

Daily Derivatives Report



Nifty Futures

	Value	Change	
Most recent settlement	24,115	1.1%▼	
Open Interest (OI)	1,24,33,275	6.4%▲	
Change in OI (abs)	1,24,33,275	7,41,950▲	
Premium / Discount (Abs)	119	40 ▲	
Inference	Short Build Up		

Bank Nifty Futures

	Value	Change	
Most recent settlement	51,552	0.7%▼	
Open interest (OI)	29,76,810	3.8%▲	
Change in OI (abs)	29,76,810	1,09,995▲	
Premium / Discount (Abs)	337	83▲	
Inference	Short Build Up		
•	•		

Volatility Insights

	Value	Change
India VIX Index	16.69	1.2▲
Nifty ATM IV (%)	15.97	1.0 ▲
Bank Nifty ATM IV (%)	18.01	1.0▲
PCR (Nifty)	0.85	0.22▼
PCR (Bank Nifty)	0.71	0.02 ▲

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
PNB	25,78,24,000	25.1%	104.27	2.5%			
ABBOTINDIA	1,24,920	21.7%	29693.7	1.0%			
DIXON	17,77,150	6.2%	14469.65	2.3%			
NAUKRI	15,47,025	5.9%	7747.1	3.4%			
BHARATFORG	1,06,66,500	5.4%	1429.7	0.4%			

Short Buildup (Open Interest Higher + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
RBLBANK	5,36,60,000	28.0%	172.85	-2.6%			
INDIAMART	9,95,700	17.0%	2476.4	-3.5%			
IDFCFIRSTB	35,25,90,000	14.5%	66.09	-2.0%			
MCX	17,91,100	9.3%	6444.1	0.0%			
MANAPPURAM	5,79,33,000	7.4%	153.06	-4.3%			

Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
CIPLA	1,34,20,875	-6.8%	1589.15	2.0%			
MOTHERSON	9,89,03,000	-4.4%	185.56	2.0%			
M&M	2,53,06,925	-3.7%	2893.25	2.2%			
HCLTECH	1,28,59,000	-3.1%	1772.05	0.7%			
BSOFT	1,37,23,000	-2.7%	553.1	0.2%			

Long Unwinding (Open Interest Lower + Price Lower)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
PIIND	9,95,125	-8.0%	4475.5	-0.4%			
ABB	16,04,875	-7.4%	7378.9	-0.7%			
COROMANDEL	26,13,450	-5.5%	1640.3	-3.1%			
SUNPHARMA	1,69,52,950	-5.2%	1813.6	-2.8%			
BPCL	6,94,13,400	-5.0%	304.4	-2.8%			

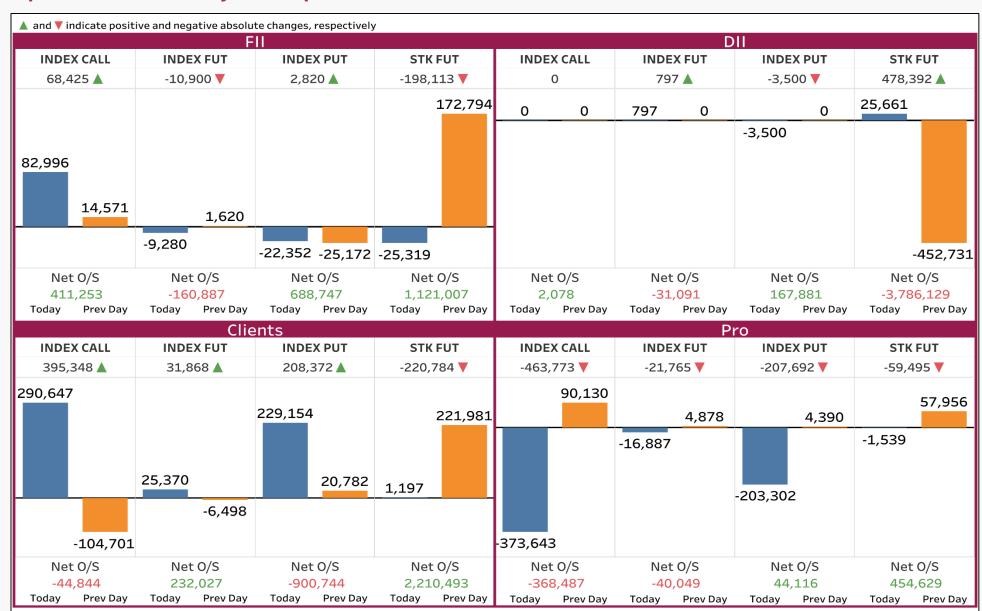
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

^{*}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

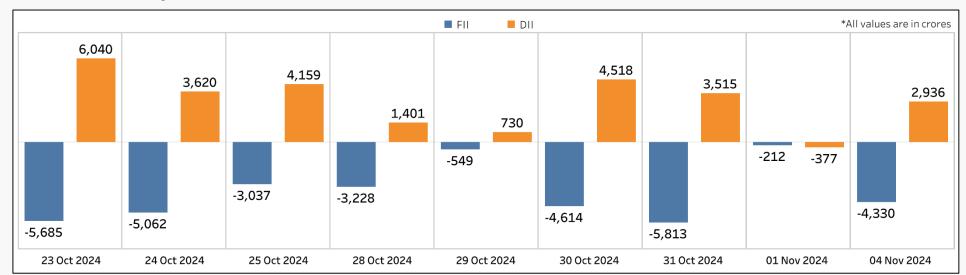




Daily Net Open Interest Change

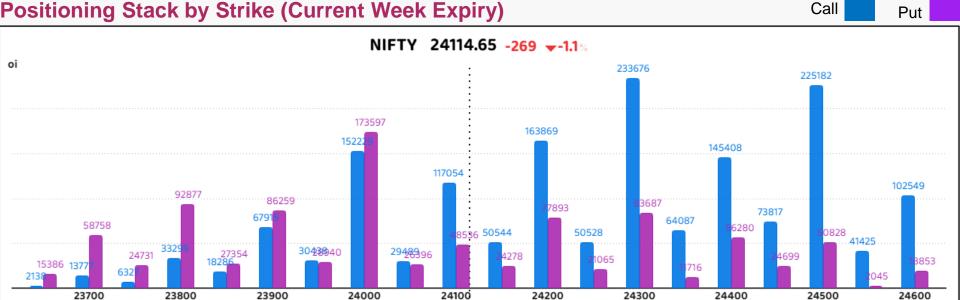


DII and FII Daily Cash Market Flows

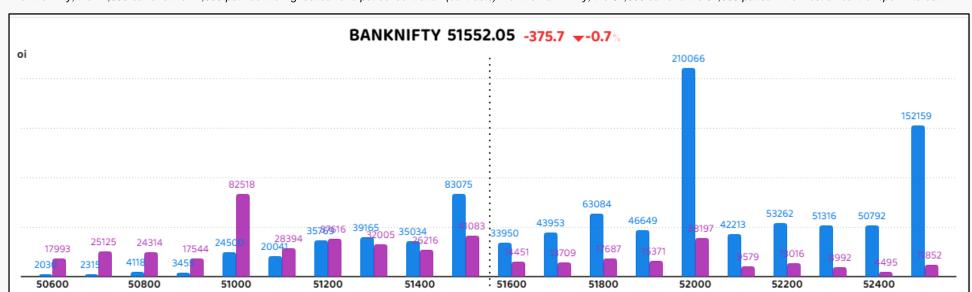




Positioning Stack by Strike (Current Week Expiry)



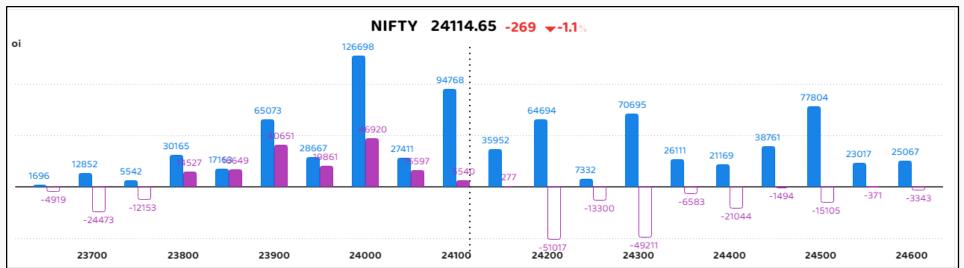
For the Nifty, the 24,300 call and the 24,000 put had the highest call and put concentration (contracts). For the Bank Nifty, the 52,000 call and the 51,000 put saw the most amount of open interest.



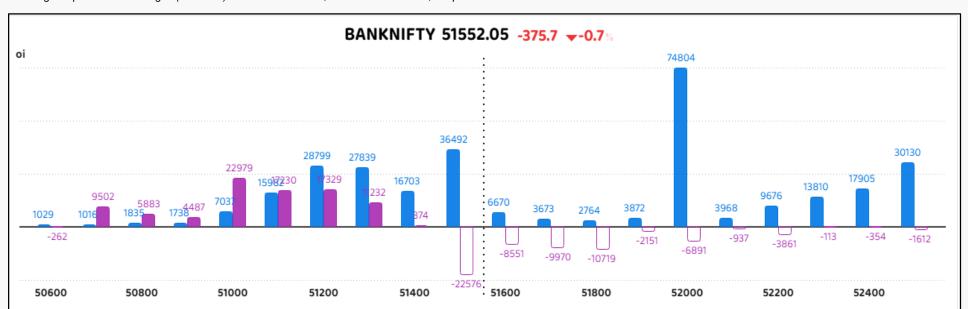


Open Interest Change (Current Week Expiry)

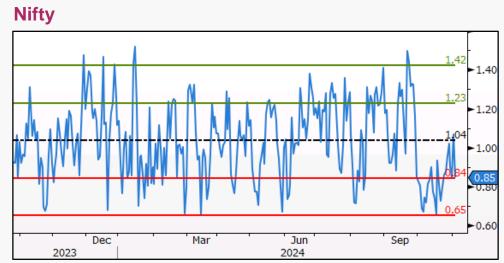


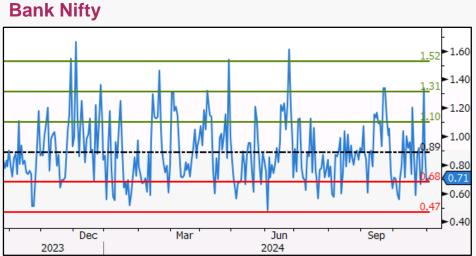


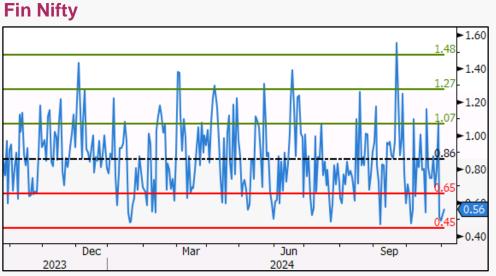
The largest open interest changes (contracts) were seen at the 24,000 call strike and 24,200 put strike.

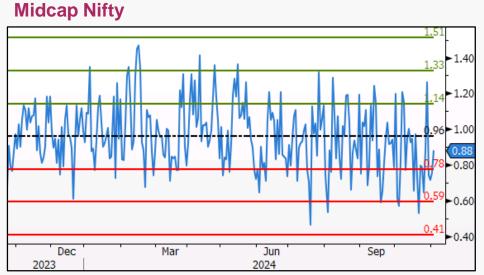






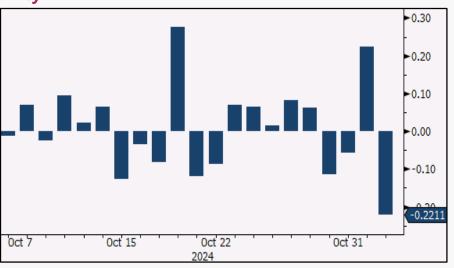




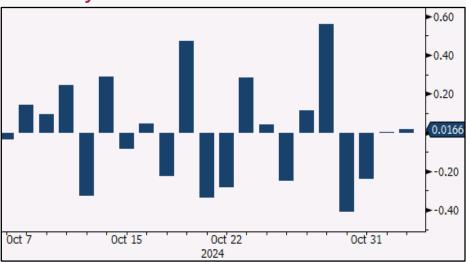




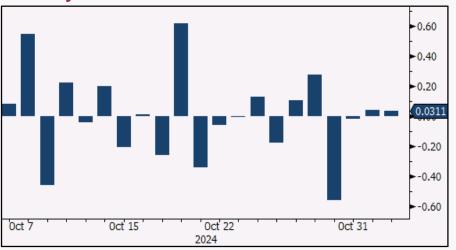
Nifty



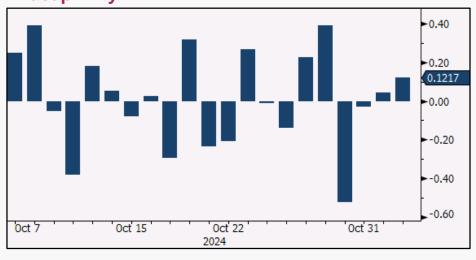
Bank Nifty



Fin Nifty



Midcap Nifty





Stocks with High IVR:

Ticker	Last Px	%1D	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
WIPRO LTD	540.8	-1.9	38.9	39.1	15.7	98.8
TITAN CO LTD	3222	-2.2	32.1	33.5	2.3	95.5
BALRAMPUR CHINI	609.35	-3.0	50.1	52.3	12.0	94.5
ABBOTT INDIA LTD	29460.45	0.6	29.3	32.6	6.5	87.2
TATA MOTORS LTD	824.1	-2.3	38.5	41.8	19.8	85.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HDFCLIFE IS	710.85	-1.8	22.8	80.5	16.9	9.2
AMBUJA CEMENTS	571.4	-1.9	27.1	70.4	19.1	15.5
ACC LTD	2289.45	-1.6	25.1	55.4	19.2	16.3
ADANI PORTS AND	1349.25	-3.2	28.3	85.8	16.7	16.7
BANK OF BARODA	252.65	-0.4	31.7	66.9	24.5	17.0



Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
WIPRO LTD	540.8	-1.9	38.9	39.1	15.7	99.9
BALRAMPUR CHINI	609.35	-3.0	50.1	52.3	12.0	99.4
TITAN CO LTD	3222	-2.2	32.1	33.5	2.3	99.4
MAHINDRA & MAHIN	2883.95	2.4	39.1	58.8	0.8	99.0
PAGE INDUSTRIES	43037.05	-0.8	33.3	41.8	9.9	96.9

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA COMMUNICATI	1746.35	-2.5	24.2	47.2	18.7	7.9
ADANI ENTERPRISE	2897.4	-1.8	30.3	84.3	2.4	12.5
HDFC LIFE INSURA	710.85	-1.8	22.8	80.5	16.9	13.6
ICICI PRUDENTIAL	735.8	-1.2	24.2	41.4	14.2	13.7
SBI LIFE INSURAN	1608.8	-1.2	20.7	35.8	10.1	15.7



Stocks With High Call Volume To Put Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Call to Put Vol
INFO EDGE	7722.75	3.4	19506	4644	4.2
OIL & NATURAL GA	265.3	-2.4	40088	12718	3.2
ZYDUS LIFESCIENC	1004.45	0.0	8910	3193	2.8
GMR AIRPORTS INF	77.94	-2.6	21313	7707	2.8
CROM GREAVES CON	384.75	-1.9	1691	613	2.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	%1D	Total Call Vol	Total Put Vol	Put to Call Vol
JK CEMENTS LTD	4273.3	-1.7	696	1202	1.7
BALKRISHNA INDS	2791.1	-2.2	1288	2105	1.6
DR LAL PATHLABS	3066.499	-0.5	1888	2542	1.3
NAVIN FLUORINE I	3317.35	-1.2	1053	1322	1.3
ICICI LOMBARD GE	1870.85	-2.4	2051	2497	1.2



Call Open Interest Relative to Record High

Ticker	Last Px	Last Px %1D		Highest Call OI	Call OI Diff
ADITYA BIRLA CAP	199.1	-3.4	12798	12798	100.0
MCX INDIA LTD	6457.25	-0.5	16798	17055	98.5

Put Open Interest Relative to Record High

Ticker	Last Px	%1D	Total Put OI	Highest Put OI	Put OI Diff
CIPLA LTD	1584.6	1.6	18485	18485	100.0
ADITYA BIRLA CAP	199.1	-3.4	7996	7996	100.0
MCX INDIA LTD	6457.25	-0.5	9622	10972	87.7



Call Volume Relative to Record High

Ticker	Last Px	Last Px %1D		Highest CV	CV Diff	
ABCAPITAL	215.37	5.31	34676	43617	80	

Put Volume Relative to Record High

Ticker	Last Px	%1D	Total Put Vol	Highest PV	PV Diff
DABUR	546.65	2.02	29134	30600	95.2
MCX	6390.35	-6.37	50635	53559	94.5
ABCAPITAL	215.37	5.31	13636	14602	93.4



Call Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio	
MANAPPURAM FINAN	152.9	-4.2	8172	1931	4.2	
GUJARAT NARM VLY	607.65	-3.0	4698	1318	3.6	
PUNJAB NATL BANK	103.65	2.6	24679	7609	3.2	
RBL BANK LTD	171.96	-2.3	10180	3301	3.1	
INFO EDGE	7722.75	3.4	19506	6654	2.9	

Put Volume Relative to 20-day Average

Ticker	Last Px	%1D	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MANAPPURAM FINAN	152.9	-4.2	5127	1035	5.0
GUJARAT NARM VLY	607.65	-3.0	3456	950	3.6
PUNJAB NATL BANK	103.65	2.6	12432	4280	2.9
RBL BANK LTD	171.96	-2.3	7221	2619	2.8
IDFC FIRST BANK	65.83	-2.0	8737	3329	2.6



Call Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ABCAP IS	199.1	-3.4	12798	7285	1.8
VOLT IS	1665.05	1.4	11569	8070	1.4
DIXON IS	14434.6	2.2	30498	22353	1.4
COAL INDIA LTD	443.3	-2.4	21747	17276	1.3
RECL IS	518.35	-1.6	23929	19431	1.2

Put Open Interest to 20-day Average

Ticker	Last Px	%1D	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
CIPLA LTD	1584.6	1.6	18485	7968	2.3
ADITYA BIRLA CAP	199.1	-3.4	7996	4893	1.6
REC LTD	518.35	-1.6	17588	12181	1.4
HINDUSTAN AERONA	4208.25	-1.9	20372	14251	1.4
COAL INDIA LTD	443.3	-2.4	14587	10771	1.4



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	1356300	3.5%	2897	3000	1826700	3.5%	INFY	1800	1945600	2.1%	1764	1800	694800	2.1%
ADANIPORTS	1400	1386800	3.8%	1349	1300	574000	-3.7%	ITC	490	6704000	1.1%	485	500	2232000	3.2%
APOLLOHOSP	7000	64125	0.6%	6958	7000	55125	0.6%	JSWSTEEL	1000	544050	4.7%	955	900	369900	-5.7%
ASIANPAINT	3000	469000	2.9%	2915	2900	343200	-0.5%	KOTAKBANK	1800	1238800	4.1%	1729	1800	740000	4.1%
AXISBANK	1200	2606250	5.3%	1139	1200	1238750	5.3%	LT	3600	932400	0.7%	3574	3600	461400	0.7%
BAJAJ-AUTO	11000	415725	15.5%	9526	9000	153900	-5.5%	LTIM	6000	90450	4.6%	5737	5500	50100	-4.1%
BAJAJFINSV	1780	886000	3.9%	1713	1700	307500	-0.7%	M&M	3000	888125	4.0%	2884	2700	534450	-6.4%
BAJFINANCE	7000	420375	2.3%	6844	7000	231375	2.3%	MARUTI	12000	414950	8.6%	11052	11000	166000	-0.5%
BHARTIARTL	1700	1355175	6.8%	1591	1600	1121475	0.5%	NESTLEIND	2400	442200	6.8%	2246	2400	245800	6.8%
BPCL	320	4462200	5.5%	303	300	2293200	-1.1%	NTPC	430	6054000	7.2%	401	400	1756500	-0.2%
BRITANNIA	5800	70400	3.1%	5625	5500	41400	-2.2%	ONGC	270	8308300	1.8%	265	300	2487100	13.1%
CIPLA	1600	951600	1.0%	1585	1500	1158950	-5.3%	POWERGRID	330	4732200	4.6%	315	320	2269800	1.4%
COALINDIA	500	4047750	12.8%	443	500	1531950	12.8%	RELIANCE	1400	10269000	7.5%	1302	1450	5153500	11.4%
DIVISLAB	6000	114700	1.7%	5902	5000	169100	-15.3%	SBILIFE	1640	885000	1.9%	1609	1600	180750	-0.5%
DRREDDY	1300	978750	2.5%	1268	1200	538125	-5.4%	SBIN	800	5438250	-3.6%	830	800	3547500	-3.6%
EICHERMOT	5000	204050	3.5%	4832	4800	99925	-0.7%	SUNPHARMA	1900	1141000	5.0%	1809	1800	409850	-0.5%
GRASIM	2700	294250	4.2%	2591	2600	221500	0.4%	TATACONSUM	1100	1048800	10.6%	995	950	273144	-4.5%
HCLTECH	1800	883750	2.1%	1763	1700	269850	-3.6%	TATAMOTORS	900	4748150	9.2%	824	850	2019600	3.1%
HDFCBANK	1800	3544750	5.0%	1714	1700	1916750	-0.8%	TATASTEEL	160	19437000	8.9%	147	150	10098000	2.1%
HDFCLIFE	740	1148400	4.1%	711	700	332200	-1.5%	TCS	4200	739550	5.9%	3964	4000	491925	0.9%
HEROMOTOCO	5200	365550	8.2%	4806	4800	133950	-0.1%	TECHM	1800	935400	9.9%	1638	1600	524400	-2.3%
HINDALCO	700	2055200	3.8%	674	700	910000	3.8%	TITAN	3300	739200	2.4%	3222	3000	497700	-6.9%
HINDUNILVR	2600	754500	3.0%	2525	2400	330300	-4.9%	ULTRACEMCO	11500	80300	4.5%	11002	11000	55300	0.0%
ICICIBANK	1300	1933400	1.8%	1277	1200	1061900	-6.0%	UPL	600	976300	8.6%	553	550	640900	-0.5%
INDUSINDBK	1200	3053500	12.8%	1064	1000	1893000	-6.0%	WIPRO	600	2625000	10.9%	541	500	1603500	-7.5%



- 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

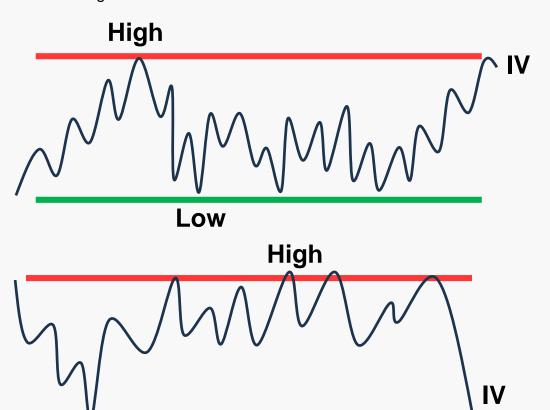


- Volume: Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- Open Interest: The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the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



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

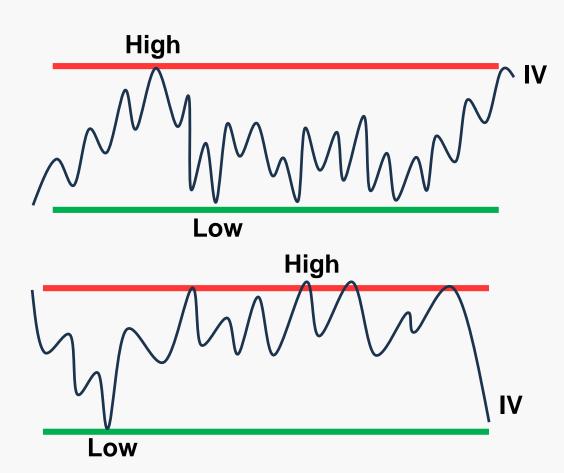


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

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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