



# Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,058	3.9%▲
Open Interest (OI)	2,30,00,900	6.2%▼
Change in OI (abs)	2,30,00,900	15,27,955▼
Premium / Discount (Abs)	60	33▲
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,928	5.78%▲
Open interest (OI)	24,90,780	7.2%▼
Change in OI (abs)	24,90,780	1,94,340▼
Premium / Discount (Abs)	224	68▲
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	19.7	5.00▼
Nifty ATM IV (%)	18.09	7.72▼
Bank Nifty ATM IV (%)	20.84	8.68▼
PCR (Nifty)	1.13	0.00▲
PCR (Bank Nifty)	0.80	0.05▼

The FII Long Ratio in Index Futures **Jump** to **21%**, **Up** from **18.4%** in the previous session.

## Single Stock Futures Movers

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	45,81,500	42.7%	973.85	4.7%
NAM-INDIA	15,15,625	35.5%	901.4	8.5%
GODFRYPHLP	2,29,075	25.5%	2013.8	3.9%
ADANIPOWER	5,25,75,500	19.0%	169.75	3.4%
HYUNDAI	43,72,775	15.8%	1767.2	3.6%

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
DRREDDY	1,37,10,000	10.3%	1193	-0.3%
COALINDIA	6,10,76,700	8.3%	445.65	-3.2%
ONGC	9,64,82,250	6.3%	287.05	-0.1%
POWERGRID	7,89,60,200	3.9%	295.8	-0.2%
NATIONALUM	5,12,43,750	2.3%	402.2	-2.8%

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

Symbol	Open Interest	Chg (%)	Price	Chg (%)
FORCEMOT	84,975	-21.7%	22128	12.1%
ASHOKLEY	14,61,20,000	-9.2%	172.62	12.7%
MUTHOOTFIN	35,49,975	-7.8%	3484.5	7.4%
SAMMAANCAP	10,79,34,300	-6.6%	153.07	5.0%
APLAPOLLO	47,91,850	-6.2%	2052.2	8.0%

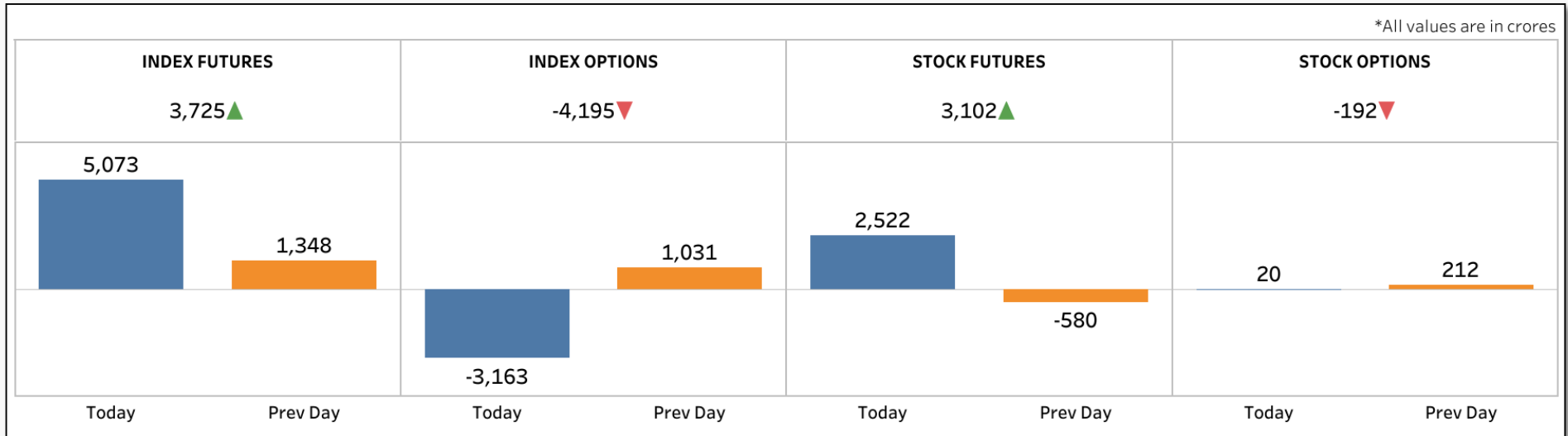
### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
DMART	42,35,700	-6.2%	4383.8	-2.0%
OFSS	15,07,050	-4.8%	7163.5	-0.4%
MARICO	2,61,98,400	-4.0%	751.15	-0.8%
FORTIS	1,18,82,300	-1.8%	842.2	-0.2%
OIL	2,13,03,800	-1.2%	461	-4.6%

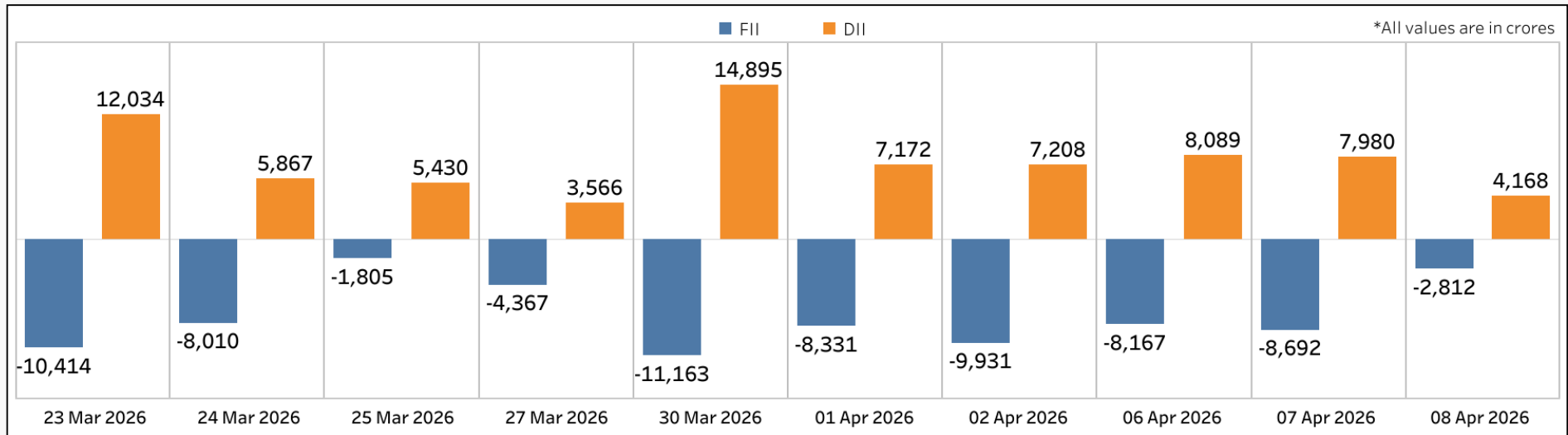
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix



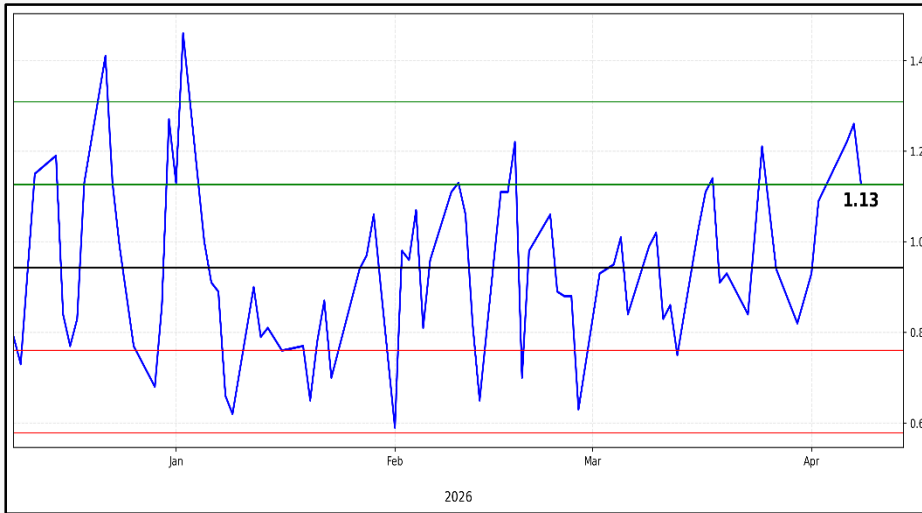
## Daily Net Open Interest Change



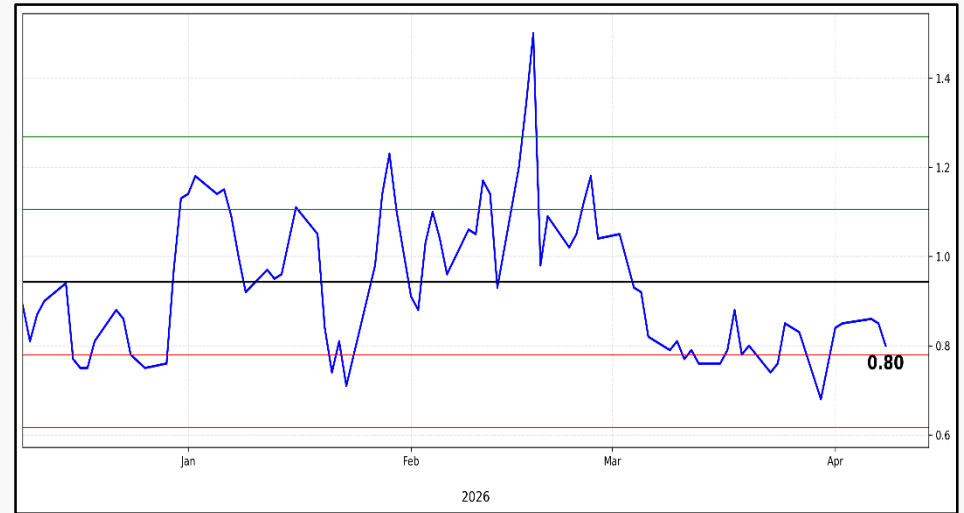
## DII and FII Daily Cash Market Flows



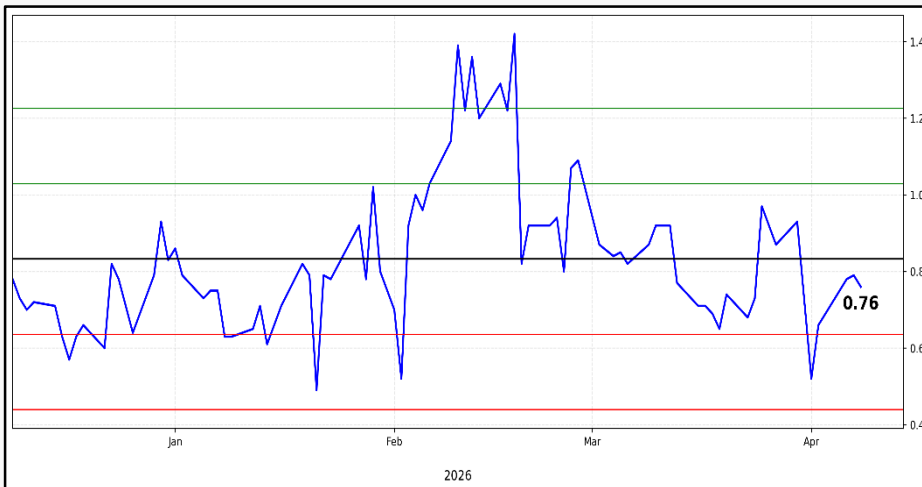
### Nifty



### Bank Nifty



### Fin Nifty



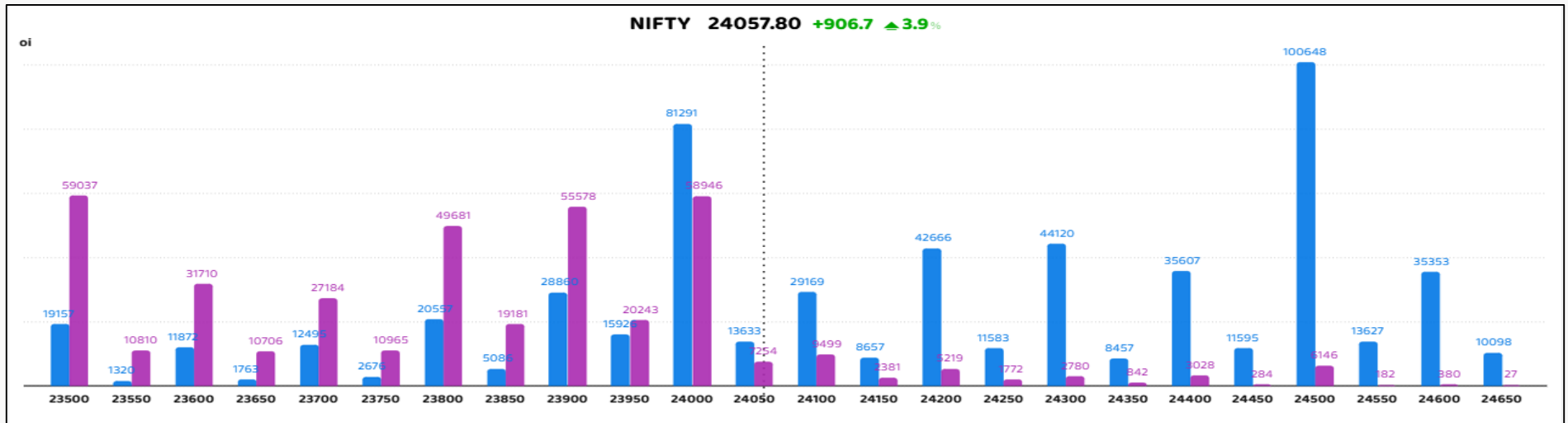
### Midcap Select Nifty



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 24,500 Call and 23,500 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 55,000 Put saw the most amount of open interest.

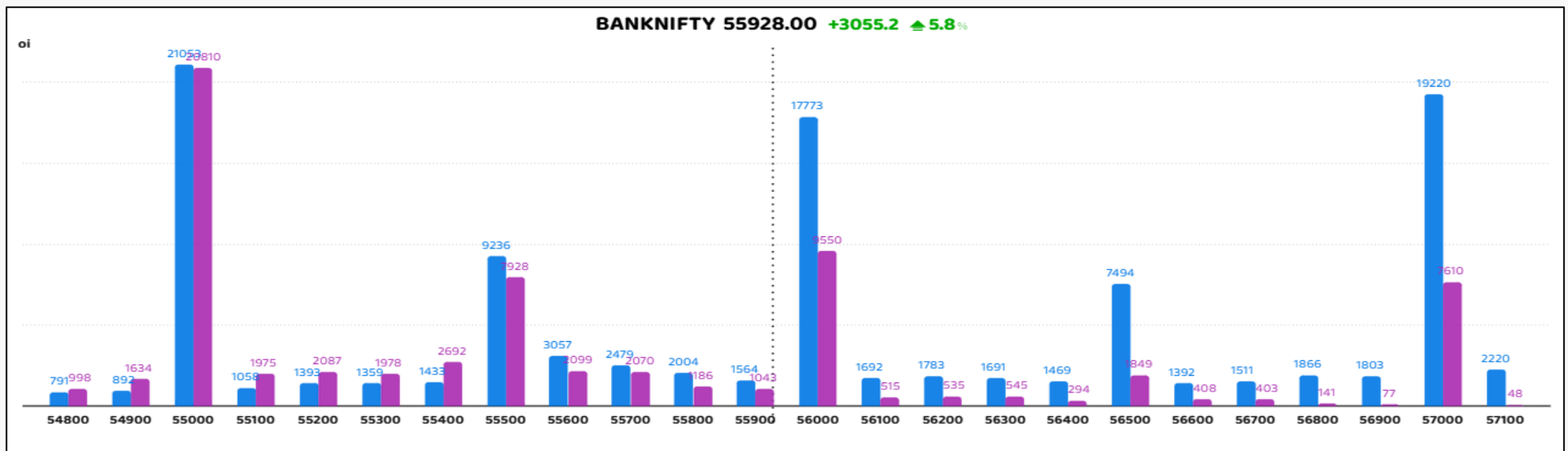
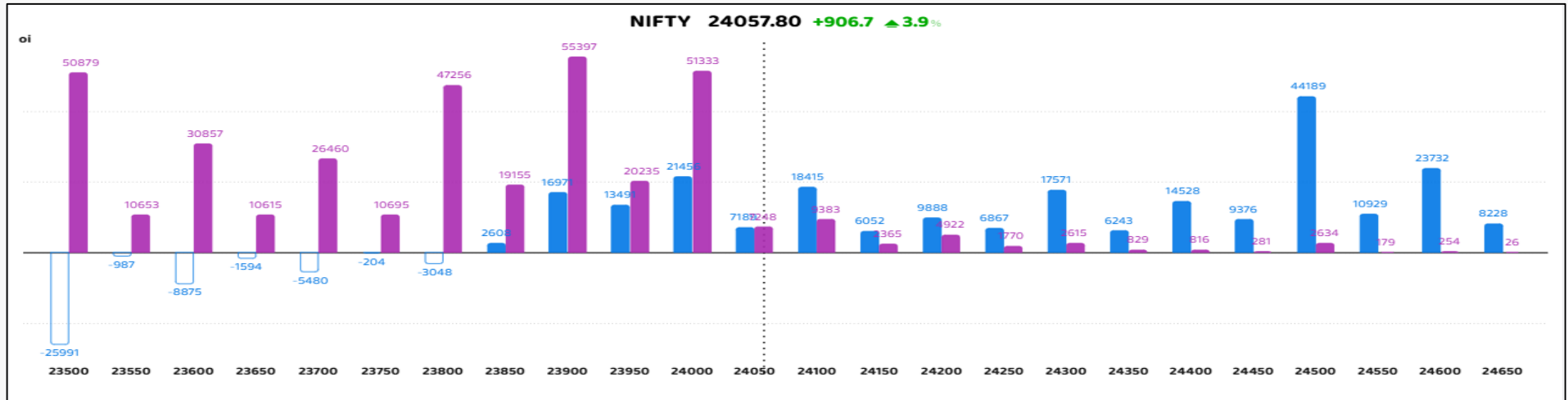


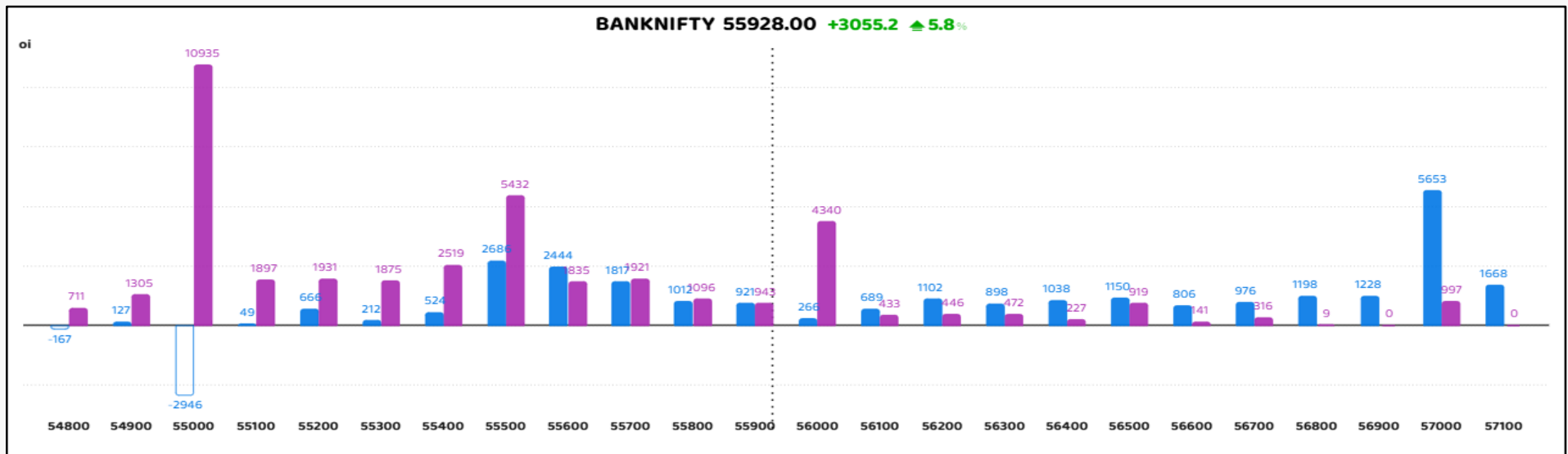
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,500 Call and the 23,900 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 55,000 Put

**Stocks with High IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
COLGATE PALMOLIV	1907.0	3.1	30.7	33.8	9.7	87.3
BHARAT HEAVY ELE	265.7	4.8	42.5	47.9	5.2	87.2
BOSCH LTD	35935.0	7.5	41.1	47.1	2.1	86.7
POLYCAB INDIA LT	7600.5	5.2	38.3	44.0	2.8	86.2
APOLLO HOSPITALS	7401.5	1.0	27.2	29.7	12.9	85.5

**Stocks with Low IVR:**

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ASHOK LEYLAND	172.5	12.8	41.3	734.8	18.5	3.2
ADITYA BIRLA CAP	338.4	9.7	39.9	658.6	8.2	4.9
CHOLAMANDALAM IN	1554.3	9.5	35.1	186.8	19.6	9.2
HINDALCO INDS	951.8	-0.3	36.8	254.2	12.3	10.1
REC LTD	342.7	4.0	35.1	244.9	8.0	11.4

### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
FORTIS HEALTHCAR	840.6	0.1	37.3	37.3	21.3	100.0
BOSCH LTD	35935.0	7.5	41.1	47.1	2.1	99.7
SRF LTD	2435.1	1.6	38.3	54.2	21.1	98.0
GRASIM INDS LTD	2756.2	5.2	30.5	34.7	13.8	97.8
COLGATE PALMOLIV	1907.0	3.1	30.7	33.8	9.7	97.4

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RAIL VIKAS NIGAM	274.9	5.2	34.4	127.8	17.4	23.9
INDIAN ENERGY EX	129.4	1.9	32.5	76.3	8.0	30.6
ASTRAL LTD	1525.5	-1.2	25.8	47.1	18.8	34.7
RBL BANK LTD	322.9	3.3	28.5	71.1	10.6	37.5
VODAFONE IDEA LT	9.2	6.6	53.3	212.9	10.0	38.4

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
360ONE	974.4	4.9	6,204.0	1,519.0	4.1
CUMMINSIND	4,796.3	3.4	12,513.0	3,244.0	3.9
ADANIENSOL	1,073.3	8.8	17,959.0	4,940.0	3.6
IRFC	98.9	6.4	16,580.0	4,625.0	3.6
CIPLA	1,215.9	1.1	17,710.0	5,010.0	3.5

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALBHARAT	1,922.6	4.7	3,928.0	5,650.0	1.4
SBILIFE	1,907.6	3.6	3,566.0	3,620.0	1.0
ABCAPITAL	338.4	9.7	6,969.0	6,615.0	0.9
BDL	1,291.4	4.5	13,590.0	12,820.0	0.9
AUBANK	967.8	8.9	11,357.0	10,338.0	0.9

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BOSCHLTD	35,935.0	7.4	9,847.0	10,307.0	95.5
RBLBANK	322.8	3.3	8,588.0	9,308.0	92.3
RELIANCE	1,347.8	3.3	159,779.0	177,455.0	90.0
DMART	4,368.8	-2.2	12,283.0	13,795.0	89.0
ADANIPTS	1,453.3	5.2	19,150.0	21,925.0	87.3

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
BOSCHLTD	35,935.0	7.4	6,165.0	6,233.0	98.9
DRREDDY	1,191.4	-0.4	8,166.0	8,342.0	97.9
ASHOKLEY	172.5	12.8	12,155.0	12,434.0	97.8
JSWSTEEL	1,194.3	3.7	8,383.0	8,598.0	97.5
DMART	4,368.8	-2.2	10,263.0	10,564.0	97.2

**Call Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
AMBUJACEM	446.8	6.3	26,436.0	19,411.0	100.0
ADANIGREEN	1,029.6	11.3	58,156.0	52,918.0	100.0
ADANIENT	2,043.8	8.6	83,852.0	82,165.0	100.0
BOSCHLTD	35,935.0	7.4	35,298.0	36,666.0	96.3
IOC	143.4	6.6	31,530.0	34,936.0	90.3

**Put Volume Relative to Record High**

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
ADANIPOINTS	1,453.3	5.2	45,283.0	45,014.0	100.0
AMBUJACEM	446.8	6.3	11,098.0	10,230.0	100.0
NESTLEIND	1,213.7	-0.7	4,169.0	4,587.0	90.9
BOSCHLTD	35,935.0	7.4	9,991.0	11,197.0	89.2
LODHA	778.8	8.5	17,124.0	19,331.0	88.6

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

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
JUBLFOOD	435.8	5.5	12,459.0	7,556.0	1.6
LODHA	778.8	8.5	13,174.0	10,260.0	1.3
BOSCHLTD	35,935.0	7.4	9,847.0	8,306.0	1.2
DMART	4,368.8	-2.2	12,283.0	10,389.6	1.2
TITAN	4,492.5	6.2	18,772.0	16,151.2	1.2

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

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
SAMMAANCAP	152.7	5.2	4,896.0	2,973.2	1.6
JUBLFOOD	435.8	5.5	8,134.0	4,991.0	1.6
TITAN	4,492.5	6.2	14,685.0	9,211.6	1.6
DMART	4,368.8	-2.2	10,263.0	7,242.5	1.4
JSWSTEEL	1,194.3	3.7	8,383.0	5,974.0	1.4

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
SAIL	164.4	2.4	7,097.0	833.8	8.5
ADANIPTS	1,453.3	5.2	93,242.0	20,070.9	4.6
LICI	793.7	6.8	15,423.0	3,535.4	4.4
360ONE	974.4	4.9	6,204.0	1,687.1	3.7
BOSCHLTD	35,935.0	7.4	35,298.0	9,840.8	3.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
SAIL	164.4	2.4	3,204.0	410.2	7.8
ASHOKLEY	172.5	12.8	31,073.0	10,684.3	2.9
BOSCHLTD	35,935.0	7.4	9,991.0	3,474.1	2.9
LICI	793.7	6.8	5,406.0	1,944.0	2.8
JUBLFOOD	435.8	5.5	17,801.0	6,683.6	2.7

## 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
ADANIEN	2100	784860	2.7%	2044	2200	643647	7.6%	JIOFIN	300	4272300	21.5%	247	230	2998600	-6.8%
ADANIPTS	1500	1905225	3.2%	1453	1400	813200	-3.7%	JSWSTEEL	1160	942300	-2.9%	1194	1100	899775	-7.9%
APOLLOHOSP	7500	113875	1.3%	7402	6700	77375	-9.5%	KOTAKBANK	370	3868000	-2.7%	380	335	3248000	-11.9%
ASIANPAINT	2300	565250	0.8%	2282	1900	450000	-16.8%	LT	4000	685125	-0.1%	4006	4000	621250	-0.1%
AXISBANK	1240	1003750	-7.0%	1333	1180	1208125	-11.5%	M&M	3100	413000	-3.4%	3210	3000	341000	-6.5%
BAJAJ-AUTO	9000	112200	-3.9%	9366	8000	107700	-14.6%	MARUTI	12900	129750	-5.2%	13602	13000	92750	-4.4%
BAJAJFINSV	1760	335000	-1.4%	1785	1620	344500	-9.2%	MAXHEALTH	1000	462525	6.3%	941	950	158550	0.9%
BAJFINANCE	1000	1770000	9.3%	915	800	1600500	-12.6%	NESTLEIND	1250	446500	3.0%	1214	1200	299000	-1.1%
BEL	500	5349450	15.4%	433	400	2676150	-7.6%	NTPC	400	5970000	6.9%	374	380	1827000	1.6%
BHARTIARTL	1900	1337600	2.1%	1862	1800	929575	-3.3%	ONGC	293	9807750	2.6%	286	270	5150250	-5.4%
CIPLA	1220	684750	0.3%	1216	1160	524250	-4.6%	POWERGRID	320	5405500	8.5%	295	300	2701800	1.7%
COALINDIA	500	4106700	11.3%	449	440	1559250	-2.1%	RELIANCE	1400	9964500	3.9%	1348	1300	4444000	-3.5%
DRREDDY	1300	948125	9.1%	1191	1200	966875	0.7%	SBILIFE	2100	87375	10.1%	1908	1600	325125	-16.1%
EICHERMOT	8000	246500	12.2%	7131	6900	112800	-3.2%	SBIN	1100	4166250	3.6%	1061	1000	3419250	-5.8%
ETERNAL	240	6370475	-1.5%	244	230	4311650	-5.6%	SHRIRAMFIN	1000	1296900	-2.3%	1023	900	985875	-12.0%
GRASIM	2620	320500	-4.9%	2756	2600	142000	-5.7%	SUNPHARMA	1800	654850	5.0%	1715	1690	431200	-1.4%
HCLTECH	1450	405300	-0.8%	1461	1360	383250	-6.9%	TATACONSUM	1100	201300	2.9%	1069	930	433950	-13.0%
HDFCBANK	800	6741900	-2.0%	816	750	3292850	-8.1%	TMPV	380	3152800	13.5%	335	300	3696800	-10.4%
HDFCLIFE	600	2679600	0.3%	598	520	820600	-13.1%	TATASTEEL	195	24453000	-4.5%	204	200	8222500	-2.0%
HINDALCO	900	2806300	-5.4%	952	900	1379000	-5.4%	TCS	2600	1127350	1.6%	2559	2400	1373400	-6.2%
HINDUNILVR	2100	770700	-2.1%	2146	1900	483000	-11.4%	TECHM	1500	767400	3.3%	1451	1320	635400	-9.1%
ICICIBANK	1400	1552600	6.9%	1309	1200	1682800	-8.3%	TITAN	4200	333200	-6.5%	4493	4200	423500	-6.5%
INDIGO	4700	676650	1.8%	4616	4200	294450	-9.0%	TRENT	4000	275900	2.4%	3905	3800	191500	-2.7%
INFY	1400	2598000	4.0%	1346	1280	2076000	-4.9%	ULTRACEMCO	12000	58150	3.4%	11603	10000	37000	-13.8%
ITC	300	21726400	-0.8%	302	300	4707200	-0.8%	WIPRO	200	7275000	-1.7%	203	190	4752000	-6.6%

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.

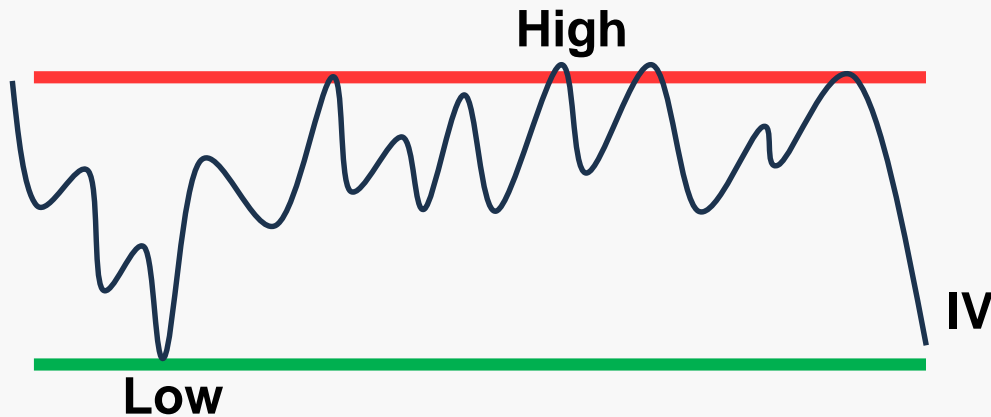


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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