

Daily Derivatives Report

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Nifty Futures	Bank Nifty Futures					Volatility Insights			
	Value	Change		Value	Change	`	Value	Change	
Most recent settlement	22,973	0.2%▼	Most recent settlement	49,462	0.5%▼	India VIX Index	15.66	0.1▼	
Open Interest (OI)	1,91,83,500	0.9%▼	Open interest (OI)	40,00,560	1.4%▲	Nifty ATM IV (%)	17.48	0.9▼	
Change in OI (abs)	1,91,83,500	1,72,350▼	Change in OI (abs)	40,00,560	56,010▲	Bank Nifty ATM IV (%)	18.46	0.4▼	
Premium / Discount (Abs)	27	40▼	Premium / Discount (Abs)	203	83▼	PCR (Nifty)	0.84	0.03▼	
Inference	Long Unw	inding	Inference	Short B	uild Up	PCR (Bank Nifty)	0.70	0.05▼	

The Long Ratio for the FII Index Futures declined to 15.9%, against 16.2% recorded in the previous session.

Single Stock Futures Movers

Long Build	Long Buildup (Open Interest Higher + Price Higher)				Short Buil	dup (Open Intere	st Higher + I	Price Lower)	Lower)			
Symbol	Open Interest	Chg (%)	Price	Chg (%)	Symbol	Open Interest	Chg (%)	Price	Chg (%)			
BERGEPAINT	1,56,57,840	13.6%	492.2	1.5%	MCX	14,35,800	12.2%	5451.35	-1.9%			
ANGELONE	48,55,600	4.0%	2211.55	0.2%	ABB	33,66,625	11.8%	5148.55	-2.1%			
ADANIGREEN	1,45,40,250	3.4%	876.2	1.5%	BSE	34,80,000	9.7%	5181.1	-0.2%			
PERSISTENT	25,53,400	3.4%	5786.3	4.2%	LTF	8,63,84,320	8.5%	132.17	-2.7%			
IGL	4,00,23,500	3.3%	191.81	0.8%	KEI	8,94,600	7.6%	3412.1	-1.2%			

Short Cove	Short Covering (Open Interest Lower + Price Higher)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)					
ABBOTINDIA	39,280	-6.7%	29239.25	2.2%					
MAXHEALTH	72,98,025	-5.4%	1038.5	1.9%					
LALPATHLAB	7,32,750	-4.6%	2632.2	0.1%					
PIIND	20,25,625	-4.3%	3164	1.1%					
GUJGASLTD	59,76,250	-3.4%	393.05	0.4%					

Long Unwinding (Open Interest Lower + Price Lower)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
COROMANDEL	20,26,850	-7.3%	1709.55	-0.1%				
IPCALAB	18,03,750	-6.6%	1469.6	-0.2%				
GNFC	43,49,800	-6.1%	545.3	-2.2%				
NAVINFLUOR	6,79,350	-4.7%	4084.9	-0.6%				
INDIAMART	6,09,000	-3.8%	2066.85	-1.8%				

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

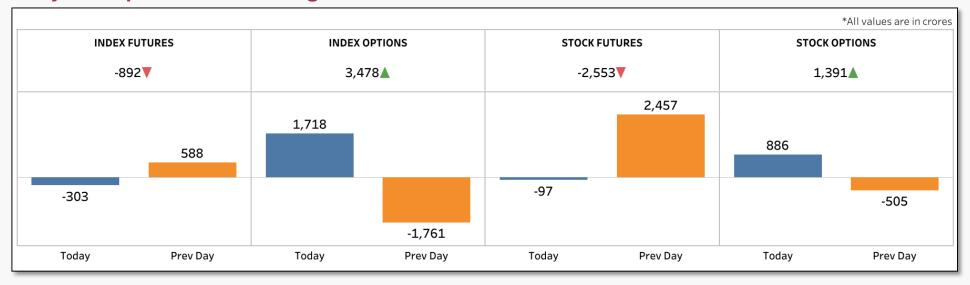


Open Interest Data by Participant

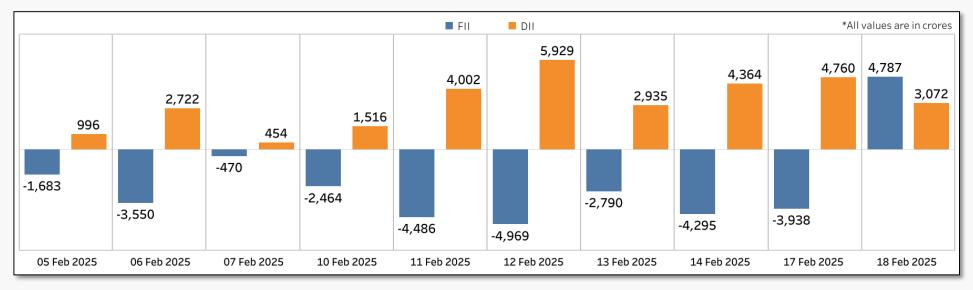
▲ and ▼ indicate posit		te changes, respectively	,				
INDEX CALL	F INDEX FUT	II INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
1,853	-5,271 V	16,198	-48,910 🔻	0	500	0	66,921
			47,691				18,079
	3,639	13,720		0 0	-569 -1,069	0 0	
-2,912 -4,765	-1,632	-2,478	-1,219				-48,842
Net O/S - <mark>53,079</mark> Today Prev Day	Net O/S - <mark>164,613</mark> Today Prev Day	Net O/S 202,699 Today Prev Day	Net O/S 1,227,398 Today Prev Day	Net O/S 70 Today Prev Day	Net O/S 17,512 Today Prev Day	Net O/S 18,985 Today Prev Day	Net O/S - <mark>3,959,243</mark> Today Prev Day
		ents			P	ro	
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
91,996 🔺	3,734 🔺	-87,725 🔻	-5,502 🔻	-93,849 🔻	1,037 🔺	71,529 🔺	-12,509 🔻
32,120	1,874	59,364		64,641	327	14,642	1,873
	-1,860		-6,224 -722		-710		-10,636
		-28,361		-29,208			
-59,876						-56,887	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
- <mark>69,917</mark> Today Prev Day	137,736 Today Prev Day	-270,015 Today Prev Day	2,198,075 Today Prev Day	122,926 Today Prev Day	9,365 Today Prev Day	48,330 Today Prev Day	533,770 Today Prev Day
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Daily Net Open Interest Change

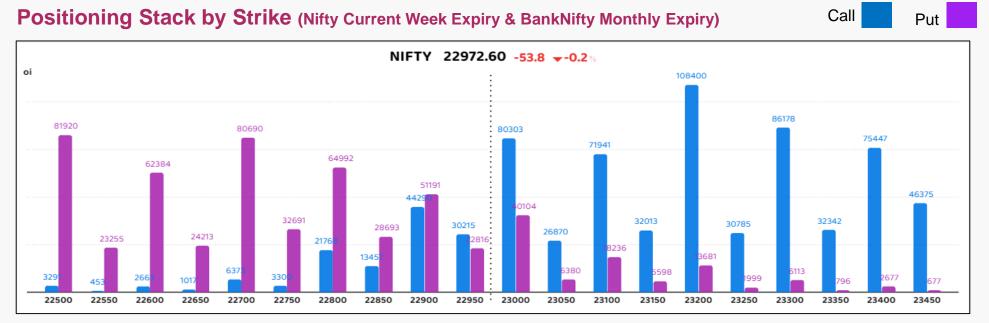


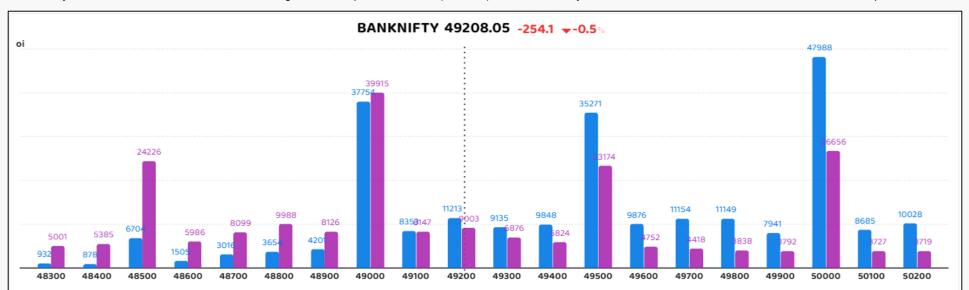
DII and FII Daily Cash Market Flows





Options Strike Concentration

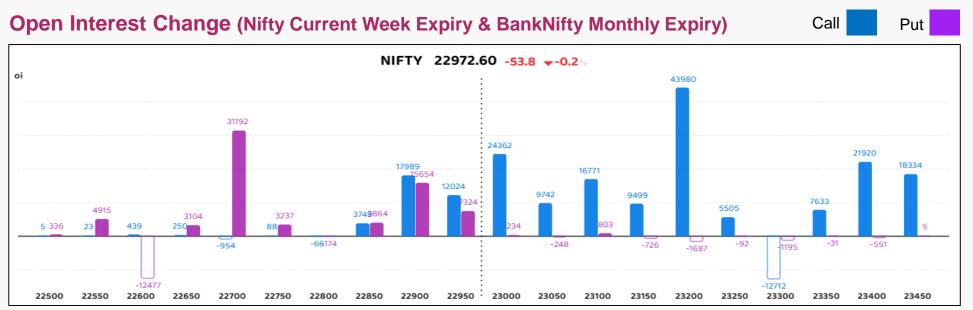




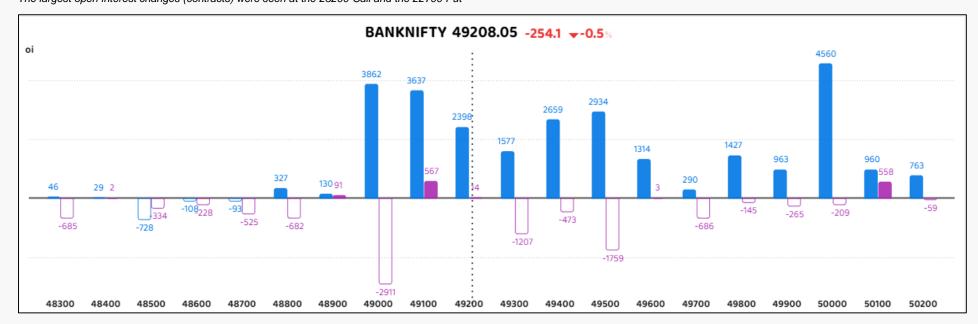
For the Nifty, the 23200 Call and the 22700 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 50000 Call and the 49000 Put saw the most amount of open interest.

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





The largest open interest changes (contracts) were seen at the 23200 Call and the 22700 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)
LAURUS LABS LTD	546	-1.7	43.8	44.3	16.1	98.1
MANAPPURAM FINAN	189.33	-2.0	56.1	64.2	2.7	86.9
DIXON TECHNOLOGI	14006.7	-1.4	40.3	51.5	1.8	77.4
KOTAK MAHINDRA	1963.35	0.9	21.5	28.7	1.9	73.1
TATA MOTORS LTD	682.4	-0.6	31.4	41.8	3.9	72.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
PAGE INDUSTRIES	40617.75	-0.7	13.0	41.8	13.0	0.0
PVR INOX LTD	988.25	-1.8	3.8	45.3	3.8	0.0
HDFC LIFE INSURA	618.95	-0.7	24.1	80.6	19.6	7.4
BALKRISHNA INDS	2648.05	-0.8	22.6	58.3	17.8	11.7
CIPLA LTD	1482.1	0.5	23.8	61.3	18.0	13.3



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LAURUS LABS LTD	546	-1.7	43.8	44.3	16.1	99.6
L&T FINANCE LTD	132.28	-2.8	49.2	67.0	5.4	98.9
ABB INDIA LTD	5142.05	-1.9	43.6	56.4	23.7	97.7
MANAPPURAM FINAN	189.33	-2.0	56.1	64.2	2.7	97.0
GODREJ PROPERTIE	1975.85	0.1	43.2	58.5	26.7	93.9

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PAGE INDUSTRIES	40617.75	-0.7	13.0	41.8	13.0	0.0
PVR INOX LTD	988.25	-1.8	3.8	45.3	3.8	0.0
GODREJ CONSUMER	1015.55	-2.3	18.7	40.6	14.3	2.7
BALKRISHNA INDS	2648.05	-0.8	22.6	58.3	17.8	2.8
TORRENT PHARMA	3041.8	-1.2	18.5	45.4	12.0	4.3



Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PAGE INDUSTRIES	40617.75	-0.7	11678	2210	5.3
MRF LTD	109020.5	-0.9	3155	783	4.0
EICHER MOTORS	4719.4	-0.5	31329	10086	3.1
MARICO LTD	626.15	0.2	3782	1271	3.0
ESCORTS KUBOTA L	2995.75	0.8	6217	2114	2.9

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	1062.05	-0.3	1820	5791	3.2
INDIAMART INTERM	2068.8	-1.6	2117	5621	2.7
COROMANDEL INTER	1710.05	0.1	2354	5195	2.2
RAMCO CEMENT/THE	850.2	-1.2	2987	5465	1.8
UNITED BREWERIES	2022.8	-0.3	2871	5167	1.8



Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
MAHINDRA & MAHIN	2790.05	-1.5	68952	68952	100.0
HINDUSTAN AERONA	3344.6	-3.8	86384	86384	100.0
TRENT LTD	4997.75	-1.9	76558	76558	100.0
ABB INDIA LTD	5142.05	-1.9	30563	30563	100.0
PAGE INDUSTRIES	40617.75	-0.7	21372	21372	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
GLENMARK PHARMA	1379.3	0.4	7640	7640	100.0
LARSEN & TOUBRO	3220.15	-0.1	42450	42491	99.9
LAURUS LABS LTD	546	-1.7	8222	8491	96.8
GODREJ PROPERTIE	1975.85	0.1	8850	9326	94.9
HINDUSTAN AERONA	3344.6	-3.8	33203	36416	91.2



Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Chg (%) Total Call Vol		CV Diff	
ABB INDIA LTD	5142.05	-1.9	290135	290135	100.0	

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff	
ABB INDIA LTD	5142.05	-1.9	177039	177039	100.0	



Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ABB INDIA LTD	5142.05	-1.9	30563	11528	2.7
DEEPAK NITRITE	1899.25	0.0	17976	6993	2.6
MAHINDRA & MAHIN	2790.05	-1.5	68952	32195	2.1
MANAPPURAM FINAN	189.33	-2.0	10471	4938	2.1
PAGE INDUSTRIES	40617.75	-0.7	21372	10691	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
DEEPAK NITRITE	1899.25	0.0	9010	3868	2.3
ABB INDIA LTD	5142.05	-1.9	13564	6392	2.1
GLENMARK PHARMA	1379.3	0.4	7640	3718	2.1
MUTHOOT FINANCE	2244.5	0.0	5894	3482	1.7
MANAPPURAM FINAN	189.33	-2.0	6635	4061	1.6



Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ABB INDIA LTD	5142.05	-1.9	290135	33686	8.6
LTIMINDTREE LTD	5668.6	3.6	32581	12287	2.7
MAHANAGAR GAS LT	1301.4	1.9	19239	7903	2.4
ACC LTD	1880.4	-1.6	37574	17447	2.2
TECH MAHINDRA LT	1705	2.4	28539	14090	2.0

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ABB INDIA LTD	5142.05	-1.9	177039	21159	8.4
ACC LTD	1880.4	-1.6	45185	11389	4.0
MAX FINANCIAL SE	1062.05	-0.3	5791	2373	2.4
HINDUSTAN AERONA	3344.6	-3.8	147912	76565	1.9
MAHANAGAR GAS LT	1301.4	1.9	7298	4009	1.8



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	2400	1308000	8.1%	2220	2800	2393400	26.1%	INFY	1900	3647200	2.6%	1852	1700	1130400	-8.2%
ADANIPORTS	1200	1777200	10.6%	1085	1000	806400	-7.8%	ПС	450	11881600	11.0%	405	400	3465600	-1.3%
APOLLOHOSP	7000	345750	9.8%	6377	6300	112125	-1.2%	JSWSTEEL	1080	892350	10.3%	979	950	494775	-2.9%
ASIANPAINT	2400	1320200	7.3%	2238	2100	396800	-6.1%	KOTAKBANK	2000	2324400	1.9%	1963	1900	917600	-3.2%
AXISBANK	1050	7518125	5.6%	994	1000	1348750	0.6%	LT	3600	1854600	11.8%	3220	3250	675600	0.9%
BAJAJ-AUTO	9000	222975	6.6%	8447	9000	74400	6.6%	LTIM	6000	122550	5.8%	5669	5500	100200	-3.0%
BAJAJFINSV	1860	1820000	-1.8%	1894	1800	1033000	-4.9%	M&M	3200	1312850	14.7%	2790	2800	568225	0.4%
BAJFINANCE	8500	643750	0.4%	8466	7500	480250	-11.4%	MARUTI	13200	558150	3.2%	12786	12000	359750	-6.1%
BHARTIARTL	1720	4974675	3.1%	1669	1600	1507650	-4.1%	NESTLEIND	2400	686000	8.0%	2222	2300	211600	3.5%
BPCL	270	9873000	6.8%	253	250	1477800	-1.1%	NTPC	315	9357000	1.2%	311	390	3748500	25.3%
BRITANNIA	5000	459400	2.2%	4891	5000	103300	2.2%	ONGC	270	11249700	14.1%	237	230	3157000	-2.8%
CIPLA	1500	1604850	1.2%	1482	1400	383825	-5.5%	POWERGRID	300	8215200	12.4%	267	240	2098800	-10.1%
COALINDIA	400	5319300	10.8%	361	450	3072300	24.6%	RELIANCE	1300	11881500	6.1%	1225	1200	4246000	-2.1%
DIVISLAB	6200	218900	6.2%	5840	5400	139800	-7.5%	SBILIFE	1460	802875	-1.0%	1475	1460	328500	-1.0%
DRREDDY	1240	1392500	3.6%	1197	1200	527500	0.2%	SBIN	800	19530750	10.2%	726	720	5181750	-0.8%
EICHERMOT	5500	504700	16.5%	4719	4700	166075	-0.4%	SUNPHARMA	1800	1873200	5.8%	1702	1700	856450	-0.1%
GRASIM	2600	262750	5.6%	2463	2400	315250	-2.6%	TATACONSUM	1060	509352	3.2%	1027	900	634296	-12.4%
HCLTECH	1760	1219750	2.0%	1726	1700	784350	-1.5%	TATAMOTORS	750	9782850	9.9%	682	600	3119050	-12.1%
HDFCBANK	1760	9609600	2.1%	1723	1700	2844600	-1.3%	TATASTEEL	150	34226500	11.5%	135	130	14003000	-3.4%
HDFCLIFE	640	2988700	3.4%	619	540	806300	-12.8%	TCS	4200	1101100	8.4%	3873	4000	457800	3.3%
HEROMOTOCO	4200	760200	9.4%	3841	3900	251250	1.5%	TECHM	1700	1015800	-0.3%	1705	1640	579600	-3.8%
HINDALCO	620	3686200	1.4%	611	600	1968400	-1.9%	TITAN	3600	1190000	11.7%	3222	3200	579600	-0.7%
HINDUNILVR	2500	1495500	8.9%	2296	2200	558600	-4.2%	ULTRACEMCO	12000	285300	6.1%	11309	11000	75100	-2.7%
ICICIBANK	1300	6475700	4.6%	1243	1250	2289700	0.6%	UPL	640	1636840	1.5%	631	600	1616515	-4.9%
INDUSINDBK	1100	4650500	7.4%	1024	1100	1181000	7.4%	WIPRO	320	4347000	2.5%	312	300	4263000	-3.9%

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



- 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**

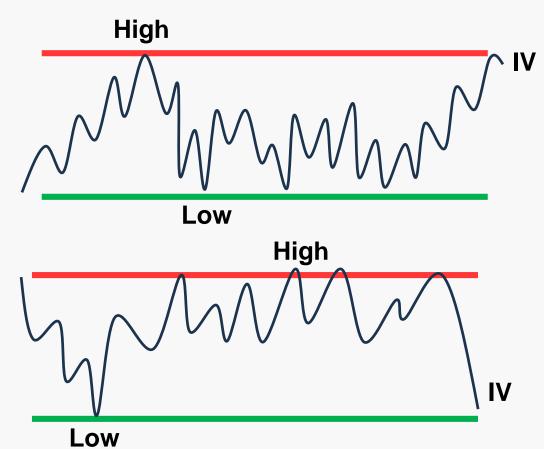
*ATM IV is the midpoint of the IV for the ATM call and put respectively



- 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): <u>www.nseindia.com</u>, 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.

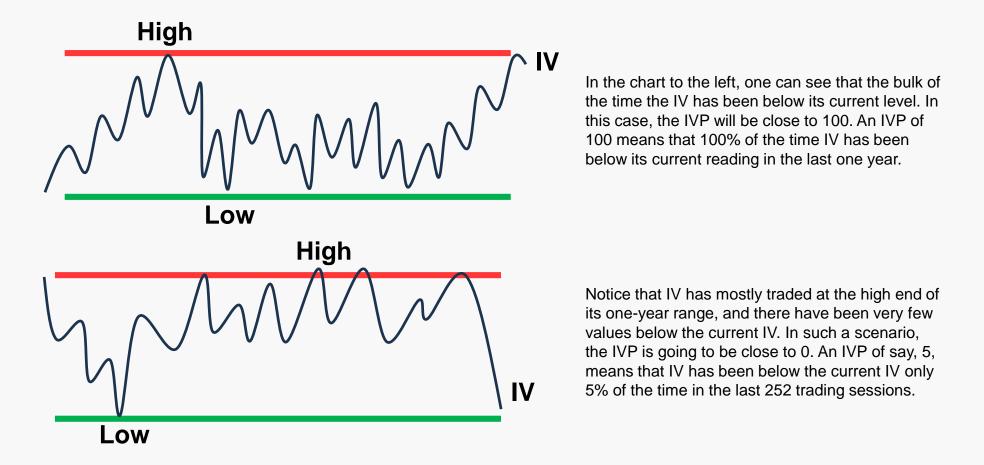
In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

Appendix



Appendix

• 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.





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