



Daily Derivatives Report

Nifty Futures

	Value	Change
Most recent settlement	26,055	0.4% ▼
Open Interest (OI)	1,45,50,765	30.6% ▼
Change in OI (abs)	1,45,50,765	28,51,080 ▲
Premium / Discount (Abs)	171	134 ▲
Inference	Short Build Up	

Bank Nifty Futures

	Value	Change
Most recent settlement	59,140	0.2% ▼
Open interest (OI)	14,33,025	31.5% ▼
Change in OI (abs)	14,33,025	3,38,430 ▲
Premium / Discount (Abs)	319	283 ▲
Inference	Short Build Up	

Volatility Insights

	Value	Change
India VIX Index	12.24	0.99 ▼
Nifty ATM IV (%)	10.41	2.6 ▼
Bank Nifty ATM IV (%)	10.62	3.8 ▼
PCR (Nifty)	0.95	0.18 ▲
PCR (Bank Nifty)	1.10	0.17 ▲

The FII Long Ratio in Index Futures **Jump** to 15.1 %, **Up** from 14.5 % in the previous session.

Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ABCAPITAL	7,93,94,100	0.8%	347.1	4.0%
ICICIPRULI	1,38,99,975	0.0%	615.85	0.6%
AUROPARMA	2,41,53,250	-0.2%	1215.7	1.0%
GODREJPROP	82,75,025	-1.0%	2105.8	2.2%
HUDCO	3,21,37,275	-1.0%	232.28	1.1%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
ADANIENT	1,43,30,802	9.7%	2347.6	-2.9%
HINDPETRO	4,23,08,325	2.4%	458.5	-1.8%
TIINDIA	20,12,200	-0.6%	2900.9	-0.8%
GRASIM	1,60,49,000	-1.2%	2704.6	-0.2%
HCLTECH	1,75,08,750	-1.2%	1610.2	-0.7%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
SBICARD	1,44,29,600	-24.4%	878	1.0%
BSE	90,55,875	-24.3%	2857.3	1.2%
LTF	4,22,97,608	-21.0%	299	1.7%
SAIL	13,85,23,100	-20.2%	132.8	0.5%
DABUR	1,70,86,250	-20.1%	517.7	0.4%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
360ONE	16,45,500	-29.5%	1124.7	-0.6%
TITAGARH	55,45,525	-27.8%	841.95	-0.8%
PIIND	22,76,400	-25.8%	3417	-0.3%
ANGELONE	24,47,250	-24.2%	2670.3	-0.6%
ASTRAL	78,25,950	-22.9%	1450	-1.1%

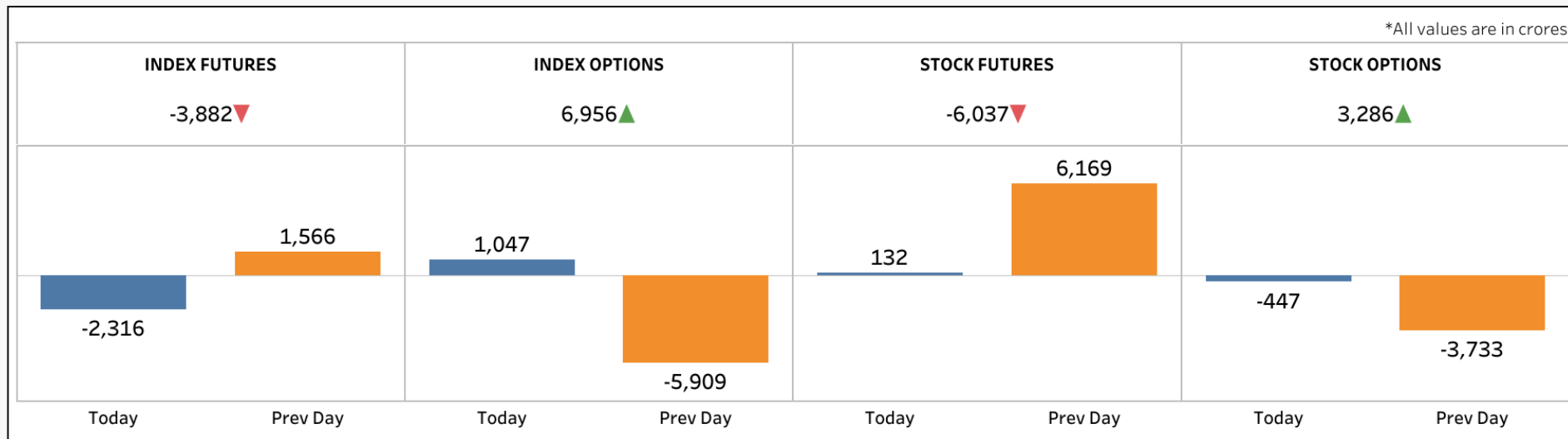
For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

Open Interest Trends by Participant

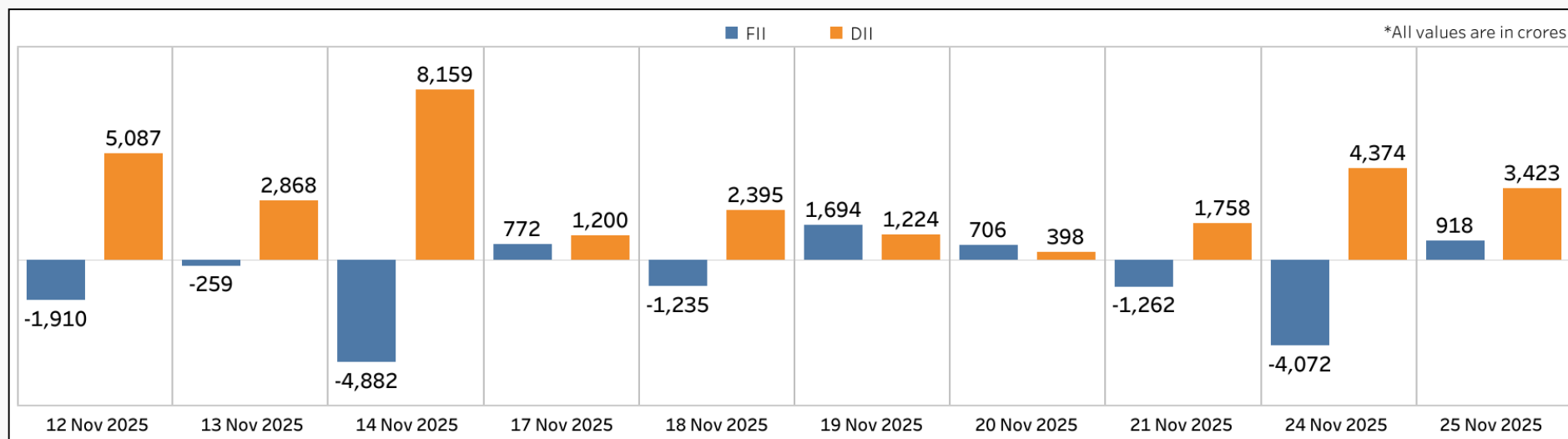
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-18,324 ▼	58,858 ▲	-37,499 ▼	-104,184 ▼	-431 ▼	18,182 ▲	2,157 ▲	65,122 ▲
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-51,812	-94,689	258,250	1,329,621	1,950	42,501	23,384	-4,437,551
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
-215,883 ▼	-18,392 ▼	256,502 ▲	-60,455 ▼	234,639 ▲	-58,648 ▼	-221,158 ▼	99,517 ▲
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-361	60,088	-445,990	2,625,636	50,224	-7,900	164,356	482,294
Today	Prev Day	Today	Prev Day	Today	Prev Day	Today	Prev Day

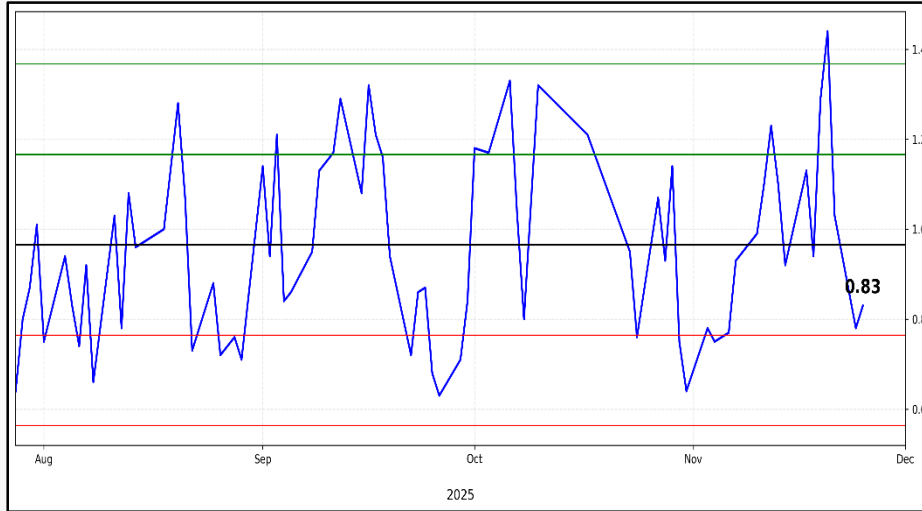
Daily Net Open Interest Change



DII and FII Daily Cash Market Flows



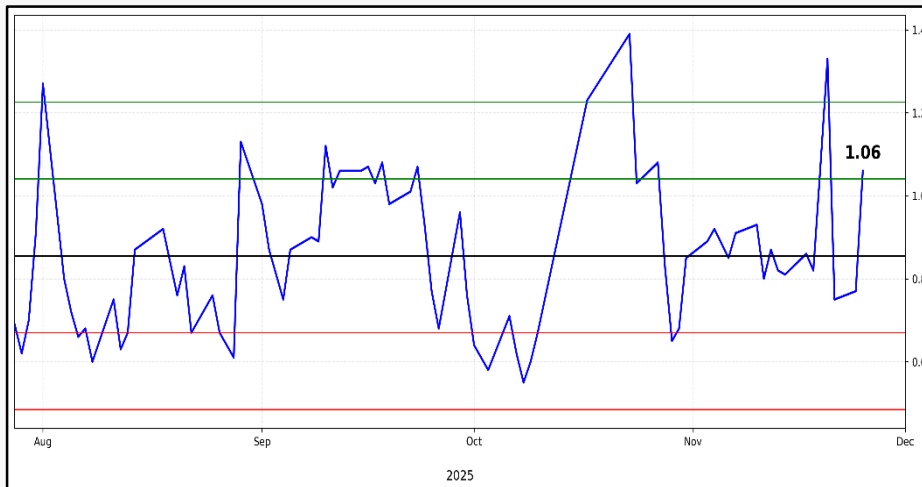
Nifty



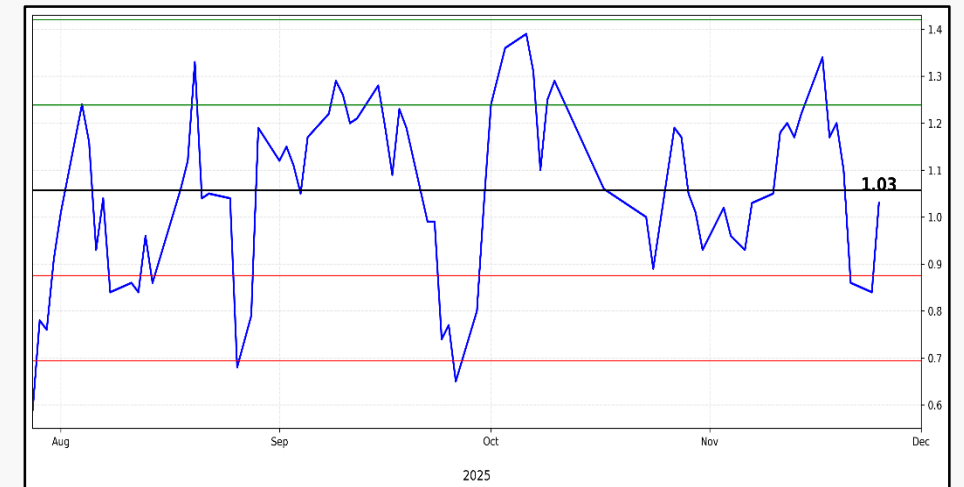
Bank Nifty



Fin Nifty

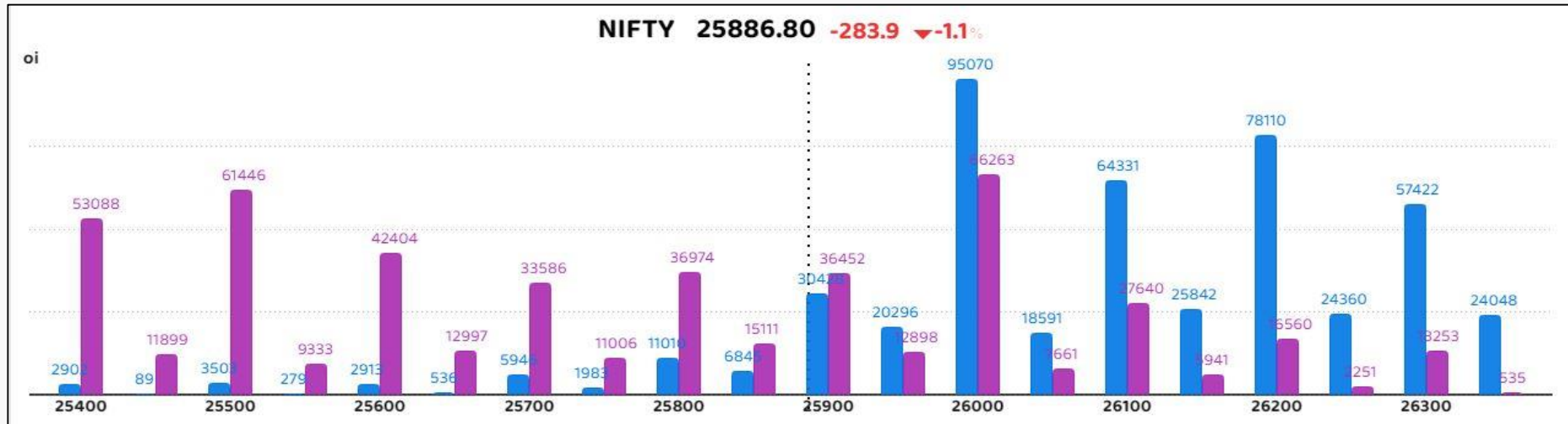


Midcap Select Nifty



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

Call  Put 



For Nifty, the 26,000 Call and 26,000 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 58,500 Call and the 58,500 Put saw the most amount of open interest.

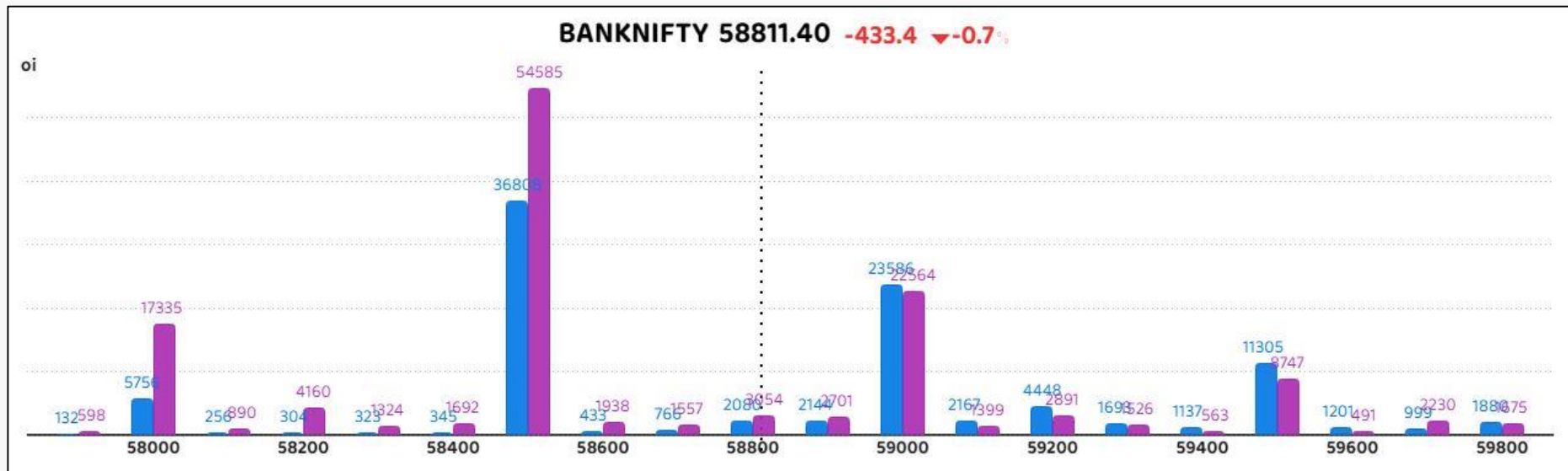
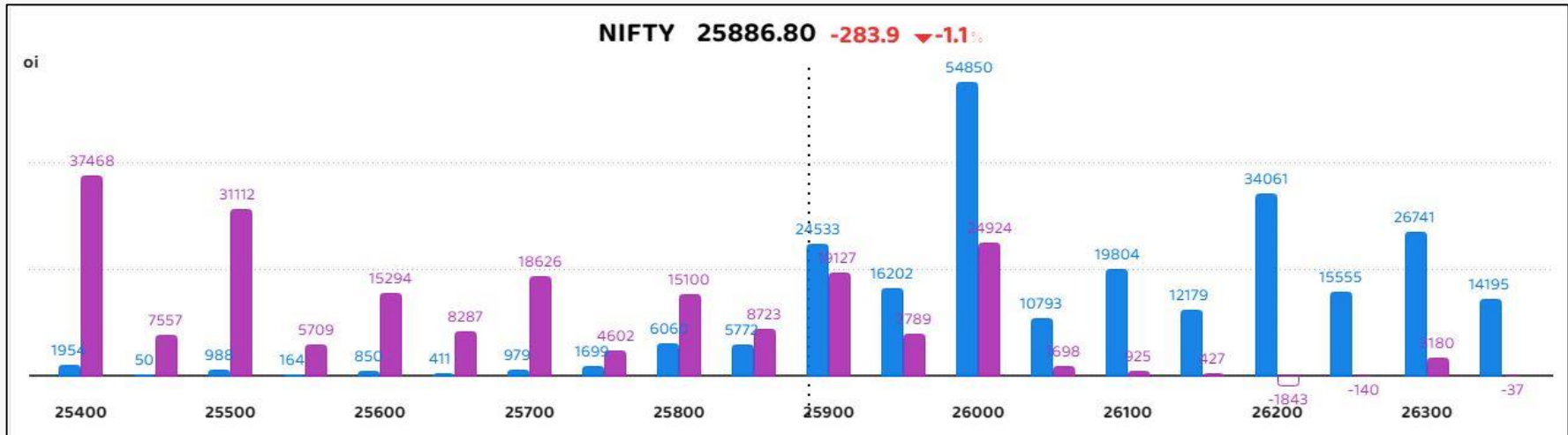


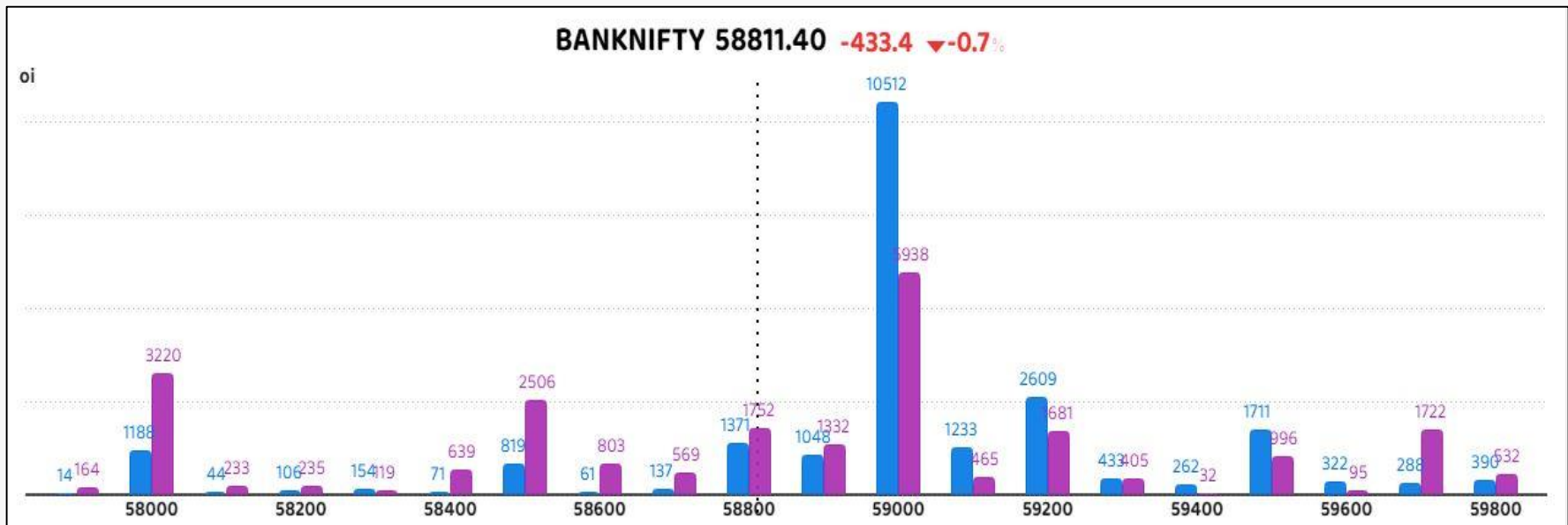
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

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

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 26,000 Call and the 25,400 Put



For the Bank Nifty, the biggest open interest changes were seen at the 59,000 Call & the 59,000 Put

Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
STEEL AUTHORITY	132.3	0.1	66.0	91.3	8.4	69.4
TATA CONSUMER PR	1,177.7	-0.7	21.2	34.4	5.5	54.4
HDFC BANK LTD	989.8	-0.9	15.1	28.0	1.5	51.6
BOSCH LTD	35,770.0	-1.2	19.2	36.2	2.1	50.1
ICICI LOMBARD GE	1,999.0	0.1	20.5	38.2	3.2	49.3

Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN UNILEV	2,414.1	-0.4	9.4	25.8	9.4	0.0
NTPC LTD	323.7	0.1	15.6	116.6	15.6	0.0
MAHINDRA & MAHIN	3,669.3	-0.6	22.2	43.5	22.2	0.0
ULTRATECH CEMENT	11,580.0	0.0	15.9	31.0	15.9	0.0
ADANI PORTS AND	1,483.9	-0.1	19.0	99.7	19.0	0.0

Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
STEEL AUTHORITY	132.3	0.1	66.0	91.3	8.4	98.8
INDRAPRASTHA GAS	194.9	-2.1	39.8	63.7	22.3	81.5
ASTRAL LTD	1,465.5	-0.5	27.1	40.4	19.3	45.8
INDIAN ENERGY EX	140.2	0.0	32.9	76.3	8.0	36.8
GMR AIRPORTS LTD	104.2	0.4	27.1	45.0	21.5	33.2

Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN UNILEV	2,414.1	-0.4	9.4	25.8	9.4	0.0
MAHINDRA & MAHIN	3,669.3	-0.6	22.2	43.5	22.2	0.0
ULTRATECH CEMENT	11,580.0	0.0	15.9	31.0	15.9	0.0
NTPC LTD	323.7	0.1	15.6	116.6	15.6	0.0
ADANI PORTS AND	1,483.9	-0.1	19.0	99.7	19.0	0.0

Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
PHOENIXLTD	1,731.7	3.2	20,454	4,353	4.7
ASHOKLEY	145.8	0.9	28,234	7,433	3.8
TATACONSUM	1,177.7	-0.7	13,354	3,820	3.5
RVNL	322.9	-0.6	31,335	9,114	3.4
YESBANK	22.7	2.3	14,460	4,264	3.4

Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
DALBHARAT	2,019.9	-0.1	1,631	2,828	1.7
IGL	194.8	-2.1	2,009	3,350	1.7
TORNTPHARM	3,745.2	0.7	1,711	2,069	1.2
NESTLEIND	1,263.2	-0.5	4,364	5,245	1.2
SAIL	132.2	0.1	2,320	2,695	1.2

Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
NMDC	72.7	0.2	22,634	22,779	99.4
TMPV	352.4	-1.6	1,06,472	1,07,899	98.7
JSWENERGY	476.6	-0.9	18,773	19,325	97.1
CROMPTON	265.0	-0.1	14,643	15,585	94.0
GMRAIRPORT	104.2	0.4	21,714	23,473	92.5

Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
CONCOR	512.5	-0.5	9,261	8,846	100.0
CROMPTON	265.0	-0.1	8,234	7,827	100.0
RECLTD	351.8	-1.2	25,523	25,361	100.0
JSWENERGY	476.6	-0.9	9,878	10,025	98.5
TMPV	352.4	-1.6	40,563	41,434	97.9

Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
PHOENIXLTD	1,731.7	3.2	20,454	40,801	50.1
RVNL	322.9	-0.6	31,335	74,012	42.3
ABCAPITAL	345.4	4.1	21,194	50,801	41.7
IIFL	557.4	3.8	9,334	32,790	28.5
FEDERALBNK	256.0	3.2	28,909	1,10,443	26.2

Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
RVNL	322.9	-0.6	9,114	18,384	49.6
INOXWIND	134.7	-0.8	4,688	12,089	38.8
TMPV	352.4	-1.6	33,636	98,498	34.1
IIFL	557.4	3.8	3,744	11,764	31.8
ABCAPITAL	345.4	4.1	8,045	25,952	31.0

Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
TMPV	352.4	-1.6	1,06,472	56,492	1.9
SAMMAANCAP	151.7	-0.4	12,790	7,731	1.7
NHPC	77.2	0.4	6,585	4,106	1.6
INOXWIND	134.7	-0.8	13,158	8,398	1.6
JSWENERGY	476.6	-0.9	18,773	12,792	1.5

Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
JSWENERGY	476.6	-0.9	9,878	5,393	1.8
GMRAIRPORT	104.2	0.4	13,253	7,788	1.7
INOXWIND	134.7	-0.8	6,307	3,981	1.6
TMPV	352.4	-1.6	40,563	26,551	1.5
NHPC	77.2	0.4	2,905	1,919	1.5

Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
PHOENIXLTD	1,731.7	3.2	20,454	5,509	3.7
RVNL	322.9	-0.6	31,335	12,128	2.6
FEDERALBNK	256.0	3.2	28,909	15,216	1.9
ABCAPITAL	345.4	4.1	21,194	11,221	1.9
BAJAJ-AUTO	9,048.0	0.4	61,214	40,753	1.5

Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
PHOENIXLTD	1,731.7	3.2	4,353	2,037	2.1
RVNL	322.9	-0.6	9,114	4,288	2.1
IRFC	116.7	-0.1	3,303	1,746	1.9
RECLTD	351.8	-1.2	24,279	13,671	1.8
JSWENERGY	476.6	-0.9	10,596	6,000	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	2500	559290	7.2%	2333	2400	385632	2.9%	JIOFIN	310	5830350	3.1%	301	300	4655350	-0.3%
ADANIPTS	1500	1169450	1.1%	1484	1500	871625	1.1%	JSWSTEEL	1200	465750	7.9%	1112	1100	253800	-1.1%
APOLLOHOSP	7500	174375	2.3%	7331	7500	112625	2.3%	KOTAKBANK	2100	1186400	1.5%	2070	2100	983200	1.5%
ASIANPAINT	2900	432000	0.8%	2876	2800	241750	-2.6%	LT	4000	321825	0.1%	3997	4000	281225	0.1%
AXISBANK	1300	968125	2.7%	1266	1280	963750	1.1%	M&M	3800	513200	3.6%	3669	3700	298800	0.8%
BAJAJ-AUTO	9500	167700	5.0%	9048	9000	127650	-0.5%	MARUTI	17000	101300	7.0%	15889	15000	139500	-5.6%
BAJAJFINSV	2100	401500	3.4%	2030	2040	189750	0.5%	MAXHEALTH	1200	409500	3.6%	1158	1160	297150	0.2%
BAJFINANCE	1100	1841250	11.5%	986	1000	2139000	1.4%	NESTLEIND	1300	248500	2.9%	1263	1200	118000	-5.0%
BEL	420	5164200	2.4%	410	410	3542550	-0.1%	NTPC	330	2604000	1.9%	324	330	1812000	1.9%
BHARTIARTL	2200	987050	1.8%	2162	2100	724375	-2.8%	ONGC	250	2335500	1.9%	245	250	2040750	1.9%
CIPLA	1600	371250	6.1%	1508	1500	317250	-0.5%	POWERGRID	280	2527000	2.4%	273	280	1504800	2.4%
COALINDIA	380	1760400	2.7%	370	440	1590300	18.9%	RELIANCE	1560	3130500	1.3%	1540	1550	1423500	0.7%
DRREDDY	1250	373125	1.1%	1236	1200	295625	-2.9%	SBILIFE	2100	159375	3.4%	2031	2000	155625	-1.5%
EICHERMOT	7300	257600	1.1%	7219	7000	114275	-3.0%	SBIN	1000	3393750	1.7%	984	980	2031750	-0.4%
ETERNAL	310	7068875	2.5%	302	300	4411075	-0.8%	SHRIRAMFIN	880	2368575	5.0%	838	800	877800	-4.6%
GRASIM	2800	416000	4.2%	2687	2700	579000	0.5%	SUNPHARMA	1800	260400	1.3%	1777	1780	159950	0.2%
HCLTECH	1640	446950	2.4%	1601	1600	263900	-0.1%	TATACONSUM	1200	823900	1.9%	1178	1180	180950	0.2%
HDFCBANK	1000	4241600	1.0%	990	1000	2248950	1.0%	TMPV	400	7490400	13.5%	352	360	3903200	2.1%
HDFCLIFE	800	1150600	4.4%	767	740	413600	-3.5%	TATASTEEL	180	20718500	8.2%	166	170	10796500	2.2%
HINDALCO	800	4106900	1.3%	789	800	1151500	1.3%	TCS	3200	1094100	2.6%	3119	3200	630000	2.6%
HINDUNILVR	2500	1639500	3.6%	2414	2400	684000	-0.6%	TECHM	1600	1005600	7.0%	1495	1500	640800	0.4%
ICICIBANK	1400	3628800	3.1%	1358	1400	2796500	3.1%	TITAN	4000	207375	3.8%	3855	3840	104825	-0.4%
INDIGO	6000	301500	3.9%	5775	6000	160650	3.9%	TRENT	4400	434700	3.7%	4244	4300	295500	1.3%
INFY	1600	2478800	4.5%	1531	1500	1660400	-2.0%	ULTRACEMCO	12000	67950	3.6%	11580	11700	37500	1.0%
ITC	410	5721600	2.3%	401	410	3380800	2.3%	WIPRO	250	6045000	1.8%	246	250	2976000	1.8%

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

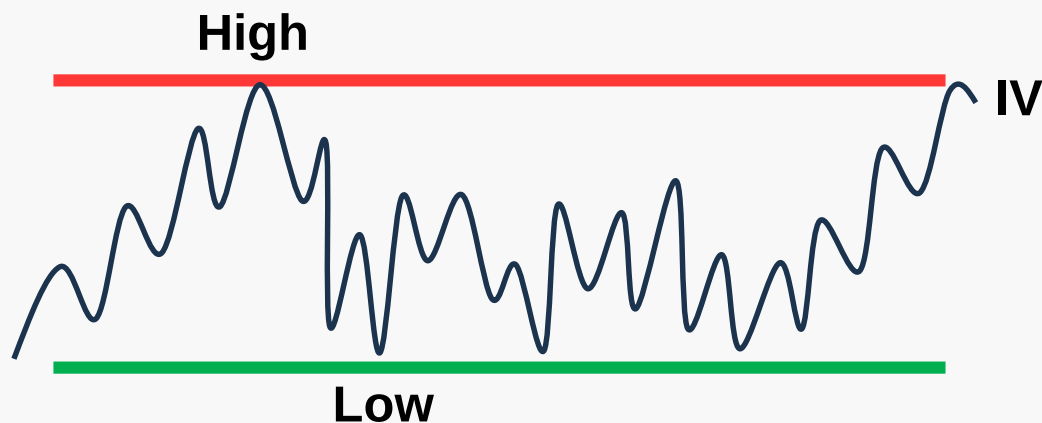
If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

- 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**

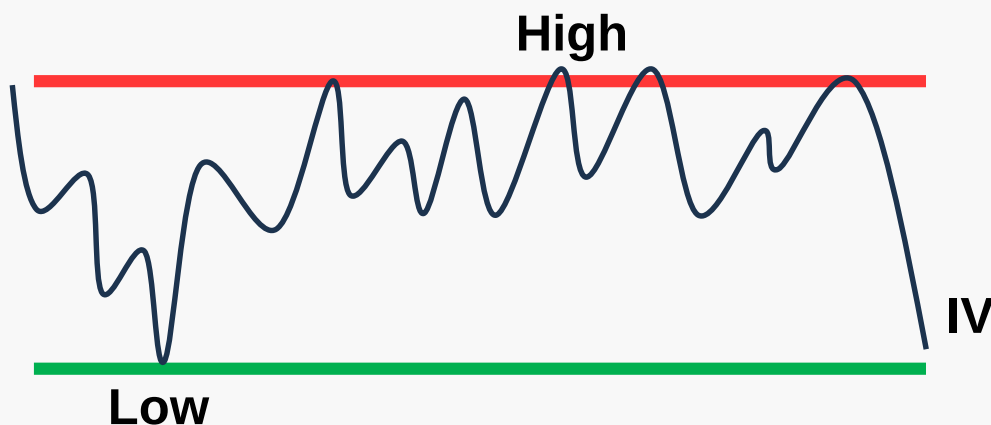
**ATM IV is the midpoint of the IV for the ATM call and put respectively*

- **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

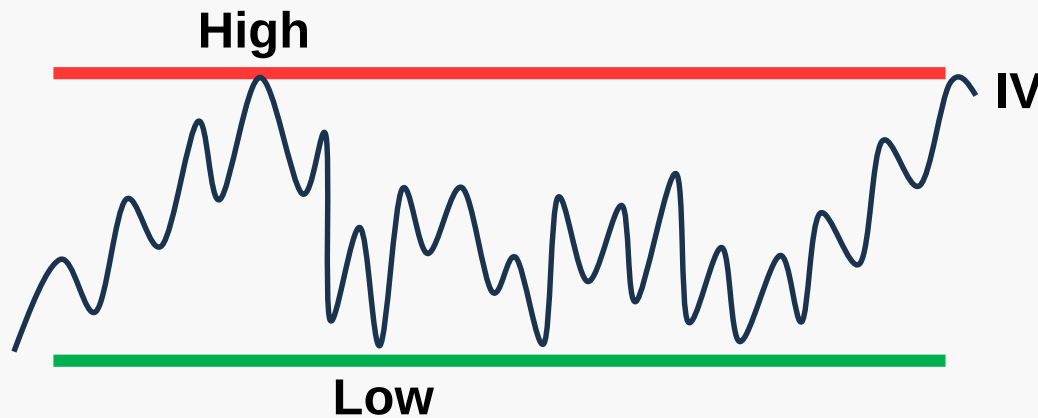


Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.

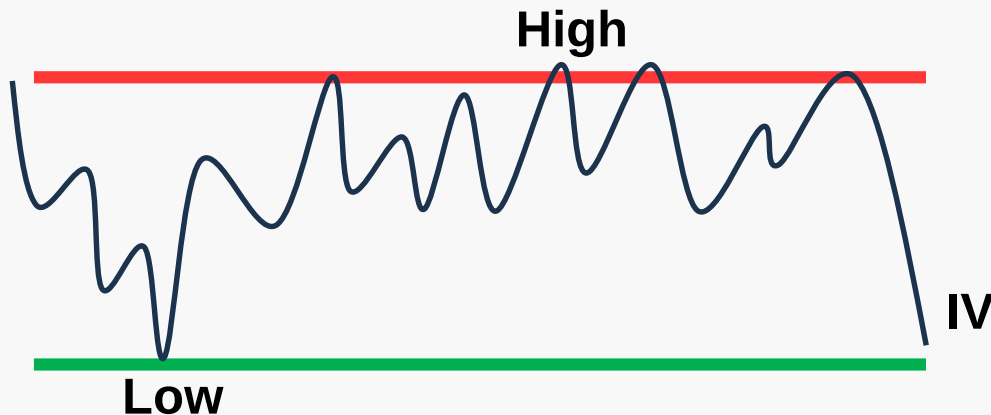


In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **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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