



Daily Derivatives Report



Nifty Futures

	Value	Change	
Most recent settlement	23,659	1.3%▼	
Open Interest (OI)	1,39,61,850	3.7%▲	
Change in OI (abs)	1,39,61,850	4,99,125▲	
Premium / Discount (Abs)	100	23 ▲	
Inference	Short Build Up		

Bank Nifty Futures

	Value	Change	
Most recent settlement	50,358	2.0%▼	
Open interest (OI)	34,32,345	2.4%▲	
Change in OI (abs)	34,32,345	81,000 ▲	
Premium / Discount (Abs)	270	54▲	
Inference	Short Build Up		

Volatility Insights

	Value	Change
India VIX Index	15.44	0.9▲
Nifty ATM IV (%)	14.00	1.2▲
Bank Nifty ATM IV (%)	15.01	0.2▼
PCR (Nifty)	0.70	0.03▼
PCR (Bank Nifty)	0.71	0.11 ▲

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
MARICO	2,06,18,400	2.4%	598.3	0.1%			
ALKEM	17,50,100	1.7%	5577.65	1.7%			
HINDUNILVR	1,62,12,000	1.5%	2467.25	0.1%			
HAVELLS	1,03,56,000	0.2%	1618.8	0.7%			
DABUR	2,02,86,250	0.0%	512.75	0.0%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
GNFC	80,84,700	36.2%	545.95	-7.4%			
IPCALAB	21,29,400	16.1%	1500	-3.2%			
DEEPAKNTR	23,67,900	16.1%	2479.35	-2.9%			
METROPOLIS	11,20,400	8.9%	2056.45	-5.8%			
SUNTV	58,69,500	7.4%	707.55	-0.7%			

Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
MANAPPURAM	5,49,72,000	-12.4%	157.19	0.0%			
ZYDUSLIFE	1,40,18,400	-8.2%	964.15	1.4%			
BRITANNIA	28,92,500	-2.2%	5049.85	0.2%			
TATAMOTORS	9,95,48,350	-0.9%	788.7	0.1%			
GODREJCP	1,16,23,500	-0.1%	1185.2	0.7%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Symbol Open Interest Chg (%) Price Ch						
SYNGENE	66,55,000	-4.4%	863.45	-3.3%			
LTF	7,45,42,172	-4.3%	136.21	-1.8%			
BERGEPAINT	83,67,480	-4.3%	490.05	-1.0%			
MPHASIS	40,58,175	-4.1%	2848.25	-0.3%			
PIIND	12,35,000	-4.0%	4456.85	-2.0%			

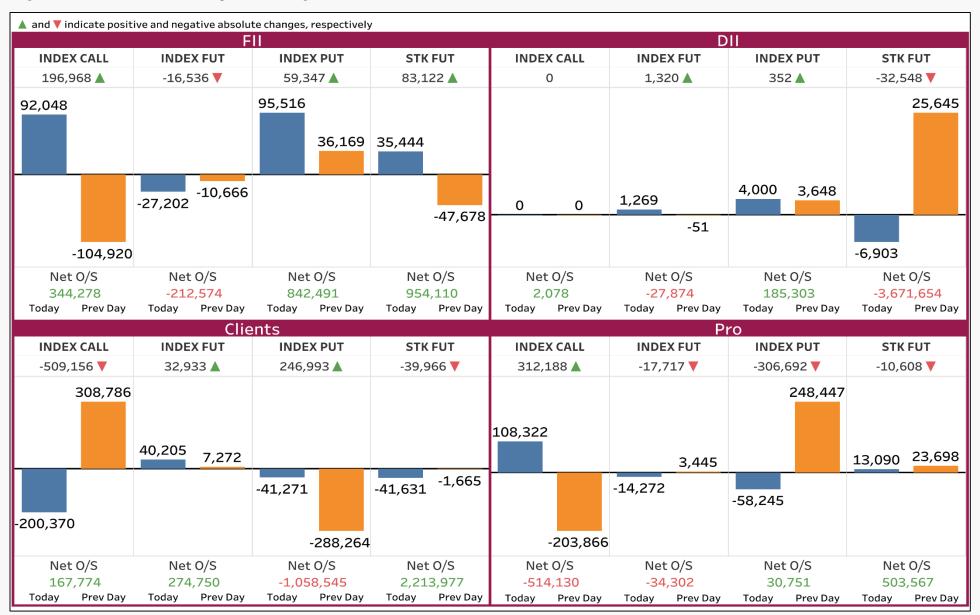
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

^{*}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

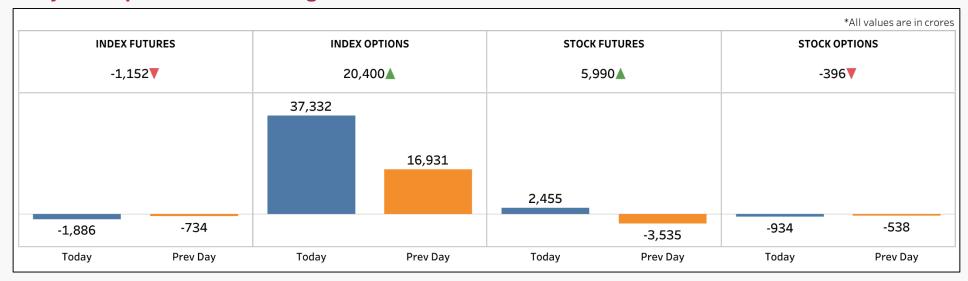


Open Interest Data by Participant

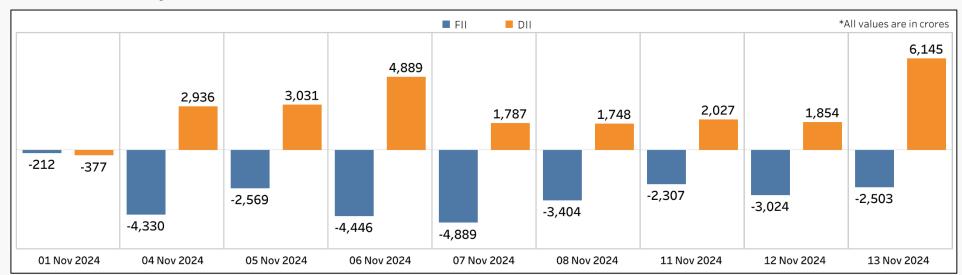




Daily Net Open Interest Change



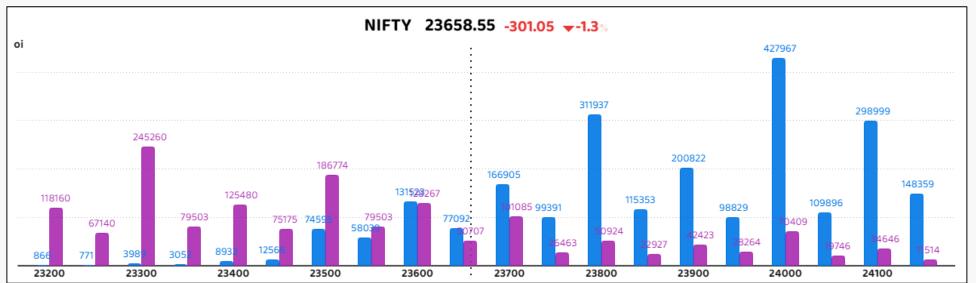
DII and FII Daily Cash Market Flows



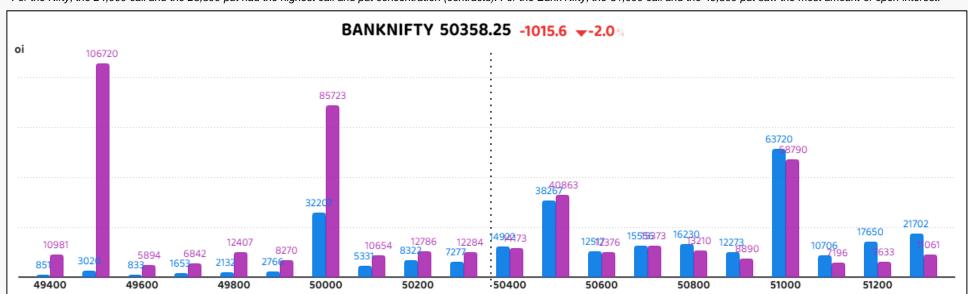


Positioning Stack by Strike (Current Week Expiry)





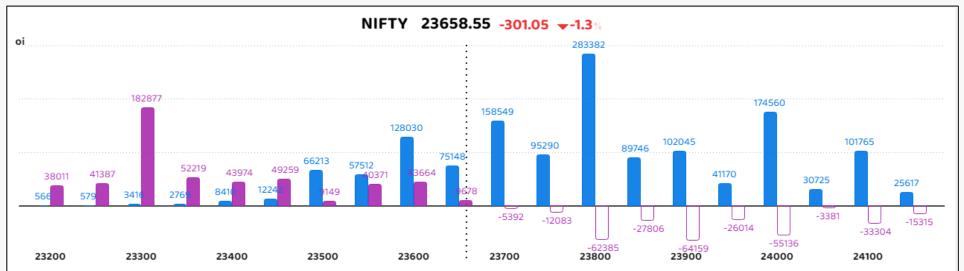
For the Nifty, the 24,000 call and the 23,300 put had the highest call and put concentration (contracts). For the Bank Nifty, the 51,000 call and the 49,500 put saw the most amount of open interest.



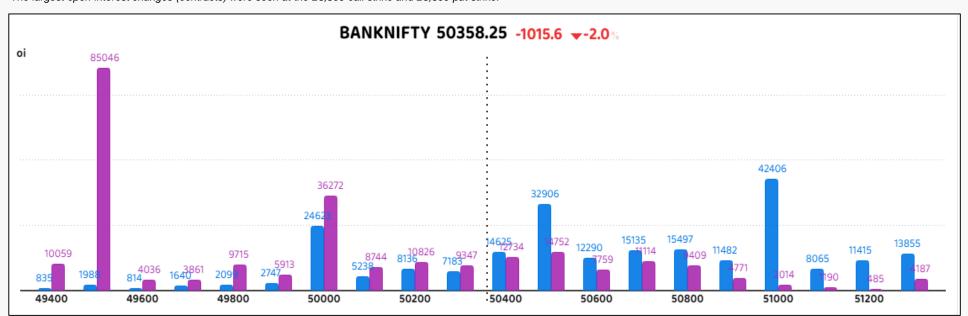


Open Interest Change (Current Week Expiry)



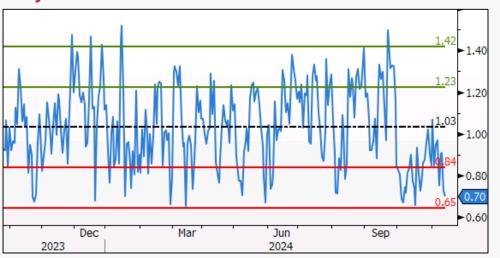


The largest open interest changes (contracts) were seen at the 23,800 call strike and 23,300 put strike.

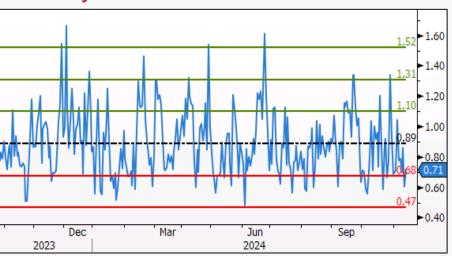




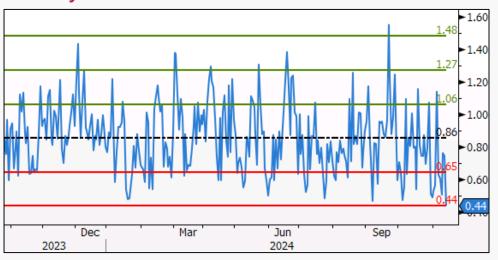
Nifty



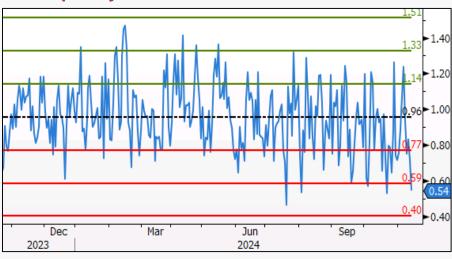
Bank Nifty



Fin Nifty

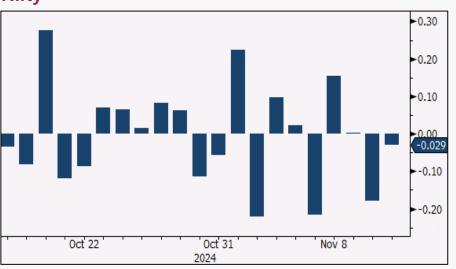


Midcap Nifty

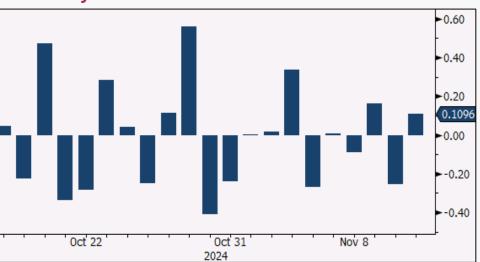




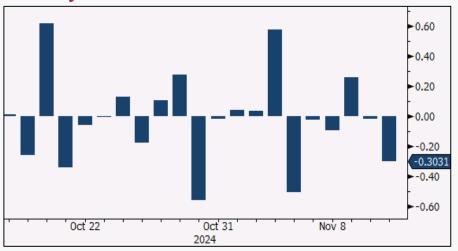
Nifty



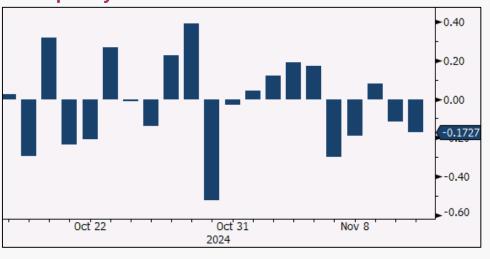
Bank Nifty



Fin Nifty



Midcap Nifty





Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ABBOTINDIA	27629.8	-3.4	28.1	32.6	6.5	82.5
GRANULES	532.4	-5.3	46.6	54.5	11.0	82.0
HEROMOTOCO	4519.6	-4.3	31.6	40.4	2.8	76.6
INFY	1868.4	0.0	34.5	45.6	4.9	72.8
COLPAL	2762.9	-0.9	25.6	31.7	9.5	72.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
CUB	170.7	-2.0	27.2	52.1	26.7	2.2
VOLTAS	1685.4	-0.8	21.9	50.4	20.8	3.6
IRCTC	801.4	-1.3	25.4	59.6	23.5	5.4
HDFCLIFE	685.1	-2.1	23.3	80.5	19.6	6.1
RECLTD	508.5	-1.2	34.6	86.9	31.2	6.1



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
GRANULES	532.4	-5.3	46.6	54.5	11.0	99.2
INFY	1868.4	0.0	34.5	45.6	4.9	98.4
ABBOTINDIA	27629.8	-3.4	28.1	32.6	6.5	90.7
BERGEPAINT	489.8	-1.3	32.6	50.6	12.0	88.9
CROMPTON	385.0	-1.4	40.1	49.4	17.0	87.9

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
VOLTAS	1685.4	-0.8	21.9	50.4	20.8	1.4
CUB	170.7	-2.0	27.2	52.1	26.7	1.9
HCLTECH	1864.8	-0.4	18.1	33.9	15.7	2.2
MANAPPURAM	158.1	0.1	26.1	80.2	2.7	2.4
HAVELLS	1614.1	0.7	20.5	43.3	17.5	2.6



Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
MANAPPURAM	158.1	0.1	2293	735	3.1
IDFCFIRSTB	63.6	-4.0	38917	13744	2.8
PEL	1012.3	-1.1	5495	1984	2.8
GMRINFRA	76.0	-2.8	20575	8023	2.6
GODREJCP	1183.9	0.7	7480	2929	2.6

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
HINDCOPPER	261.7	-2.9	280	678	2.4
LALPATHLAB	2957.2	-2.4	4044	8667	2.1
TORNTPHARM	3116.6	-1.1	903	1494	1.7
JKCEMENT	3973.9	-2.2	1012	1529	1.5
GNFC	545.0	-7.5	18456	24957	1.4



Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Call OI Diff	
SHRIRAMFIN	2853.85	-2.6	12884	12884	100.0	
ABB	6802	-2.3	18194	18194	100.0	
ABCAPITAL	187.61	-3.7	12814	12814	100.0	
CUMMINSIND	3326.05	-4.4	11039	11039	100.0	
MCX	5949.15	-2.5	17481	17481	100.0	

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Put OI Diff	
MOTHERSON	159.89	-3.70	11293	11293	100.0	
COLPAL	2762.9	-0.95	5013	5013	100.0	
BRITANNIA	5046.5	0.38	17415	17415	100.0	
GNFC	545	-7.50	4688	4720	99.3	
ASIANPAINT	2470.5	-0.18	40534	41224	98.3	



Call Volume Relative to Record High

Ticker	Last Px	%1D	Total Call Vol	Highest CV	CV Diff
BOSCHLTD	33212	-0.20	66589	66589	100.0
ALKEM	5571.2	1.23	39316	61649	63.8
IDFCFIRSTB	63.62	-3.96	38917	81141	48.0
BRITANNIA	5046.5	0.38	115157	245802	46.8
PFC	461.45	-1.22	63490	140592	45.2

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
BOSCHLTD	33212	-0.20	32130	32130	100.0
MOTHERSON	159.89	-3.70	34549	41334	83.6
ABCAPITAL	187.61	-3.68	12097	14602	82.8
GNFC	545	-7.50	24957	32472	76.9
APOLLOTYRE	456.6	-3.13	20028	31642	63.3



Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
BOSCHLTD	33212.0	-0.2	66589	6544	10.2
ALKEM	5571.2	1.2	39316	6438	6.1
GNFC	545.0	-7.5	18456	4133	4.5
BRITANNIA	5046.5	0.4	115157	32004	3.6
METROPOLIS	2050.2	-5.7	12299	3481	3.5

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
BOSCHLTD	33212.0	-0.2	32130	3807	8.4
GNFC	545.0	-7.5	24957	3330	7.5
METROPOLIS	2050.2	-5.7	12464	1769	7.0
ALKEM	5571.2	1.2	28950	4247	6.8
PIIND	4446.2	-2.3	9291	1797	5.2



Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BRITANNIA	5046.5	0.4	44183	10265	4.3
BOSCHLTD	33212.0	-0.2	6558	3117	2.1
ALKEM	5571.2	1.2	5950	2926	2.0
ASIANPAINT	2470.5	-0.2	63568	32138	2.0
COLPAL	2762.9	-0.9	10592	5370	2.0

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BRITANNIA	5046.5	0.4	17415	5239	3.3
PIIND	4446.2	-2.3	3043	1148	2.7
ALKEM	5571.2	1.2	4497	1873	2.4
GNFC	545.0	-7.5	4688	2188	2.1
ASIANPAINT	2470.5	-0.2	40534	20552	2.0



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	3000	1534200	6.5%	2817	3000	1856700	6.5%	INFY	1800	2769200	-3.7%	1868	1800	1846400	-3.7%
ADANIPORTS	1400	2087600	8.7%	1288	1300	822400	0.9%	ITC	500	8531200	5.9%	472	470	3136000	-0.5%
APOLLOHOSP	7500	283250	9.3%	6859	6900	134625	0.6%	JSWSTEEL	1000	1090800	6.8%	936	1000	598050	6.8%
ASIANPAINT	2600	1417400	5.2%	2471	2400	631800	-2.9%	KOTAKBANK	1800	2059600	6.6%	1688	1680	791600	-0.5%
AXISBANK	1200	3145000	5.3%	1139	1200	1126875	5.3%	LT	3700	1349850	4.3%	3548	3600	497700	1.5%
BAJAJ-AUTO	11000	436500	16.4%	9452	9500	150975	0.5%	LTIM	6000	141450	0.9%	5948	6000	52650	0.9%
BAJAJFINSV	1780	990000	6.9%	1664	1660	311500	-0.3%	M&M	3000	1764700	7.2%	2799	2800	516250	0.0%
BAJFINANCE	7000	909875	6.6%	6566	6500	326250	-1.0%	MARUTI	12000	522550	8.6%	11050	11000	156400	-0.4%
BHARTIARTL	1620	2367400	4.5%	1550	1600	1005100	3.2%	NESTLEIND	2400	497000	7.4%	2235	2400	251000	7.4%
BPCL	320	5463000	4.6%	306	300	2295000	-1.9%	NTPC	400	8980500	4.9%	381	390	2430000	2.3%
BRITANNIA	5500	554600	9.0%	5047	5000	227700	-0.9%	ONGC	275	24618825	8.9%	253	250	2804725	-1.0%
CIPLA	1600	945425	6.3%	1506	1500	616850	-0.4%	POWERGRID	330	7630200	3.8%	318	300	2890800	-5.7%
COALINDIA	484.25	2566200	19.0%	407	484.25	1484700	19.0%	RELIANCE	1400	11586500	11.8%	1252	1500	4569000	19.8%
DIVISLAB	6000	436200	4.0%	5770	5000	372300	-13.3%	SBILIFE	1640	1324125	6.0%	1547	1600	189750	3.4%
DRREDDY	1300	1607500	4.4%	1245	1200	375000	-3.6%	SBIN	850	10297500	5.1%	809	800	4201500	-1.1%
EICHERMOT	5000	351400	9.0%	4589	4500	181125	-1.9%	SUNPHARMA	1900	1965250	6.8%	1779	1800	316750	1.2%
GRASIM	2700	456750	7.9%	2503	2500	337250	-0.1%	TATACONSUM	1100	1234848	15.5%	953	900	404472	-5.5%
HCLTECH	1820	1203650	-2.4%	1865	1800	687400	-3.5%	TATAMOTORS	900	8203800	14.5%	786	800	3193850	1.7%
HDFCBANK	1800	6107200	7.1%	1681	1700	2003650	1.1%	TATASTEEL	155	51337000	11.4%	139	140	19475500	0.6%
HDFCLIFE	730	3060200	6.6%	685	700	476300	2.2%	TCS	4200	696500	1.2%	4150	4000	510475	-3.6%
HEROMOTOCO	5000	490500	10.6%	4520	4500	167100	-0.4%	TECHM	1800	886800	7.4%	1676	1600	483600	-4.5%
HINDALCO	700	8944600	11.7%	627	600	2135000	-4.2%	TITAN	3300	712250	3.5%	3188	3000	413875	-5.9%
HINDUNILVR	2600	939000	5.5%	2465	2400	405600	-2.6%	ULTRACEMCO	11500	105100	6.7%	10782	11000	87150	2.0%
ICICIBANK	1300	5151300	3.7%	1254	1260	1745800	0.5%	UPL	540	2649400	4.8%	515	500	1328600	-3.0%
INDUSINDBK	1200	3581500	15.8%	1037	1000	1760000	-3.5%	WIPRO	600	4084500	5.4%	569	540	1876500	-5.1%



- 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**

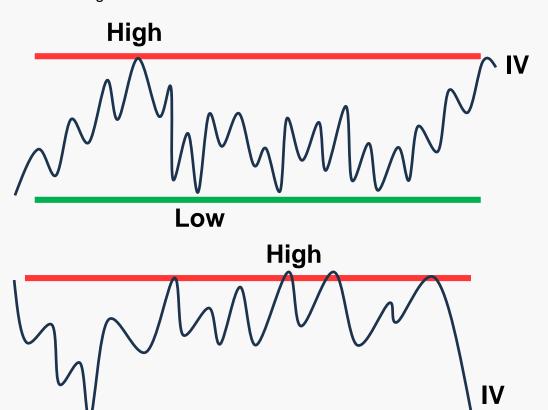


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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



Low

- 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

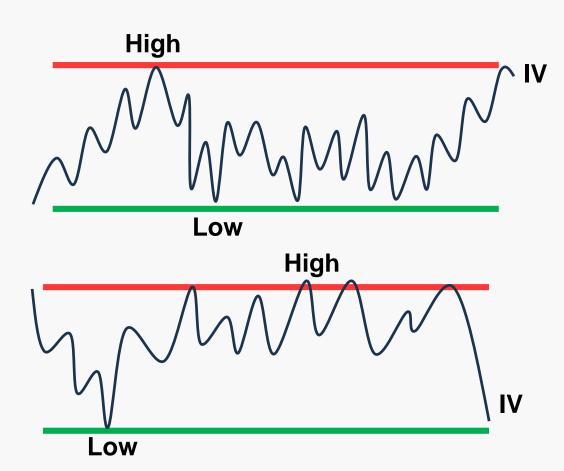


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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