



# **Daily Derivatives Report**



Nifty Futures			Bank Nifty Futures Volatility			Volatility Insig	ty Insights		
	Value	Change		Value	Change		Value	Change	
Most recent settlement	24,976	0.4%▼	Most recent settlement	55,515	0.0%▲	India VIX Index	17.36	0.81 🛦	
Open Interest (OI)	1,59,59,925	0.4%▼	Open interest (OI)	22,01,260	4.0%▲	Nifty ATM IV (%)	15.74	1.3▲	
Change in OI (abs)	1,59,59,925	59,550▼	Change in OI (abs)	22,01,260	83,910▲	Bank Nifty ATM IV (%)	16.63	1.6▲	
Premium / Discount (Abs)	31	28 🔻	Premium / Discount (Abs)	94	54▼	PCR (Nifty)	0.82	0.15▼	
Inference	Long Unwi	nding	Inference	Long B	uild Up	PCR (Bank Nifty)	0.86	0.04▼	

The Long Ratio for FII Index Futures drop at 42.7%, down from 45.6 % in the last session.

# **Single Stock Futures Movers**

Long Buildup (Open Interest Higher + Price Higher)				Short Build	up (Open Interes	st Higher + F	Price Lower	)	
Symbol	Open Interest	Chg (%)	Price	Chg (%)	Symbol	Open Interest	Chg (%)	Price	%) Chg
HUDCO	2,70,14,050	14.4%	235.09	0.2%	PATANJALI	52,90,500	8.3%	1733.2	-3.3%
IRFC	8,47,93,350	10.0%	140.87	1.4%	MUTHOOTFIN	57,49,975	5.2%	2088.2	-1.0%
ALKEM	10,33,500	7.5%	5339	2.0%	HAL	81,97,650	5.0%	5022.1	-2.4%
INDIANB	62,14,100	7.1%	613.25	2.8%	ITC	16,66,35,200	4.6%	434.3	-0.2%
NBCC	4,18,59,100	6.9%	114.93	3.2%	LICHSGFIN	2,74,69,000	4.5%	602.75	-3.2%

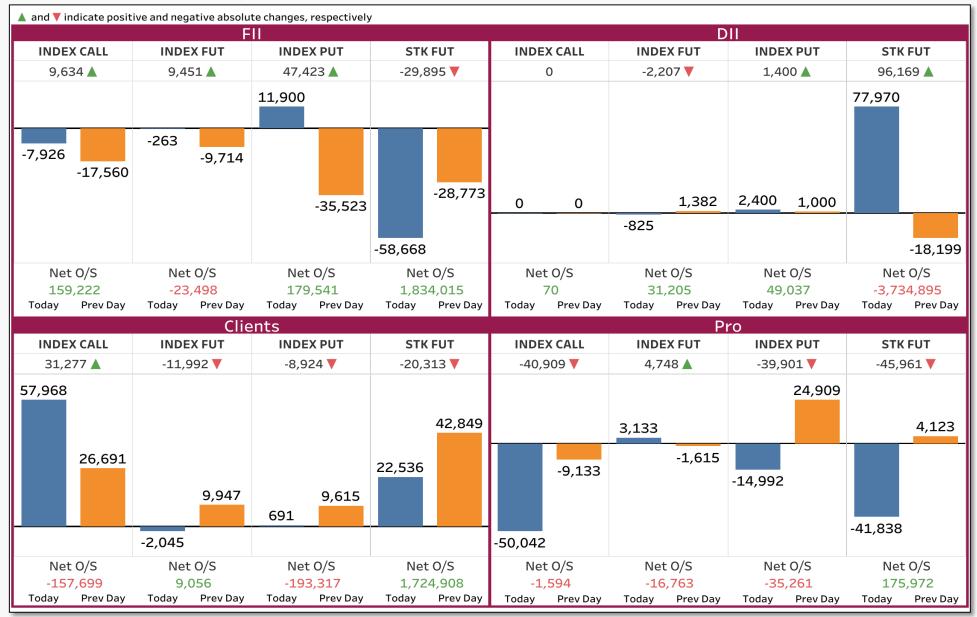
Short Covering (Open Interest Lower + Price Higher)							
Symbol	Open Interest	Chg (%)	Price	Chg (%)			
CESC	2,17,63,550	-20.3%	172.54	4.1%			
ABFRL	3,99,90,600	-12.9%	286.1	2.7%			
DELHIVERY	1,44,31,300	-9.5%	350.1	8.8%			
DIVISLAB	34,38,000	-6.1%	6595.5	4.5%			
HDFCAMC	23,17,200	-5.9%	4809.4	1.3%			

Long Unwinding (Open Interest Lower + Price Lower)								
Symbol	Open Interest	Chg (%)	Price	Chg (%)				
DEEPAKNTR	8,85,900	-7.1%	2123.6	-0.1%				
APOLLOTYRE	58,00,400	-7.0%	490.2	-1.3%				
ADANIENSOL	1,12,57,125	-4.7%	889.7	-3.2%				
COFORGE	26,95,875	-4.5%	8283	-2.1%				
IRB	8,80,27,375	-4.1%	50.73	-1.1%				

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

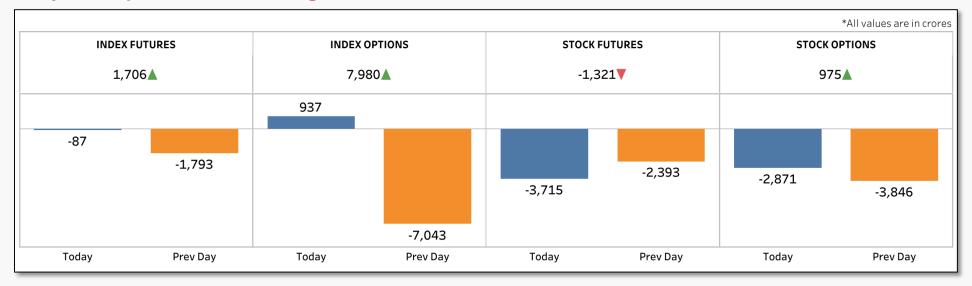


# **Open Interest Trends by Participant**

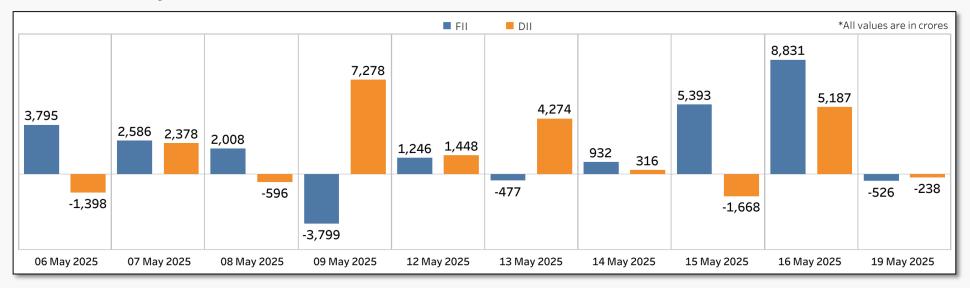




### **Daily Net Open Interest Change**

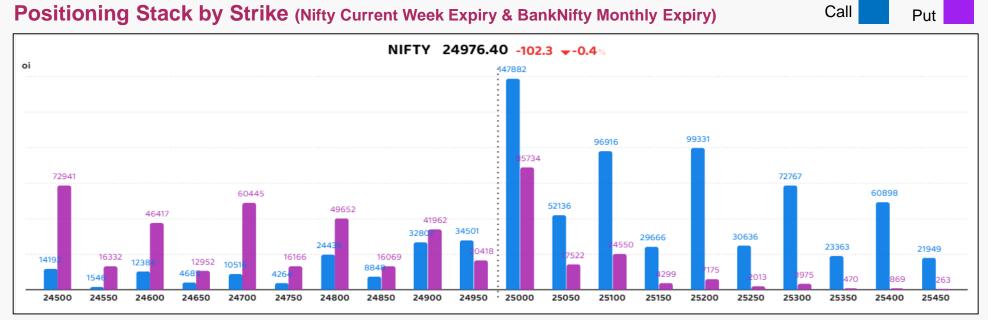


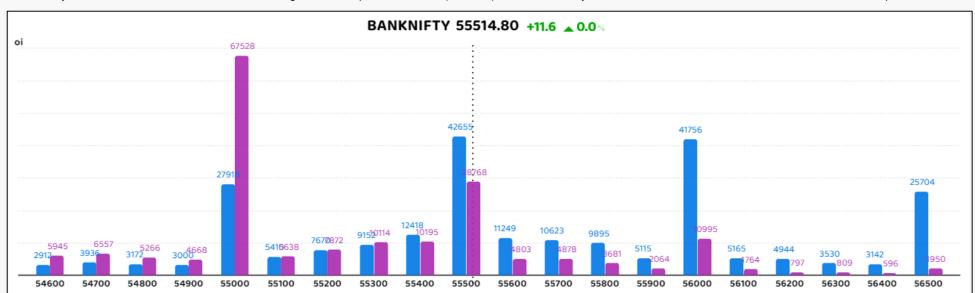
# **DII and FII Daily Cash Market Flows**





# **Options Strike Concentration**

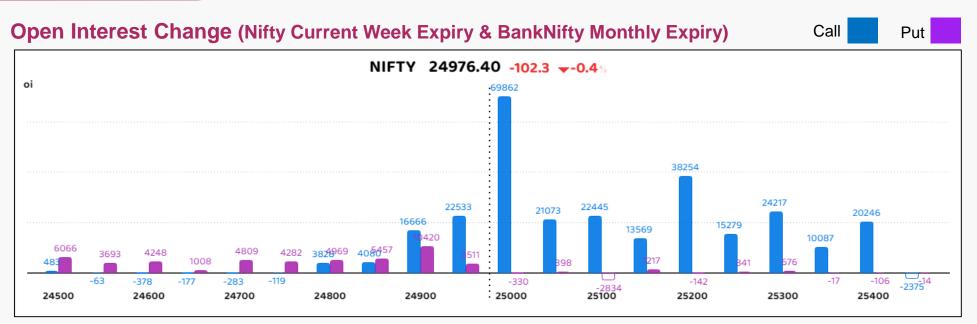




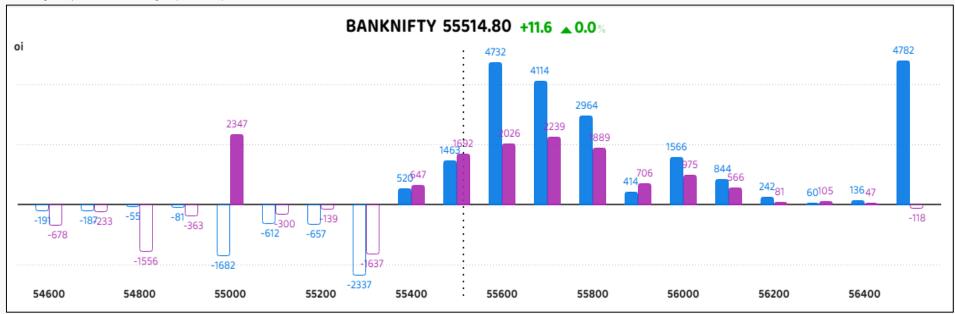
For the Nifty, the 25,000 Call and the 25,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,500 Call and the 55,000 Put saw the most amount of open interest.

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





The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,900 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,400 Call & the 55,700 Put



# Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI LOMBARD GE	1884.7	1.9	34.7	38.2	9.9	87.5
PRESTIGE ESTATES	1439.8	0.5	50.0	56.2	14.7	85.0
ASTRAL LTD	1419.1	4.4	36.5	42.9	2.9	84.1
RAMCO CEMENT/THE	998.95	-0.5	36.0	43.6	0.5	82.4
DIXON TECHNOLOGI	16574	-0.5	43.5	53.0	1.8	81.4

### Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HDFC LIFE INSURA	750.95	0.1	22.5	80.6	19.6	4.7
BANK OF BARODA	239.98	1.3	27.2	66.9	24.3	6.9
CHOLAMANDALAM IN	1634.4	0.9	26.1	47.2	24.3	7.6
ACC LTD	1930	0.1	24.6	55.4	21.2	10.0
MANAPPURAM FINAN	228.67	-0.4	9.1	64.2	2.7	10.4



# Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ICICI LOMBARD GE	1884.7	1.9	34.7	38.2	9.9	98.5
PI INDUSTRIES	3759	-0.3	38.3	46.7	18.3	97.6
DEEPAK NITRITE	2118.5	0.4	41.7	49.1	21.4	96.9
PETRONET LNG LTD	320.8	0.1	39.3	61.3	17.4	94.8
ZYDUS LIFESCIENC	911.25	0.9	36.8	45.2	21.1	94.3

#### **Stocks With Low IVP:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
AMBUJA CEMENTS	565.55	0.4	15.4	70.4	2.3	0.7
ADITYA BIRLA FAS	286.05	2.9	16.2	66.6	9.9	1.1
MANAPPURAM FINAN	228.67	-0.4	9.1	64.2	2.7	1.2
TATA STEEL LTD	157.57	0.0	19.4	110.0	5.6	1.6
FED BANK LTD	201.9	1.4	22.8	130.9	7.0	2.3



# Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
TORRENT POWER LT	1424.3	-1.3	7814	1369	5.7
ASTRAL LTD	1419.1	4.4	41360	9959	4.2
YES BANK LTD	21.2	-1.6	14343	3612	4.0
VARUN BEVERAGES	494.8	-1.4	21064	5502	3.8
MUTHOOT FINANCE	2085.1	-0.9	20517	5699	3.6

# Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
TECH MAHINDRA LT	1597.8	-1.2	6125	8442	1.4
ADANI PORTS AND	1398.3	-0.6	20525	27405	1.3
TITAN CO LTD	3617.7	-0.4	11596	13374	1.2
JINDAL STEEL & P	973.05	-0.9	11941	11429	1.0
SOLAR INDUSTRIES	13704	-2.3	5371	4999	0.9



#### **Call Open Interest Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SOLAR INDUSTRIES	13704	-2.3	3031	3031	100.0
MUTHOOT FINANCE	2085.1	-0.9	28422	28422	100.0
VARUN BEVERAGES	494.8	-1.4	24701	24701	100.0
PB FINTECH LTD	1694.5	-3.5	9676	9676	100.0
TUBE INVESTMENTS	3126.4	2.7	5844	5844	100.0

#### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
INDIAN RAILWAY F	141.49	2.1	11216	11216	100.0
HINDUSTAN AERONA	5016.3	-2.2	41888	41888	100.0
TATA TECHNOLOGIE	759.8	1.2	7603	7603	100.0
APL APOLLO TUBES	1805.9	1.1	6551	6551	100.0
MUTHOOT FINANCE	2085.1	-0.9	11108	11108	100.0



#### **Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
DIVI LABS LTD	6580	4.8	345566	345566	100.0
CENTRAL DEPOSITO	1450.8	3.0	187111	187111	100.0
DELHIVERY LTD	351.25	9.5	115980	115980	100.0
TUBE INVESTMENTS	3126.4	2.7	58146	58146	100.0
PHOENIX MILLS	1606.5	3.6	11502	11502	100.0

### Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV	
DIVI LABS LTD	6580	4.8	133898	133898	100.0	
DELHIVERY LTD	351.25	9.5	54876	54876	100.0	



# Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PATANJALI FOODS	1732.1	-3.0	11795	3937	3.0
MUTHOOT FINANCE	2085.1	-0.9	28422	9927	2.9
TORRENT POWER LT	1424.3	-1.3	3697	1400	2.6
SHREE CEMENT	31600	0.0	4956	1908	2.6
PB FINTECH LTD	1694.5	-3.5	9676	3743	2.6

# Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
DIVI LABS LTD	6580	4.8	17312	6784	2.6
PI INDUSTRIES	3759	-0.3	4814	2057	2.3
TITAGARH RAIL SY	937	2.6	6313	2951	2.1
PAGE INDUSTRIES	48090	0.5	2186	1028	2.1
DELHIVERY LTD	351.25	9.5	6132	2963	2.1



#### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
DIVI LABS LTD	6580	4.8	345566	37295	9.3
BAJAJ AUTO LTD	8851	4.3	224296	39711	5.6
ALKEM LABORATORI	5324	2.0	24317	4942	4.9
CONTAINER CORP	746.95	2.3	43376	9835	4.4
PI INDUSTRIES	3759	-0.3	25222	6250	4.0

# Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
DIVI LABS LTD	6580	4.8	133898	16581	8.1
PI INDUSTRIES	3759	-0.3	13183	2786	4.7
VODAFONE IDEA LT	6.72	-8.8	32736	7423	4.4
BAJAJ AUTO LTD	8851	4.3	65956	17854	3.7
INDUS TOWERS LTD	389.1	-2.8	32027	8990	3.6



## 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	2600	1953000	2.3%	2541	2600	2235600	2.3%	ITC	450	7267200	3.4%	435	430	4716800	-1.2%
ADANIPORTS	1400	1893600	0.1%	1398	1400	908000	0.1%	JIOFIN	300	6548850	8.3%	277	250	3946800	-9.8%
APOLLOHOSP	7000	152000	0.4%	6975	6150	89500	-11.8%	JSWSTEEL	1100	880200	7.9%	1020	950	990225	-6.8%
ASIANPAINT	2500	1239600	7.2%	2331	2300	540800	-1.3%	KOTAKBANK	2200	1634800	4.2%	2111	2000	644800	-5.3%
AXISBANK	1220	3188125	1.4%	1203	1200	1456250	-0.2%	LT	3500	885450	-2.8%	3600	3600	570750	0.0%
BAJAJ-AUTO	9000	221550	1.7%	8851	8000	105450	-9.6%	M&M	3200	1242850	2.3%	3128	2900	511350	-7.3%
BAJAJFINSV	2100	3097500	3.0%	2038	1900	422000	-6.8%	MARUTI	13000	328350	0.1%	12989	12000	274300	-7.6%
BAJFINANCE	10000	792000	8.0%	9256	9000	589625	-2.8%	NESTLEIND	2500	648000	3.8%	2408	2400	115400	-0.3%
BEL	380	12434550	4.5%	364	340	8911950	-6.5%	NTPC	350	10801500	1.4%	345	380	2073000	10.1%
BHARTIARTL	1900	5935600	4.5%	1818	1800	1731850	-1.0%	ONGC	250	10679900	1.4%	247	240	3769150	-2.7%
CIPLA	1600	1822275	7.3%	1492	1500	433875	0.6%	POWERGRID	330	4752000	8.5%	304	300	2019600	-1.3%
COALINDIA	400	5041050	-0.7%	403	450	2133600	11.7%	RELIANCE	1450	7332000	0.6%	1441	1400	4730500	-2.8%
DRREDDY	1240	1932500	1.7%	1219	1150	828125	-5.7%	SBILIFE	1780	1657500	0.6%	1770	1720	460875	-2.8%
EICHERMOT	5700	366450	3.1%	5530	5300	159425	-4.2%	SBIN	800	13534500	0.6%	795	800	5226000	0.6%
ETERNAL	250	8492000	5.0%	238	230	4828000	-3.4%	SHRIRAMFIN	700	1734000	3.3%	678	600	1128750	-11.5%
GRASIM	3120	319500	14.4%	2727	2340	127750	-14.2%	SUNPHARMA	1900	2125900	9.8%	1730	1700	761250	-1.7%
HCLTECH	1700	1531600	3.1%	1650	1200	752150	-27.3%	TATACONSUM	1200	1156416	4.4%	1149	1100	469224	-4.3%
HDFCBANK	2000	5172750	3.2%	1939	1800	2218700	-7.2%	TATAMOTORS	800	7131300	9.7%	730	700	4460500	-4.0%
HDFCLIFE	760	2192300	1.2%	751	720	1619200	-4.1%	TATASTEEL	160	24744500	1.5%	158	140	11775500	-11.2%
HEROMOTOCO	4500	489150	2.6%	4388	4200	299850	-4.3%	TCS	3600	1082375	2.3%	3519	3400	542675	-3.4%
HINDALCO	680	2511600	3.3%	658	650	1460200	-1.3%	TECHM	1600	748800	0.1%	1598	1500	640800	-6.1%
HINDUNILVR	2500	1357800	4.9%	2383	2400	486300	0.7%	TITAN	3500	338625	-3.3%	3618	3500	409675	-3.3%
ICICIBANK	1460	4433100	0.8%	1449	1400	2069200	-3.4%	TRENT	6000	476800	8.1%	5551	5200	279300	-6.3%
INDUSINDBK	850	3431500	8.4%	784	700	2347500	-10.7%	ULTRACEMCO	13000	329450	9.0%	11929	10000	89250	-16.2%
INFY	1600	3585600	2.6%	1560	1500	1403600	-3.8%	WIPRO	300	10230000	19.2%	252	240	2703000	-4.7%

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**

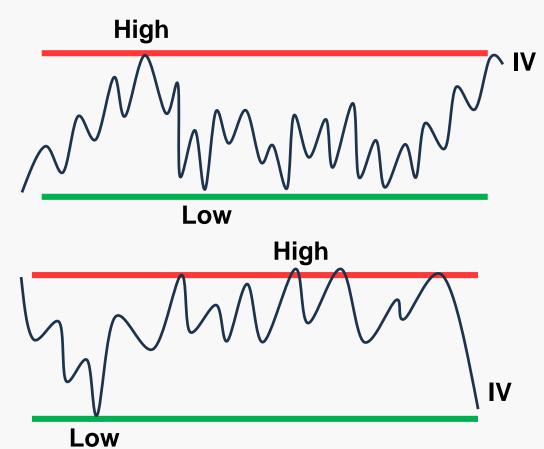
#### \*ATM IV is the midpoint of the IV for the ATM call and put respectively



- 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.

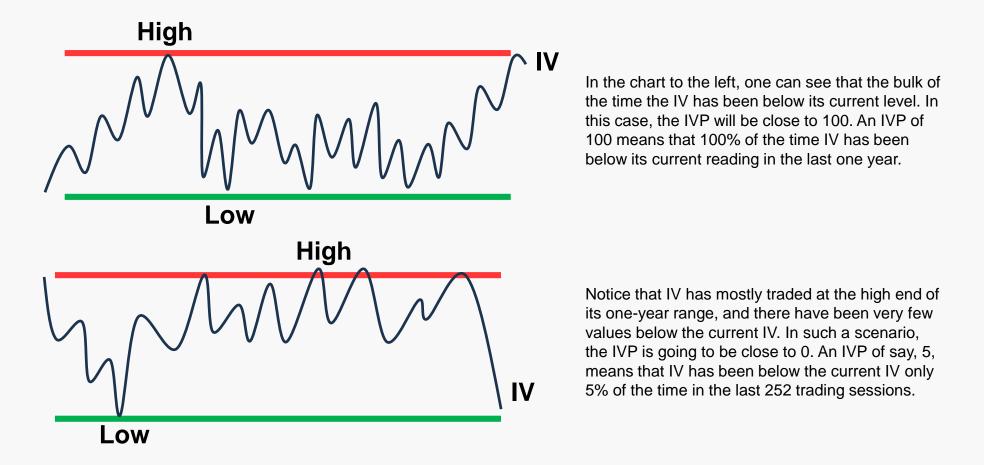
In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

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.





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