



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,109	0.1% ▼
Open Interest (OI)	1,77,95,580	2.2% ▼
Change in OI (abs)	1,77,95,580	3,99,265 ▼
Premium / Discount (Abs)	81	17 ▼
Inference	Long Unwinding	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,678	0.0% ▲
Open interest (OI)	19,39,595	0.1% ▼
Change in OI (abs)	19,39,595	1340 ▼
Premium / Discount (Abs)	216	52 ▼
Inference	Short Covering	

Volatility Insights

	Value	Change
India VIX Index	10.25	0.14 ▲
Nifty ATM IV (%)	8.97	0.43 ▲
Bank Nifty ATM IV (%)	10.24	0.73 ▲
PCR (Nifty)	1.18	0.03 ▲
PCR (Bank Nifty)	0.94	0.04 ▲

The FII Long Ratio in Index Futures **jump** to 10.6 %, **up** from 10 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ICICIPRULI	1,59,28,500	5.0%	651.75	0.4%
SIEMENS	31,34,775	4.9%	3173	0.8%
360ONE	18,76,500	4.0%	1148.1	0.0%
HINDUNILVR	1,02,73,800	3.2%	2296	1.4%
NBCC	8,63,65,500	3.1%	115.85	5.3%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SAMMAANCAP	10,23,83,000	8.7%	149.36	-0.3%
KAYNES	37,61,400	6.3%	4208.5	-1.8%
BSE	1,14,68,625	5.9%	2650.3	-3.4%
LICI	1,15,10,800	5.3%	858.65	-1.3%
BHEL	6,44,07,000	4.4%	283.8	-1.0%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
GODREJCP	1,00,09,500	-4.8%	1168.2	1.1%
ABB	25,25,375	-3.8%	5309.5	0.3%
HINDZINC	3,62,17,125	-3.8%	569.6	1.2%
TATASTEEL	25,96,93,500	-3.1%	173.17	0.6%
KEI	10,88,850	-2.9%	4189.5	2.5%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SRF	35,28,800	-9.9%	3005.8	-0.8%
IIFL	1,21,60,500	-2.8%	577.5	-0.9%
LTIM	22,03,350	-1.7%	6298.5	-0.3%
HINDALCO	7,85,16,200	-1.4%	849.3	-0.7%
ABCAPITAL	7,57,39,200	-1.4%	353.3	-3.0%

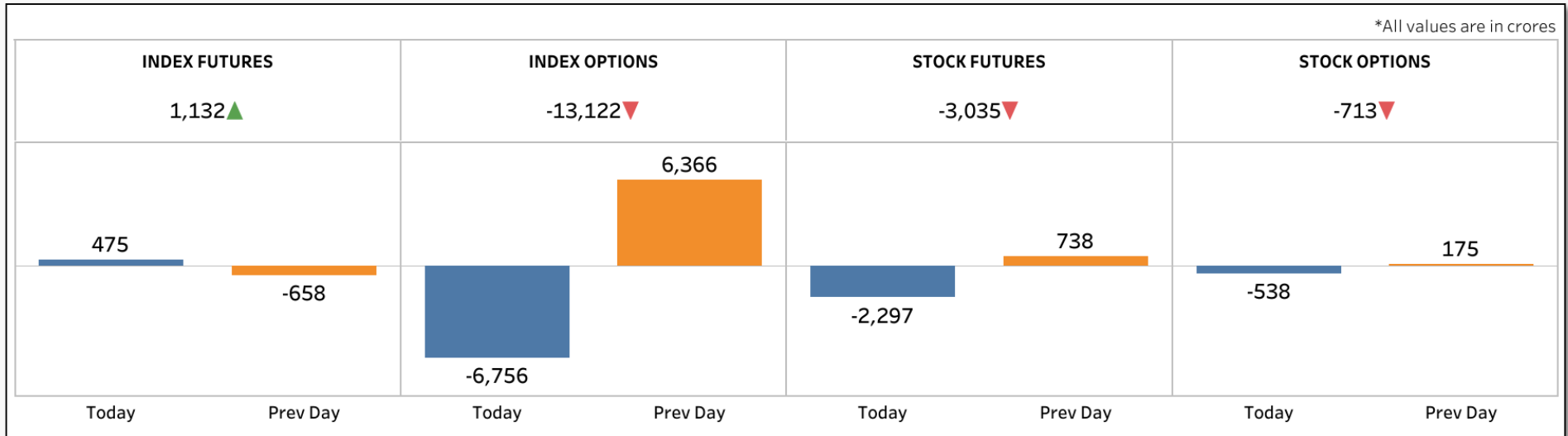
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

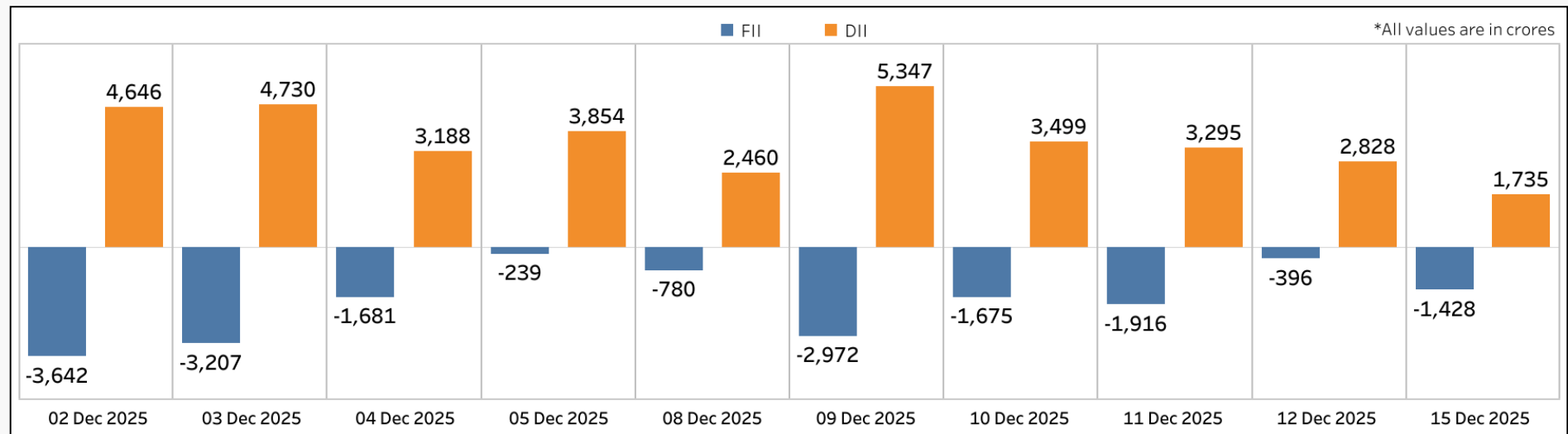
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-71,361 ▼	5,923 ▲	3,682 ▲	-41,193 ▼	0	-7,821 ▼	0	7,452 ▲
49,618					7,773		10,395
2,491			7,844				2,943
-21,743	-3,432	-12,751	-33,349	0	-48	0	
		-16,433					
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-5,619	-147,925	235,733	1,375,843	2,950	43,089	24,154	-4,544,721
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
75,448 ▲	-1,608 ▼	84,587 ▲	12,796 ▲	-4,085 ▼	3,506 ▲	-88,271 ▼	20,945 ▲
		109,472		-10,081	-5,996	-8,452	-1,065
31,825				-4,044	-7,550		-22,010
1,601	3,209	24,885	24,019				
			11,223				
-43,623						-96,723	
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
39,315	100,877	-223,697	2,657,272	-36,645	3,959	-36,191	511,606
Today	Today	Today	Today	Today	Today	Today	Today
Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day	Prev Day

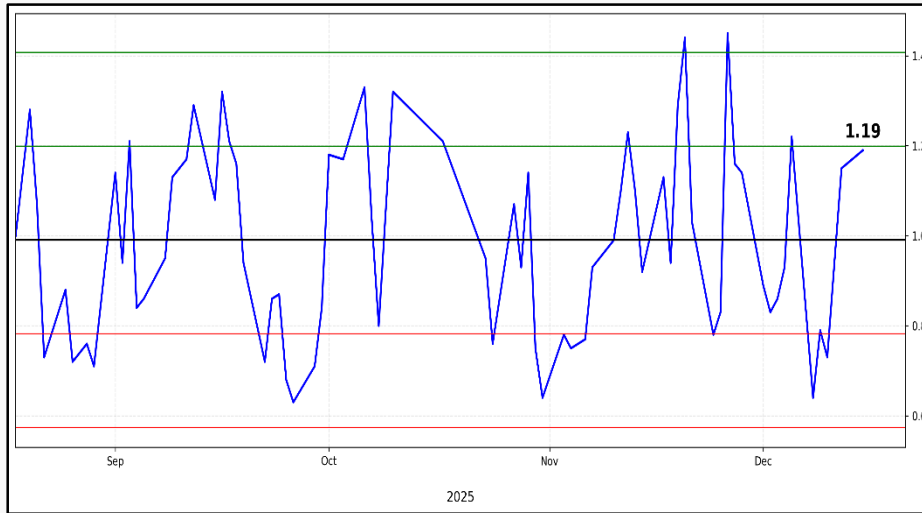
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



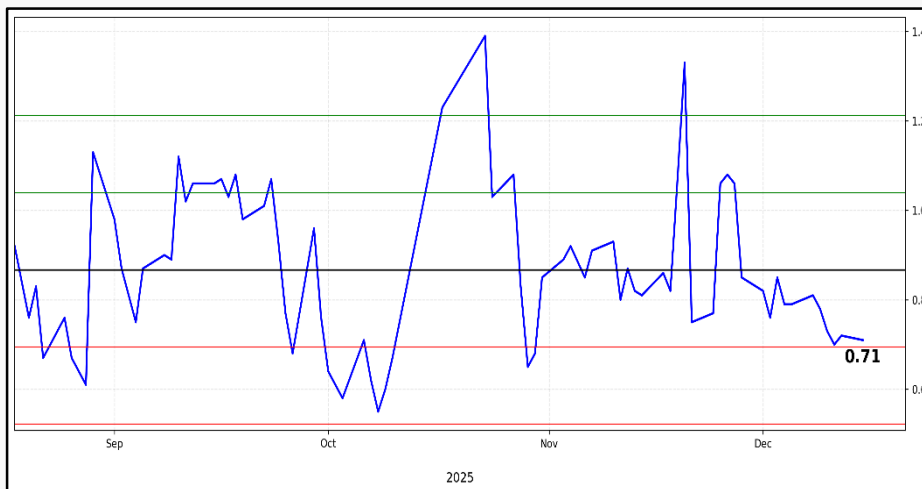
Nifty



Bank Nifty



Fin Nifty

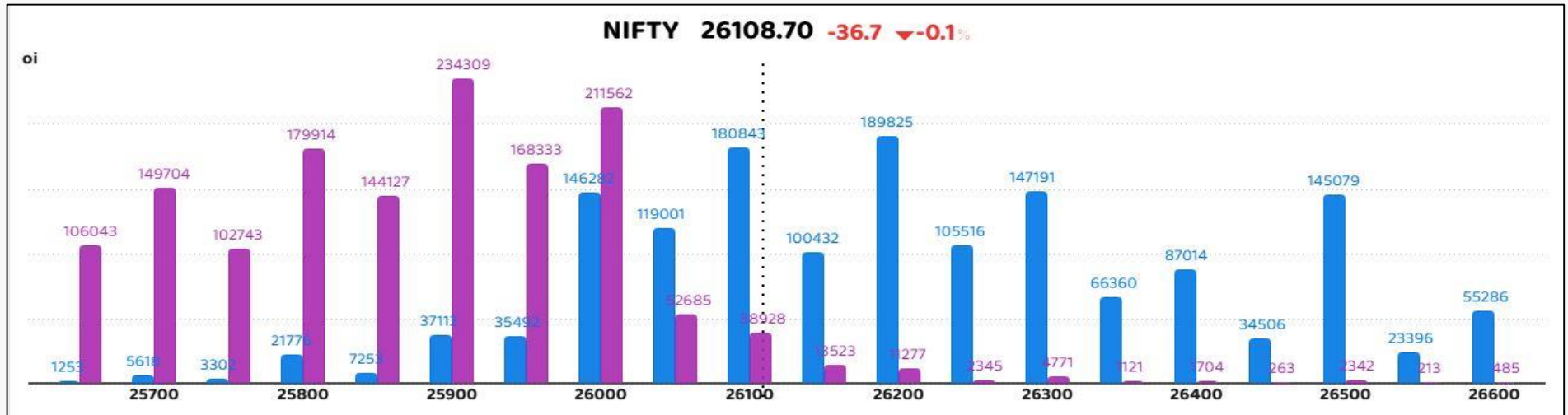


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,200 Call and 25,900 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 60,000 Call and the 59,500 Put saw the most amount of open interest.

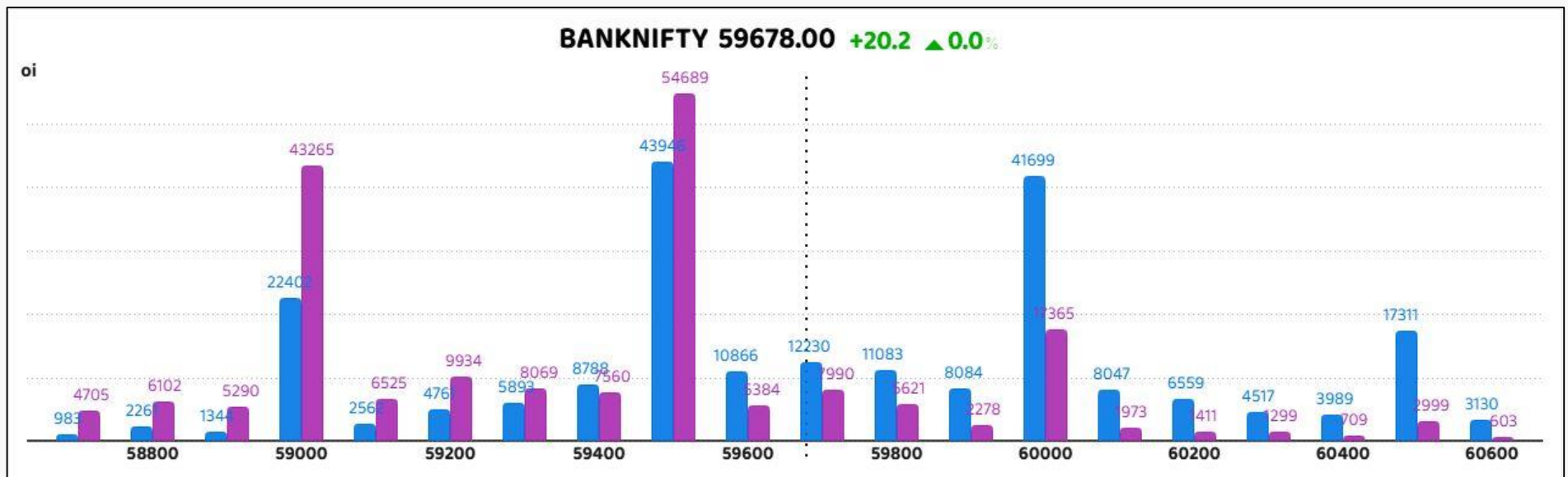
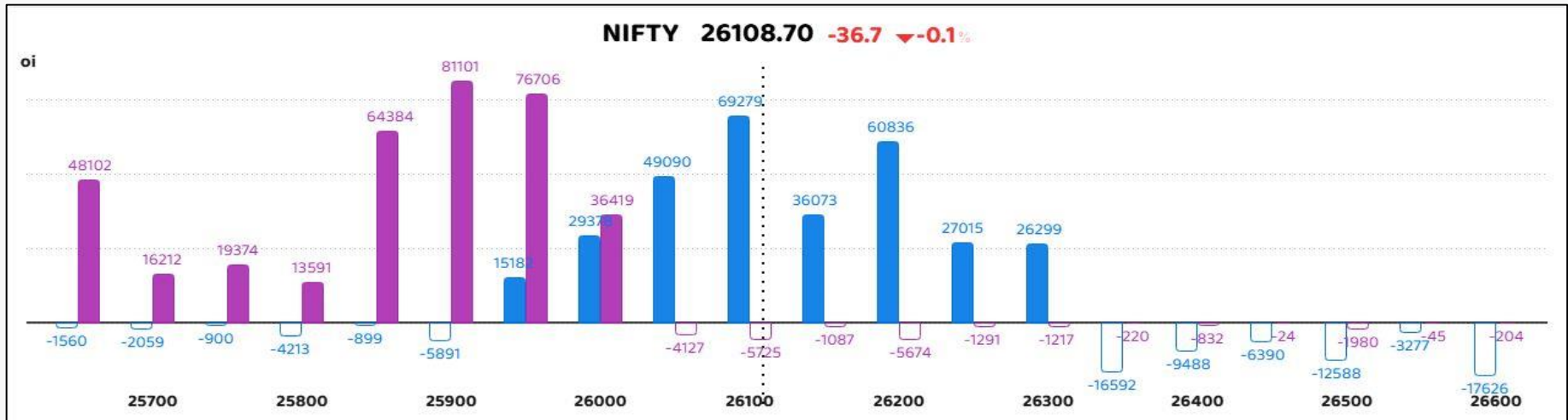


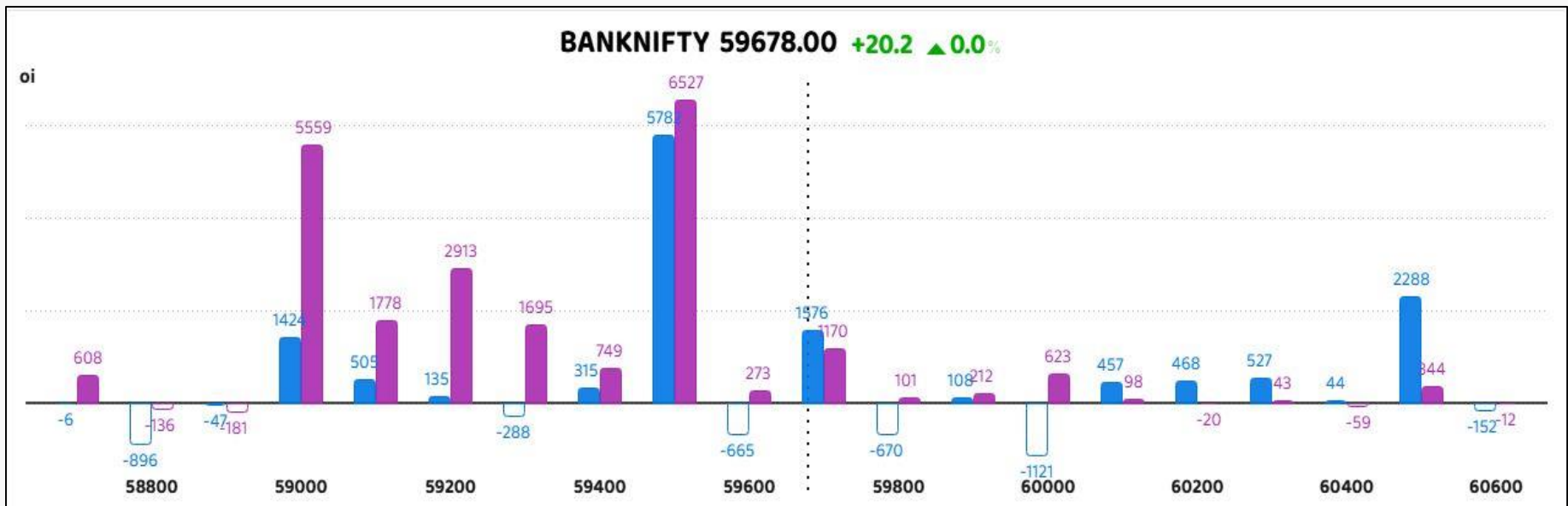
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,100 Call and the 25,900 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,500 Call & the 59,500 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
POWER GRID CORP	262.2	-0.5	29.1	34.5	15.1	72.3
HINDUSTAN UNILEV	2,293.5	1.5	16.7	25.8	0.8	63.6
ICICI LOMBARD GE	1,951.8	0.7	23.8	38.2	3.2	58.8
TATA STEEL LTD	172.9	0.6	64.7	110.0	5.2	56.7
BOSCH LTD	36,400.0	-0.9	21.2	36.2	2.1	56.0

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
DIVI LABS LTD	6,347.5	-1.2	17.5	41.3	17.5	0.0
ASHOK LEYLAND	166.8	1.8	19.7	56.0	19.7	0.0
ADITYA BIRLA CAP	351.8	-3.1	8.2	47.6	8.2	0.0
PETRONET LNG LTD	268.6	-0.1	17.1	50.4	16.9	0.6
BIOCON LTD	390.7	1.1	24.2	55.0	23.9	1.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
KAYNES TECHNOLOG	4,197.5	-1.6	54.2	62.9	30.3	98.2
TATA STEEL LTD	172.9	0.6	64.7	110.0	5.2	96.6
POWER GRID CORP	262.2	-0.5	29.1	34.5	15.1	88.4
INTERGLOBE AVIAT	4,965.5	2.2	29.1	43.2	13.2	69.7
HINDUSTAN ZINC	568.1	1.1	34.7	54.2	21.8	67.3

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
DIVI LABS LTD	6,347.5	-1.2	17.5	41.3	17.5	0.0
ASHOK LEYLAND	166.8	1.8	19.7	56.0	19.7	0.0
ADITYA BIRLA CAP	351.8	-3.1	8.2	47.6	8.2	0.0
NHPC LTD	77.2	0.1	22.4	53.0	21.6	0.7
ZYDUS LIFESCIENC	921.6	-0.8	17.8	41.7	16.5	0.9

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
HUDCO	214.8	0.5	7,720	1,522	5.1
INDIANB	783.8	-0.7	7,587	1,628	4.7
SOLARINDS	12,196.0	-0.9	6,313	1,363	4.6
IIFL	575.2	-1.0	9,093	2,049	4.4
HDFCLIFE	772.7	-0.6	16,889	3,884	4.3

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
OFSS	7,967.5	-0.3	4,964	6,422	1.3
AUROPHARMA	1,186.3	-0.7	3,157	3,901	1.2
MARUTI	16,415.0	-0.6	37,233	43,168	1.2
NAUKRI	1,361.6	-1.2	4,613	4,909	1.1
ONGC	235.4	-1.1	39,544	41,266	1.0

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
BDL	1,402.6	-0.5	18,614	17,923	100.0
BEL	390.8	0.3	63,048	60,458	100.0
HFCL	66.0	-0.8	12,388	11,381	100.0
INDIANB	783.8	-0.7	11,636	11,165	100.0
TIINDIA	2,647.7	-0.3	7,617	7,582	100.0

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
HINDZINC	568.0	1.1	27,774	25,898	100.0
INOXWIND	126.0	1.1	7,372	7,173	100.0
JSWENERGY	486.4	0.9	11,591	10,758	100.0
KAYNES	4,197.5	-1.6	33,231	32,126	100.0
TIINDIA	2,647.7	-0.3	4,838	4,700	100.0

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
NBCC	115.4	5.3	30,013	41,569	72.2
360ONE	1,144.7	0.2	23,353	33,368	70.0
IOC	168.6	3.0	38,617	76,903	50.2
INDIGO	4,965.5	2.2	2,14,781	4,39,821	48.8
HINDZINC	568.0	1.1	1,33,652	2,84,880	46.9

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
360ONE	1,144.7	0.2	17,587	16,383	100.0
PHOENIXLTD	1,789.4	1.0	10,185	15,419	66.1
HINDZINC	568.0	1.1	57,422	94,741	60.6
NBCC	115.4	5.3	9,432	15,569	60.6
ONGC	235.4	-1.1	41,266	89,436	46.1

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
INDIGO	4,965.5	2.2	1,20,425	42,030	2.9
HINDZINC	568.0	1.1	37,993	18,789	2.0
KAYNES	4,197.5	-1.6	83,117	42,284	2.0
SIEMENS	3,157.8	0.4	18,228	10,169	1.8
TIINDIA	2,647.7	-0.3	7,617	4,319	1.8

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
HINDZINC	568.0	1.1	27,774	10,748	2.6
INDIGO	4,965.5	2.2	57,932	24,300	2.4
KAYNES	4,197.5	-1.6	33,231	16,354	2.0
DIXON	13,737.0	2.7	39,198	20,452	1.9
TIINDIA	2,647.7	-0.3	4,838	2,675	1.8

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
AMBER	6,801.5	2.6	70,243	15,279	4.6
IOC	168.6	3.0	38,617	8,840	4.4
PNBHOUSING	922.0	-1.6	32,393	8,259	3.9
KEI	4,167.9	2.5	14,451	4,122	3.5
ONGC	235.4	-1.1	39,544	11,740	3.4

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
ONGC	235.4	-1.1	41,266	5,518	7.5
PNBHOUSING	922.0	-1.6	21,378	3,743	5.7
360ONE	1,144.7	0.2	17,587	3,576	4.9
PHOENIXLTD	1,789.4	1.0	10,185	2,234	4.6
HINDZINC	568.0	1.1	57,422	15,478	3.7

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	2300	2491467	0.9%	2279	2300	1090152	0.9%	JIOFIN	310	10321200	3.5%	300	300	6248650	0.1%
ADANIPTS	1600	2047250	5.8%	1513	1500	831250	-0.8%	JSWSTEEL	1200	3594375	7.6%	1115	1100	1601100	-1.3%
APOLLOHOSP	7500	381125	5.8%	7087	7000	126375	-1.2%	KOTAKBANK	2200	1455600	0.9%	2181	2000	1028000	-8.3%
ASIANPAINT	3000	1328000	7.9%	2780	2600	504750	-6.5%	LT	4100	704025	0.2%	4092	4000	496475	-2.3%
AXISBANK	1290	3710000	0.4%	1285	1280	1125625	-0.4%	M&M	3800	1272200	5.3%	3608	3600	585600	-0.2%
BAJAJ-AUTO	9100	272100	1.8%	8940	9000	143475	0.7%	MARUTI	16500	255250	0.5%	16415	15000	203150	-8.6%
BAJAJFINSV	2100	979000	1.4%	2071	2000	398750	-3.4%	MAXHEALTH	1100	728700	1.3%	1085	1160	441000	6.9%
BAJFINANCE	1100	3505500	8.6%	1013	1020	1948500	0.7%	NESTLEIND	1320	2468000	6.2%	1244	1180	240500	-5.1%
BEL	420	14425275	7.5%	391	400	4250775	2.4%	NTPC	325	7321500	0.3%	324	320	2056500	-1.2%
BHARTIARTL	2100	3074200	1.5%	2070	2100	1157575	1.5%	ONGC	250	10309500	6.2%	235	230	3498750	-2.3%
CIPLA	1660	897375	10.1%	1508	1400	514500	-7.2%	POWERGRID	280	6247200	6.8%	262	260	2557400	-0.8%
COALINDIA	400	2007450	4.0%	384	440	1590300	14.4%	RELIANCE	1600	9756000	2.8%	1556	1500	3151500	-3.6%
DRREDDY	1300	2254375	1.5%	1281	1140	384375	-11.0%	SBILIFE	2040	966375	0.3%	2035	2020	344625	-0.7%
EICHERMOT	7300	422625	2.5%	7122	6300	237125	-11.5%	SBIN	1000	9586500	3.4%	967	950	3051750	-1.8%
ETERNAL	310	15888600	3.9%	298	290	5902450	-2.8%	SHRIRAMFIN	880	2970000	2.9%	855	850	1419000	-0.6%
GRASIM	2800	470750	-0.7%	2821	2700	591500	-4.3%	SUNPHARMA	1840	2028600	2.4%	1797	1780	279300	-1.0%
HCLTECH	1720	1053850	2.1%	1684	1440	503650	-14.5%	TATACONSUM	1200	1819400	3.7%	1157	1070	378950	-7.6%
HDFCBANK	1000	5904800	0.4%	996	1000	3501300	0.4%	TMPV	360	12016800	3.7%	347	350	5107200	0.8%
HDFCLIFE	800	5859700	3.5%	773	700	1435500	-9.4%	TATASTEEL	180	23050500	4.1%	173	170	16170000	-1.7%
HINDALCO	800	1996400	-5.6%	848	780	1339100	-8.0%	TCS	3200	1103550	-0.9%	3230	3000	663250	-7.1%
HINDUNILVR	2400	1040100	4.6%	2294	2300	475800	0.3%	TECHM	1600	1033200	1.6%	1575	1500	446400	-4.8%
ICICIBANK	1400	8622600	2.5%	1365	1400	3488100	2.5%	TITAN	3900	619500	0.9%	3866	3800	392350	-1.7%
INDIGO	5500	2254200	10.8%	4966	4500	805200	-9.4%	TRENT	4300	908900	4.6%	4109	4000	391100	-2.7%
INFY	1600	8260000	-0.4%	1607	1600	3076800	-0.4%	ULTRACEMCO	12000	146050	2.3%	11728	10800	93750	-7.9%
ITC	410	10803200	1.9%	402	390	8820800	-3.1%	WIPRO	260	5820000	-0.7%	262	250	3648000	-4.5%

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

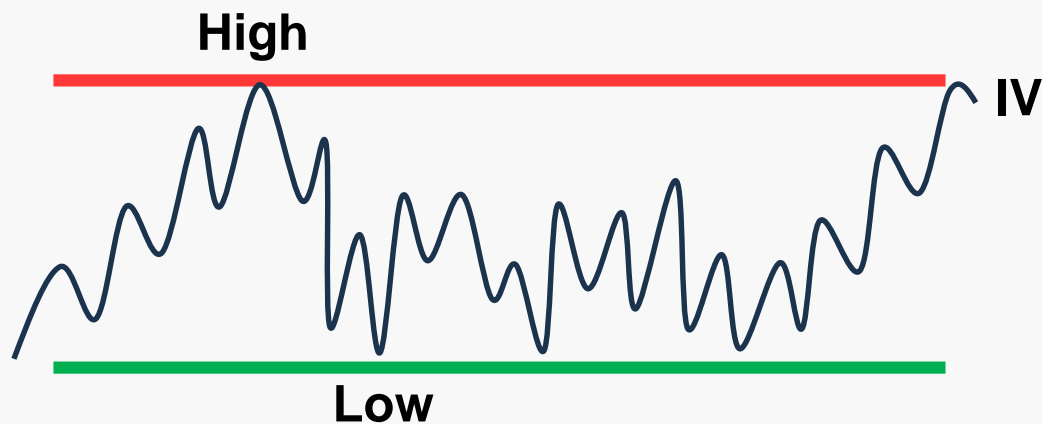
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

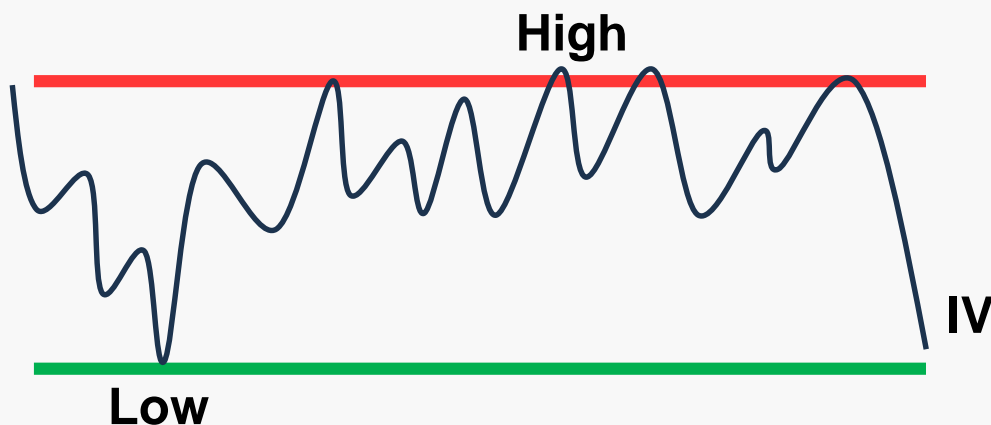
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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 (DII)s, 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

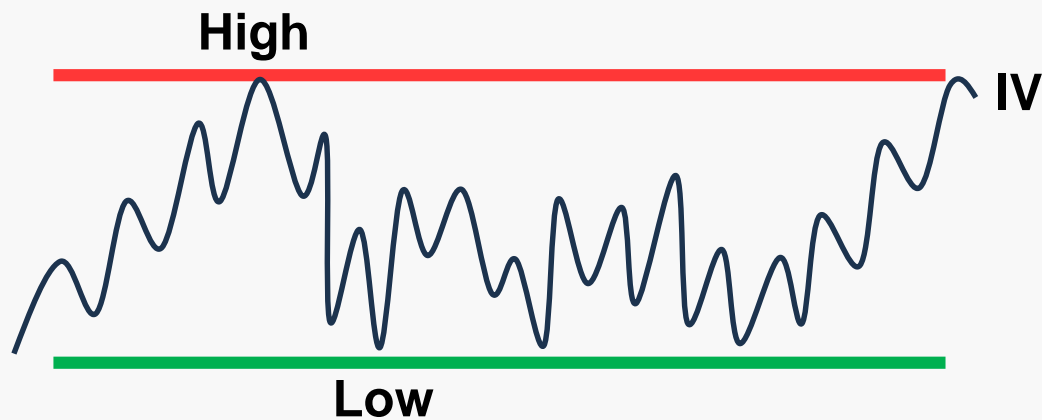


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

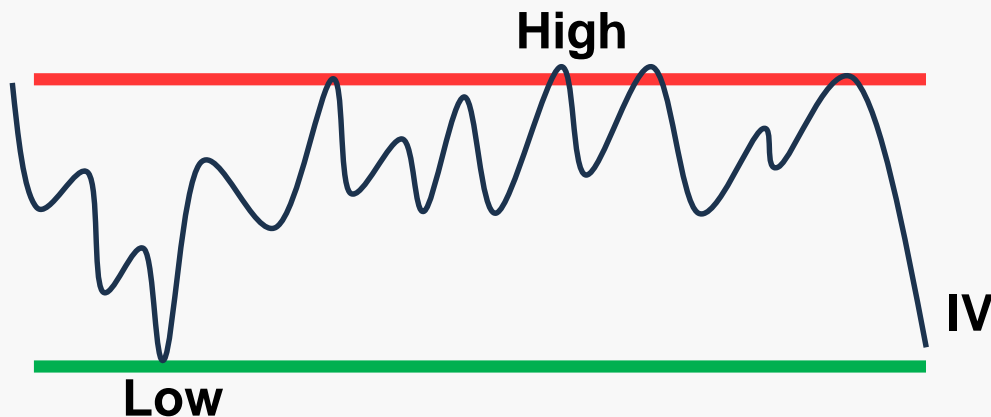


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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