



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	25,828	0.3%▲
Open Interest (OI)	1,77,51,175	0.4%▲
Change in OI (abs)	1,77,51,175	66,105▲
Premium / Discount (Abs)	8	6▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	61,500	0.6%▲
Open interest (OI)	19,19,430	8.6%▲
Change in OI (abs)	19,19,430	1,51,920▲
Premium / Discount (Abs)	-50	11▲
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.22	0.45▼
Nifty ATM IV (%)	9.73	0.88▼
Bank Nifty ATM IV (%)	10.59	0.92▼
PCR (Nifty)	1.22	0.10▲
PCR (Bank Nifty)	1.50	0.16▲

The FII Long Ratio in Index Futures **jump** to 22.8 %, **up** from 21 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANKIND	29,40,975	8.4%	2081.4	0.6%
PREMIERENE	70,94,925	8.3%	766.15	0.5%
CGPOWER	1,58,12,550	8.0%	712.05	3.3%
ICICIPRULI	1,71,40,250	8.0%	650.5	1.8%
CUMMINSIND	36,73,600	7.5%	4738.1	3.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KPITTECH	66,06,200	15.5%	862	-1.9%
AUOPHARMA	2,41,88,450	12.7%	1165.7	-1.4%
PERSISTENT	38,82,900	11.4%	5514	-1.8%
WAAREEENER	32,12,825	10.1%	2967.3	-3.2%
WIPRO	20,38,23,000	8.2%	212.37	-1.9%

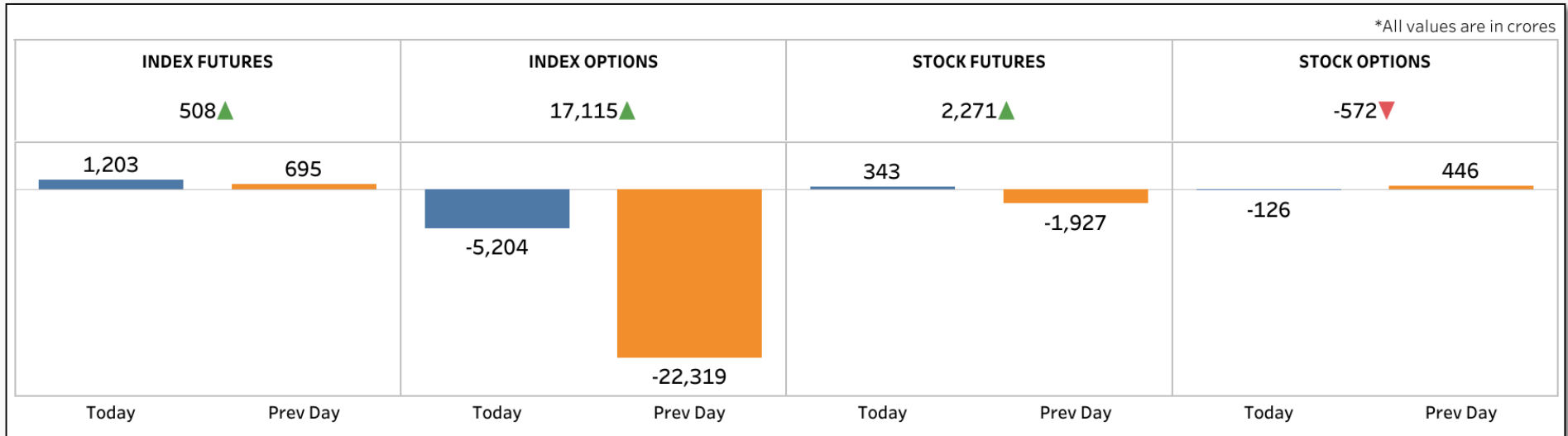
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RBLBANK	6,80,30,725	-8.2%	325.8	1.2%
IRCTC	1,34,18,125	-7.0%	620.7	0.8%
KFINTECH	59,92,000	-6.0%	1041.5	1.8%
GODREJPROP	84,35,900	-5.1%	1882.8	2.1%
SHREECEM	3,97,975	-5.0%	26525	1.0%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ETERNAL	24,54,07,575	-2.3%	276.95	-1.7%
TORNTPHARM	28,77,500	-1.9%	4215.6	-0.5%
ASIANPAINT	1,43,05,750	-1.3%	2434.6	-0.2%
DRREDDY	1,59,20,625	-1.3%	1280.9	-0.3%
JSWENERGY	3,32,13,000	-1.0%	486.55	-0.1%

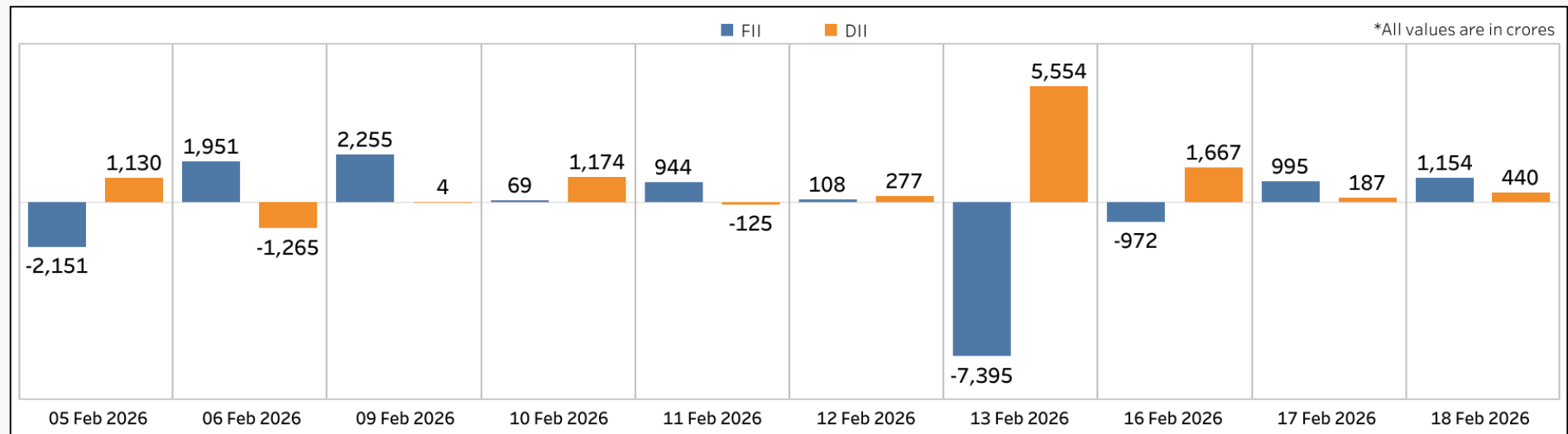
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

▲ 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
11,096 ▲	2,784 ▲	-7,417 ▼	28,076 ▲	185 ▲	-2,428 ▼	3,600 ▲	-9,114 ▼
4,552 -6,544	6,664 3,880	-34,367 -26,950	-3,625 -31,701	185 0	-4,283 -1,855	200 -3,400	30,660 39,774
Net O/S 33,910 Today Prev Day	Net O/S -134,594 Today Prev Day	Net O/S 267,011 Today Prev Day	Net O/S 1,201,580 Today Prev Day	Net O/S 1,062 Today Prev Day	Net O/S 71,501 Today Prev Day	Net O/S 53,517 Today Prev Day	Net O/S -4,033,790 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-113,829 ▼	-9,172 ▼	-92,524 ▼	9,966 ▲	102,546 ▲	8,816 ▲	96,345 ▲	-28,928 ▼
-59,845 53,984	-6,904 2,268	61,760 154,284	17,472 7,506	55,107 -47,439	4,523 -4,293	-27,591 -123,936	-44,507 -15,579
Net O/S -137,485 Today Prev Day	Net O/S 75,610 Today Prev Day	Net O/S -193,664 Today Prev Day	Net O/S 2,548,493 Today Prev Day	Net O/S 102,513 Today Prev Day	Net O/S -12,517 Today Prev Day	Net O/S -126,863 Today Prev Day	Net O/S 283,717 Today Prev Day

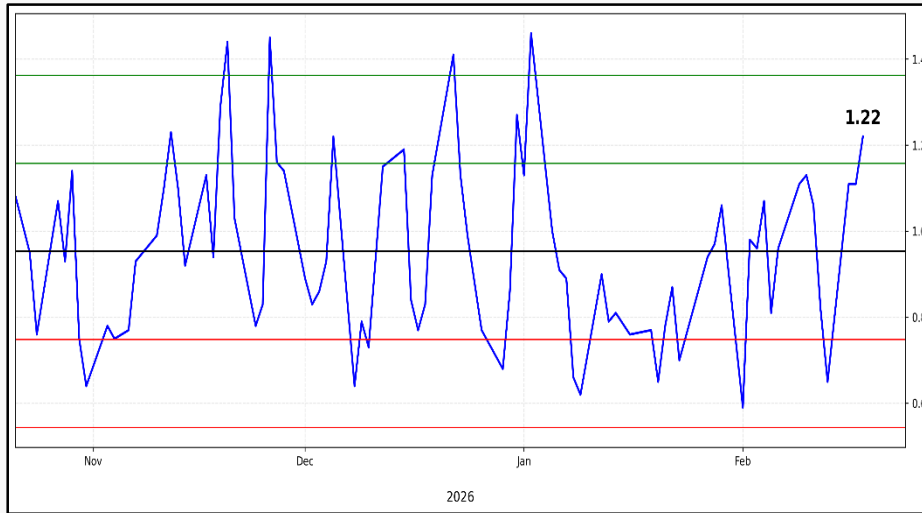
Daily Net Open Interest Change



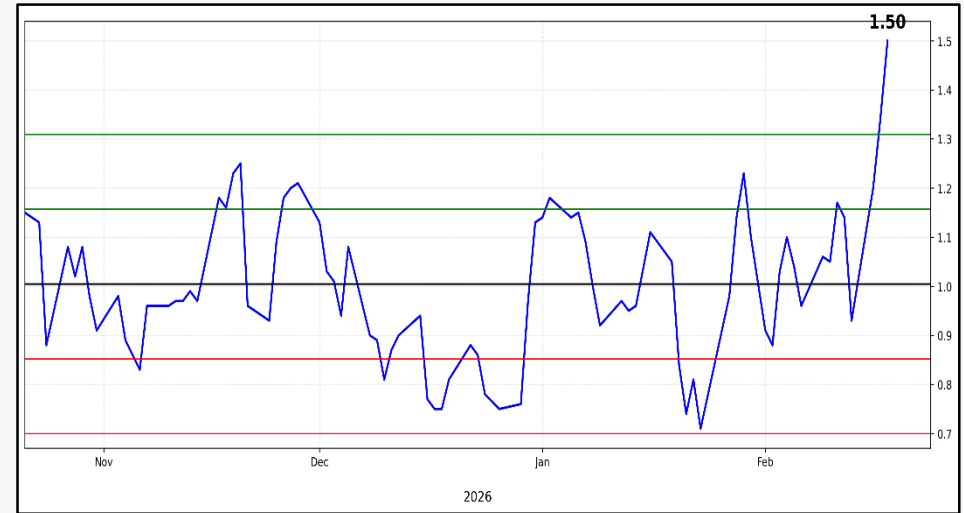
DII and FII Daily Cash Market Flows



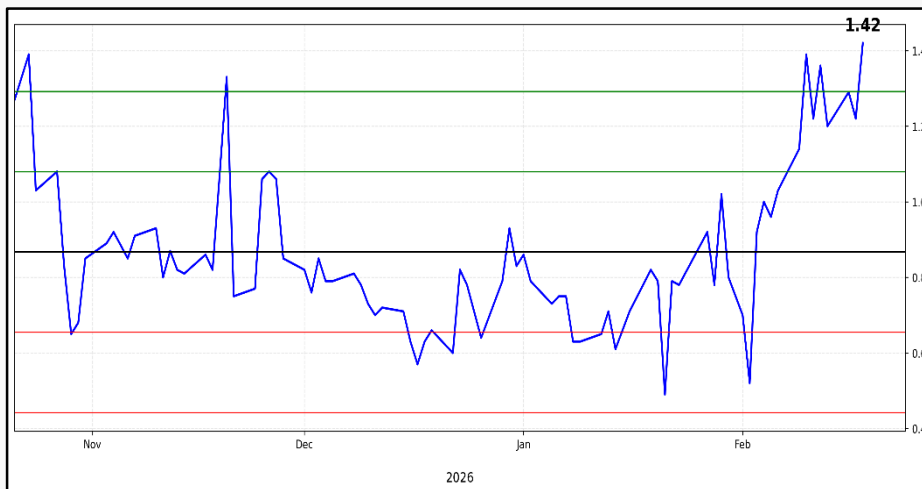
Nifty



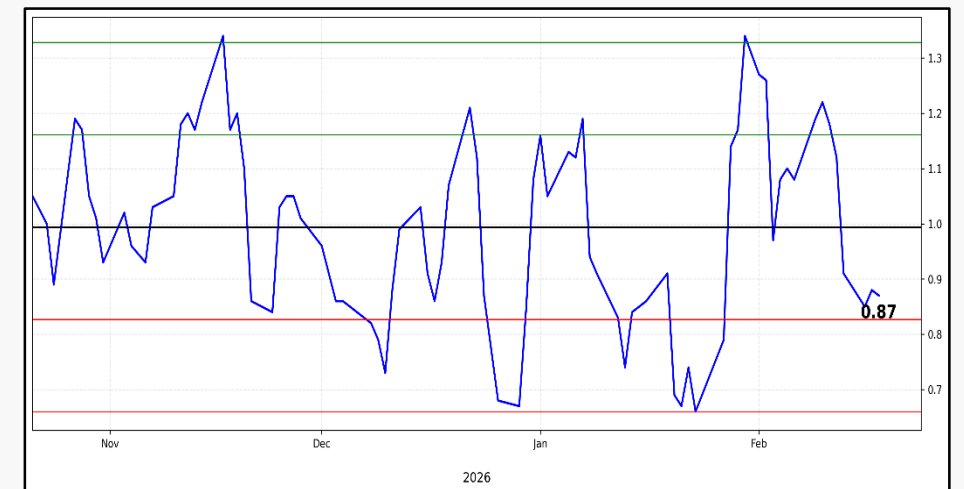
Bank Nifty



Fin Nifty

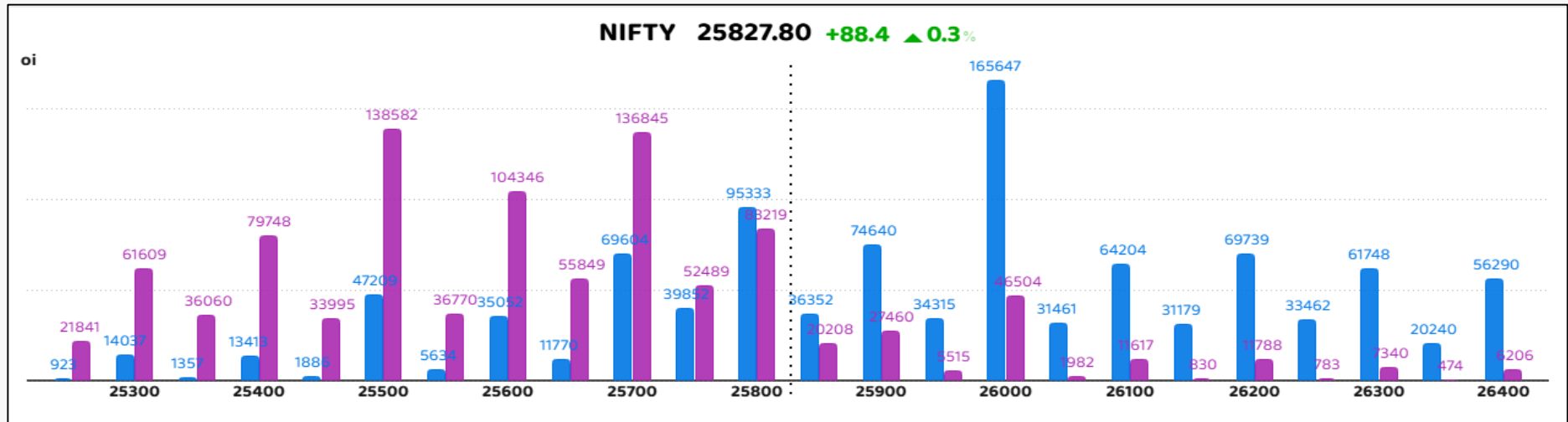


Midcap Select Nifty

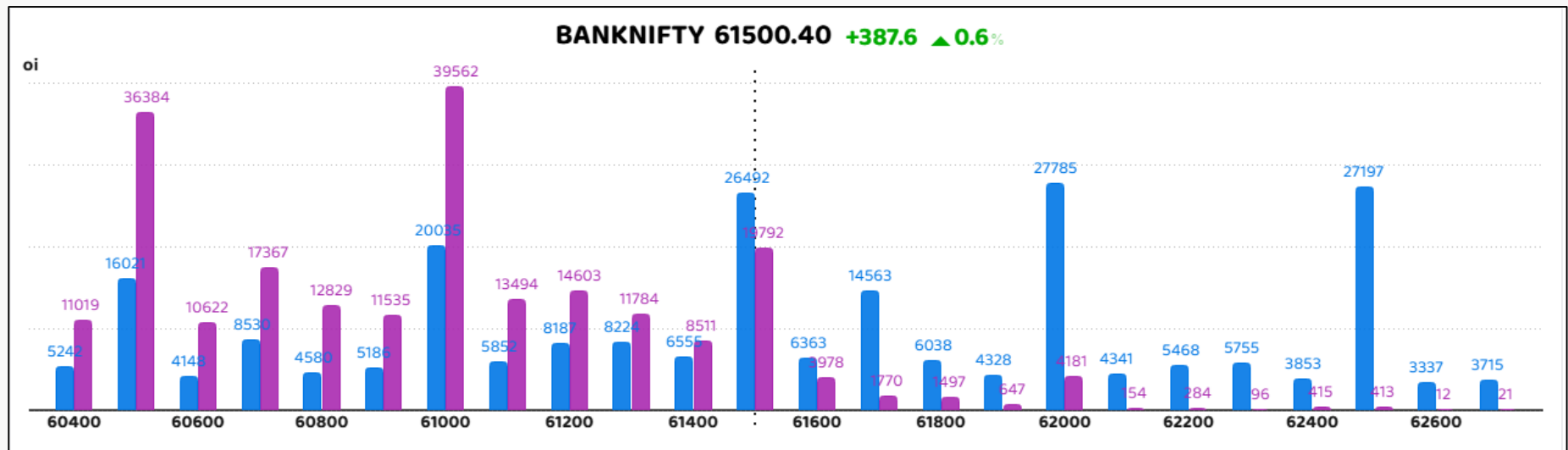


Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 

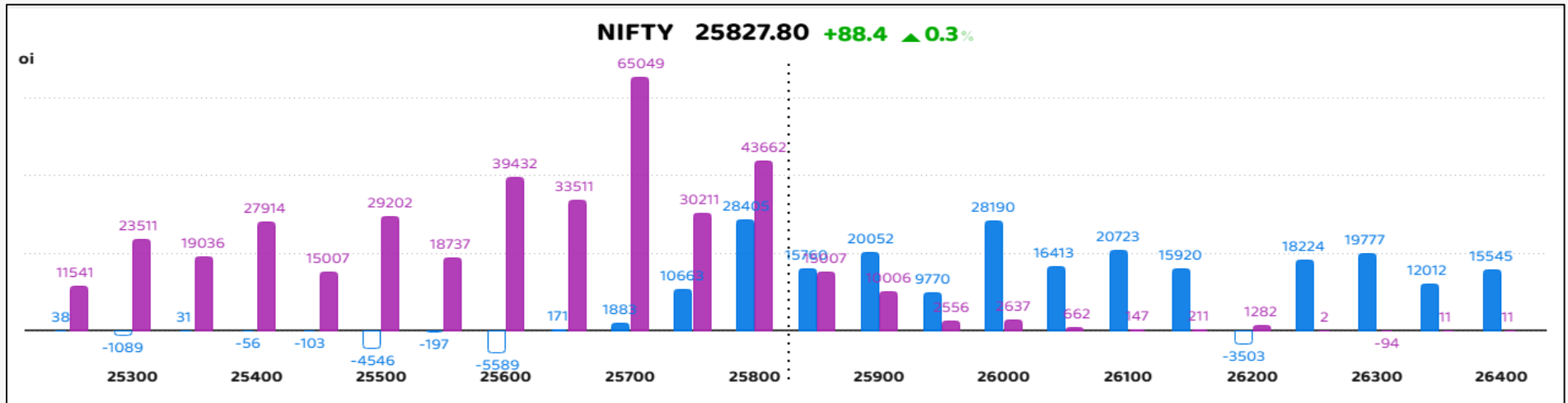


For Nifty, the 26,000 Call and 25,700 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 62,000 Call and the 61,000 Put saw the most amount of open interest.

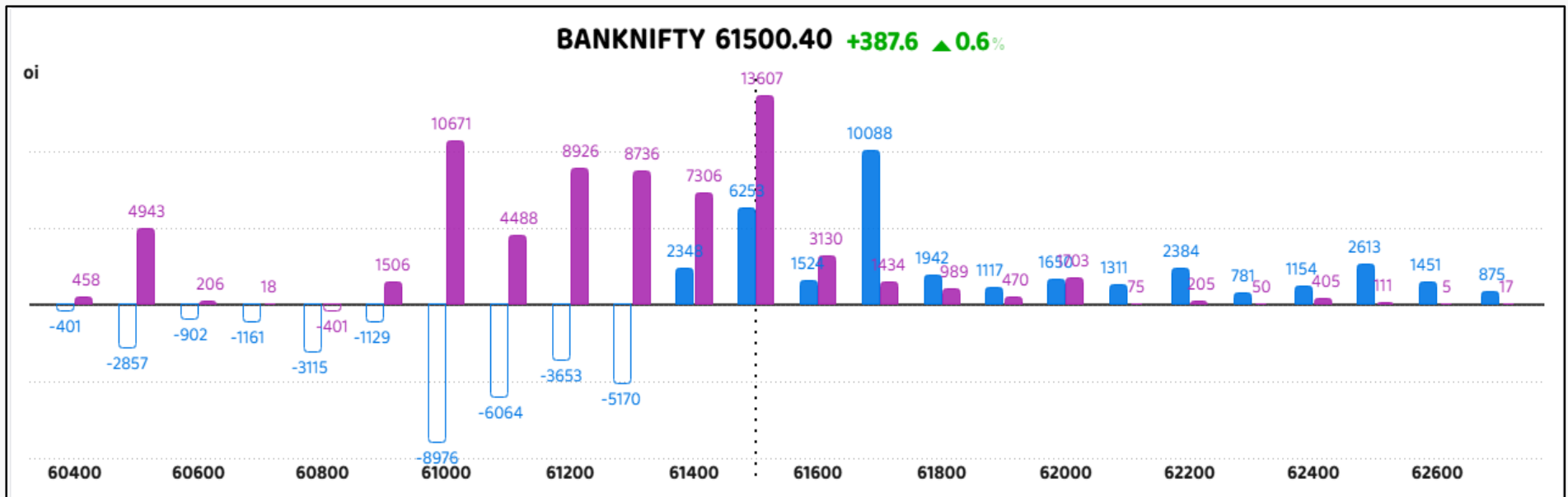


Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,800 Call and the 25,700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 61,000 Call & the 61,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SYNGENE INTERNAT	433.2	0.1	33.4	38.7	15.7	76.6
SHREE CEMENT	26,635.0	1.0	25.6	31.5	7.9	75.0
LTIMINDTREE LTD	5,054.0	-2.1	33.3	43.3	6.8	72.6
HINDUSTAN UNILEV	2,323.5	0.5	18.0	25.3	0.8	70.0
DIXON TECHNOLOGI	11,517.0	-1.0	39.8	53.1	9.2	69.6

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASTRAL LTD	1,636.6	-0.6	18.8	40.4	18.8	0.0
GAIL INDIA LTD	167.3	0.9	20.7	91.4	19.4	1.9
HDFC LIFE INSURA	729.6	3.4	18.3	68.4	16.6	3.2
NTPC LTD	368.4	0.0	19.4	116.6	14.9	4.4
ADANI PORTS AND	1,550.8	-1.0	24.3	99.7	19.0	6.5

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA CONSULTANCY	2,694.9	-0.8	29.5	44.6	1.6	97.1
INFOSYS LTD	1,373.7	-1.3	34.6	60.8	1.7	94.8
HCL TECH LTD	1,467.2	-1.0	29.4	46.0	10.4	91.0
COFORGE LTD	1,372.8	-0.4	40.8	60.2	18.1	90.5
MCX INDIA LTD	2,341.3	2.5	45.0	56.4	26.3	89.0

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MAX HEALTHCARE I	1,086.3	0.9	22.4	68.8	22.4	0.0
ASTRAL LTD	1,636.6	-0.6	18.8	40.4	18.8	0.0
YES BANK LTD	21.2	0.8	24.3	55.3	8.1	1.8
BAJAJ FINSERV LT	2,060.6	0.8	18.9	33.8	13.0	3.3
HDFC LIFE INSURA	729.6	3.4	18.3	68.4	16.6	3.6

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
BOSCHLTD	35,695.0	0.9	13,113	2,142	6.1
RVNL	309.6	0.3	46,256	8,799	5.3
SHREECEM	26,634.8	1.0	11,359	2,580	4.4
SUZLON	46.1	0.3	11,137	2,670	4.2
IRFC	113.3	0.3	22,240	5,467	4.1

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALBHARAT	2,128.9	0.8	2,708	12,327	4.6
BAJAJHLDNG	11,412.9	1.7	4,585	7,728	1.7
LODHA	1,108.1	1.0	4,177	5,566	1.3
AMBER	7,894.0	1.0	13,663	17,767	1.3
MFSL	1,836.4	-1.2	4,739	5,852	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ABB	5,881.5	0.8	12,505	12,437	100.0
ADANIENT	2,211.2	-1.4	29,254	29,103	100.0
ANGELONE	2,591.8	0.8	13,732	11,379	100.0
ADANIPORTS	1,550.8	-1.0	20,921	20,837	100.0
HDFCAMC	2,812.6	-1.8	6,555	6,445	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
ABB	5,881.5	0.8	8,884	8,392	100.0
ABCAPITAL	349.6	0.2	4,550	4,471	100.0
ADANIENSOL	1,035.7	0.5	5,422	5,299	100.0
HDFCLIFE	729.6	3.4	6,428	6,185	100.0
COFORGE	1,372.8	-0.4	15,960	15,730	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ABB	5,881.5	0.8	22,071	19,133	100.0
APLAPOLLO	2,243.8	0.9	13,333	10,728	100.0
ANGELONE	2,591.8	0.8	71,069	54,936	100.0
DABUR	510.6	-1.2	27,037	13,008	100.0
GAIL	167.3	0.9	19,259	15,560	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ABB	5,881.5	0.8	10,281	8,587	100.0
DIXON	11,517.6	-1.0	74,858	52,043	100.0
EXIDEIND	341.6	0.2	2,534	2,315	100.0
GAIL	167.3	0.9	9,010	7,209	100.0
HDFCAMC	2,812.6	-1.8	12,185	7,851	100.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
CUMMINSIND	4,725.8	2.8	9,331	5,604	1.7
MUTHOOTFIN	3,456.9	-1.1	40,232	25,782	1.6
BSE	2,824.0	3.0	42,896	28,122	1.5
INOXWIND	98.8	-1.1	13,042	8,836	1.5
ALKEM	5,464.0	0.1	4,581	3,190	1.4

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
AUROPHARMA	1,159.6	-2.3	15,936	9,942	1.6
CUMMINSIND	4,725.8	2.8	8,632	5,496	1.6
TORNTPHARM	4,210.8	-1.1	3,311	2,141	1.5
PERSISTENT	5,521.0	-1.9	15,007	9,737	1.5
MUTHOOTFIN	3,456.9	-1.1	15,055	10,364	1.5

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
CUMMINSIND	4,725.8	2.8	1,10,309	15,504	7.1
ICICIGI	1,959.7	1.6	29,759	4,326	6.9
MARICO	796.0	2.8	29,306	5,106	5.7
WAAREEENER	2,963.6	-2.9	38,888	7,855	5.0
PETRONET	304.0	2.5	35,866	8,295	4.3

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
WAAREEENER	2,963.6	-2.9	35,388	3,075	11.5
BAJAJHLDNG	11,412.9	1.7	7,728	897	8.6
DALBHARAT	2,128.9	0.8	12,327	2,213	5.6
CUMMINSIND	4,725.8	2.8	38,628	8,350	4.6
PETRONET	304.0	2.5	15,829	3,584	4.4

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	2300	959136	4.0%	2211	2200	824103	-0.5%	JIOFIN	270	7064100	2.2%	264	260	5202900	-1.6%
ADANIPTS	1600	1135250	3.2%	1551	1500	1245925	-3.3%	JSWSTEEL	1260	845775	0.7%	1251	1200	1273050	-4.1%
APOLLOHOSP	7700	275750	0.7%	7648	7500	111250	-1.9%	KOTAKBANK	420	4740000	-1.5%	426	410	4918000	-3.8%
ASIANPAINT	2500	857750	2.8%	2432	2100	485250	-13.7%	LT	4100	1732675	-5.2%	4326	4100	1064175	-5.2%
AXISBANK	1380	3525625	0.2%	1377	1350	1626250	-2.0%	M&M	3700	1376600	4.8%	3531	3500	519200	-0.9%
BAJAJ-AUTO	10000	201525	0.2%	9980	9600	100425	-3.8%	MARUTI	16000	275400	5.5%	15164	15000	126700	-1.1%
BAJAJFINSV	2040	680250	-1.0%	2061	1680	670500	-18.5%	MAXHEALTH	1120	360150	3.1%	1086	1000	471450	-7.9%
BAJFINANCE	1000	2167500	-2.3%	1024	950	1890000	-7.2%	NESTLEIND	1350	497000	3.8%	1301	1200	177500	-7.8%
BEL	450	13962150	0.5%	448	440	3830400	-1.7%	NTPC	370	31569000	0.4%	368	350	4411500	-5.0%
BHARTIARTL	2100	2226325	3.9%	2022	2000	894900	-1.1%	ONGC	263.75	16204500	-0.3%	265	263.75	5022000	-0.3%
CIPLA	1400	1153500	3.7%	1350	1300	457500	-3.7%	POWERGRID	300	13328500	-0.2%	301	290	4235100	-3.5%
COALINDIA	460	4835700	10.0%	418	420	2814750	0.5%	RELIANCE	1500	6749500	4.1%	1441	1400	4398500	-2.9%
DRREDDY	1280	2164375	0.0%	1280	1280	485625	0.0%	SBILIFE	2040	1263375	-1.0%	2060	2040	585000	-1.0%
EICHERMOT	8500	212700	6.1%	8010	7700	201200	-3.9%	SBIN	1220	4101000	0.1%	1219	1100	6186000	-9.8%
ETERNAL	300	16603975	8.2%	277	260	5812725	-6.3%	SHRIRAMFIN	1100	1345575	2.2%	1076	1000	1076625	-7.1%
GRASIM	3000	293500	2.3%	2934	2800	272000	-4.6%	SUNPHARMA	1720	2423400	-0.3%	1724	1700	1257900	-1.4%
HCLTECH	1600	2896600	9.1%	1467	1400	572600	-4.6%	TATACONSUM	1200	645150	2.6%	1170	1120	523050	-4.2%
HDFCBANK	950	8193350	2.7%	925	930	2762100	0.6%	TMPV	390	4633600	1.9%	383	370	2248800	-3.4%
HDFCLIFE	740	3163600	1.4%	730	650	909700	-10.9%	TATASTEEL	210	23501500	0.5%	209	200	9927500	-4.3%
HINDALCO	1000	1740900	11.2%	899	900	1315300	0.1%	TCS	3000	3012450	11.3%	2695	2600	907900	-3.5%
HINDUNILVR	2400	1058400	3.3%	2324	2300	733500	-1.0%	TECHM	1760	1035000	17.0%	1505	1420	693000	-5.6%
ICICIBANK	1410	7279300	0.1%	1408	1400	3452400	-0.6%	TITAN	4300	956725	1.2%	4249	4000	392175	-5.9%
INDIGO	5000	414600	0.4%	4980	4700	343500	-5.6%	TRENT	4500	681900	7.5%	4187	4000	315800	-4.5%
INFY	1500	6779600	9.2%	1374	1400	2033200	1.9%	ULTRACEMCO	13000	134400	-0.4%	13052	12900	53250	-1.2%
ITC	330	17312000	-0.7%	332	320	4881600	-3.7%	WIPRO	250	14595000	18.0%	212	205	5208000	-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

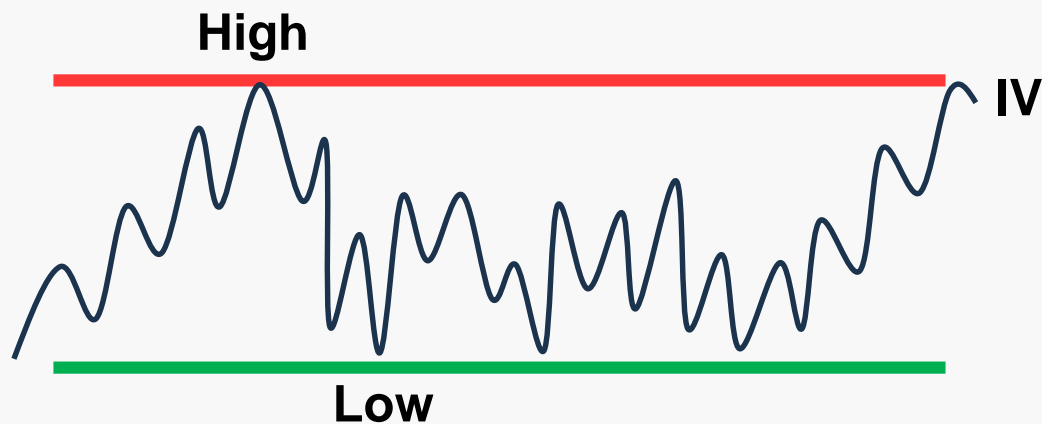
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

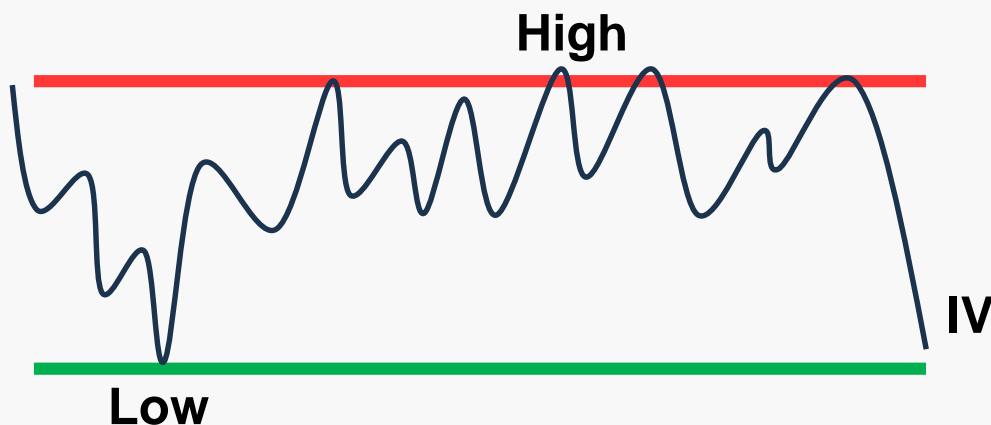
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (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.

Disclaimer & Disclosures

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 Parç, 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 RAASB (in case of RA's) 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 an 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 a different conclusion 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