



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,729	0.2%▲
Open Interest (OI)	1,65,81,675	1.5%▲
Change in OI (abs)	1,65,81,675	2,41,575▲
Premium / Discount (Abs)	109	24▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	55,989	0.1%▲
Open interest (OI)	21,53,900	1.1%▲
Change in OI (abs)	21,53,900	22,345▲
Premium / Discount (Abs)	313	19▼
Inference	Long Build Up	

Volatility Insights

	Value	Change
India VIX Index	15.74	0.81▼
Nifty ATM IV (%)	15.03	1.0▼
Bank Nifty ATM IV (%)	15.87	0.7▼
PCR (Nifty)	0.73	0.08▲
PCR (Bank Nifty)	0.81	0.06▼

The Long Ratio for FII Index Futures **jump** at 17.1%, **up** from 16.7% in the **last session..**

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RVNL	56,69,125	81.2%	432.7	6.8%
KAYNES	1,24,800	45.8%	5762.5	0.5%
FORTIS	20,35,150	43.9%	743.1	1.3%
PPLPHARMA	23,95,000	13.8%	206.76	1.1%
BLUESTARCO	2,71,050	8.2%	1560.3	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ABFRL	8,08,80,800	161.9%	77.3	-10.5%
MAZDOCK	13,87,925	23.5%	3434.1	-0.4%
BDL	13,57,850	19.6%	1959.7	-1.4%
MANKIND	3,69,675	10.7%	2359	-0.2%
CHOLAFIN	1,19,58,750	9.9%	1521	-3.3%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PAYTM	2,55,65,350	-6.0%	942.55	1.2%
ETERNAL	20,24,20,225	-4.9%	246.77	3.2%
COFORGE	1,22,05,875	-2.9%	1726	1.1%
BHARTIARTL	4,55,86,225	-1.9%	1881.1	1.5%
POLICYBZR	55,42,050	-1.8%	1843.8	5.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MANAPPURAM	5,14,89,000	-6.1%	233.1	-2.0%
PRESTIGE	43,27,125	-3.6%	1586.2	-0.2%
PIDILITIND	37,13,750	-1.5%	3104.2	-0.1%
HCLTECH	1,49,28,900	-1.2%	1634.2	-0.2%
KPITTECH	25,76,400	-1.1%	1324	-0.3%

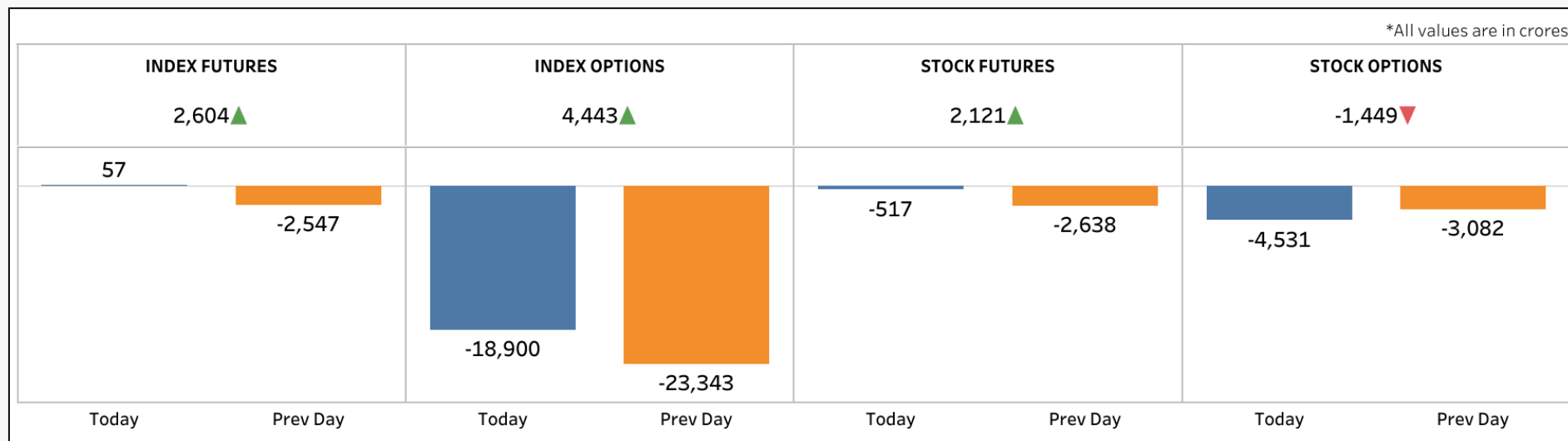
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

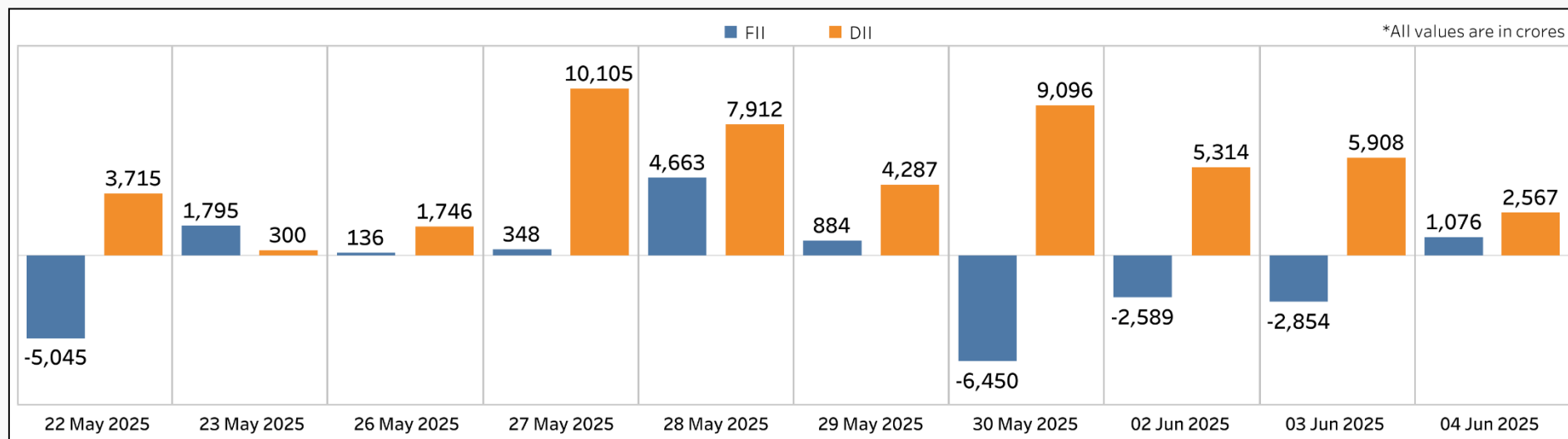
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
44,428 ▲	14,307 ▲	-4,790 ▼	35,934 ▲	0	-5,452 ▼	0	-2,516 ▼
219				4,807			
-30,068	-14,088	-65,848	-7,566	0	-645	0	-30,571
-74,496	-61,058	-43,500					-28,055
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
99,579	-102,935	135,421	1,571,885	70	44,591	10,901	-4,053,308
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
-228,808 ▼	-8,167 ▼	-20,455 ▼	-44,330 ▼	184,383 ▲	-688 ▼	25,243 ▲	10,912 ▲
192,993	7,413	68,377	16,545	65,885	1,180	-2,530	21,592
-35,815	-754	88,832	60,875	-118,498	1,868	-27,773	10,680
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-302,896	68,635	-238,170	2,048,846	203,248	-10,291	91,847	432,577
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

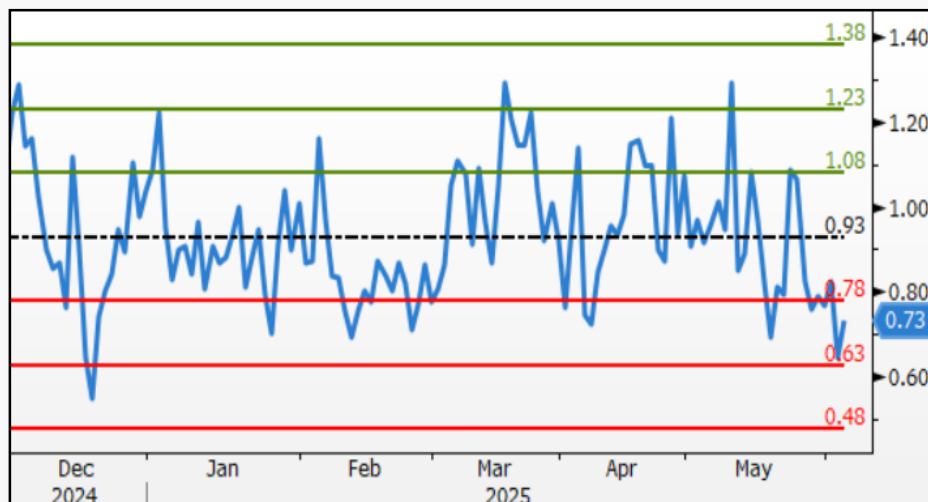
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



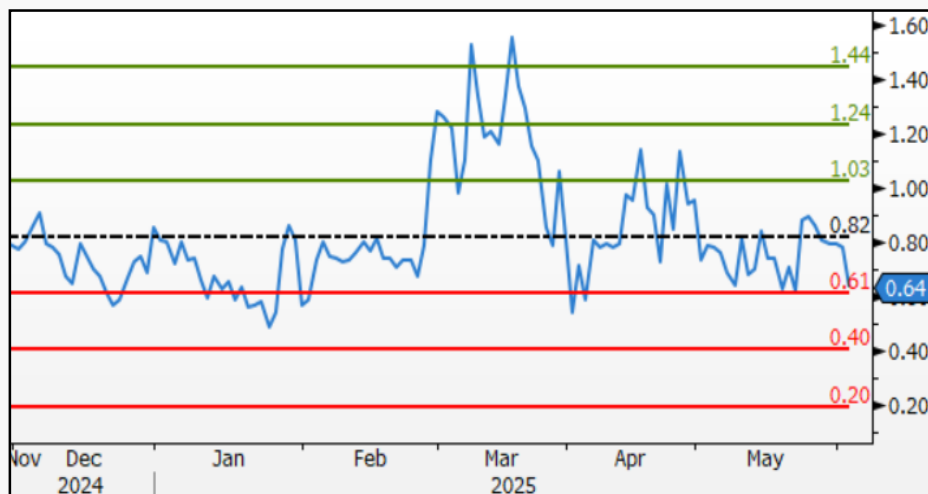
Nifty



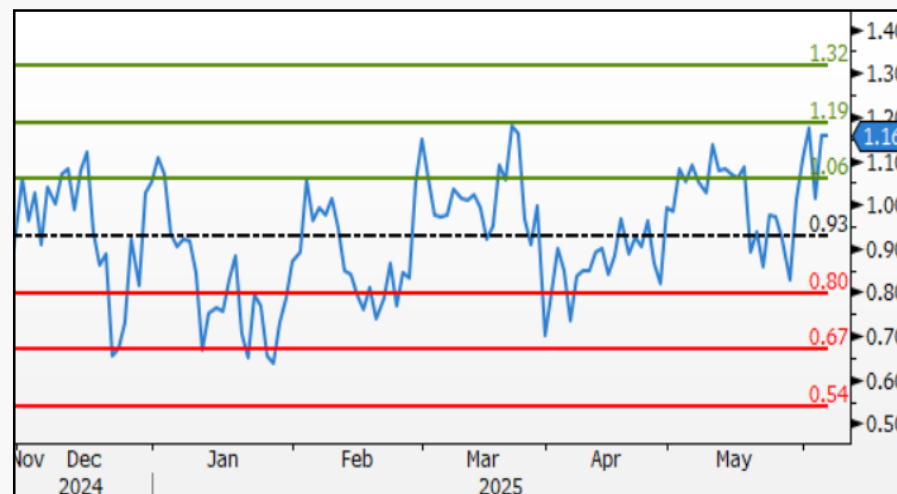
Bank Nifty



Fin Nifty



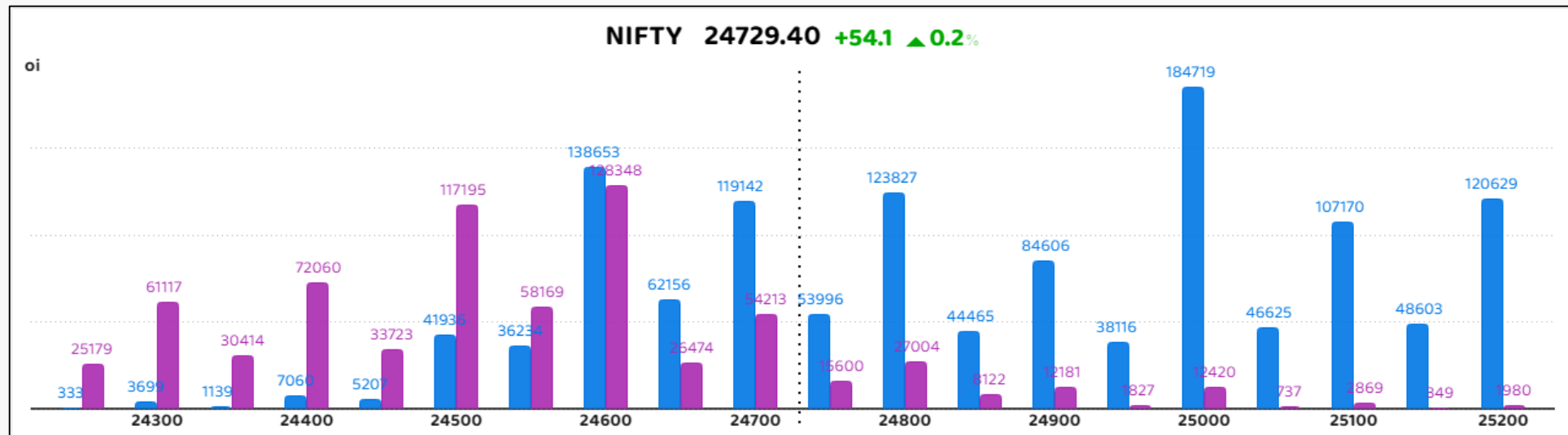
Midcap Select Nifty



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 the Nifty, the 25,000 Call and the 24,600 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 56,000 Put saw the most amount of open interest.

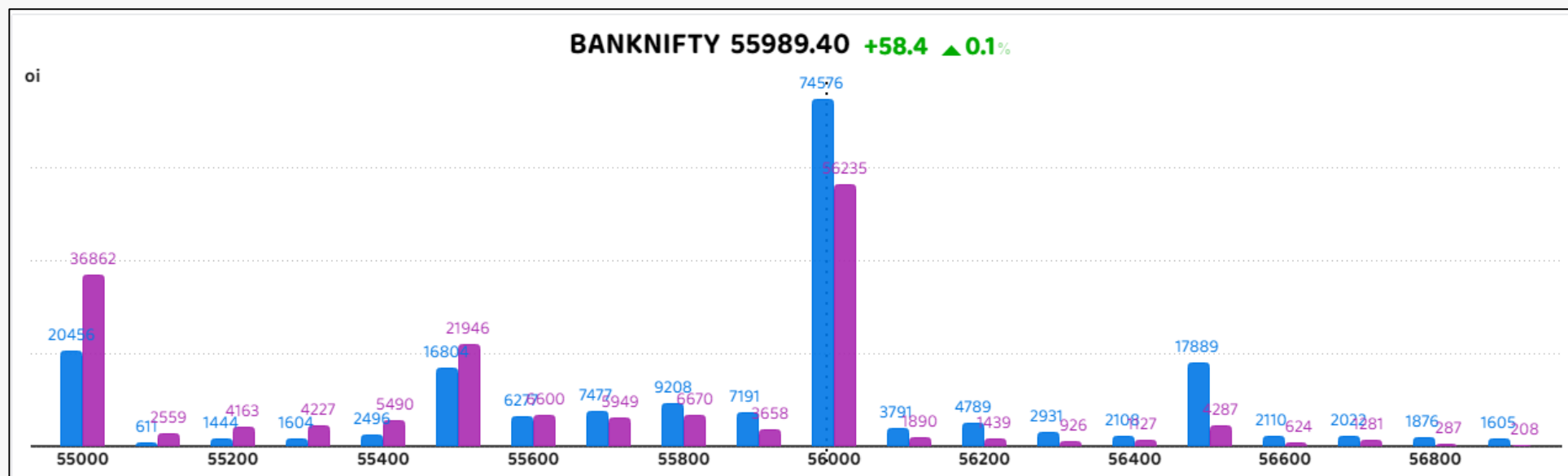
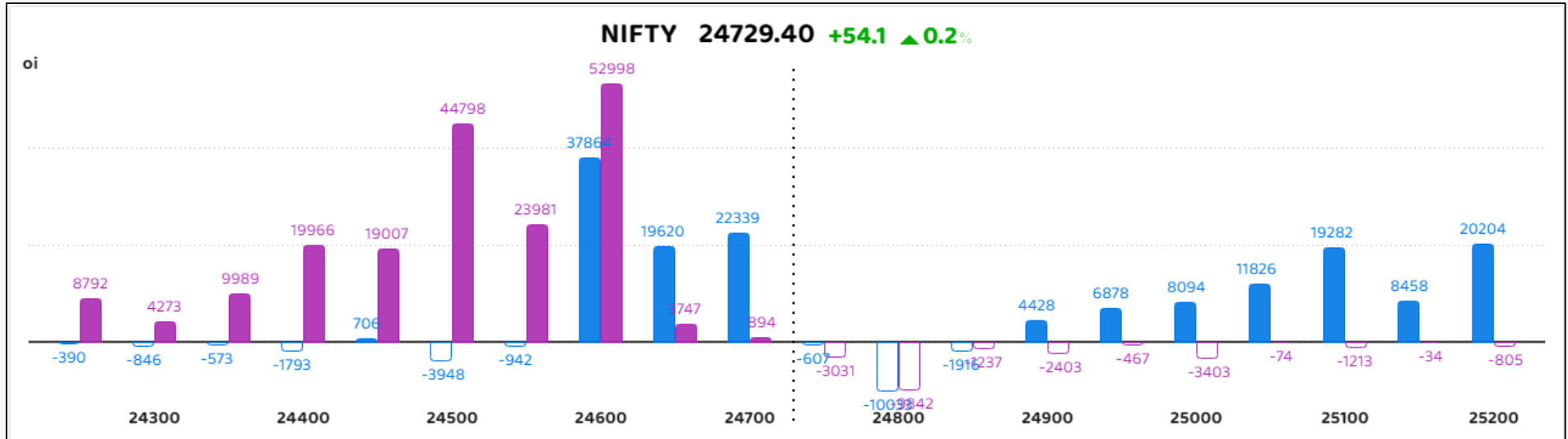


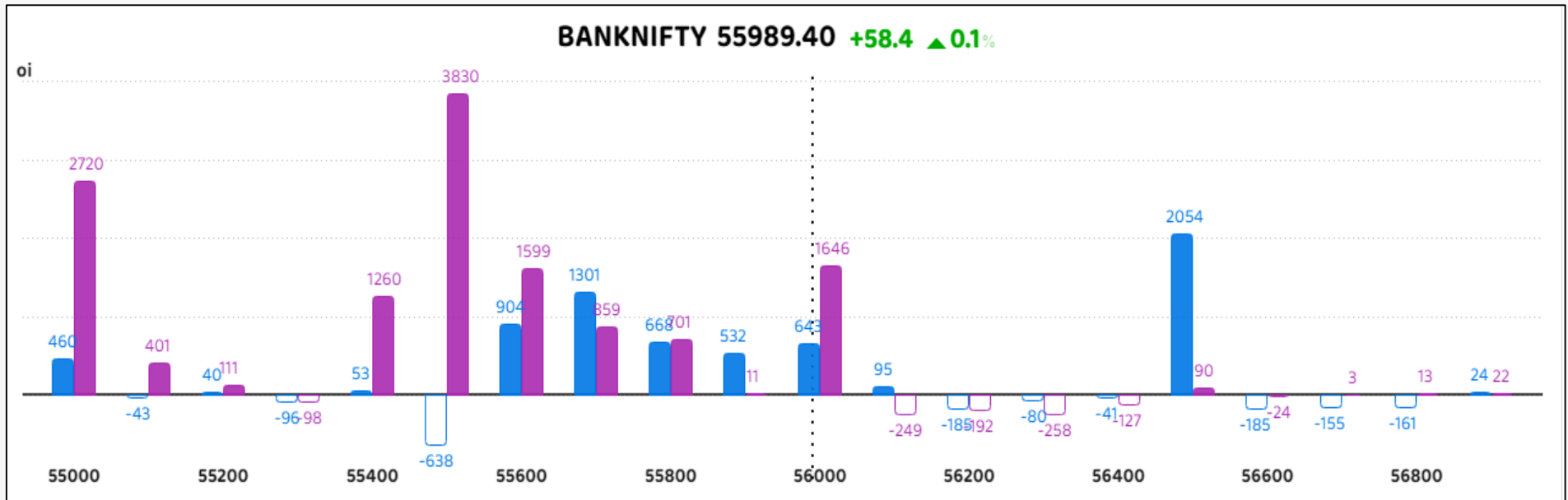
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,600 Call and the 24,600 Put



For the Bank Nifty, the biggest open interest changes were seen at the 56,500 Call & the 55,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BLUE STAR LTD	1551.5	0.5	37.5	37.5	29.2	100.0
BHARAT DYNAMICS	1947.4	-1.5	46.5	46.7	42.3	95.7
ASTRAL LTD	1522.4	1.8	29.7	38.4	2.9	75.4
MARUTI SUZUKI	12163	0.3	20.7	29.9	0.4	68.9
FORTIS HEALTHCARE	738.85	1.3	35.0	36.0	32.8	68.2

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
ONE 97 COMMUNICATIONS	939.55	1.2	39.1	59.8	39.1	0.0
ADANI GREEN ENERGY	1004.8	1.2	38.0	74.3	38.0	0.0
MAZAGON DOCK	3412.7	-0.8	46.8	48.4	46.8	0.0
UNO MINDA	1054.8	2.8	37.5	39.7	37.5	0.0
INDIAN RENEWABLE	174	0.7	37.7	69.2	37.7	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BLUE STAR LTD	1551.5	0.5	37.5	37.5	29.2	100.0
BHARAT DYNAMICS	1947.4	-1.5	46.5	46.7	42.3	97.9
OBEROI REALTY	1777.3	-1.1	40.0	50.6	23.1	92.0
HCL TECH LTD	1626.1	-0.3	27.2	46.0	17.9	83.6
PIRAMAL PHARMA	205.94	1.1	37.0	37.9	36.1	81.1

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
ADANI GREEN ENERGY	1004.8	1.2	38.0	74.3	38.0	0.0
MAZAGON DOCK	3412.7	-0.8	46.8	48.4	46.8	0.0
UNO MINDA LTD	1054.8	2.8	37.5	39.7	37.5	0.0
INDIAN RENEWABLE	174	0.7	37.7	69.2	37.7	0.0
INOX WIND LTD	184.44	1.7	45.2	85.7	45.2	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
UNO MINDA LTD	1054.8	2.8	10948	1203	9.1
TORRENT POWER	1419.1	1.1	9343	1457	6.4
CIPLA LTD	1471.9	-0.1	40870	8059	5.1
TATA CHEMICALS	915.15	1.1	16465	3330	4.9
BHARAT DYNAMICS	1947.4	-1.5	28756	6129	4.7

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
AARTI INDUS LTD	481.4	2.3	6498	11004	1.7
MPHASIS LTD	2503.3	0.1	5944	6399	1.1
BHARAT PETROLEUM	311.55	0.6	5513	5887	1.1
SUN PHARMA INDUSTRIES	1664.9	-0.2	15645	15715	1.0
MANKIND PHARMA	2345.9	-0.3	1121	1102	1.0

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
MAZAGON DOCK	3412.7	-0.8	9960	9960	100.0
MANKIND PHARMA	2345.9	-0.3	1410	1410	100.0
RAIL VIKAS NIGAM	429.95	6.5	4825	4825	100.0
BHARAT DYNAMICS	1947.4	-1.5	6335	6335	100.0
UNO MINDA LTD	1054.8	2.8	1015	1015	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MAZAGON DOCK	3412.7	-0.8	4466	4466	100.0
RAIL VIKAS NIGAM	429.95	6.5	2245	2245	100.0
BHARAT DYNAMICS	1947.4	-1.5	2084	2084	100.0
INOX WIND LTD	184.44	1.7	3485	3485	100.0
CHAMBAL FERTILISER	559.3	-0.5	4971	4971	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MAZAGON DOCK	3412.7	-0.8	38255	38255	100.0
RAIL VIKAS NIGAM	429.95	6.5	47206	47206	100.0
BHARAT DYNAMICS	1947.4	-1.5	28756	28756	100.0
UNO MINDA LTD	1054.8	2.8	10948	10948	100.0
BLUE STAR LTD	1551.5	0.5	2064	2064	100.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
MAZAGON DOCK	3412.7	-0.8	10978	13025	84.3

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
ADITYA BIRLA FASHION	76.77	-10.7	21665	7912	2.7
RAIL VIKAS NIGAM	429.95	6.5	4825	2131	2.3
FSN E-COMMERCE	195.05	-0.2	10248	4624	2.2
INOX WIND LTD	184.44	1.7	8445	3900	2.2
ALKEM LABORATORIES	4868.5	-2.6	6394	3449	1.9

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ALKEM LABORATORIES	4868.5	-2.6	4084	2270	1.8
INOX WIND LTD	184.44	1.7	3485	2117	1.6
LIC INSURANCE	953.25	0.0	7981	5292	1.5
BHARAT DYNAMICS	1947.4	-1.5	2084	1400	1.5
APOLLO HOSPITALS	6855	0.6	7224	5142	1.4

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
RAIL VIKAS NIGAM	429.95	6.5	47206	2778	17.0
BHARAT DYNAMICS	1947.4	-1.5	28756	3780	7.6
MAZAGON DOCK	3412.7	-0.8	38255	5098	7.5
ADITYA BIRLA FASHION	76.77	-10.7	60191	12752	4.7
PI INDUSTRIES	3970.3	4.1	73273	15873	4.6

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ADITYA BIRLA FAS	76.77	-10.7	38403	6138	6.3
MAZAGON DOCK SHI	3412.7	-0.8	10978	1871	5.9
CHOLAMANDALAM IN	1512.7	-3.4	13127	3927	3.3
PI INDUSTRIES	3970.3	4.1	22204	6733	3.3
SBI CARDS & PAYM	942.05	2.8	9737	3275	3.0

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	2700	1373400	8.5%	2489	2700	1506300	8.5%	ITC	440	9804800	5.5%	417	420	5651200	0.7%
ADANIPTS	1500	1357600	4.4%	1436	1400	950400	-2.5%	JIOFIN	300	9566700	3.3%	290	290	3502950	-0.1%
APOLLOHOSP	7000	314000	2.1%	6855	6800	116625	-0.8%	JSWSTEEL	1100	1146150	13.6%	969	980	510975	1.2%
ASIANPAINT	2400	810000	6.7%	2249	2300	545200	2.3%	KOTAKBANK	2100	1124000	2.6%	2046	1820	491200	-11.1%
AXISBANK	1250	3990000	6.7%	1171	1200	1425000	2.5%	LT	3740	1007400	3.1%	3627	3500	388350	-3.5%
BAJAJ-AUTO	9000	381825	5.1%	8564	8000	142050	-6.6%	M&M	3200	800625	4.8%	3053	3000	362600	-1.7%
BAJAJFINSV	2100	1176500	7.4%	1956	1900	678000	-2.9%	MARUTI	12500	366050	2.8%	12163	12000	84100	-1.3%
BAJFINANCE	10000	376625	11.3%	8987	8500	303000	-5.4%	NESTLEIND	2500	224200	4.3%	2398	2200	146200	-8.2%
BEL	400	10570650	2.4%	391	360	4919100	-7.8%	NTPC	350	7537500	6.3%	329	340	2544000	3.3%
BHARTIARTL	1880	2891325	0.2%	1875	1860	921500	-0.8%	ONGC	250	9782850	5.0%	238	240	1601600	0.8%
CIPLA	1600	2180425	8.7%	1472	1320	573950	-10.3%	POWERGRID	300	4442400	4.0%	289	270	3942000	-6.4%
COALINDIA	400	4566450	1.4%	395	400	2667000	1.4%	RELIANCE	1500	5415000	5.4%	1424	1400	2457500	-1.7%
DRREDDY	1300	1291250	3.8%	1252	1200	300625	-4.1%	SBILIFE	1860	1063500	4.7%	1776	1800	231000	1.4%
EICHERMOT	5500	192675	3.4%	5320	5000	137900	-6.0%	SBIN	850	11001000	5.4%	807	800	5502750	-0.8%
ETERNAL	250	8380000	1.8%	246	240	6530000	-2.3%	SHRIRAMFIN	720	780750	12.3%	641	600	504000	-6.4%
GRASIM	2700	336250	5.9%	2550	2500	202500	-1.9%	SUNPHARMA	1700	1419250	2.1%	1665	1600	693350	-3.9%
HCLTECH	1820	607250	11.9%	1626	1600	295050	-1.6%	TATACONSUM	1200	701328	6.7%	1124	1100	175104	-2.2%
HDFCBANK	2000	5563250	3.0%	1941	1940	2244550	-0.1%	TATAMOTORS	800	5948800	12.8%	709	700	2719200	-1.3%
HDFCLIFE	800	2876500	5.4%	759	750	893200	-1.2%	TATASTEEL	165	17754000	4.3%	158	150	9790000	-5.2%
HEROMOTOCO	4400	593850	4.7%	4201	3700	181950	-11.9%	TCS	3500	1219750	3.5%	3381	3400	698425	0.6%
HINDALCO	700	4442200	10.1%	636	600	1853600	-5.6%	TECHM	1600	619800	2.8%	1557	1360	471600	-12.6%
HINDUNILVR	2400	1819200	1.5%	2365	2300	482100	-2.7%	TITAN	3600	297500	2.9%	3500	3500	226450	0.0%
ICICIBANK	1470	2636900	2.7%	1431	1440	1641500	0.6%	TRENT	5700	375100	3.5%	5507	5500	281500	-0.1%
INDUSINDBK	820	4042000	0.7%	814	700	1952500	-14.0%	ULTRACEMCO	12000	240350	8.8%	11033	9800	119700	-11.2%
INFY	1600	2513600	3.1%	1551	1600	938800	3.1%	WIPRO	250	7560000	1.3%	247	250	4440000	1.3%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

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

- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

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

- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DII), proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** www.nseindia.com, Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100



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



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

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

Axis Securities Limited is a subsidiary company of Axis Bank Ltd. 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 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: 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 helpdesk@axisdirect.in.

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

Investments in 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 favourable view for a particular industry or sector or business group in any manner.

Registration granted by SEBI, membership of BASL (in case of IAs) and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk-free return to the investors. Our research should not be considered as an advertisement or advice, professional or otherwise. This research report and its respective content by Axis Securities made available on this page or otherwise do not constitute an offer to sell or purchase or subscribe for any securities or solicitation of any investments or investment services for the residents of Canada and / or USA or any jurisdiction where such an offer or solicitation would be illegal.

Subject company(ies) may have been client during 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 any notice. The report and information contained herein is 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 of 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 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.

Disclaimer & Disclosures :

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 is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. Axis Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and 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 needs of 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 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 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 service 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 minimize conflict in preparation of research report. Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with 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 with 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 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 percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different 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 centres 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 position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

Disclaimer & Disclosures:

Axis Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with 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 with 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 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 percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report. Axis Securities may have issued other reports that are inconsistent with and reach different 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 centres 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 position in the above mentioned scrip(s) and therefore may be considered as interested. This should not be construed as invitation or solicitation to do business with Axis Securities. Axis Securities is also a Portfolio Manager. Portfolio Management Team (PMS) takes its investment decisions independent of the PCG research and accordingly PMS may have positions contrary to the PCG research recommendation.

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