



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	25,256	0.1% ▼
Open Interest (OI)	1,77,92,325	0.8% ▼
Change in OI (abs)	1,77,92,325	1,33,575 ▼
Premium / Discount (Abs)	86	11 ▲
<b>Inference</b>	<b>Long Unwinding</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,472	0.5% ▲
Open interest (OI)	23,26,240	3.8% ▲
Change in OI (abs)	23,26,240	87,290 ▲
Premium / Discount (Abs)	187	27 ▲
<b>Inference</b>	<b>Long Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	10.63	0.07 ▲
Nifty ATM IV (%)	9.18	0.1 ▼
Bank Nifty ATM IV (%)	10.30	0.0 ▼
PCR (Nifty)	0.97	0.25 ▲
PCR (Bank Nifty)	1.12	0.15 ▲

The FII Long Ratio in Index Futures **jump** to 13.8 %, **up** from 13.3 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ANGELONE	48,11,500	11.3%	2220.8	0.1%
ASHOKLEY	15,02,15,000	8.1%	142.96	2.8%
LAURUSLABS	2,17,51,500	6.1%	912.85	0.8%
PATANJALI	3,38,70,600	5.2%	600.9	0.6%
CANBK	25,32,06,000	4.4%	122.18	2.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BLUESTARCO	27,22,525	12.4%	1951.1	-1.9%
LICI	94,24,800	11.4%	901.75	-0.8%
IGL	1,81,55,500	9.1%	208.97	-1.4%
360ONE	39,60,000	6.9%	1023	-2.9%
SUZLON	16,96,80,000	6.5%	58.92	-2.0%

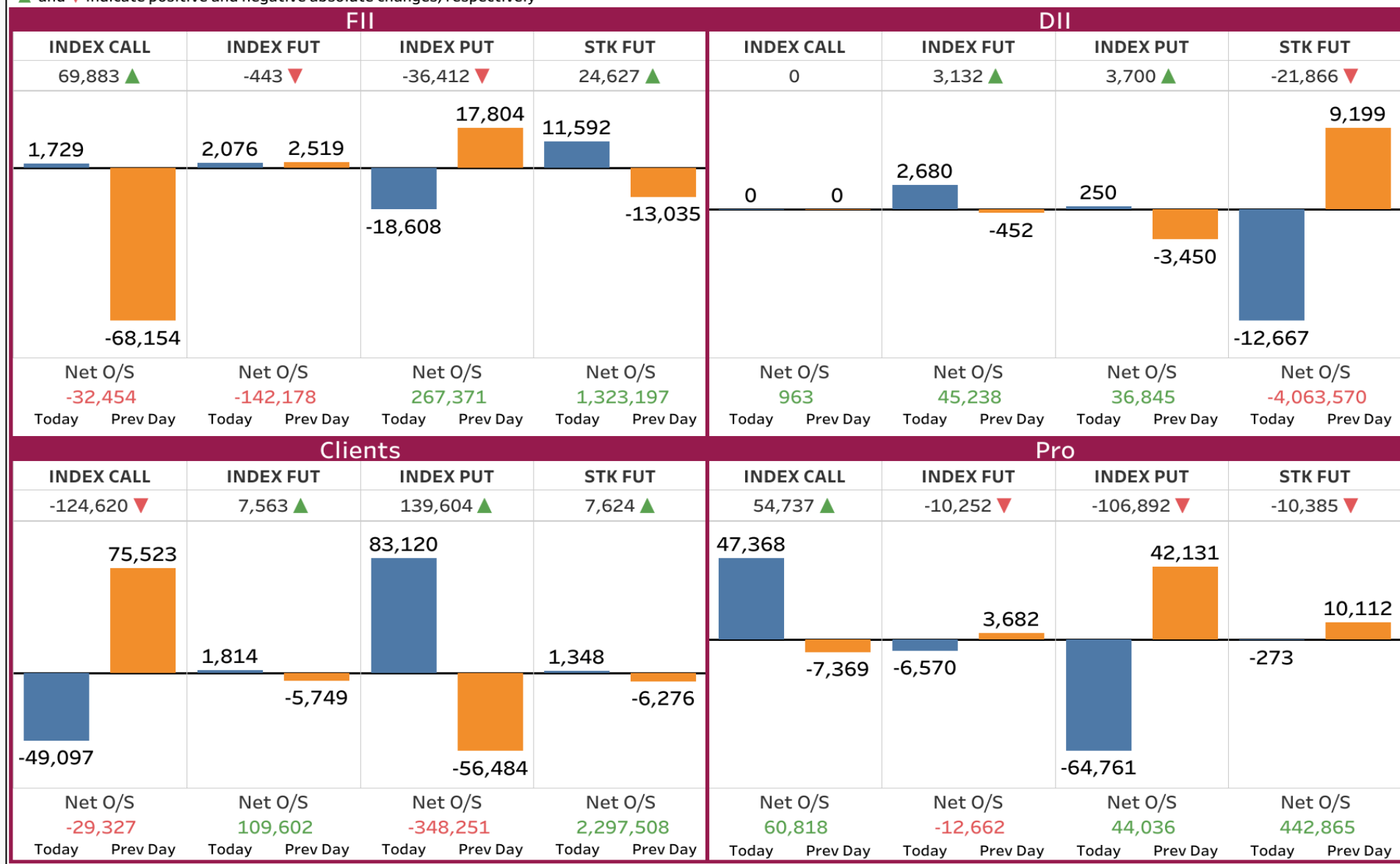
Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIENT	1,43,33,700	-6.8%	2677.4	1.5%
PNBHousing	1,73,47,200	-4.2%	892.65	3.5%
ZYDUSLIFE	96,93,000	-2.0%	1046.25	0.8%
CYIENT	38,70,900	-1.9%	1201.6	0.4%
KEI	11,31,725	-1.8%	4194	1.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MPHASIS	43,91,750	-4.2%	2769	-3.1%
AMBER	5,97,600	-4.1%	8306.5	-0.3%
SAMMAANCAP	9,02,09,700	-3.9%	135.55	-4.1%
LTF	4,42,40,730	-3.3%	247.44	-0.7%
DABUR	2,45,62,500	-2.2%	515.95	-1.3%

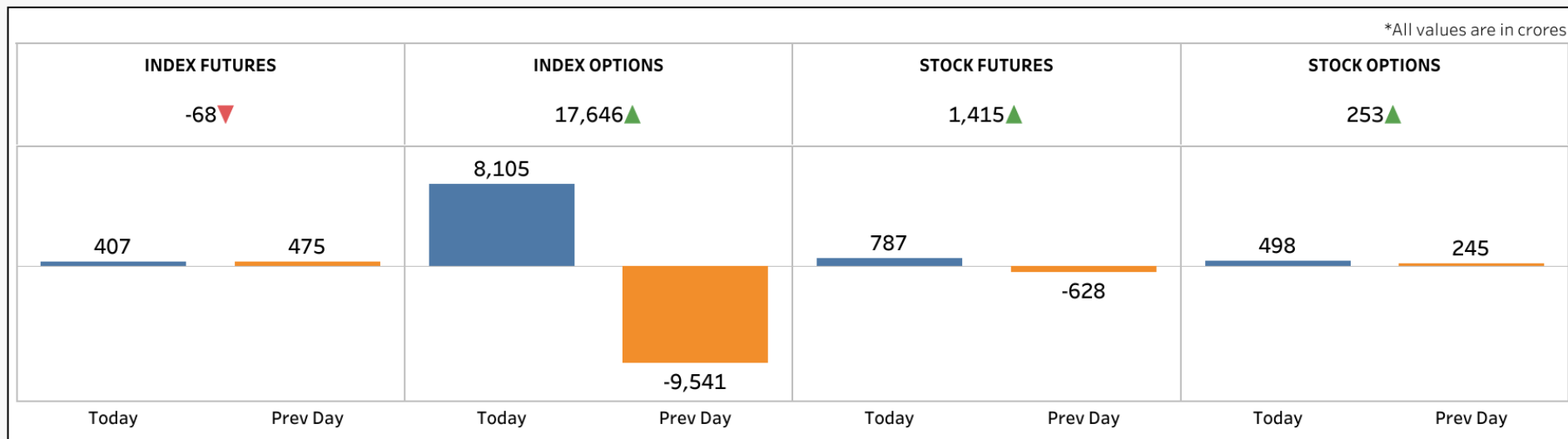
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

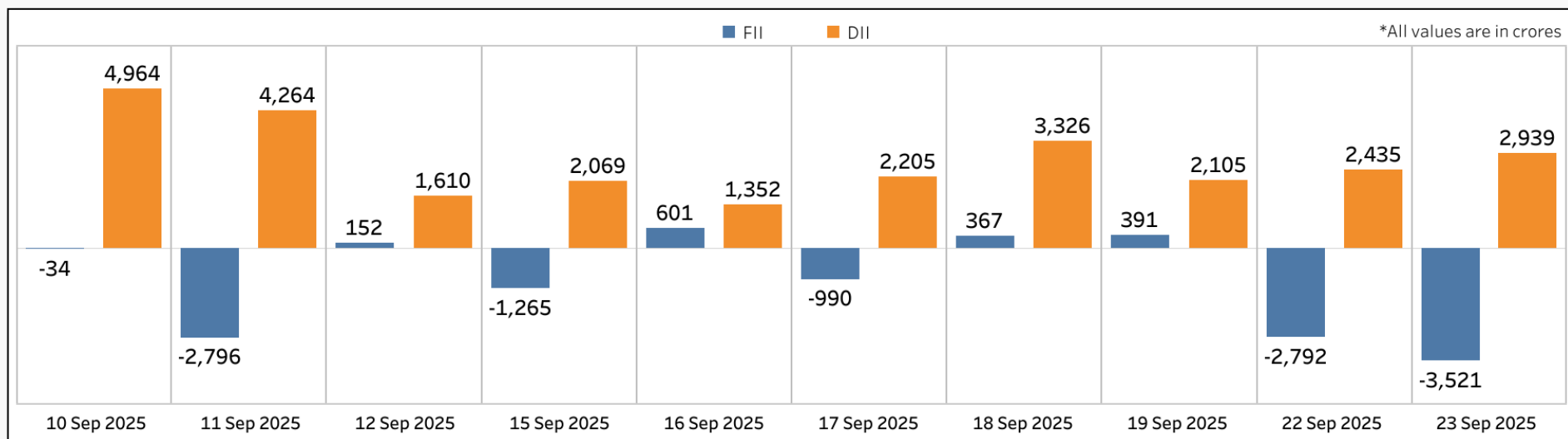
▲ and ▼ indicate positive and negative absolute changes, respectively



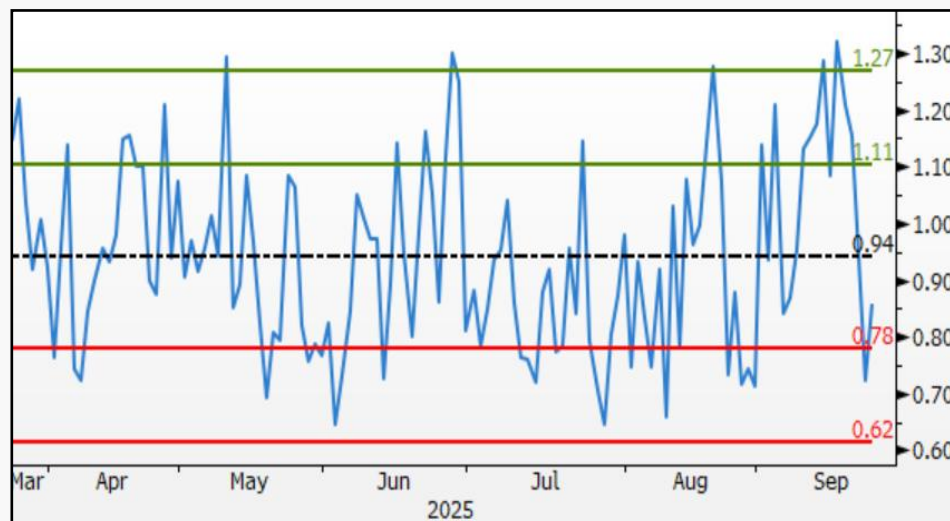
## Daily Net Open Interest Change



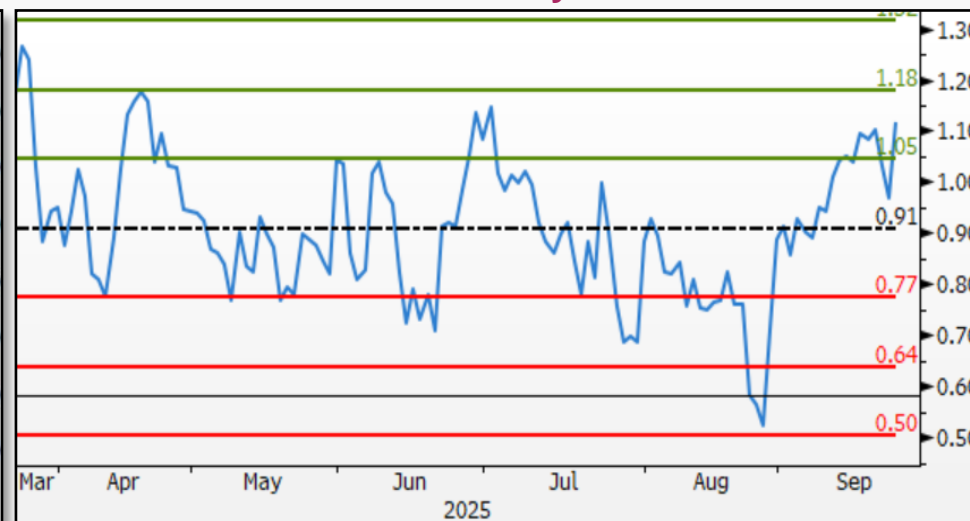
## DII and FII Daily Cash Market Flows



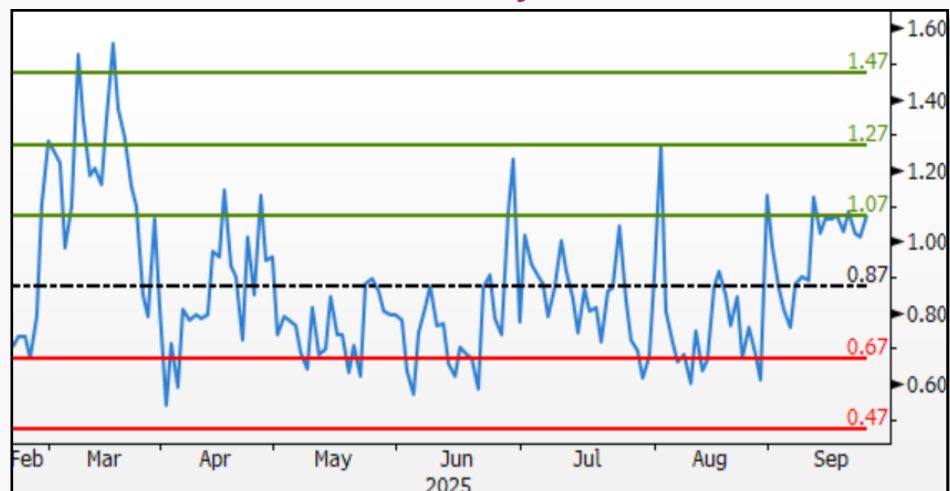
## Nifty



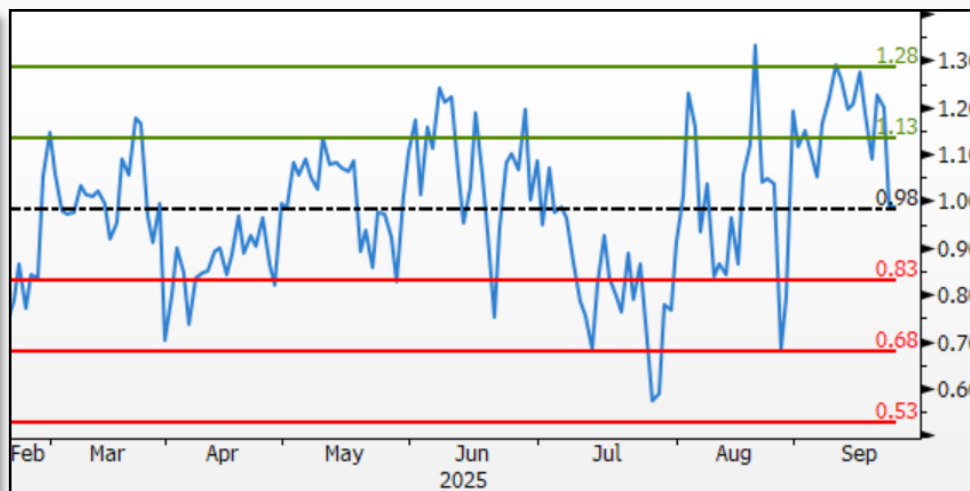
## Bank Nifty



## Fin Nifty

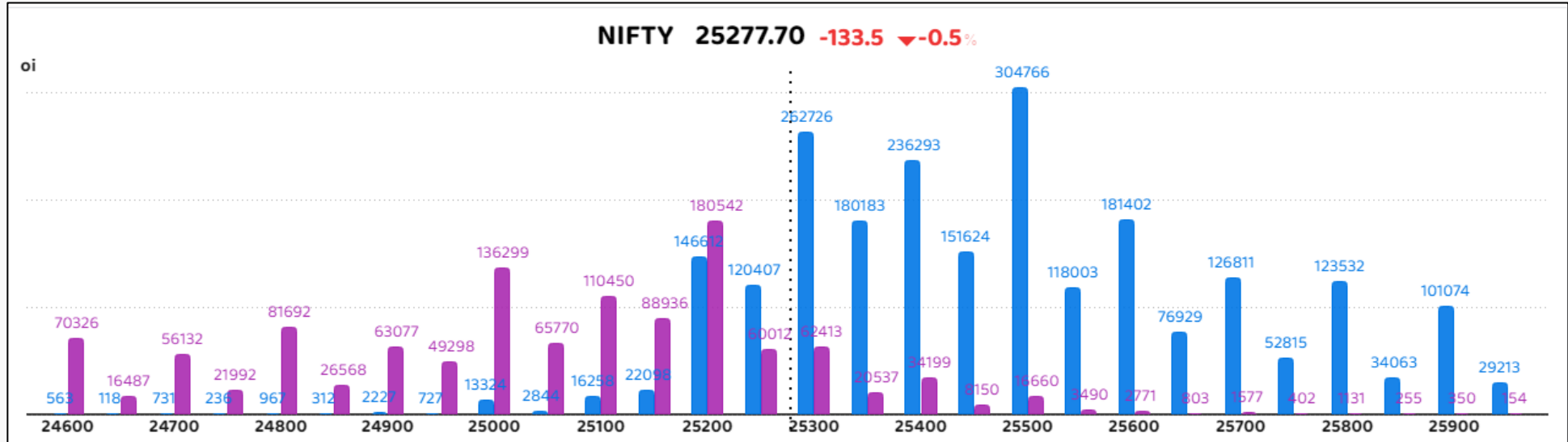


## Midcap Select Nifty



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

Call  Put 



For the Nifty, the 25,500 Call and the 25,200 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

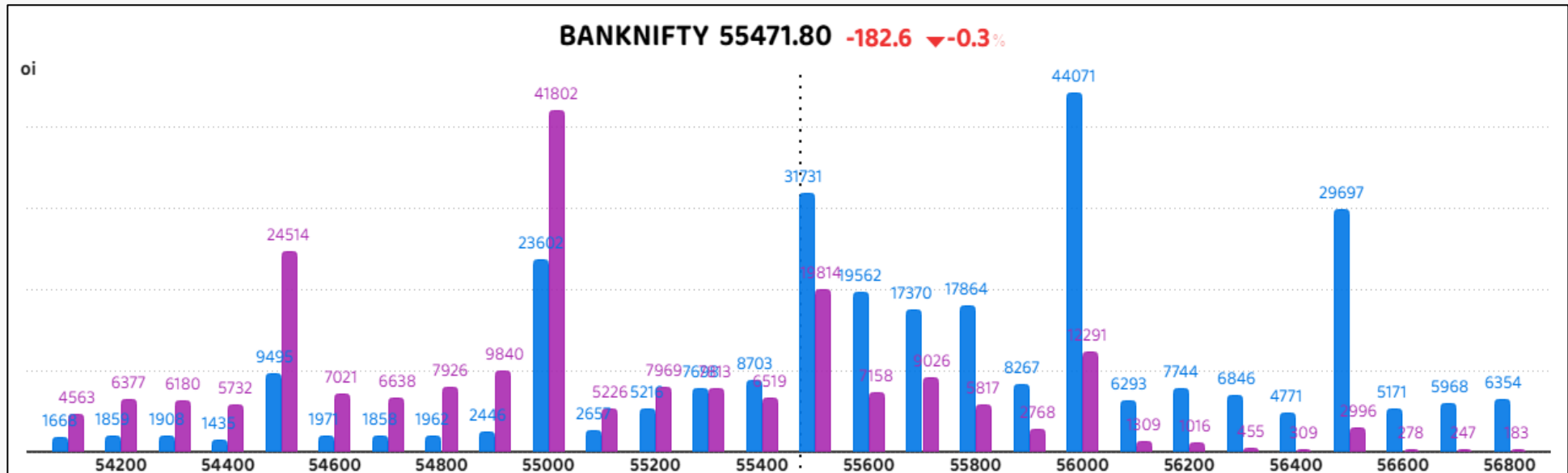
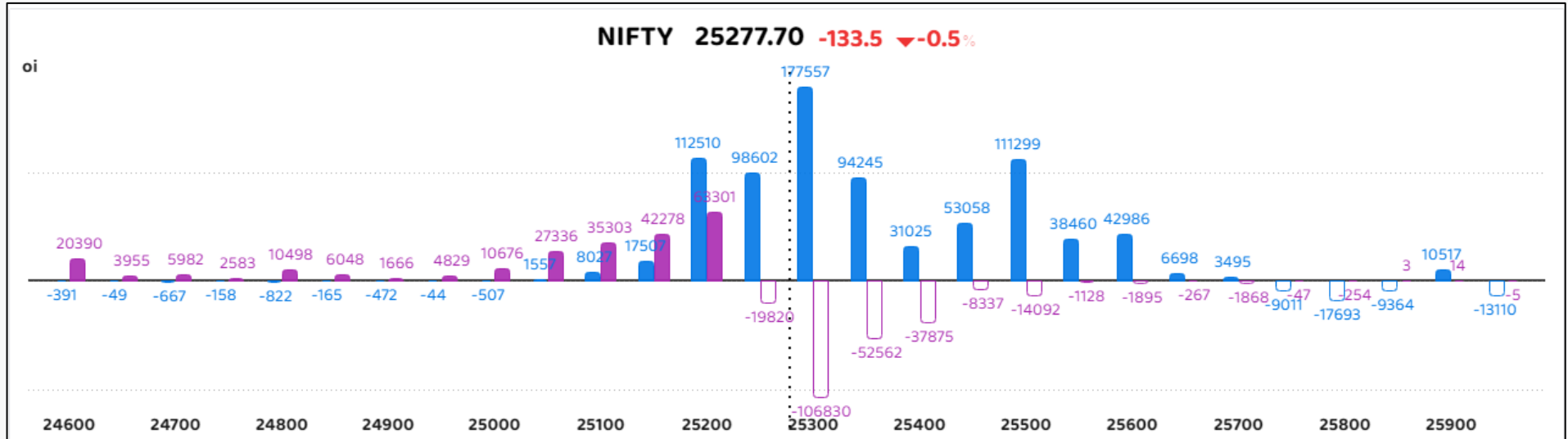


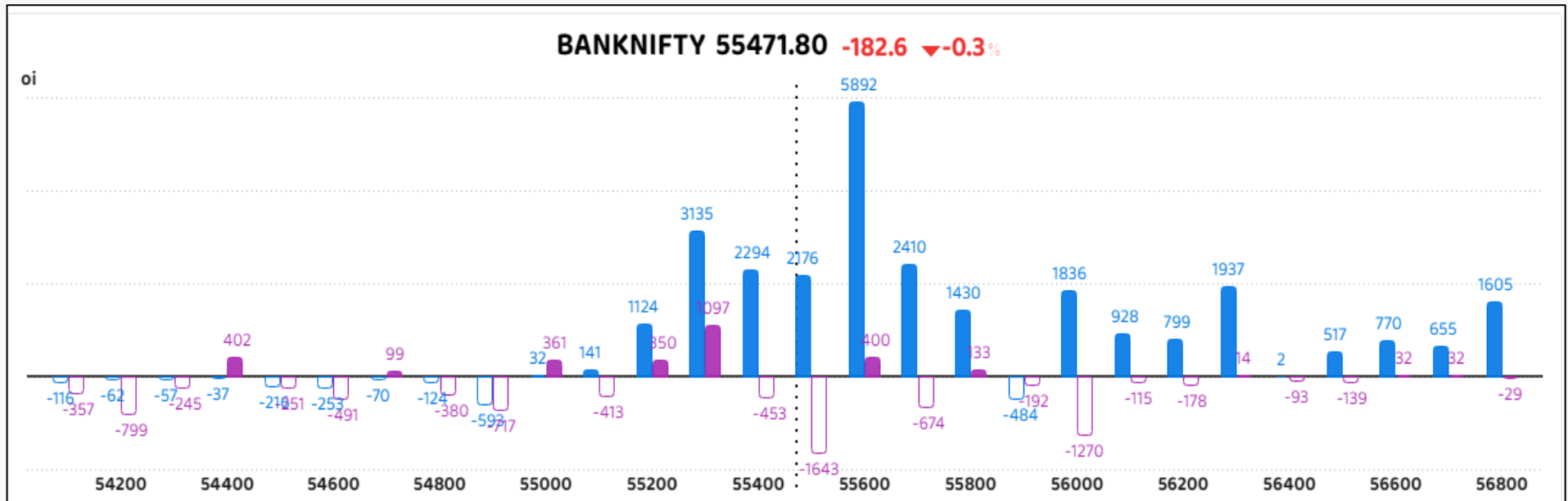
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,300 Call and the 25,300 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,600 Call & the 55,500 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
TATA MOTORS LTD	701.35	0.7	72.6	72.6	3.9	100.0
DLF LTD	759.4	-1.9	64.6	64.6	9.2	100.0
PG ELECTROPLAST	558.2	-0.5	89.8	89.8	35.6	100.0
SBI CARDS & PAYMENTS	870.3	0.1	34.8	36.9	4.6	93.4
BAJAJ AUTO LTD	8984.5	-0.8	28.2	36.4	2.1	75.9

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
POWER FINANCE	412.9	1.0	23.8	51.5	23.8	0.1
FED BANK LTD	195.13	0.1	19.6	130.9	17.1	2.2
UNITED SPIRITS	1341.2	0.1	18.6	34.9	18.0	3.8
NTPC LTD	343	1.1	20.7	116.6	16.7	4.0
PUNJAB NATL BANK	113.43	0.3	25.7	108.3	21.3	5.1



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
TATA MOTORS LTD	701.35	0.7	72.6	72.6	3.9	100.0
DLF LTD	759.4	-1.9	64.6	64.6	9.2	100.0
PG ELECTROPLAST	558.2	-0.5	89.8	89.8	35.6	100.0
WIPRO LTD	249.63	-0.3	67.3	93.6	19.1	99.6
HFCL LTD	75.34	0.7	56.3	89.4	33.2	98.6

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BHEL	238.73	-0.4	15.4	56.6	5.2	0.6
POWER FINANCE	412.9	1.0	23.8	51.5	23.8	0.6
CIPLA LTD	1527.1	-1.0	16.0	61.3	5.1	0.7
ABB INDIA LTD	5298.7	-1.2	24.0	47.7	22.5	2.1
TATA CHEMICALS	959.9	-1.4	22.0	40.8	20.3	2.4

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
VODAFONE IDEA LTD	8.72	3.9	41167	6583	6.3
TATA CHEMICALS	959.9	-1.4	13754	2824	4.9
TORRENT POWER LTD	1279.3	0.8	5316	1139	4.7
ALKEM LABORATORIES	5544.5	0.9	6489	1561	4.2
UNO MINDA LTD	1317.1	0.3	7263	1816	4.0

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SUN PHARMA	1631.2	-0.8	14482	15650	1.1
360 ONE WAM LTD	1019.6	-2.9	5258	5113	1.0
COMPUTER AGE	3986.1	-0.7	4723	4079	0.9
GODREJ CONSUMER	1192.2	-3.2	13400	11502	0.9
DELHIVERY LTD	459.05	-1.9	8683	7451	0.9

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
ADANI ENERGY	925.1	-1.3	12086	12086	100.0
RAIL VIKAS NIGAM	357.6	-0.4	13544	13544	100.0
PIRAMAL PHARMA	200.03	-1.3	6298	6298	100.0
KFIN TECHNOLOGIES	1080.4	-1.2	4470	4470	100.0
TRENT LTD	4891	-2.4	88440	89417	98.9

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
RAIL VIKAS NIGAM	357.6	-0.4	8440	8440	100.0
PIRAMAL PHARMA	200.03	-1.3	2936	2936	100.0
ADANI ENERGY	925.1	-1.3	6676	6736	99.1
TORRENT POWER	1279.3	0.8	2788	2818	98.9
MAZAGON DOCK	2939.5	-1.2	11170	11303	98.8

## Call Volume Relative to Record High

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

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
NO STOCK OPTION MET THE CONDITIONS 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
ADANI GREEN ENERGY	1131.45	-1.8	27380	8285	3.3
PAGE INDUSTRIES	42780	-1.4	12744	4519	2.8
MANKIND PHARMA	2564.3	-1.2	5559	2109	2.6
ADANI ENERGY	925.1	-1.3	12086	4862	2.5
KFIN TECHNOLOGIES	1080.4	-1.2	4470	1798	2.5

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ADANI GREEN ENERGY	1131.45	-1.8	18178	5743	3.2
MANKIND PHARMA	2564.3	-1.2	2391	1069	2.2
ADANI ENERGY	925.1	-1.3	6676	3101	2.2
KPIT TECHNOLOGIES	1249.7	-1.0	5496	2595	2.1
PAGE INDUSTRIES	42780	-1.4	2926	1592	1.8

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
AU SMALL FINANCE	731.65	3.6	57906	12007	4.8
ADANI GREEN ENERGY	1131.45	-1.8	186627	47552	3.9
INDUSIND BANK	755.25	2.9	66216	17881	3.7
MARUTI SUZUKI	16097	1.8	557016	174136	3.2
SONA BLW PRECISION	421.35	0.2	23106	7283	3.2

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ADANI GREEN ENERGY	1131.45	-1.8	86780	18655	4.7
360 ONE WAM LTD	1019.6	-2.9	5113	1150	4.4
AU SMALL FINANCE	731.65	3.6	23082	5533	4.2
KFIN TECHNOLOGIES	1080.4	-1.2	7317	1906	3.8
ADANI ENTERPRISES	2676.4	1.8	104385	32594	3.2

## 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	1367100	0.9%	2676	2600	1398000	-2.9%	ITC	410	7880000	1.7%	403	400	3931200	-0.8%
ADANIPTS	1460	1834925	1.3%	1442	1400	1389850	-2.9%	JIOFIN	320	13740450	2.4%	313	310	4624800	-0.8%
APOLLOHOSP	7900	235500	2.8%	7684	7700	47250	0.2%	JSWSTEEL	1200	1133325	5.4%	1138	1100	558225	-3.4%
ASIANPAINT	2600	1330500	6.3%	2447	2500	312000	2.2%	KOTAKBANK	2000	1239200	-2.3%	2048	1980	1057200	-3.3%
AXISBANK	1120	2384375	-4.3%	1171	1100	1980000	-6.0%	LT	3600	1198225	-1.6%	3658	3600	632275	-1.6%
BAJAJ-AUTO	9500	367725	5.7%	8985	9100	106125	1.3%	M&M	3700	1200600	2.4%	3615	3600	655200	-0.4%
BAJAJFINSV	2100	1647500	0.7%	2084	1900	637000	-8.8%	MARUTI	16000	350450	-0.6%	16097	15000	464900	-6.8%
BAJFINANCE	1020	1835250	-0.5%	1026	1000	1849500	-2.5%	NESTLEIND	1220	1326500	4.4%	1168	1150	199500	-1.6%
BEL	420	9821100	3.8%	404	400	4976100	-1.1%	NTPC	340	11748000	-0.9%	343	340	3595500	-0.9%
BHARTIARTL	1960	2413475	1.1%	1939	1900	1092975	-2.0%	ONGC	240	18677250	1.4%	237	235	3516750	-0.7%
CIPLA	1600	1392375	4.8%	1527	1440	259875	-5.7%	POWERGRID	290	5549900	0.5%	289	280	1863900	-3.0%
COALINDIA	400	7992000	1.5%	394	390	2242350	-1.0%	RELIANCE	1500	6548000	7.9%	1390	1400	2497000	0.7%
DRREDDY	1300	4088125	-0.6%	1308	1300	1476250	-0.6%	SBILIFE	1840	667500	1.1%	1819	1820	162000	0.0%
EICHERMOT	7100	352625	1.6%	6991	6500	277725	-7.0%	SBIN	900	6000000	3.4%	871	800	5278500	-8.1%
ETERNAL	340	7495675	0.5%	338	330	6060075	-2.5%	SHRIRAMFIN	640	1167375	1.8%	629	620	900075	-1.4%
GRASIM	2900	398250	3.1%	2814	2600	157500	-7.6%	SUNPHARMA	1620	1372350	-0.7%	1631	1600	746550	-1.9%
HCLTECH	1500	1436750	4.9%	1430	1380	464450	-3.5%	TATACONSUM	1200	670450	6.3%	1129	970	397650	-14.0%
HDFCBANK	970	10012200	1.3%	957	970	4185500	1.3%	TATAMOTORS	720	9916800	2.7%	701	700	3722400	-0.2%
HDFCLIFE	800	2449700	3.2%	775	780	761200	0.6%	TATASTEEL	175	20047500	1.0%	173	160	14531000	-7.7%
HEROMOTOCO	5500	853200	2.4%	5371	5400	208350	0.5%	TCS	3200	2026150	4.5%	3062	3000	790125	-2.0%
HINDALCO	760	2538200	1.9%	746	720	1240400	-3.5%	TECHM	1580	1530000	7.3%	1472	1480	1431000	0.6%
HINDUNILVR	2700	1658700	7.0%	2522	2600	343200	3.1%	TITAN	3600	1065225	4.7%	3439	3400	290325	-1.1%
ICICIBANK	1420	3840900	1.8%	1394	1400	2409400	0.4%	TRENT	5300	1108600	8.4%	4891	5000	251900	2.2%
INDUSINDBK	760	1736000	0.6%	755	740	1402800	-2.0%	ULTRACEMCO	13000	164850	4.8%	12401	12000	46600	-3.2%
INFY	1600	5531200	6.8%	1498	1440	2934400	-3.8%	WIPRO	260	13221000	4.2%	250	250	4563000	0.1%

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

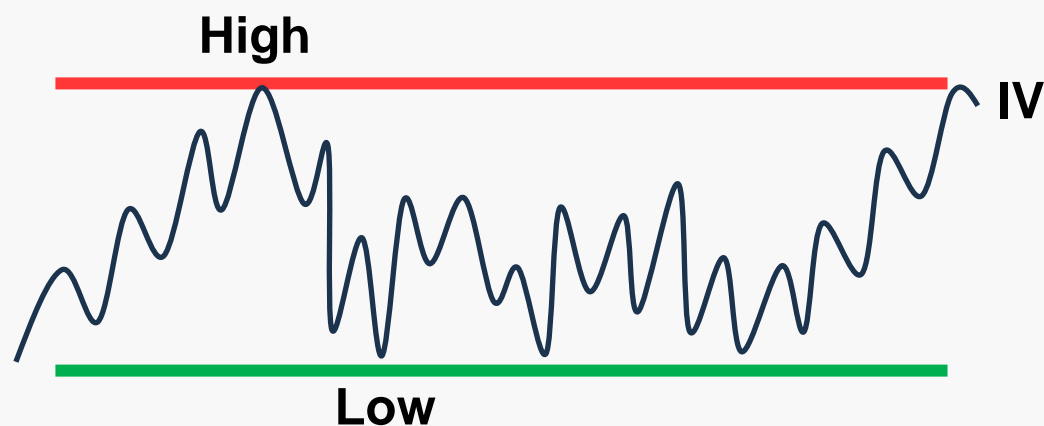
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating 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*

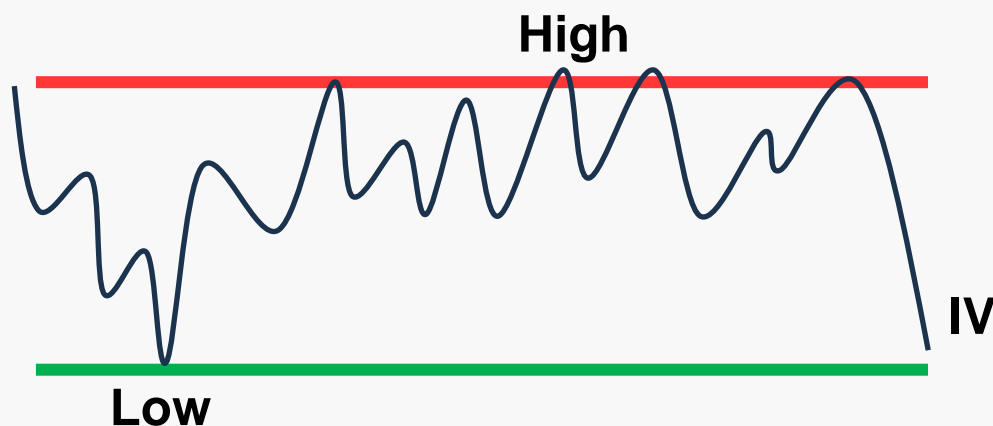


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, 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

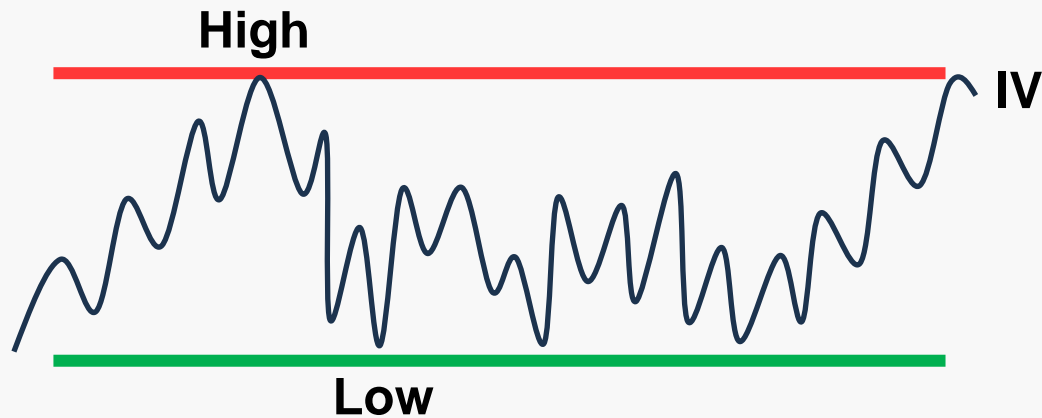


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

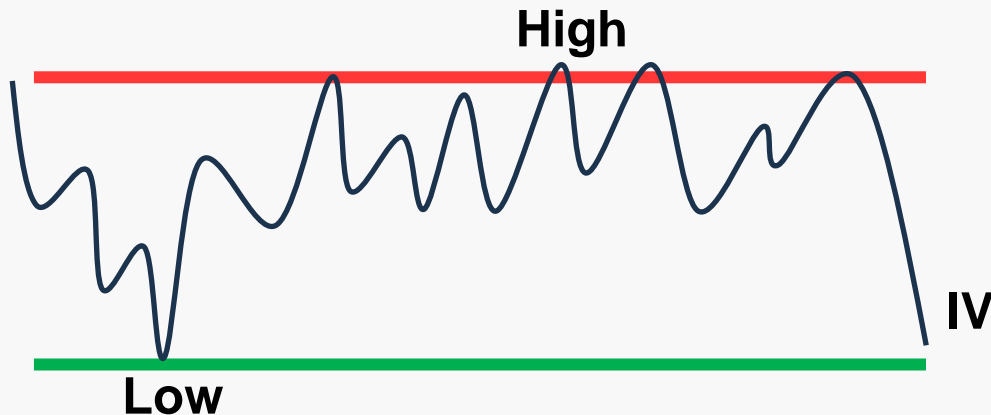


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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