



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,009	0.1%▼
Open Interest (OI)	1,94,49,365	39.4%▲
Change in OI (abs)	1,94,49,365	54,99,390▲
Premium / Discount (Abs)	143	117▲
<b>Inference</b>	<b>Short Build Up</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	57,991	0.27%▼
Open interest (OI)	23,52,060	25.7%▲
Change in OI (abs)	23,52,060	4,81,500▲
Premium / Discount (Abs)	85	363▲
<b>Inference</b>	<b>Short Build Up</b>	

## Volatility Insights

	Value	Change
India VIX Index	13.6	0.01▼
Nifty ATM IV (%)	13.36	1.72▼
Bank Nifty ATM IV (%)	11.64	7.52▼
PCR (Nifty)	1.02	0.17▲
PCR (Bank Nifty)	0.88	0.08▼

The FII Long Ratio in Index Futures **Drop to 10.3%**, **down** from 17 % in the previous session.

## Single Stock Futures Movers

### Long Buildup (Open Interest Higher + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
BIOCON	4,00,87,500	2.8%	421.2	1.0%
GVT&D	14,44,500	1.4%	4982.5	0.3%
DIVISLAB	33,14,500	1.2%	6604	0.4%
INDHOTEL	2,61,99,000	0.5%	719.2	0.8%
NMDC	35,76,96,000	-0.4%	85.78	0.0%

### Short Buildup (Open Interest Higher + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
ICICIGI	47,73,275	1.7%	1754.3	-1.5%
GODREJCP	1,14,20,000	1.4%	1018.6	-1.1%
PETRONET	3,47,18,700	1.1%	282.8	0.0%
DABUR	2,75,36,250	0.7%	419.95	-0.8%
HINDALCO	5,12,29,500	0.5%	959.5	-0.6%

### Short Covering (Open Interest Lower + Price Higher)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
JUBLFOOD	1,88,62,500	-40.0%	419.9	0.8%
INDIGO	73,77,300	-32.3%	5394.6	0.7%
BHEL	7,22,00,625	-29.6%	417.7	1.1%
HYUNDAI	52,22,525	-27.4%	1914.8	0.8%
MAZDOCK	44,88,075	-24.2%	2514.7	4.7%

### Long Unwinding (Open Interest Lower + Price Lower)

Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDUSTOWER	9,12,47,500	-24.8%	394.8	-0.4%
MPHASIS	47,10,750	-22.5%	2177.9	-2.2%
MCX	92,72,025	-20.9%	2842.6	-0.1%
COFORGE	1,96,03,250	-19.0%	1441.5	-2.8%
NHPC	10,92,26,200	-16.1%	79.9	-0.2%

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

Data Source : NSEBHAVCOPY

## Open Interest Trends by Participant

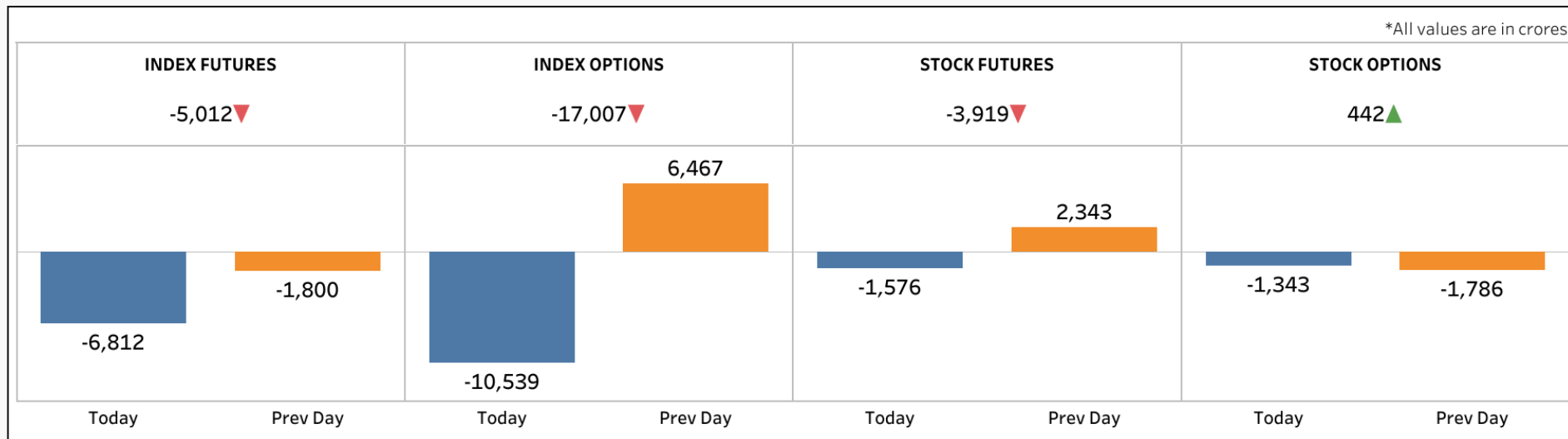
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-2,266 ▼	-11,317 ▼	-103,258 ▼	-189,497 ▼	-2,774 ▼	-10,198 ▼	-8,187 ▼	-27,872 ▼
12,274	14,540	19,574	23,300	65	846	5,550	7,687
	-21,959	-83,684	-166,197	-2,709	-9,352	-2,637	-20,185
	-10,642						
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-233,098	-256,410	532,536	510,094	3,350	60,881	23,026	-4,032,481
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

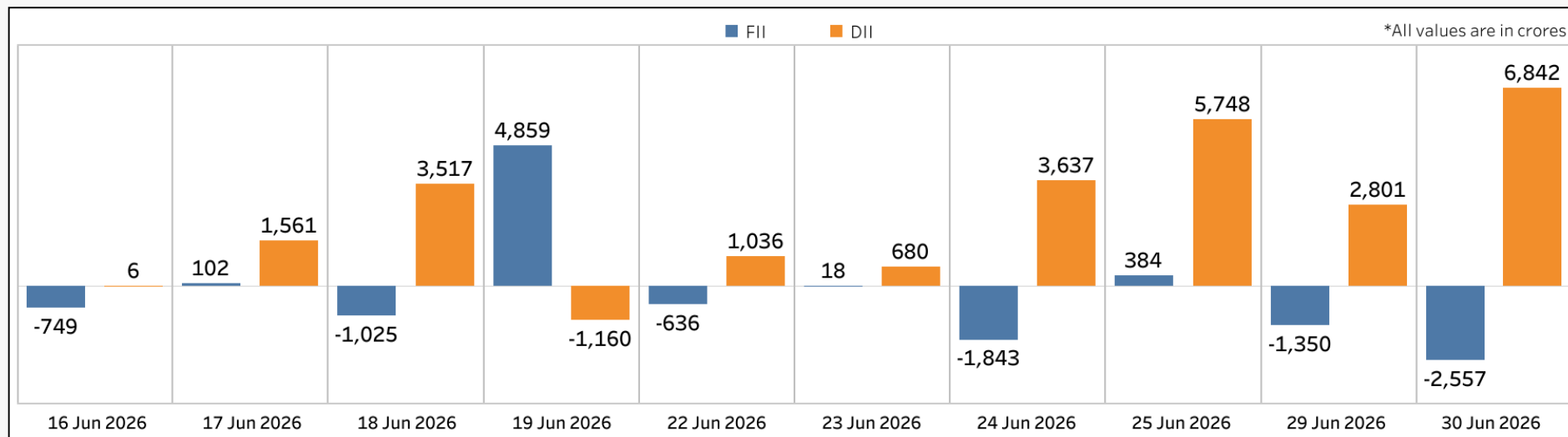
  

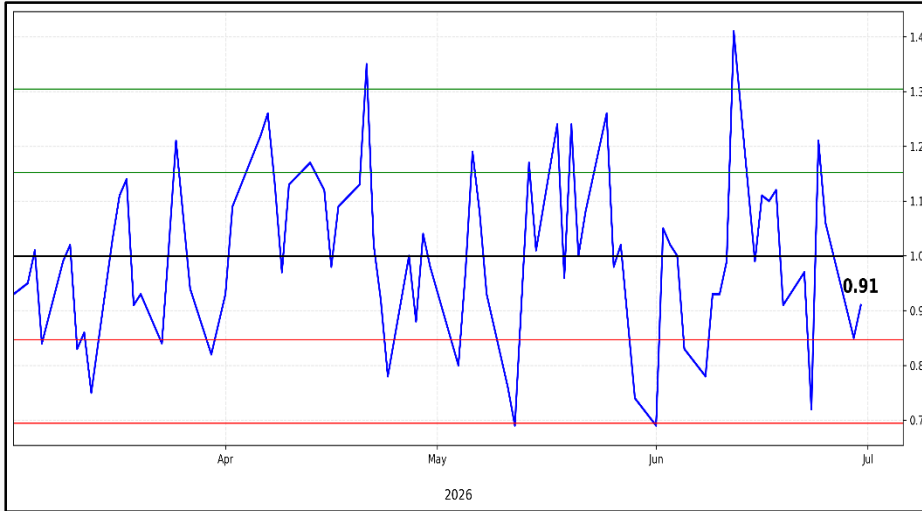
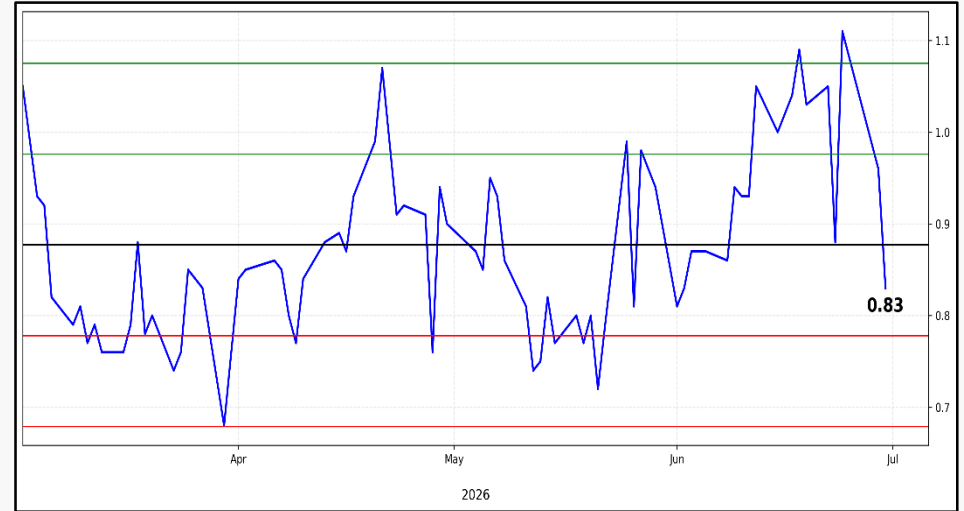
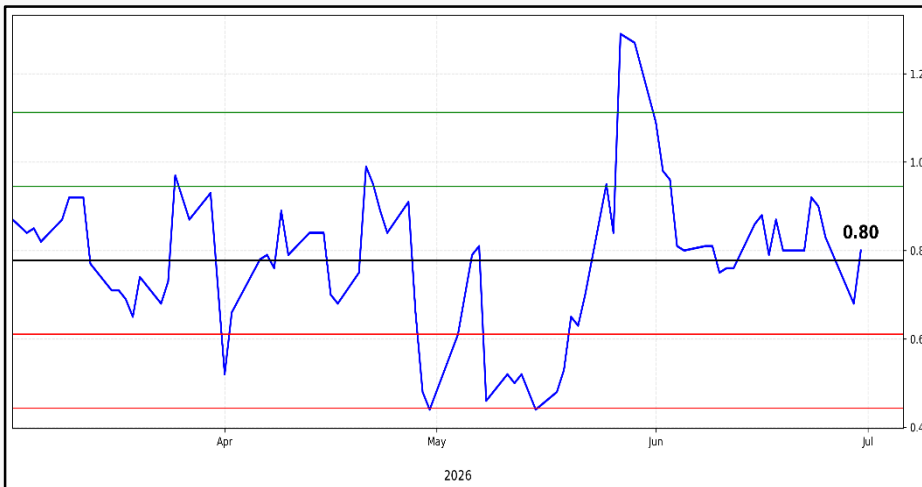
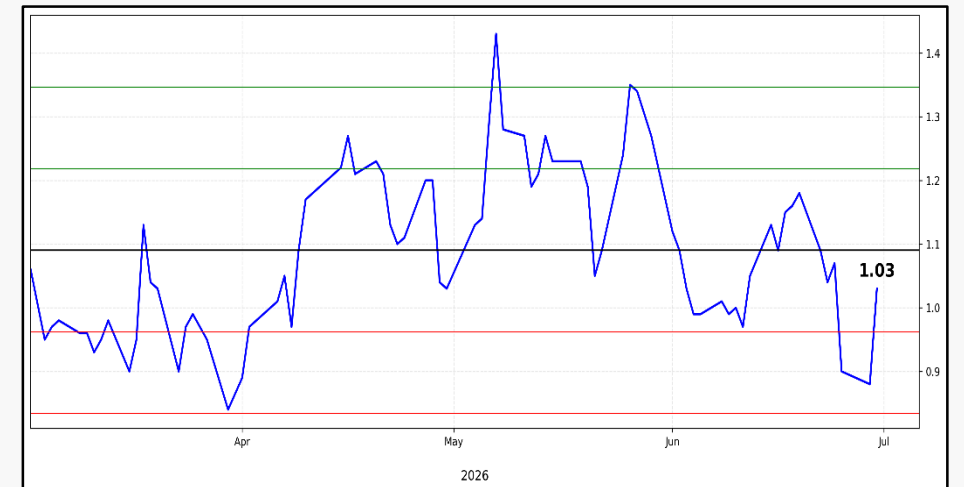
Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-100,025 ▼	2,457 ▲	46,048 ▲	17,091 ▲	105,065 ▲	19,058 ▲	65,402 ▲	200,278 ▲
76,403	18,761	30,039	17,641	14,057	12,550	56,285	168,741
-23,622	16,304	-16,009	550	-91,008	-6,508	-9,117	-31,537
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
192,300	186,107	-716,869	2,974,105	37,448	9,422	161,308	548,282
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

## Daily Net Open Interest Change



## DII and FII Daily Cash Market Flows

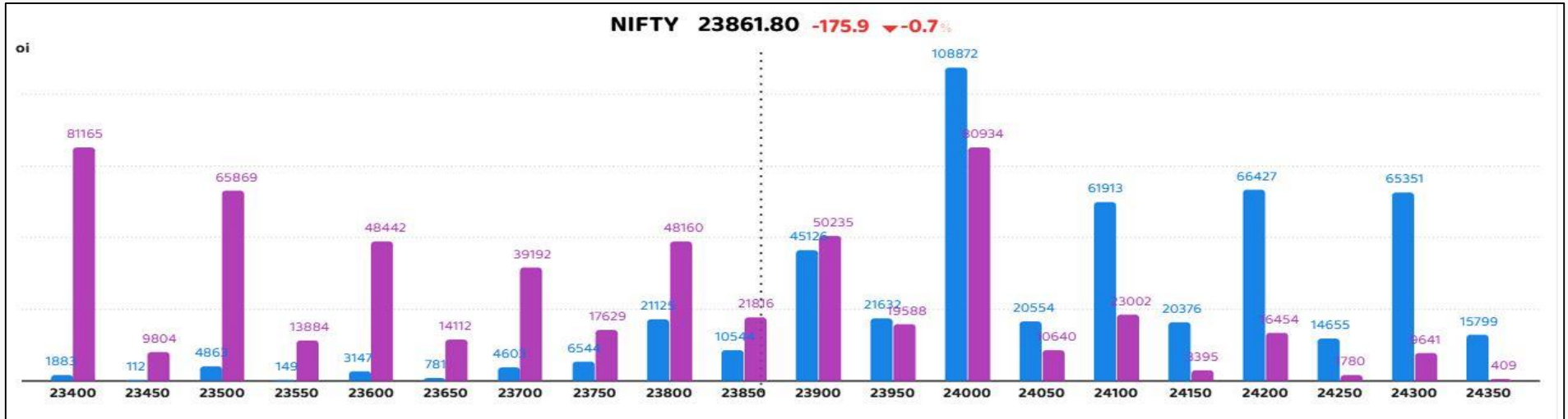


**Nifty**

**Bank Nifty**

**Fin Nifty**

**Midcap Select Nifty**


*On the day immediately post expiration, PCR values will differ due to the way open interest data for the expired series is treated for the PCR calculation*

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

Call ■ Put ■



For Nifty, the 24,500 Call and 24,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 59,000 Call and the 58,000 Put saw the most amount of open interest.

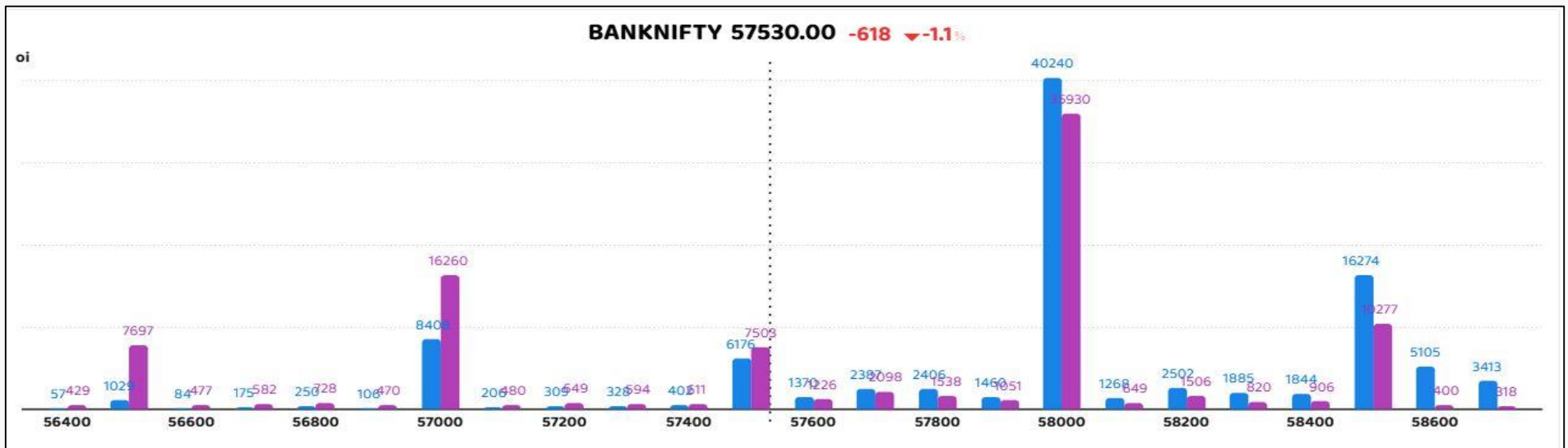
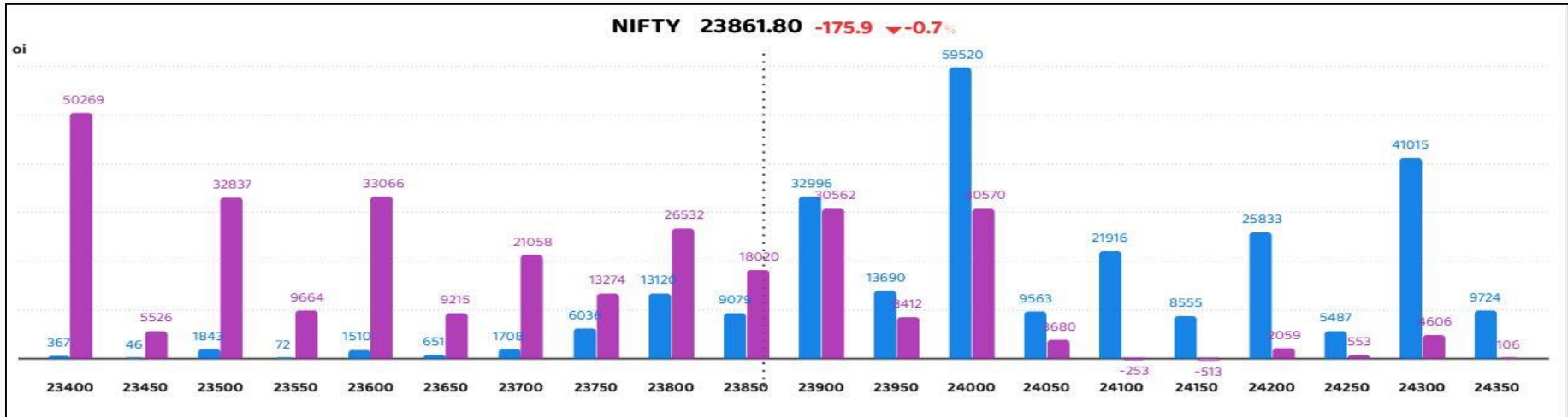


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

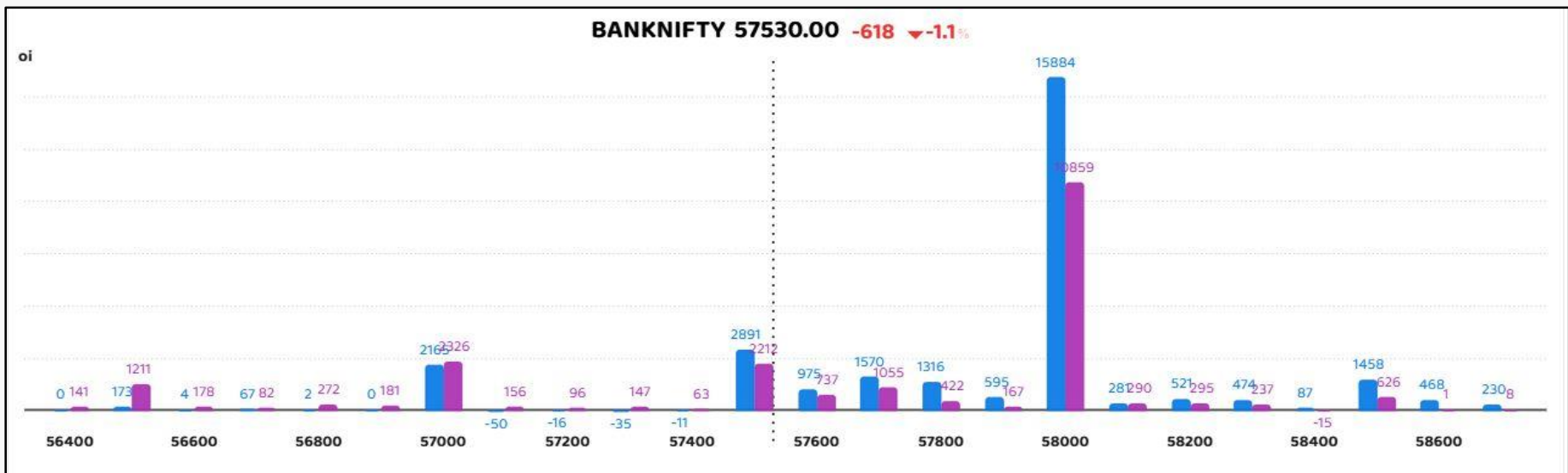
Data Source : NSE, MYFNO

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,200 Call and the 24,100 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,000 Call & the 58,500 Put

Data Source : NSE, MYFNO

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PHOENIXLTD	1,948.6	1.9	7,994.0	1,947.0	4.1
MANKIND	2,545.7	2.4	9,749.0	2,517.0	3.9
KAYNES	3,121.9	-0.9	19,189.0	5,194.0	3.7
EXIDEIND	387.6	0.3	16,125.0	4,402.0	3.7
SOLARINDS	18,696.0	5.0	37,525.0	10,962.0	3.4

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
ICICIGI	1,741.5	-1.5	2,744.0	5,111.0	1.9
PIDILITIND	1,592.7	-0.4	6,164.0	11,019.0	1.8
ONGC	234.9	0.4	41,554.0	72,132.0	1.7
GODREJCP	1,010.0	-1.2	3,468.0	5,880.0	1.7
MPHASIS	2,161.6	-2.1	3,317.0	5,275.0	1.6

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
SBICARD	593.2	-1.4	20,302.0	19,673.0	100.0
INDUSTOWER	391.7	-0.7	19,884.0	19,180.0	100.0
HEROMOTOCO	4,794.3	-0.4	31,034.0	30,688.0	100.0
EICHERMOT	7,073.5	-4.7	28,682.0	28,790.0	99.6
ONGC	234.9	0.4	53,011.0	53,224.0	99.6

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
SONACOMS	619.9	-0.1	3,421.0	3,407.0	100.0
MARUTI	14,115.0	5.2	49,964.0	40,031.0	100.0
NHPC	81.3	-0.3	13,811.0	12,385.0	100.0
HEROMOTOCO	4,794.3	-0.4	13,344.0	13,408.0	99.5
BANKBARODA	272.4	-0.1	15,554.0	15,668.0	99.3

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MARUTI	14,115.0	5.2	5,93,688.0	3,87,474.0	100.0
BAJAJFINSV	1,780.3	1.2	39,435.0	61,097.0	64.5
DIXON	11,920.0	1.0	1,93,144.0	3,75,014.0	51.5
PHOENIXLTD	1,948.6	1.9	7,994.0	16,207.0	49.3
MCX	2,837.2	-2.7	38,196.0	89,882.0	42.5

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
MARUTI	14,115.0	5.2	2,57,271.0	1,73,690.0	100.0
ONGC	234.9	0.4	72,132.0	68,576.0	100.0
EICHERMOT	7,073.5	-4.7	91,306.0	1,28,298.0	71.2
BAJAJFINSV	1,780.3	1.2	22,461.0	42,308.0	53.1
NATIONALUM	339.6	-2.2	13,799.0	28,176.0	49.0

## Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PERSISTENT	4,326.5	0.7	41,704.0	16,798.6	2.5
ASTRAL	1,335.6	-2.4	13,403.0	5,926.4	2.3
UPL	571.2	0.5	11,197.0	6,150.6	1.8
SUPREMEIND	3,157.8	-1.1	6,428.0	3,593.3	1.8
HEROMOTOCO	4,794.3	-0.4	31,034.0	17,673.8	1.8

## Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
MARUTI	14,115.0	5.2	49,964.0	23,208.6	2.2
SUPREMEIND	3,157.8	-1.1	4,456.0	2,082.0	2.1
PERSISTENT	4,326.5	0.7	21,331.0	10,330.1	2.1
ASTRAL	1,335.6	-2.4	6,384.0	3,341.8	1.9
NUVAMA	1,806.4	2.0	2,521.0	1,401.6	1.8

## Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MARUTI	14,115.0	5.2	5,93,688.0	89,543.0	6.6
EICHERMOT	7,073.5	-4.7	1,09,412.0	25,187.6	4.3
SAMMAANCAP	173.6	3.6	17,554.0	5,220.9	3.4
SOLARINDS	18,696.0	5.0	37,525.0	14,066.6	2.7
PERSISTENT	4,326.5	0.7	1,03,948.0	40,770.4	2.5

## Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
EICHERMOT	7,073.5	-4.7	91,306.0	14,700.3	6.2
MARUTI	14,115.0	5.2	2,57,271.0	44,126.5	5.8
ONGC	234.9	0.4	72,132.0	13,160.6	5.5
SAMMAANCAP	173.6	3.6	9,870.0	2,261.9	4.4
PIDILITIND	1,592.7	-0.4	11,019.0	2,845.7	3.9

## 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
ADANIANT	3100	1512864	2.1%	3036	3000	859020	-1.2%	JIOFIN	250	5682300	5.7%	236	280	4180650	18.4%
ADANIAPORTS	1840	974700	1.6%	1810	1700	858800	-6.1%	JSWSTEEL	1250	267300	1.9%	1226	1240	295650	1.1%
APOLLOHOSP	9200	57250	6.0%	8682	8000	36125	-7.9%	KOTAKBANK	400	5076000	2.0%	392	390	3808000	-0.6%
ASIANPAINT	2800	260500	6.2%	2636	2540	134750	-3.6%	LT	4300	567350	3.8%	4143	4100	362425	-1.0%
AXISBANK	1400	1242500	4.0%	1346	1300	931875	-3.4%	M&M	3200	992200	4.3%	3069	3100	506000	1.0%
BAJAJ-AUTO	10000	161400	2.9%	9716	9200	84375	-5.3%	MARUTI	15000	203600	6.3%	14115	13500	173200	-4.4%
BAJAJFINSV	1800	877200	1.1%	1780	1700	507300	-4.5%	MAXHEALTH	1160	310800	2.7%	1129	1100	307650	-2.6%
BAJFINANCE	1000	1881750	-0.5%	1005	1000	870000	-0.5%	NESTLEIND	1500	490000	6.7%	1405	1410	211000	0.3%
BEL	430	4129650	4.4%	412	410	3710700	-0.4%	NTPC	360	2292000	0.9%	357	360	1834500	0.9%
BHARTIARTL	1900	1198900	2.6%	1852	1860	586625	0.4%	ONGC	250	5973750	6.4%	235	225	3523500	-4.2%
CIPLA	1500	720800	2.4%	1465	1400	555900	-4.5%	POWERGRID	300	2722700	4.8%	286	300	1360400	4.8%
COALINDIA	450	3620700	2.5%	439	460	2139750	4.8%	RELIANCE	1400	8925000	8.2%	1294	1300	4786500	0.5%
DRREDDY	1400	1041875	3.2%	1357	1300	413125	-4.2%	SBILIFE	1800	153000	1.9%	1766	1700	62625	-3.7%
EICHERMOT	8000	363000	13.1%	7074	7000	173900	-1.0%	SBIN	1100	3381000	7.1%	1027	1050	2696250	2.2%
ETERNAL	280	5085225	5.8%	265	260	2745100	-1.7%	SHRIRAMFIN	1050	1159950	0.8%	1042	1000	550275	-4.0%
GRASIM	3100	100000	0.0%	3100	3100	86250	0.0%	SUNPHARMA	1900	989100	2.0%	1863	1800	615300	-3.4%
HCLTECH	1100	1019200	2.6%	1072	1100	898800	2.6%	TATACONSUM	1200	524150	11.6%	1076	1100	284350	2.3%
HDFCBANK	800	16268850	0.3%	798	800	7797400	0.3%	TMPV	400	6921600	13.6%	352	350	2440000	-0.6%
HDFCLIFE	610	1248500	5.9%	576	570	1609300	-1.0%	TATASTEEL	200	11211750	6.3%	188	190	7081250	1.0%
HINDALCO	1000	1193500	4.5%	957	960	763700	0.4%	TCS	2200	2345175	8.3%	2032	2100	1954350	3.4%
HINDUNILVR	2200	938700	3.9%	2118	2200	347400	3.9%	TECHM	1500	441000	6.8%	1405	1400	372600	-0.3%
ICICIBANK	1400	2307200	1.8%	1375	1400	2095100	1.8%	TITAN	4400	212625	-0.1%	4404	4350	141050	-1.2%
INDIGO	5600	308700	4.3%	5368	5000	183150	-6.9%	TRENT	3300	421875	0.5%	3283	3200	169875	-2.5%
INFY	1100	5332800	10.0%	1000	1000	3573600	0.0%	ULTRACEMCO	12000	104450	6.6%	11253	11500	49300	2.2%
ITC	300	9206325	4.5%	287	290	6353175	1.1%	WIPRO	180	18132000	5.6%	170	170	8985000	-0.2%

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

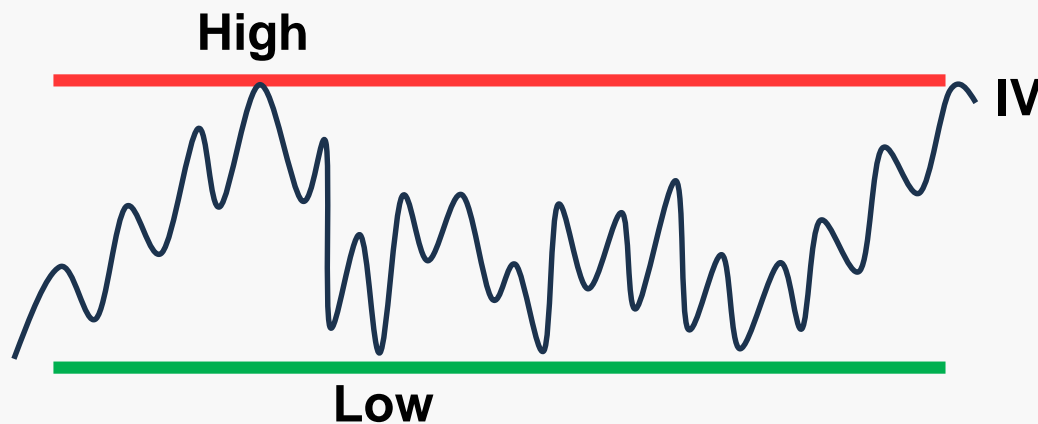
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

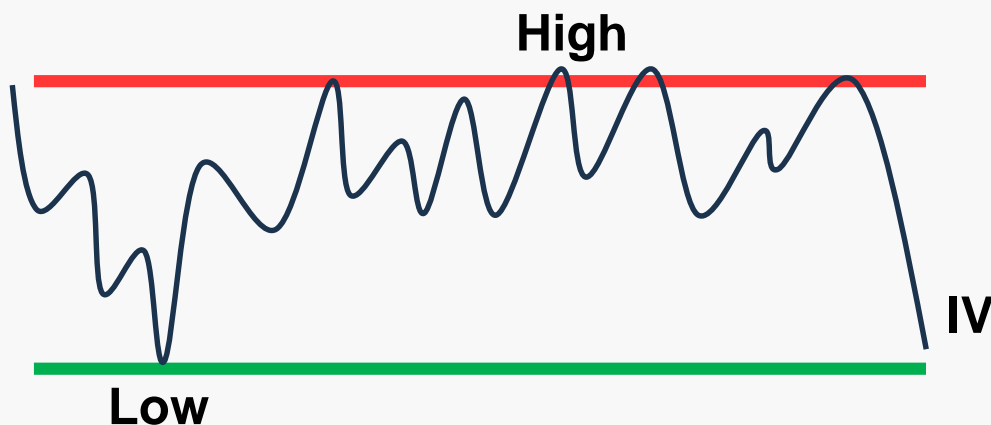
*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DIIs), 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

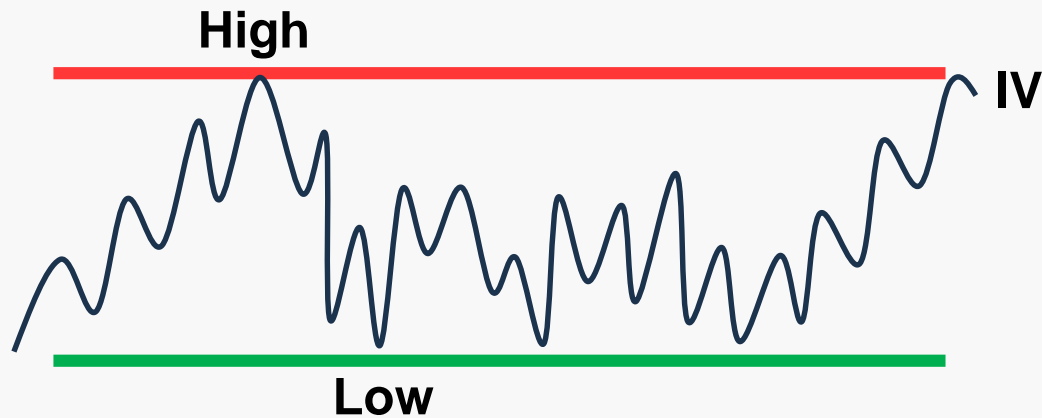


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

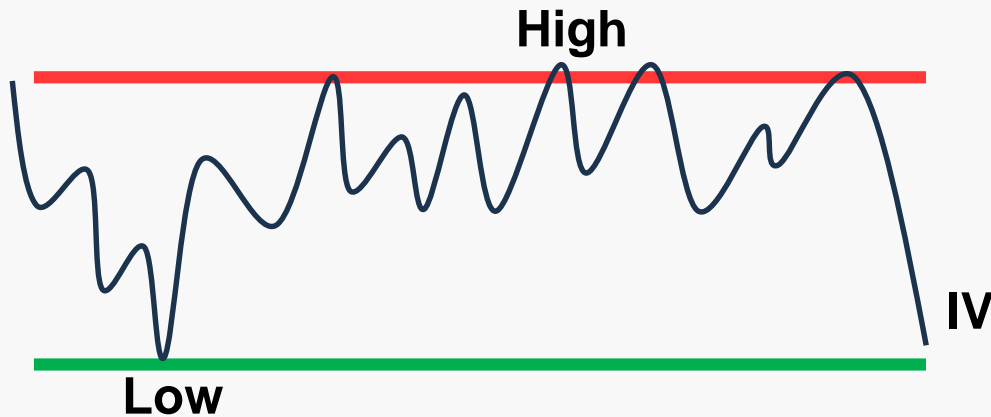


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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