



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,034	0.3%▲
Open Interest (OI)	1,81,04,175	0.4%▼
Change in OI (abs)	1,81,04,175	65,475▼
Premium / Discount (Abs)	53	37▼
<b>Inference</b>	<b>Short Covering</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,966	0.2%▲
Open interest (OI)	28,81,305	3.5%▼
Change in OI (abs)	28,81,305	1,03,425▼
Premium / Discount (Abs)	101	27▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	11.79	0.55▼
Nifty ATM IV (%)	9.65	1.0▼
Bank Nifty ATM IV (%)	10.42	1.0▼
PCR (Nifty)	1.14	0.14▲
PCR (Bank Nifty)	0.82	0.05▲

The FII Long Ratio in Index Futures **jump** to 9.7 %, **up** from 9.7 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
EXIDEIND	3,22,88,400	36.6%	394.6	4.7%
RVNL	2,15,10,500	7.1%	325.75	1.6%
PAYTM	2,79,00,900	7.1%	1230	4.6%
DELHIVERY	1,53,90,275	6.4%	473.1	1.3%
GODREJCP	85,70,500	5.8%	1223.1	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	2,30,925	14.4%	6796	-1.6%
KALYANKJIL	3,17,60,250	9.7%	509.05	-2.5%
MUTHOOTFIN	40,24,625	7.5%	2750	-0.9%
BDL	48,37,625	7.4%	1555	-3.6%
GLENMARK	79,81,500	4.9%	1949.8	-1.6%

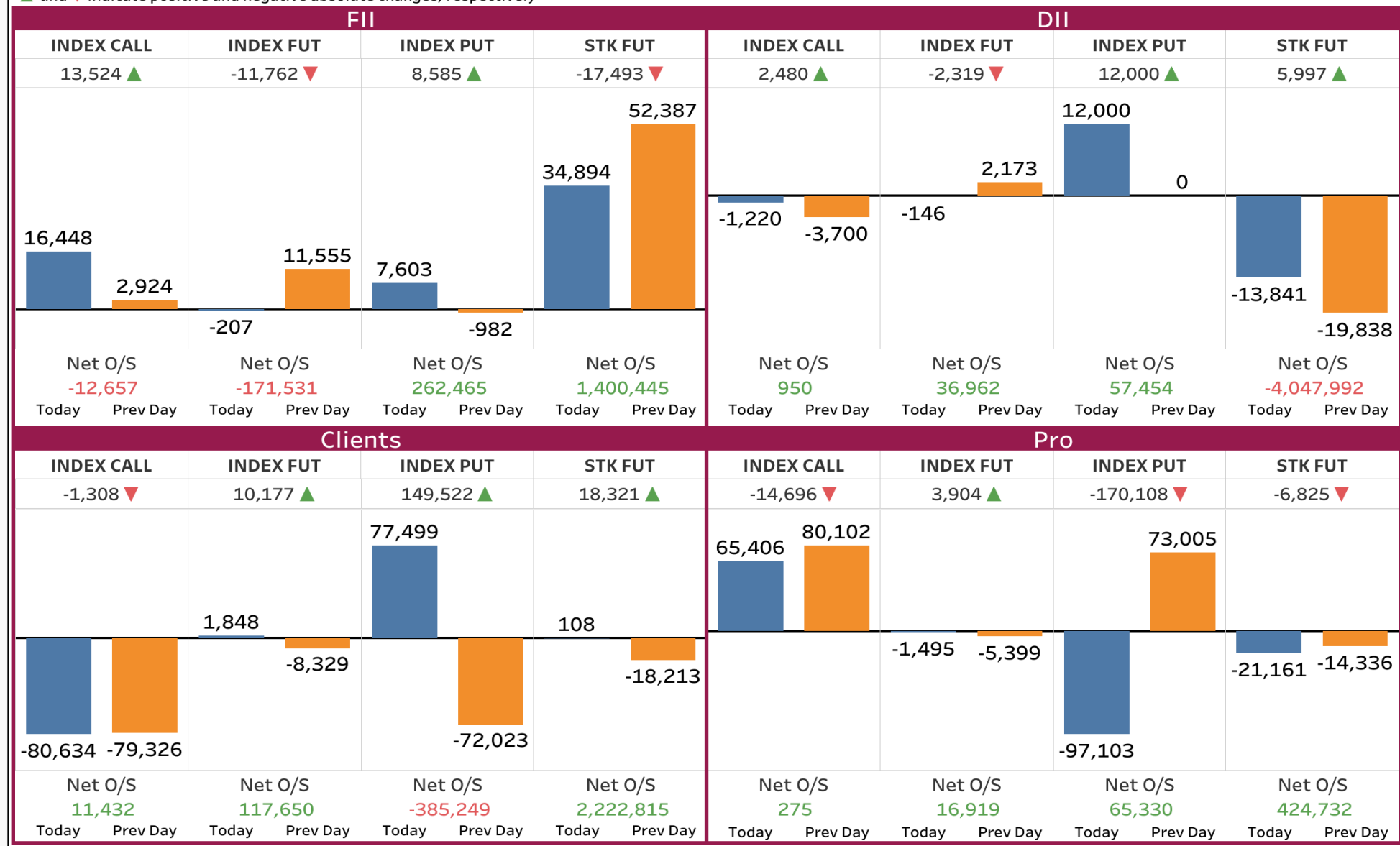
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BPCL	3,60,91,150	-6.0%	322.1	2.2%
ATGL	26,83,625	-5.5%	631.6	0.8%
IRB	6,92,67,775	-4.2%	45.21	0.5%
COLPAL	58,58,550	-3.3%	2276.3	2.2%
BANDHANBNK	8,12,52,000	-3.2%	174.26	3.9%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
M&M	1,98,44,400	-3.1%	3356.4	-1.0%
INDUSINDBK	5,12,74,300	-1.9%	786.35	-0.4%
GRANULES	1,04,27,500	-1.8%	459.3	-0.6%
SBILIFE	74,26,125	-1.7%	1858.4	-0.6%
AUBANK	2,05,62,000	-1.5%	757	-0.7%

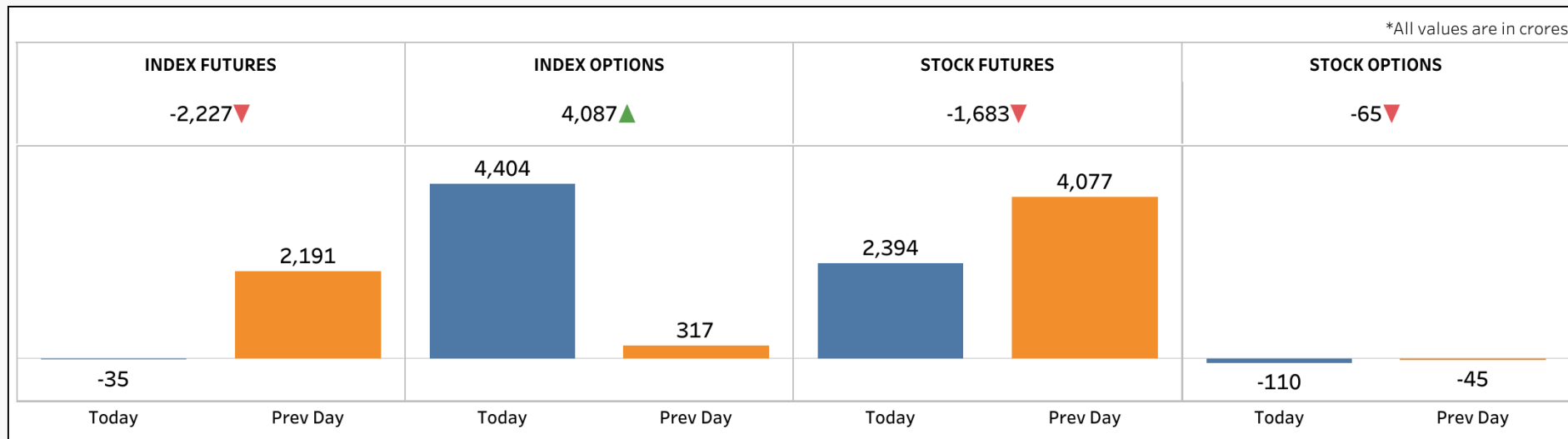
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

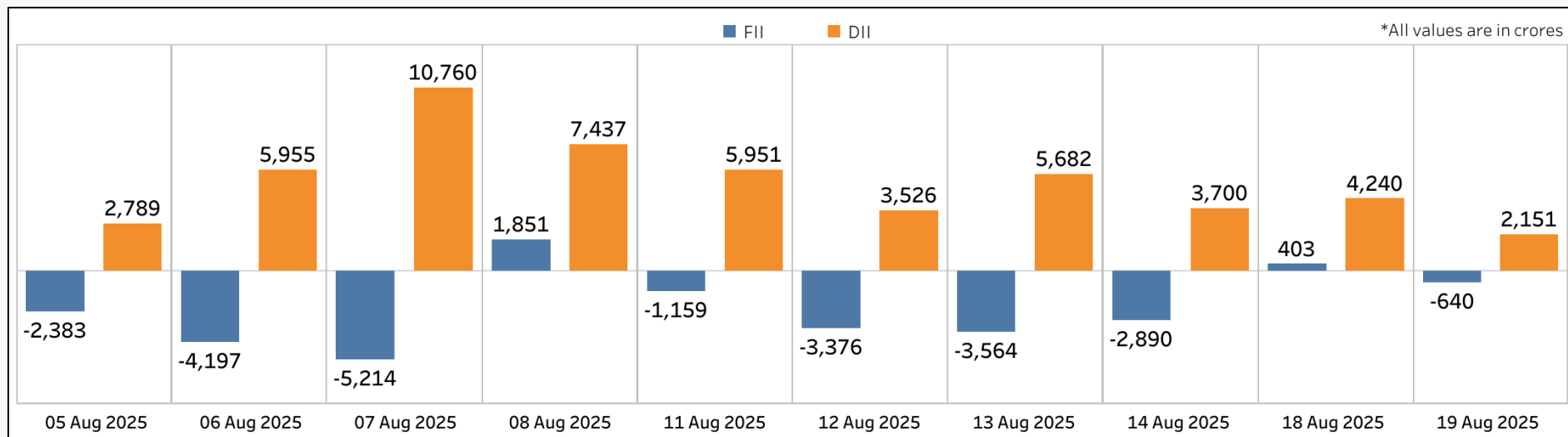
▲ and ▼ indicate positive and negative absolute changes, respectively



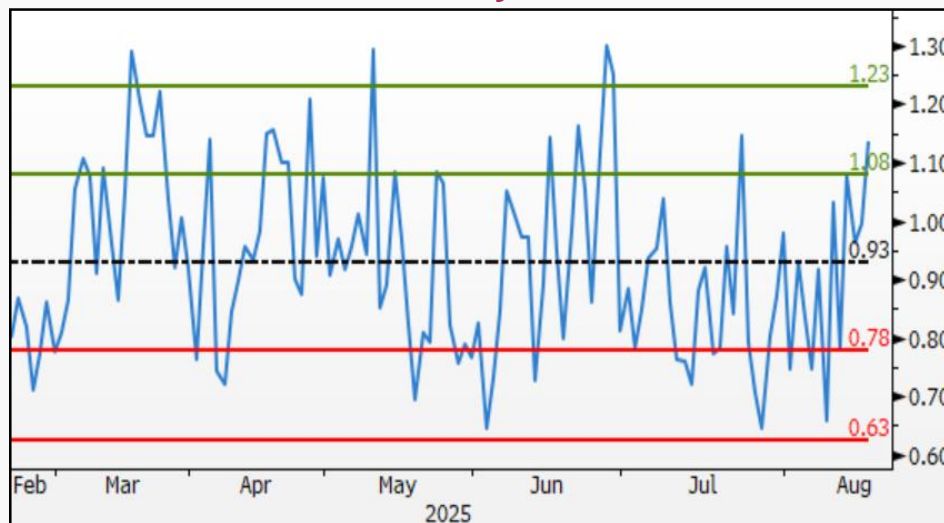
## Daily Net Open Interest Change



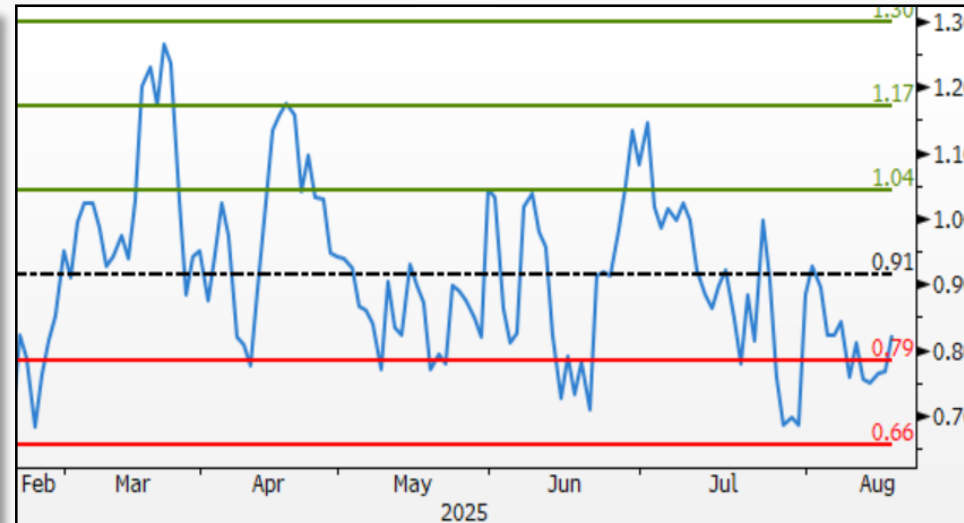
## DII and FII Daily Cash Market Flows



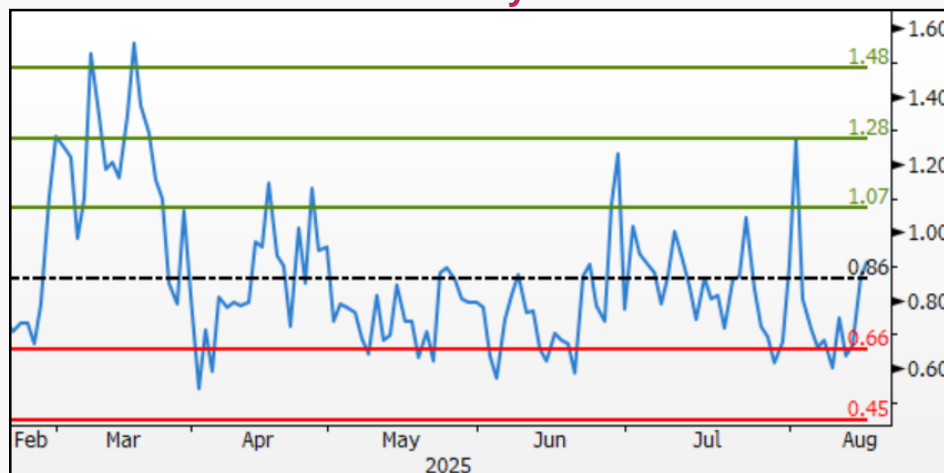
## Nifty



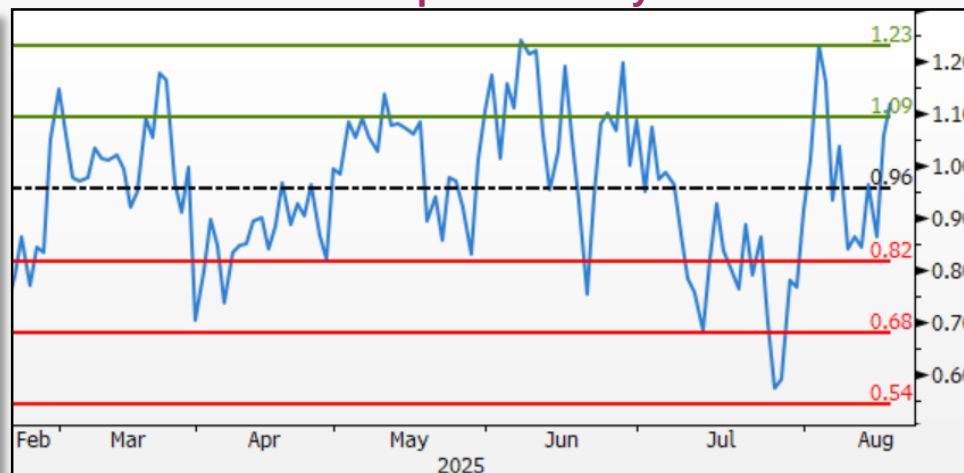
## Bank Nifty



## Fin Nifty

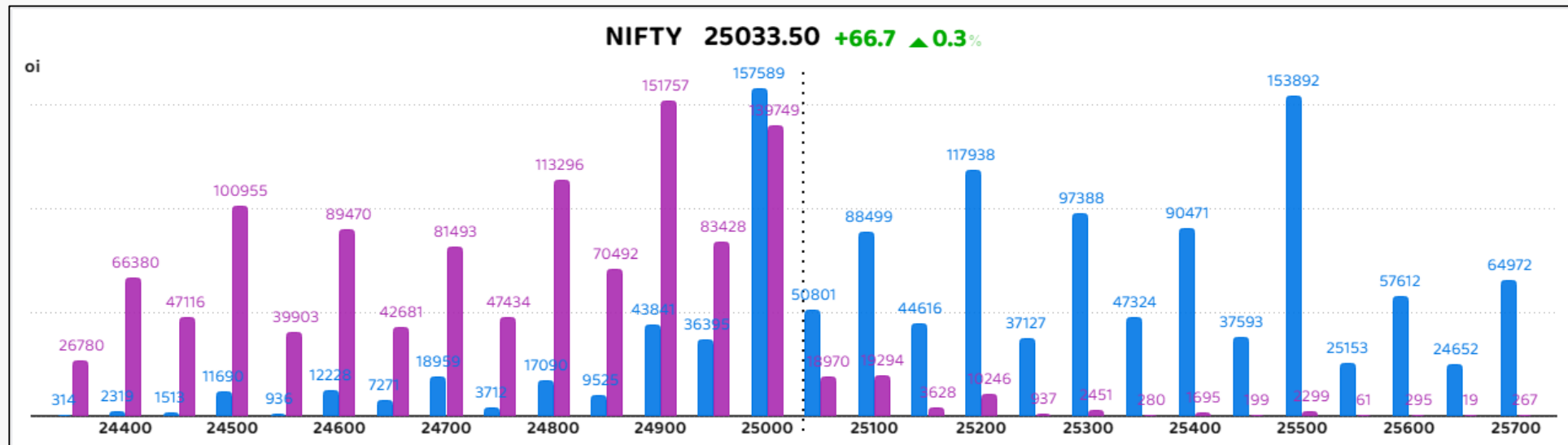


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,000 Call and the 24,900 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,000 Call and the 56,000 Put saw the most amount of open interest.

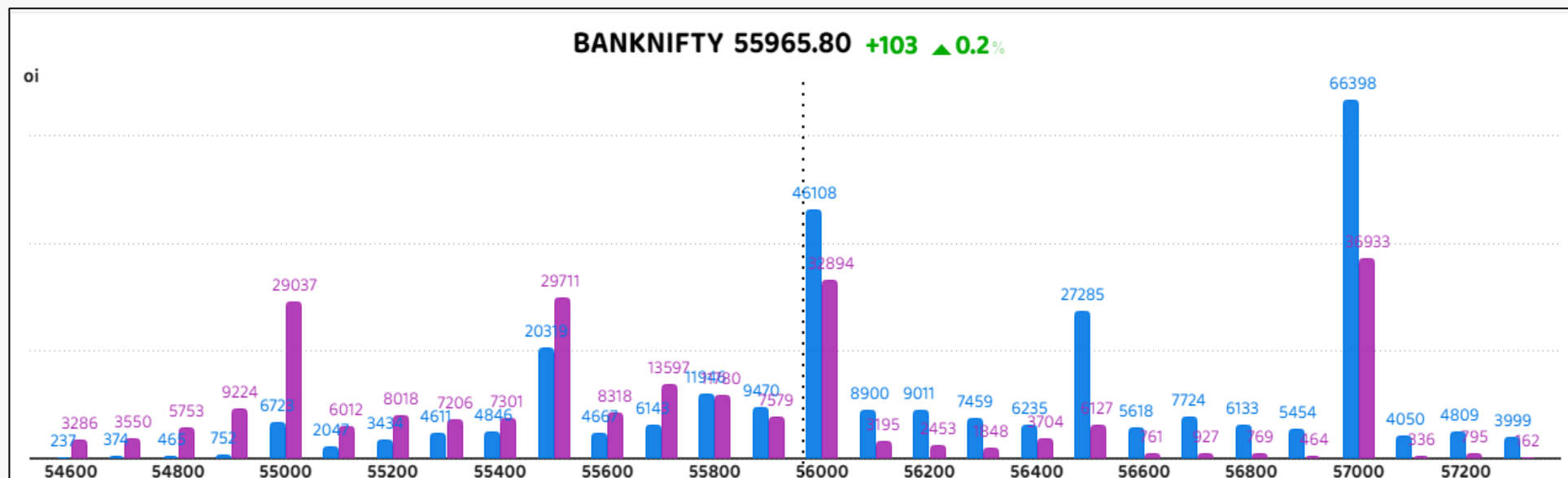
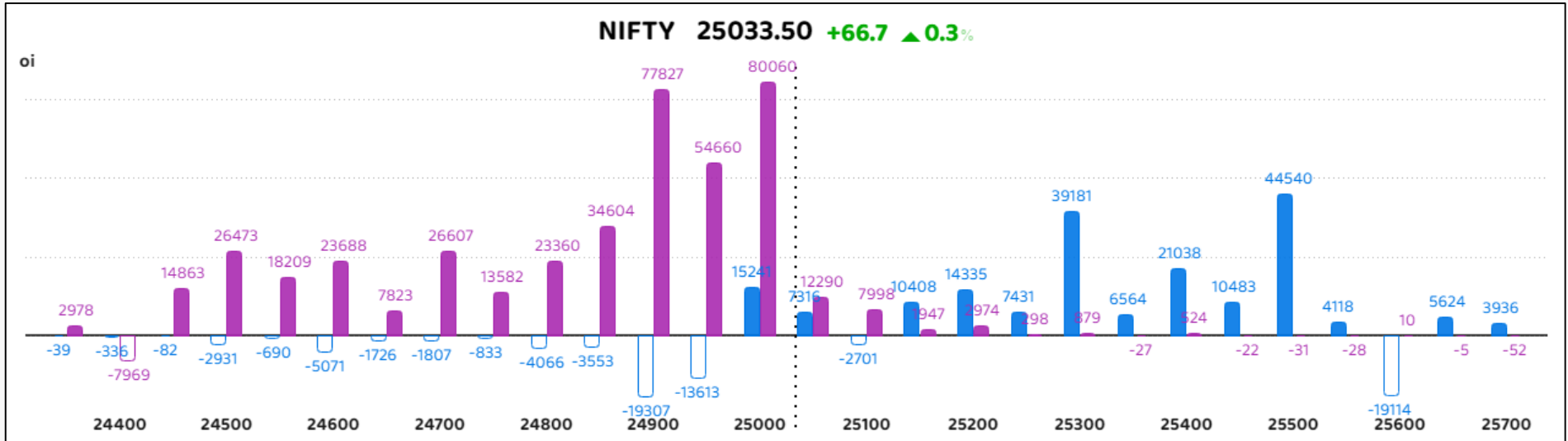


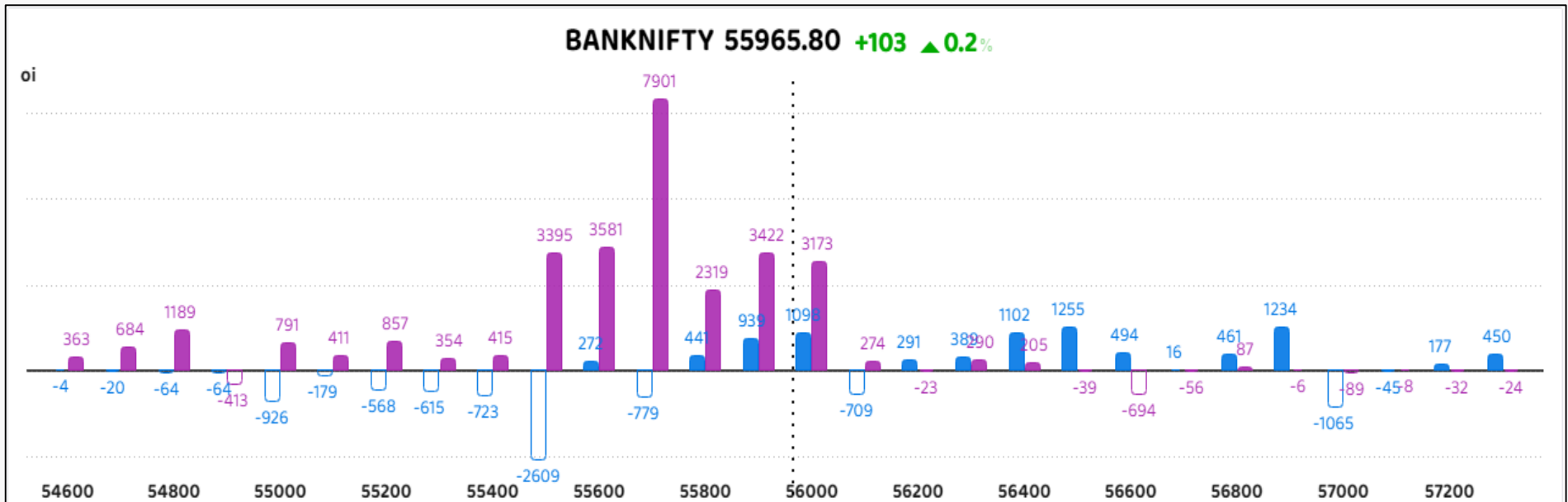
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



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



For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 55,700 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
PG ELECTROPLAST	540.3	2.2	63.5	63.7	35.6	99.1
SHREE CEMENT	30905	-1.4	28.5	31.9	7.9	86.0
TORRENT PHARMA	3651.6	0.0	27.9	34.6	8.3	74.4
BOSCH LTD	39860	1.3	26.3	36.2	2.1	70.8
MARUTI SUZUKI	14250	1.3	19.8	29.9	0.4	65.7

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
KOTAK MAHINDRA	2029.9	1.4	16.5	32.4	16.5	0.0
WIPRO LTD	246.96	0.7	20.1	93.6	20.1	0.0
ASIAN PAINTS LTD	2579.4	-0.3	16.8	29.4	16.8	0.0
INTERGLOBE AVIATION	6055.5	-0.7	22.0	43.2	22.0	0.0
INDIAN OIL CORP	142.01	1.2	20.7	42.1	20.7	0.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
PG ELECTROPLAST	540.3	2.2	63.5	63.7	35.6	98.9
SHREE CEMENT	30905	-1.4	28.5	31.9	7.9	95.4
PAGE INDUSTRIES	45640	2.1	30.3	39.9	13.0	93.6
RBL BANK LTD	261.75	1.0	48.3	76.5	10.6	86.4
TORRENT PHARMA	3651.6	0.0	27.9	34.6	8.3	77.7

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KOTAK MAHINDRA	2029.9	1.4	16.5	32.4	16.5	0.0
WIPRO LTD	246.96	0.7	20.1	93.6	20.1	0.0
ASIAN PAINTS LTD	2579.4	-0.3	16.8	29.4	16.8	0.0
INTERGLOBE AVIATION	6055.5	-0.7	22.0	43.2	22.0	0.0
INDIAN OIL CORP	142.01	1.2	20.7	42.1	20.7	0.0

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
MAZAGON DOCK	2747.4	0.3	15738	2852	5.5
MANKIND PHARMA	2492.2	0.8	6577	1200	5.5
TUBE INVESTMENTS	3152.4	3.3	17839	3610	4.9
ORACLE FINANCIAL	8597	0.5	7213	1693	4.3
TATA CHEMICALS	947.6	0.2	4279	1006	4.3

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
MAX FINANCIAL	1637.3	-0.2	3077	3550	1.2
BHARAT DYNAMICS	1549.1	-3.5	12508	14002	1.1
CIPLA LTD	1548.9	-1.0	7022	6610	0.9
PRESTIGE ESTATES	1636.4	0.7	3637	3412	0.9
APOLLO HOSPITALS	7823.5	0.0	15856	14754	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NUVAMA WEALTH	6789.5	-1.3	5512	5512	100.0
MAX HEALTHCARE	1229.4	1.5	8371	8698	96.2
AMBER ENTERPRISES	7368.5	-0.9	10247	10859	94.4
KAYNES TECHNOLOGY	6272	-0.1	8944	11157	80.2

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
MARUTI SUZUKI	14250	1.3	97256	97256	100.0
HERO MOTOCORP	5118.2	2.7	28649	28649	100.0
NUVAMA WEALTH	6789.5	-1.3	2620	2620	100.0
UNO MINDA LTD	1219.9	0.0	2539	2681	94.7
FSN E-COMMERCE	226.83	3.5	3595	3944	91.2

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
INOX WIND LTD	144.48	3.2	40548	40548	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
INOX WIND LTD	144.48	3.2	10809	10809	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
KALYAN JEWELLERS	507.35	-2.5	24711	9977	2.5
NUVAMA WEALTH	6789.5	-1.3	5512	2236	2.5
MUTHOOT FINANCE	2747.2	-0.8	18490	9307	2.0
SUZLON ENERGY	59.59	2.6	16060	8259	1.9
MAX HEALTHCARE	1229.4	1.5	8371	4331	1.9

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
MARUTI SUZUKI IN	14250	1.3	97256	25519	3.8
ASHOK LEYLAND	133.28	1.2	11299	4492	2.5
MUTHOOT FINANCE	2747.2	-0.8	11972	4799	2.5
NUVAMA WEALTH	6789.5	-1.3	2620	1078	2.4
APOLLO HOSPITALS	7823.5	0.0	18249	7875	2.3

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
INOX WIND LTD	144.48	3.2	40548	4596	8.8
PNB HOUSING FINANCE	817.7	4.0	61612	11882	5.2
ASHOK LEYLAND	133.28	1.2	64293	12665	5.1
BAJAJ AUTO LTD	8795.5	2.4	238612	47427	5.0
EXIDE INDUS LTD	392.8	4.4	43406	10441	4.2

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ASHOK LEYLAND	133.28	1.2	37487	6676	5.6
INOX WIND LTD	144.48	3.2	10809	1940	5.6
NUVAMA WEALTH	6789.5	-1.3	7448	1607	4.6
BAJAJ AUTO LTD	8795.5	2.4	97254	23998	4.1
MARUTI SUZUKI IN	14250	1.3	251870	66959	3.8

## 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	2600	1614900	8.9%	2388	2700	1304700	13.0%	ITC	420	15388800	2.7%	409	410	5131200	0.2%
ADANIPTS	1400	1840625	2.2%	1369	1300	1410275	-5.1%	JIOFIN	350	10149650	5.6%	331	310	4808100	-6.4%
APOLLOHOSP	8000	189250	2.3%	7824	7600	287625	-2.9%	JSWSTEEL	1080	1227825	0.6%	1073	920	531225	-14.3%
ASIANPAINT	2600	758250	0.8%	2579	2400	603000	-7.0%	KOTAKBANK	2200	1074800	8.4%	2030	2000	746800	-1.5%
AXISBANK	1200	2931875	10.8%	1083	1060	1308750	-2.1%	LT	3700	1164275	2.4%	3613	3600	414925	-0.4%
BAJAJ-AUTO	9000	277425	2.3%	8796	8000	118050	-9.0%	M&M	3400	1865800	1.4%	3354	3100	1346000	-7.6%
BAJAJFINSV	2000	839000	1.4%	1972	1900	732500	-3.7%	MARUTI	14200	420450	-0.4%	14250	14000	610600	-1.8%
BAJFINANCE	900	5319750	-0.3%	902	900	3152250	-0.3%	NESTLEIND	1150	713500	-1.0%	1161	1100	316000	-5.3%
BEL	400	11739150	5.2%	380	390	4337700	2.6%	NTPC	340	16962000	1.5%	335	340	3163500	1.5%
BHARTIARTL	2000	3040475	4.7%	1910	1860	854525	-2.6%	ONGC	235	15084000	-1.2%	238	235	5206500	-1.2%
CIPLA	1600	880875	3.3%	1549	1340	354000	-13.5%	POWERGRID	300	7476500	4.2%	288	320	1383200	11.1%
COALINDIA	400	5915700	3.8%	385	450	2234250	16.8%	RELIANCE	1500	7821000	5.6%	1420	1400	5022500	-1.4%
DRREDDY	1300	1659375	4.5%	1244	1200	736875	-3.6%	SBILIFE	1900	738000	2.5%	1854	1800	232125	-2.9%
EICHERMOT	6000	344050	1.0%	5939	5600	189000	-5.7%	SBIN	830	9140250	0.0%	830	820	7434000	-1.3%
ETERNAL	320	11749125	-0.5%	321	300	6571750	-6.7%	SHRIRAMFIN	700	1555950	11.8%	626	600	890175	-4.2%
GRASIM	3000	324750	6.1%	2828	2700	172500	-4.5%	SUNPHARMA	1740	906150	7.0%	1627	1500	790300	-7.8%
HCLTECH	1500	1417150	1.6%	1476	1500	861350	1.6%	TATACONSUM	1100	904750	1.3%	1086	1050	437800	-3.3%
HDFCBANK	2000	3347850	0.4%	1991	2000	2879800	0.4%	TATAMOTORS	700	4684000	0.0%	700	700	3289600	0.0%
HDFCLIFE	840	1301300	5.8%	794	770	1122000	-3.0%	TATASTEEL	165	20361000	3.6%	159	160	8151000	0.5%
HEROMOTOCO	4600	567000	-10.1%	5118	5000	460650	-2.3%	TCS	3100	3154375	2.8%	3016	3000	1306550	-0.5%
HINDALCO	720	2550800	1.9%	707	680	1650600	-3.8%	TECHM	1600	892200	6.9%	1497	1420	615600	-5.1%
HINDUNILVR	2600	1614300	-0.2%	2605	2400	648900	-7.9%	TITAN	3600	565250	0.9%	3568	3400	383600	-4.7%
ICICIBANK	1500	4211200	4.4%	1436	1400	1514800	-2.5%	TRENT	6000	465200	9.2%	5496	5000	261900	-9.0%
INDUSINDBK	900	2595600	14.6%	786	800	1414700	1.8%	ULTRACEMCO	12900	113450	0.3%	12863	12400	49950	-3.6%
INFY	1500	3892800	4.2%	1440	1400	1718400	-2.8%	WIPRO	250	7524000	1.2%	247	240	3519000	-2.8%

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

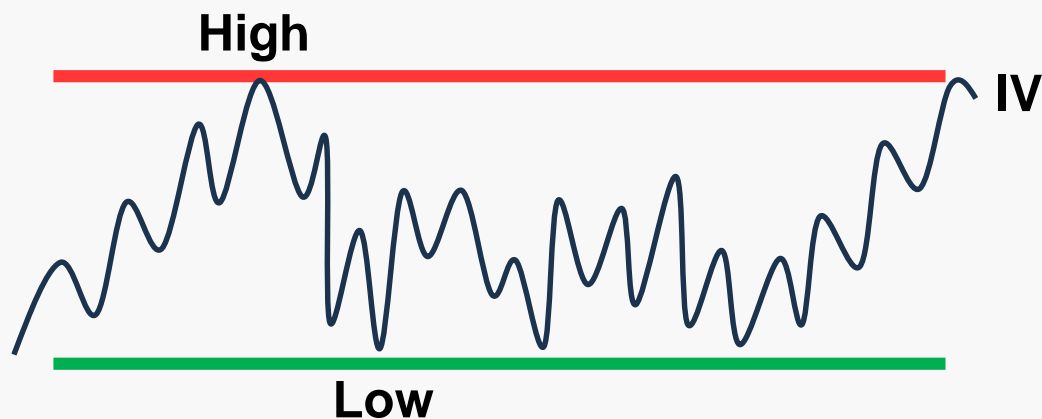


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

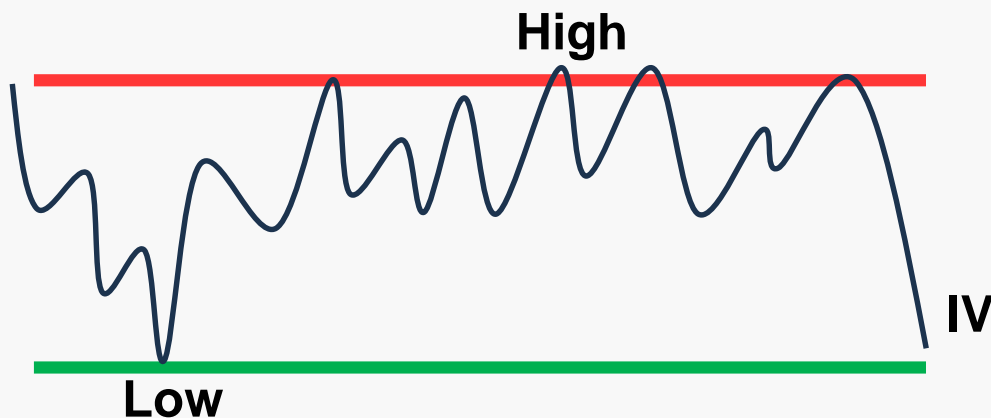


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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