



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,986	1.0% ▼
Open Interest (OI)	1,81,76,665	15.7% ▲
Change in OI (abs)	1,81,76,665	24,69,220 ▲
Premium / Discount (Abs)	109	14 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,885	0.5% ▼
Open interest (OI)	13,09,560	6.9% ▼
Change in OI (abs)	13,09,560	96,570 ▼
Premium / Discount (Abs)	199	18 ▲
Inference	Long Unwinding	

Volatility Insights

	Value	Change
India VIX Index	10.6	0.65 ▲
Nifty ATM IV (%)	8.80	0.57 ▲
Bank Nifty ATM IV (%)	10.06	0.52 ▲
PCR (Nifty)	0.66	0.23 ▼
PCR (Bank Nifty)	1.00	0.09 ▼

The FII Long Ratio in Index Futures **drop** to 8.7 %, **down** from 10.1 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDUSTOWER	9,57,10,000	3.1%	433	0.6%
SBILIFE	93,20,625	2.5%	2090.1	0.5%
SOLARINDS	11,36,800	1.7%	13509	0.9%
ICICIBANK	11,44,87,800	0.9%	1438.9	0.6%
BAJFINANCE	9,92,65,500	0.9%	973.8	0.0%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BAJAJHLDNG	1,46,650	47.8%	11242	-0.1%
PREMIERENE	45,51,700	19.3%	726.5	-3.8%
CGPOWER	1,88,34,300	16.4%	613.35	-4.0%
SWIGGY	1,90,71,000	11.0%	353	-2.8%
POWERINDIA	2,84,650	10.6%	18446	-6.0%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
IDFCFIRSTB	30,69,37,575	-5.0%	86.26	1.7%
DIXON	29,20,000	-3.6%	12015	1.6%
ETERNAL	28,54,37,050	-1.0%	284.6	0.8%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
TATAELXSI	15,72,300	-6.4%	5727	-2.6%
IIFL	1,05,46,800	-5.5%	648.9	-1.8%
PNBHOUSING	1,39,15,200	-4.8%	982.9	-2.3%
BHEL	7,22,00,625	-4.7%	272.9	-10.5%
AUBANK	1,91,53,000	-3.9%	996.85	-1.1%

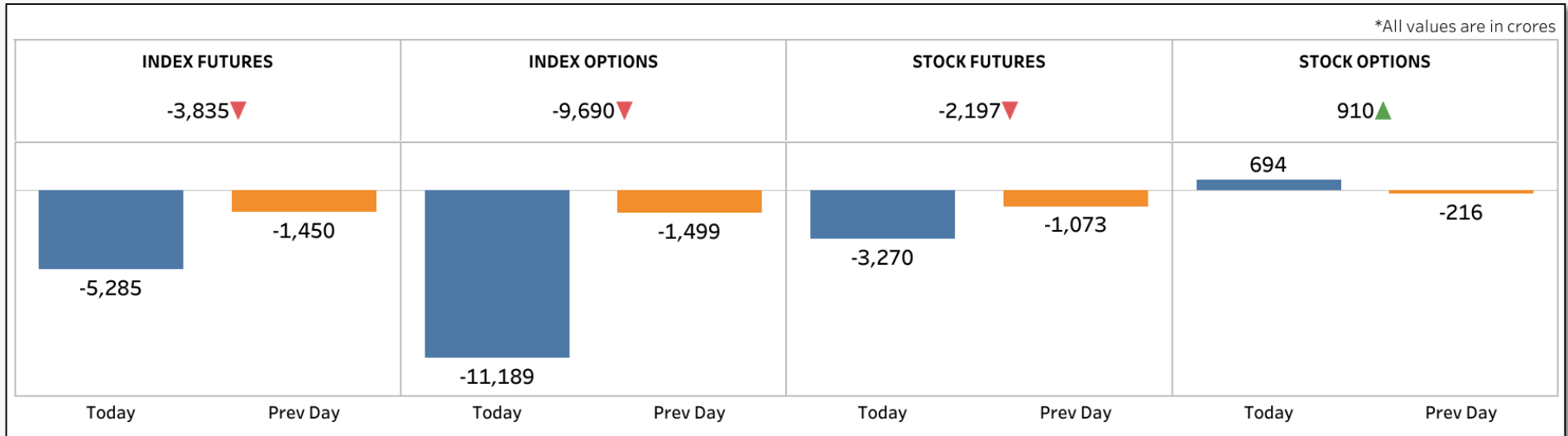
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

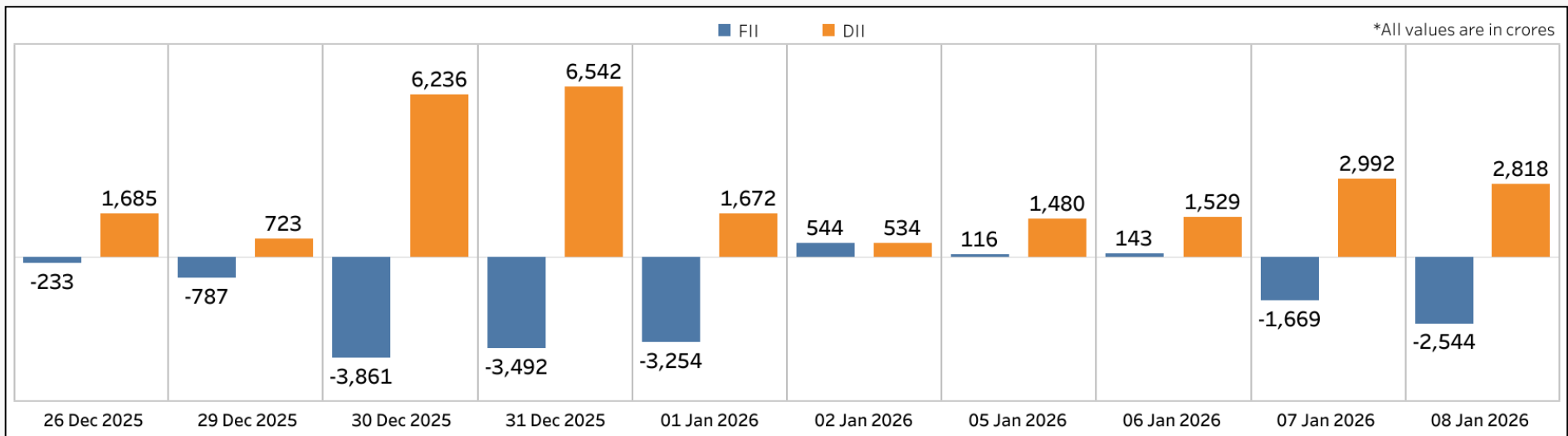
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-86,636 ▼	-22,691 ▼	27,377 ▲	-32,101 ▼	0	-4,519 ▼	-1,280 ▼	33,159 ▲
		32,041					24,642
		4,664					
-14,952	-8,384		-23,787	0	366	0	
-31,075			-55,888	-4,153		-1,280	
-101,588							-8,517
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-82,137	-167,347	255,381	1,434,775	0	37,569	21,132	-4,540,302
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
194,421 ▲	6,803 ▲	16,063 ▲	-8,120 ▼	-107,786 ▼	20,407 ▲	-42,161 ▼	7,062 ▲
247,122					24,787	67,757	32,969
52,701					4,380		25,907
10,441	3,638		6,397	-37,748			
			-1,723	-145,534			
		-56,358	-72,421				
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
192,011	120,266	-457,527	2,641,665	-109,874	9,512	181,013	463,862
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

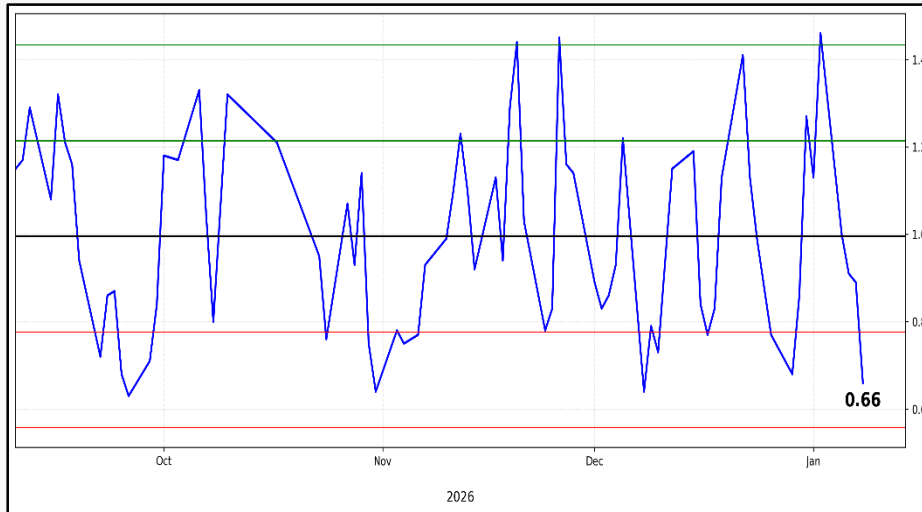
Daily Net Open Interest Change



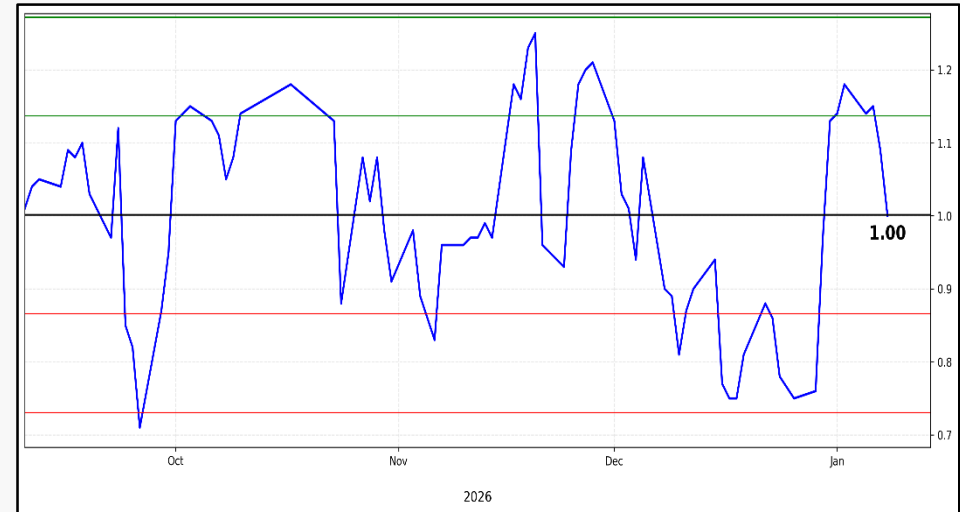
DII and FII Daily Cash Market Flows



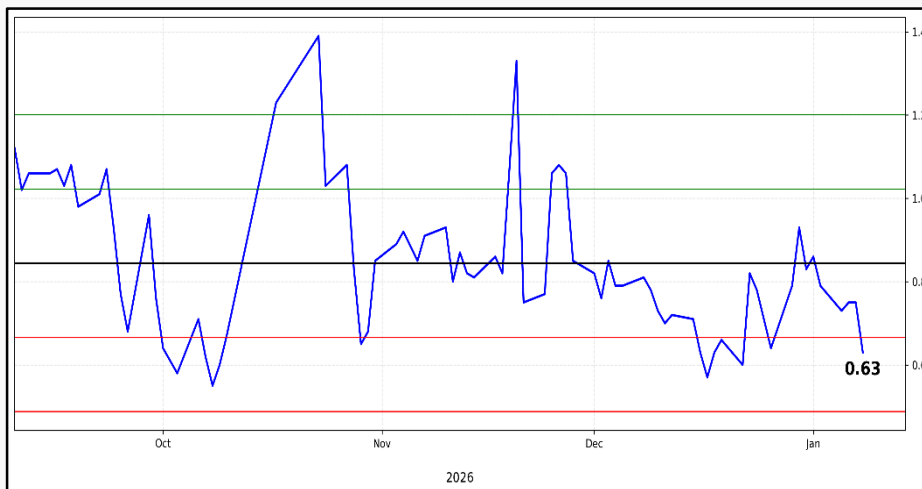
Nifty



Bank Nifty



Fin Nifty

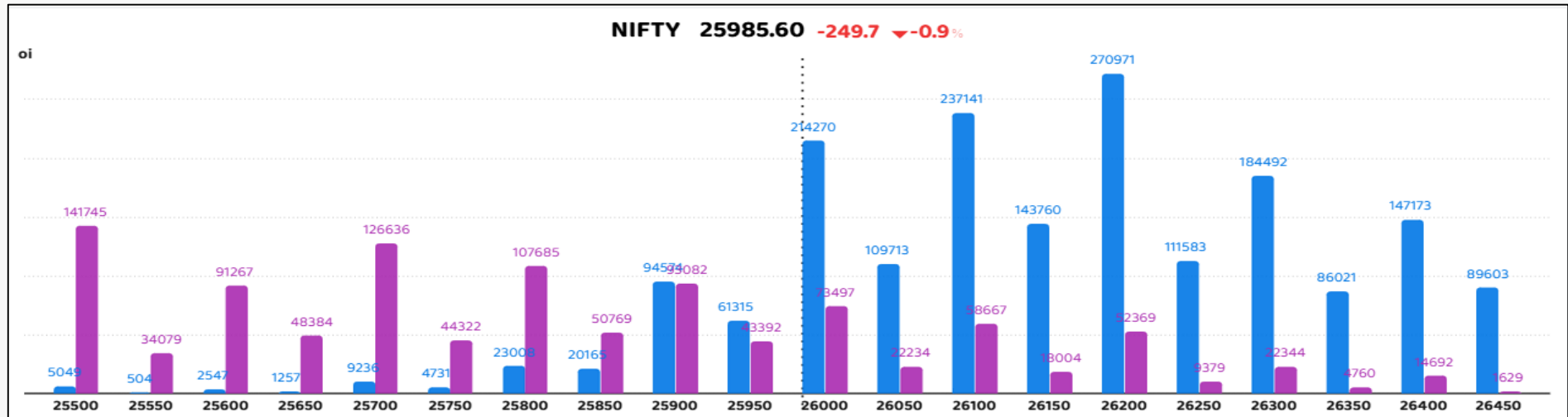


Midcap Select Nifty

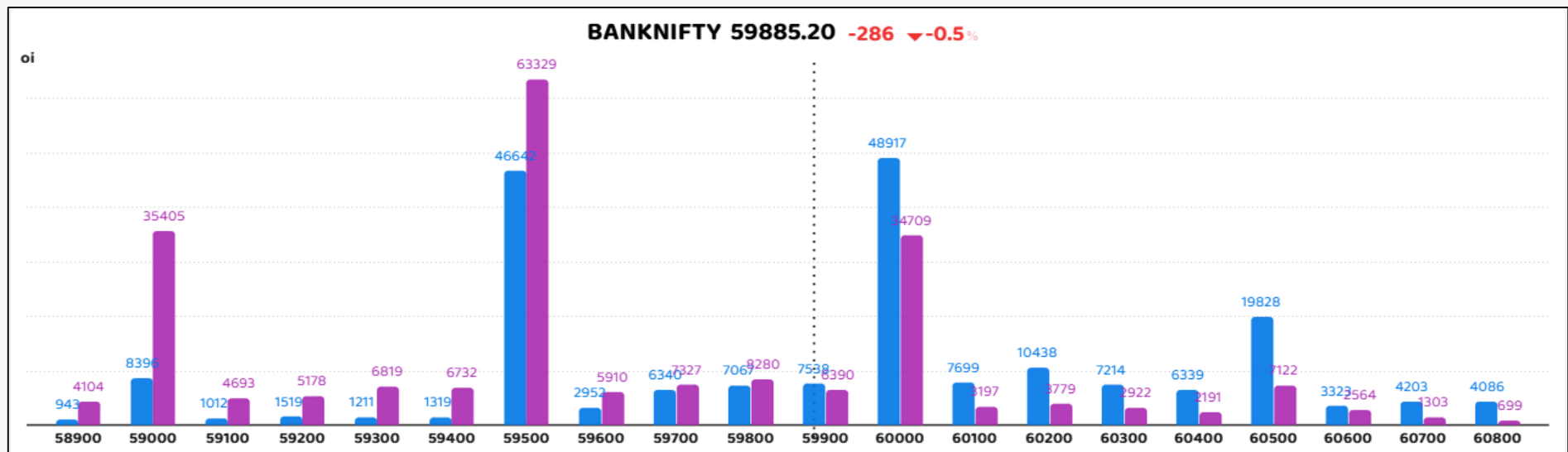


Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 

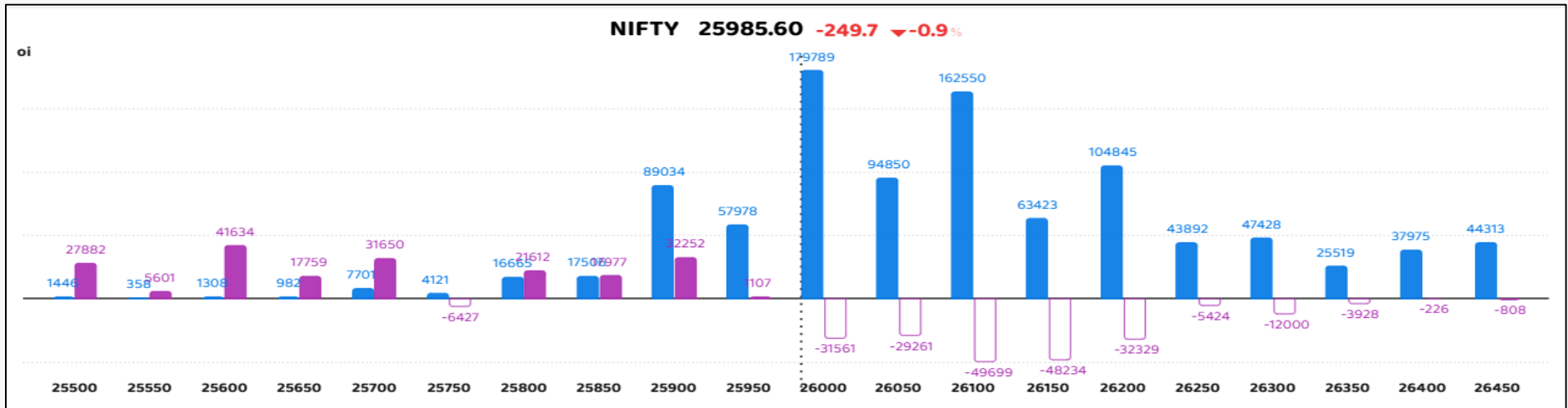


For Nifty, the 26,200 Call and 25,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.

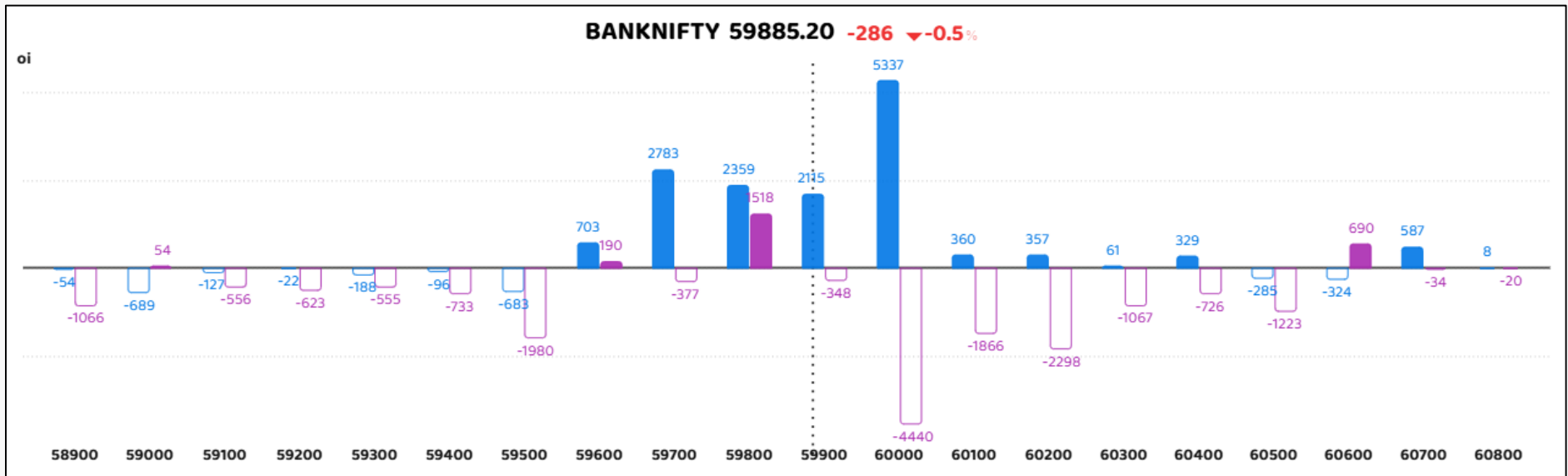


Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 26,100 Put



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

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BHARAT HEAVY ELE	271.8	-10.5	44.6	54.7	5.2	79.6
ICICI BANK LTD	1,435.0	0.5	26.7	35.4	0.4	75.1
DIXON TECHNOLOGI	11,987.0	1.8	41.5	53.1	9.2	73.6
HINDUSTAN UNILEV	2,386.7	-0.5	19.1	25.8	0.8	73.2
HDFC BANK LTD	946.7	-0.2	20.6	28.0	1.5	72.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ICICI PRUDENTIAL	681.4	-0.5	18.1	41.4	17.3	3.6
NTPC LTD	344.4	-1.3	18.8	116.6	14.9	3.9
ADANI PORTS AND	1,465.2	0.0	25.3	99.7	19.0	7.8
GAIL INDIA LTD	163.5	-2.9	26.3	91.4	19.4	9.6
HDFC LIFE INSURA	758.2	-1.8	21.6	68.4	16.6	9.6

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
INDIAN ENERGY EX	150.1	-3.0	56.8	76.3	8.0	99.3
KAYNES TECHNOLOG	3,719.9	-2.9	54.5	62.9	30.3	98.1
FORTIS HEALTHCAR	917.1	-2.5	32.8	36.0	21.3	97.4
ICICI BANK LTD	1,435.0	0.5	26.7	35.4	0.4	96.6
HINDUSTAN ZINC	590.8	-6.2	41.0	54.2	21.8	93.4

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KOTAK MAHINDRA	2,133.0	-0.5	12.2	32.4	1.1	1.1
ICICI PRUDENTIAL	681.4	-0.5	18.1	41.4	17.3	1.4
TORRENT PHARMA	4,026.4	-1.6	15.7	34.6	8.3	2.5
INFOSYS LTD	1,613.3	-1.6	13.2	60.8	2.3	2.7
RAIL VIKAS NIGAM	342.6	-4.2	24.0	52.8	21.0	3.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ALKEM	5,793.0	-0.2	7,500	1,051	7.1
OBEROIRLTY	1,722.0	0.8	12,600	2,087	6.0
PIIND	3,245.5	-1.2	8,660	2,276	3.8
SOLARINDS	13,452.0	0.9	60,278	15,947	3.8
IRFC	124.3	-2.9	10,925	2,974	3.7

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
OIL	410.0	-2.0	3,984	6,719	1.7
JINDALSTEL	1,013.6	-5.7	22,381	34,419	1.5
EICHERMOT	7,551.0	-0.4	9,708	13,137	1.4
JSWSTEEL	1,155.9	-2.8	16,797	22,170	1.3
LICHSGFIN	525.8	-2.3	6,307	7,626	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
CGPOWER	614.2	-3.6	13,757	13,563	100.0
IEX	150.1	-3.0	25,721	24,173	100.0
IRCTC	656.4	-2.4	29,093	26,742	100.0
ITC	340.9	-0.1	2,26,574	2,29,024	98.9
LTF	307.3	-2.1	11,238	11,524	97.5

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ITC	340.9	-0.1	84,156	85,419	98.5
TRENT	3,990.4	-1.7	34,257	37,886	90.4
IRCTC	656.4	-2.4	12,323	13,935	88.4
RECLTD	371.4	-3.6	22,444	25,523	87.9
PFC	365.4	-3.1	21,096	24,848	84.9

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
CGPOWER	614.2	-3.6	1,03,433	66,596	100.0
BHEL	271.8	-10.5	91,269	1,42,186	64.2
IDFCFIRSTB	86.1	2.0	42,214	78,953	53.5
SOLARINDS	13,452.0	0.9	60,278	1,14,895	52.5
BEL	415.6	0.0	1,26,766	2,44,424	51.9

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
BHEL	271.8	-10.5	66,688	84,898	78.6
HINDALCO	904.0	-3.7	59,922	89,155	67.2
TORNTPOWER	1,359.7	-2.7	8,996	13,435	67.0
CGPOWER	614.2	-3.6	32,432	53,982	60.1
TATAELXSI	5,716.5	-2.3	61,311	1,17,210	52.3

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ITC	340.9	-0.1	2,26,574	75,934	3.0
BOSCHLTD	38,660.0	-1.2	10,412	5,220	2.0
IEX	150.1	-3.0	25,721	13,059	2.0
SBILIFE	2,082.9	0.6	19,444	10,417	1.9
CUMMINSIND	4,118.0	-0.7	9,452	5,090	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ITC	340.9	-0.1	84,156	37,303	2.3
BOSCHLTD	38,660.0	-1.2	5,948	2,956	2.0
IEX	150.1	-3.0	18,213	9,266	2.0
CGPOWER	614.2	-3.6	7,106	4,448	1.6
TITAN	4,249.0	-0.6	23,115	15,165	1.5

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
CGPOWER	614.2	-3.6	1,03,433	9,604	10.8
ABB	5,021.0	-5.2	45,769	8,424	5.4
IDFCFIRSTB	86.1	2.0	42,214	11,306	3.7
BHEL	271.8	-10.5	91,269	27,147	3.4
KPITTECH	1,180.3	-2.3	22,965	8,231	2.8

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
CGPOWER	614.2	-3.6	32,432	3,123	10.4
BHEL	271.8	-10.5	66,688	10,119	6.6
JINDALSTEL	1,013.6	-5.7	34,419	5,776	6.0
ABB	5,021.0	-5.2	18,749	4,549	4.1
TORNTPOWER	1,359.7	-2.7	8,996	2,188	4.1

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	1660257	3.9%	2214	2200	1343223	-0.6%	JIOFIN	300	8629200	2.2%	294	300	7541150	2.2%
ADANIPTS	1500	1804050	2.4%	1465	1480	909625	1.0%	JSWSTEEL	1200	1316925	3.8%	1156	1100	2265300	-4.8%
APOLLOHOSP	7500	162875	1.8%	7365	7000	104750	-4.9%	KOTAKBANK	2200	2007600	3.1%	2133	2100	717200	-1.5%
ASIANPAINT	3000	600000	7.7%	2787	2600	369000	-6.7%	LT	4200	756525	4.3%	4028	4100	368550	1.8%
AXISBANK	1300	8205625	1.0%	1287	1300	2363125	1.0%	M&M	3800	680200	2.0%	3724	3700	285200	-0.6%
BAJAJ-AUTO	10000	222600	2.5%	9761	9000	97200	-7.8%	MARUTI	17500	210450	5.0%	16664	16000	140800	-4.0%
BAJAJFINSV	2080	928500	3.5%	2009	1900	390750	-5.4%	MAXHEALTH	1100	714000	6.8%	1030	1040	298725	1.0%
BAJFINANCE	1000	5415000	2.9%	972	1000	2817750	2.9%	NESTLEIND	1340	604500	2.5%	1307	1300	696000	-0.5%
BEL	420	9866700	1.0%	416	400	6227250	-3.8%	NTPC	360	8013000	4.5%	344	330	2508000	-4.2%
BHARTIARTL	2200	2247225	6.5%	2066	2100	845500	1.6%	ONGC	240	13504500	3.7%	231	240	3357000	3.7%
CIPLA	1500	834375	2.7%	1461	1400	579750	-4.1%	POWERGRID	280	7795700	8.0%	259	260	3228100	0.3%
COALINDIA	430	5707800	1.1%	425	400	2928150	-5.9%	RELIANCE	1600	17059500	8.8%	1471	1500	3368000	2.0%
DRREDDY	1300	1223125	7.7%	1207	1250	550625	3.6%	SBILIFE	2140	2312250	2.7%	2083	2100	574500	0.8%
EICHERMOT	8100	150800	7.3%	7551	7000	212000	-7.3%	SBIN	1050	6792000	5.2%	998	1000	2130750	0.2%
ETERNAL	300	10776700	5.8%	284	280	6295300	-1.3%	SHRIRAMFIN	1000	1998150	0.7%	993	900	1221825	-9.4%
GRASIM	2900	288250	3.9%	2792	2800	350250	0.3%	SUNPHARMA	1800	2123100	2.2%	1761	1760	563850	0.0%
HCLTECH	1680	1475950	2.0%	1647	1600	730100	-2.8%	TATACONSUM	1220	839850	1.9%	1197	1080	1051050	-9.8%
HDFCBANK	1000	11977350	5.6%	947	900	4687650	-4.9%	TMPV	400	7779200	11.3%	359	360	3920800	0.2%
HDFCLIFE	780	2117500	2.9%	758	750	1237500	-1.1%	TATASTEEL	200	16637500	11.0%	180	180	11968000	-0.1%
HINDALCO	1000	2184000	10.6%	904	800	1067500	-11.5%	TCS	3300	2456650	3.0%	3204	3200	865375	-0.1%
HINDUNILVR	2400	878700	0.6%	2387	2300	430500	-3.6%	TECHM	1800	691200	14.1%	1578	1600	408600	1.4%
ICICIBANK	1400	4659200	-2.4%	1435	1400	3150700	-2.4%	TITAN	4300	636825	1.2%	4249	4000	495075	-5.9%
INDIGO	5100	816600	3.9%	4907	5000	478350	1.9%	TRENT	4100	797200	2.7%	3990	4000	388000	0.2%
INFY	1660	4507200	2.9%	1613	1620	1960800	0.4%	ULTRACEMCO	12200	93600	1.1%	12064	11500	57800	-4.7%
ITC	400	40859200	17.3%	341	350	15256000	2.7%	WIPRO	270	4983000	3.0%	262	260	3492000	-0.8%

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

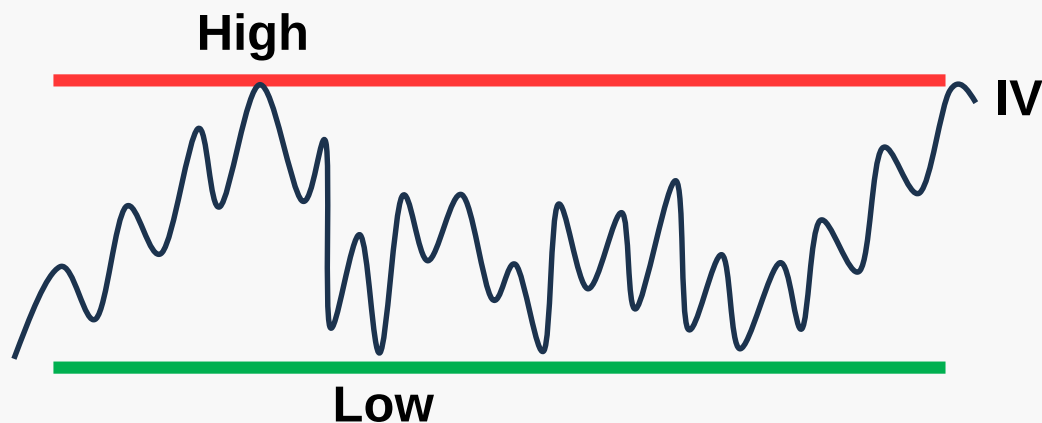
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

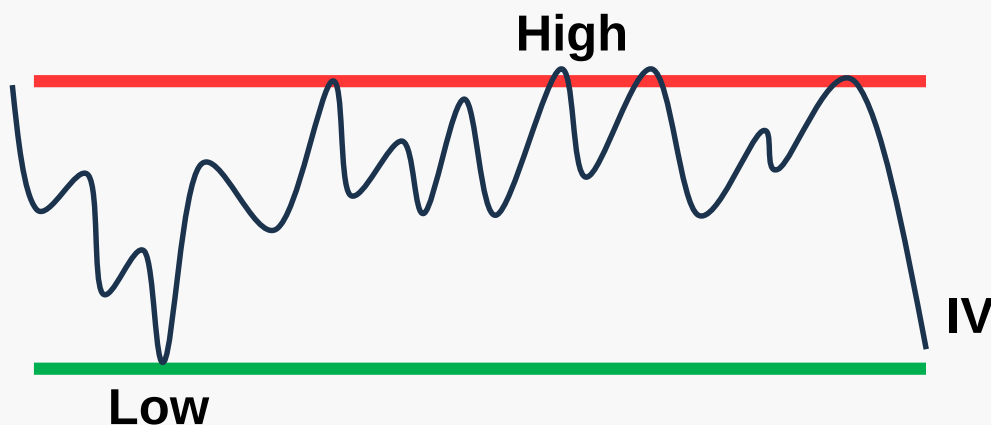
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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):** 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

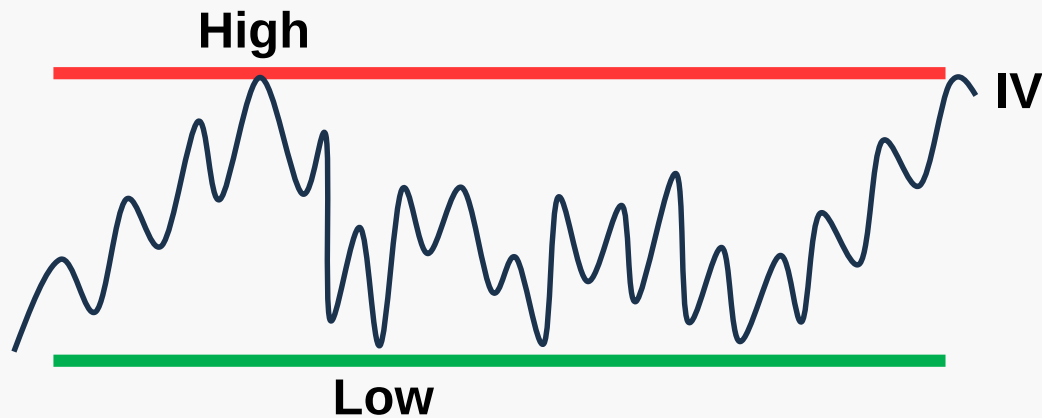


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

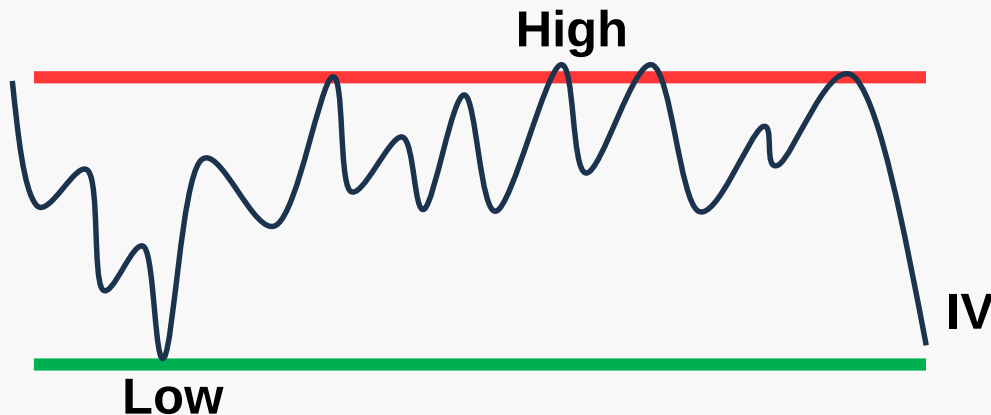


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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