



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,612	0.3%▲
Open Interest (OI)	1,67,62,050	4.2%▲
Change in OI (abs)	1,67,62,050	6,70,500▲
Premium / Discount (Abs)	89	12▲
<b>Inference</b>	<b>Long Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,454	0.5%▲
Open interest (OI)	23,65,685	2.4%▲
Change in OI (abs)	23,65,685	55,650▲
Premium / Discount (Abs)	198	41▼
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.2	0.36▼
Nifty ATM IV (%)	11.45	0.4▼
Bank Nifty ATM IV (%)	12.44	0.3▼
PCR (Nifty)	1.04	0.09▲
PCR (Bank Nifty)	1.02	0.02▲

The FII Long Ratio in Index Futures **jump** to 28.7%, **up** from 26.2% in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ABFRL	5,59,98,800	6.9%	79.77	1.9%
HDFCAMC	26,90,850	6.3%	5136.5	2.2%
DELHIVERY	1,26,16,000	5.9%	409.55	3.2%
IIFL	1,87,11,000	5.4%	504.25	3.0%
KOTAKBANK	2,89,95,200	4.8%	2233.2	3.6%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BSE	1,42,75,500	13.4%	2490	-5.8%
360ONE	13,08,500	12.0%	1227.7	-2.0%
ANGELONE	28,77,500	9.8%	2700.3	-3.8%
PGEL	37,13,500	9.1%	744.55	-2.4%
CDSL	98,82,375	8.3%	1756.6	-1.6%

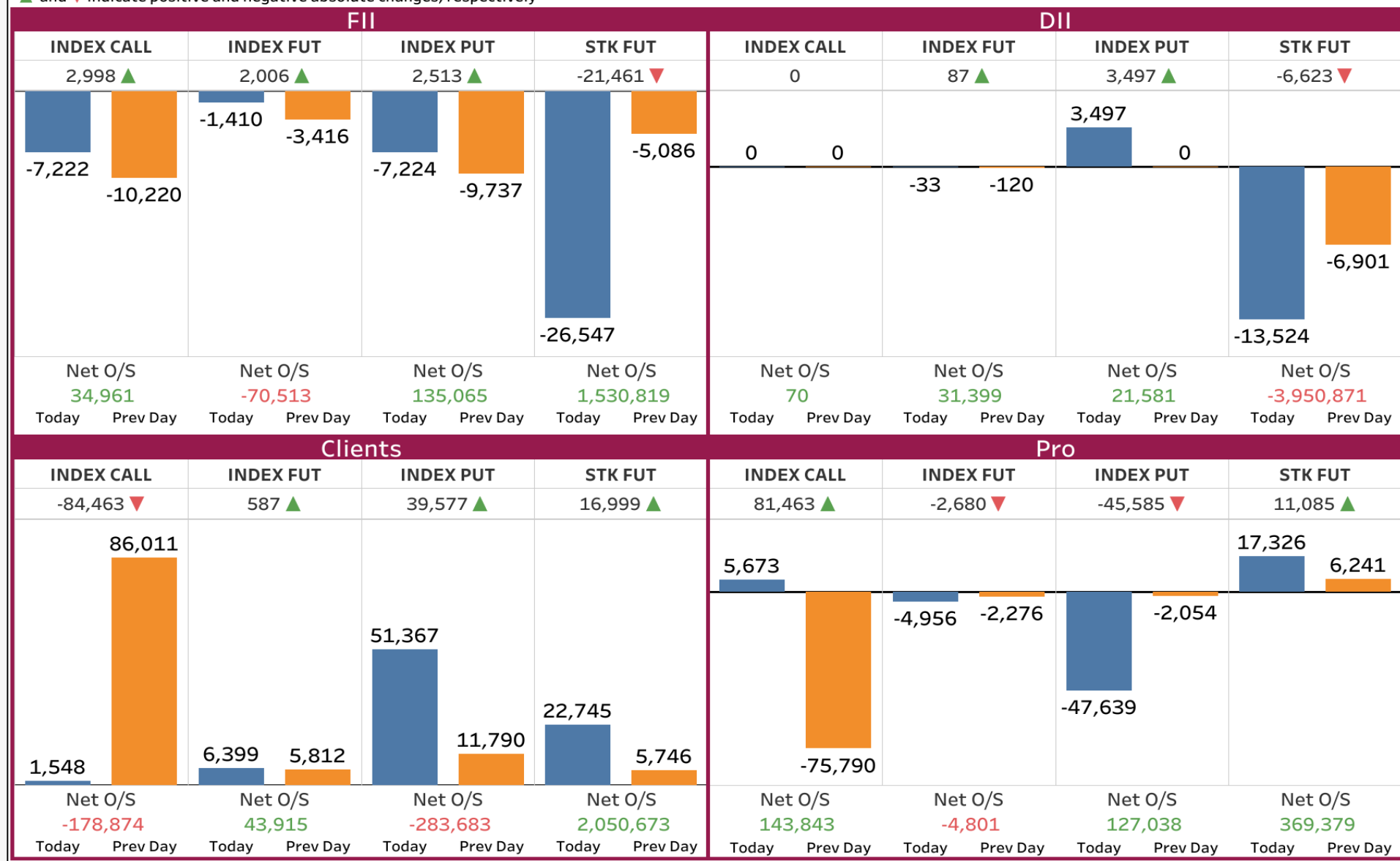
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NYKAA	5,69,28,125	-4.8%	202.92	0.5%
IGL	1,74,29,500	-4.2%	228.18	0.4%
CUMMINSIND	40,92,400	-3.6%	3455	1.3%
GODREJCP	1,01,26,500	-3.3%	1281.5	0.6%
PHOENIXLTD	34,11,100	-2.6%	1581.9	1.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BOSCHLTD	3,20,175	-11.5%	35115	-1.4%
GAIL	9,58,67,100	-3.4%	192.67	-0.5%
FORTIS	79,17,400	-2.8%	793.85	-1.8%
MGL	26,06,800	-2.5%	1520.7	-1.5%
KAYNES	5,81,300	-2.0%	6026.5	-2.9%

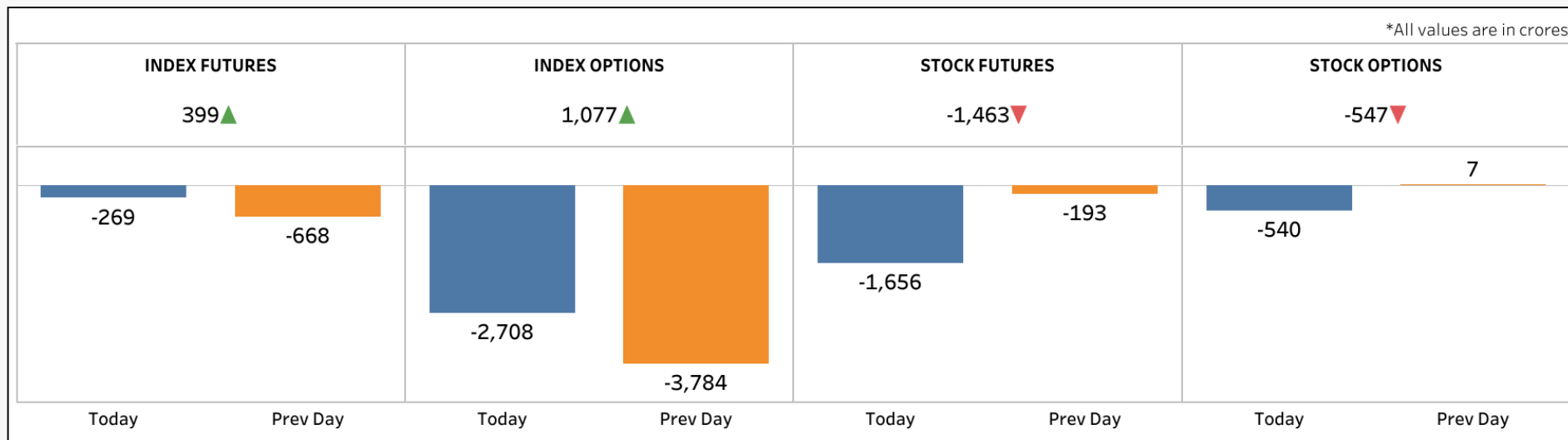
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

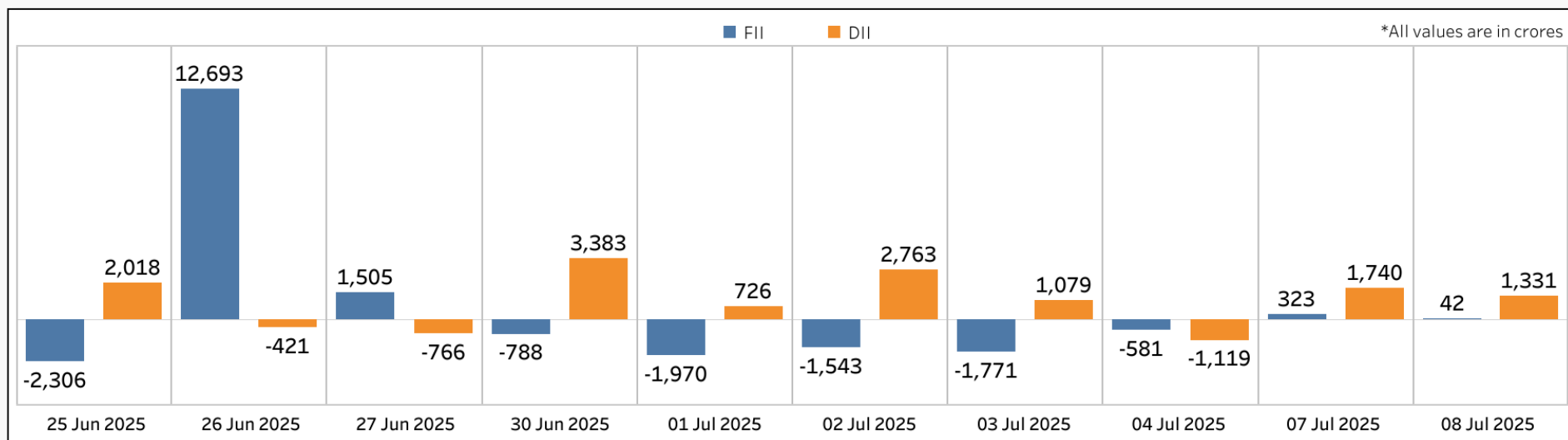
▲ and ▼ indicate positive and negative absolute changes, respectively



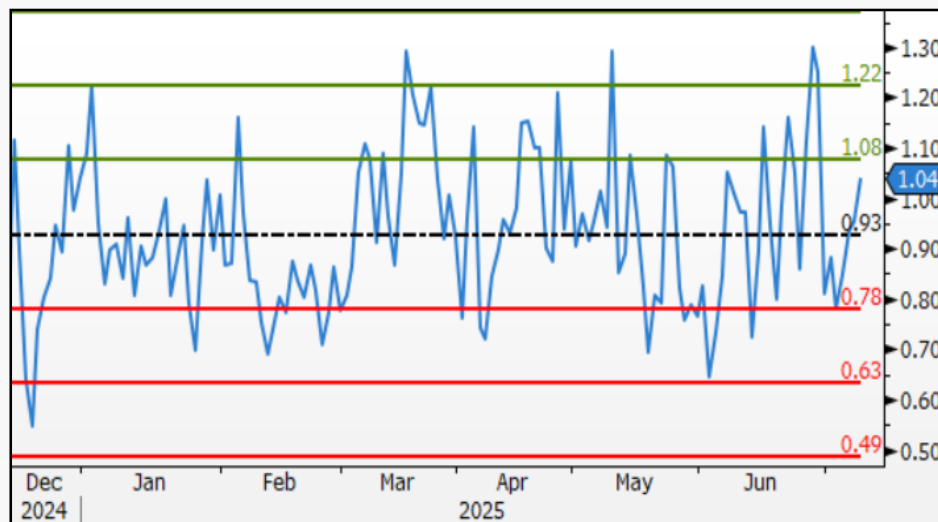
## Daily Net Open Interest Change



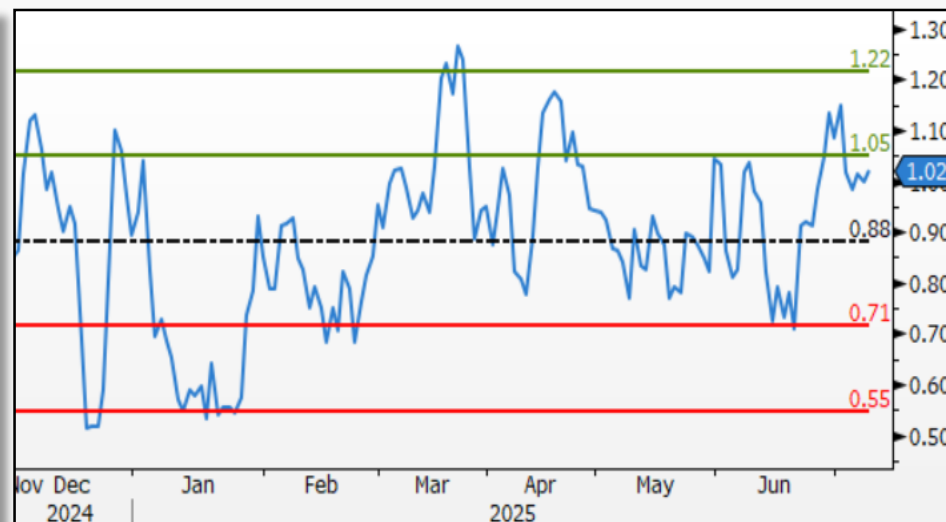
## DII and FII Daily Cash Market Flows



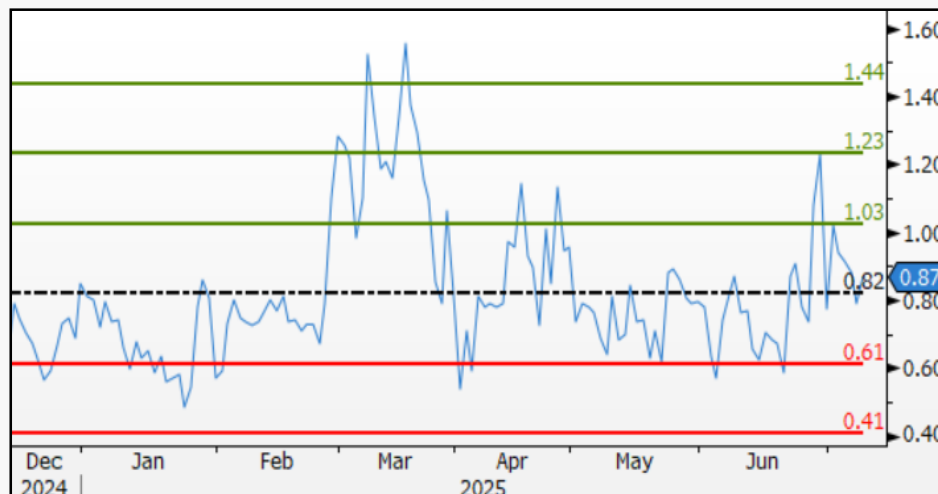
## Nifty



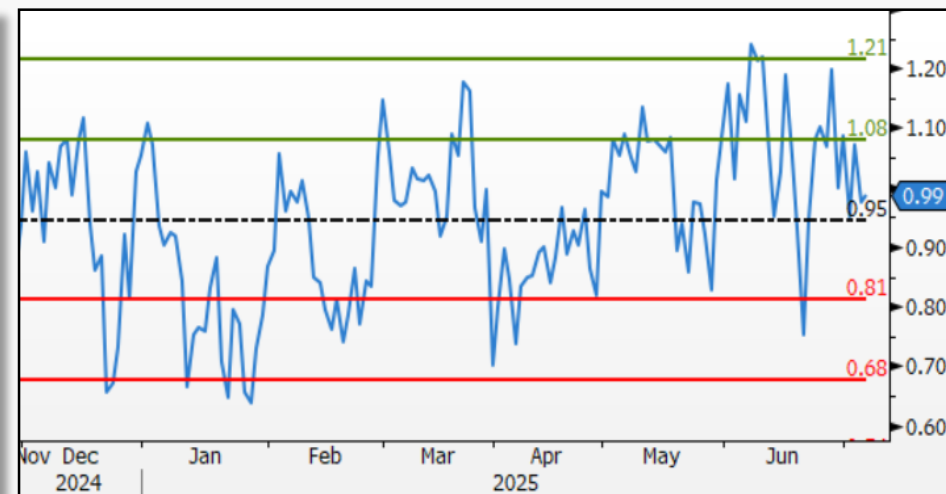
## Bank Nifty



## Fin Nifty

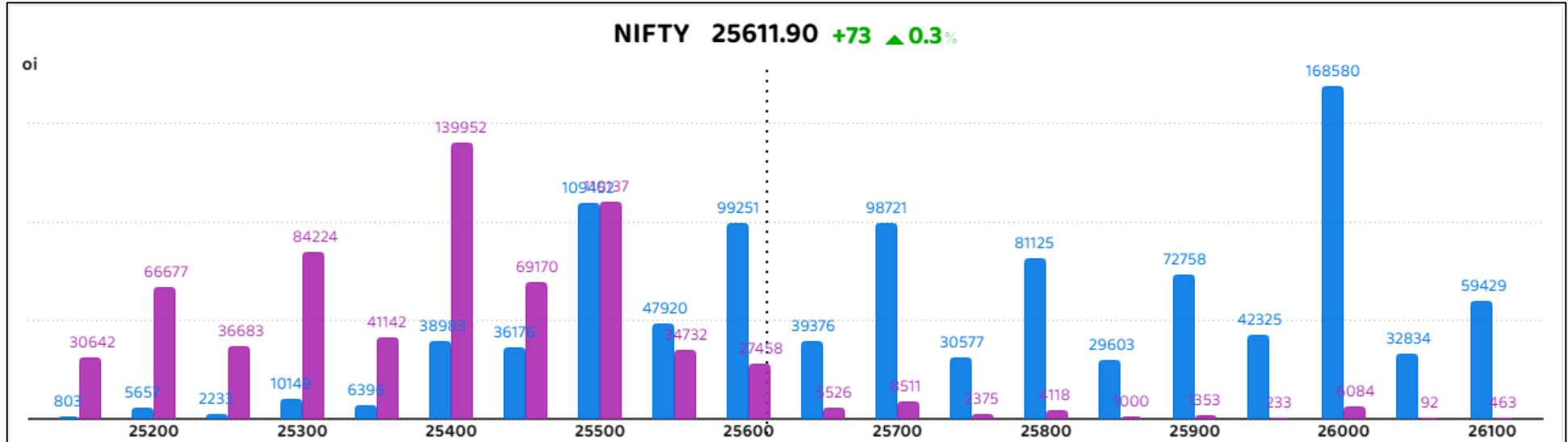


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 26,000 Call and the 25,400 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 57,000 Put saw the most amount of open interest.

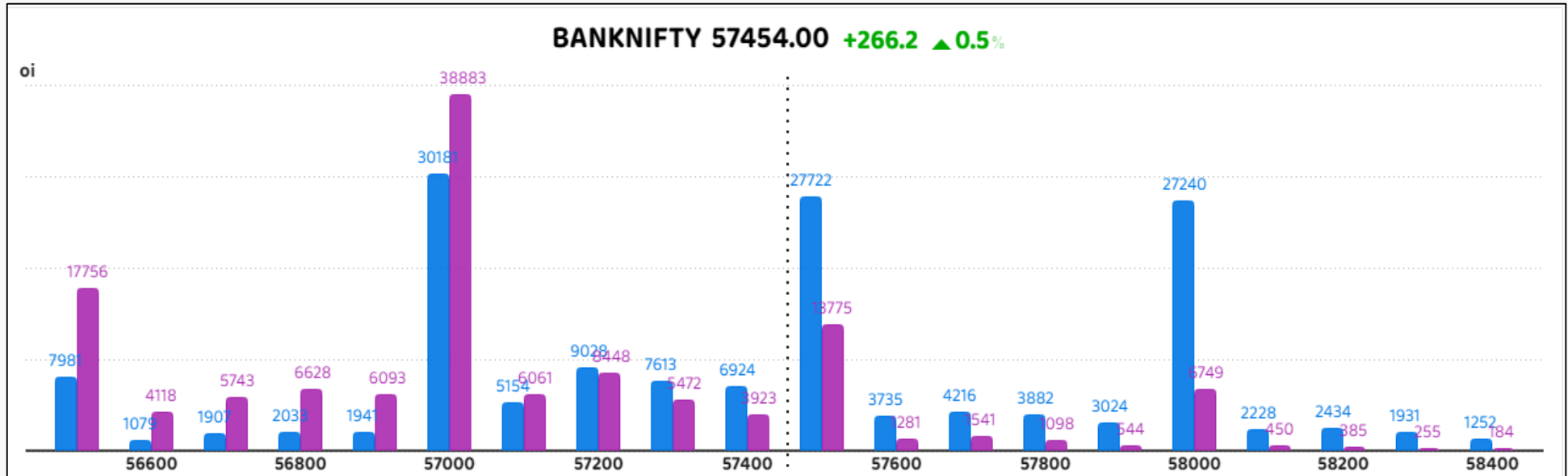
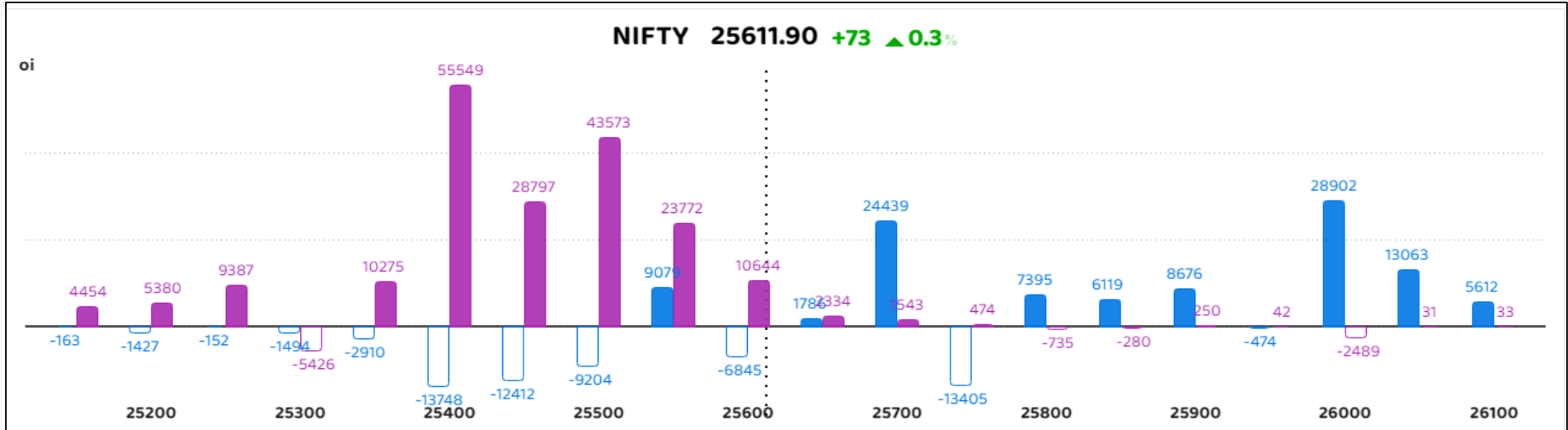


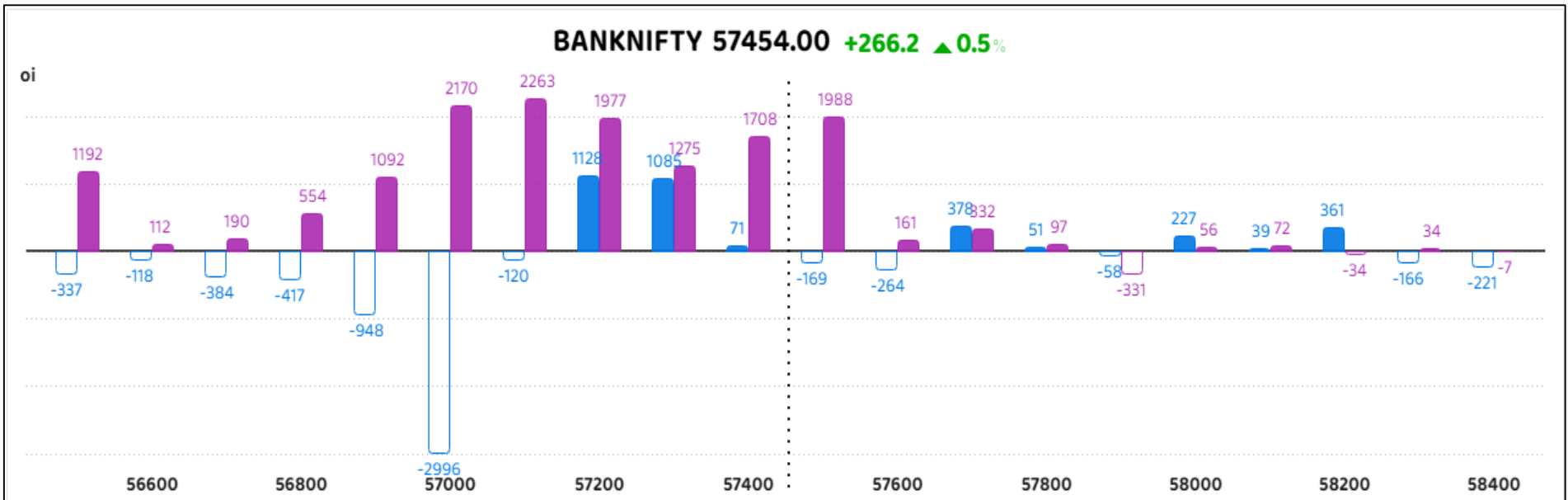
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,700 Call and the 25,400 Put



For the Bank Nifty, the biggest open interest changes were seen at the 57,000 Call & the 57,100 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIXON TECHNOLOGIES	15473	0.3	37.2	53.0	1.8	69.2
M&M FIN SERVICES	269.85	0.7	40.9	50.0	23.4	65.6
TORRENT PHARMA	3322.4	-0.9	26.2	36.2	8.3	64.4
SBI CARDS & PAYMENTS	918.75	1.1	24.9	36.9	4.6	62.9
GLENMARK PHARMA	1830.5	-1.6	35.5	47.4	15.9	62.1

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
MANKIND PHARMA LTD	2431.7	0.9	25.0	33.2	25.0	0.0
ONE 97 COMMUNICATIONS	911.05	-1.1	35.1	59.8	35.1	0.0
UNO MINDA LTD	1103.2	0.9	30.4	42.4	30.4	0.0
IREDA	166.48	-0.4	6.7	74.5	6.7	0.0
BLUE STAR LTD	1810.1	-0.9	23.4	37.9	23.4	0.0



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
M&M FIN SERVICES	269.85	0.7	40.9	50.0	23.4	96.1
KAYNES TECHNOLOGY	6007	-2.7	39.2	49.4	32.2	92.9
HCL TECH LTD	1708.1	-0.1	28.5	46.0	17.9	91.2
GLENMARK PHARMA	1830.5	-1.6	35.5	47.4	15.9	77.5
TATA ELXSI LTD	6171.5	-0.1	34.8	51.9	23.0	76.0

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
MANKIND PHARMA LTD	2431.7	0.9	25.0	33.2	25.0	0.0
ONE 97 COMMUNICATIONS	911.05	-1.1	35.1	59.8	35.1	0.0
UNO MINDA LTD	1103.2	0.9	30.4	42.4	30.4	0.0
IREDA	166.48	-0.4	6.7	74.5	6.7	0.0
BLUE STAR LTD	1810.1	-0.9	23.4	37.9	23.4	0.0

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
ADITYA BIRLA FASHION	79.52	1.8	21656	3356	6.5
NHPC LTD	87.96	4.2	18001	3445	5.2
ABB INDIA LTD	5840	-0.1	6057	1166	5.2
CUMMINS INDIA	3478	1.2	20219	4005	5.1
SIEMENS LTD	3296.8	0.6	27607	5470	5.1

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ONE 97 COMMUNICATIONS	911.05	-1.1	9365	13557	1.4
BLUE STAR LTD	1810.1	-0.9	1147	1457	1.3
MCX INDIA LTD	8496	-2.9	61240	77140	1.3
ZYDUS LIFESCIENCES	983.2	-1.6	3852	4380	1.1
ANGEL ONE LTD	2692.6	-3.6	55490	49796	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5440	-1.1	83224	83224	100.0
BOSCH LTD	35490	-1.5	17998	17998	100.0
GLENMARK PHARMA	1830.5	-1.6	17853	17853	100.0
BLUE STAR LTD	1810.1	-0.9	3425	3553	96.4
KAYNES TECHNOLOGY	6007	-2.7	4377	4633	94.5

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TRENT LTD	5440	-1.1	34469	34469	100.0
MANKIND PHARMA LTD	2431.7	0.9	1796	1796	100.0
BLUE STAR LTD	1810.1	-0.9	4493	4493	100.0
LAURUS LABS LTD	778.3	0.3	8004	8491	94.3
DABUR INDIA LTD	513.1	0.1	10816	11728	92.2

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NHPC LTD	87.96	4.2	18001	21233	84.8

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NO STOCK OPTION MET THE CONDITION MENTIONED IN THE FOOTNOTE					

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
BOSCH LTD	35490	-1.5	17998	5238	3.4
TRENT LTD	5440	-1.1	83224	34177	2.4
TITAN CO LTD	3441.3	-6.1	43004	19843	2.2
GLENMARK PHARMA	1830.5	-1.6	17853	10151	1.8
TORRENT PHARMA	3322.4	-0.9	5499	3434	1.6

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
BOSCH LTD	35490	-1.5	7009	2317	3.0
GODREJ CONSUMER	1277.4	0.7	4821	2267	2.1
BLUE STAR LTD	1810.1	-0.9	4493	2154	2.1
TITAN CO LTD	3441.3	-6.1	23988	12125	2.0
LAURUS LABS LTD	778.3	0.3	8004	4339	1.8

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
NHPC LTD	87.96	4.2	18001	3510	5.1
ADITYA BIRLA FASHION	79.52	1.8	21656	5038	4.3
KOTAK MAHINDRA	2224.5	3.5	117083	33061	3.5
IIFL FINANCE LTD	501.25	2.9	16355	4862	3.4
HDFC AMC	5109	2.2	28034	9122	3.1

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TITAN CO LTD	3441.3	-6.1	102620	22063	4.7
BOSCH LTD	35490	-1.5	21835	5496	4.0
ANGEL ONE LTD	2692.6	-3.6	49796	15010	3.3
KOTAK MAHINDRA	2224.5	3.5	62330	19360	3.2
NHPC LTD	87.96	4.2	3445	1149	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	1526700	4.2%	2591	2700	1792800	4.2%	ITC	420	11920000	0.7%	417	420	5414400	0.7%
ADANIPTS	1500	1550875	3.6%	1449	1400	1432125	-3.3%	JIOFIN	350	8537550	6.4%	329	300	4925600	-8.8%
APOLLOHOSP	7600	240250	0.5%	7565	7000	190875	-7.5%	JSWSTEEL	1180	1451925	12.9%	1045	1000	745200	-4.3%
ASIANPAINT	2500	1508750	0.6%	2485	2300	525750	-7.4%	KOTAKBANK	2300	960400	3.4%	2225	2100	894000	-5.6%
AXISBANK	1200	5011250	3.0%	1165	1200	1861875	3.0%	LT	3700	1018150	2.6%	3606	3500	558425	-3.0%
BAJAJ-AUTO	9000	186600	7.9%	8340	8000	120000	-4.1%	M&M	3200	1244600	1.3%	3158	3200	418800	1.3%
BAJAJFINSV	2100	1331500	4.0%	2018	1980	609500	-1.9%	MARUTI	12800	436800	3.1%	12414	11200	78250	-9.8%
BAJFINANCE	950	3516750	2.4%	928	900	2133000	-3.0%	NESTLEIND	2500	385500	3.4%	2418	2400	177500	-0.7%
BEL	430	9467700	1.9%	422	400	6198750	-5.2%	NTPC	345	21988500	0.5%	343	345	3048000	0.5%
BHARTIARTL	2040	3324525	0.5%	2030	1900	1064475	-6.4%	ONGC	250	14751000	2.8%	243	240	2763000	-1.3%
CIPLA	1600	872625	7.5%	1488	1340	408750	-10.0%	POWERGRID	300	4539100	0.8%	298	290	2046300	-2.6%
COALINDIA	400	8037900	4.5%	383	400	3433050	4.5%	RELIANCE	1600	4830500	4.1%	1538	1500	3232500	-2.4%
DRREDDY	1400	1071250	9.1%	1284	1100	795000	-14.3%	SBILIFE	1900	958125	4.6%	1817	1800	190875	-0.9%
EICHERMOT	5800	295575	2.1%	5680	5800	120050	2.1%	SBIN	820	18971250	0.9%	813	800	5746500	-1.6%
ETERNAL	270	5883050	2.5%	264	250	3615675	-5.1%	SHRIRAMFIN	700	2174700	4.6%	669	700	714450	4.6%
GRASIM	3000	251500	6.4%	2821	2600	113750	-7.8%	SUNPHARMA	1700	1681400	1.6%	1673	1500	518350	-10.3%
HCLTECH	1960	834050	14.7%	1708	1700	418250	-0.5%	TATACONSUM	1230	943250	11.8%	1100	980	564300	-10.9%
HDFCBANK	2020	4408800	0.9%	2001	2000	1925550	-0.1%	TATAMOTORS	700	7382400	1.0%	693	700	3772000	1.0%
HDFCLIFE	820	2646600	3.3%	794	740	1087900	-6.8%	TATASTEEL	170	20922000	5.0%	162	160	8838500	-1.2%
HEROMOTOCO	4400	633000	2.3%	4300	4300	260550	0.0%	TCS	3500	2141125	2.8%	3406	3400	910350	-0.2%
HINDALCO	700	3168200	2.1%	686	670	991200	-2.3%	TECHM	1670	1040400	2.1%	1635	1390	354000	-15.0%
HINDUNILVR	2460	1244100	2.8%	2393	2300	965100	-3.9%	TITAN	3500	1076425	1.7%	3441	3400	460250	-1.2%
ICICIBANK	1500	2762900	4.0%	1442	1400	1916600	-2.9%	TRENT	6000	1121400	10.3%	5440	5500	423200	1.1%
INDUSINDBK	900	2800700	5.8%	850	800	1030400	-5.9%	ULTRACEMCO	13800	116750	10.9%	12445	11000	59900	-11.6%
INFY	1700	3826800	3.7%	1639	1600	1295200	-2.4%	WIPRO	310	5508000	15.0%	270	240	2136000	-11.0%

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)s, 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.

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