



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,652	0.8% ▼
Open Interest (OI)	1,69,15,950	10.8% ▼
Change in OI (abs)	1,69,15,950	48,65,850 ▲
Premium / Discount (Abs)	151	131 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	54,259	1.0% ▼
Open interest (OI)	29,16,760	7.4% ▼
Change in OI (abs)	29,16,760	12,42,115 ▲
Premium / Discount (Abs)	439	364 ▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.18	0.01 ▼
Nifty ATM IV (%)	10.85	1.2 ▲
Bank Nifty ATM IV (%)	11.19	0.1 ▼
PCR (Nifty)	0.86	0.14 ▲
PCR (Bank Nifty)	0.97	0.46 ▲

The FII Long Ratio in Index Futures **drop** to 8.3 %, **down** from 14.3 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RELIANCE	12,52,07,000	0.8%	1395.4	0.1%
SBILIFE	71,11,500	-1.9%	1827.5	0.1%
LT	1,47,52,850	-4.1%	3573.7	0.3%
POLYCAB	15,26,375	-4.7%	7134.5	0.6%
ADANIENT	1,56,08,400	-5.3%	2287.1	0.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SHRIRAMFIN	4,71,16,575	10.1%	575.5	-3.9%
INDIGO	87,18,300	3.6%	5747.5	-5.0%
KOTAKBANK	3,72,84,800	1.5%	1958.5	-1.0%
JSWSTEEL	4,15,23,300	-0.2%	1042.8	-1.1%
MARICO	2,67,49,200	-0.4%	713.85	-1.2%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
MARUTI	30,30,650	-29.3%	14813	0.4%
BHARATFORG	1,10,34,500	-22.7%	1128.5	0.7%
HEROMOTOCO	53,62,350	-20.1%	5107.8	0.6%
KALYANKJIL	2,23,29,700	-19.1%	511.3	2.6%
AMBER	6,10,700	-17.6%	7279.5	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RBLBANK	3,78,68,225	-51.9%	255.65	-0.8%
DALBHARAT	22,01,550	-35.6%	2366	-0.4%
360ONE	33,65,000	-33.6%	1046.3	-4.2%
IGL	1,52,15,750	-28.4%	205.95	-0.4%
IEX	3,46,12,500	-25.9%	140.42	-1.1%

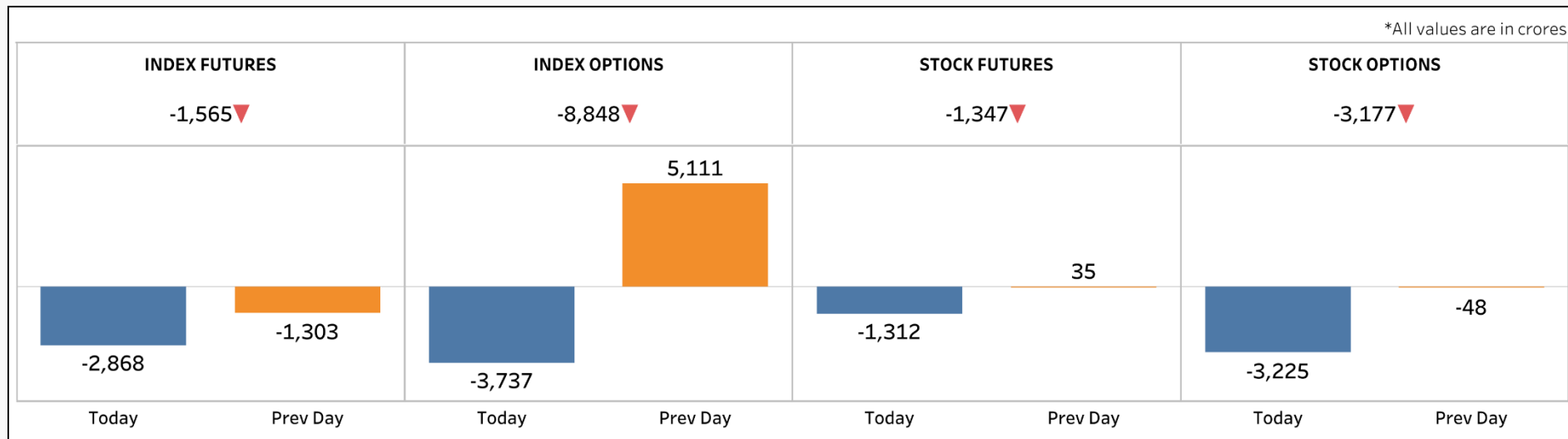
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

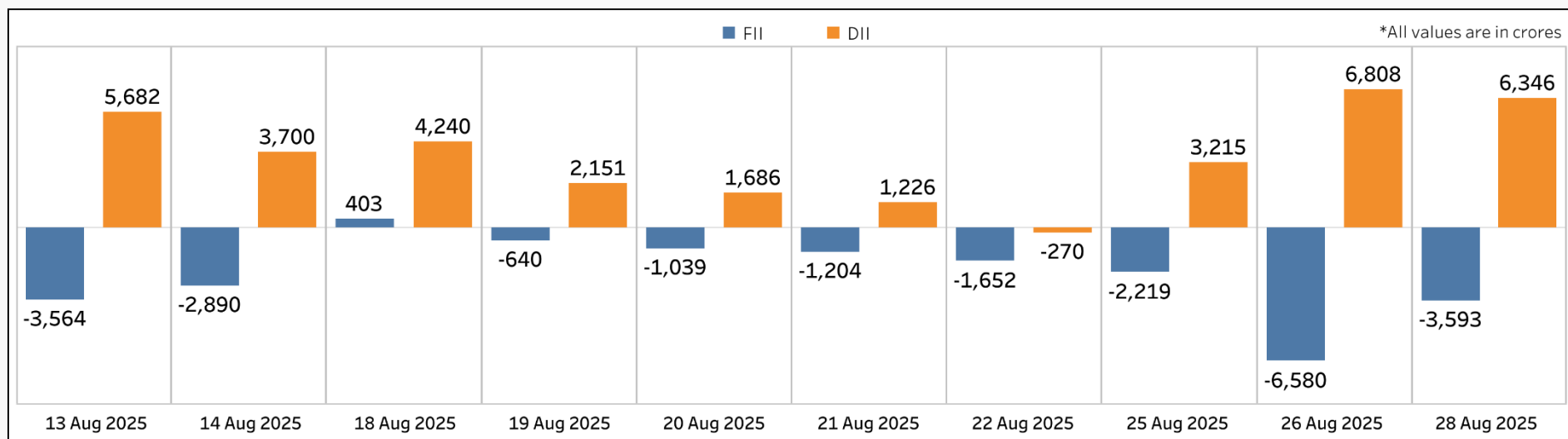
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
12,436 ▲	15,106 ▲	-35,347 ▼	-10,931 ▼	0	9,097 ▲	-22,675 ▼	24,492 ▲
6,903	8,415	29,832		0	8,867	0	2,852
-5,533	-6,691	-5,515	-13,835	-230	-22,675	-21,640	
Net O/S -46,009 Today Prev Day	Net O/S -168,514 Today Prev Day	Net O/S 286,019 Today Prev Day	Net O/S 1,344,762 Today Prev Day	Net O/S 370 Today Prev Day	Net O/S 36,166 Today Prev Day	Net O/S 22,179 Today Prev Day	Net O/S -3,971,364 Today Prev Day
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-191,372 ▼	-3,426 ▼	176,095 ▲	-66,389 ▼	178,934 ▲	-20,777 ▼	-118,074 ▼	52,828 ▲
186,436	4,294	114,688	32,039	-1,968	-21,576	31,575	45,333
-4,936	7,720	-61,407	-34,350	-180,902	-799	-86,499	-7,495
Net O/S 94,656 Today Prev Day	Net O/S 127,635 Today Prev Day	Net O/S -412,890 Today Prev Day	Net O/S 2,210,430 Today Prev Day	Net O/S -49,017 Today Prev Day	Net O/S 4,713 Today Prev Day	Net O/S 104,692 Today Prev Day	Net O/S 416,172 Today Prev Day

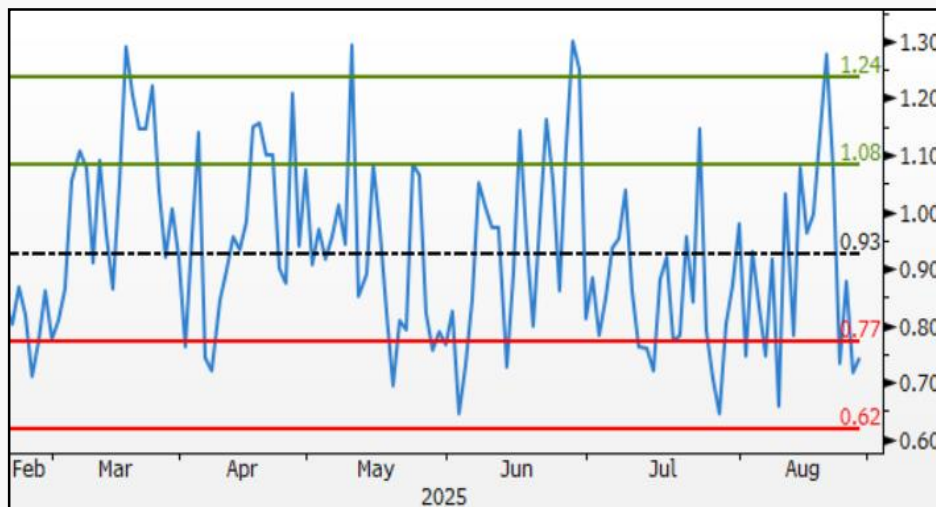
## Daily Net Open Interest Change



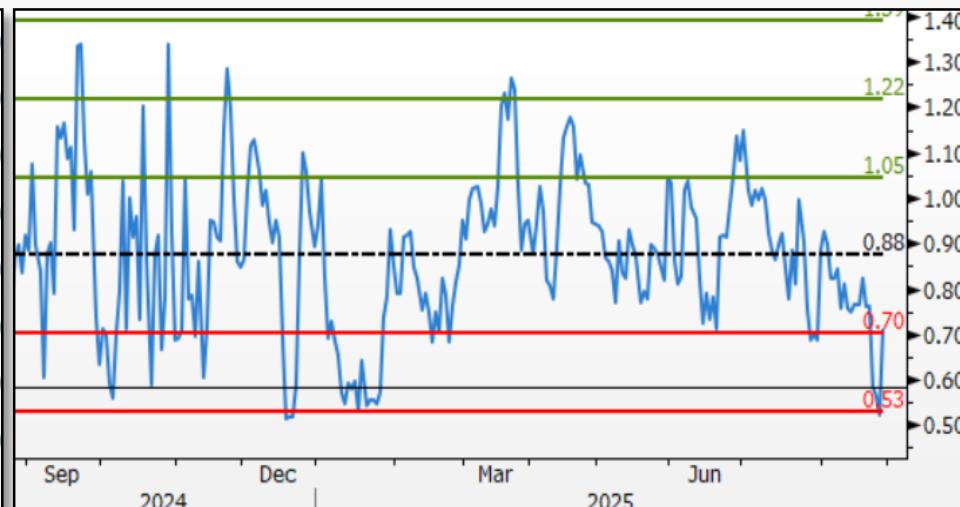
## DII and FII Daily Cash Market Flows



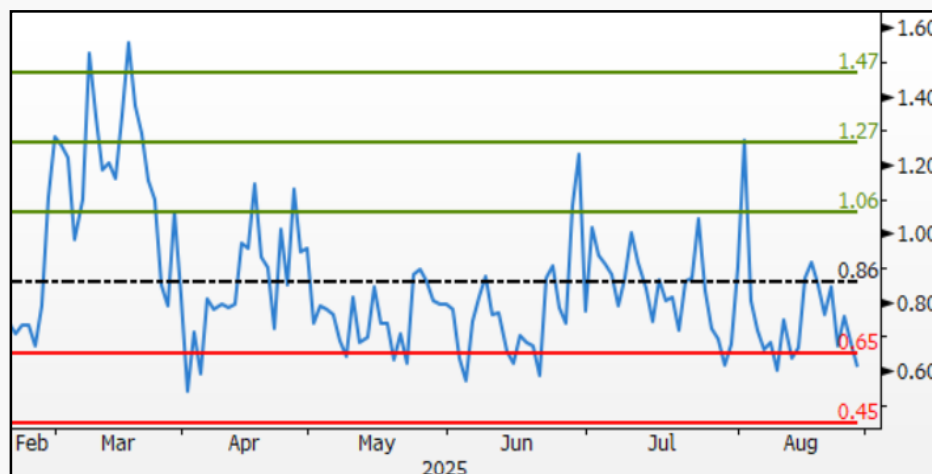
## Nifty



## Bank Nifty



## Fin Nifty

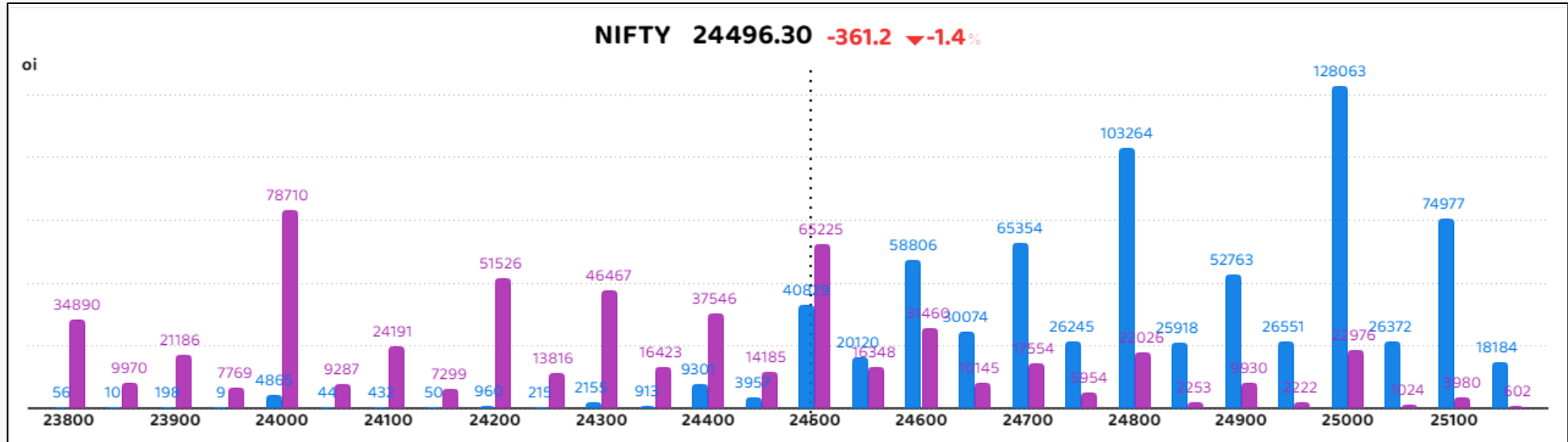


## Midcap Select Nifty



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

Call ■ Put ■



For the Nifty, the 25,000 Call and the 24,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 55,000 Call and the 54,000 Put saw the most amount of open interest.

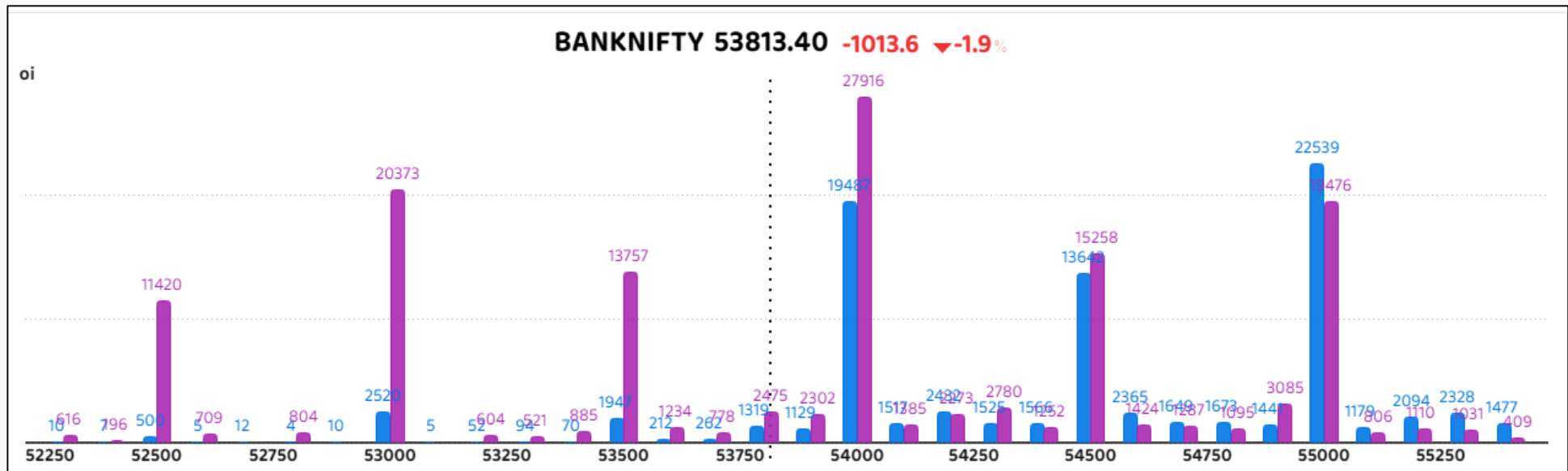
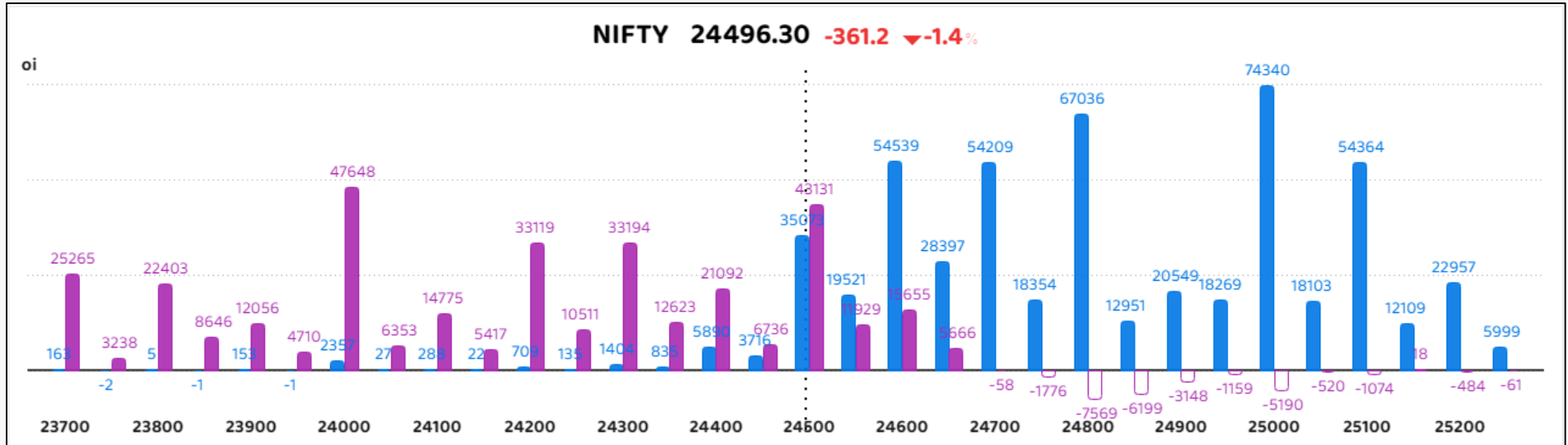


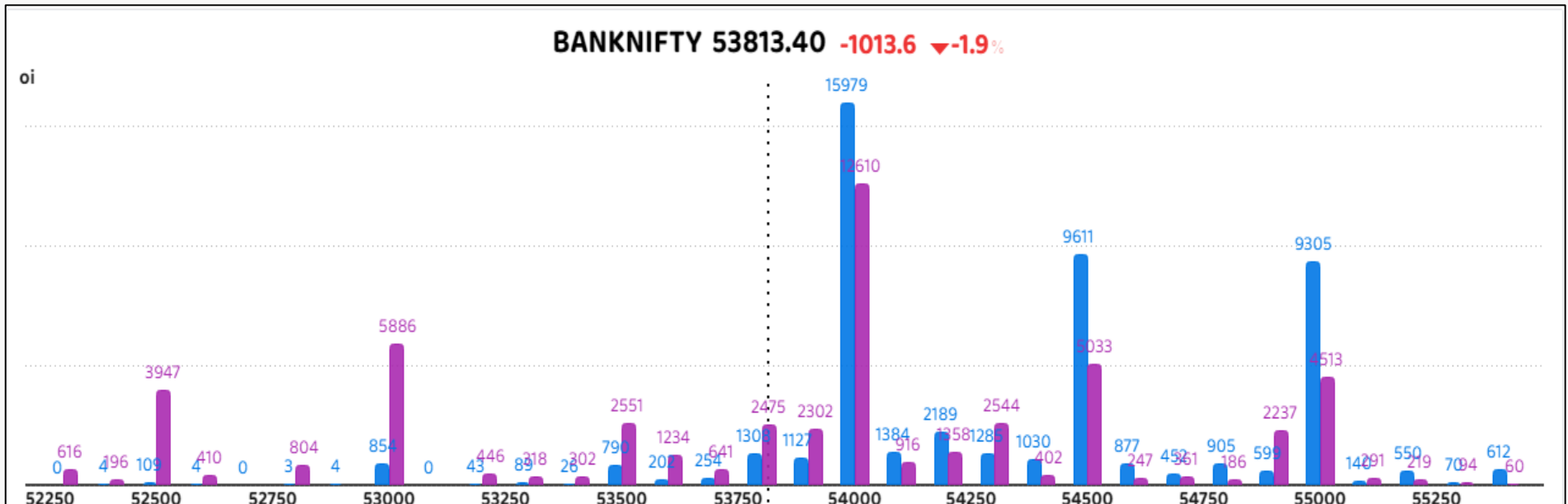
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,000 Put



For the Bank Nifty, the biggest open interest changes were seen at the 54,000 Call & the 54,000 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
SBI CARDS & PAYMENTS	803.6	-1.5	28.3	36.9	4.6	73.2
SHREE CEMENT	29675	-1.4	25.2	31.9	7.9	72.3
RBL BANK LTD	250.85	-1.8	56.9	76.5	10.6	70.2
MARUTI SUZUKI	14752	0.3	20.8	29.9	0.4	69.0
UNO MINDA LTD	1295.6	1.5	31.9	43.6	10.9	64.2

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
INTERGLOBE AVIATION	5727	-5.3	21.5	43.2	21.5	0.0
SUZLON ENERGY	56.32	-1.1	36.9	50.1	36.9	0.0
PNB HOUSING FINANCE	767.05	-2.0	28.1	58.6	28.1	0.0
DELHIVERY LTD	469.15	-2.0	27.3	58.6	27.3	0.0
PIRAMAL PHARMA	186.3	-1.6	29.2	40.1	29.2	0.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RBL BANK LTD	250.85	-1.8	56.9	76.5	10.6	92.0
SBI CARDS & PAYMENTS	803.6	-1.5	28.3	36.9	4.6	83.7
SHREE CEMENT	29675	-1.4	25.2	31.9	7.9	71.8
RELIANCE INDS	1385.9	0.1	21.4	34.1	1.4	69.0
ADITYA BIRLA FASHION	78.08	-5.4	36.4	97.3	9.9	67.9

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
LIC	869.5	-2.1	17.0	40.4	17.0	0.0
BHARAT ELECTRONICS	363.85	-0.5	22.1	60.0	22.1	0.0
INTERGLOBE AVIATION	5727	-5.3	21.5	43.2	21.5	0.0
CUMMINS INDIA	3835.2	0.0	22.0	53.5	22.0	0.0
UNITED SPIRITS	1281.5	-1.6	18.7	34.9	18.7	0.0

### Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
VODAFONE IDEA LTD	6.57	-2.1	12086	2574	4.7
SUZLON ENERGY	56.32	-1.1	5720	1444	4.0
FSN E-COMMERCE	233.84	0.9	6400	1658	3.9
AVENUE SUPERMART	4699.9	-0.3	6482	1887	3.4
SBI LIFE	1816.8	0.0	4872	1468	3.3

### Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
SIEMENS LTD	3043.2	-0.2	3066	4562	1.5
CUMMINS INDIA	3835.2	0.0	1076	1467	1.4
CHOLAMANDALAM	1439.8	-2.5	2067	2467	1.2
APOLLO HOSPITALS	7728	-0.8	6180	6859	1.1
ABB INDIA LTD	5000.5	-0.4	6975	7484	1.1

## Call Open Interest Relative to Record High

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

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
NO STOCK OPTION MET THE CONDTION MENTIONED IN THE FOOTNOTE					

### 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
INTERGLOBE AVIATION	5727	-5.3	14269	9661	1.5
JINDAL STAINLESS	806.45	1.4	2810	2518	1.1
ANGEL ONE LTD	2259.4	-3.4	8040	7654	1.1
IRB INFRASTRUCTURE	42.36	-4.2	2110	2105	1.0
VODAFONE IDEA LTD	6.57	-2.1	16633	16840	1.0

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
JINDAL STAINLESS	806.45	1.4	2131	1425	1.5
ADITYA BIRLA FASHION	78.08	-5.4	7224	5364	1.3
SJVN LTD	96.17	-3.1	1550	1248	1.2
INTERGLOBE AVIATION	5727	-5.3	10198	8608	1.2
ADANI TOTAL GAS	592.55	-6.8	1320	1241	1.1

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
CESC LTD	154.17	-4.6	12657	3796	3.3
GRANULES INDIA	467.25	-0.5	15642	5479	2.9
INTERGLOBE AVIATION	5727	-5.3	53030	26140	2.0
ADANI TOTAL GAS	592.55	-6.8	3613	1955	1.8
SHRIRAM FINANCE	571.65	-3.9	17546	11604	1.5

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
CESC LTD	154.17	-4.6	3903	1313	3.0
GRANULES INDIA	467.25	-0.5	5481	2321	2.4
INTERGLOBE AVIATION	5727	-5.3	37173	16796	2.2
SHRIRAM FINANCE	571.65	-3.9	12519	6302	2.0
REC LTD	354.9	-2.4	16260	9246	1.8

## 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	717000	14.3%	2275	2600	920400	14.3%	ITC	410	5116800	2.3%	401	400	4168000	-0.2%
ADANIPTS	1400	1055925	6.4%	1315	1400	1179900	6.4%	JIOFIN	340	4704700	9.6%	310	350	3494450	12.9%
APOLLOHOSP	8000	67125	3.5%	7728	7900	54750	2.2%	JSWSTEEL	1100	871425	6.2%	1036	1000	282150	-3.5%
ASIANPAINT	2600	663250	4.5%	2489	2500	258000	0.4%	KOTAKBANK	2000	1126800	2.8%	1945	2000	519200	2.8%
AXISBANK	1100	1985625	4.6%	1052	1100	929375	4.6%	LT	3600	491925	1.1%	3560	3600	478975	1.1%
BAJAJ-AUTO	9000	146850	3.6%	8690	8200	54375	-5.6%	M&M	3300	373800	0.1%	3295	3400	287400	3.2%
BAJAJFINSV	2000	430500	4.3%	1918	1900	270500	-0.9%	MARUTI	15000	181350	1.7%	14752	14000	226500	-5.1%
BAJFINANCE	900	2489250	2.6%	877	900	1446750	2.6%	NESTLEIND	1200	424500	3.2%	1162	1100	137500	-5.4%
BEL	400	5930850	9.9%	364	370	3542550	1.7%	NTPC	340	2970000	2.8%	331	380	1870500	14.9%
BHARTIARTL	2000	873050	6.3%	1881	1900	577600	1.0%	ONGC	240	2504250	2.8%	233	235	1921500	0.7%
CIPLA	1600	297750	1.2%	1580	1500	130875	-5.1%	POWERGRID	300	2283800	9.3%	274	280	1692900	2.0%
COALINDIA	400	2181600	6.9%	374	450	2155950	20.2%	RELIANCE	1400	5482500	1.0%	1386	1400	3785000	1.0%
DRREDDY	1280	445625	1.6%	1260	1200	233750	-4.7%	SBILIFE	1900	135375	4.6%	1817	1900	68625	4.6%
EICHERMOT	6200	105700	1.1%	6133	5500	155225	-10.3%	SBIN	820	3468000	2.3%	802	800	2909250	-0.2%
ETERNAL	300	7682400	-4.9%	316	300	5150700	-4.9%	SHRIRAMFIN	600	1626075	5.0%	572	580	886875	1.5%
GRASIM	2900	105500	4.2%	2784	2600	68250	-6.6%	SUNPHARMA	1600	240450	0.9%	1586	1500	655550	-5.4%
HCLTECH	1500	767900	3.5%	1450	1500	342650	3.5%	TATACONSUM	1100	337150	3.5%	1062	1100	128700	3.5%
HDFCBANK	1000	5066600	4.4%	958	950	1669800	-0.8%	TATAMOTORS	700	4335200	3.6%	675	700	2172800	3.6%
HDFCLIFE	800	636900	3.2%	775	800	543400	3.2%	TATASTEEL	160	12292500	4.1%	154	150	6435000	-2.4%
HEROMOTOCO	5200	248250	2.1%	5092	5000	97950	-1.8%	TCS	3200	967225	3.4%	3094	3100	707875	0.2%
HINDALCO	750	831600	6.9%	701	700	894600	-0.2%	TECHM	1500	265800	0.3%	1496	1500	291000	0.3%
HINDUNILVR	2800	555300	5.5%	2654	2600	203100	-2.0%	TITAN	3600	240625	-1.0%	3638	3600	189525	-1.0%
ICICIBANK	1500	1180200	7.2%	1399	1400	1274000	0.1%	TRENT	5600	313500	7.0%	5236	5000	132400	-4.5%
INDUSINDBK	800	1145900	7.2%	747	800	918400	7.2%	ULTRACEMCO	13000	31100	3.8%	12521	12000	28450	-4.2%
INFY	1600	1090400	6.7%	1500	1500	958400	0.0%	WIPRO	260	3006000	3.7%	251	250	2202000	-0.3%

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

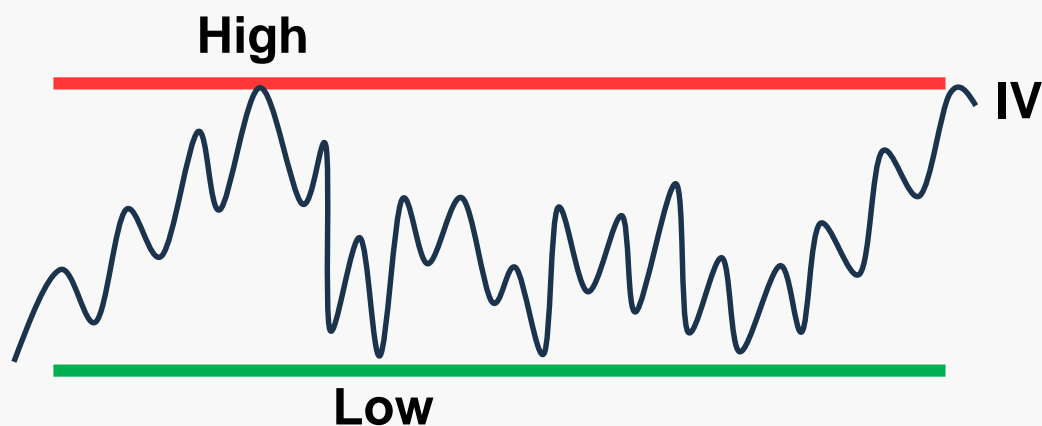
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating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

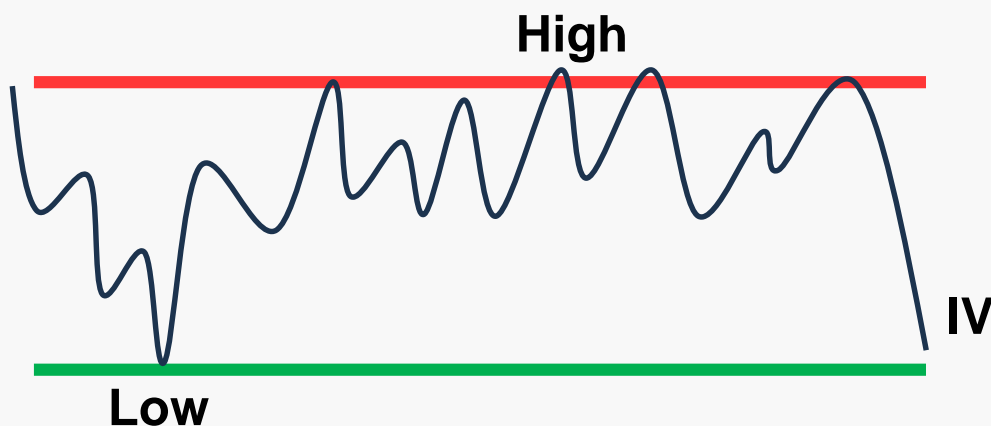


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls,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

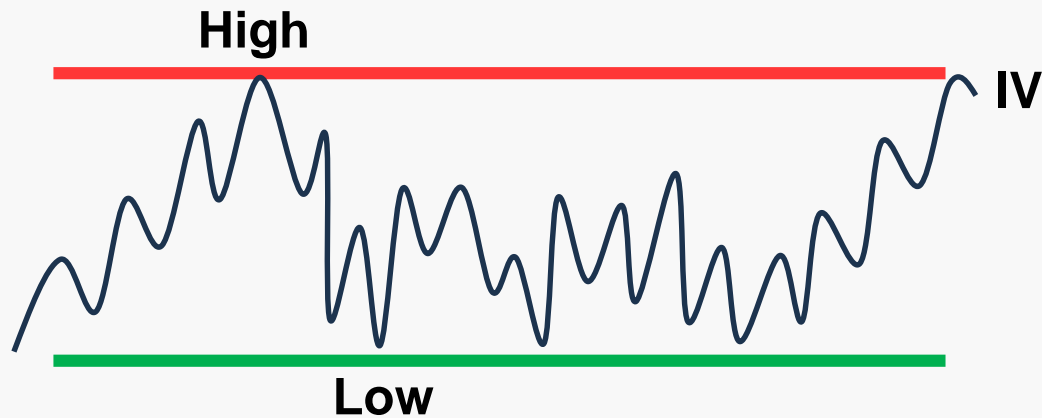


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

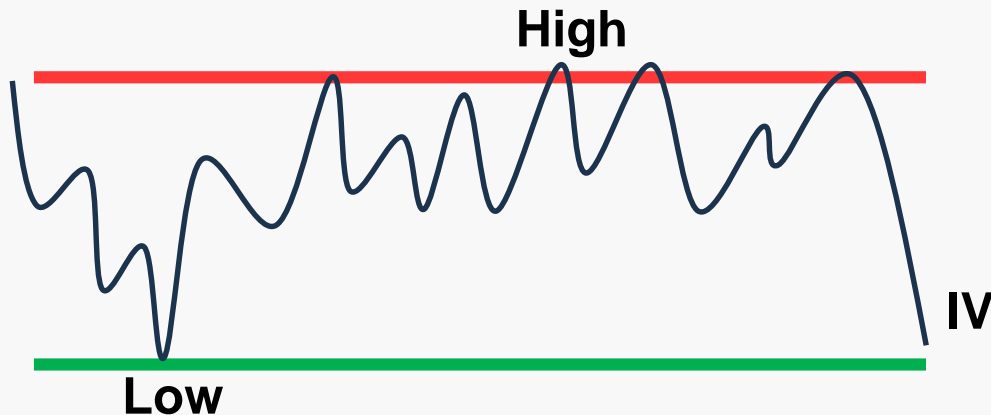


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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