



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,708	0.3%▼
Open Interest (OI)	1,76,37,525	0.7%▲
Change in OI (abs)	1,76,37,525	1,27,500▲
Premium / Discount (Abs)	58	12▼
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,539	0.6%▼
Open interest (OI)	28,38,675	18.2%▲
Change in OI (abs)	28,38,675	4,36,730▲
Premium / Discount (Abs)	179	62▼
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	11.71	0.26▼
Nifty ATM IV (%)	10.31	0.4▼
Bank Nifty ATM IV (%)	11.23	0.2▼
PCR (Nifty)	0.83	0.11▼
PCR (Bank Nifty)	0.82	0.08▼

The FII Long Ratio in Index Futures **drop** to 8.4 %, **down** from 9 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	96,750	40.8%	6977	1.5%
APLAPOLLO	57,78,500	12.7%	1607.5	1.2%
KAYNES	8,98,200	8.9%	6356	0.4%
PIDILITIND	36,49,250	4.3%	3004.3	1.8%
NHPC	5,13,85,600	2.4%	85.29	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
PAYTM	2,86,85,350	27.4%	1058.5	-2.3%
NCC	1,57,32,900	12.1%	209.26	-0.2%
ANGELONE	23,29,750	10.4%	2596.3	-1.6%
AUBANK	2,10,94,000	7.6%	746.3	-1.3%
KEI	10,58,400	7.1%	3834	-1.8%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MARUTI	29,70,500	-3.1%	12556	1.3%
BHARTIARTL	4,30,72,525	-2.8%	1936.7	0.9%
CGPOWER	1,73,80,800	-2.6%	681.75	2.6%
HCLTECH	1,91,63,200	-2.5%	1485.5	0.5%
MAZDOCK	30,09,650	-2.2%	2849.6	2.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SHREECEM	2,53,325	-5.2%	30355	-1.4%
MPHASIS	38,11,225	-5.0%	2712.5	-1.7%
BRITANNIA	29,48,125	-4.1%	5648.5	-2.7%
DELHIVERY	1,31,49,275	-3.9%	460.15	-0.8%
CIPLA	1,13,63,625	-3.0%	1502.5	-1.3%

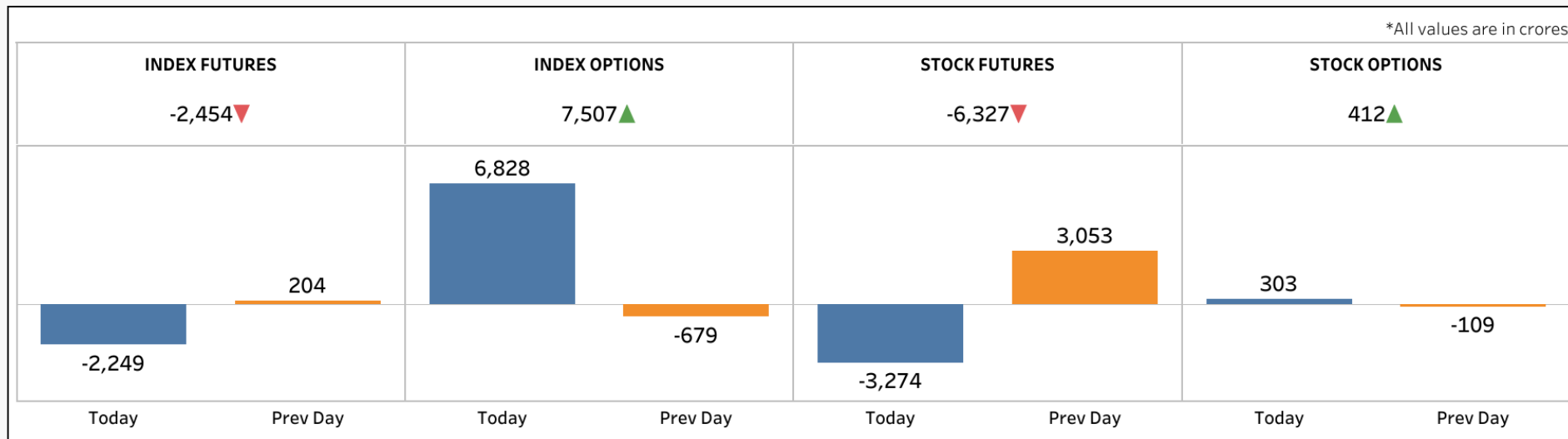
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

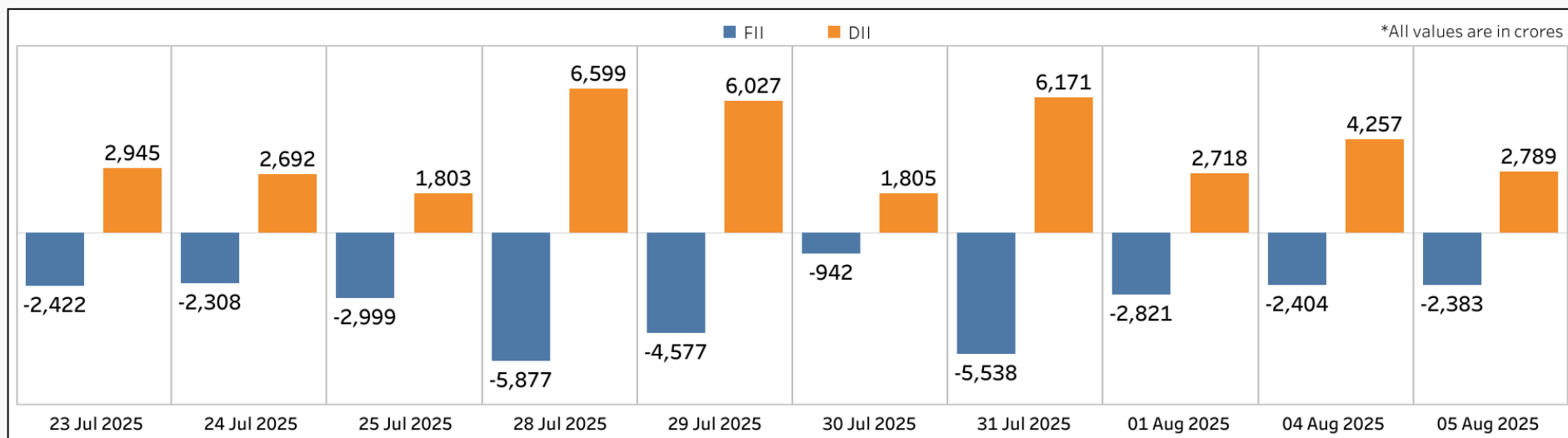
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-24,409 ▼	-13,058 ▼	61,116 ▲	-86,709 ▼	0	1,770 ▲	-5,140 ▼	46,090 ▲
6,683	31,092	28,508	44,831	0	1,724	0	20,141
	-11,824	-32,608	-41,878		-46	-5,140	-25,949
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-39,792	-168,774	196,892	1,308,969	70	33,417	19,634	-3,944,897
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
316,325 ▲	8,226 ▲	-33,904 ▼	56,350 ▲	-291,914 ▼	3,062 ▲	-22,068 ▼	-15,731 ▼
125,326	5,670	30,364	35,449	159,906	4,430	2,242	2,019
	-2,556	-3,540	-20,901		1,368	-19,826	-13,712
-190,999				-132,008			
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
27,909	118,497	-425,276	2,204,100	11,813	16,860	208,751	431,828
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

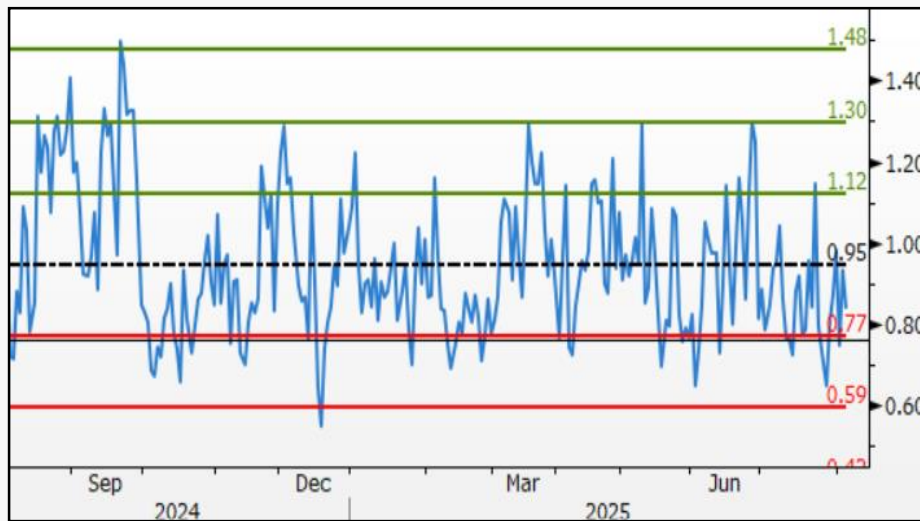
## Daily Net Open Interest Change



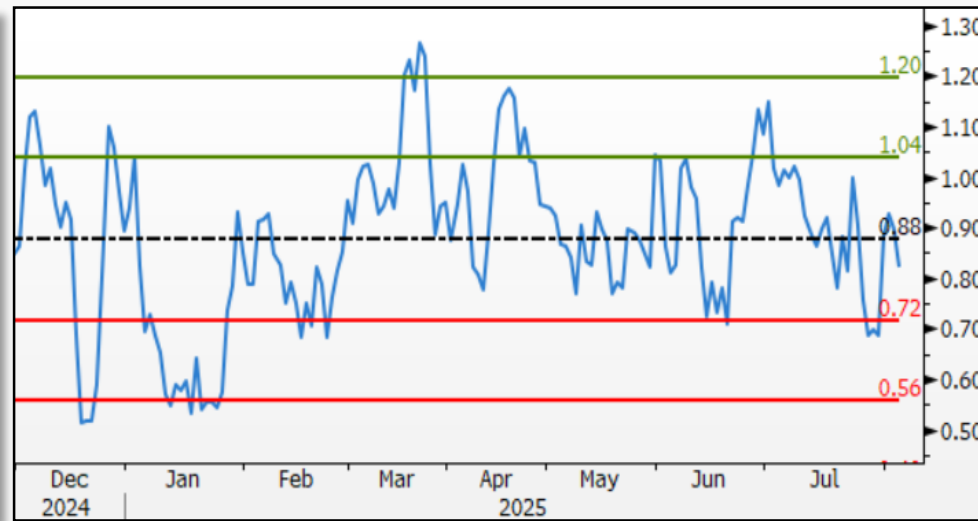
## DII and FII Daily Cash Market Flows



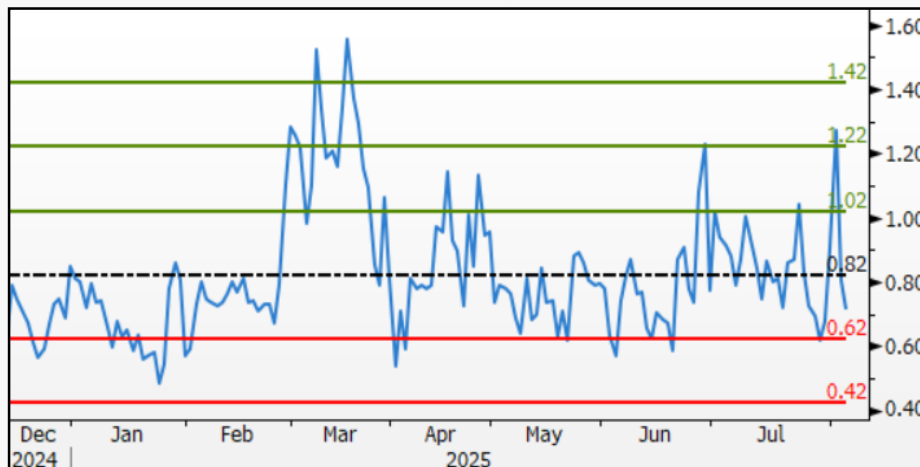
## Nifty



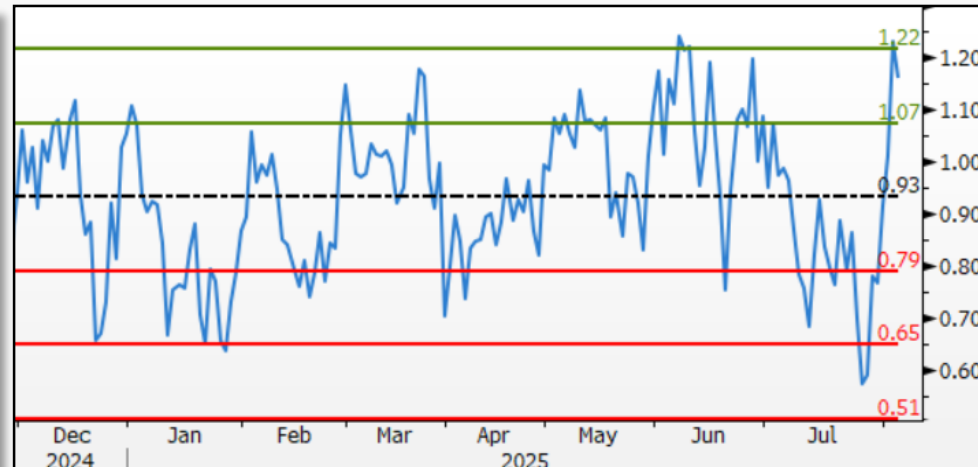
## Bank Nifty



## Fin Nifty

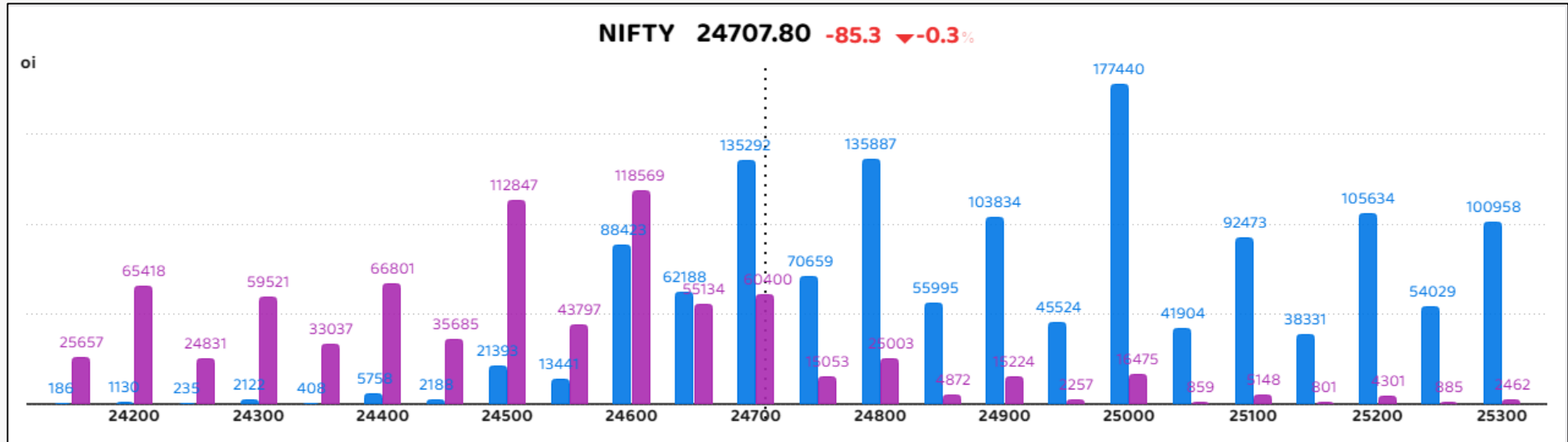


## Midcap Select Nifty



## 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.

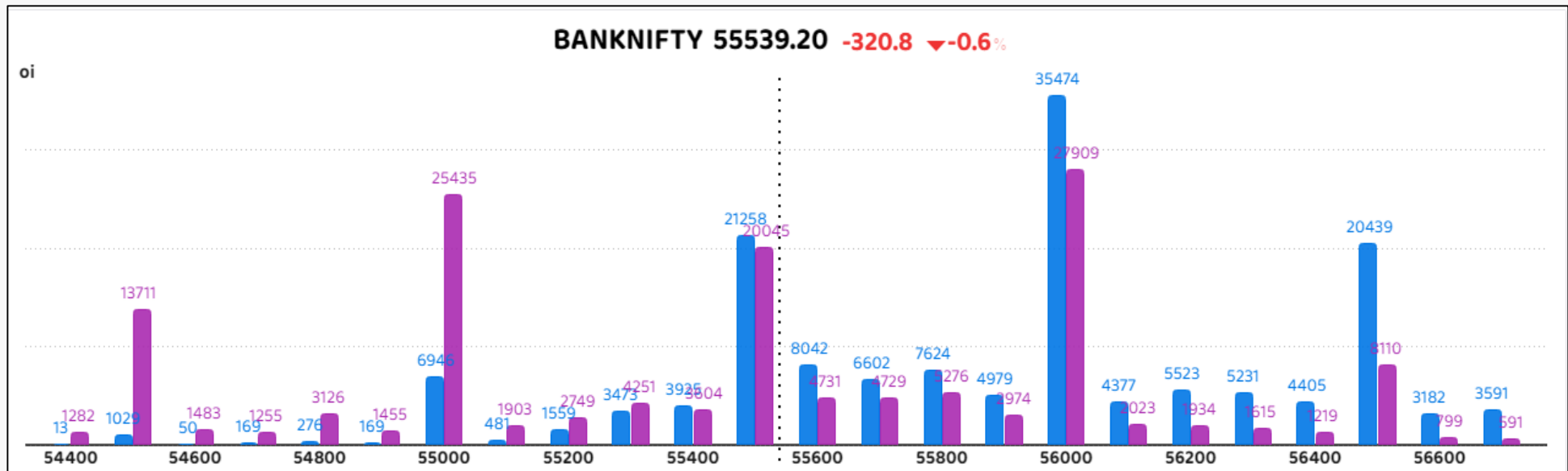
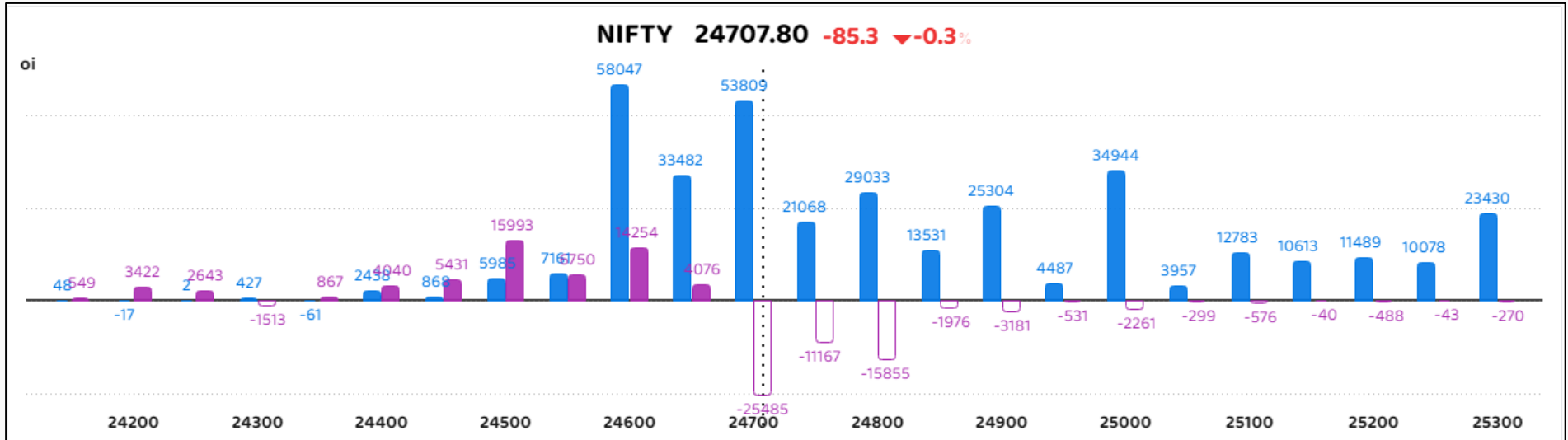


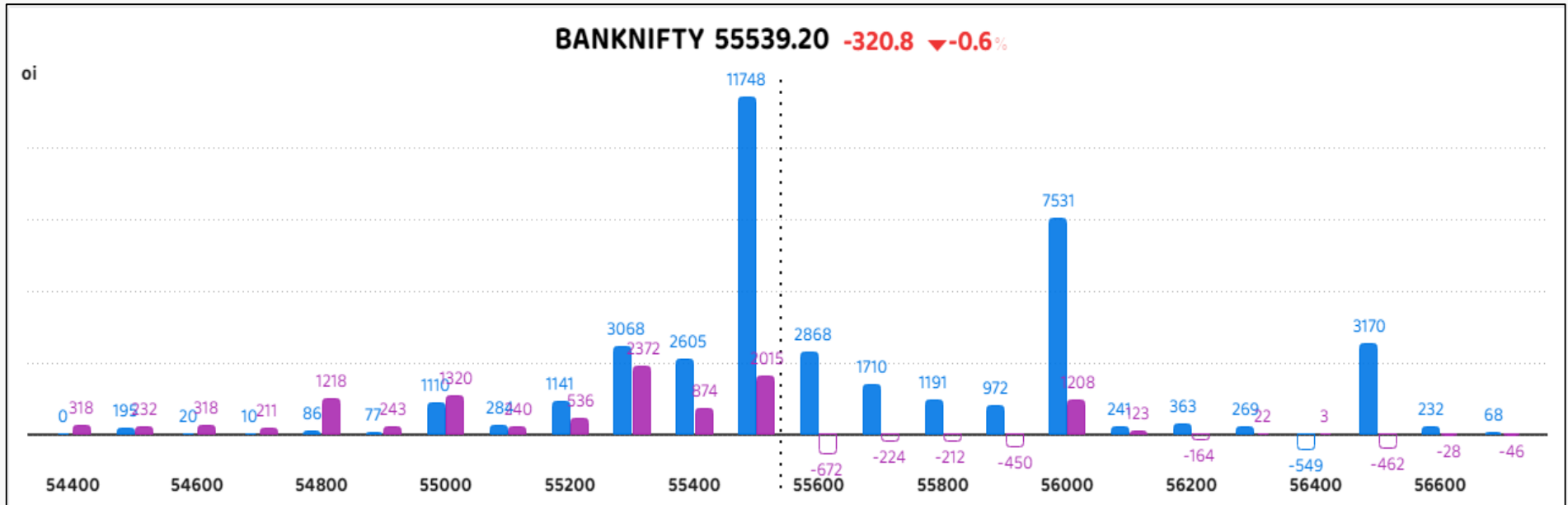
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## 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 24,700 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 55,300 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BLUE STAR LTD	1750.7	0.6	40.0	40.0	23.4	100.0
PG ELECTROPLAST	790.9	0.2	47.2	48.9	35.6	87.4
PIDILITE INDS	2997.6	1.6	24.9	28.9	11.8	76.4
SHREE CEMENT	30205	-1.4	25.5	31.9	7.9	73.3
ASTRAL LTD	1427	-0.1	30.3	40.4	2.9	72.9

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
LARSEN & TOUBRO	3652.6	0.6	16.2	35.5	16.2	0.0
LODHA DEVELOPERS	1234	-0.8	30.8	57.6	30.8	0.0
BOSCH LTD	40595	-1.3	2.1	36.2	2.1	0.0
BALKRISHNA INDS	2545.1	-1.3	17.4	42.7	17.4	0.0
BANK OF BARODA	240.65	-0.2	22.8	66.9	22.7	0.3



### Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
BLUE STAR LTD	1750.7	0.6	40.0	40.0	23.4	100.0
PG ELECTROPLAST	790.9	0.2	47.2	48.9	35.6	97.0
PAGE INDUSTRIES	45730	-1.2	31.4	39.9	13.0	95.2
GODREJ CONSUMER	1219.4	-2.4	31.5	38.0	18.7	94.6
IEX	133.49	-0.4	41.5	76.3	25.8	90.9

### Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LARSEN & TOUBRO	3652.6	0.6	16.2	35.5	16.2	0.0
LODHA DEVELOPERS	1234	-0.8	30.8	57.6	30.8	0.0
BOSCH LTD	40595	-1.3	2.1	36.2	2.1	0.0
BALKRISHNA INDS	2545.1	-1.3	17.4	42.7	17.4	0.0
ULTRATECH CEMENT	12298	0.3	17.8	31.0	17.5	0.6

### 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	75.17	-0.9	16010	1689	9.5
NUVAMA WEALTH	6993	1.6	7549	1416	5.3
INDUS TOWERS LTD	342.85	-0.9	6654	1563	4.3
MAZAGON DOCK	2847.8	2.9	27868	6985	4.0
CG POWER	680.25	2.7	11550	2955	3.9

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PAGE INDUSTRIES	45730	-1.2	1607	3096	1.9
PIRAMAL PHARMA	193.53	-0.8	1061	1696	1.6
INFO EDGE	1341.7	-2.1	3024	3808	1.3
AUROBINDO PHARMA	1079.3	-1.0	27408	31598	1.2
BSE LTD	2367.2	-4.8	69472	76588	1.1

### Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
KAYNES TECHNOLOGY	6325.5	0.5	7736	7736	100.0
PNB HOUSING FINANCE	767.8	-1.4	18244	22469	81.2

### Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
KAYNES TECHNOLOGY	6325.5	0.5	4943	4943	100.0
PIRAMAL PHARMA	193.53	-0.8	1875	2092	89.6
PNB HOUSING FINANCE	767.8	-1.4	9863	11631	84.8
UNO MINDA LTD	1103.1	3.9	1178	1454	81.0

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
UNO MINDA LTD	1103.1	3.9	14835	14835	100.0
NUVAMA WEALTH	6993	1.6	7549	7549	100.0

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
UNO MINDA LTD	1103.1	3.9	3824	3824	100.0
NUVAMA WEALT	6993	1.6	1416	1416	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PNB HOUSING FINANCE	767.8	-1.4	18244	6827	2.7
IIFL FINANCE LTD	437.35	-2.7	3728	2737	1.4
DELHIVERY LTD	458.05	-0.8	4663	3438	1.4
BRITANNIA INDS	5635.5	-2.6	7029	5215	1.3
KAYNES TECHNOLOGY	6325.5	0.5	7736	5838	1.3

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PNB HOUSING FINANCE	767.8	-1.4	9863	3952	2.5
KAYNES TECHNOLOGY	6325.5	0.5	4943	3009	1.6
DELHIVERY LTD	458.05	-0.8	4281	2622	1.6
PETRONET LNG LTD	276.35	-2.0	8060	5472	1.5
BRITANNIA INDS	5635.5	-2.6	4592	3198	1.4

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
UNO MINDA LTD	1103.1	3.9	14835	3262	4.5
ADANI PORTS	1358.1	-2.2	69402	18144	3.8
EXIDE INDUS LTD	384.75	-1.5	31507	8350	3.8
ADITYA BIRLA CAP	282	1.3	33183	8894	3.7
INDUSIND BANK	819.15	1.9	146086	41136	3.6

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
AUROBINDO PHARMA	1079.3	-1.0	31598	6092	5.2
BRITANNIA INDS	5635.5	-2.6	17644	3713	4.8
EXIDE INDUS LTD	384.75	-1.5	14604	3307	4.4
ADITYA BIRLA CAPITAL	282	1.3	20009	4931	4.1
ADANI PORTS	1358.1	-2.2	33929	8837	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	1663800	11.7%	2328	2700	1305600	16.0%	ITC	420	15032000	1.4%	414	410	4486400	-1.0%
ADANIPTS	1400	1971250	3.1%	1358	1400	1355650	3.1%	JIOFIN	350	7618700	5.2%	333	310	6582350	-6.9%
APOLLOHOSP	7500	121875	3.1%	7274	6600	77500	-9.3%	JSWSTEEL	1060	936225	0.6%	1053	1000	502875	-5.1%
ASIANPAINT	2500	673500	2.6%	2437	2400	372000	-1.5%	KOTAKBANK	2200	1196000	9.8%	2003	2000	708800	-0.1%
AXISBANK	1200	3145000	12.1%	1071	1100	1488750	2.7%	LT	3700	951125	1.3%	3653	3600	460425	-1.4%
BAJAJ-AUTO	8500	117075	3.3%	8231	8000	107025	-2.8%	M&M	3400	1560600	5.8%	3212	3100	1395600	-3.5%
BAJAJFINSV	2000	869000	3.1%	1939	1720	455000	-11.3%	MARUTI	13000	274950	3.7%	12537	12000	90600	-4.3%
BAJFINANCE	900	6301500	0.9%	892	900	3576750	0.9%	NESTLEIND	2300	415500	1.4%	2267	2100	179750	-7.4%
BEL	400	9082950	3.5%	387	380	4049850	-1.7%	NTPC	340	11494500	1.9%	334	380	1831500	13.9%
BHARTIARTL	2000	2297100	3.5%	1932	1900	803225	-1.6%	ONGC	235	15088500	0.2%	234	235	4911750	0.2%
CIPLA	1600	647625	6.7%	1500	1500	288375	0.0%	POWERGRID	300	5924200	4.9%	286	280	1590300	-2.1%
COALINDIA	400	6166800	5.4%	380	370	3052350	-2.5%	RELIANCE	1400	8791000	0.6%	1392	1400	4992000	0.6%
DRREDDY	1300	1748750	7.0%	1215	1080	666250	-11.1%	SBILIFE	1900	700875	2.3%	1857	1840	167250	-0.9%
EICHERMOT	5800	155400	2.1%	5681	5800	141400	2.1%	SBIN	820	8622750	2.4%	801	820	6613500	2.4%
ETERNAL	310	7408375	2.6%	302	300	5254975	-0.7%	SHRIRAMFIN	700	1643400	11.1%	630	600	816750	-4.8%
GRASIM	3100	236250	10.8%	2797	2800	115750	0.1%	SUNPHARMA	1800	942200	10.3%	1632	1500	961450	-8.1%
HCLTECH	1600	836150	7.9%	1483	1500	434000	1.2%	TATACONSUM	1100	778250	3.3%	1065	1000	309650	-6.1%
HDFCBANK	2000	2466750	1.1%	1978	2000	2672450	1.1%	TATAMOTORS	700	5315200	6.9%	655	800	2592000	22.2%
HDFCLIFE	800	1740200	8.3%	739	660	788700	-10.6%	TATASTEEL	180	22280500	12.8%	160	140	8123500	-12.3%
HEROMOTOCO	4600	587850	1.2%	4547	4500	169500	-1.0%	TCS	3200	2278850	4.4%	3064	3000	1103900	-2.1%
HINDALCO	700	2249800	1.9%	687	670	722400	-2.5%	TECHM	1600	991800	7.7%	1485	1400	338400	-5.7%
HINDUNILVR	2600	1892400	2.6%	2535	2400	724500	-5.3%	TITAN	3500	317450	2.4%	3418	3400	262675	-0.5%
ICICIBANK	1500	3418100	3.8%	1444	1400	1333500	-3.1%	TRENT	5500	317000	3.4%	5318	5000	227800	-6.0%
INDUSINDBK	900	2244900	9.9%	819	800	1354500	-2.3%	ULTRACEMCO	12300	97850	0.0%	12298	12000	43650	-2.4%
INFY	1600	3286800	9.6%	1460	1400	1486400	-4.1%	WIPRO	270	6384000	9.8%	246	250	3378000	1.7%

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

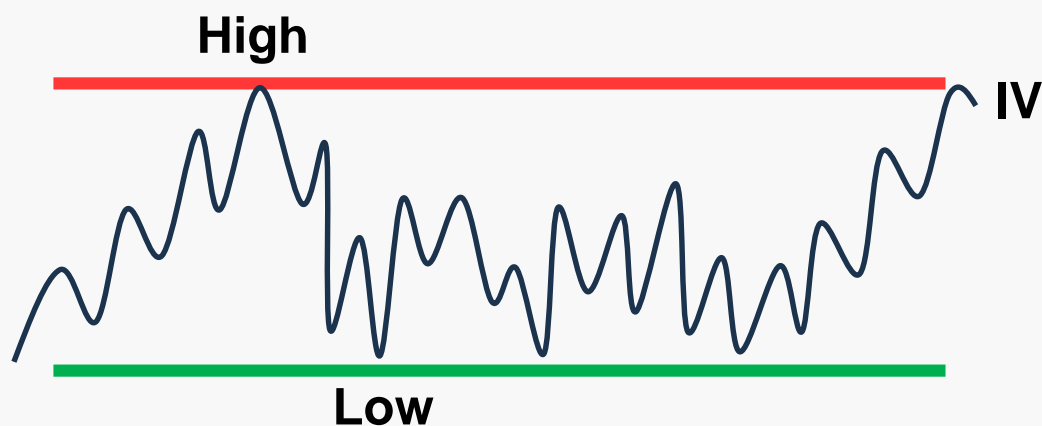
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

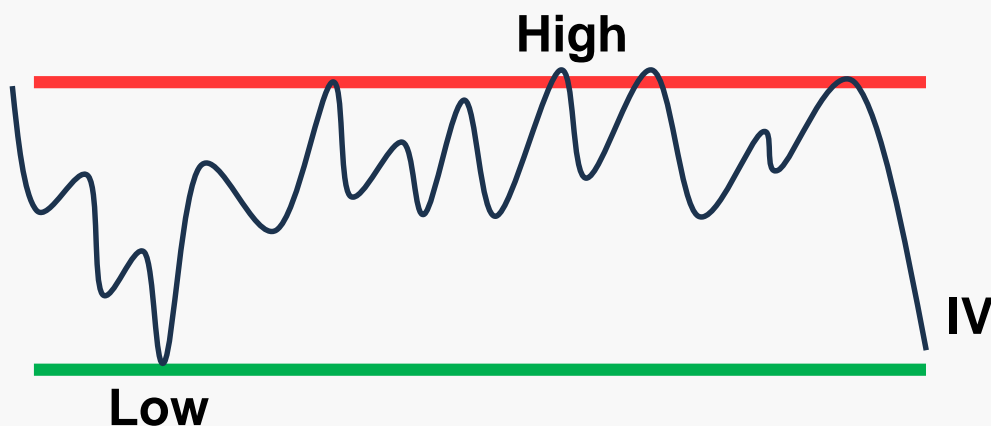


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls,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