



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,260	0.3% ▼
Open Interest (OI)	1,67,49,850	2.6% ▼
Change in OI (abs)	1,67,49,850	4,50,320 ▼
Premium / Discount (Abs)	21	34 ▲
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	58,125	0.70% ▼
Open interest (OI)	25,14,150	3.0% ▲
Change in OI (abs)	25,14,150	73,020 ▲
Premium / Discount (Abs)	180	168 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.98	0.17 ▼
Nifty ATM IV (%)	12.49	0.19 ▼
Bank Nifty ATM IV (%)	15.11	0.26 ▼
PCR (Nifty)	1.28	0.14 ▼
PCR (Bank Nifty)	0.97	0.08 ▼

The FII Long Ratio in Index Futures **Drop** to **9.3** %, **down** from **11%** in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
RADICO	5,76,900	12.2%	4144.1	1.1%
GVT&D	19,99,750	6.4%	4466.5	1.7%
NHPC	13,25,57,350	5.1%	81.11	3.1%
COALINDIA	8,40,76,650	4.6%	430.95	0.6%
IREDA	9,13,59,750	4.5%	120.7	0.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
CDSL	1,16,69,325	6.3%	1385.9	-2.4%
HYUNDAI	52,07,400	5.7%	1961.5	-1.0%
JIOFIN	18,92,24,350	4.5%	239.05	-1.7%
OFSS	17,14,700	3.6%	11669	-1.4%
OBEROIRLTY	72,06,500	3.3%	1867.3	-0.6%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BAJAJ-AUTO	26,24,250	-5.6%	10532	0.4%
INDIANB	1,74,04,000	-5.5%	858.6	3.1%
COLPAL	48,21,300	-5.3%	2120.7	3.5%
JSWENERGY	2,54,86,100	-5.2%	567.9	4.8%
PNB	33,48,80,000	-4.8%	112.06	5.7%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INDIGO	66,56,100	-4.0%	5227	-0.4%
BANDHANBNK	9,98,64,000	-2.4%	211.38	-0.9%
NUVAMA	18,22,000	-2.4%	1854	-0.5%
M&M	1,77,18,800	-2.3%	3166.9	-0.4%
KALYANKJIL	3,80,84,850	-2.0%	572.15	-0.3%

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

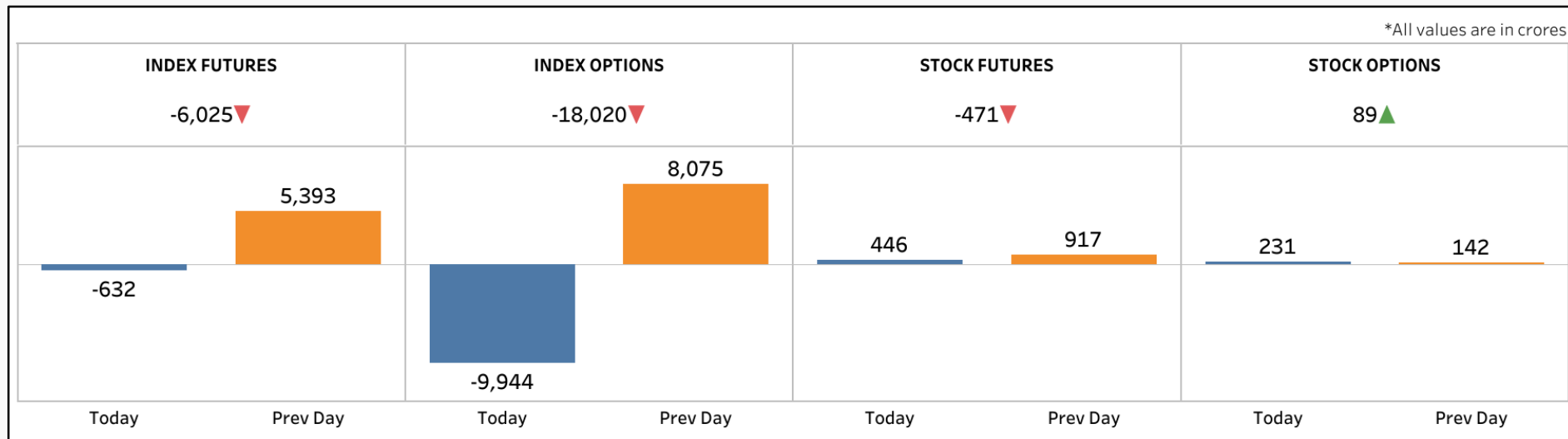
Data Source : NSEBHAVCOPY

Open Interest Trends by Participant

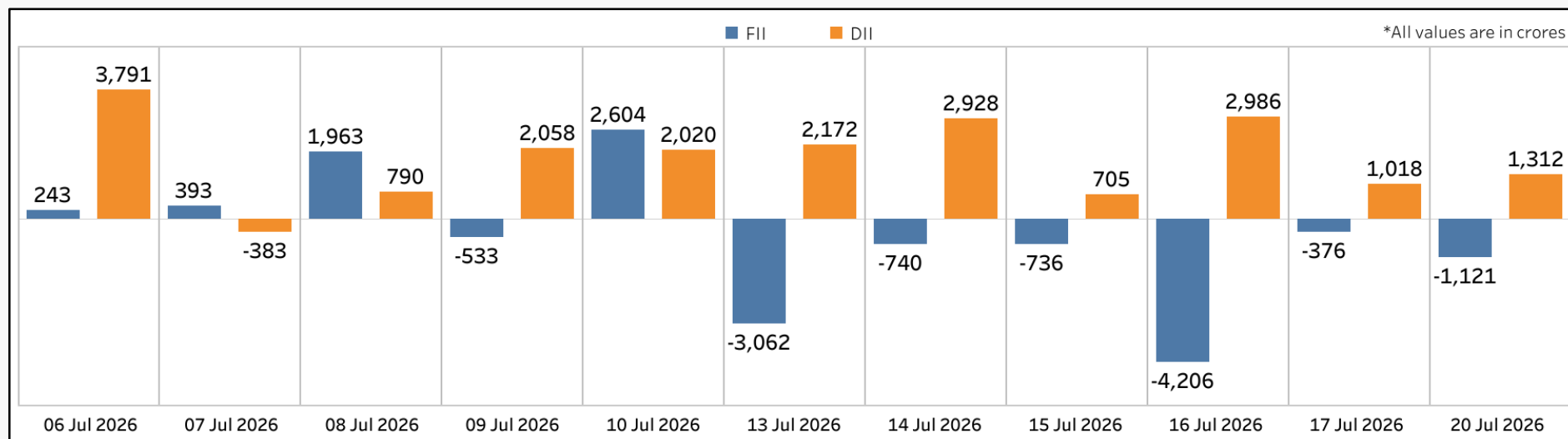
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-229,918 ▼	-36,653 ▼	102,986 ▲	-19,220 ▼	187 ▲	4,187 ▲	1,437 ▲	-45,863 ▼
149,472							39,072
	33,358	12,674	158				
-80,446	-3,295			36	-151	1,457	-6,791
		-90,312			-353	20	
					-4,540		
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-149,857	-219,823	410,533	553,703	7,600	58,806	33,667	-3,857,802
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	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
403,484 ▲	26,287 ▲	-320,789 ▼	67,642 ▲	-173,752 ▼	6,179 ▲	216,366 ▲	-2,559 ▼
107,155		174,426		147,007		132,232	
	3,418		18,844				
					230		
	-22,869	-146,363	-48,798	-26,745	-5,949	-84,134	-12,211
-296,329							-9,652
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-104,565	149,384	-617,095	2,852,569	246,822	11,633	172,895	451,530
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

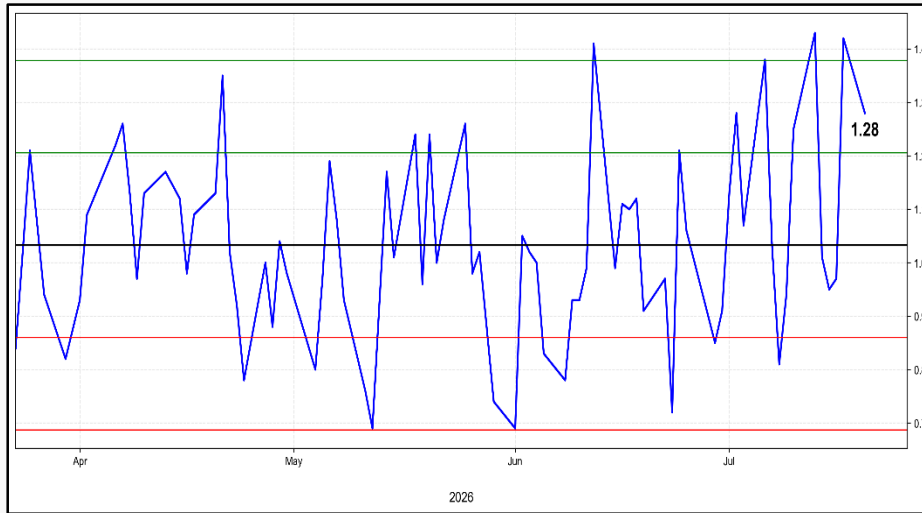
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



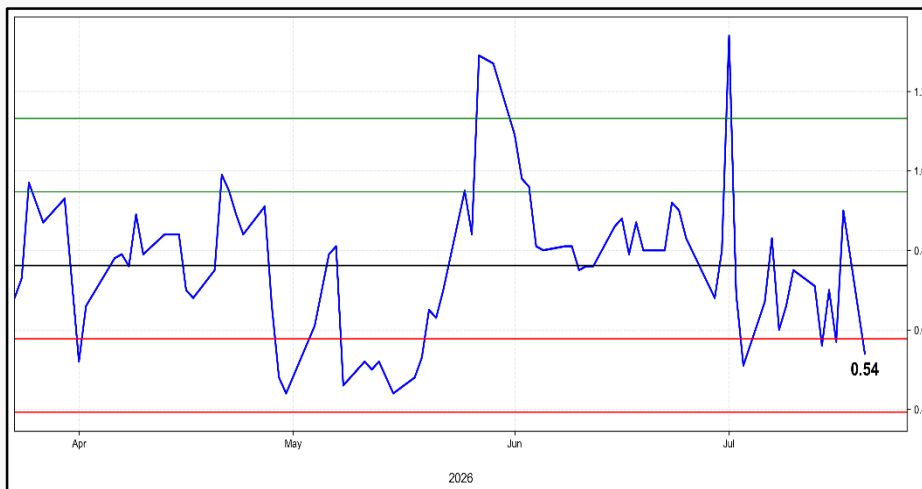
Nifty



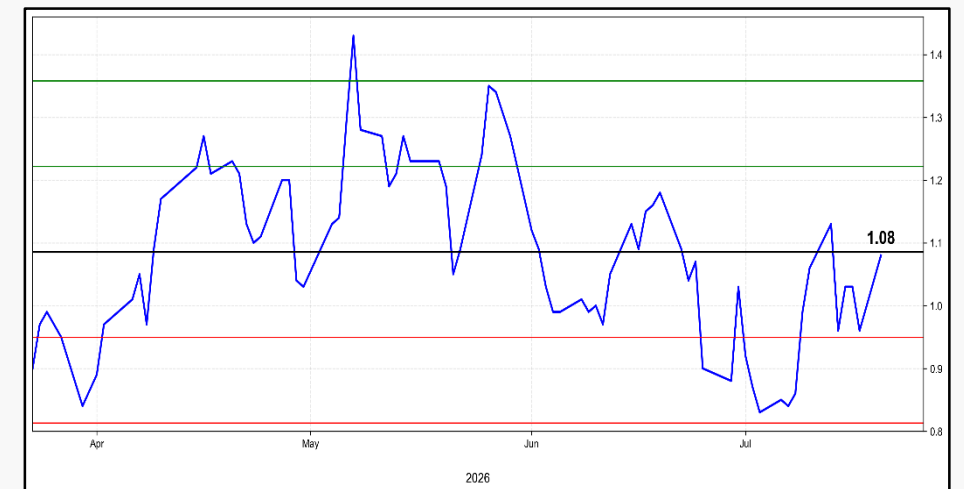
Bank Nifty



Fin Nifty



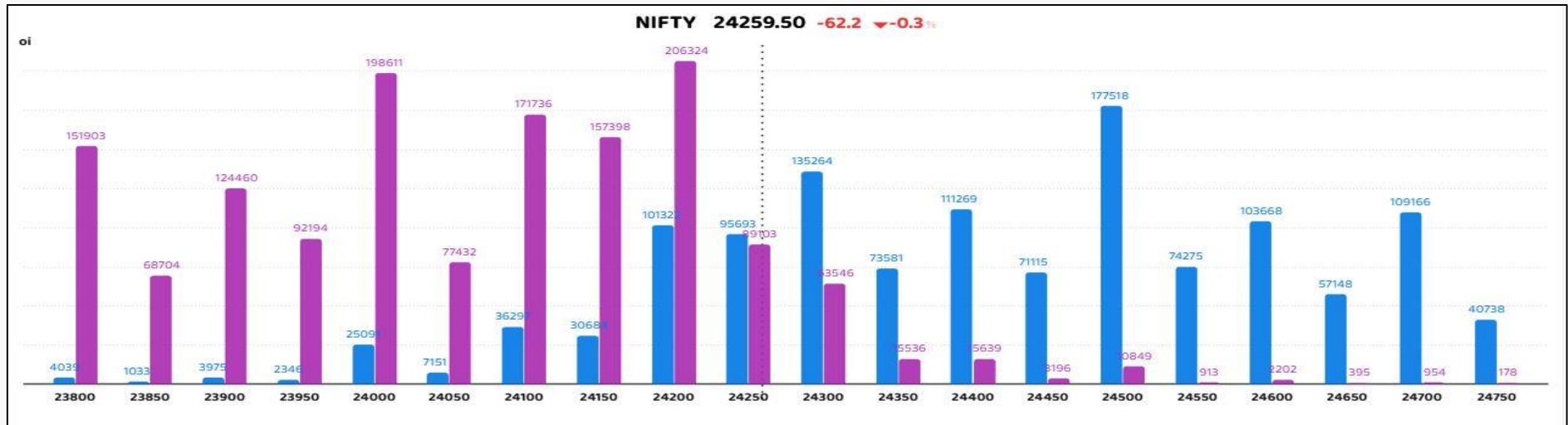
Midcap Select Nifty



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 24,200 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.

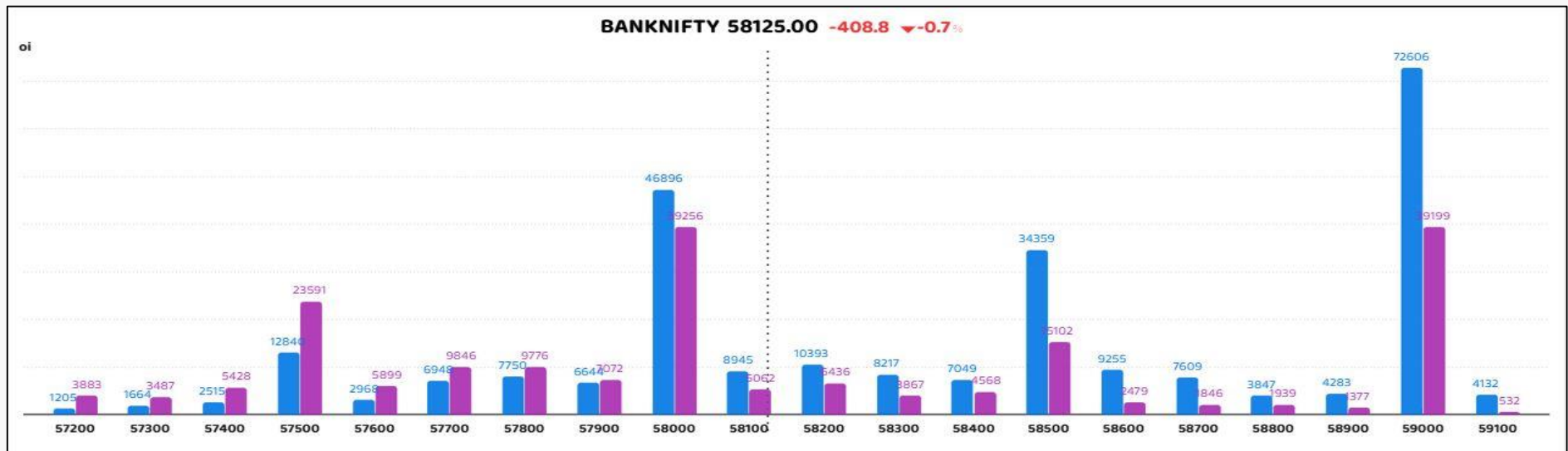
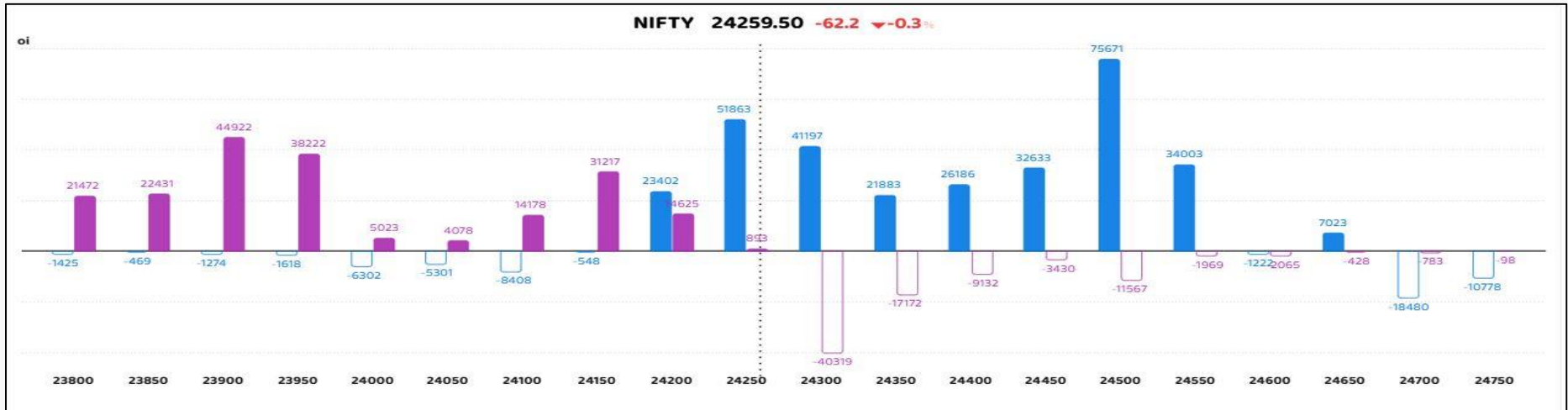


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

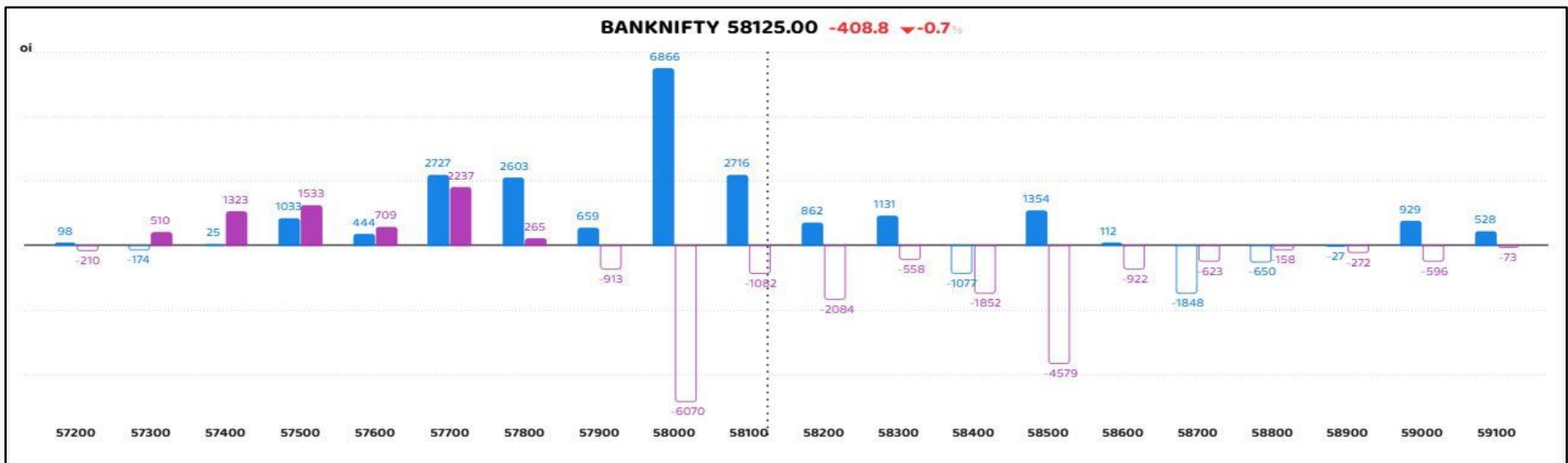
Data Source : NSE, MYFNO

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,500 Call and the 24,300 Put



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

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PIIND	2,657.4	1.3	24,877.0	4,394.0	5.7
INOXWIND	79.2	1.4	6,402.0	1,177.0	5.4
ALKEM	5,653.5	1.6	11,342.0	2,099.0	5.4
CROMPTON	262.1	2.2	16,488.0	3,318.0	5.0
BDL	1,257.6	0.2	10,704.0	2,250.0	4.8

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
LODHA	1,188.8	0.0	4,480.0	5,386.0	1.2
INDIGO	5,229.0	-0.4	23,822.0	28,435.0	1.2
KALYANKJIL	570.0	-0.8	39,620.0	43,943.0	1.1
GODREJPROP	2,118.5	0.8	7,152.0	7,632.0	1.1
PERSISTENT	5,188.7	0.1	15,979.0	16,173.0	1.0

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
JIOFIN	238.9	-1.7	50,829.0	47,477.0	100.0
MARUTI	13,514.0	-2.1	74,971.0	70,671.0	100.0
PAYTM	1,347.5	0.0	29,864.0	23,664.0	100.0
OBEROIRLTY	1,882.7	-0.6	11,494.0	11,394.0	100.0
BANKINDIA	147.0	2.6	7,969.0	7,834.0	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
OBEROIRLTY	1,882.7	-0.6	6,164.0	5,808.0	100.0
FEDERALBNK	350.8	0.5	16,514.0	16,372.0	100.0
BANKINDIA	147.0	2.6	6,876.0	6,080.0	100.0
DELHIVERY	486.8	-1.1	7,480.0	7,244.0	100.0
PNB	111.8	5.7	15,083.0	13,326.0	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
ICICIBANK	1,460.2	1.1	2,08,819.0	1,92,485.0	100.0
PNB	111.8	5.7	94,928.0	61,074.0	100.0
ULTRACEMCO	11,903.0	1.5	1,78,352.0	2,02,941.0	87.9
HDFCBANK	777.6	-5.1	4,99,859.0	6,11,044.0	81.8
JSWSTEEL	1,257.0	1.6	45,557.0	56,620.0	80.5

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
PNB	111.8	5.7	47,144.0	34,665.0	100.0
JSWSTEEL	1,257.0	1.6	17,739.0	20,162.0	88.0
ICICIBANK	1,460.2	1.1	1,19,612.0	1,45,504.0	82.2
OBEROIRLTY	1,882.7	-0.6	13,200.0	17,366.0	76.0
ULTRACEMCO	11,903.0	1.5	68,241.0	90,856.0	75.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
POLYCAB	8,885.0	0.3	36,321.0	11,693.4	3.1
ICICIGI	1,623.3	0.7	14,811.0	4,877.3	3.0
JIOFIN	238.9	-1.7	50,829.0	23,039.2	2.2
PATANJALI	339.2	0.4	20,265.0	9,187.6	2.2
PAYTM	1,347.5	0.0	29,864.0	13,556.5	2.2

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
ICICIGI	1,623.3	0.7	8,861.0	3,192.8	2.8
KALYANKJIL	570.0	-0.8	46,679.0	18,410.6	2.5
POLYCAB	8,885.0	0.3	20,632.0	9,553.0	2.2
PATANJALI	339.2	0.4	14,866.0	6,918.5	2.1
360ONE	1,126.5	1.1	4,592.0	2,149.1	2.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
ULTRACEMCO	11,903.0	1.5	1,78,352.0	18,429.8	9.7
PNB	111.8	5.7	94,928.0	12,010.2	7.9
COLPAL	2,113.1	3.5	52,481.0	9,285.1	5.7
OIL	453.5	4.2	38,892.0	8,105.0	4.8
JSWSTEEL	1,257.0	1.6	45,557.0	9,618.8	4.7

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ULTRACEMCO	11,903.0	1.5	68,241.0	8,477.0	8.1
PNB	111.8	5.7	47,144.0	7,380.6	6.4
PREMIERENE	1,086.4	0.0	16,149.0	3,445.2	4.7
OIL	453.5	4.2	10,441.0	2,675.0	3.9
COLPAL	2,113.1	3.5	19,580.0	5,036.6	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
ADANIENT	3200	2116650	0.5%	3183	3100	583701	-2.6%	JIOFIN	250	25229600	4.6%	239	240	7421300	0.5%
ADANIPTS	1900	1194150	3.0%	1844	1700	838850	-7.8%	JSWSTEEL	1300	1207575	3.4%	1257	1100	1129275	-12.5%
APOLLOHOSP	9000	244000	1.1%	8905	8700	121625	-2.3%	KOTAKBANK	400	14322000	4.7%	382	380	4520000	-0.5%
ASIANPAINT	2700	656500	0.3%	2691	2700	349250	0.3%	LT	4000	2190475	4.2%	3839	3700	557900	-3.6%
AXISBANK	1300	4140000	3.5%	1256	1300	2227500	3.5%	M&M	3200	1188800	1.1%	3166	3100	621800	-2.1%
BAJAJ-AUTO	10500	257775	-0.2%	10523	9500	132825	-9.7%	MARUTI	14000	381750	3.6%	13514	13000	174600	-3.8%
BAJAJFINSV	1900	1054200	2.1%	1862	1700	489600	-8.7%	MAXHEALTH	1140	1019025	3.4%	1102	1100	319725	-0.2%
BAJFINANCE	1000	1678500	-6.0%	1064	1000	2328000	-6.0%	NESTLEIND	1500	1095500	3.7%	1446	1400	528000	-3.2%
BEL	430	6669000	5.4%	408	410	4454550	0.5%	NTPC	367.5	8854500	5.8%	347	340	1776000	-2.1%
BHARTIARTL	1940	3560600	0.0%	1940	1900	1917100	-2.1%	ONGC	250	14256000	0.2%	250	250	3620250	0.2%
CIPLA	1500	1656225	4.1%	1442	1400	506175	-2.9%	POWERGRID	290	4054600	0.5%	289	300	1309100	3.9%
COALINDIA	450	5503950	4.8%	429	430	2841750	0.1%	RELIANCE	1400	10966000	5.8%	1323	1300	4012000	-1.7%
DRREDDY	1400	3241875	14.5%	1223	1200	896875	-1.9%	SBILIFE	1900	588000	4.1%	1825	1740	225000	-4.6%
EICHERMOT	8000	295500	5.8%	7564	6800	468400	-10.1%	SBIN	1100	5805000	3.8%	1060	1050	3956250	-0.9%
ETERNAL	300	15663075	4.5%	287	280	6161925	-2.4%	SHRIRAMFIN	1050	2247300	1.4%	1035	1000	1038675	-3.4%
GRASIM	3300	761750	5.0%	3144	3100	158250	-1.4%	SUNPHARMA	1960	2844450	0.2%	1956	1900	966350	-2.9%
HCLTECH	1200	1685600	-1.7%	1221	1200	1197600	-1.7%	TATACONSUM	1100	669900	0.7%	1092	1000	705650	-8.4%
HDFCBANK	800	15191800	2.9%	778	780	7998900	0.3%	TMPV	400	12401600	18.9%	336	350	3110400	4.0%
HDFCLIFE	600	3171300	6.3%	565	570	1909600	0.9%	TATASTEEL	190	17116000	1.9%	186	190	7040000	1.9%
HINDALCO	1000	3770900	5.5%	948	960	1406300	1.3%	TCS	2100	2399175	-6.7%	2251	2100	2573775	-6.7%
HINDUNILVR	2200	1503300	2.8%	2140	2100	686400	-1.9%	TECHM	1600	783600	1.5%	1576	1500	1022400	-4.8%
ICICIBANK	1400	4115300	-4.1%	1460	1400	4727100	-4.1%	TITAN	4600	611450	-0.9%	4643	4450	534975	-4.2%
INDIGO	5300	603450	1.4%	5229	5200	359400	-0.6%	TRENT	3000	1134000	2.5%	2926	2900	546300	-0.9%
INFY	1100	11802800	1.2%	1087	1100	4067200	1.2%	ULTRACEMCO	12000	309450	0.8%	11903	11500	95750	-3.4%
ITC	290	15145500	2.6%	283	280	6175500	-1.0%	WIPRO	180	20190000	2.1%	176	170	14346000	-3.6%

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

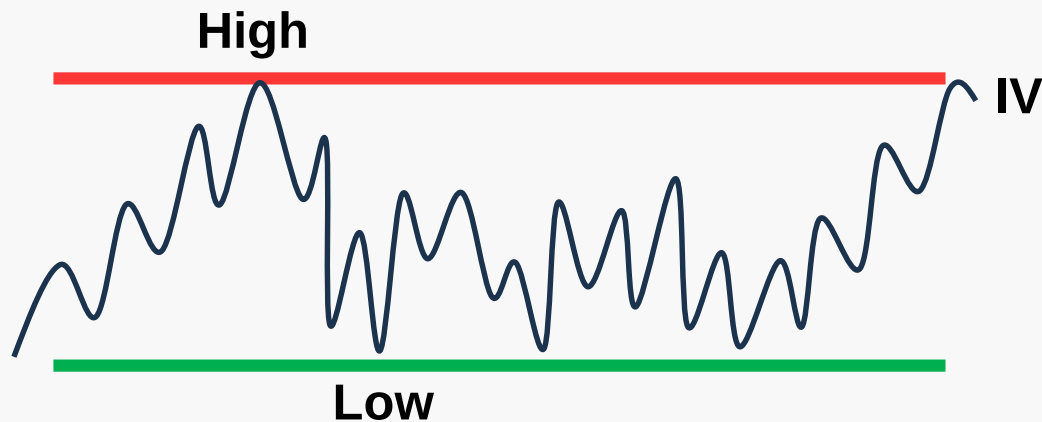
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

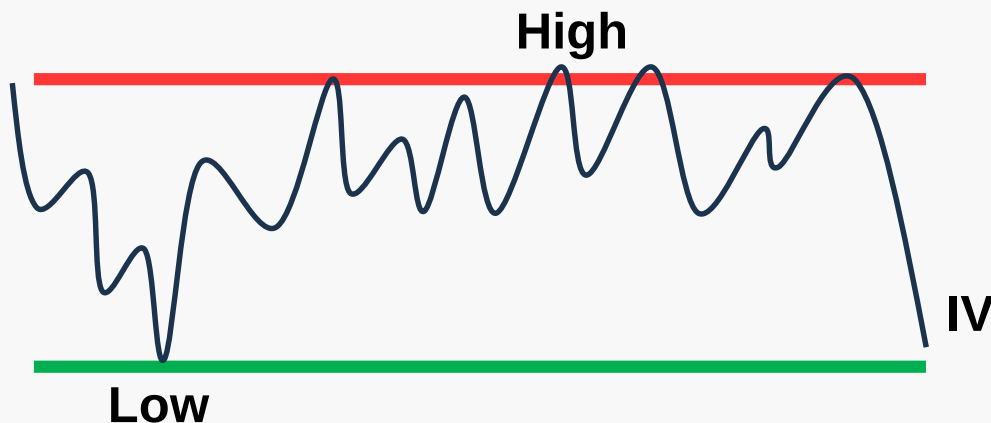
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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, 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

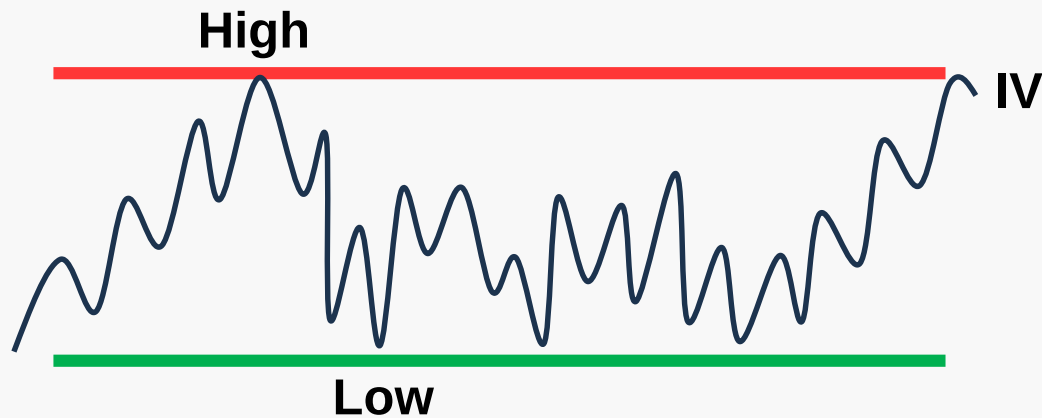


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

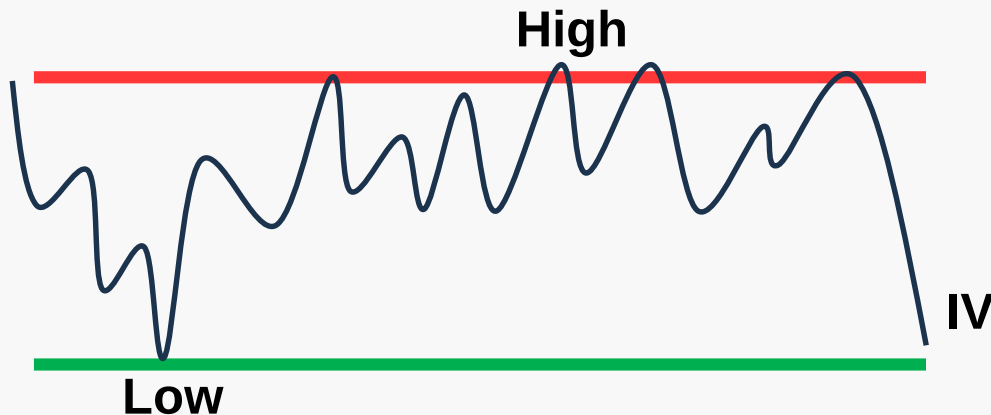


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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