



Daily Derivatives Report



Nifty Futures		Bank Nifty Futures			Volatility Insig	hts			
	Value	Change		Value	Change		Value	Change	
Most recent settlement	23,114	0.6%▼	Most recent settlement	48,375	0.7%▼	India VIX Index	16.75	0.0▼	
Open Interest (OI)	1,96,32,350	0.7%▲	Open interest (OI)	38,66,490	1.4%▲	Nifty ATM IV (%)	14.07	0.6▼	
Change in OI (abs)	1,96,32,350	1,27,675	Change in OI (abs)	38,66,490	54,195▲	Bank Nifty ATM IV (%)	17.56	0.2▼	
Premium / Discount (Abs)	22	37▼	Premium / Discount (Abs)	7	100 🔻	PCR (Nifty)	0.85	0.10▼	
Inference	Short Bui	ld Up	Inference	Short B	uild Up	PCR (Bank Nifty)	0.56	0.01 ▼	

*The Long Ratio for the FII Index Futures closed higher at 20.3% against 18.8%, as recorded in the previous session.

Single Stock Futures Movers

Long Build	Long Buildup (Open Interest Higher + Price Higher)				Short Bu	uildup (Open Intere	st Higher +	Price Lower)	e Lower)			
Symbol	Open Interest	Chg (%)	Price	Chg (%)	Symbol	Open Interest	Chg (%)	Price	Chg (%)			
MPHASIS	37,09,475	7.0%	3012.65	2.9%	CYIENT	38,49,900	124.4%	1349.85	-23.2%			
INDIGO	80,40,750	4.0%	4172.55	0.6%	KPITTECH	29,61,600	19.4%	1326	-1.6%			
BRITANNIA	34,71,400	3.4%	5078.8	1.8%	POLYCAB	27,04,125	12.5%	5930.1	-5.4%			
LODHA	67,44,600	2.8%	1099.2	1.3%	GLENMARK	29,78,300	12.2%	1451.25	-4.2%			
NESTLEIND	1,04,30,600	2.1%	2211.35	0.4%	PRESTIGE	40,43,650	10.9%	1260.15	-6.6%			

Short Covering (Open Interest Lower + Price Higher)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
GRASIM	1,18,30,000	-5.1%	2487.6	1.1%				
JSWSTEEL	3,17,43,900	-4.8%	934.3	0.3%				
COFORGE	25,21,800	-4.6%	9229.05	0.6%				
AUBANK	4,15,69,000	-4.5%	592.9	2.8%				
DIXON	17,88,650	-3.4%	15324.65	0.2%				

Long Unwinding (Open Interest Lower + Price Lower)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
KEI	7,86,300	-8.5%	4245.15	-5.4%				
JKCEMENT	8,04,000	-6.3%	4751	-1.1%				
DRREDDY	1,45,20,000	-6.2%	1221.05	-5.4%				
LUPIN	70,54,575	-6.1%	2131.8	-1.2%				
MFSL	44,75,200	-5.9%	1041.45	-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

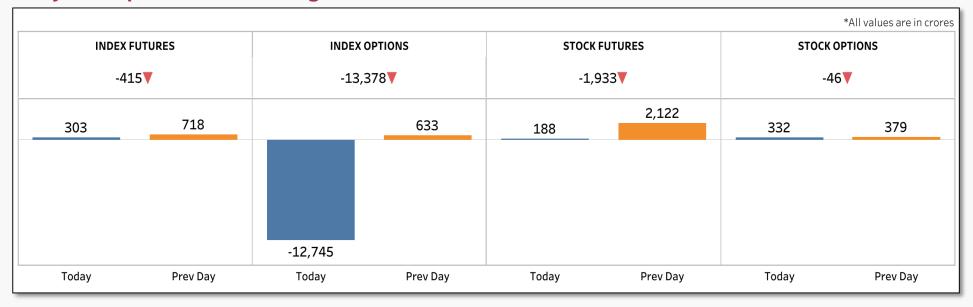


Open Interest Data by Participant

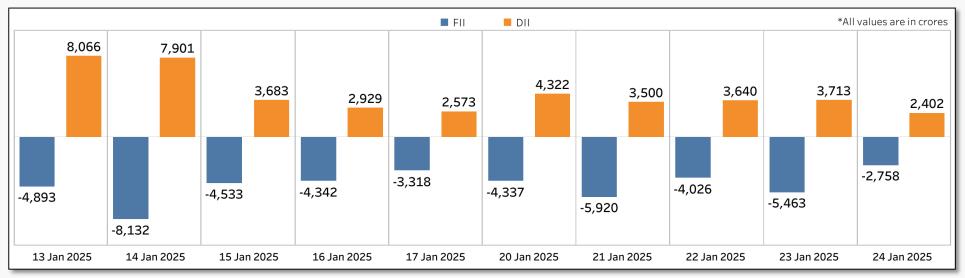
	F	II			D	II.	
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-467,728 🔻	-2,976 🔻	-146,299 🔻	-32,639 🔻	0	-739 🔻	-96 🔻	29,663 🔺
246,019				0 0	463 1,202	0 96	
		147,582					
			27.000				-8,595
	18,841 21,817	1,283	4,567 37,206				0,333
221,709							-38,25
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
61,020	-286,951	246,567	1,175,949	70	37,956	144,371	-3,885,895
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day		Today Prev Day	Today Prev Da
	Clie					ro	
					INDEX FUT		STK FUT
507,276 🔺	-8,687 🔻	-75,417 🔻	-29,293 🔻	-39,548 🔻	12,402 🔺	221,809 🔺	32,269 🔺
102,786				158,471		100 105	
			26,170	118,923		129,125	
	-15,087 -6,400		-3,123				
		-54,992					
		-130,409					7,151
					-4,217 -16,619		
					10,010		-25,12
-404,490						-92,684	
-404,490 Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	-92,684 Net O/S	Net O/S
		Net O/S -540,364 Today Prev Day	Net O/S 2,282,665 Today Prev Day	Net O/S -26,184	Net O/S -35,345 Today Prev Day		



Daily Net Open Interest Change

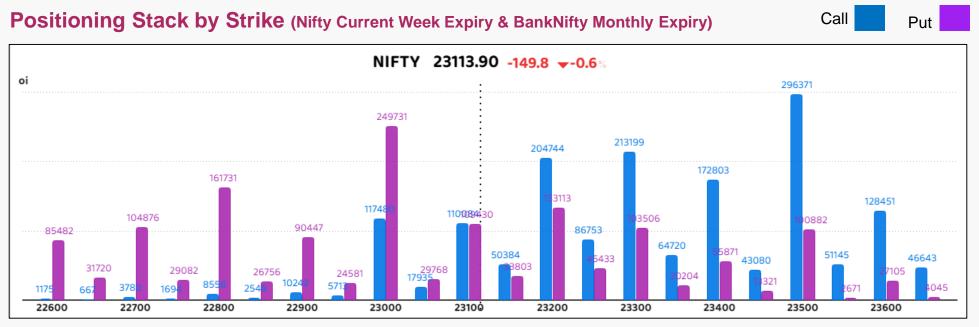


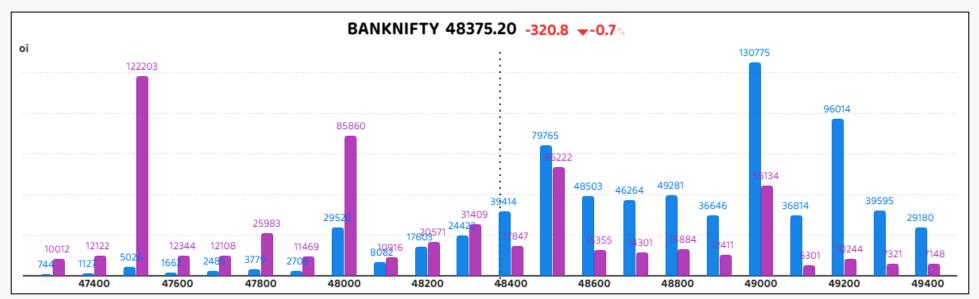
DII and FII Daily Cash Market Flows





Options Strike Concentration





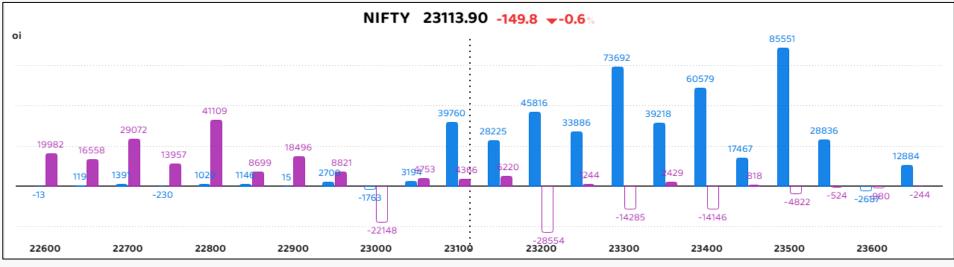
For the Nifty, the 23500 Call and the 23000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 49000 Call and the 47500 Put saw the most amount of open interest.

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

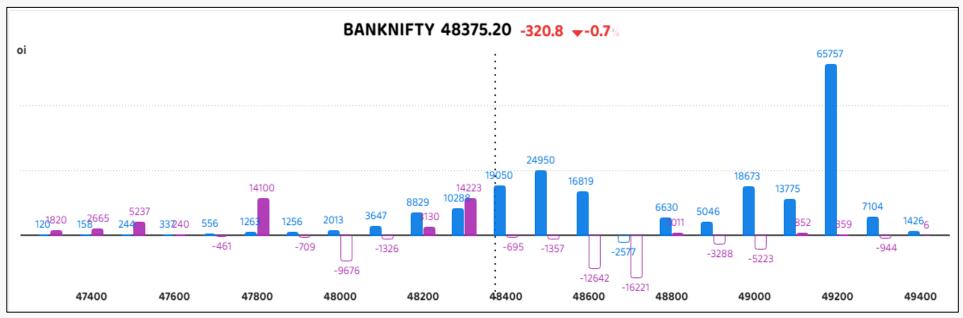








The largest open interest changes (contracts) were seen at the 23500 Call and the 22800 Put



For the Bank Nifty, the biggest open interest changes were seen at the 49200 Call & the 48700 Put



Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SHRIRAM FINANCE	527.45	-0.4	44.6	44.9	22.3	98.7
BRITANNIA INDS	5101.55	1.8	30.9	31.2	15.1	98.2
COLGATE PALMOLIV	2751.9	0.5	30.5	32.8	9.5	90.3
TATA MOTORS LTD	734.1	-2.4	37.8	41.8	3.9	89.5
DIXON TECHNOLOGI	15584.9	0.8	45.6	51.3	1.8	88.4

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CAN FIN HOMES	682.7	-1.2	11.1	46.5	11.1	0.0
L&T FINANCE LTD	139.68	-0.2	21.5	67.0	16.9	9.2
BANDHAN BANK LTD	148.83	-1.5	19.6	54.2	15.9	9.6
HDFC LIFE INSURA	621.1	0.0	27.3	80.6	19.6	12.6
TORRENT PHARMA	3248.4	-0.5	14.8	45.4	10.1	13.3



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BRITANNIA INDS	5101.55	1.8	30.9	31.2	15.1	99.7
VOLTAS LTD	1456.6	-2.7	43.7	50.4	21.9	99.6
SHRIRAM FINANCE	527.45	-0.4	44.6	44.9	22.3	99.5
INDUSIND BANK	950.8	-2.1	38.9	60.4	12.4	99.3
COLGATE PALMOLIV	2751.9	0.5	30.5	32.8	9.5	98.3

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
CAN FIN HOMES	682.7	-1.2	11.1	46.5	11.1	0.0
L&T FINANCE LTD	139.68	-0.2	21.5	67.0	16.9	1.1
BANDHAN BANK LTD	148.83	-1.5	19.6	54.2	15.9	1.3
BATA INDIA LTD	1281.35	-1.5	17.0	39.2	13.4	1.3
MANAPPURAM FINAN	196.71	-0.1	21.7	64.2	2.7	1.7



Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
DIXON TECHNOLOGI	15584.9	0.8	12673	835	15.2
VODAFONE IDEA LT	9.46	-0.5	19623	3938	5.0
MRF IS	111484.5	-0.2	5954	1290	4.6
BHARAT PETROL	263.8	-2.7	105001	37277	2.8
BRITANNIA INDS	5101.55	1.8	78142	30527	2.6

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALMIA BHARAT LT	1828.35	-1.4	8160	10535	1.3
L&T TECHNOLOGY S	5453.15	-0.4	10692	13420	1.3
ABBOTT INDIA LTD	27849.8	-2.0	940	1163	1.2
ZYDUS LIFESCIENC	989.15	-3.2	12657	14516	1.1
GLENMARK PHARMA	1510.95	-4.0	10137	11523	1.1



Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff
TRENT LTD	5733.6	-4.2	59550	59550	100.0
INTERGLOBE AVIAT	4134.8	0.7	27485	27485	100.0
LAURUS LABS LTD	585.15	3.0	9950	9950	100.0
HINDUSTAN AERONA	3922.55	-1.9	60721	62336	97.4
OBEROI REALTY	1819.90	-3.6	22873	24243	94.4

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff
BRITANNIA INDS	5101.55	1.8	18185	18185	100.0
INDUS TOWERS LTD	367.95	0.4	15214	15214	100.0
COLGATE PALMOLIV	2751.9	0.5	9245	9245	100.0
AU SMALL FINANCE	594.65	2.1	13213	13213	100.0
SYNGENE INTERNAT	796.1	-6.0	3044	3044	100.0



Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	CV Diff
MPHASIS LTD	3009.3	3.1	205192	205192	100.0
LAURUS LABS LTD	602.65	3.0	58469	58469	100.0
SYNGENE INTERNAT	796.1	-6.0	31426	31426	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	PV Diff
MPHASIS LTD	2918.95	3.1	121156	121156	100.0
SYNGENE INTERNAT	847	-6.0	30754	30754	100.0
ATUL LTD	6748.8	-3.0	13002	13902	93.5
AU SMALL FINANCE	582.4	2.1	70791	79298	89.3



Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MPHASIS LTD	3009.3	3.1	205192	17506	11.7
ATUL LTD	6547.1	-3.0	17107	1958	8.7
RBL BANK LTD	155.73	-0.2	24086	3518	6.8
HINDUSTAN PETRO	352.85	-2.6	90574	14613	6.2
LAURUS LABS LTD	602.65	3.0	58469	9831	5.9

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ATUL LTD	6547.1	-3.0	13002	1004	12.9
MPHASIS LTD	3009.3	3.1	121156	9559	12.7
DR REDDY'S LABS	1224.4	-5.0	128880	15595	8.3
SYNGENE INTERNAT	796.1	-6.0	30754	3868	8.0
RBL BANK LTD	155.73	-0.2	14665	2185	6.7



Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POLYCAB INDIA LT	5915.8	-5.4	28550	9633	3.0
ULTRATECH CEMENT	11285.85	-1.2	40017	16627	2.4
SYNGENE INTERNAT	796.1	-6.0	6035	2589	2.3
ATUL LTD	6547.1	-3.0	3430	1508	2.3
OBEROI REALTY	1756.75	-3.6	22873	10185	2.2

Put Open Interest to 20-day Average

Ticker	Last Px	Last Px Chg (%) Total Put OI		Avg OI Put 20D	20D Put OI Ratio	
ATUL LTD	6547.1	-3.0	2159	705	3.1	
MPHASIS LTD	3009.3	3.1	8494	3084	2.8	
ULTRATECH CEMENT	11285.85	-1.2	24636	10599	2.3	
COFORGE LTD	9234.6	0.4	27099	12105	2.2	
PERSISTENT SYS	6360.65	1.2	15808	7358	2.1	



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	2500	1140000	8.0%	2315	2800	712800	20.9%	INFY	2000	6124000	6.6%	1875	1800	1738000	-4.0%
ADANIPORTS	1200	1884000	9.7%	1094	1200	686400	9.7%	ПС	460	6080000	4.2%	442	440	2305600	-0.4%
APOLLOHOSP	7500	178750	11.2%	6745	6700	68125	-0.7%	JSWSTEEL	950	883575	1.9%	932	900	1107675	-3.5%
ASIANPAINT	2500	936800	10.5%	2262	2200	560000	-2.8%	KOTAKBANK	2000	2326400	6.0%	1886	1800	1296400	-4.6%
AXISBANK	1000	6202500	5.4%	949	1000	1865625	5.4%	LT	3700	861900	7.0%	3458	3600	433800	4.1%
BAJAJ-AUTO	9000	168675	7.1%	8402	7600	149400	-9.5%	LTIM	6500	166350	8.4%	5998	5800	144750	-3.3%
BAJAJFINSV	1700	1491000	-1.7%	1729	1700	992000	-1.7%	M&M	3000	696850	7.1%	2801	2800	425775	0.0%
BAJFINANCE	7500	453375	0.8%	7439	7200	364125	-3.2%	MARUTI	12000	667900	0.3%	11968	12000	229950	0.3%
BHARTIARTL	1640	3339250	-0.3%	1645	1640	1144275	-0.3%	NESTLEIND	2300	272800	4.2%	2208	1940	247600	-12.1%
BPCL	280	1.2E+07	6.1%	264	270	3229200	2.4%	NTPC	340	13687500	5.1%	324	300	2394000	-7.3%
BRITANNIA	4850	250400	-4.9%	5102	4700	569400	-7.9%	ONGC	264	15715700	2.9%	257	250	3661350	-2.5%
CIPLA	1540	723775	9.1%	1411	1320	253825	-6.5%	POWERGRID	305	4581000	3.1%	296	290	1989000	-2.0%
COALINDIA	390	5160750	1.8%	383	380	1964550	-0.8%	RELIANCE	1300	10578500	4.3%	1246	1200	3891500	-3.7%
DIVISLAB	6000	161100	4.1%	5763	5800	112900	0.6%	SBILIFE	1600	1123875	11.1%	1440	1460	289500	1.4%
DRREDDY	1400	2021875	14.3%	1224	1200	1260000	-2.0%	SBIN	800	10524000	7.5%	744	700	5004750	-5.9%
EICHERMOT	5000	336525	-4.0%	5206	5000	219100	-4.0%	SUNPHARMA	1920	1336650	5.4%	1822	1800	644700	-1.2%
GRASIM	2500	305250	0.4%	2491	2400	194750	-3.6%	TATACONSUM	1000	664392	0.8%	992	900	440496	-9.3%
HCLTECH	2000	2286200	11.6%	1793	1600	673050	-10.8%	TATAMOTORS	800	8092150	9.0%	734	750	3347850	2.2%
HDFCBANK	1800	6311250	9.1%	1650	1560	2307250	-5.4%	TATASTEEL	140	23309000	7.9%	130	130	9284000	0.2%
HDFCLIFE	640	2698300	3.0%	621	600	1213300	-3.4%	TCS	4300	1192800	3.6%	4152	4000	634725	-3.7%
HEROMOTOCO	4300	413100	6.1%	4052	4000	136200	-1.3%	TECHM	1760	1818600	2.1%	1723	1660	493800	-3.7%
HINDALCO	600	3309600	-1.1%	607	600	2378600	-1.1%	TITAN	3600	535500	5.8%	3402	3300	255500	-3.0%
HINDUNILVR	2400	1175700	1.3%	2368	2300	663600	-2.9%	ULTRACEMCO	11500	243800	1.9%	11286	11000	130150	-2.5%
ICICIBANK	1300	5009900	7.5%	1209	1200	2357600	-0.8%	UPL	550	1703235	-0.4%	552	550	947145	-0.4%
INDUSINDBK	1000	4852500	5.2%	951	980	861500	3.1%	WIPRO	320	5397000	0.0%	320	300	7461000	-6.3%

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**

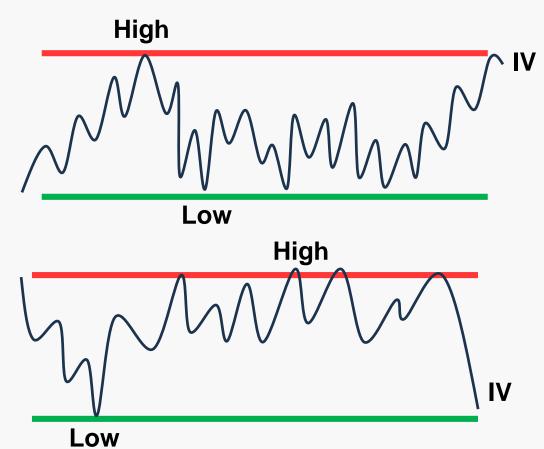
*ATM IV is the midpoint of the IV for the ATM call and put respectively



- 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): <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.

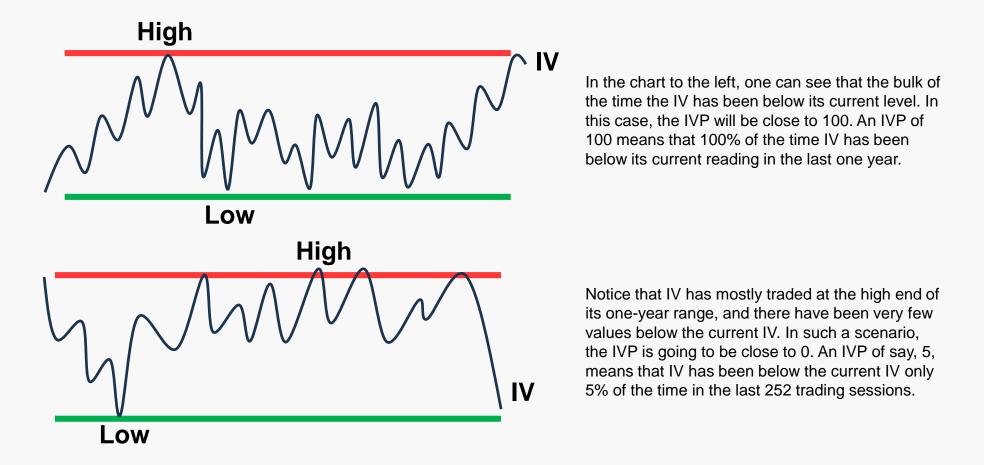
In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

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.





Axis Securities Limited is a subsidiary company of Axis Bank Ltd. Axis Bank Ltd. is a listed public company and one of India's largest private sector banks and has its various subsidiaries engaged in businesses of Asset management, NBFC, Merchant Banking, Trusteeship, Venture Capital, Stock Broking, the details in respect of which are available on www.axisbank.com.

Axis Securities Limited, is registered as a Stock Broker, Depository Participant, Portfolio Manager, Investment Adviser and Research Analyst with Securities and Exchange Board of India Corporate Agent with Insurance Regulatory and Development Authority Distributor for Mutual Funds with AMFI

Registration Details:

SEBI Single Reg. No.- NSE, BSE, MSEI, MCX & NCDEX – INZ000161633 | SEBI Depository Participant Reg. No. IN-DP-403-2019 | Portfolio Manager Reg. No.- INP000000654 | Investment Advisor Reg No. INA000000615 | SEBI-Research Analyst Reg. No. INH000000297 | IRDA Corporate Agent (Composite) Reg. No. CA0073 | PFRDA – POP Reg. No. POP387122023 | Mutual Fund Distributor ARN- 64610.

Compliance Officer Details: Name - Mr. Maneesh Mathew, Tel No. - 022-68555574, Email id - 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 Parć, Q2 Building, Unit No. 1001, 10th Floor, Level - 6, Plot No. 4/1 TTC, Thane - Belapur Road, Ghansoli, Navi Mumbai, Pin Code - 400710.

In case of any grievances please call us at 022-40508080 or write to us helpdesk@axisdirect.in.

We hereby declare that our activities were neither suspended nor we have defaulted with any stock exchange authority with whom we are registered in last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories etc. have conducted the routine inspection and based on their observations have issued advise/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in normal course of business, as a Stock Broker / Depository Participant/Portfolio Manager. We have not been debarred from doing business by any Stock Exchange / SEBI or any other authorities; nor has our certificate of registration been cancelled by SEBI at any point of time.

Investments in securities market are subject to market risks. Read all the related documents carefully before investing. By referring to any particular sector, Axis Securities does not provide any promise or assurance of favourable view for a particular industry or sector or business group in any manner.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors. Our research should not be considered as an advertisement or advice, professional or otherwise. This research report and its respective content by Axis Securities made available on this page or otherwise do not constitute an offer to sell or purchase or subscribe for any securities or solicitation of any investments or investment services for the residents of Canada and / or USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been client during twelve months preceding the date of distribution of the research report. Derivatives are a sophisticated investment device. The investor is requested to take into consideration all the risk factors before actually trading in derivative contracts.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment of its original date of publication by ASL and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments.

The information and opinions in this report have been prepared by Axis Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of Axis Securities. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite, investment objective or the particular circumstances of an individual investor. The investor is requested to take into consideration all the risk factors including their financial condition, suitability to risk return profile and the like and take professional advice before investing.

While we would endeavour to update the information herein on a reasonable basis, Axis Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent Axis Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or Axis Securities policies, in circumstances where Axis Securities might be acting in an advisory capacity to this company, or in certain other circumstances.



Disclaimer & Disclosures :

This report is based on information obtained in good faith from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. Axis Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. Axis Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice. Axis Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months. Axis Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction. Axis Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months. Axis Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently. potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock'sprice movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.



Disclaimer & Disclosures:

Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither Axis Securities nor Research Analysts and / or their relatives have any material conflict of interest at the time of publication of this report. Please note that Axis Securities has a proprietary trading desk. This desk maintains an arm's length distance with the Research team and all its activities are segregated from Research activities. The proprietary desk operates independently, potentially leading to investment decisions that may deviate from research views.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

Research Analyst may have served as an officer, director or employee of subject company(ies). Axis Securities or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report. Since associates of Axis Securities and Axis Securities as an entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Certain transactions -including those involving futures, options and other derivatives as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Reports based on technical analysis centres on studying charts of a stock'sprice movement and trading volume, as opposed to focusing on a company's fundamentals and as such, may not match with a report on a company's fundamentals.

We and our affiliates/associates, officers, directors, and employees, Research Analyst(including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the securities thereof, of company (ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company (ies) discussed herein or act as advisor or lender / borrower to such company (ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of Research Report or at the time of public appearance. Axis Securities may have proprietary long/short position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

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