



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,455	0.6%▲
Open Interest (OI)	1,51,69,960	1.4%▼
Change in OI (abs)	1,51,69,960	2,09,755▼
Premium / Discount (Abs)	127	17▼
Inference	Short Covering	

Bank Nifty Futures

	Value	Change
Most recent settlement	60,341	0.6%▲
Open interest (OI)	15,00,660	5.7%▲
Change in OI (abs)	15,00,660	80,940▲
Premium / Discount (Abs)	190	54▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	9.45	0.26▲
Nifty ATM IV (%)	8.41	0.04▲
Bank Nifty ATM IV (%)	9.50	0.08▲
PCR (Nifty)	1.46	0.33▲
PCR (Bank Nifty)	1.18	0.04▲

The FII Long Ratio in Index Futures **jump** to 11.4 %, **up** from 9.4 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
DABUR	2,38,21,250	12.7%	526.4	4.6%
UNOMINDA	47,11,300	12.4%	1329.9	2.6%
SAMMAANCAP	11,22,12,800	11.7%	149.73	3.1%
ANGELONE	39,68,250	7.7%	2394.6	1.2%
SBIN	7,81,14,000	7.3%	1006.45	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
WAAREEENER	9,14,550	235.0%	2866.7	-3.6%
SWIGGY	71,04,500	40.5%	388.7	-1.2%
BAJAJHLDNG	79,300	29.7%	11243	-1.6%
PREMIERENE	9,18,275	27.7%	850.5	-0.2%
BAJAJ-AUTO	35,57,250	13.5%	9521.5	-0.9%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IIFL	1,21,50,600	-8.5%	644.45	3.7%
JSWENERGY	4,02,30,000	-4.7%	512.45	1.5%
NTPC	8,39,01,000	-4.2%	352.3	4.5%
NHPC	6,93,44,000	-3.7%	83.88	4.8%
TATATECH	1,18,94,400	-3.6%	659.95	1.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	4,59,03,125	-2.8%	265.7	-0.3%
SAIL	20,18,55,600	-2.6%	149.08	-0.2%
LTIM	20,38,350	-2.5%	6102.5	-0.4%
ULTRACEMCO	29,92,050	-1.5%	11941	-0.1%
TITAN	97,06,725	-1.2%	4066.2	-0.2%

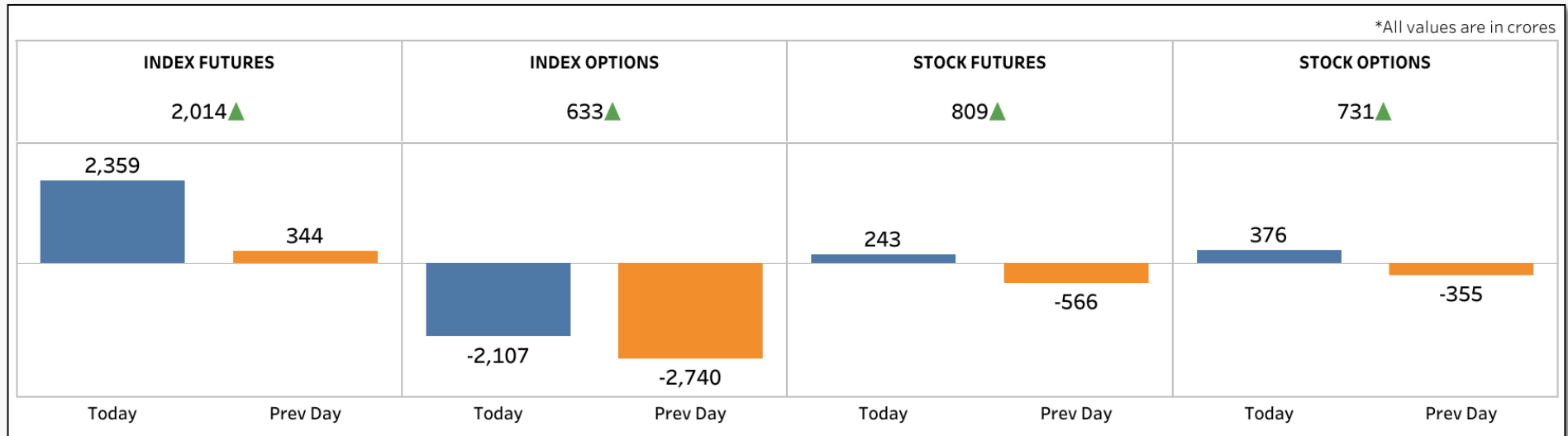
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

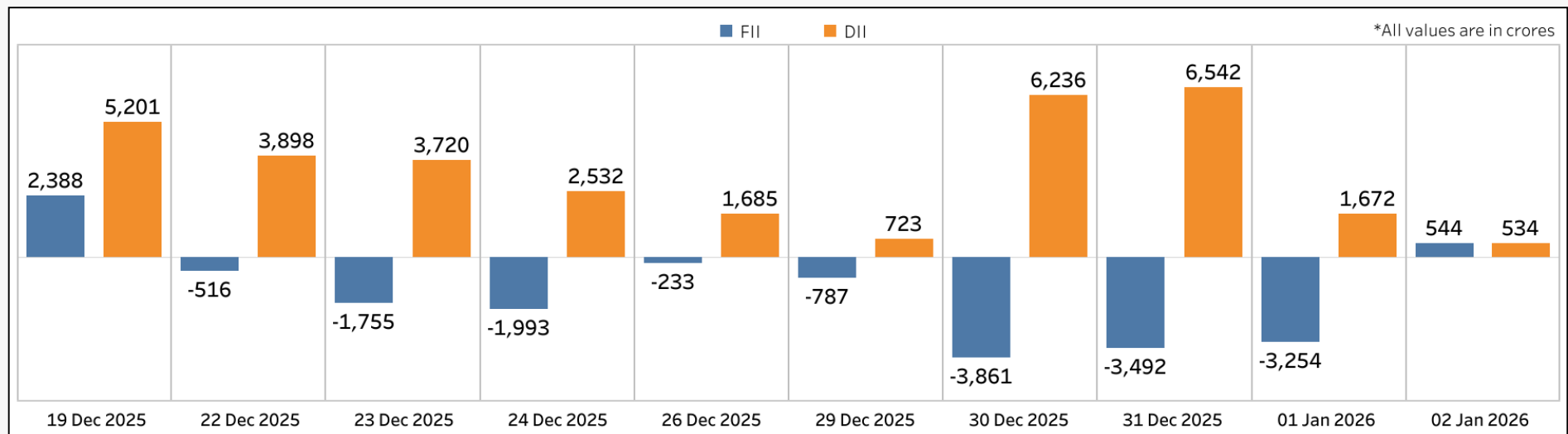
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
54,546 ▲	11,720 ▲	-47,128 ▼	13,513 ▲	0	2,185 ▲	1,550 ▲	29,581 ▲
54,954	13,680		1,205				22,478
408	1,960				2,845	1,600	
		-17,932	-12,308	0	660	50	
		-65,060					-7,103
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
68,310	-130,246	156,249	1,592,399	0	41,489	23,397	-4,607,219
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-323,180 ▼	-13,533 ▼	120,564 ▲	-39,452 ▼	268,632 ▲	-372 ▼	-74,984 ▼	-3,642 ▼
98,813		117,611	38,020	169,411			
	898				-3,890	20,834	
-12,635		-2,953	-1,432	-99,221	-3,518	-54,150	-22,251
-224,367							-18,609
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-333,941	104,109	-170,368	2,609,327	265,630	-15,352	-9,278	405,493
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

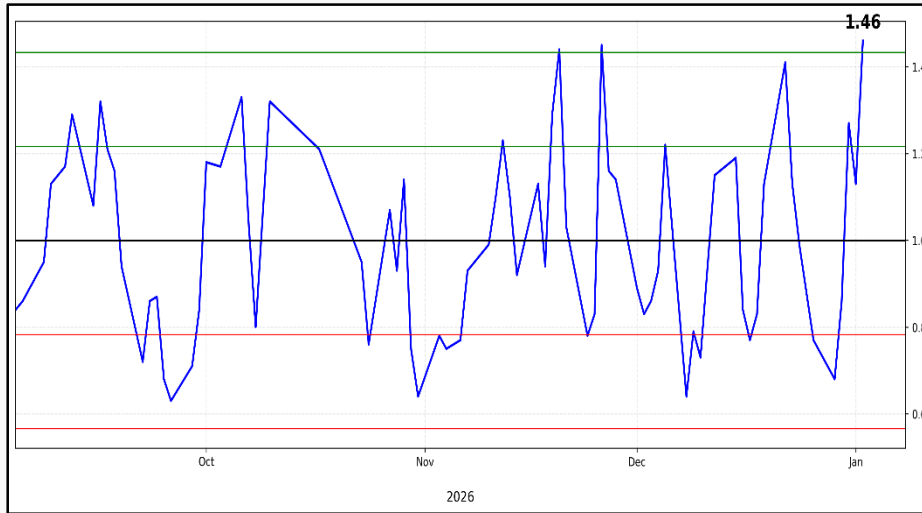
Daily Net Open Interest Change



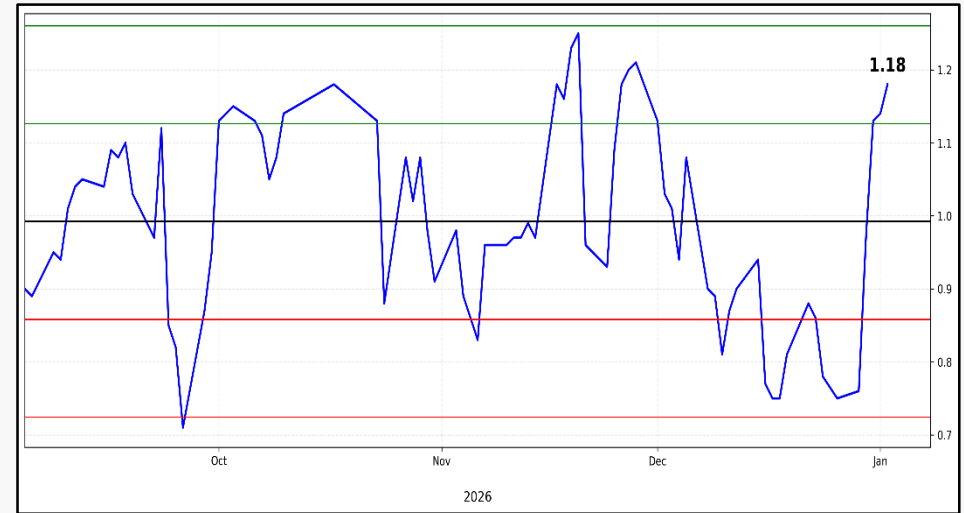
DII and FII Daily Cash Market Flows



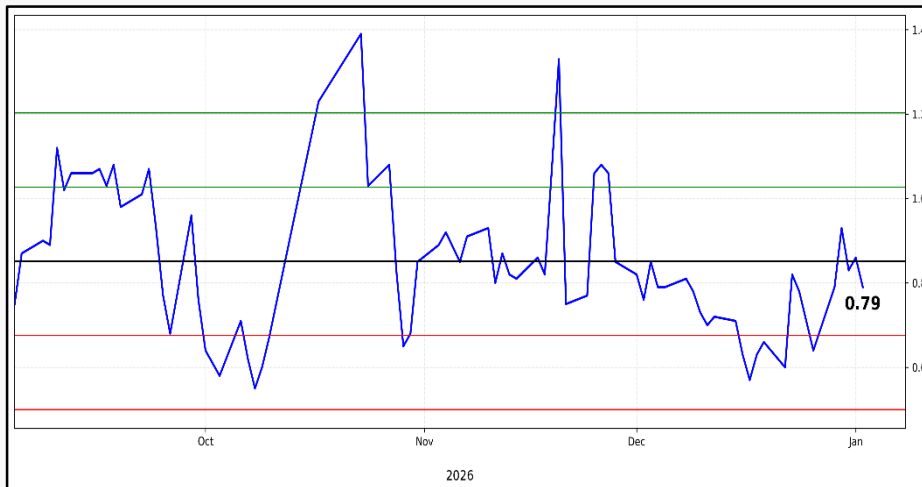
Nifty



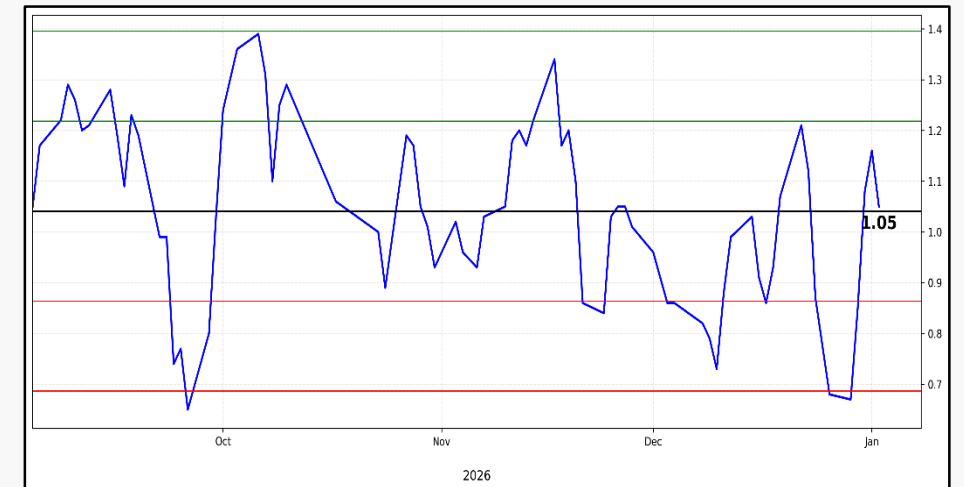
Bank Nifty



Fin Nifty

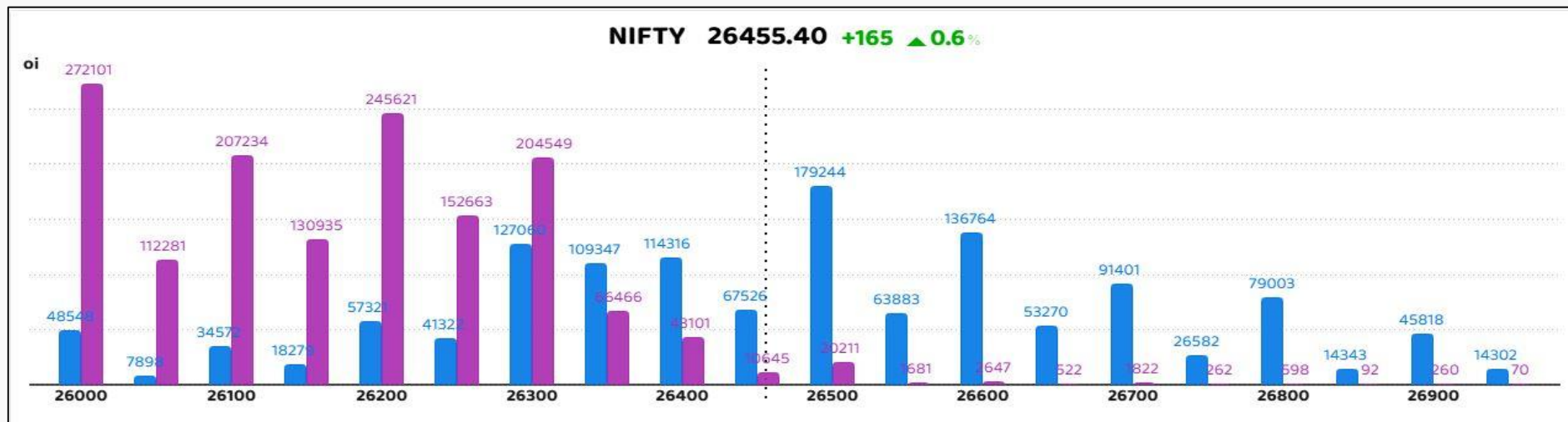


Midcap Select Nifty



Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 



For Nifty, the 26,500 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.

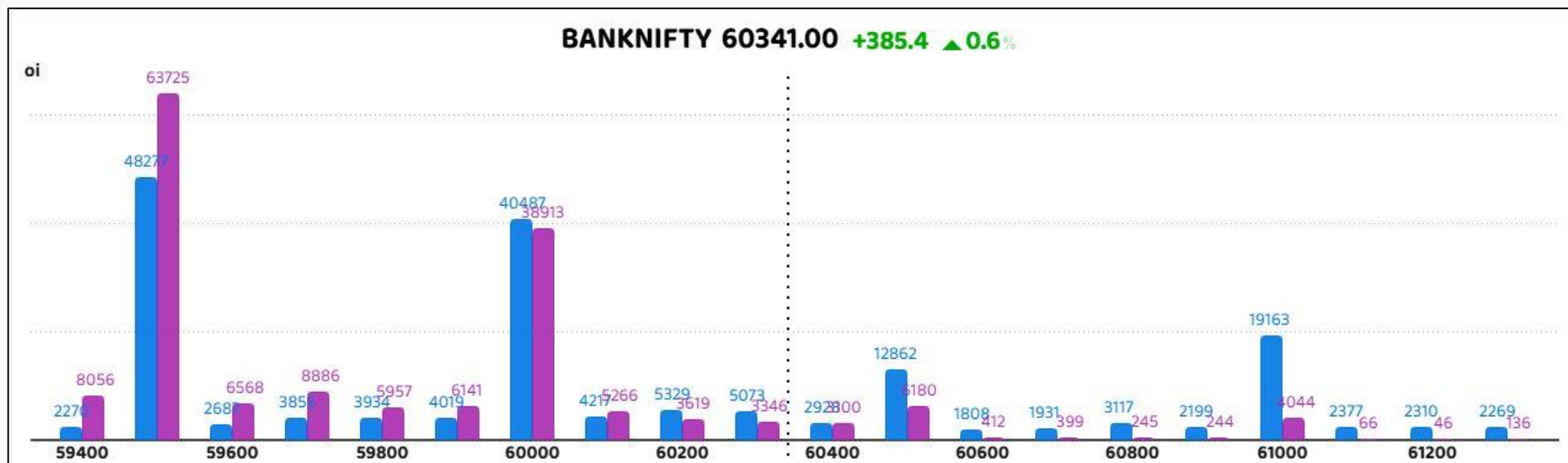
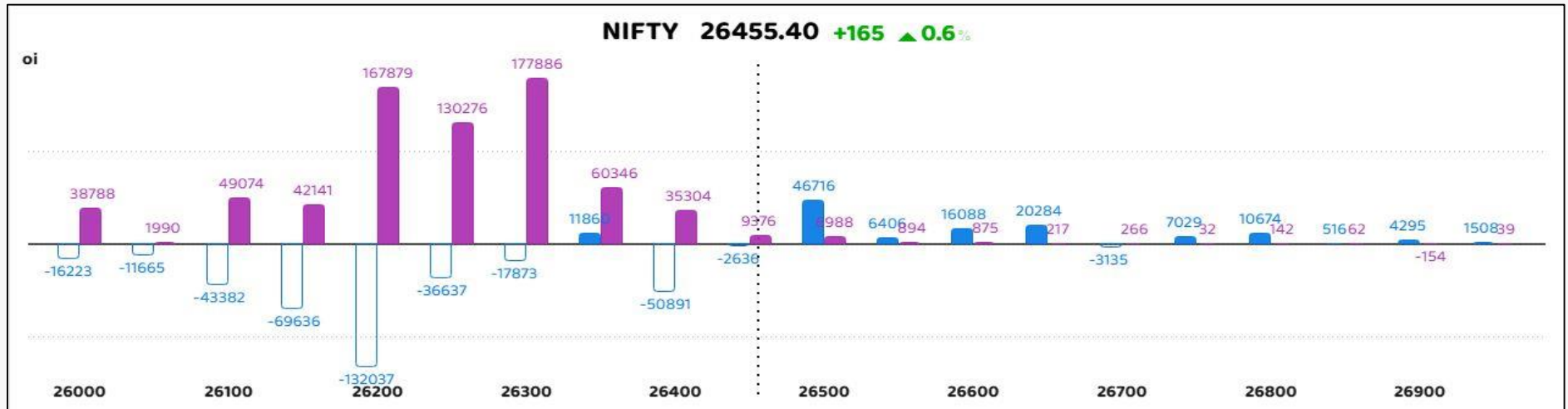


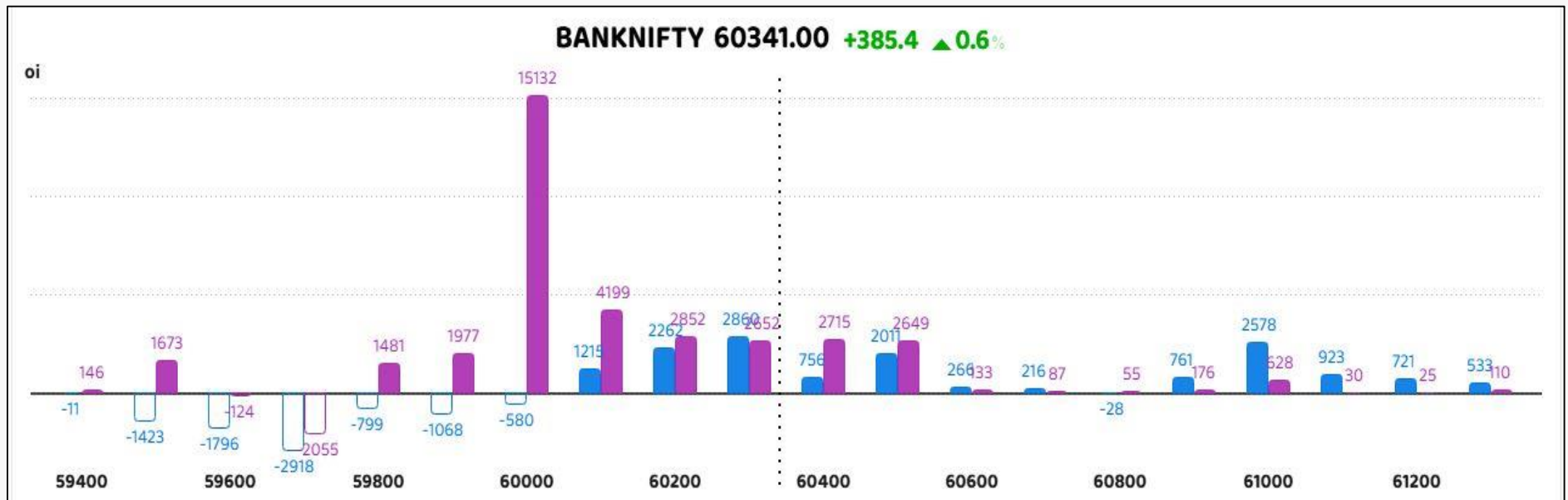
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,200 Call and the 26,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,600 Call & the 60,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	39,420.0	9.1	47.1	47.1	2.1	100.0
ITC LTD	350.1	-3.8	24.6	34.0	1.0	71.4
DIXON TECHNOLOGI	12,165.0	0.6	40.0	53.1	9.2	70.2
COAL INDIA LTD	427.9	6.9	24.3	38.8	1.9	60.6
HINDUSTAN UNILEV	2,348.0	1.1	15.9	25.8	0.8	60.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TATA POWER CO	393.1	2.9	18.2	48.7	18.0	0.7
GAIL INDIA LTD	175.4	2.1	20.9	91.4	19.4	2.1
NTPC LTD	352.1	4.7	17.9	116.6	14.9	2.9
ADANI PORTS AND	1,489.5	0.6	21.4	99.7	19.0	3.0
LUPIN LTD	2,105.3	0.1	19.9	40.7	19.1	3.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BOSCH LTD	39,420.0	9.1	47.1	47.1	2.1	100.0
HFCL LTD	67.7	-1.7	59.3	89.4	32.2	98.5
RAIL VIKAS NIGAM	365.9	1.2	46.4	52.8	21.0	96.3
ITC LTD	350.1	-3.8	24.6	34.0	1.0	92.8
HINDUSTAN ZINC	628.8	2.8	39.8	54.2	21.8	90.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA POWER CO	393.1	2.9	18.2	48.7	18.0	0.6
PHOENIX MILLS	1,903.4	1.6	22.4	64.3	15.0	0.9
LUPIN LTD	2,105.3	0.1	19.9	40.7	19.1	1.1
SAMVARDHANA MOTH	122.0	-0.4	27.2	59.6	24.8	1.2
SONA BLW PRECISI	486.4	2.5	28.8	57.8	22.5	2.2

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
OBEROIRLTY	1,730.0	2.0	8,471	1,474	5.7
IRCTC	694.8	1.3	23,474	4,602	5.1
DIVISLAB	6,392.5	0.8	8,199	1,614	5.1
IREDA	146.6	5.2	28,651	6,233	4.6
IRFC	128.5	2.1	17,788	4,041	4.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
TATACONSUM	1,170.7	-0.5	4,851	5,010	1.0
GODREJCP	1,235.2	-0.7	2,619	2,495	1.0
DRREDDY	1,256.1	0.2	11,271	9,863	0.9
INDIGO	5,106.0	-0.1	13,884	10,927	0.8
SBIN	999.0	1.4	77,476	56,815	0.7

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ITC	350.0	-3.8	1,91,832	1,14,510	100.0
SWIGGY	387.2	0.0	2,080	0	100.0
WAAREEENER	2,866.3	0.0	4,754	0	100.0
NMDC	84.5	1.0	17,933	22,779	78.7
LTF	319.8	0.8	8,684	11,524	75.4

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ITC	350.0	-3.8	81,788	58,511	100.0
SWIGGY	387.2	0.0	1,430	0	100.0
WAAREEENER	2,866.3	0.0	1,597	0	100.0
PFC	376.0	3.5	20,132	24,848	81.0
IDEA	11.8	1.6	21,953	27,998	78.4

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
COALINDIA	427.9	6.9	2,06,216	1,81,040	100.0
SWIGGY	387.2	0.0	3,173	0	100.0
WAAREEENER	2,866.3	0.0	10,812	0	100.0
BOSCHLTD	39,420.0	9.1	1,76,105	1,86,568	94.4
ITC	350.0	-3.8	4,42,001	4,98,394	88.7

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
SWIGGY	387.2	0.0	1,279	0	100.0
WAAREEENER	2,866.3	0.0	5,531	0	100.0
COALINDIA	427.9	6.9	68,739	85,748	80.2
BOSCHLTD	39,420.0	9.1	46,517	65,726	70.8
ITC	350.0	-3.8	2,66,101	4,36,333	61.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
WAAREEENER	2,866.3	0.0	4,754	0	4,754,000,000.0
SWIGGY	387.2	0.0	2,080	0	2,080,000,000.0
ITC	350.0	-3.8	1,91,832	40,184	4.8
BOSCHLTD	39,420.0	9.1	7,782	4,839	1.6
COALINDIA	427.9	6.9	28,836	19,224	1.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
WAAREEENER	2,866.3	0.0	1,597	0	1,597,000,000.0
SWIGGY	387.2	0.0	1,430	0	1,430,000,000.0
BOSCHLTD	39,420.0	9.1	7,334	2,072	3.5
ITC	350.0	-3.8	81,788	26,007	3.1
COALINDIA	427.9	6.9	19,477	15,170	1.3

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
WAAREEENER	2,866.3	0.0	10,812	0	10,812,000,000.0
SWIGGY	387.2	0.0	3,173	0	3,173,000,000.0
BOSCHLTD	39,420.0	9.1	1,76,105	9,591	18.4
ITC	350.0	-3.8	4,42,001	50,139	8.8
COALINDIA	427.9	6.9	2,06,216	28,953	7.1

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
WAAREEENER	2,866.3	0.0	5,531	0	5,531,000,000.0
SWIGGY	387.2	0.0	1,279	0	1,279,000,000.0
BOSCHLTD	39,420.0	9.1	46,517	2,890	16.1
ITC	350.0	-3.8	2,66,101	34,796	7.6
DABUR	522.6	4.5	20,638	3,286	6.3

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	2300	1339824	0.9%	2280	2200	1086753	-3.5%	JIOFIN	300	6415500	-0.6%	302	290	6488350	-3.9%
ADANIPTS	1500	1428800	0.7%	1490	1500	740525	0.7%	JSWSTEEL	1160	909900	-1.8%	1181	1100	2110050	-6.8%
APOLLOHOSP	7200	209375	1.0%	7130	7100	130125	-0.4%	KOTAKBANK	2200	922000	0.2%	2195	2200	495600	0.2%
ASIANPAINT	2800	574750	1.0%	2773	2520	332000	-9.1%	LT	4200	441700	0.9%	4163	4000	327425	-3.9%
AXISBANK	1300	4381875	2.6%	1267	1260	1286875	-0.5%	M&M	3800	556000	-0.1%	3802	3600	301000	-5.3%
BAJAJ-AUTO	10000	193725	5.2%	9503	9000	98100	-5.3%	MARUTI	17000	168000	0.2%	16960	16000	169650	-5.7%
BAJAJFINSV	2100	662000	3.0%	2038	1900	393000	-6.8%	MAXHEALTH	1060	417375	-0.2%	1063	1040	391125	-2.1%
BAJFINANCE	1000	3519000	1.0%	990	1000	2783250	1.0%	NESTLEIND	1300	545000	1.6%	1280	1300	173500	1.6%
BEL	400	7720650	-0.8%	403	400	5621625	-0.8%	NTPC	335	3792000	-4.9%	352	330	2848500	-6.3%
BHARTIARTL	2100	1199850	-0.3%	2106	2100	751925	-0.3%	ONGC	245	9600750	1.5%	241	240	3039750	-0.6%
CIPLA	1500	397125	-0.8%	1512	1500	457125	-0.8%	POWERGRID	270	3594800	-0.4%	271	250	2684700	-7.7%
COALINDIA	430	4554900	0.5%	428	400	3285900	-6.5%	RELIANCE	1600	7771500	0.5%	1592	1550	1626500	-2.7%
DRREDDY	1300	1118125	3.5%	1256	1250	650625	-0.5%	SBILIFE	2240	593250	8.3%	2067	1900	261000	-8.1%
EICHERMOT	8100	167900	10.4%	7335	7200	96200	-1.8%	SBIN	1000	3370500	0.1%	999	980	2536500	-1.9%
ETERNAL	300	6222550	5.6%	284	280	5080375	-1.5%	SHRIRAMFIN	1000	1928025	-1.0%	1010	900	1857075	-10.9%
GRASIM	2900	217000	1.5%	2856	2740	250000	-4.1%	SUNPHARMA	1760	1266650	1.9%	1728	1620	364000	-6.3%
HCLTECH	1820	646800	11.0%	1640	1600	252700	-2.5%	TATACONSUM	1200	774400	2.5%	1171	1080	1057650	-7.7%
HDFCBANK	1000	4539700	-0.2%	1002	940	3182300	-6.2%	TMPV	400	6769600	8.0%	370	360	3648000	-2.8%
HDFCLIFE	770	1608200	2.0%	755	750	1157200	-0.6%	TATASTEEL	200	15438500	9.4%	183	170	11687500	-7.0%
HINDALCO	1000	1575000	8.0%	926	880	1281000	-4.9%	TCS	3300	2053625	1.5%	3251	3200	699125	-1.6%
HINDUNILVR	2340	891300	-0.3%	2348	2300	581100	-2.0%	TECHM	1800	694800	11.7%	1612	1600	423600	-0.7%
ICICIBANK	1400	5745600	3.3%	1355	1350	3380300	-0.4%	TITAN	4100	495775	1.2%	4052	4000	373100	-1.3%
INDIGO	5500	450600	7.7%	5106	5000	752700	-2.1%	TRENT	4300	408200	-2.5%	4410	4300	252500	-2.5%
INFY	1660	2537200	1.2%	1640	1620	1335200	-1.2%	ULTRACEMCO	12000	94550	0.8%	11899	11500	49200	-3.4%
ITC	400	40289600	14.3%	350	350	19307200	0.0%	WIPRO	265	4344000	-1.5%	269	260	2766000	-3.3%

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

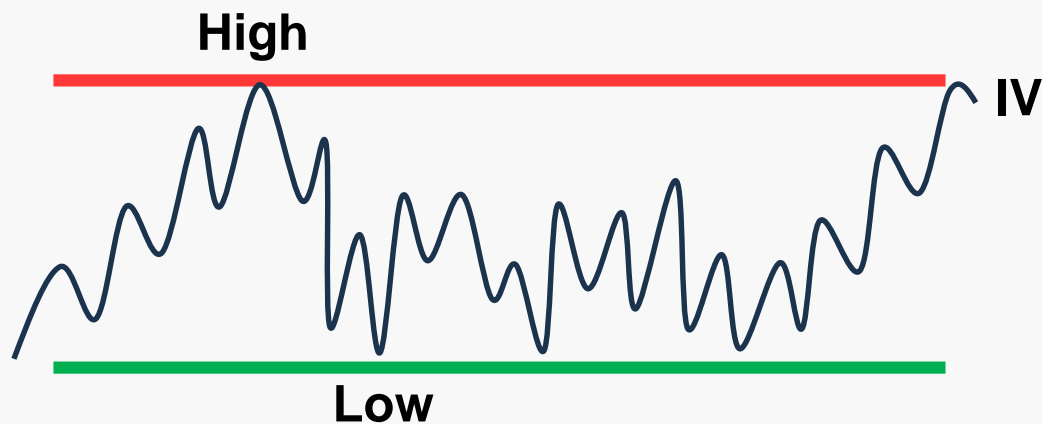
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

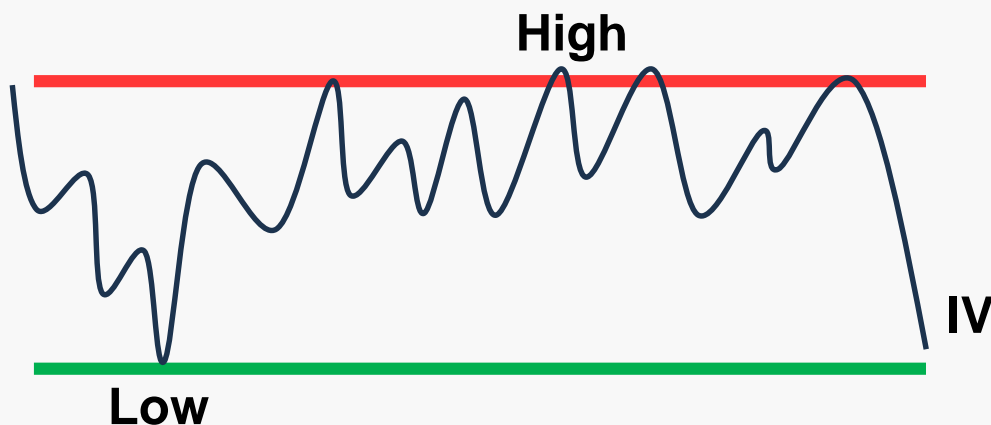
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DII)s, 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

- **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

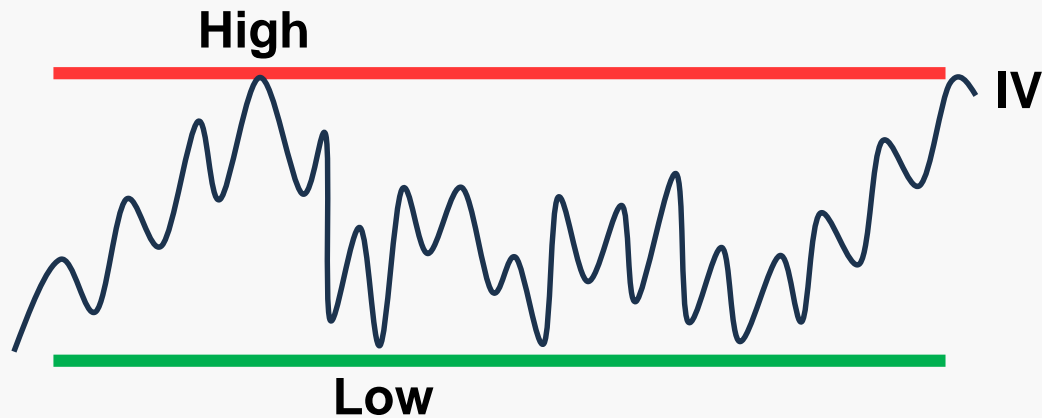


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

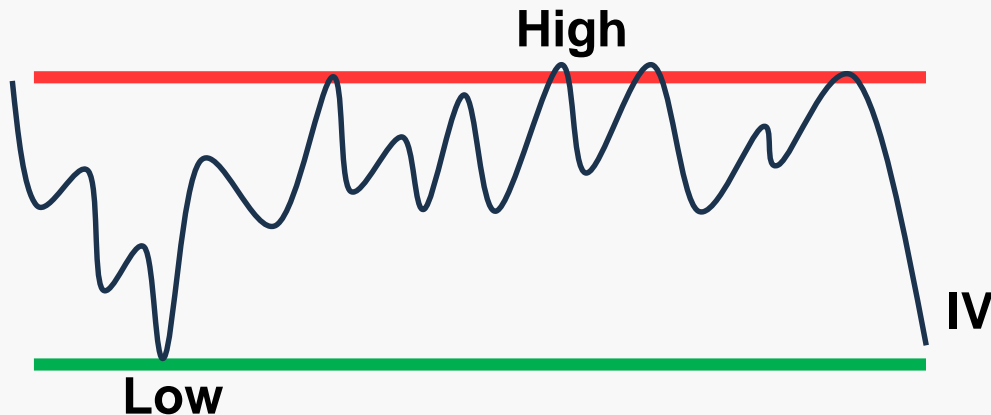


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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.

Axis Direct is the brand under Axis Securities Limited, which is a 100% subsidiary of Axis Bank Limited. 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 the Securities and Exchange Board of India
- Corporate Agent with Insurance Regulatory and Development Authority of India
- Point of Presence with Pension Fund 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 Rajiv Kejriwal, 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: Axis Securities Limited, Aurum Q Parc, 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 at helpdesk@axisdirect.in.

We hereby declare that our activities have neither been suspended nor have we defaulted with any stock exchange authority with whom we are registered in the last five years. However, SEBI, Exchanges, Clearing Corporations and Depositories, etc. have conducted the routine inspection and based on their observations have issued advice/warning/show cause notices/deficiency letters/ or levied penalty or imposed charges for certain deviations observed in inspections or in the 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 in time.

Investments in the 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 a 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 the USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been clients during the 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 notice. The report and information contained herein are 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 for 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 the 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.

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 are solely for informational purposes 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/or 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 the needs of the 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 the 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 a 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 services 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 minimise conflict in the preparation of research reports. Axis Securities or its associates, or its analysts, did not receive any compensation or other benefits from the companies mentioned in the report or a third party in connection with the 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 from 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 the 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 per cent or more or other material conflicts 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 conclusions 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 centre on studying charts of a stock's price 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 positions in the above-mentioned scrip(s) and therefore may be considered as interested. This should not be construed as an invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independently of the PCG research, and accordingly, PMS may have positions contrary to the PCG research recommendation.

This research report is issued in India by Axis Securities Limited in accordance with the Securities and Exchange Board of India (Research Analysts) Regulations, 2014. It is intended solely for persons residing in India. The report is not directed at or intended for distribution to, or use by, any person or entity resident in the United States of America, Canada, or in any jurisdiction where such distribution, publication, availability, or use would be contrary to applicable securities laws, including the U.S. Securities Exchange Act of 1934, regulations of the U.S. Securities and Exchange Commission (SEC), and regulations of the Canadian Securities Administrators (CSA).

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