

Daily Derivatives Report

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Nifty Futures			Bank Nifty Futu	Volatility Insights				
	Value	Change		Value	Change		Value	Change
Most recent settlement	24,587	1.2%▲	Most recent settlement	52,650	0.5%▲	India VIX Index	14.87	1.3▼
Open Interest (OI)	1,26,13,175	0.5%▲	Open interest (OI)	27,99,915	2.9%▲	Nifty ATM IV (%)	13.34	1.5▼
Change in OI (abs)	1,26,13,175	67,675▲	Change in OI (abs)	27,99,915	77,565 🛦	Bank Nifty ATM IV (%)	15.42	0.8▼
Premium / Discount (Abs)	103	21 🛦	Premium / Discount (Abs)	333	146▲	PCR (Nifty)	0.97	0.03
Inference	Long Buil	d Up	Inference	Long B	uild Up	PCR (Bank Nifty)	0.78	0.26▼

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

*On expiration days, the premium/discount will be the difference between the new front-month contract and the cash market level on the day

Single Stock Futures Movers

Long Build	dup (Open Interes	t Higher +	Price Highe	r)	Short Build
Symbol	Open Interest	Chg (%)	Price	Chg (%)	Symbol
SYNGENE	63,66,000	24.7%	910.7	4.6%	TRENT
MPHASIS	44,00,825	14.9%	2913.45	1.5%	INDUSINDBK
GRANULES	1,65,56,000	12.5%	580.6	4.9%	LUPIN
CHAMBLFERT	1,04,89,900	10.6%	501.95	4.5%	ABFRL
INDIAMART	11,91,300	9.9%	2478.05	1.3%	SBILIFE

Short Buildup (Open Interest Higher + Price Lower)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
TRENT	38,92,700	4.5%	6971.65	-0.4%				
INDUSINDBK	4,31,20,500	4.1%	1083.5	-0.9%				
LUPIN	1,15,94,000	3.0%	2178.85	-0.5%				
ABFRL	5,79,17,600	2.8%	301.25	-0.9%				
SBILIFE	96,28,125	2.5%	1612.8	-1.5%				

Short Covering (Open Interest Lower + Price Higher)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
DIXON	15,24,350	-12.9%	15734.5	8.7%				
TECHM	1,23,09,600	-8.0%	1698.9	3.6%				
TCS	1,53,31,925	-7.7%	4151.45	4.3%				
DRREDDY	93,00,625	-6.3%	1304.05	2.4%				
LTIM	26,71,650	-5.6%	6005.3	4.5%				

Long Unwinding (Open Interest Lower + Price Lower)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
ABBOTINDIA	1,19,600	-4.9%	29295.1	-0.5%				
TITAN	1,12,82,950	-4.6%	3186.75	-1.7%				
CIPLA	1,24,54,000	-3.8%	1598.55	-0.5%				
MUTHOOTFIN	54,68,925	-1.1%	1902.65	-0.8%				
HDFCLIFE	1,99,32,000	-0.8%	710.85	-1.2%				

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

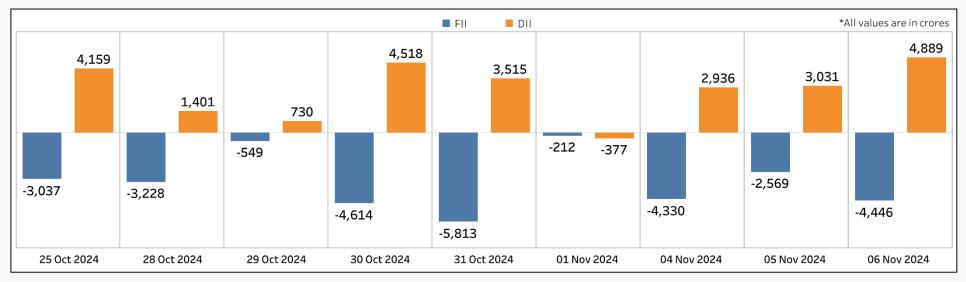
🔺 and 🔻 indicate po	ositive and negative absolu		/				
	F	-11			D		
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-191,501 🔻	-14,578 🔻	20,884 🔺	-49,645 🔻	0	274	27,000 🔺	3,315 🔺
206,36	51 10,038	135,175 114,291	31,384	0 0	789 515	20,000	24,464 21,149
	-4,540		-18,261			-7,000	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
632,474	-155,389	938,213	1,134,130	2,078	-29,787	180,881	-3,740,516
Today Prev Da	ay Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day
	Clie	ents			P	ro	
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
586,197 🔺	8,909 🔺	-331,270 🔻	44,662 🔺	-394,696 🔻	5,395 🔺	283,386 🔺	1,668 🔺
235,847		239,516		143,989	2,032		
	1,719		16,257				
	-7,190	-91,754	-28,405		-3,363	-63,421	-22,460 -24,128
				-250,707			
-350,35	50					-346,807	7
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
	226,556	-752,982	2,198,345	-475,205	-41,380	-366,112	408,041
-159,347	220,550	132,302	_/_00/010	170,200	/000	000/	



Daily Net Open Interest Change

							*All values are in crores
INDEX	FUTURES	INDEX	OPTIONS	STOCK F	UTURES	STOCK (OPTIONS
-1,2	295	-32,6	528	-3,73	35	-482	
			41,966				
	812	9,337			2,831		
-482				-904		-1,296	-814
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

DII and FII Daily Cash Market Flows

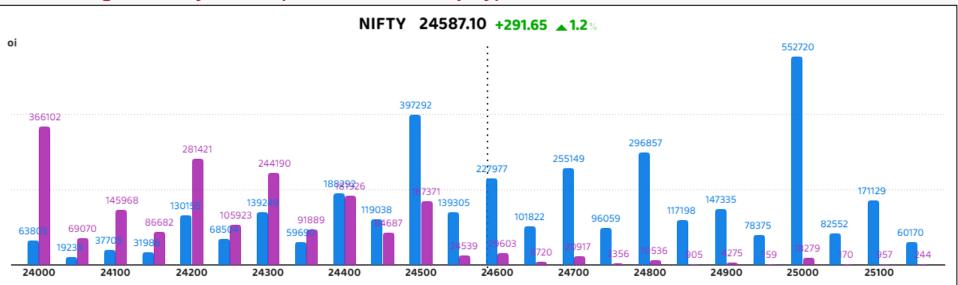




Call

Put

Positioning Stack by Strike (Current Week Expiry)



For the Nifty, the 25,000 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 53,000 call and the 52,000 put saw the most amount of open interest.

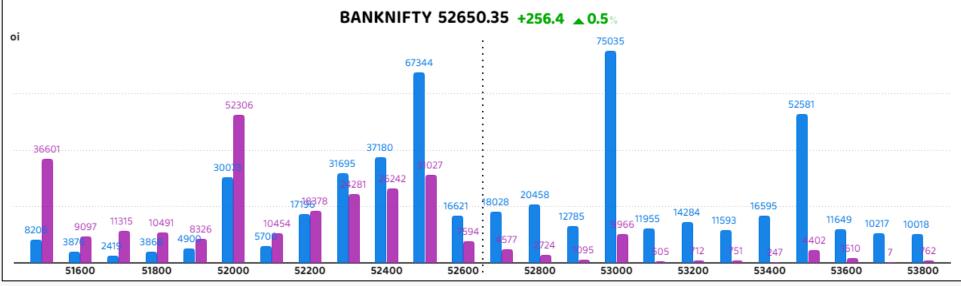
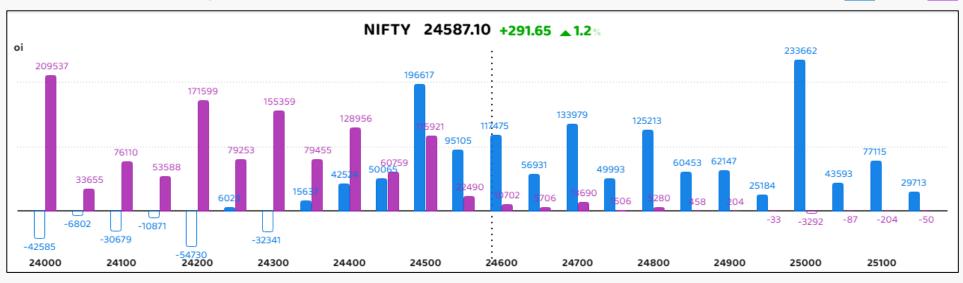


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

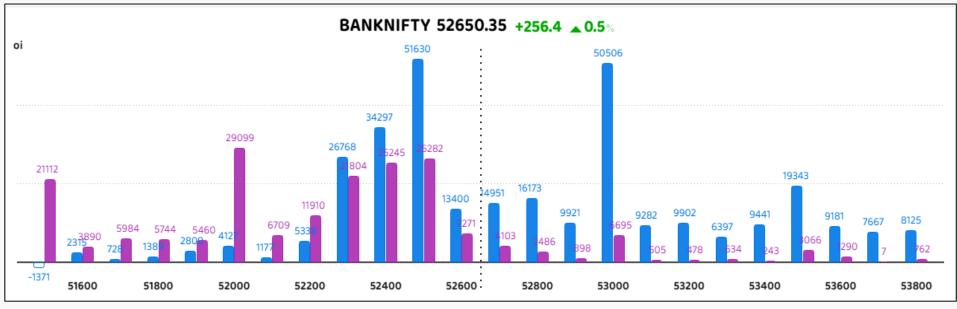


Open Interest Change (Current Week Expiry)

Call Put



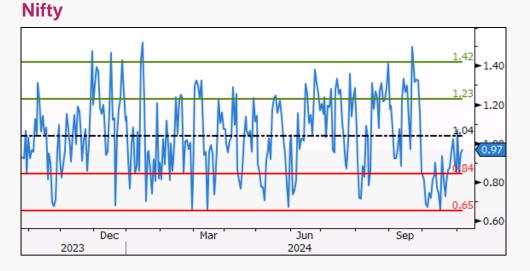
The largest open interest changes (contracts) were seen at the 25,000 call strike and 24,000 put strike.



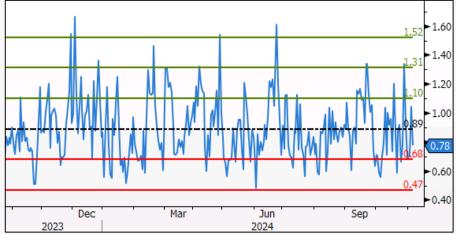
For the Bank Nifty, the biggest open interest changes were seen at the 52,500, Call Strike & 52,000 Put strike.



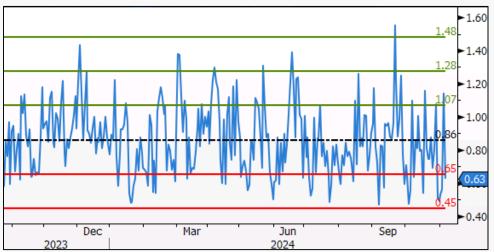
Put-Call Ratio Trend



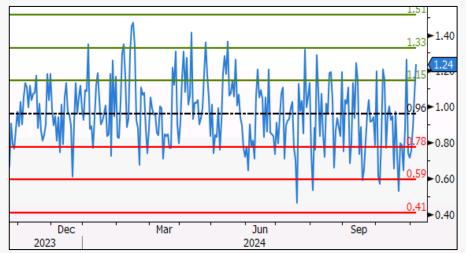
Bank Nifty



Fin Nifty

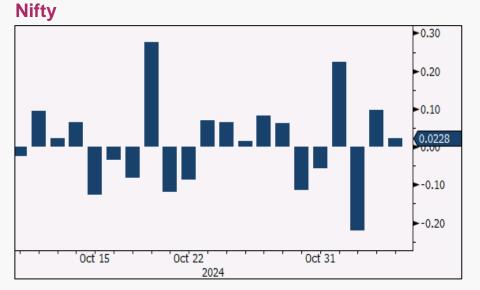


Midcap Nifty

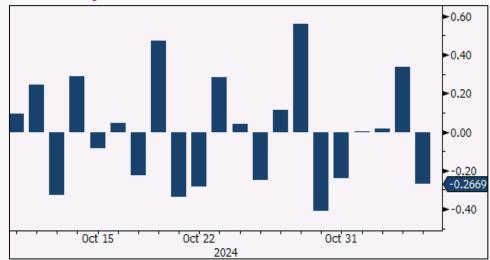




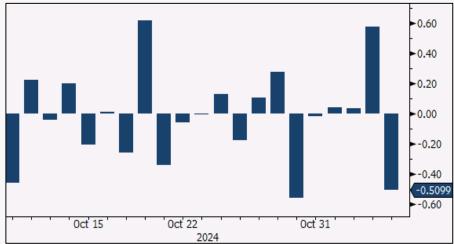
Put-Call Ratio Change



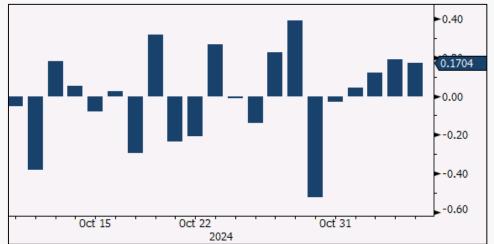
Bank Nifty



Fin Nifty



Midcap Nifty





Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TRENT LTD	6955.45	-0.2	54.5	54.5	2.2	100
ABBOTT INDIA LTD	29145.05	-0.6	28.5	32.6	6.5	84.1
HERO MOTOCORP LT	4892.8	1.5	32.2	40.4	2.8	78.3
COLGATE PALMOLIV	2973.95	-0.3	25.9	31.7	9.5	73.7
DIXON TECHNOLOGI	15467.60	8.6	38.1	51.3	1.8	73.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN AERONA	4390.15	3.0	8.3	74.0	5.7	3.9
INDIAN RAILWAY C	857.35	3.4	24.5	59.6	22.6	5.3
AMBUJA CEMENTS	582.65	1.9	22.6	70.4	19.1	6.8
BANK OF BARODA	262.55	1.8	27.8	66.9	24.5	7.8
HDFC LIFE INSURA	708.7	-1.2	23.5	80.5	17.4	9.8



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TRENT LTD	6955.45	-0.2	54.5	54.5	2.2	100.0
ITC LTD	481.1	0.2	35.2	60.7	10.2	99.6
ABBOTT INDIA LTD	29145.05	-0.6	28.5	32.6	6.5	93.7
HERO MOTOCORP LT	4892.8	1.5	32.2	40.4	2.8	89.5
LUPIN LTD	2166.05	-0.7	33.9	45.8	18.9	89.5

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN AERONA	4390.15	3.0	8.3	74.0	5.7	0.5
INFOSYS LTD	1823.7	4.0	9.8	45.6	4.9	0.9
RELIANCE INDS	1325.35	1.5	8.7	33.8	3.0	1.4
AMBUJA CEMENTS	582.65	1.9	22.6	70.4	19.1	2.2
AU SMALL FINANCE	609.8	-0.7	22.0	116.2	1.7	3.2



Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
UNITED BREWERIES	1975.25	1.2	3299	781	4.2
BALKRISHNA INDS	2869.65	2.8	2719	672	4.1
MAHANAGAR GAS LT	1434.7	4.0	8925	2234	4.0
INFO EDGE	7997	4.7	19634	4917	4.0
NAVIN FLUORINE I	3495.8	3.6	8683	2216	3.9

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol	
ICICI PRUDENTIAL	716.25	-2.2	5767	7800	1.4	
PETRONET LNG LTD	344.65	3.0	5497	7297	1.3	
ADITYA BIRLA FAS	300.2	-0.7	10298	9119	0.9	
CIPLA LTD	1594.05	-0.4	22633	19447	0.9	
BERGER PAINTS	525.15	2.3	11068	9367	0.8	



Call Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Call OI	Highest Call OI	Call OI Diff
TRENT LTD	6955.45	-0.2	30006	30006	100.0
MCX INDIA LTD	6456.75	-1.3	17217	17217	100.0
ABB INDIA LTD	7164.05	0.4	15945	16361	97.5
ADITYA BIRLA CAP	206.14	2.1	11537	12798	90.2

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
DIXON TECHNOLOGI	15647.6	8.6	26465	26465	100.0
BATA INDIA LTD	1358.4	0.2	6266	6318	99.2
MCX INDIA LTD	6456.75	-1.3	10722	10972	97.7
ADITYA BIRLA CAP	206.14	2.1	7832	8061	97.2
CIPLA LTD	1594.05	-0.4	18764	19412	96.7



Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff				
No stock option met the 80% criteria									

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff	
TITAN CO LTD	3177.05	-1.6	116813	120133	97.2	



Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
GRANULES INDIA	576.45	4.7	32308	3526	9.2
MANAPPURAM FINAN	156.98	-1.3	20477	3863	5.3
DIXON TECHNOLOGI	15647.6	8.6	250435	60742	4.1
CHAMBAL FERTILIS	503.4	4.00	17203	4256	4.0
STEEL AUTHORITY	123.89	4.5	23966	7366	3.3

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
GRANULES INDIA	576.45	4.7	18772	2138	8.8
MANAPPURAM FINAN	156.98	-1.3	11677	2123	5.5
TITAN CO LTD	3177.05	-1.6	116813	26539	4.4
DIXON TECHNOLOGI	15647.6	8.6	115054	36133	3.2
STEEL AUTHORITY	123.89	4.5	13863	4529	3.1



Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
GRANULES INDIA	576.45	4.7	5710	3130	1.8
TRENT LTD	6955.45	-0.2	30006	18972	1.6
ABB INDIA LTD	7164.05	0.4	15945	10624	1.5
ADITYA BIRLA CAP	206.14	2.1	11537	7890	1.5
MCX INDIA LTD	6456.75	-1.3	17217	11892	1.4

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
CIPLA LTD	1594.05	-0.4	18764	9478	2.0
GRANULES INDIA	576.45	4.7	3950	2275	1.7
DIXON TECHNOLOGI	15647.6	8.6	26465	16761	1.6
TRENT LTD	6955.45	-0.2	18001	11542	1.6
BATA INDIA LTD	1358.4	0.2	6266	4125	1.5



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	3100	1157100	1.8%	3046	3000	1880400	-1.5%	INFY	1800	2828800	-1.3%	1824	1800	1376800	-1.3%
ADANIPORTS	1400	1790000	2.2%	1370	1300	898400	-5.1%	ПС	500	8401600	3.9%	481	480	2768000	-0.2%
APOLLOHOSP	7000	142000	0.5%	6968	7000	95000	0.5%	JSWSTEEL	1070	1038825	6.1%	1009	980	629100	-2.8%
ASIANPAINT	3000	678200	3.5%	2897	2900	570800	0.1%	KOTAKBANK	1800	1943600	2.1%	1763	1760	874000	-0.1%
AXISBANK	1200	2578750	2.9%	1167	1200	1172500	2.9%	LT	3700	1308450	1.5%	3645	3600	520800	-1.2%
BAJAJ-AUTO	11000	404775	9.8%	10021	9000	134625	-10.2%	LTIM	6500	99750	8.5%	5990	5500	45900	-8.2%
BAJAJFINSV	1800	952500	2.9%	1749	1700	354000	-2.8%	M&M	3000	929075	2.2%	2935	2700	580825	-8.0%
BAJFINANCE	7000	425500	-0.1%	7006	7000	253375	-0.1%	MARUTI	12000	398600	5.7%	11354	11000	157850	-3.1%
BHARTIARTL	1620	1875775	1.3%	1599	1600	1096300	0.1%	NESTLEIND	2400	492600	5.5%	2276	2400	243800	5.5%
BPCL	320	4579200	0.9%	317	300	1557000	-5.4%	NTPC	420	6360000	2.7%	409	400	1833000	-2.2%
BRITANNIA	5800	58500	1.8%	5695	5200	76800	-8.7%	ONGC	275	23155825	2.2%	269	300	2494800	11.5%
CIPLA	1600	936000	0.4%	1594	1500	1126775	-5.9%	POWERGRID	330	6786000	3.6%	319	320	2183400	0.5%
COALINDIA	484.25	4242000	11.1%	436	484.25	1522500	11.1%	RELIANCE	1400	12376500	5.6%	1325	1450	5153000	9.4%
DIVISLAB	6000	241900	0.8%	5954	5000	227300	-16.0%	SBILIFE	1640	1260750	2.2%	1604	1640	194250	2.2%
DRREDDY	1300	1638750	-0.2%	1302	1200	533125	-7.8%	SBIN	900	5993250	5.3%	855	800	3906750	-6.4%
EICHERMOT	5000	187425	1.7%	4917	4800	140875	-2.4%	SUNPHARMA	1900	1730750	4.0%	1827	1800	407750	-1.5%
GRASIM	2700	323500	2.0%	2646	2600	275250	-1.7%	TATACONSUM	1100	1149120	9.2%	1007	950	295032	-5.7%
HCLTECH	1820	1217650	-1.0%	1838	1800	509250	-2.1%	TATAMOTORS	900	5345450	7.2%	840	800	1895300	-4.7%
HDFCBANK	1800	5489000	2.5%	1755	1700	2420550	-3.1%	TATASTEEL	155	28528500	0.9%	154	150	14778500	-2.4%
HDFCLIFE	730	2654300	3.0%	709	700	546700	-1.2%	TCS	4200	658350	1.5%	4140	4000	572775	-3.4%
HEROMOTOCO	5200	340800	6.3%	4893	5000	125550	2.2%	TECHM	1700	871200	0.4%	1694	1600	504600	-5.5%
HINDALCO	700	2072000	-1.2%	708	700	1772400	-1.2%	TITAN	3300	1140475	3.9%	3177	3000	720825	-5.6%
HINDUNILVR	2600	814200	4.0%	2501	2400	359700	-4.0%	ULTRACEMCO	11500	69150	2.0%	11274	11000	50900	-2.4%
ICICIBANK	1300	3110100	-0.2%	1302	1200	1568700	-7.9%	UPL	600	1103700	5.8%	567	550	566800	-3.0%
INDUSINDBK	1200	3660000	11.4%	1078	1000	2000500	-7.2%	WIPRO	600	4075500	6.4%	564	500	1603500	-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



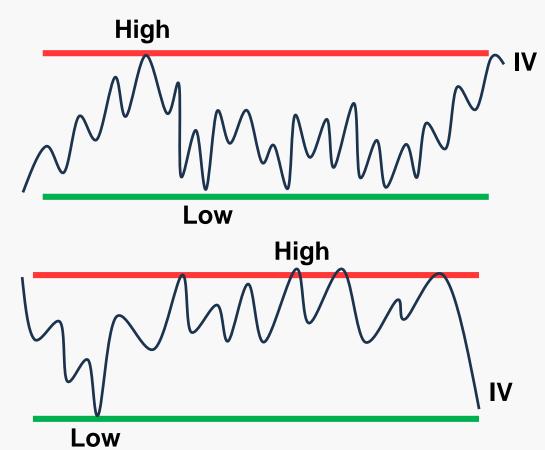
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the same when one party is opening a new position and the other is liquidating an existing position
- Open interest falls when both the buyer and the seller are liquidating existing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



- 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.

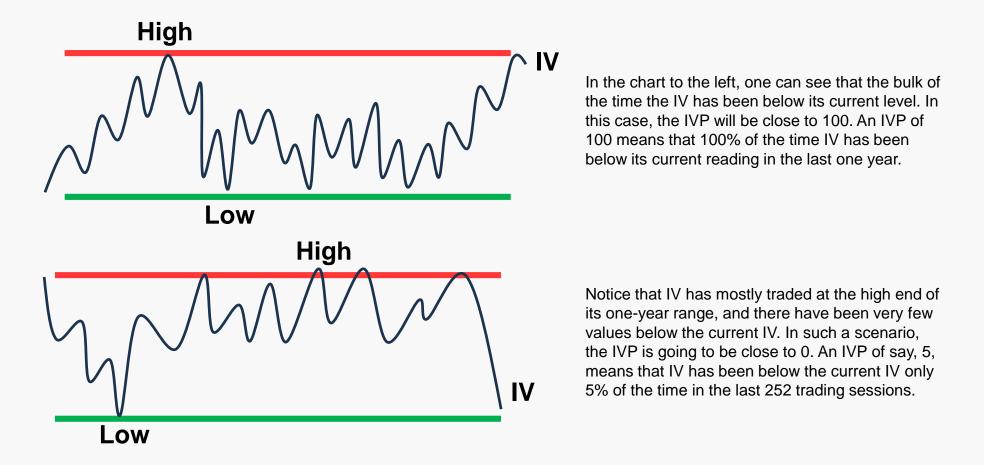
In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

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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