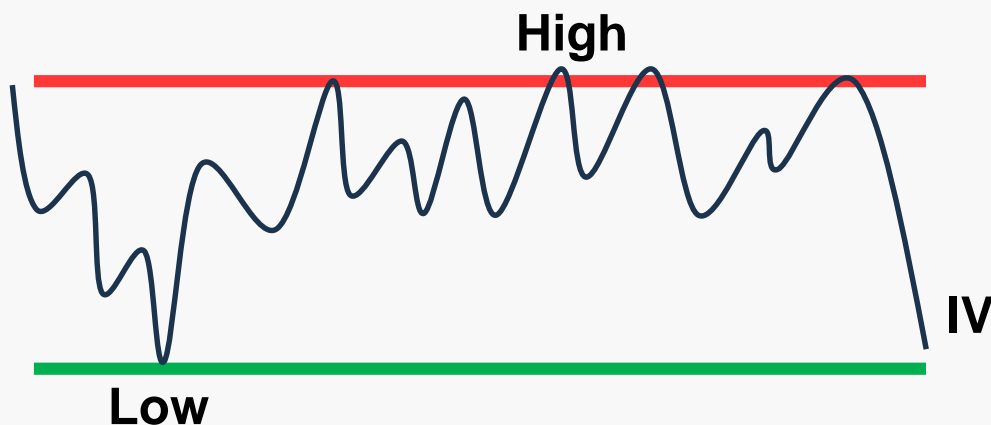
- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls,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

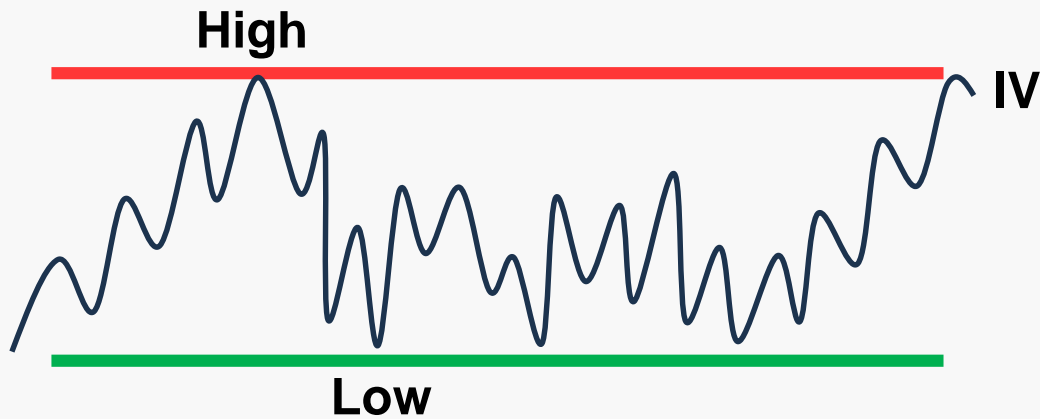


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

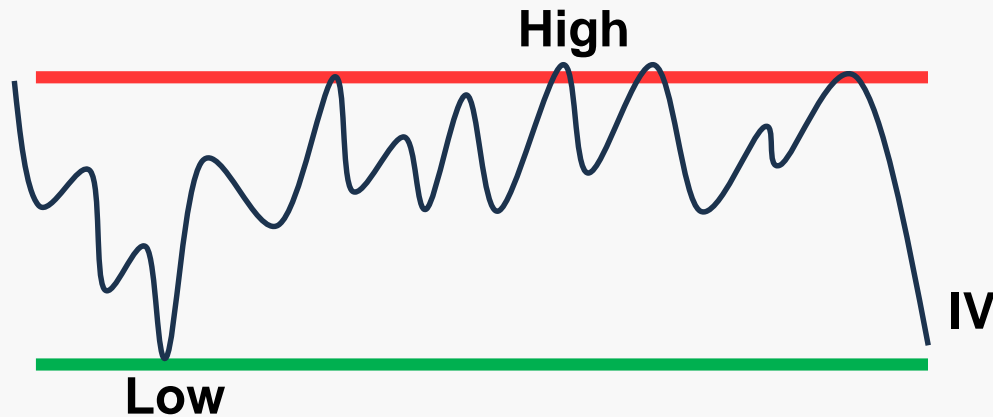


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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Compliance Officer Details: Name – Mr. Maneesh Mathew, Tel No. – 022-68555574, Email id – [compliance.officer@axisdirect.in](mailto:compliance.officer@axisdirect.in);

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in