



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	24,342	0.3%▲
Open Interest (OI)	1,69,62,725	3.2%▲
Change in OI (abs)	1,69,62,725	5,29,035▲
Premium / Discount (Abs)	166	25▼
Inference	Long Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	57,859	0.08%▼
Open interest (OI)	21,53,790	1.4%▲
Change in OI (abs)	21,53,790	30,300▲
Premium / Discount (Abs)	363	30▼
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	10.68	0.39▼
Nifty ATM IV (%)	9.29	0.50▼
Bank Nifty ATM IV (%)	10.56	0.15▼
PCR (Nifty)	0.89	0.12▲
PCR (Bank Nifty)	1.15	0.03▲

The FII Long Ratio in Index Futures **Drop to 9.6 %**, **down** from **9.8%** in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SAGILITY	4,85,16,000	25.2%	46.64	5.0%
ATHERENERG	16,66,875	24.8%	1623.9	8.0%
ALKEM	14,93,750	7.3%	5392.5	0.4%
COALINDIA	9,83,67,750	7.1%	398.25	0.2%
OFSS	11,79,900	6.3%	12269	2.4%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
HAVELLS	78,41,500	11.2%	1215.8	-2.1%
BDL	67,05,650	10.4%	1296.1	-2.6%
INDHOTEL	2,74,46,000	5.2%	712.45	-0.8%
MAHABANK	1,60,29,000	4.8%	84.53	-0.6%
TATASTEEL	26,53,42,000	4.6%	187.68	-0.4%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
POLYCAB	22,84,875	-3.2%	9122	0.3%
PERSISTENT	29,88,750	-3.2%	5922.5	4.2%
HEROMOTOCO	40,11,000	-3.1%	5619	0.9%
LICHSGFIN	4,16,45,000	-3.0%	544.25	0.7%
WIPRO	20,40,51,000	-2.6%	180.57	2.6%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
BOSCHLTD	1,98,025	-2.8%	48940	-0.2%
KALYANKJIL	3,19,30,200	-2.0%	617.35	-2.6%
CGPOWER	1,80,08,950	-1.7%	893.05	-0.8%
ICICIPRULI	1,63,01,275	-1.6%	509.85	-0.3%
NAM-INDIA	75,00,000	-1.5%	1197.6	-1.2%

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 changes, respectively

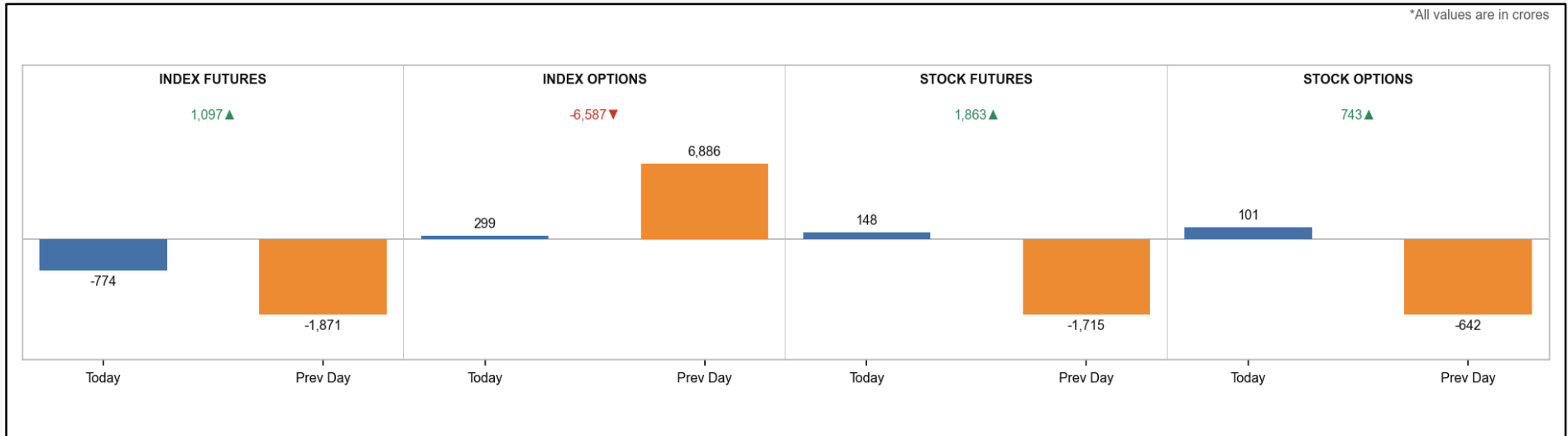
FII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
65,807 ▲	6,891 ▲	-1,02,609 ▼	34,249 ▲
35,836		70,609	7,856
-29,971	-4,841 -11,732	-32,000	-26,393
Net O/S -2,30,020	Net O/S -2,02,633	Net O/S 5,94,360	Net O/S 5,49,226
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-395 ▼	-1,224 ▼	-560 ▼	-15,572 ▼
25 420	700 1,924	975 1,535	-12,040
			-27,612
Net O/S 4,350	Net O/S 20,213	Net O/S 34,489	Net O/S -41,63,984
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

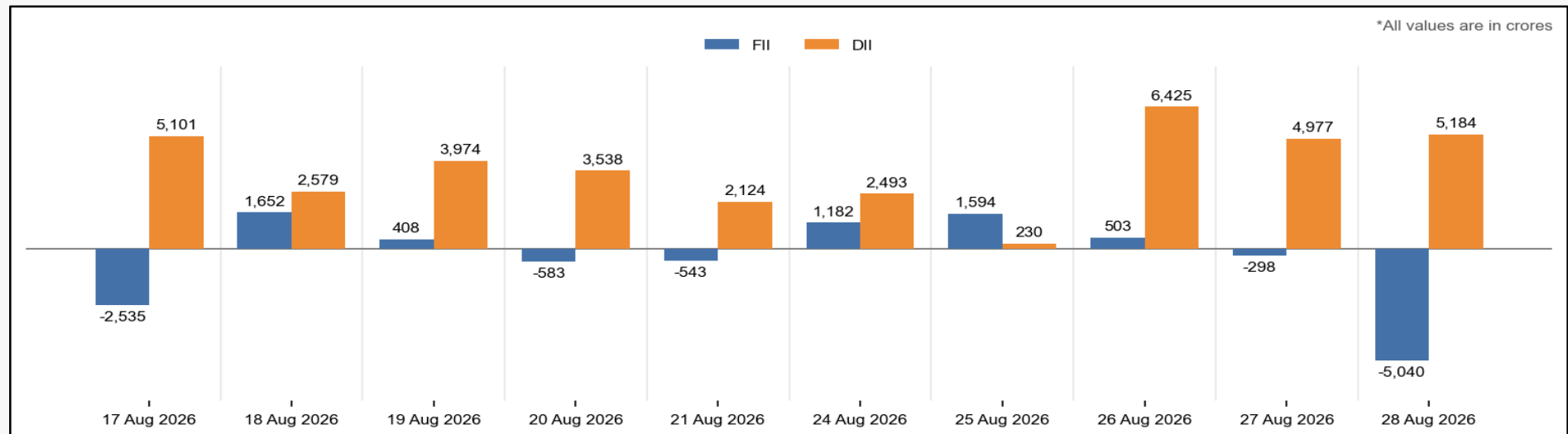
Clients			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-2,96,038 ▼	-11,074 ▼	1,33,896 ▲	-32,287 ▼
98,082	2,801 13,875	35,917	6,850 39,137
-1,97,956		-97,979	
Net O/S 91,197	Net O/S 1,76,959	Net O/S -7,25,066	Net O/S 31,61,018
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
2,30,625 ▲	5,407 ▲	-30,727 ▼	13,610 ▲
1,62,095	1,340	25,835	12,906
-68,530	-4,067	-4,892	-704
Net O/S 1,34,473	Net O/S 5,461	Net O/S 96,217	Net O/S 4,53,740
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

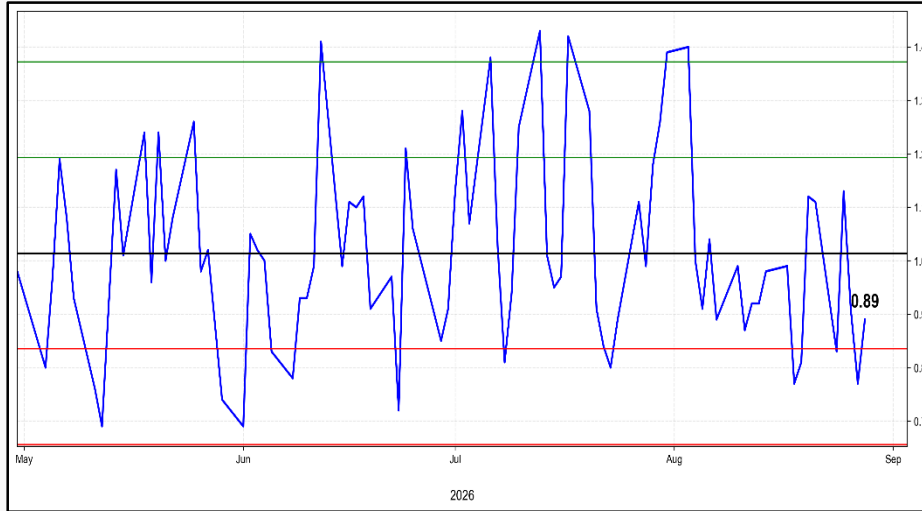
Daily Net Open Interest Change



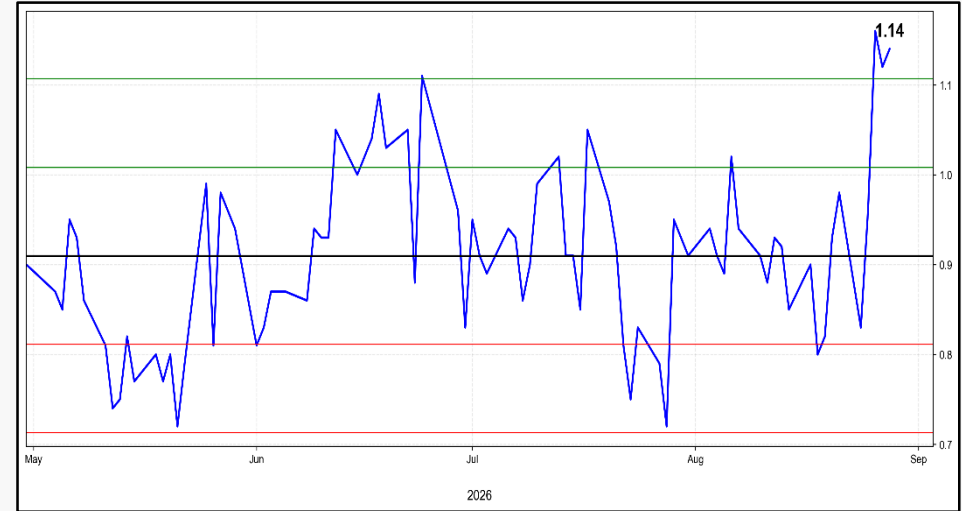
DII and FII Daily Cash Market Flows



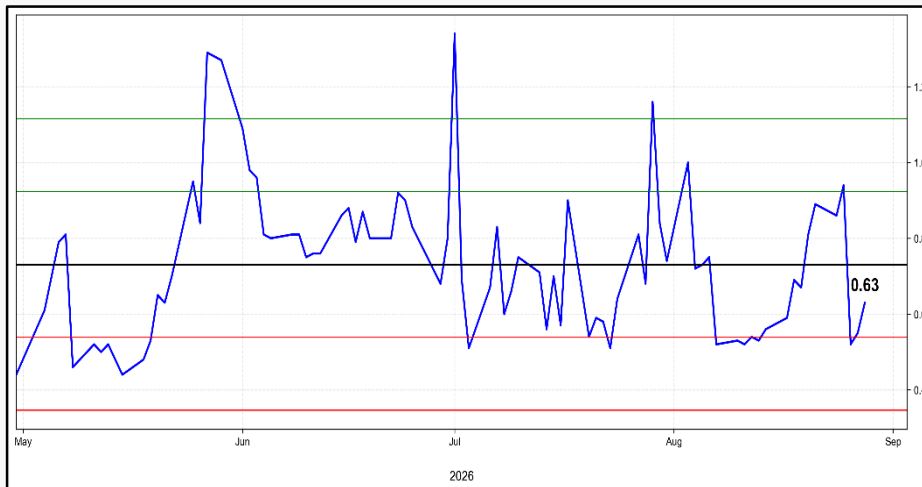
Nifty



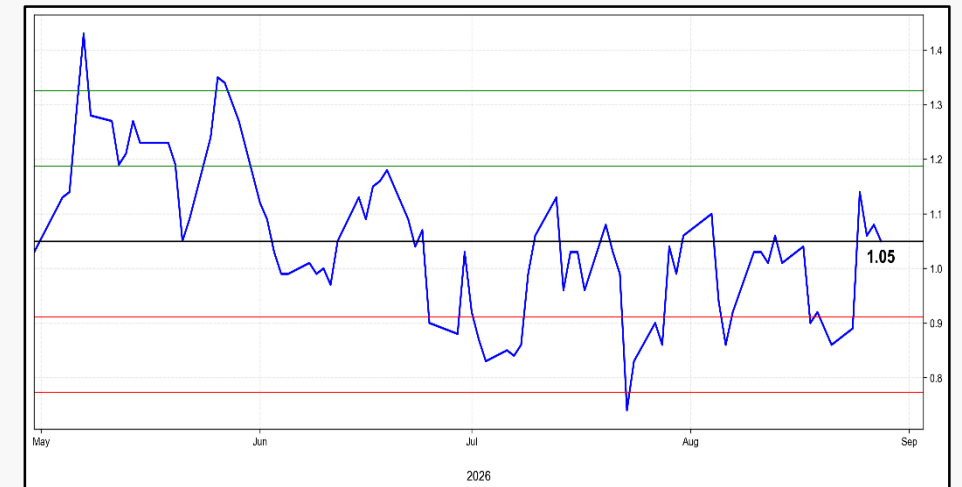
Bank Nifty



Fin Nifty



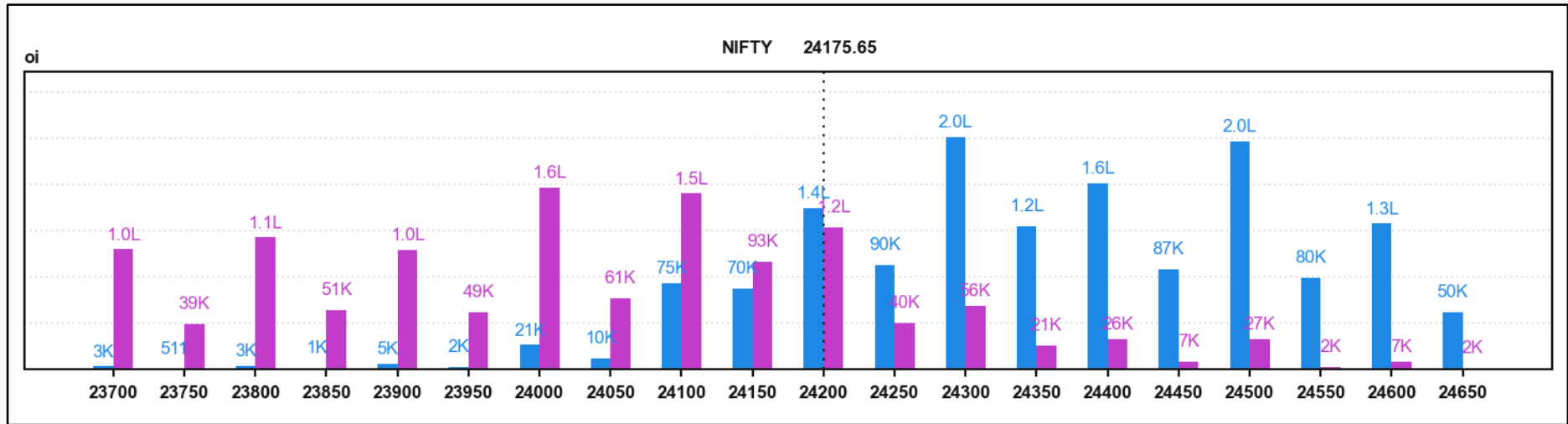
Midcap Select Nifty



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 24,300 Call and 24,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 57,500 Call and the 57,500 Put saw the most amount of open interest.

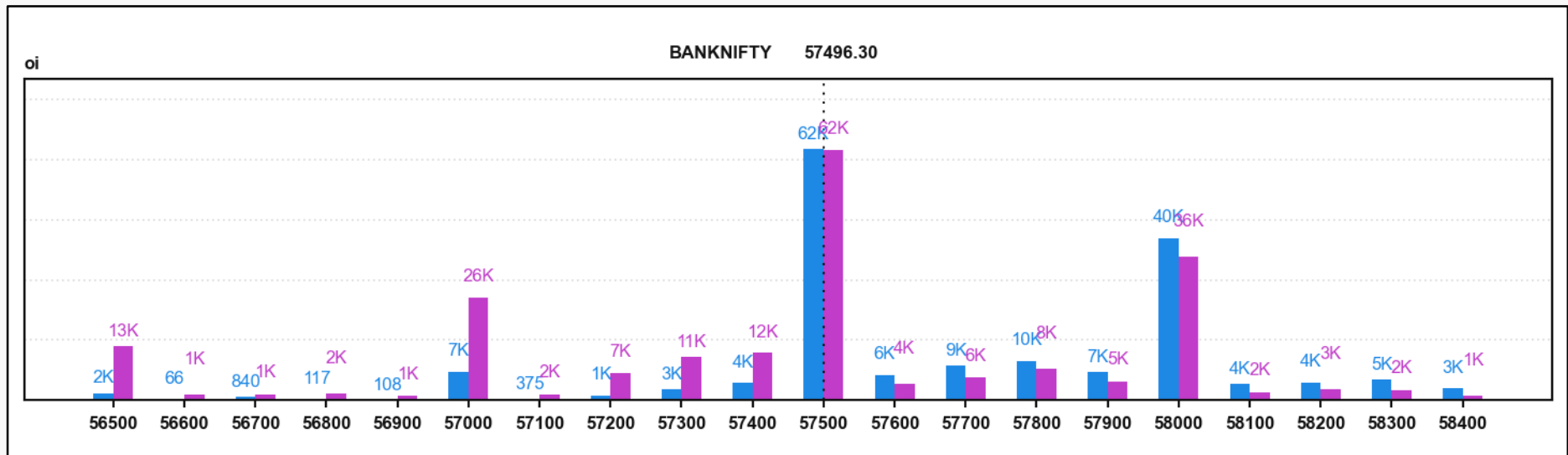
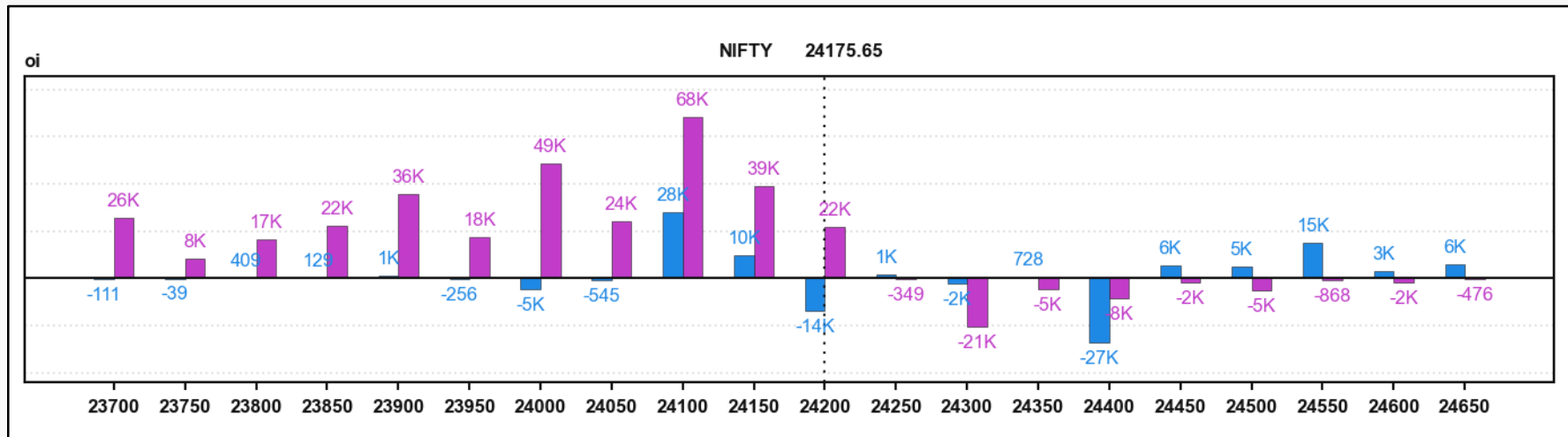


Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

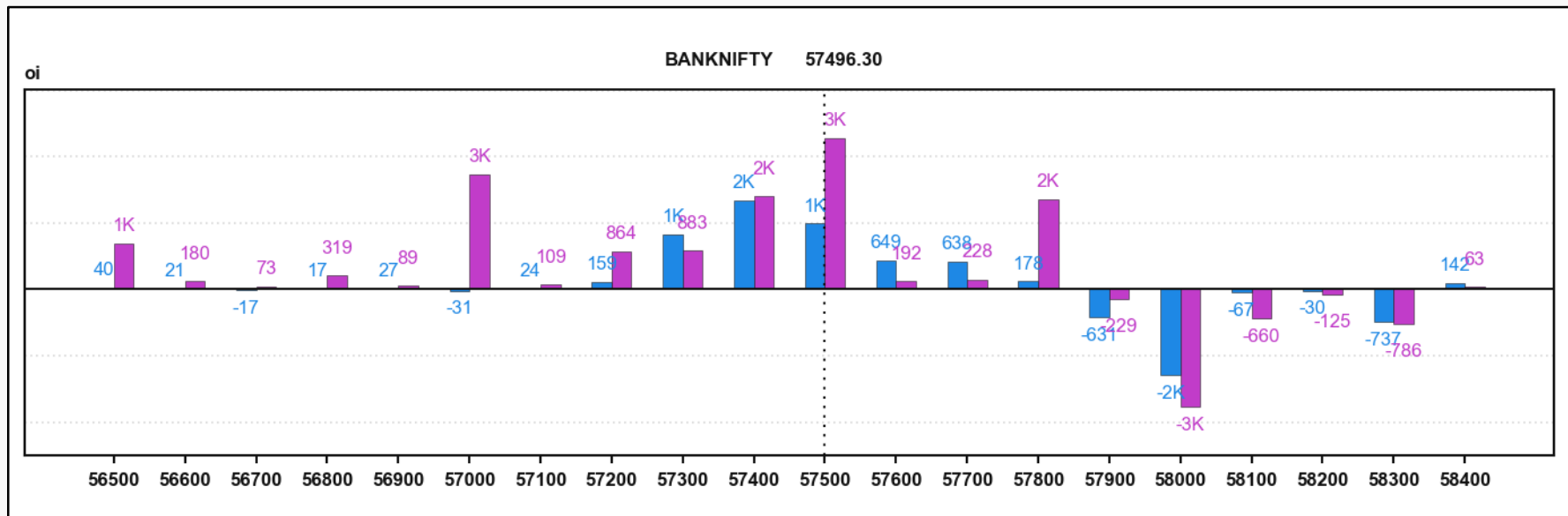
Data Source : NSE, MYFNO

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 24,400 Call and the 24,100 Put



For the Bank Nifty, the biggest open interest changes were seen at the 58,000 Call & the 57,500 Put

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SUPREMEIND	3,637.0	1.5	16,282.0	3,068.0	5.3
CONCOR	516.0	4.6	19,969.0	4,450.0	4.5
UNIONBANK	186.0	1.4	5,104.0	1,162.0	4.4
TORNTPHARM	5,049.6	1.0	7,083.0	1,749.0	4.0
PAGEIND	35,981.7	0.5	4,384.0	1,091.0	4.0

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
BAJFINANCE	1,079.9	0.0	13,174.0	14,388.0	1.1
INDHOTEL	706.3	-1.7	4,136.0	3,752.0	0.9
KOTAKBANK	423.7	0.0	19,624.0	16,895.0	0.9
TVSMOTOR	4,304.2	-2.4	69,487.0	57,002.0	0.8
HAVELLS	1,222.9	-1.5	9,055.0	7,308.0	0.8

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
TATAPOWER	351.8	0.0	26,782.0	33,212.0	80.6
VBL	414.0	-1.1	23,632.0	29,354.0	80.5
IREDA	117.1	-0.3	10,020.0	13,829.0	72.5
SONACOMS	815.0	-0.5	5,681.0	7,974.0	71.2
PREMIERENE	1,013.9	1.4	7,292.0	10,258.0	71.1

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
VBL	414.0	-1.1	13,627.0	13,703.0	99.4
KOTAKBANK	423.7	0.0	19,523.0	21,396.0	91.2
TATAPOWER	351.8	0.0	18,430.0	22,687.0	81.2
TATASTEEL	186.5	-0.1	22,937.0	28,893.0	79.4
DIVISLAB	9,240.6	2.0	15,509.0	19,781.0	78.4

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
PREMIERENE	1,013.9	1.4	24,357.0	54,276.0	44.9
JINDALSTEL	1,179.2	0.8	10,929.0	28,286.0	38.6
SUPREMEIND	3,637.0	1.5	16,282.0	45,794.0	35.6
COFORGE	2,014.6	5.9	68,178.0	2,09,193.0	32.6
TVSMOTOR	4,304.2	-2.4	69,487.0	2,16,953.0	32.0

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
TVSMOTOR	4,304.2	-2.4	57,002.0	1,00,313.0	56.8
JINDALSTEL	1,179.2	0.8	6,595.0	18,094.0	36.4
DIVISLAB	9,240.6	2.0	28,872.0	89,433.0	32.3
PREMIERENE	1,013.9	1.4	13,081.0	40,876.0	32.0
APLAPOLLO	2,265.6	3.5	6,479.0	21,932.0	29.5

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
PREMIERENE	1,013.9	1.4	7,292.0	4,741.6	1.5
TATAPOWER	351.8	0.0	26,782.0	20,034.3	1.3
JSWSTEEL	1,334.8	-0.2	9,364.0	7,705.7	1.2
VBL	414.0	-1.1	23,632.0	19,464.2	1.2
SBILIFE	1,761.1	-0.7	7,279.0	6,362.6	1.1

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
PREMIERENE	1,013.9	1.4	4,919.0	2,302.3	2.1
VBL	414.0	-1.1	13,627.0	8,845.8	1.5
KOTAKBANK	423.7	0.0	19,523.0	12,705.6	1.5
TATAPOWER	351.8	0.0	18,430.0	14,600.0	1.3
JSWSTEEL	1,334.8	-0.2	7,195.0	6,273.7	1.1

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
TVSMOTOR	4,304.2	-2.4	69,487.0	22,294.3	3.1
KPITTECH	609.3	3.6	44,001.0	15,791.3	2.8
COFORGE	2,014.6	5.9	68,178.0	25,091.0	2.7
PREMIERENE	1,013.9	1.4	24,357.0	9,795.2	2.5
TECHM	1,640.9	3.5	27,256.0	11,194.3	2.4

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
TVSMOTOR	4,304.2	-2.4	57,002.0	14,108.1	4.0
PREMIERENE	1,013.9	1.4	13,081.0	3,496.0	3.7
HAVELLS	1,222.9	-1.5	7,308.0	2,873.8	2.5
TECHM	1,640.9	3.5	14,101.0	6,343.0	2.2
COFORGE	2,014.6	5.9	31,928.0	16,387.6	1.9

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	3100	996525	-2.2%	3169	3200	556509	1.0%	JIOFIN	250	13707550	4.9%	238	230	7975900	-3.5%
ADANIPTS	1740	1379400	1.9%	1708	1700	906775	-0.4%	JSWSTEEL	1400	1104975	4.9%	1335	1300	1200150	-2.6%
APOLLOHOSP	9300	137750	5.2%	8839	8300	157625	-6.1%	KOTAKBANK	420	8562000	-0.9%	424	400	6794000	-5.6%
ASIANPAINT	2900	364250	11.2%	2609	2420	312500	-7.2%	LT	4100	1190700	1.3%	4046	4100	673400	1.3%
AXISBANK	1300	3159375	2.8%	1265	1240	2263125	-2.0%	M&M	3400	919000	2.0%	3334	3200	445800	-4.0%
BAJAJ-AUTO	13000	146325	9.2%	11910	11500	106125	-3.4%	MARUTI	14000	263750	4.7%	13376	13500	100600	0.9%
BAJAJFINSV	2100	609300	4.9%	2002	1900	456300	-5.1%	MAXHEALTH	1000	519225	-1.4%	1014	1000	565950	-1.4%
BAJFINANCE	1100	2840250	1.9%	1080	1000	1530750	-7.4%	NESTLEIND	1500	376000	3.1%	1455	1400	181500	-3.8%
BEL	410	5134275	-0.5%	412	410	4769475	-0.5%	NTPC	340	6883500	3.0%	330	340	3363000	3.0%
BHARTIARTL	2000	2348400	6.2%	1882	1900	1728525	0.9%	ONGC	237.5	8437500	2.3%	232	225	3975750	-3.1%
CIPLA	1480	739075	4.0%	1424	1300	948175	-8.7%	POWERGRID	290	5793100	9.0%	266	270	3446600	1.5%
COALINDIA	400	6570450	-0.2%	401	400	4125600	-0.2%	RELIANCE	1300	6934500	1.0%	1287	1300	5697500	1.0%
DRREDDY	1200	1424375	1.9%	1178	1080	1121875	-8.3%	SBILIFE	1800	491625	2.2%	1761	1660	249750	-5.7%
EICHERMOT	9000	147700	11.7%	8059	7500	264900	-6.9%	SBIN	1100	7176750	5.0%	1048	1000	4240500	-4.5%
ETERNAL	340	11538150	3.7%	328	310	3184025	-5.5%	SHRIRAMFIN	1100	1309275	1.2%	1087	1100	1466025	1.2%
GRASIM	3300	303250	0.3%	3290	3040	136000	-7.6%	SUNPHARMA	1980	594300	3.1%	1920	1860	598850	-3.1%
HCLTECH	1350	663600	2.6%	1316	1160	530800	-11.9%	TATACONSUM	1140	736450	9.5%	1041	950	777700	-8.7%
HDFCBANK	730	17328350	1.3%	720	730	9251450	1.3%	TMPV	320	5819200	0.2%	319	320	4356800	0.2%
HDFCLIFE	570	2576200	4.0%	548	510	2429900	-6.9%	TATASTEEL	190	19695500	1.9%	187	185	8962250	-0.8%
HINDALCO	1100	2350600	6.0%	1037	1000	1836100	-3.6%	TCS	2400	1253700	2.5%	2342	2300	1131300	-1.8%
HINDUNILVR	2100	1788300	4.5%	2010	2000	924300	-0.5%	TECHM	1760	545400	7.3%	1641	1400	449400	-14.7%
ICICIBANK	1470	2178400	3.3%	1423	1400	1390900	-1.6%	TITAN	5400	313250	4.5%	5169	5000	353150	-3.3%
INDIGO	5300	418050	2.6%	5166	5200	329850	0.7%	TRENT	3000	995625	3.5%	2898	2900	308025	0.1%
INFY	1160	4212400	1.4%	1144	1100	2258400	-3.8%	ULTRACEMCO	11760	106450	1.5%	11589	11500	39200	-0.8%
ITC	270	13568850	1.5%	266	270	9813525	1.5%	WIPRO	200	9102000	10.5%	181	180	7224000	-0.5%

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

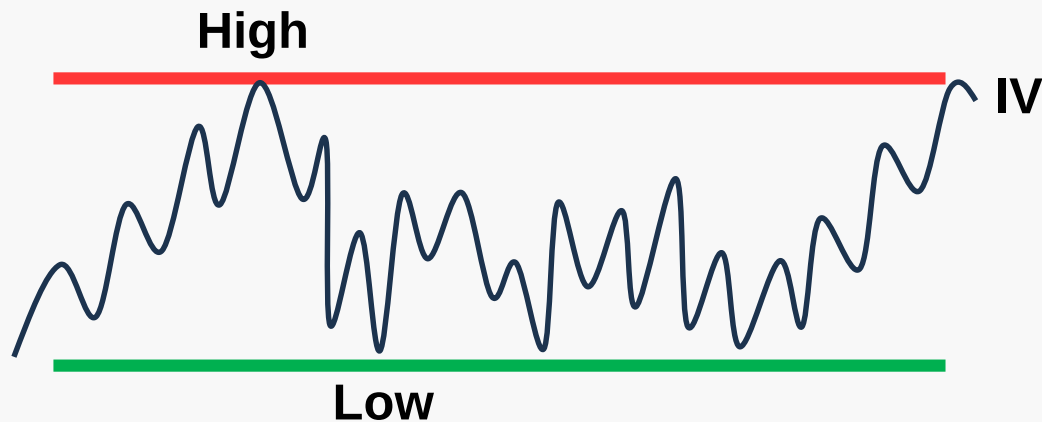
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

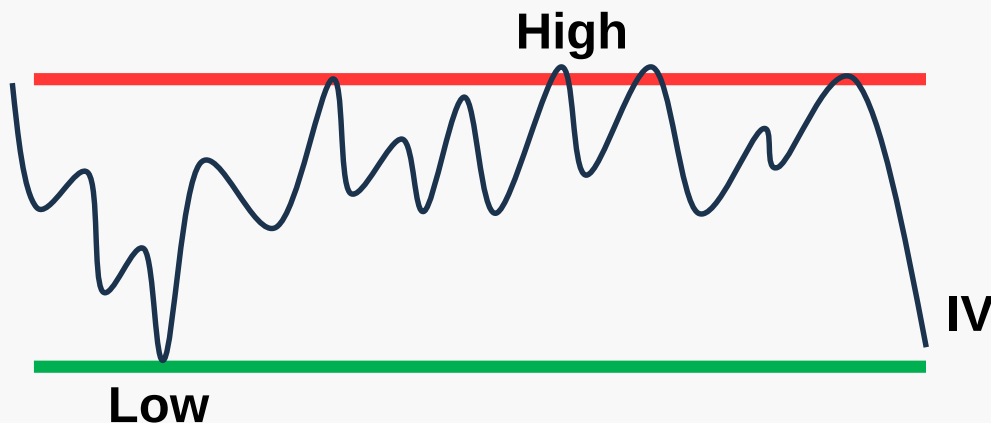
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

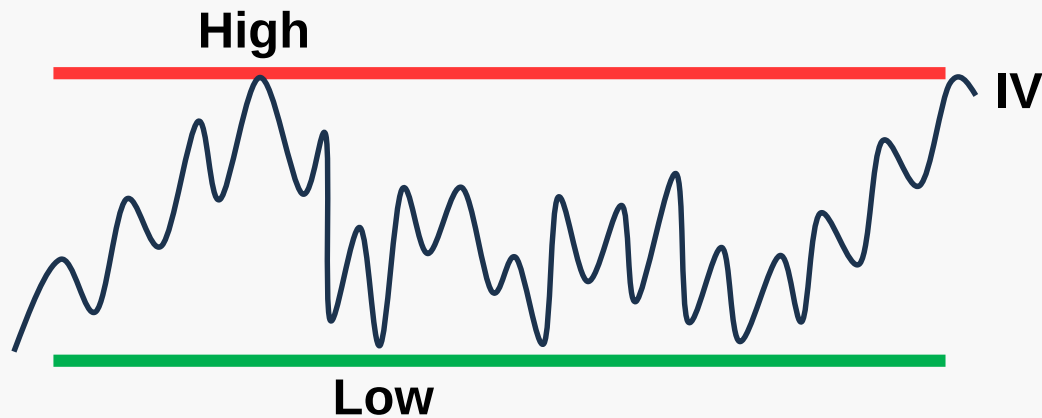


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

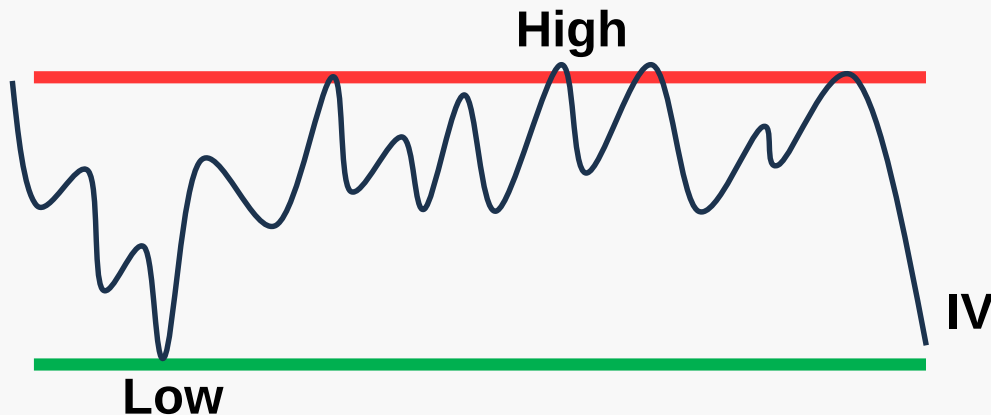


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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