



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,585	1.0%▲
Open Interest (OI)	1,99,10,865	1.4%▼
Change in OI (abs)	1,99,10,865	2,85,415▼
Premium / Discount (Abs)	8	41▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,374	1.42%▲
Open interest (OI)	24,07,530	1.1%▼
Change in OI (abs)	24,07,530	27,240▼
Premium / Discount (Abs)	3	16▲
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	17.53	1.26▼
Nifty ATM IV (%)	17.82	2.60▼
Bank Nifty ATM IV (%)	21.18	2.59▼
PCR (Nifty)	1.18	0.05▲
PCR (Bank Nifty)	1.07	0.08▲

The FII Long Ratio in Index Futures **Jump** to **22.6%**, **Up** from **21 %** in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
BHEL	11,25,10,125	6.3%	332.97	2.4%
JINDALSTEL	1,35,51,250	4.7%	1291.6	0.4%
NAM-INDIA	34,79,375	4.5%	1048.15	4.5%
BDL	41,37,350	4.5%	1374.4	0.3%
SBIN	8,13,07,500	4.2%	1112.05	0.5%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
AMBER	13,97,200	10.1%	7823.5	-1.5%
LICI	1,13,98,800	6.8%	826.3	-0.1%
CDSL	1,23,14,375	6.1%	1358.8	-0.5%
SAMMAANCAP	10,25,76,500	5.5%	149.15	-2.5%
RELIANCE	10,08,10,000	5.5%	1355.9	-0.5%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
PNBHOUSING	1,21,97,250	-13.2%	979.4	7.9%
PPLPHARMA	1,05,81,375	-6.1%	150.25	1.4%
FORTIS	1,03,46,250	-5.9%	915.75	2.9%
MOTILALOFS	27,83,025	-5.3%	822	1.8%
HINDPETRO	3,88,69,875	-5.1%	384.1	1.4%

### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
COLPAL	55,89,000	-4.0%	2101.6	-1.0%
HUDCO	2,52,85,800	-2.8%	198.4	-0.4%
CROMPTON	4,45,24,800	-1.7%	258.47	-1.0%
DMART	39,90,750	-0.7%	4591.8	-0.4%
BAJAJHLDNG	2,92,150	-0.7%	10351.5	-0.2%

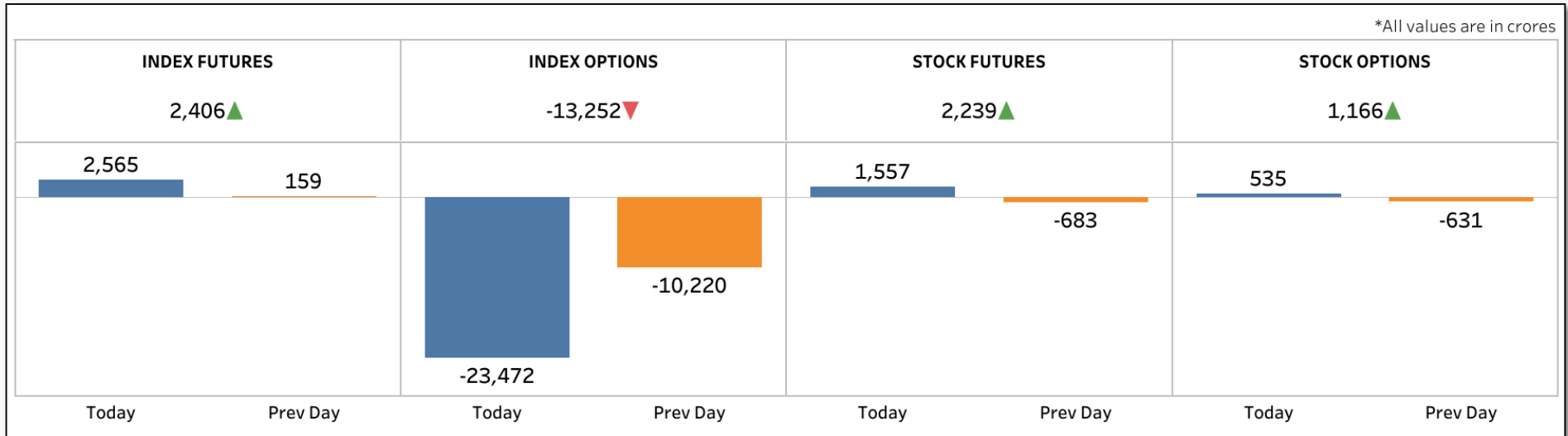
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

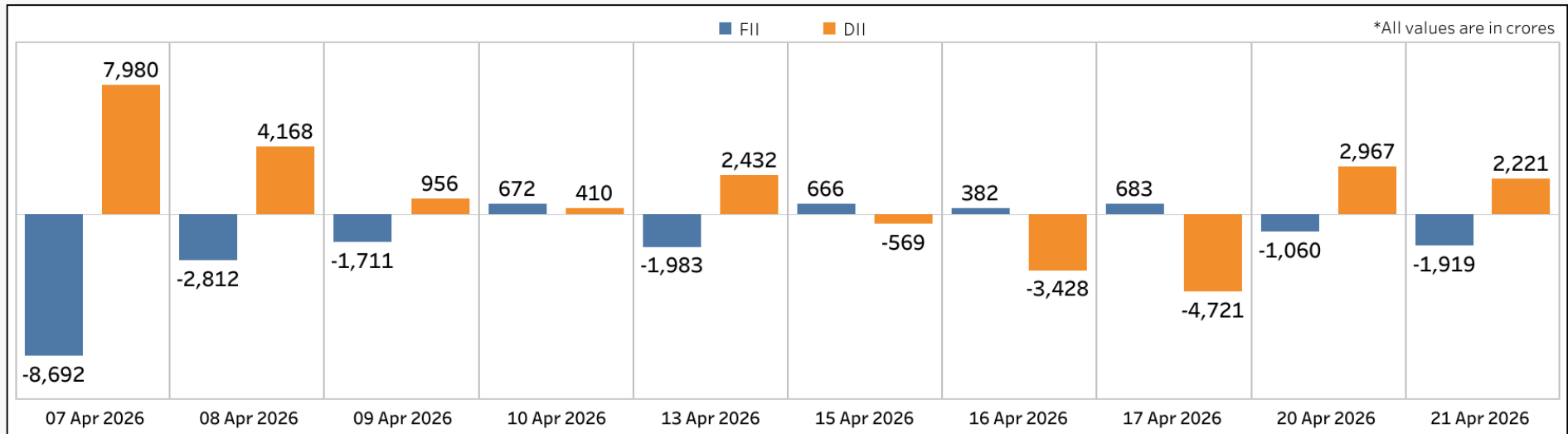
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
88,010 ▲	14,621 ▲	28,586 ▲	47,242 ▲	632 ▲	7,733 ▲	6,699 ▲	-37,498 ▼
48,697	15,813	3,486	27,001	1,692	2,846	5,017	33,247
-39,313	1,192	-25,100	-20,241	1,060	-4,887	-1,682	-4,251
Net O/S -131,313	Net O/S -173,948	Net O/S 300,331	Net O/S 1,038,731	Net O/S 4,028	Net O/S 59,321	Net O/S 56,683	Net O/S -3,640,409
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
-62,597 ▼	-22,535 ▼	157,816 ▲	-1,204 ▼	-26,046 ▼	181 ▲	-193,099 ▼	-8,540 ▼
-39,436	-24,039	110,578	968	-10,954	5,380	-119,080	-23,718
23,161	-1,504	-47,238	2,172	15,092	5,199	74,019	-15,178
Net O/S 2,820	Net O/S 106,176	Net O/S -380,694	Net O/S 2,385,016	Net O/S 124,464	Net O/S 8,451	Net O/S 23,680	Net O/S 216,662
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

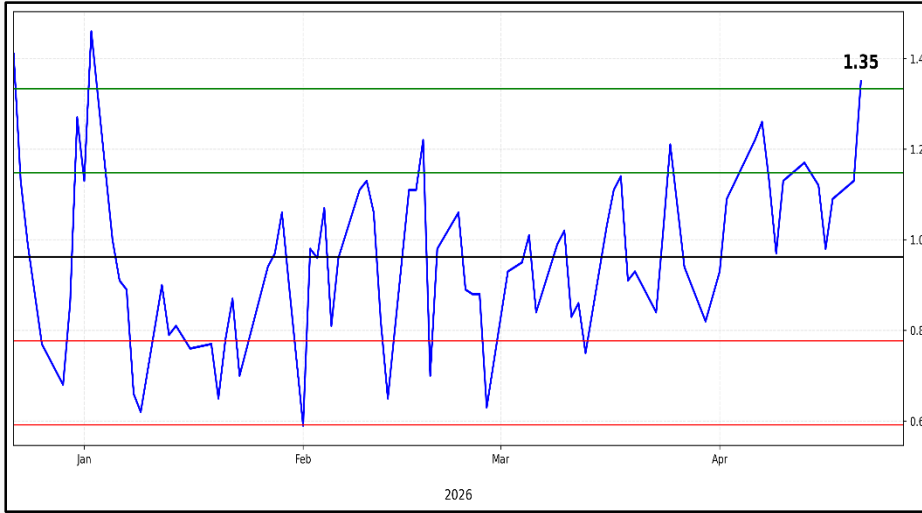
## Daily Net Open Interest Change



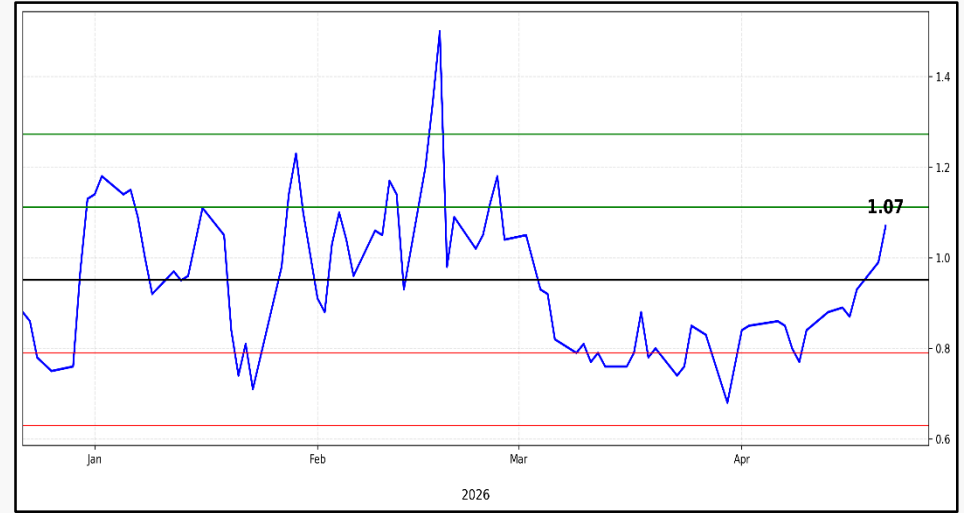
## DII and FII Daily Cash Market Flows



### Nifty



### Bank Nifty



### Fin Nifty



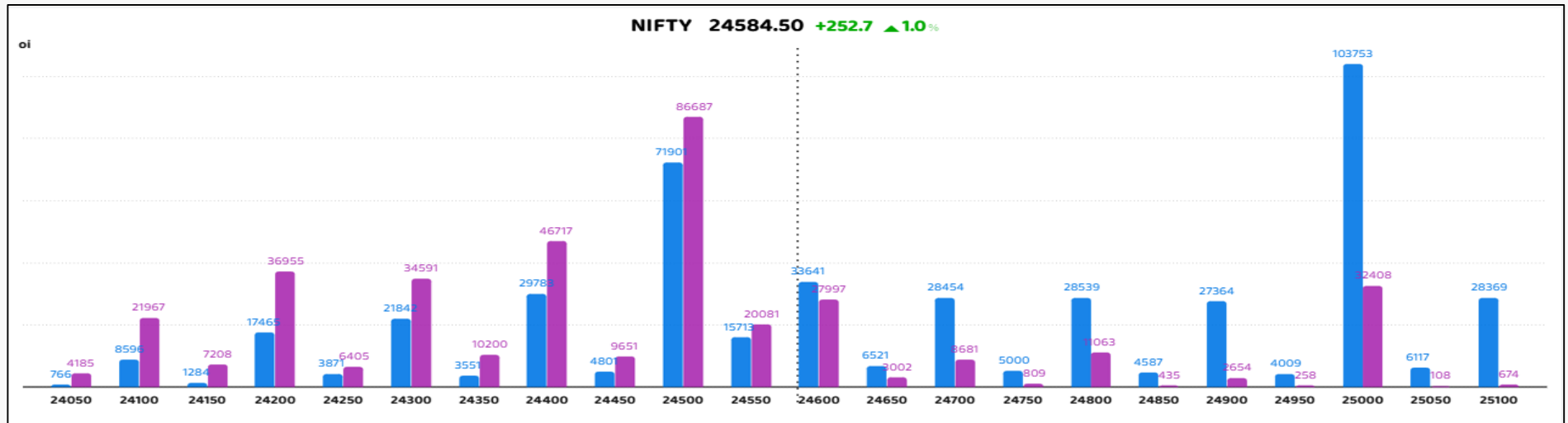
### Midcap Select Nifty



*On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation*

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

Call ■ Put ■



For Nifty, the 25,000 Call and 24,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,000 Call and the 57,000 Put saw the most amount of open interest.

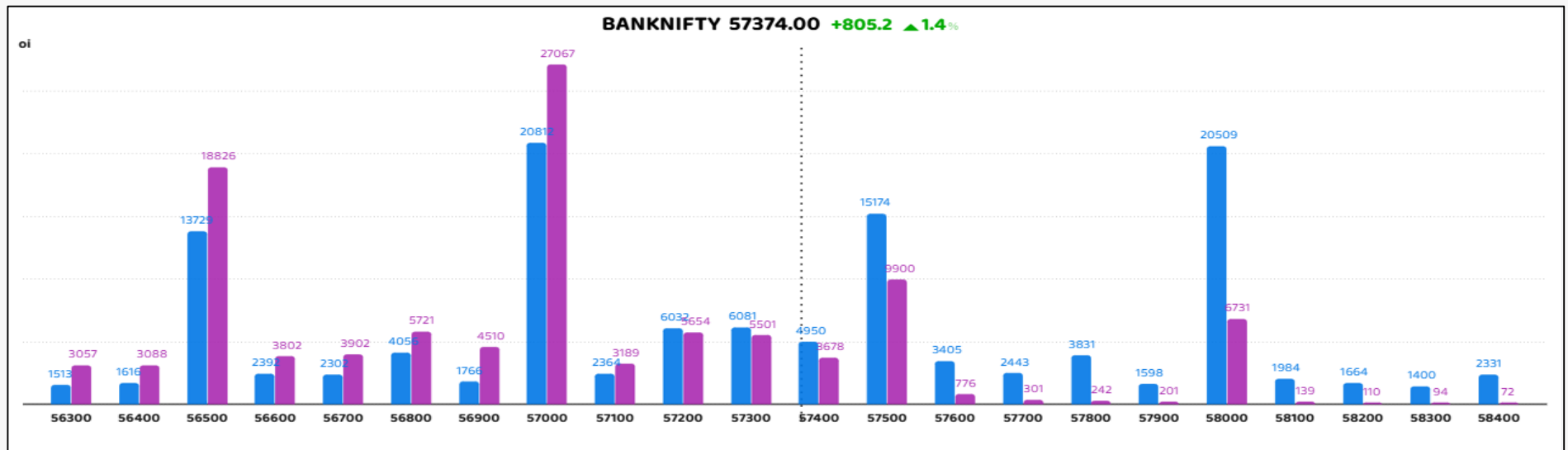
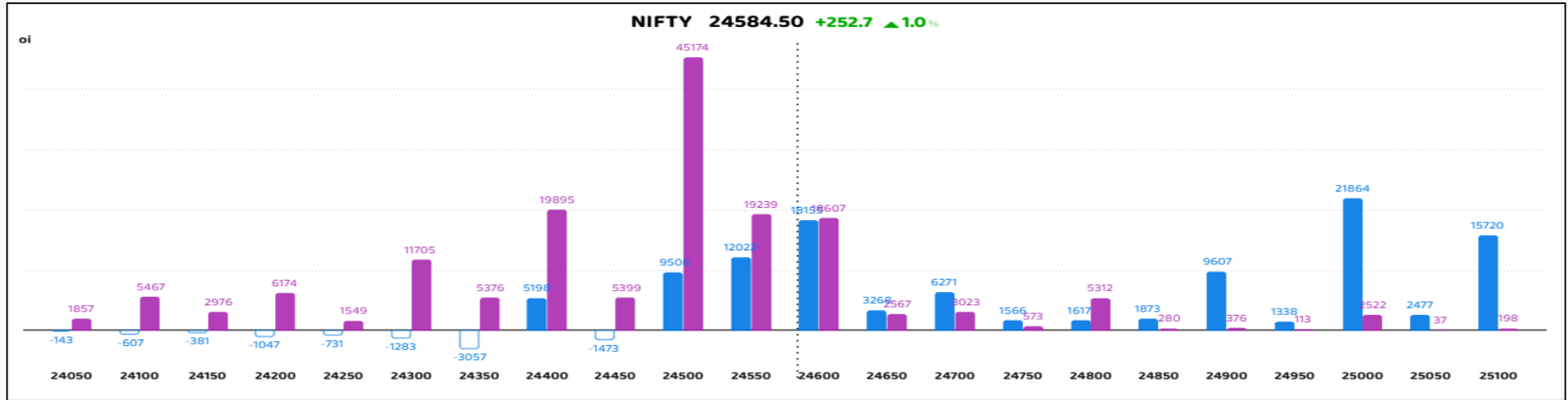


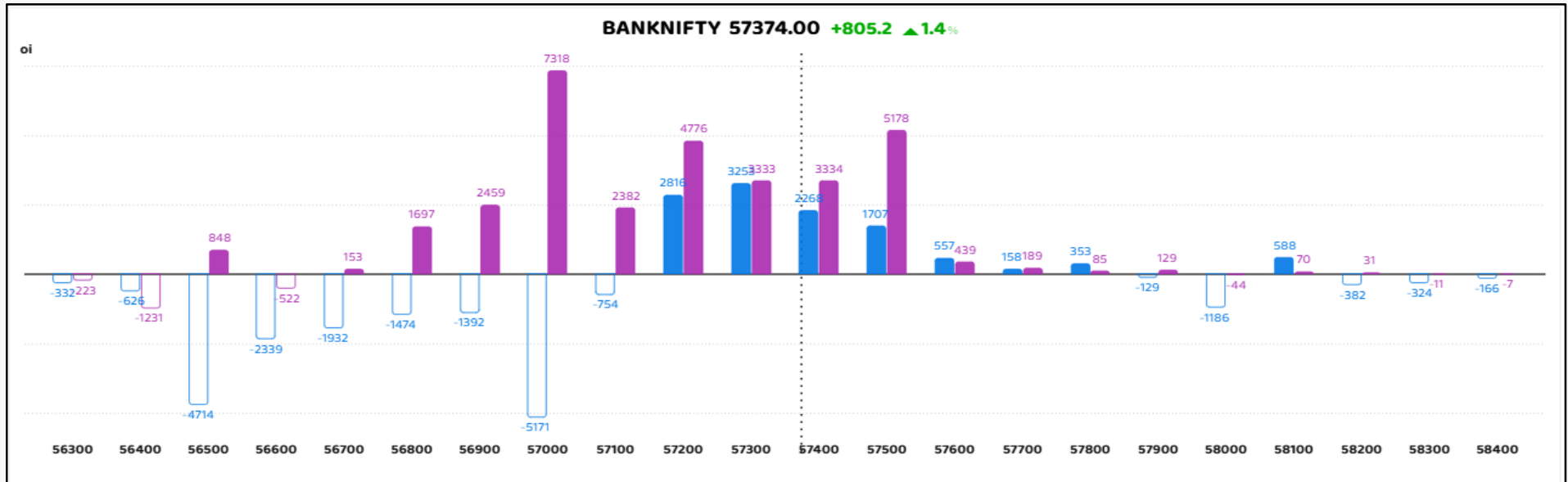
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,500 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 57,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ZYDUS LIFESCIENC	928.6	-0.8	36.7	36.8	16.5	99.2
SUN PHARMA INDU	1665.2	-0.2	26.2	28.5	14.1	84.0
HCL TECH LTD	1441.2	0.9	34.4	40.0	10.4	81.2
STEEL AUTHORITY	175.1	1.4	73.9	91.3	0.6	80.8
BHARAT HEAVY ELE	332.6	2.1	39.5	47.9	5.2	80.3

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	176.6	0.4	42.2	734.8	18.5	3.3
ADITYA BIRLA CAP	344.6	0.9	35.1	658.6	8.2	4.1
CHOLAMANDALAM IN	1589.2	1.3	34.0	186.8	19.6	8.6
HINDALCO INDS	1021.7	0.6	34.1	254.2	12.3	9.0
REC LTD	383.4	0.2	31.7	244.9	8.0	10.0

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
GAIL INDIA LTD	160.8	1.9	67.2	91.4	19.4	99.8
ZYDUS LIFESCIENC	928.6	-0.8	36.7	36.8	16.5	99.6
PATANJALI FOODS	468.1	1.8	39.2	43.4	0.1	99.4
NESTLE INDIA LTD	1379.9	7.3	26.9	30.7	12.2	98.5
DABUR INDIA LTD	452.0	2.3	32.7	40.8	17.4	97.7

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
UNO MINDA LTD	1149.6	1.8	21.3	46.3	10.9	1.6
VEDANTA LTD	766.8	-0.5	21.6	46.2	9.6	2.3
PRESTIGE ESTATES	1402.7	2.1	29.6	51.0	26.3	6.4
OBEROI REALTY	1723.9	1.7	26.3	48.4	20.4	15.9
VODAFONE IDEA LT	9.6	0.8	48.8	212.9	10.0	18.1

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
UNOMINDA	1,149.6	1.8	9,278.0	1,216.0	7.6
JSWENERGY	546.6	0.7	23,602.0	5,226.0	4.5
YESBANK	19.8	-0.4	21,081.0	5,167.0	4.1
PRESTIGE	1,402.7	2.1	18,248.0	4,950.0	3.7
DELHIVERY	472.0	1.6	17,273.0	4,697.0	3.7

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BOSCHLTD	38,100.0	0.8	5,202.0	41,062.0	7.9
NUVAMA	1,391.5	0.9	1,217.0	2,970.0	2.4
SHREECEM	25,540.0	0.2	3,027.0	5,474.0	1.8
PAGEIND	37,960.0	-1.2	4,393.0	7,386.0	1.7
TORNTPOWER	1,621.5	0.9	5,372.0	7,100.0	1.3

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
360ONE	1,108.3	-0.1	8,584.0	3,958.0	100.0
ADANIENSOL	1,265.3	0.5	6,509.0	6,336.0	100.0
HAVELLS	1,328.7	2.0	7,538.0	6,960.0	100.0
PNBHOUSING	979.1	8.0	11,690.0	7,356.0	100.0
SIEMENS	3,721.5	0.3	13,135.0	11,755.0	100.0

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
360ONE	1,108.3	-0.1	6,272.0	4,467.0	100.0
ADANIPOINTS	1,594.1	1.0	19,508.0	18,505.0	100.0
ASIANPAINT	2,543.6	1.1	24,033.0	24,008.0	100.0
BHEL	332.6	2.1	17,778.0	17,471.0	100.0
CHOLAFIN	1,589.2	1.3	6,871.0	6,669.0	100.0

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
360ONE	1,108.3	-0.1	24,944.0	11,912.0	100.0
VBL	485.1	4.0	43,783.0	39,667.0	100.0
TRENT	4,390.7	3.5	215,294.0	175,476.0	100.0
PHOENIXLTD	1,807.0	2.2	16,207.0	10,675.0	100.0
PNBHOUSING	979.1	8.0	132,674.0	16,768.0	100.0

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
360ONE	1,108.3	-0.1	9,570.0	7,299.0	100.0
BOSCHLTD	38,100.0	0.8	41,062.0	26,649.0	100.0
NESTLEIND	1,379.8	7.3	92,516.0	5,200.0	100.0
TRENT	4,390.7	3.5	81,000.0	69,904.0	100.0
PNBHOUSING	979.1	8.0	71,805.0	10,017.0	100.0

**Call Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
360ONE	1,108.3	-0.1	8,584.0	2,194.4	3.9
PNBHOUSING	979.1	8.0	11,690.0	3,145.6	3.7
NESTLEIND	1,379.8	7.3	22,683.0	6,111.4	3.7
SBILIFE	1,911.6	-3.6	14,592.0	6,696.6	2.2
KALYANKJIL	415.1	-0.6	13,683.0	6,821.9	2.0

**Put Open Interest to 20-day Average**

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
NESTLEIND	1,379.8	7.3	15,010.0	3,513.8	4.3
360ONE	1,108.3	-0.1	6,272.0	1,657.7	3.8
PNBHOUSING	979.1	8.0	9,371.0	2,655.2	3.5
ANGELONE	324.0	1.5	13,975.0	5,826.0	2.4
POWERINDIA	29,890.0	0.8	7,974.0	3,353.0	2.4

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
NESTLEIND	1,379.8	7.3	236,929.0	6,761.7	35.0
PNBHOUSING	979.1	8.0	132,674.0	5,064.8	26.2
SBILIFE	1,911.6	-3.6	52,337.0	5,709.8	9.2
360ONE	1,108.3	-0.1	24,944.0	3,314.2	7.5
LICHSGFIN	565.2	5.3	46,076.0	6,125.4	7.5

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
NESTLEIND	1,379.8	7.3	92,516.0	3,185.2	29.0
PNBHOUSING	979.1	8.0	71,805.0	2,518.9	28.5
SBILIFE	1,911.6	-3.6	30,040.0	3,544.9	8.5
SHREECEM	25,540.0	0.2	5,474.0	870.5	6.3
BOSCHLTD	38,100.0	0.8	41,062.0	7,507.6	5.5

## 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
ADANIANT	2200	638703	-1.2%	2226	2200	652299	-1.2%	JIOFIN	240	10363500	2.2%	235	240	6187550	2.2%
ADANIPTS	1500	996075	-5.9%	1594	1500	1075400	-5.9%	JSWSTEEL	1300	732375	1.6%	1280	1200	426600	-6.2%
APOLLOHOSP	7700	99500	-0.6%	7744	6700	73125	-13.5%	KOTAKBANK	370	3662000	-3.2%	382	335	3218000	-12.3%
ASIANPAINT	2600	432250	2.2%	2544	2400	408500	-5.6%	LT	4000	832300	-1.9%	4075	4000	664825	-1.9%
AXISBANK	1400	2010000	1.6%	1378	1300	1260000	-5.6%	M&M	3300	617000	1.6%	3247	3100	297800	-4.5%
BAJAJ-AUTO	10000	119400	2.1%	9793	9500	119100	-3.0%	MARUTI	14000	197750	4.0%	13461	13000	109550	-3.4%
BAJAJFINSV	1760	341250	-4.9%	1851	1620	333500	-12.5%	MAXHEALTH	1020	596400	0.0%	1020	1000	265125	-2.0%
BAJFINANCE	1000	1933500	6.5%	939	900	1884750	-4.1%	NESTLEIND	1400	1353000	1.5%	1380	1300	893000	-5.8%
BEL	500	5397900	10.7%	452	450	2332725	-0.3%	NTPC	400	9484500	1.0%	396	380	3162000	-4.1%
BHARTIARTL	1900	2264800	2.4%	1855	1800	1068750	-3.0%	ONGC	290	14044500	2.4%	283	270	4484250	-4.6%
CIPLA	1240	619500	0.6%	1233	1160	513750	-5.9%	POWERGRID	315	6361200	-1.4%	319	300	2836700	-6.1%
COALINDIA	460	3720600	3.8%	443	440	3349350	-0.7%	RELIANCE	1400	9290000	3.5%	1353	1300	3827000	-3.9%
DRREDDY	1240	882500	1.6%	1221	1200	945625	-1.7%	SBILIFE	2000	1301250	4.6%	1912	1900	387000	-0.6%
EICHERMOT	8000	297300	10.5%	7241	6500	135400	-10.2%	SBIN	1200	3466500	7.9%	1112	1000	3548250	-10.1%
ETERNAL	260	6275900	0.2%	259	230	4124925	-11.4%	SHRIRAMFIN	1100	1456950	5.2%	1045	1000	1206150	-4.3%
GRASIM	2800	237500	0.8%	2778	2600	87500	-6.4%	SUNPHARMA	1800	1126650	8.1%	1665	1600	478100	-3.9%
HCLTECH	1440	1336300	-0.1%	1441	1400	1275050	-2.9%	TATACONSUM	1180	263450	3.3%	1142	930	442750	-18.6%
HDFCBANK	850	7181900	4.7%	812	800	4820200	-1.4%	TMPV	360	7684000	1.2%	356	300	2974400	-15.7%
HDFCLIFE	600	2387000	-2.3%	614	600	1361800	-2.3%	TATASTEEL	195	23908500	-8.0%	212	200	8079500	-5.7%
HINDALCO	900	2679600	-11.9%	1022	900	1183000	-11.9%	TCS	2600	2214975	-0.4%	2611	2400	977900	-8.1%
HINDUNILVR	2260	1339500	-2.2%	2311	1900	446100	-17.8%	TECHM	1500	653400	-0.1%	1501	1400	415800	-6.7%
ICICIBANK	1400	4734100	0.8%	1388	1300	2144800	-6.4%	TITAN	4500	352975	0.5%	4480	4200	316225	-6.2%
INDIGO	4700	783600	0.1%	4693	4700	461100	0.1%	TRENT	4400	454700	0.2%	4391	3800	200100	-13.4%
INFY	1340	3009200	2.0%	1313	1280	2379200	-2.5%	ULTRACEMCO	11800	139550	-2.0%	12039	11800	51100	-2.0%
ITC	300	20456000	-3.1%	310	300	5019200	-3.1%	WIPRO	210	28440000	2.4%	205	200	9336000	-2.4%

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](http://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.

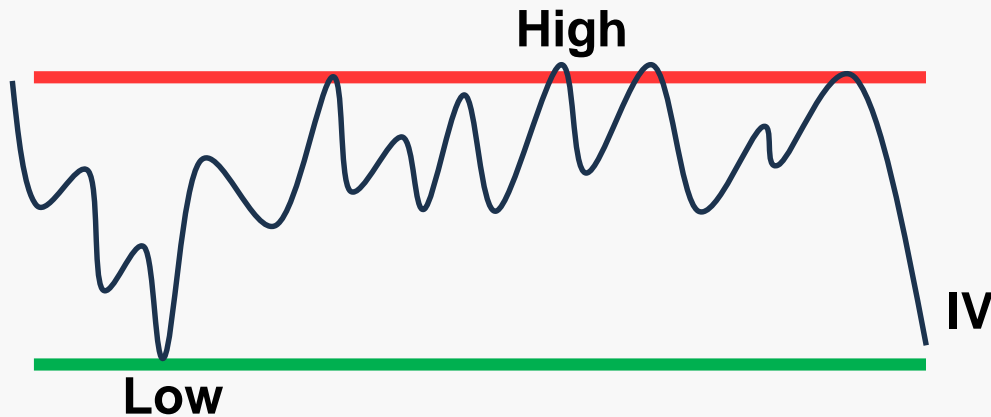


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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](http://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](mailto: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](mailto: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